

EA11-012

HONDA

4/20/2012

Q1

VIN	Report Type	Type	Source No.	Model	Model year	Summary
1HGES15201L [REDACTED]	CRASH	CONSUMER COMPLAINT	N032010-09-1302970	CIVIC	2001	HEADLIGHTS WENT OUT AND HIT A DEER
SHHEP33572U [REDACTED]	CRASH	CONSUMER COMPLAINT	N012010-04-1501539	CIVIC HB	2002	HEADLIGHTS FAILED ALLEGEDLY CAUSING DRIVER TO CRASH INTO MOUNTAIN. VIN NOT INCLUDED IN RECALL. REFERRED CUSTOMER TO NHSTA.
JHMGD38687S [REDACTED]	CRASH	CONSUMER COMPLAINT	N012011-02-0801203	FIT	2007	LIGHTS WENT OUT ON HER VEHICLE PREVENTING HER FROM SEEING THE MEDIAN THAT WAS HIT.
JHMGD38687S [REDACTED]	CRASH	CONSUMER COMPLAINT	N032011-02-0801170	FIT	2007	UNABLE TO SEE CLEARLY WHICH CAUSED HER TO RUN OVER A CENTER MEDIAN.
JHMGD38417S [REDACTED]	CRASH	CONSUMER COMPLAINT	N012011-02-0801241	FIT	2007	HEADLIGHTS WENT OUT AND RUN INTO A DITCH.
JHMGD38417S [REDACTED]	CRASH	CONSUMER COMPLAINT	N032011-02-0801201	FIT	2007	LIGHTS WENT OUT ON THE VEHICLE.
JHMGD38698S [REDACTED]	CRASH INJURY	CONSUMER COMPLAINT	N012011-02-2103363	FIT	2008	ACCIDENT WAS LIKELY ATTRIBUTED TO SAFETY RECALL 10-082 FOR THE HEADLIGHTS.
JHMGD38698S [REDACTED]	CRASH	CONSUMER COMPLAINT	N032011-02-2103355	FIT	2008	FATHERS HEADLIGHTS MAY HAVE BEEN FAULTY WHICH CAUSED THE ACCIDENT
JHMZE1355YT [REDACTED]	CRASH	CONSUMER COMPLAINT	N012004-10-2700742	INSIGHT	2000	HEADLIGHTS FAILED, THEN CUSTOMER HIT A BOULDER AND DAMAGED HER FRONT PASSENGER TIRE.
N/A	CRASH	CONSUMER COMPLAINT	N012010-11-0801337	PILOT	2003	VEHICLE'S HEADLIGHTS WENT OUT

VIN	Report Type	Type	Source No.	Model	Model year	Summary
1HGEM22931L [REDACTED]	LAWSUIT	CLAIM	062724	CIVIC	2001	<p>Single vehicle automobile accident (October 13, 2003 at 9:27 p.m. on Reece Road near the intersection of Jacobs Road in Anne Arundel County, Maryland.) Plaintiff [REDACTED] was driving a 2001 Honda Civic (VIN 1HGEM22931L [REDACTED]) when the headlights of the vehicle failed. As a result of the headlight failure, it is alleged that plaintiff lost control of the Civic and the Civic went off the road and rolled over. Plaintiff was ejected and sustained significant injuries including the amputation of his right leg. [REDACTED] was 19 years old at the time of the accident.</p> <p>According to plaintiff's complaint, the failure of the headlights in the Civic resulted from the headlight Safety Recall 04-015. According to plaintiff's complaint, although Honda initiated an investigation in September, 2001, that resulted in this recall, the recall was not effected until February 12, 2004, after plaintiff's accident.</p> <p>Plaintiff's allegations:</p> <ol style="list-style-type: none"><li>1. headlight failure resulting from combination light switch recall</li><li>2. defective driver occupant protection system</li></ol>

VIN	Report Type	Type	Source No.	Model	Model year	Summary
2HGES16563H [REDACTED]	LAWSUIT	CLAIM	053034	CIVIC	2003	AT CLAIM STAGE:  8/4/05 TC  Customer is claiming faulty headlights (recall notice) were the cause of her accident.   AT LITIGATION:  [REDACTED], the driver of the opposing vehicle, claims that the accident occurred because he could not see the [REDACTED] vehicle. Based on this contention, Plaintiffs, the [REDACTED], have alleged in the alternative that the accident may have been the result of a malfunction of the headlights of the Honda Civic.
JHMGD38698S [REDACTED]	LAWSUIT	CLAIM	085554	FIT	2008	Recall notice - headlights

VIN	Report Type	Type	Source No.	Model	Model year	Summary
5J6YH18375L [REDACTED]	LAWSUIT	CLAIM	075135	ELEMENT	2005	<p>Plaintiff alleges the dealer concealed the existence of the Honda Certified Use Car 7 year /1000,000 mile powertrain warranty and 1 year / 120,000 mile comprehensive warranty. The vehicle contained serious pre-existing defects when it was delivered to Plaintiffs, including, but not limited to the following:</p> <ul style="list-style-type: none"><li>a. Defective air conditioning system;</li><li>b. An inappropriate noise when driving over bumps;</li><li>c. A no crank, no start condition;</li><li>d. Defective headlight switch; and</li><li>e. The engine stalling</li></ul>

EA11-012

HONDA

4/20/2012

Q5

LON\_Problem

Labor Operation Number	Labor Operation Number Description
000008	WARRANTY GOODWILL FOR VSC DEDUCTIBLE.
019099	FOG LIGHT BULB/LENS - STRAIGHT TIME (WITHOUT PARTS)
019140	FOG LIGHT SWITCH - REPLACE.
0191B5	RELAY, DAYTIME RUNNING LIGHT - REPLACE.
050097	SECURITY SYSTEM - REPAIR - PARTS ONLY
050099	SECURITY SYSTEM - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
050110	SECURITY SYSTEM MAIN WIRE HARNESS - REPLACE.
050199	SECURITY SYSTEM - REPAIR - STRAIGHT TIME (WITH PARTS)
118100	ALTERNATOR - REPLACE. REQUIRED: 15-DIGIT TEST CODE INTO CLAIM S/B# 03-005 S/B# 12-002
1255A4	PRODUCT UPDATE CAMPAIGN: ECM UPDATE TO PREVENT CATALYST DTC, UPDATE TO PREVENT IMA BATTERY DETERIORATION - UPDATE PGM-FI, VPS & IMA BATTERY SOFTWARE. PRODUCT UPDATE: S/B# 05-028
5101A1	WIPER AND LIGHT SWITCH CENTER HOLDER/BODY ASSEMBLY - REPLACE. S/B# 09-058
612097	BLOWER MOTOR - REPAIR - PARTS ONLY
615150	COMPRESSOR OR FAN RELAY - REPLACE.
710097	BATTERY - REPAIR - PARTS ONLY
710100	BATTERY - REPLACE. INCLUDES: TESTING S/B# 88-023
712097	HEADLIGHTS AND HEADLIGHT RETRACTORS - REPAIR - PARTS ONLY
712099	HEADLIGHTS AND HEADLIGHT RETRACTORS - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
712102	HEADLIGHT UNIT, BOTH. INCLUDES: AIM HEADLIGHTS.
712103	HEADLIGHT UNIT, LEFT. INCLUDES: AIM HEADLIGHTS.
712105	HEADLIGHT BULB, BOTH - REPLACE. S/B# 08-010
712110	HEADLIGHT BULB, LEFT - REPLACE. S/B# 08-010
712115	HEADLIGHT BULB, RIGHT - REPLACE. S/B# 08-010
712123	HEADLIGHT RELAY (ANY) - REPLACE.
712199	HEADLIGHTS AND HEADLIGHT RETRACTORS - REPLACE - STRAIGHT TIME (WITH PARTS)
712320	HEADLIGHTS - ADJUST.
713097	BACK-UP LIGHTS - PARTS ONLY
713099	BACK-UP LIGHTS - STRAIGHT TIME (WITHOUT PARTS)
713100	BACK-UP LIGHT BULB (BOTH) - REPLACE.
713103	HEADLIGHT UNIT, RIGHT. INCLUDES: AIM HEADLIGHTS.
713199	BACK-UP LIGHTS - STRAIGHT TIME (WITH PARTS)
714110	BRAKE LIGHT/TAILLIGHT BULB, LEFT - REPLACE.
714120	BRAKE LIGHT/TAILLIGHT BULB OR LED, RIGHT - REPLACE
716199	INSTRUMENT PANEL LIGHTS - STRAIGHT TIME (WITH PARTS)
717097	FRONT TURN SIGNAL - REPAIR - PARTS ONLY
717100	FRONT TURN SIGNAL/PARKING LIGHT BULB, BOTH - REPLACE.
721199	TRUNK LIGHTS - STRAIGHT TIME (WITH PARTS)
722097	DASH LIGHT DIMMER SWITCH - REPAIR - PARTS ONLY

Labor Operation Number	Labor Operation Number Description
722110	DASH LIGHT DIMMER SWITCH/BRIGHTNESS CONTROLLER - REPLACE.
724199	INTERIOR LIGHT DOOR SWITCH - REPLACE - STRAIGHT TIME (WITH PARTS)
724110	INTERIOR LIGHT DOOR SWITCH, LEFT FRONT - REPLACE.
724199	INTERIOR LIGHT DOOR SWITCH - STRAIGHT TIME (WITH PARTS)
725097	IGNITION SWITCH - REPAIR - PARTS ONLY
725100	IGNITION SWITCH AND LOCK ASSEMBLY - REPLACE.
725120	IGNITION SWITCH ELECTRICAL PORTION - REPLACE.
725199	IGNITION SWITCH - REPLACE - STRAIGHT TIME (WITH PARTS)
726120	BRAKE LIGHT SWITCH - REPLACE.
728096	TURN SIGNAL SWITCH - REPAIR - WARRANTY SUBLET ONLY
728097	TURN SIGNAL SWITCH - REPAIR - PARTS ONLY
728099	TURN SIGNAL SWITCH - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
7280A2	LOW BEAM HEADLIGHTS IN TERMITTENTLY DO NOT COME ON - REPLACE THE COMBINATION SWITCH, THE 16P HEADLIGHT WIRE HARNESS CONNECTOR, AND THE WHT/RED WIRE IN THE CONNECTOR. S/B#07-027.
7280A3	INSPECT AND INSTALL A COMBINATION LIGHT SWITCH WIRE KIT. S/B# 10-082
7280A4	INSPECT AND INSTALL A COMBINATION LIGHT SWITCH REPAIR KIT. S/B# 10-082
728100	TURN SIGNAL/HEADLIGHT SWITCH - REPLACE.
728103	TURN SIGNAL/HEADLIGHT SWITCH - REPLACE. SAFETY RECALL: COMBINATION LIGHT SWITCH - REPLACE THE COMBINATION LIGHT SWITCH AND THE RED/WHT WIRE IN THE HEADLIGHT WIRE HARNESS. S/B# 04-015
728104	TURN SIGNAL/HEADLIGHT SWITCH - REPLACE. SAFETY RECALL: COMBINATION LIGHT SWITCH - REPLACE THE COMBINATION LIGHT SWITCH AND THE RED/WHT WIRE IN THE HEADLIGHT WIRE HARNESS. S/B# 04-015
728130	WIPER SWITCH - REPLACE.
728199	TURN SIGNAL SWITCH - REPLACE - STRAIGHT TIME (WITH PARTS)
730099	RELAY - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
730101	RELAY, ANY IN FUSE BOX- REPLACE.
730130	RELAY (IN FUSE BOX) - REPLACE ONE OR TWO .
7301A5	HEADLIGHT RELAY - REPLACE.
734101	METER/GAUGE ASSEMBLY - REPLACE. S/B# 03-059 S/B# 05-002 S/B# 07-087
737097	WIRE HARNESS - REPAIR - PARTS ONLY
737099	WIRE HARNESS - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
737150	FUSE - REPLACE ONE OR MORE.
737199	WIRE HARNESS - REPLACE - STRAIGHT TIME (WITH PARTS)



Labor Operation Number	Labor Operation Number Description
7371A6	CABIN WIRE HARNESS, DRIVER`S SIDE - REPLACE. INCLUDES: AIR CONDITIONING SYSTEM EVACUATE AND RECHARGE
7371B6	INSTRUMENT SUB-CORD/HARNESS - REPLACE.
7371C6	INSTRUMENT PANEL WIRE HARNESS - REPLACE.
738100	STEERING WHEEL SWITCH - REPLACE.
738130	CRUISE CONTROL MAIN SWITCH - REPLACE.
738199	CRUISE CONTROL - STRAIGHT TIME (WITH PARTS)
740100	WIPER MOTOR, FRONT - REPLACE. S/B# 00-031 S/B# 07-071 S/B# 09-015
741199	REAR WIPER MOTOR - STRAIGHT TIME (WITH PARTS)
7440A6	INSPECT THE POWER WINDOW MASTER SWITCH AND INSTALL PROTECTIVE SKIRT, REPLACE THE SWITCH IF NEEDED. S/B# 10-008
744100	POWER WINDOW/VENT SWITCH, LEFT FRONT; INCLUDING CONTROL UNIT - REPLACE. S/B# 06-010
745099	ELECTRICAL TEST - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
745199	ELECTRICAL TEST - REPLACE - STRAIGHT TIME (WITH PARTS)
745509	SWITCH/CIRCUIT - DIAGNOSE OR INPUT TEST.
745535	SIDE MARKER - INPUT TEST.
746097	INTEGRATED SWITCH - PARTS ONLY
746099	INTEGRATED SWITCH - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
746103	MULTIPLEX OR MULTIPLEX INTEGRATED CONTROL UNIT (RIGHT/PASSENGER SIDE) - REPLACE. S/B# 98-062
746104	MULTIPLEX OR MULTIPLEX INTEGRATED CONTROL UNIT (LEFT/DRIVER SIDE) - REPLACE. S/B# 04-034
746105	MULTIPLEX OR MULTIPLEX INTEGRATED CONTROL UNIT (BOTH) - REPLACE.
746199	INTEGRATED SWITCH - REPLACE - STRAIGHT TIME (WITH PARTS)
747097	FUSE BOX - REPAIR - PARTS ONLY
747099	FUSE BOX - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
747100	FUSE BOX - REPLACE.
747105	UNDER-HOOD FUSE BOX - REPLACE.
747199	FUSE BOX - REPLACE - STRAIGHT TIME (WITH PARTS)
7471A0	FUSE BOX, UNDER DASH - REPLACE. S/B# 05-514 S/B# 06-036
748100	POWER DOOR LOCK CONTROL UNIT - REPLACE.
751100	SRS UNIT - REPLACE. S/B# 02-014 S/B# 03-066 S/B# 06-004
752100	AIRBAG ASSEMBLY, DRIVER SIDE - REPLACE.
814199	SUNROOF - REPLACE - STRAIGHT TIME (WITH PARTS)
828199	INSIDE REAR VIEW MIRROR - REPLACE - STRAIGHT TIME (WITH PARTS)

Labor Operation Number	Labor Operation Number Description
841099	INSTRUMENT PANEL - REPAIR - STRAIGHT TIME (WITHOUT PARTS)
841100	INSTRUMENT PANEL, UPPER PANEL, DASHBOARD - REPLACE.
841199	INSTRUMENT PANEL - REPLACE - STRAIGHT TIME (WITH PARTS)

Problem Code	Problem Code Description
00002	BENT
004, 00004	DISTORTED
00401	DISTORTED
00006	PINCHED & INCLUSION
01102	DETERIORATED
017,00017	CRACKED
01701	HAIRLINE FRACTURE
018, 00018	BROKEN
01801	BROKEN
022, 00022	BURNED OR MELTED
02201	SCORCHED OR FUSED
02203	MELTED
02502	POORLY GLUED (SEPARATED)
030	BINDING OR STICKING
03001	BINDING/STICKING
032, 00032, 03200	INOPERATIVE
03214	ERRONEOUS OPERATION
03217	NOT OPERATING
035	OUT OF FACTORY SPEC
042	ABNORMAL NOISE
00059	WATER LEAKAGE
062	LOOSE-POORLY FITTED
064, 00064	SHORTED/GROUNDED
06401	SHORT CIRCUIT
06402	INSUFFICIENTLY ISOLATED
06403	POOR GROUND
06404	FUSE BURN OUT
066, 00066	POOR CONNECTION
06601	POOR/NO ELECTRICAL CONTACT
068, 00068	OPEN/BURNED CIRCUIT
06801	OPEN/BURNED CIRCUIT
072	CIRCUIT CLOSED
07201	CONSTANT CONTINUITY
07404	POOR ASSEMBLY
07406	IMPROPERLY ADJUSTED
07408	IMPROPERLY SEALED
080, 00080	WRONG PARTS
08001	INCORRECT ASSEMBLY
08003	CONNECTOR PIN CONTACT FAILURE
099, 00099	OTHER
552	CLAIM ADJUSTMENT
560	FAILED BATTERY TEST
999	WARRANTY DEBIT
09999	FOR PHENOMENA OTHER THAN THOSE STIPULATE
5CN	00-02 INSIGHTS/01-02 CIVIC
5CN00	00-02 INSIGHTS/01-02 CIVIC
5LS00	07-08 FIT HEADLIGHT SWITCH
5RE00	CIVIC IMA PUD
5WS00	07-08 FIT POWER WINDOW SWITCH

Attachment #Q6

Service Bulletin 04-015

Safety Recall: Combination Light Switch



Applies To: **See VEHICLES AFFECTED**

**April 1, 2004**

## Safety Recall: Combination Light Switch

(Supersedes 04-015, dated March 26, 2004)

### BACKGROUND

A terminal in the headlight wire harness connector can overheat and may cause the low-beam headlights to fail without warning. Although the high-beam position remains operational, an unexpected loss of low beams could result in a crash.

### VEHICLES AFFECTED

**2001 Civic: ALL**

**2002 Civic:**

2-door

From VIN 1HGEM2...2L000001 thru  
1HGEM2...2L024169

4-door

From VIN 1HGES1...2L000001 thru  
1HGES1...2L024203

From VIN 1HGES2...2L000001 thru  
1HGES2...2L028089

From VIN 2HGES...2H500001 thru  
2HGES...2H530552

From VIN JHMES1...2S000001 thru  
JHMES1...2S004507

From VIN JHMES2...2S000001 thru  
JHMES2...2S002838

Hatchback

From VIN SHHEP3...2U300001 thru  
SHHEP3...2U300222

■ **GX**

From VIN 1HGEN2...2L000001 thru  
1HGEN2...2L000181

**2000-01 Insight: ALL**

### CUSTOMER NOTIFICATION

All owners of affected vehicles will be sent a notification of this recall. An example of the customer notification is at the end of this service bulletin.

Not all vehicles within the VIN ranges are affected by this recall. Before beginning work on a vehicle, verify its eligibility by checking at least one of these items:

- The customer has a notification letter.
- The vehicle is shown on your campaign responsibility report.
- The vehicle is shown as eligible on an iN VIN status inquiry.

In addition to the bulleted verification items, check for a punch mark above the 12th character of the engine compartment VIN. A punch mark in that location means the combination light switch has already been repaired.

Some vehicles affected by this recall may be in your used car inventory. **According to federal law, these vehicles cannot be sold or leased until they are repaired.** To see if a vehicle is affected by this recall, do a VIN status inquiry before selling it.

### CORRECTIVE ACTION

Replace the combination light switch, the RED/WHT wire in the headlight wire harness, and if needed, the 16P headlight wire harness connector.

### PARTS INFORMATION

Combination Light Switch Repair Kit:

(Includes switch, wire harness connector, 250 mm wire with an attached terminal, and wire splice connector)

Civic: P/N 35012-S5A-307, H/C 7743875

Insight: P/N 35012-S3Y-306, H/C 7743883

### TOOL INFORMATION

Terminal Pin Kit C: T/N 07QAZ-003020C, or equivalent (Terminal Pin Kit C contains the wire crimper and the heat gun used for wire splicing.)

Terminal Maintenance Set: T/N 070AZ-S5A0100\* [Contains Terminal Remover Set (six small, plastic tools used to remove terminals from the 16P headlight wire harness connector), and Secondary Lock Opener (a miniature, flat-tip screwdriver used to open the secondary locks on the 16P headlight wire harness connector)]

\* This tool is being sent to your dealership along with your initial allocation of combination light switch repair kits.

**NOTE:** If you need additional tools, order them through the parts ordering system.

## WARRANTY CLAIM INFORMATION

OP#	Description	FRT
728103	Replace the combination light switch and the RED/WHT wire in the headlight wire harness	0.7
A	Do the cruise control learn (2001 Civic 2-door thru VIN 1HGEM2...1L016502)	0.3
728104	Replace the combination light switch, the RED/WHT wire in the headlight wire harness, and the 16P wire harness connector	0.8
A	Do the cruise control learn (2001 Civic 2-door thru VIN 1HGEM2...1L016502)	0.3

Failed Part: P/N 35255-S5A-A01  
H/C 6453336

Defect Code: 5CN

Symptom Code: P23

Skill Level: Repair Technician

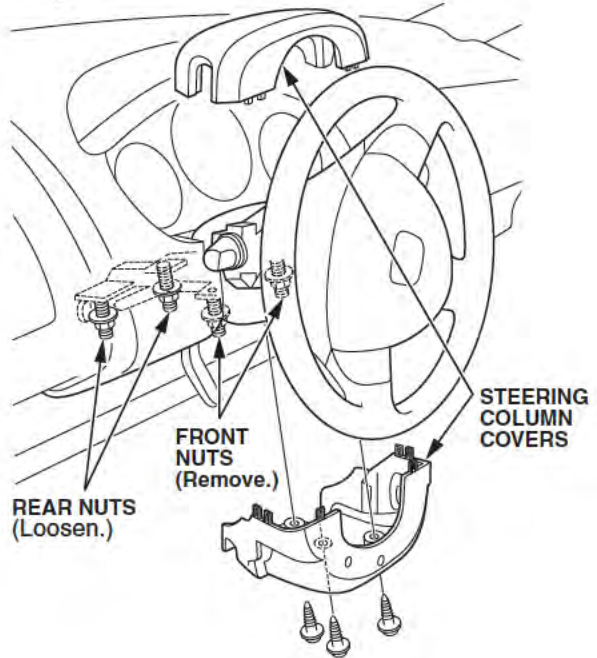
## REPAIR PROCEDURE

### NOTE:

- SRS components are located in this area. Before you begin, review the SRS component locations, cautions, and procedures in the service manual.
  - Be careful not to damage the dashboard or other interior trim pieces.
  - For information about wire terminal replacement and wire splicing, refer to service bulletin 00-099, *Terminal Replacement Instructions*.
1. Make sure you have the anti-theft code for the radio (if applicable), then write down your customer's radio station presets.
  2. Disconnect the negative cable from the battery.
  3. *On Civics*, remove the driver's dashboard lower cover. For Civic 2/4-door, see the 2001-04 Civic Service Manual, page 20-97. For Civic Hatchback, see the 2002-04 Civic Hatchback Service Manual, page 20-61.

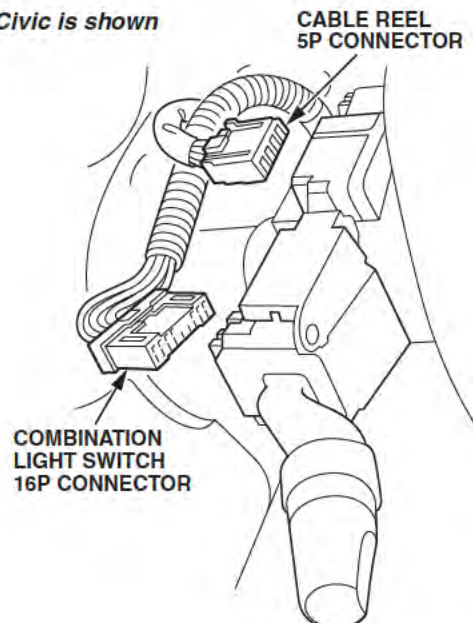
4. Remove the steering column covers (see the 2001-04 Civic Service Manual, page 17-27, step 4; the 2002-04 Civic Hatchback Service Manual, page 17-9, step 4; or the 2000-04 Insight Service Manual, page 17-9, step 5). *On the Insight* steering column, also remove the two front nuts, and loosen the two rear nuts.

*Insight is shown*

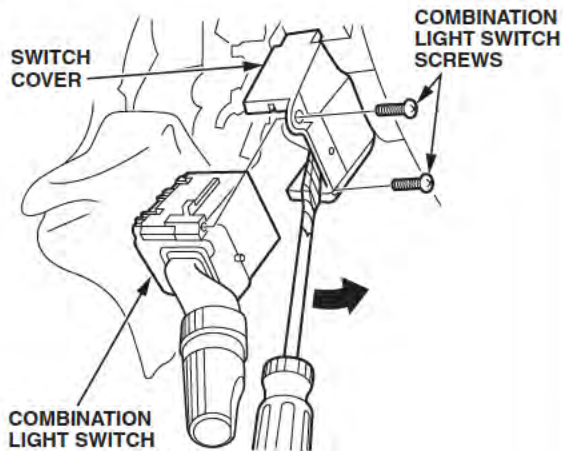


5. *On Civics*, disconnect the 16P connector from the combination light switch and the 5P connector from the cable reel. *On Civic Hatchbacks*, also disconnect the 14P connector from the wiper switch. Then carefully pull the wire harness to the right of the steering column. *On Insights*, disconnect the 16P connector from the combination light switch.

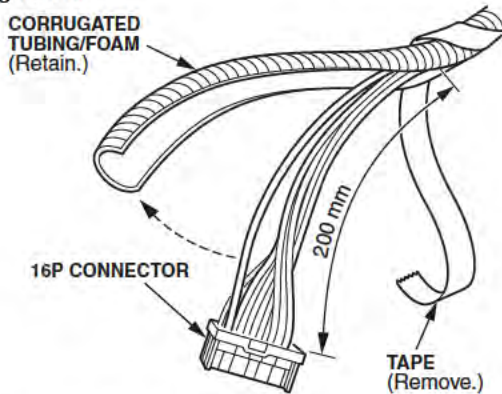
*Civic is shown*



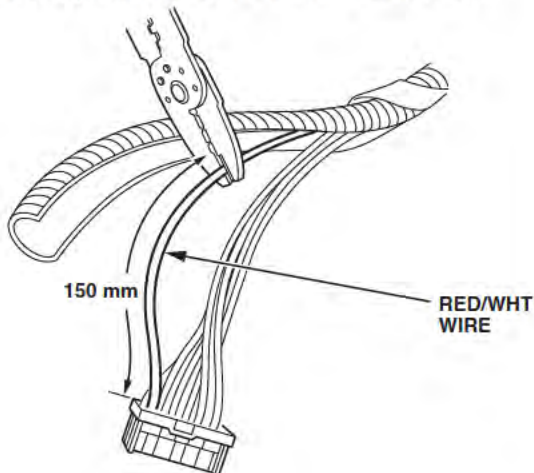
6. Turn the ignition switch to the ACCESSORY (I) position, then turn the steering wheel to the right.
7. Remove the two screws from the combination light switch.



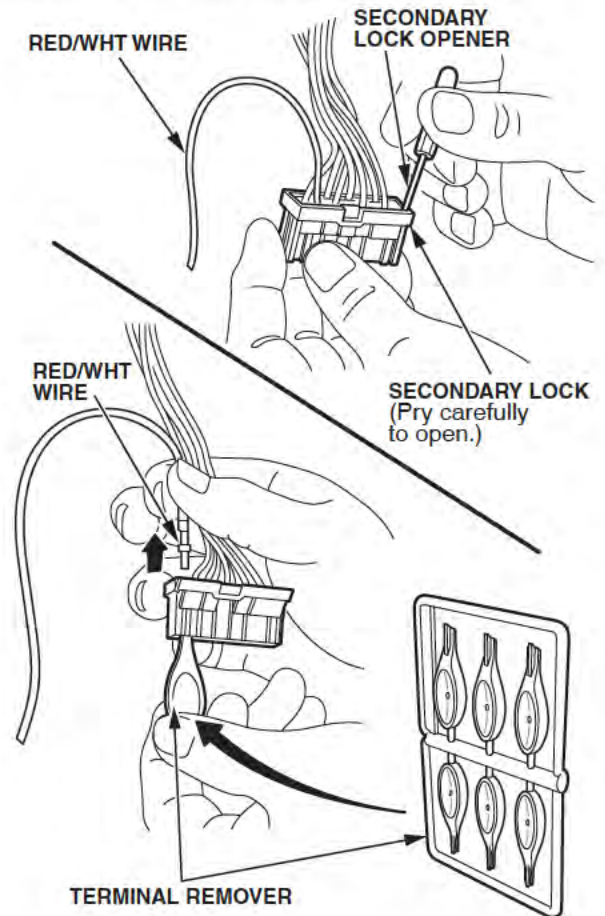
8. Using a flat-tip screwdriver wrapped with electrical tape, slightly lift the switch cover, then remove the switch, and discard it.
9. Remove the tape or corrugated tubing/foam from the 16P connector wire harness to expose about 200 mm of wire. Discard the tape, but retain the tubing/foam.



10. Locate the RED/WHT wire in the 16P connector. Then measure 150 mm from the end of the connector, and cut the RED/WHT wire there.

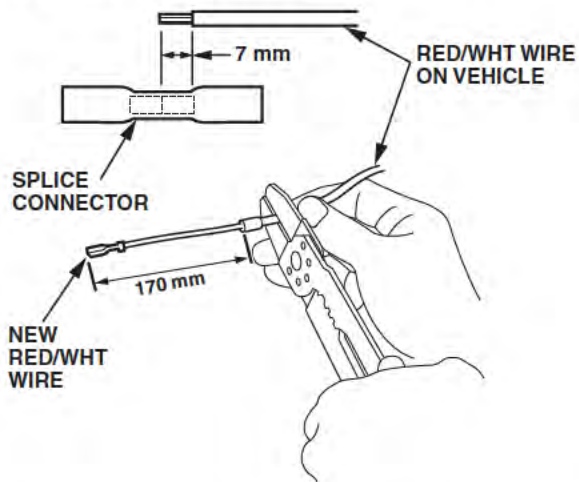


11. Inspect the 16P connector for heat damage or discoloration.
  - If the connector is OK, go to step 12.
  - If the connector is damaged or discolored, go to step 14.
12. Using the Secondary Lock Opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the secondary lock on the RED/WHT wire side of the 16P connector.



13. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into the center row cavity of the 16P connector, above the RED/WHT wire cavity, then remove and discard the RED/WHT wire.

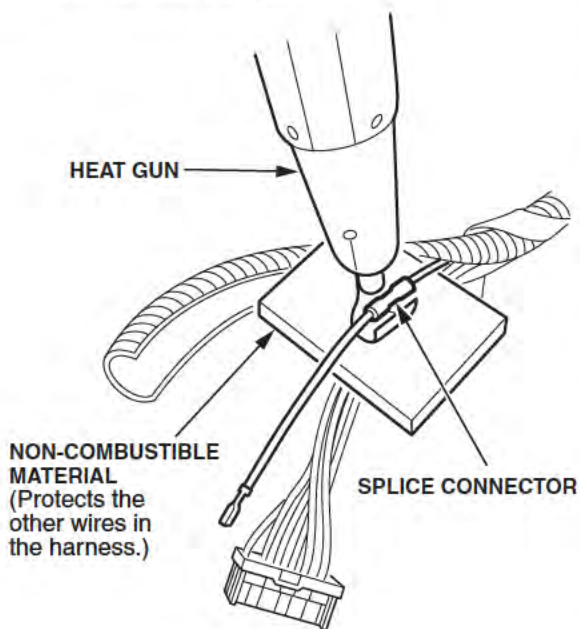
14. Strip off 7 mm of insulation from the vehicle wire harness side of the RED/WHT wire. Insert the stripped end into one side of the splice connector, and crimp the connector.



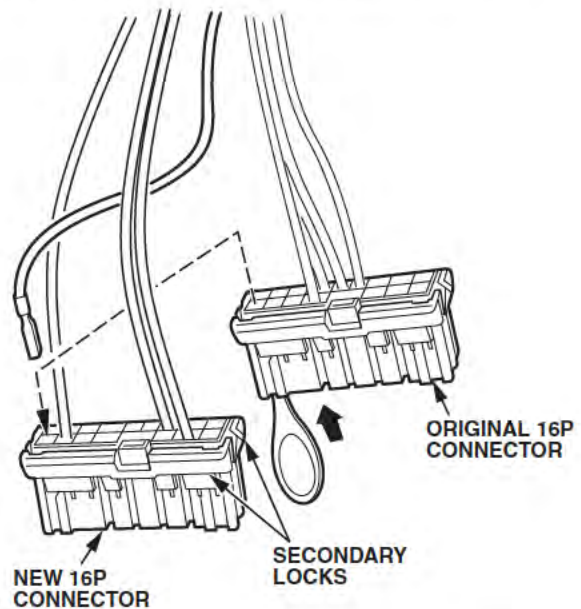
15. Cut the new RED/WHT wire 170 mm from the end of its terminal. Then strip off 7 mm of insulation from the cut end.
16. Insert the stripped end of the new RED/WHT wire into the other side of the splice connector, then crimp the connector.
17. With a non-combustible material between the RED/WHT wire and the vehicle wire harness, use a heat gun to shrink the splice connector casing.

**NOTE:**

- Be careful not to get burned.
- Do not overheat the wire.



18. If the original 16P connector is not heat damaged or discolored, insert the new RED/WHT wire into its proper terminal cavity on the connector, then go to step 22. If the 16P connector is damaged, go to step 19.
19. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A-010), carefully pry open the other secondary lock on the 16P connector.
20. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into a center row cavity of the original 16P connector, remove the corresponding wire from its cavity, and transfer it to the same cavity in the new 16P connector. Repeat this for all the wires except the original RED/WHT wire.



21. Insert the new RED/WHT wire into its proper terminal cavity in the new 16P connector.
22. Snap the secondary lock(s) closed on the 16P connector.
23. Using electrical tape, retape the wire harness or insert the wires into the corrugated tubing/foam and retape the tubing/foam.
24. Install the new combination light switch with the two original screws.
25. *On Civics*, reroute the wire harness over the steering column, then connect the 16P connector to the combination light switch, the 5P connector to the cable reel connector and, *on Civic Hatchbacks*, the 14P connector to the wiper switch. *On Insights*, connect the 16P connector to the combination light switch.
26. Connect the negative cable to the battery.
27. Check the operation of the headlights, the parking lights, and the turn signals.



28. On Civics, install the driver's dashboard lower cover.
29. Install the steering column covers.
30. Enter the radio anti-theft code (if applicable), then enter your customer's radio station presets. Set the clock.
31. Do the idle learn procedure:
  - Make sure all electrical items (A/C, audio unit, lights, etc.) are off, then start the engine.
  - Let the engine reach normal operating temperature (the cooling fans cycle twice).
  - Let the engine idle (throttle fully closed) for 10 minutes.
32. On 2001 Civic LX and EX 2-door models thru VIN 1HGEM2...1L016502, do the cruise control learn procedure:
  - Drive the vehicle, and set the cruise control above 40 miles per hour.
  - Drive the vehicle for 5 to 10 minutes at the set speed. If you cancel the set speed before driving 5 to 10 minutes, repeat the procedure.

NOTE: This procedure can also be done on a chassis dynamometer, but it cannot be done with the vehicle on a lift.
33. Center-punch a completion mark above the 12th character of the engine compartment VIN.

Center-punch here.

**1HGXXXXXXXXXXXXXX**

*Example of Customer Letter*

Spring 2004

### Safety Recall Campaign: Headlight Switch

Dear Honda Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

#### What is the reason for this notice?

Honda Motor Co., Ltd., has decided that a defect relating to motor vehicle safety exists in certain 2001–02 Civics and 2000–01 Insights. A terminal in the headlight wire harness can overheat and may cause the low-beams to fail without warning. Although the high-beam position remains operational, an unexpected loss of low beams could result in a crash.

#### What should you do?

Call any authorized Honda dealer and make an appointment to have your vehicle repaired. The dealer will inspect the headlight switch and replace all needed parts. This work will be done *free of charge*. Please plan to leave your vehicle for half a day to allow the dealer flexibility in scheduling.

#### Who to contact if you experience problems.

If you are not satisfied with the service you receive from your Honda dealer, you may write to:

American Honda Motor Co., Inc.  
 Honda Automobile Customer Service  
 Mail Stop 500-2N-7A  
 1919 Torrance Blvd.  
 Torrance, CA 90501-2746

If you believe that American Honda or the dealer has failed or is unable to remedy the defect in your vehicle, without charge, within a reasonable period of time (60 days from the date you first contact the dealer for a repair appointment), you may submit a complaint to:

Administrator  
 National Highway Traffic Safety Administration  
 400 Seventh Street, SW  
 Washington, DC 20590

Or call the toll-free Safety Hotline at (888) 327-4236.

#### What to do if you feel this notice is in error.

Our records show that you are the current owner or lessee of a 2001–02 Civic or 2000–01 Insight involved in this campaign. If this is not the case, or the name/address information is not correct, please fill out and return the enclosed, postage-paid *Information Change Card*. We will then update our records.

If you already paid to have a defective headlight switch replaced, you may be eligible for reimbursement. Refer to the attached instructions for eligibility requirements and the reimbursement procedure.

#### Lessor Information.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

#### If you have questions.

If you have any questions about this notice, or need assistance with contacting a Honda dealer, please call Honda Automobile Customer Service at (800) 999-1009, and select menu option #2.

We apologize for any inconvenience this campaign may cause you.

Sincerely,

**American Honda Motor Co., Inc.  
 Honda Automobile Division**

Attachment #Q6

Service Bulletin 07-027

Low Beam Headlights Intermittently  
Do Not Come On


 Applies To: **2003 Pilot – ALL**
**May 12, 2007**

## Low Beam Headlights Intermittently Do Not Come On

### SYMPTOM

When you turn the combination light switch to the headlight "on" position, the low beams may not come on.

### PROBABLE CAUSE

In a rare case, the wire harness may have been misrouted, causing a terminal in the headlight wire harness connector to become heat-damaged, which may cause the low beam headlights to not come on.

### CORRECTIVE ACTION

Replace the combination light switch, the WHT/RED wire in the headlight wire harness and, if needed, the 16P headlight wire harness connector.

### PARTS INFORMATION

Combination Light Switch Repair Kit:  
 P/N 35012-S5A-307, H/C 7743875  
 (Includes a switch, a wire harness connector, a 250 mm length of wire with an attached terminal, and a wire splice connector)

### TOOL INFORMATION

Terminal Maintenance Set: T/N 070AZ-S5A0100\*  
 Contains a Terminal Remover Set (six small plastic tools used to remove terminals from the 16P headlight wire harness connector), and a Secondary Lock Opener (a miniature, flat-tip screwdriver used to open the secondary locks on the 16P headlight wire harness connector)

\* This tool was sent to your dealership in Spring 2004. If you need additional tools, order them through the parts ordering system.

### WARRANTY CLAIM INFORMATION

**In warranty:** The normal warranty applies.

OP#	Description	FRT
7280A1	Replace the combination switch and the WHT/RED wire in the 16P headlight wire harness connector.	0.8
7280A2	Replace the combination switch, the 16P headlight wire harness connector, and the WHT/RED wire in the connector.	1.3

Failed Part: P/N 35255-S5A-A02  
 H/C 6859953

Defect Code: 06401

Symptom Code: 03220

Template ID: 07-027A

Skill Level: Repair Technician

**Out of warranty:** Any repair performed after warranty expiration may be eligible for goodwill consideration by the District Parts and Service Manager or your Zone Office. You must request consideration, and get a decision, before starting work.

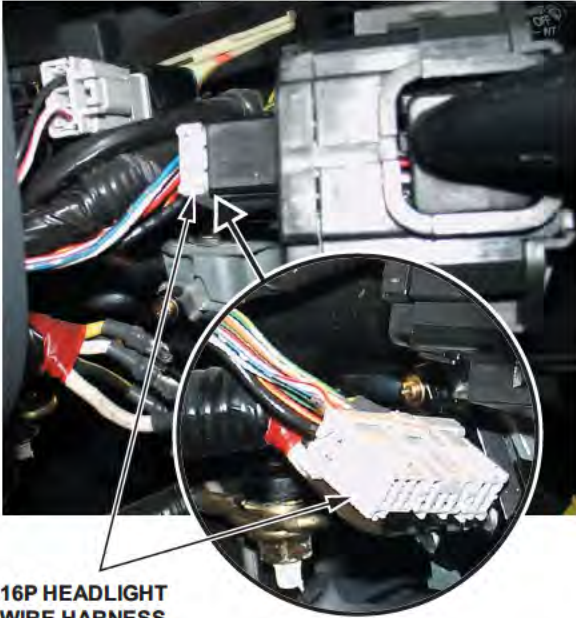
### REPAIR PROCEDURE

#### NOTE:

- SRS components are located in this area. Before you begin, review the SRS component locations, cautions, and procedures in the service manual.
- Be careful not to damage the dashboard or other interior trim pieces.
- For information about wire terminal replacement and wire splicing, refer to Service Bulletin 00-099, *Terminal Replacement Instructions*.

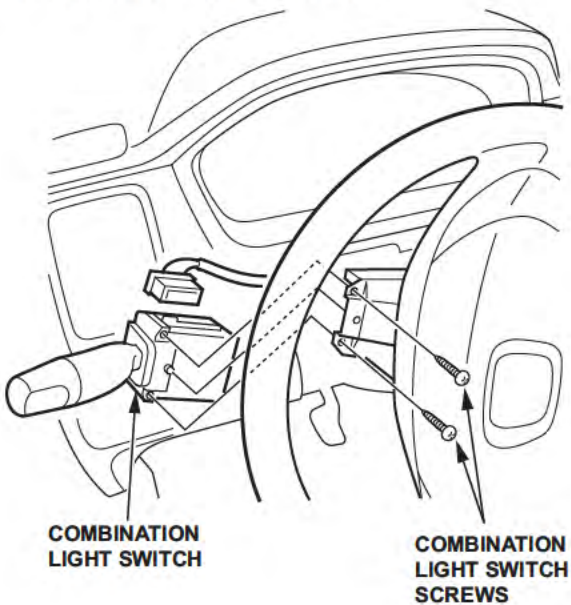
1. Apply the parking brake.
2. Move the shift lever to N.
3. Make sure you have the anti-theft code for the radio (if applicable), then write down your customer's radio station presets.
4. Disconnect the negative cable from the battery, and wait at least 3 minutes.

5. Remove the upper and lower steering column covers:  
NOTE: Be careful not to damage the instrument panel, the dashboard, or any other interior trim pieces.
  - Refer to page 17-25 of the *2003–2004 Pilot Service Manual*, or
  - Online, enter keyword **COLUMN**, and select **Steering Column Removal and Installation** from the list.
6. Disconnect the 16P headlight wire harness connector from the combination light switch.



**16P HEADLIGHT WIRE HARNESS CONNECTOR**

7. Turn the ignition switch to ACCESSORY (I), then turn the steering wheel to the left.
8. Remove the two screws from the combination light switch, and remove the switch.



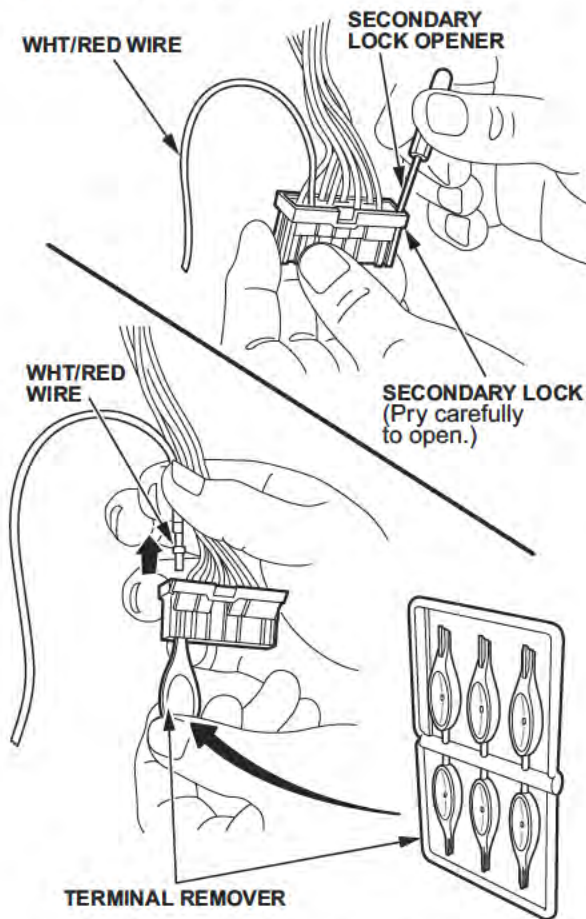
9. Locate the WHT/RED wire, terminal 6, in the 16P connector. Measure 20 mm from the end of the connector, then cut the WHT/RED wire.



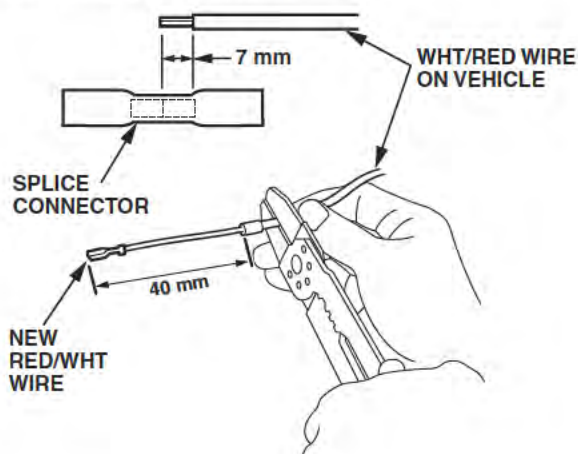
Cut WHT/RED wire 20 mm from the end of the connector.

10. Inspect the 16P connector for heat damage or discoloration:
  - If the connector is OK, go to step 11.
  - If the connector is damaged or discolored, go to step 13.

11. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the secondary lock on the WHT/RED wire side of the 16P connector.



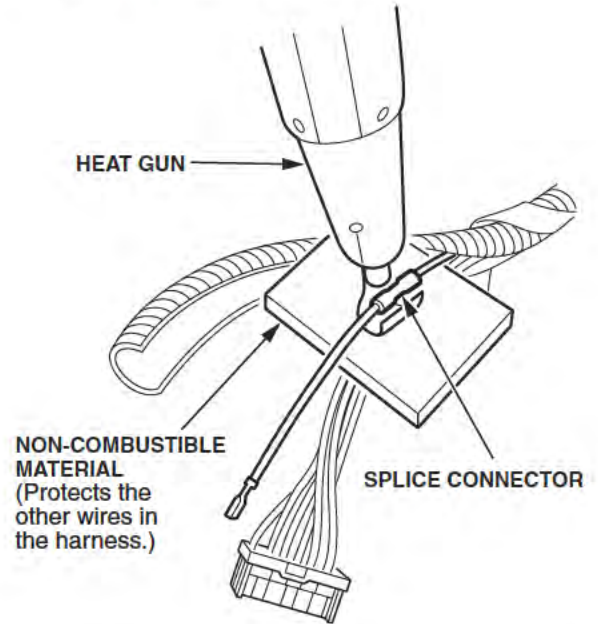
12. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into the center row cavity of the 16P connector, above the WHT/RED wire cavity (terminal 6), then remove the WHT/RED wire.
13. Strip off 7 mm of insulation from the vehicle wire harness side of the WHT/RED wire. Insert the stripped end into one side of the splice connector, and crimp the connector.



14. Cut the new RED/WHT wire 40 mm from the end of its terminal. Then strip off 7 mm of insulation from the cut end.
15. Insert the stripped end of the new RED/WHT wire into the other side of the splice connector, then crimp the connector.
16. With a non-combustible material between the RED/WHT wire and the vehicle wire harness, use a heat gun to shrink the splice connector casing.

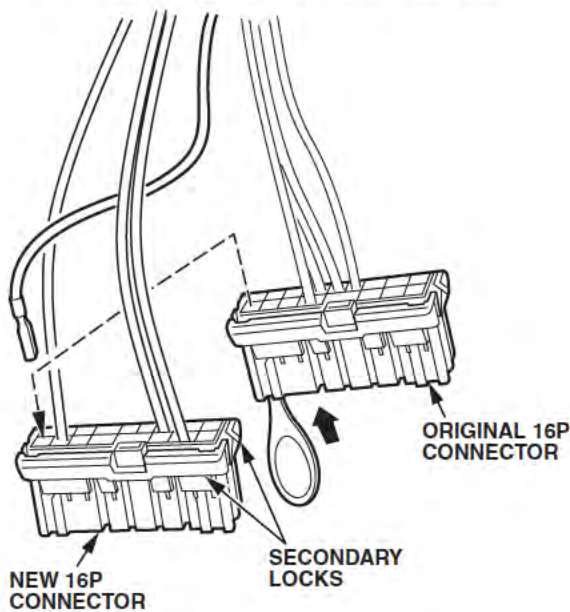
NOTE:

- Be careful to not get burned.
- Do not overheat the wire.



17. If the original 16P connector is *not* heat damaged or discolored, insert the new RED/WHT wire into its proper terminal cavity in the connector, then go to step 21. If the connector is *heat damaged*, go to step 18.
18. Use the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A-011) to carefully pry open the secondary lock on the **new** 16P connector.

19. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into a center row cavity of the original 16P connector, remove the corresponding wire from its cavity, and transfer it to the same cavity in the new 16P connector. Repeat this for all the wires except the original WHT/RED wire.



20. Insert the new RED/WHT wire into its proper terminal cavity in the new 16P connector.
21. Snap the secondary lock(s) closed on the 16P connector.
22. Using electrical tape, retape the wire harness.
23. Install the new combination light switch with the two original screws.
24. Connect the negative cable to the battery.
25. Check the operation of the headlights, the parking lights, and the turn signals.
26. Install the steering column covers.
27. Enter the radio anti-theft code (if applicable), then enter your customer's radio station presets. Set the clock.

# Attachment #Q6

## Service Bulletin 10-082

### Safety Recall: 2007-08 Fit Low Beam Headlights May Not Work



Applies To: **2007–08 Fit** – ALL

March 11, 2011

## Safety Recall: 2007–08 Fit Low Beam Headlights May Not Work (Supersedes 10-082, dated January 28, 2011, to revise the information marked by the black bars)

### REVISION SUMMARY

Under REPAIR PROCEDURE, the illustrations in steps 22 and 23 were changed.

### BACKGROUND

A terminal in the combination light switch 16P harness connector can overheat and may cause the low-beam headlights to fail without warning. Although the high-beam position remains operational, an unexpected loss of low beam functionality could result in a crash.

### CUSTOMER NOTIFICATION

All owners of affected vehicles will be sent a notification of this campaign. An example of the customer notification is at the end of this service bulletin.

To verify vehicle eligibility, you must check at least one of these items:

- The customer has a notification letter.
- The vehicle is shown as eligible on an iN VIN status inquiry.

In addition to the listed items, check for a punch mark above the seventh character of the engine compartment VIN. A punch mark in that location means the vehicle has already been repaired.

Some of the vehicles affected by this campaign may be in your used vehicle inventory. **These vehicles must be repaired before they are sold or leased.** To see if a vehicle is affected by this campaign, do an iN VIN status inquiry before selling it, leasing it, or returning it to a service customer.

Should an unrepaired vehicle that was in inventory, or that came in for service after this service bulletin was issued, cause an injury or property damage because of the campaigned item, the dealership will be solely responsible to the damaged party, and will be required to defend and indemnify American Honda for any resulting claims.

### CORRECTIVE ACTION

Inspect the combination light switch wire harness 16P connector and, depending on what you find, install a Combination Light Switch Wire Kit, or a Combination Light Switch Repair Kit.

### PARTS INFORMATION

NOTE: Most vehicles require only the Combination Light Switch *Wire* Kit.

Combination Light Switch Wire Kit:

P/N 06322-SAA-305

(Includes 250 mm wire with attached terminal, wire splice connector, and wire tie)

Combination Light Switch Repair Kit:

Base models: P/N 06323-SAA-307

Sport models: P/N 06323-SAA-309

(Includes switch, 16P wire harness connector, 250 mm wire with attached terminal, wire splice connector, and wire tie)

### TOOL INFORMATION

NOTE: The tools listed below were previously sent to your dealership for the completion of Service Bulletin 04-015, *Safety Recall: Combination Light Switch*. If you need additional tools, order them through the parts ordering system.

Terminal Pin Kit C: T/N 07QAZ-003020C

(Contains the wire crimper and the heat gun used for wire splicing.)

Terminal Maintenance Set: T/N 070AZ-S5A0100

[Contains Terminal Remover Set (six small, plastic tools used to remove terminals from the 16P headlight wire harness connector), and Secondary Lock Opener (a miniature, flat-tip screwdriver used to open the secondary locks on the 16P headlight wire harness connector)]

### WARRANTY CLAIM INFORMATION

OP#	Description	FRT
7280A3	Install a Combination Light Switch <i>Wire</i> Kit.	0.6
7280A4	Install a Combination Light Switch <i>Repair</i> Kit.	0.7

Failed Part: P/N 35255-S5A-A02

Defect Code: 5LS00

Symptom Code: R5800

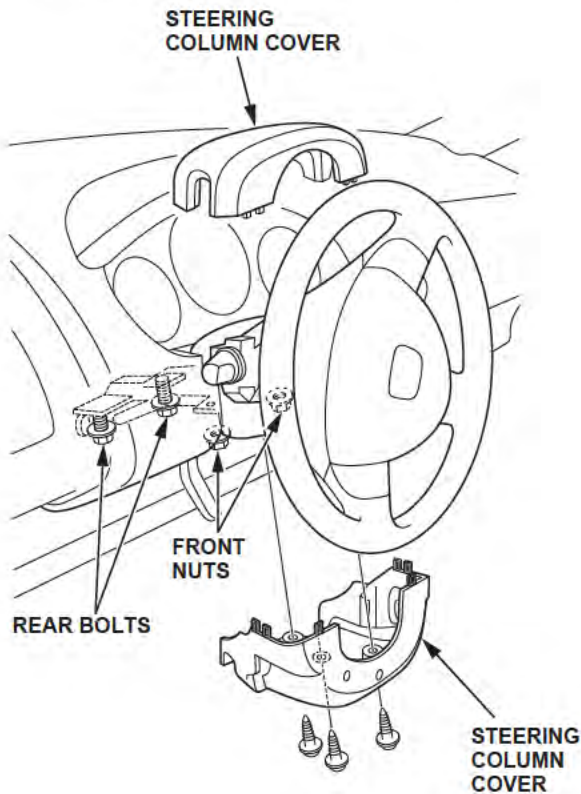
Skill Level: Repair Technician



## REPAIR PROCEDURE

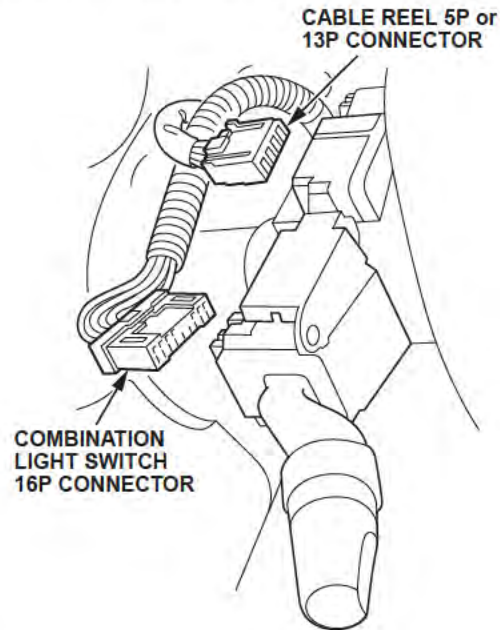
### NOTE:

- Over 90 percent of affected vehicles should be repairable with the Combination Light Switch *Wire Kit*.
  - SRS components are located in this area. Before you begin, review the SRS component locations, cautions, and procedures in the service manual.
  - Be careful not to damage the dashboard or other interior trim pieces.
  - For more information on wire terminal replacement and wire splicing, refer to Service Bulletin 00-099, *Terminal Replacement Instructions*.
1. Make sure you have the anti-theft code for the radio, then disconnect the negative cable from the battery.
  2. Remove the driver's dashboard undercover.
  3. Remove the steering column covers.

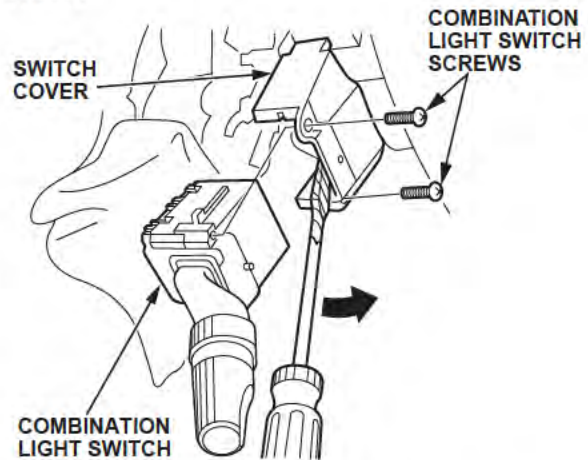


4. Remove the steering column front nuts and rear bolts.

5. Disconnect the 16P connector from the combination light switch and the 5P or 13P connector from the cable reel. Then carefully pull the wire harness to the right of the steering column.

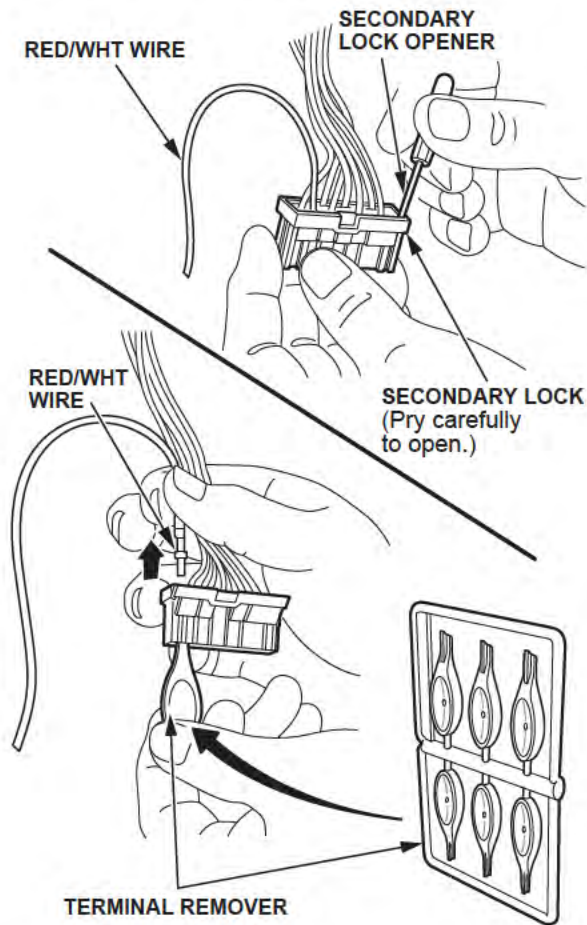


6. Turn the ignition switch to ACC (I), then turn the steering wheel 90 degrees to the left to allow room for removal of the combination light switch.
7. Remove the two screws from the combination light switch.



8. Using a flat-tip screwdriver wrapped with tape, slightly lift the switch cover, then remove the switch.  
**NOTE:** To allow removal clearance for the combination light switch, slightly shift the steering column to the right.

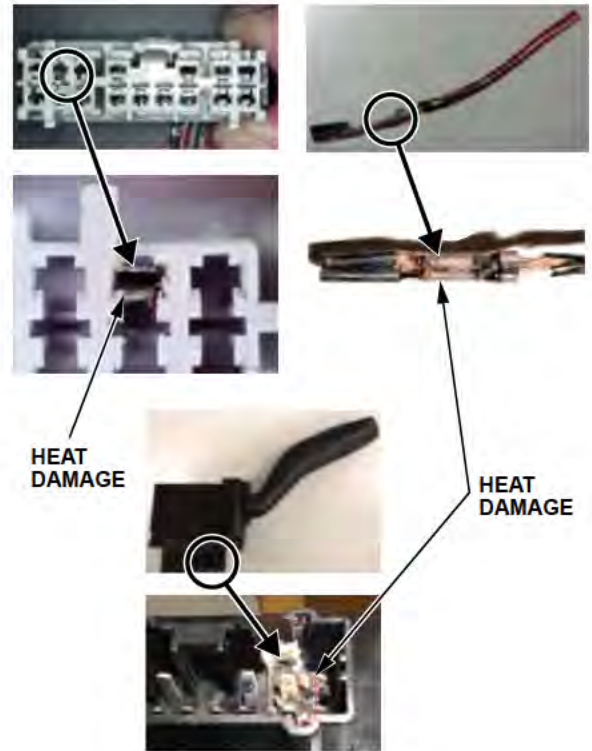
9. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the secondary lock on the RED/WHT wire side of the combination light switch 16P connector.



10. Twist off a terminal remover from the Terminal Maintenance Set (T/N 070AZ-S5A0100). Insert the terminal remover into the center row cavity of the 16P connector, above the RED/WHT wire cavity, then remove the RED/WHT wire from the 16P connector.

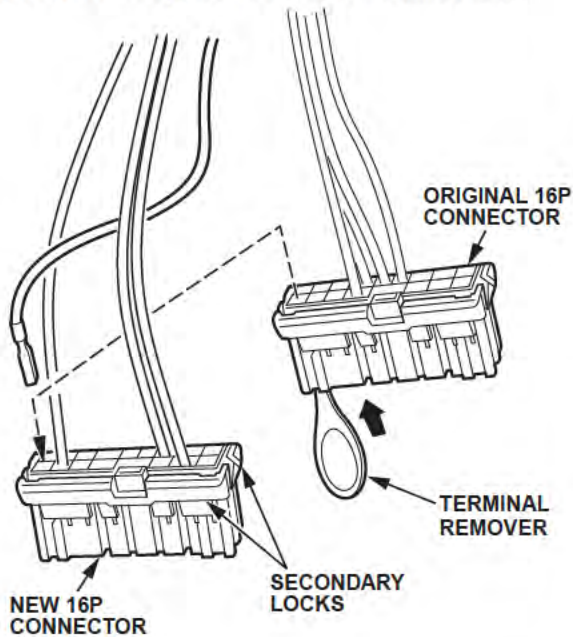
11. Using the photos below, check for signs of heat damage on the 16P connector, the terminal end of the RED/WHT wire, and the 16P terminals of the combination light switch.

- If you don't find any signs of heat damage, *retain the combination light switch* because you'll only be installing a Combination Light Switch Wire Kit. Go to step 14.
- If you do find signs of heat damage, *discard the combination light switch* because you'll be installing a Combination Light Switch Repair Kit. Go to step 12.

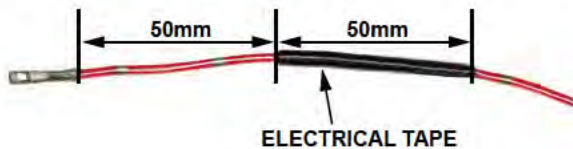


12. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the other secondary lock on the 16P connector.

13. Twist off a terminal remover from the Terminal Maintenance Set (T/N 070AZ-S5A0100). Insert the terminal remover into a center row cavity of the original 16P connector, remove the corresponding wire from its cavity, and transfer it to the same cavity in the new 16P connector from the repair kit. Repeat this for all the wires *except* the original RED/WHT wire; this wire will be installed later.



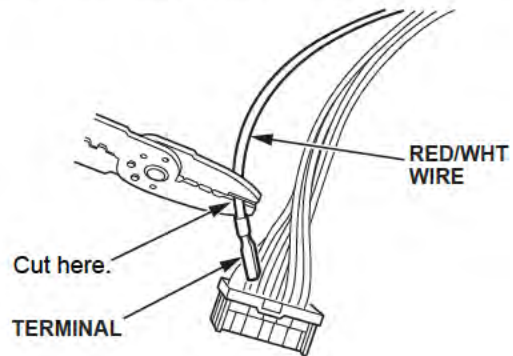
14. On the new RED/WHT wire provided in either kit, measure 50 mm from the terminal end, and wrap a 50 mm section of the wire with three turns of electrical tape. This taped section of the wire will be secured to the combination light switch in step 22.



15. Strip off 7 mm of insulation from the opposite end of the new RED/WHT wire.

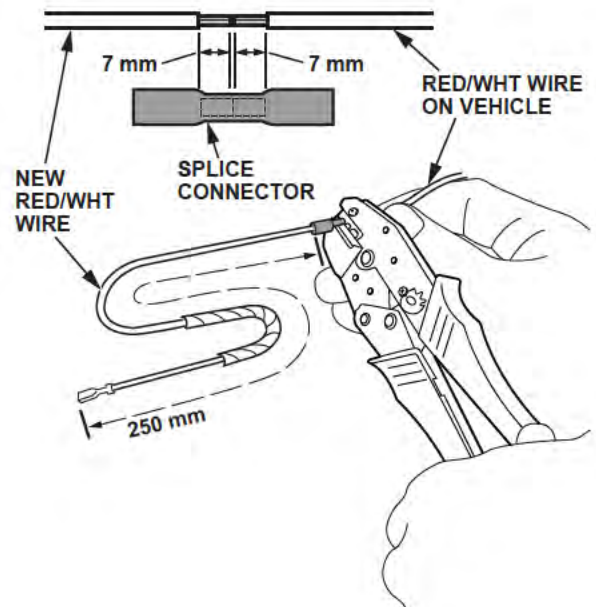
16. Cut the vehicle side RED/WHT wire near the terminal, then strip off 7 mm of insulation from the end of the wire.

NOTE: If there was any heat damage to the RED/WHT wire, make sure to cut off the damaged area before you strip off the insulation.



17. Insert the stripped end of the new and the original RED/WHT wire into each side of the splice connector from the kit, then, using the wire crimper from Terminal Pin Kit C, crimp the connector. Slightly pull on both sides of the wire to make sure it's secured in the splice connector.

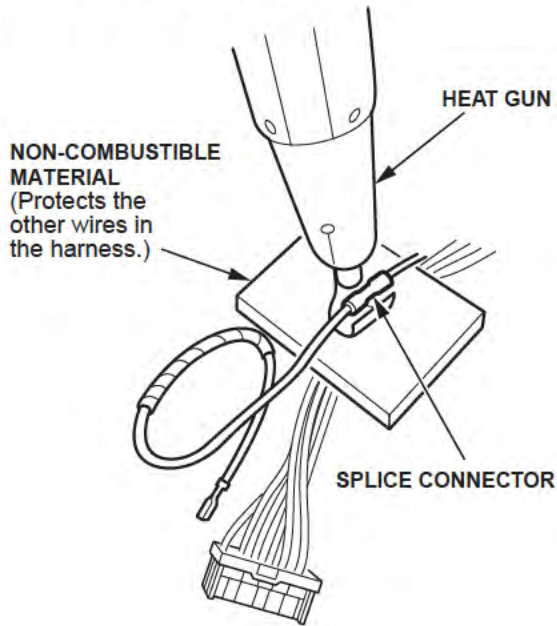
NOTE: To get the correct amount of pressure on the splice connector, you need to use the wire crimper from Terminal Pin Kit C.



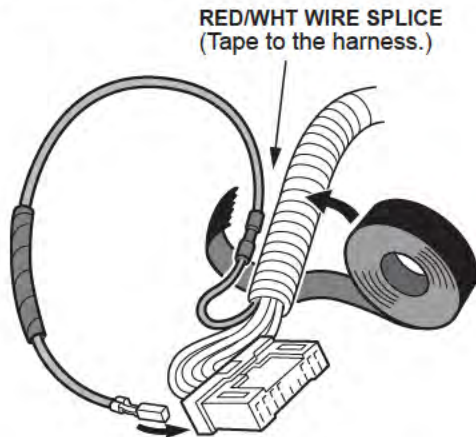
18. With a non-combustible material between the RED/WHT wire and the vehicle wire harness, use a heat gun to shrink the splice connector casing.

NOTE:

- Be careful not to get burned.
- Do not overheat the wire.



19. Place the wire splice on top of the combination switch wire harness, then attach the splice to the harness by wrapping them together with electrical tape.



20. Insert the new RED/WHT wire into its proper position in the 16P connector, then snap the connector secondary locks closed.

21. Release the cover locks on the combination light switch, then remove the switch cover.

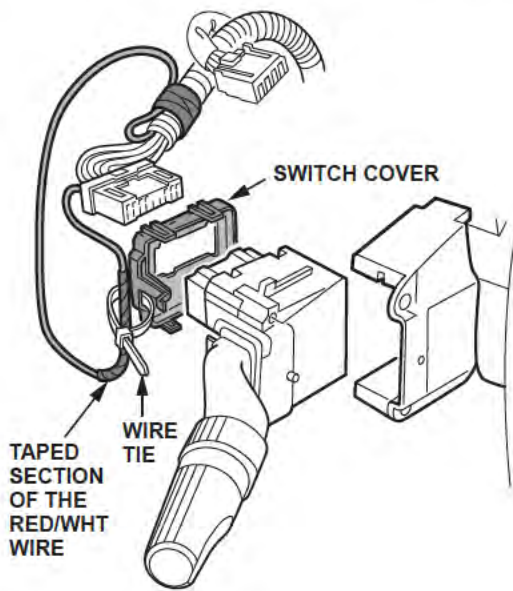
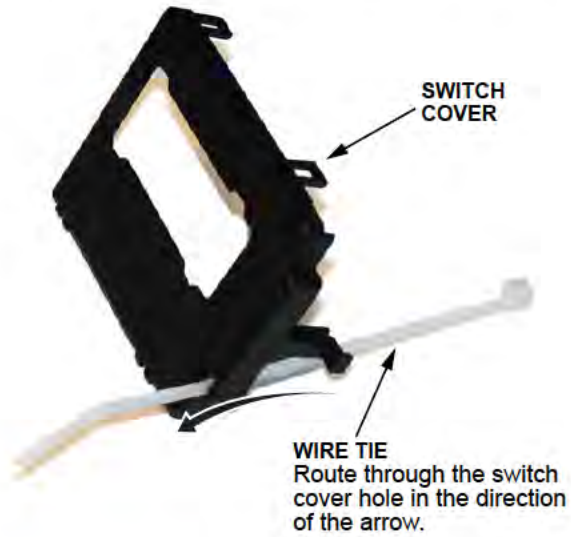
Release the switch cover locks.



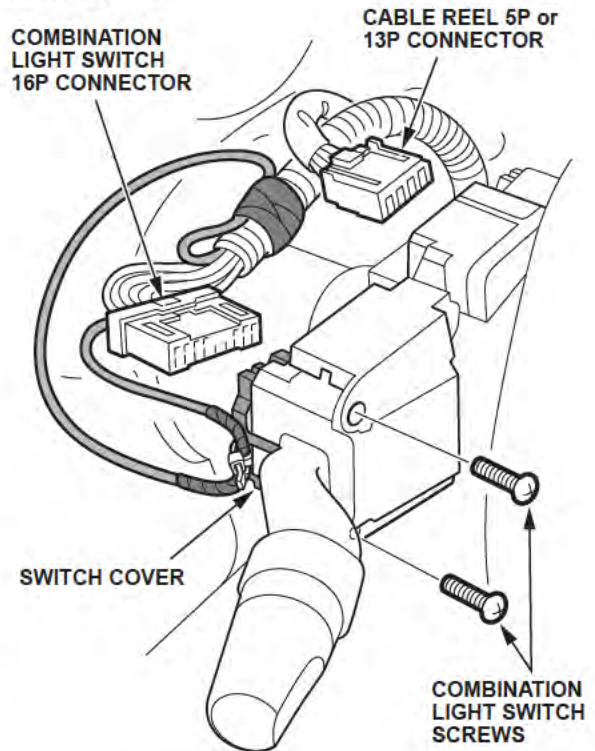
SWITCH COVER Remove.



22. As shown below, route the wire tie from the kit through the hole in the lower corner of the switch cover. Then use the wire tie to secure the RED/WHT wire (in the section you taped in step 14) to the switch cover. Cut off the excess wire tie.



23. Reattach the switch cover to the combination light switch. Make sure the switch cover is properly locked in place.



24. Connect the 16P connector to the combination light switch, then route the RED/WHT wire under the 5P or 13P cable reel connector, and reconnect the connector. Make sure the connectors are securely connected.
25. Install the combination light switch with the two original screws.
26. Connect the negative cable to the battery.
27. Check the operation of the headlights, the parking lights, and the turn signals.
28. Install the steering column front nuts and rear bolts.
29. Install the steering column covers.
30. Reinstall the driver's dashboard lower cover.
31. Enter the radio anti-theft code.
32. Center-punch a completion mark above the seventh character of the engine compartment VIN.

Center-punch here.

JHMGD3XXXXXXXXXXXX

January 2011

### **Safety Recall Campaign: Headlight Switch**

Dear Fit Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

#### **What is the reason for this notice?**

Honda has decided that a defect which relates to motor vehicle safety exists in certain 2007–08 model year Fit vehicles. There is a potential failure with the wiring of the low beam headlights which may cause the low beam headlights to fail. The loss of the low beam headlights will increase the risk of a crash.

#### **What should you do?**

Call any authorized Honda dealer and make an appointment to have your vehicle repaired. The dealer will inspect and repair the headlight wiring if necessary. This work will be done free of charge. Please plan to leave your vehicle for half a day to allow the dealer flexibility in scheduling.

#### **Who to contact if you experience problems.**

If you are not satisfied with the service you receive from your Honda dealer, you may write to:

American Honda Motor Co., Inc.  
Honda Automobile Customer Service  
Mail Stop 500-2N-7A  
1919 Torrance Blvd.  
Torrance, CA 90501-2746

If you believe that American Honda or the dealer has failed or is unable to remedy the defect in your vehicle, without charge, within a reasonable period of time (60 days from the date you first contact the dealer for a repair appointment), you may submit a complaint to:

Administrator  
National Highway Traffic Safety Administration  
1200 New Jersey Ave., SE  
Washington, DC 20590

Or call the toll-free Safety Hotline at 888-327-4236 (TTY 800-424-9153), or go to <http://www.safercar.gov>.

#### **What to do if you feel this notice is in error.**

Our records show that you are the current owner or lessee of a 2007 or 2008 Fit involved in this campaign. If this is not the case, or the name/address information is not correct, please fill out and return the enclosed, postage-paid Information Change Card. We will then update our records.

If you previously paid to have the headlight switch replaced, you may be eligible for reimbursement. Refer to the attached Instructions for Reimbursement for the eligibility requirements and the reimbursement procedure.

#### **Lessor Information.**

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

#### **If you have questions.**

If you have any questions about this notice, or need assistance with contacting a Honda dealer, please call Honda Automobile Customer Service at 800-999-1009, and select option 4.

We apologize for any inconvenience this campaign may cause you.

Sincerely,

**American Honda Motor Co., Inc.  
Honda Automobile Division**

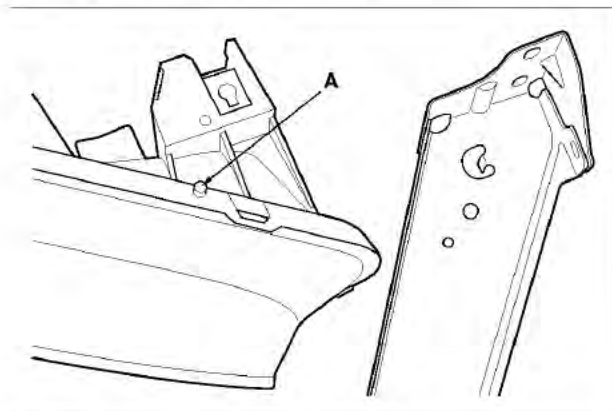
# Attachment #Q6

## Vehicle General Information

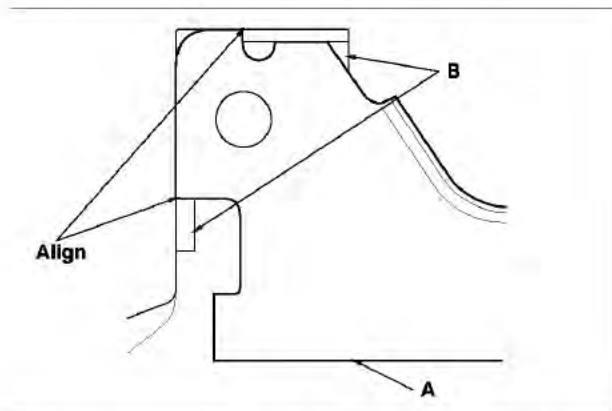
### 2002 CR-V – Damaged Headlight Alignment Pin Procedure

## 2002 CR-V - Damaged Headlight Alignment Pin Procedure

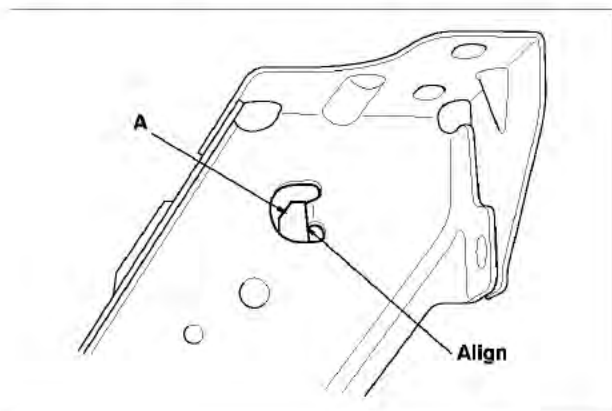
If the alignment pin (A) was broken in a collision and the headlight assembly itself was not damaged, the headlight assembly can be reused.



1. Align the corner upper beam (A) with the guides (B) on the headlight housing.



2. Align the headlight housing with the flange (A) before tightening the bolts.
3. Reinstall the headlight assembly, and adjust the headlights to local requirements.





EA11-012

HONDA

4/20/2012

Q7c-d

Headlight system  
oprations flow 120320

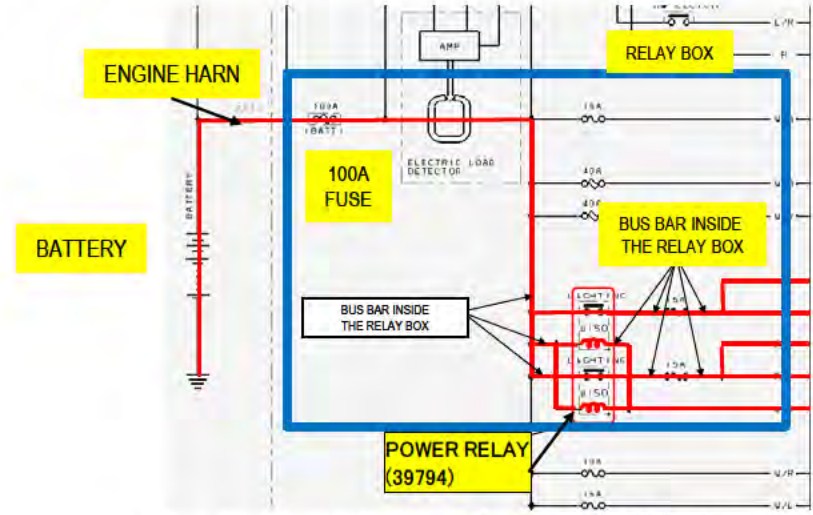
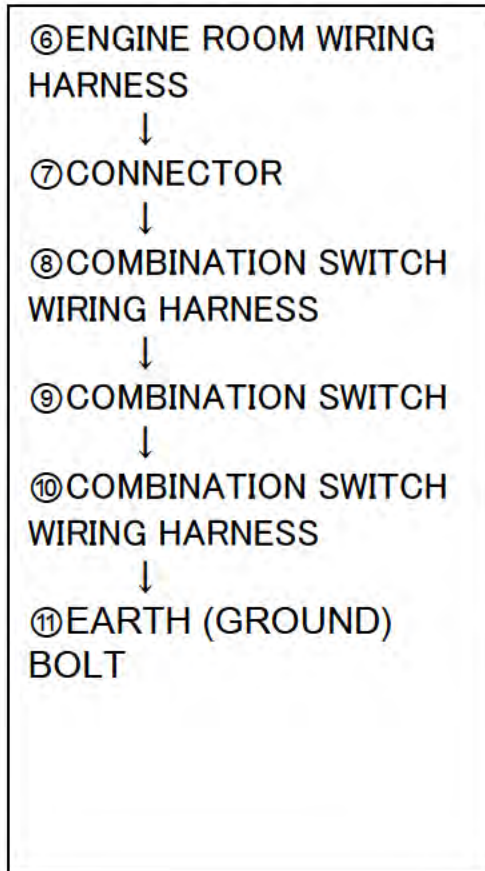
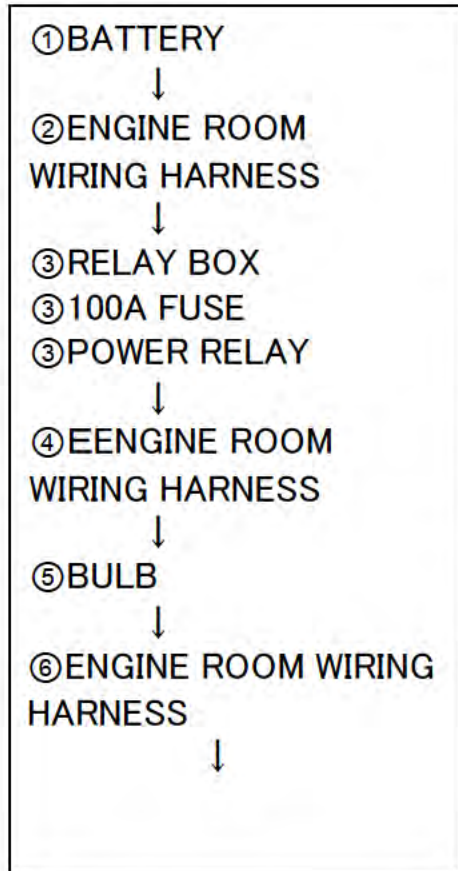
# The Current Flow from the Battery to Bulbs

(A List of names, functions, and the specs of all components)

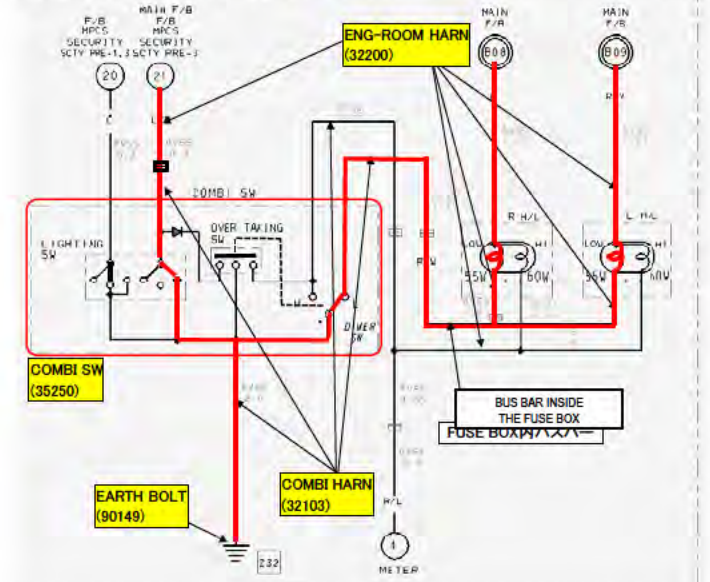
# Current Flow From the Battery to Bulbs

System: Headlight System

Model: CR-V, Element, Pilot, Insight, CIVIC, and FIT



LIGHTING SYSTEM (HALOGEN) Before MMC (02 to 04M) Dual Headlamp



## Component Junctures

- Each circuit is connected by BUS bar within the relay box.
- ⑦ CONNECTOR listed above is used as a joint of the harnesses.
- The other components are connected to the harness by a connector.

# Current Flow From the Battery to Bulbs

Flow	Component Name	P/N	Function	Spec
①	BATTERY	31500	Lead-acid battery The battery is charged by the generator. The unit which supplies power (voltage, current) to each electrical equipment.	—
②	ENGINE HARNESS	32110	Unit which electrically connects each electric part that is installed on the vehicle. Electrical wires and nearby parts (e.g. connectors) are assembled into the unit. It supplies the power from the battery to devices such as headlight bulbs.  Harness that route around the engine room and dashboard	Wiring: JIS C 3406 Low-voltage auto wire (AV) JASO D 611 Thin low-voltage auto wire (AVS) Extra thin low-voltage auto wire (AVSS) Connector: HM internal standard which conforms to the ISO and JASO standards
③	RELAY BOX	38250	Distribute electricity from the battery to each electrical part such as the headlight through bus bar etc.	-
③	100A FUSE (Within relay box)		Blown and shut off the headlight electrical circuit when excessive current flows to the circuit. (A part which protect the electric circuit and prevent incidents such as heat and fire.)	Fuse: ISO8820-3 and JASOD612-3 standards
③	Power Relay (Within relay box)	39794	Consists of electromagnet and contact. Electronic part that controls other electric power upon receiving electrical signals. Supply power to H/L bulb upon receiving H/L ON signal from COMBI SW.	Rating: DC12V/16V
④	ENG ROOM HARN	32200	The same as ②	The same as ②
⑤	BULB	33115	Light source for driving beam (high beam) headlight. Halogen bulb	FMVSS 108 Standard HB2 12V60/55W

# Current Flow From the Battery to Bulbs

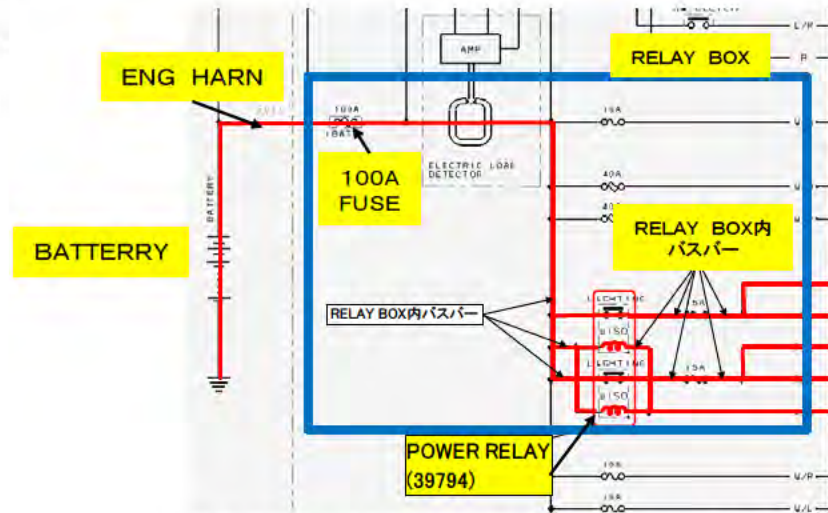
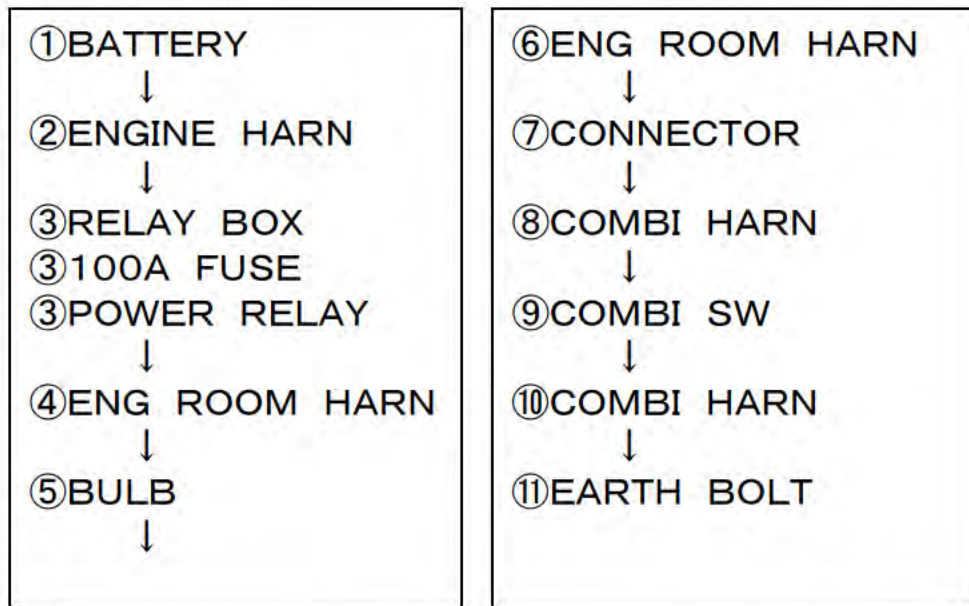
Flow	Component Name	P/N	Function	Spec
⑥	ENG ROOM HARN	32200	The same as ②	The same as ②
⑦	CONNECTOR (HARN to HARN)	-	Electrically and mechanically connect harnesses.	-
⑧	COMBI HARN	32103	<p>Unit which electrically connects each electric part that is installed on the vehicle. Electrical wires and nearby parts (e.g. connectors) are assembled into the unit. It supplies the power from the battery to devices such as headlight bulbs.</p> <p>Harness that route inside the instrument panel</p>	<p>Wiring:            JIS C 3406 Low-voltage auto wire (AV)            JASO D 611 Thin low-voltage auto wire (AVS)            Extra thin low-voltage auto wire (AVSS)            Connector: HM internal standard which conforms to the ISO and JASO standards</p>
⑨	COMBI SW	35250	<p>Contains lighting switch and dimmer switch and has following roles. Passing function is included in the dimmer switch.</p> <ul style="list-style-type: none"> <li>•Turn on/off the headlight bulbs</li> <li>•Switch driving beam (low beam) and dipped beam (high beam).</li> <li>•Illuminate the low beam while maintaining the COMBI SW lever. (Passing function)</li> </ul>	<p>Rating: DC12V            DIMMER LO:11A HI:13A PASSING:13A,            HEAD:0.5A SMALL:0.5A , TURN:5A, FR            FOG:0.5A</p>
⑩	COMBI HARN	32103	The same as ⑧	The same as ⑧
⑪	EARTH BOLT	90149	Bolt to fix the electrical terminal that releases electric charge from the headlight bulb to the BODY through the harness.	<p>M6 bolt            Tightening Torque: 6.86 to 11.76N.m            Surface treatment: MFZn</p>

バッテリーからバルブ点灯までの電流の流れ  
(各コンポーネントの名称、機能、仕様一覧)

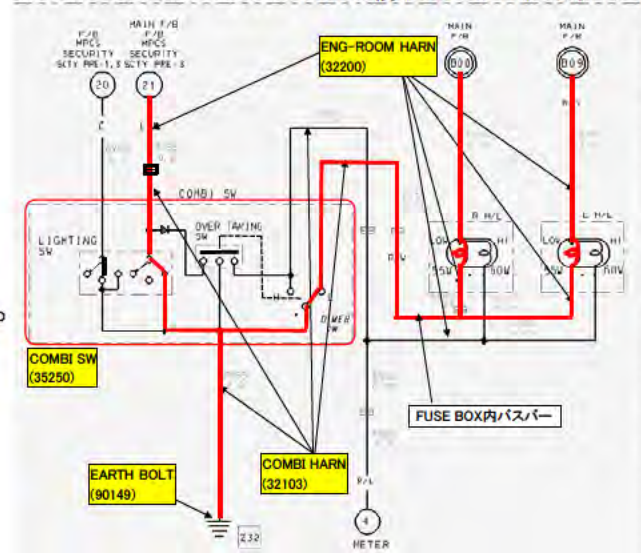
# バッテリーからバルブ点灯までの電流の流れ

機能名: ヘッドライトシステム

機種名: CR-V、Element、Pilot、Insight、CIVIC、FIT



LIGHTING SYSTEM (HALOGEN) MMC 前 (02~04M) 2灯H/L



コンポーネントの結合について

- ・RELAY BOX内はバスバーにより各回路が結合されている。
- ・上記⑦はHARN to HARNのコネクターによる結合である。
- ・その他のコンポーネントと各HARNはコネクターによる結合となっている。

# バッテリーからバルブ点灯までの電流の流れ

流れ.	部品名称	部番	機能	仕様
①	BATTERY	31500	鉛蓄電池 車両の発電機により充電され、車両の各電装品へ電力(電圧、電流)を供給する。	—
②	ENGINE HARN	32110	車両に搭載されている個々の電装部品を電氣的に接続させる機能を持ち、電線や周辺部品(コネクタなど)をアSEMBLしたユニット部品である。バッテリーからの電力をヘッドライトバルブなどの機器に供給する役割を果たしている。 ENG ROOM、ダッシュボード周辺を通線するハーネス	電線: JIS C 3406 自動車用低圧電線 (AV) JASO D 611 自動車用薄肉低圧電線 (AVS) 自動車用超薄肉低圧電線 (AVSS) コネクタ:ISO、JASO規格に準拠したHM社内規格
③	RELAY BOX	38250	バッテリーからの電気をバスバー等でヘッドライト等の各電装部品に分配する部品	—
③	100A FUSE (RELAY BOX内)		ヘッドライト電気回路に過大な電流が流れたとき溶断し回路を遮断する部品(電気回路を保護、あるいは加熱や発火といった事故を防止する部品)	Fuse: ISO8820-3及びJASOD612-3規格
③	POWER RELAY (RELAY BOX内)	39794	電磁石と接点で構成されており、電気信号を受けて他の電力を制御する電子部品 COMBI SWのH/L ONの信号を受けてH/Lのバルブに電源を供給する	定格 DC12V/16A
④	ENG ROOM HARN	32200	②と同内容	②と同内容
⑤	BULB	33115	走行用前照灯の光源 ハロゲン電球	FMVSS 108規格 HB2 12V 60/55W



# バッテリーからバルブ点灯までの電流の流れ

流れ	部品名称	部番	機能	仕様
⑥	ENG ROOM HARN N	32200	②と同内容	②と同内容
⑦	CONNECTOR (HARN to HAR N)	—	ハーネスとハーネスを電氣的、機械的に結合する	—
⑧	COMBI HARN	32103	車両に搭載されている個々の電装部品を電氣的に接続させる機能を持ち、電線や周辺部品(コネクタなど)をアSEMBLしたユニット部品である。バッテリーからの電力をヘッドライトバルブなどの機器に供給する役割を果たしている。 インストルメントパネル内を通線するハーネス	電線: JIS C 3406 自動車用低圧電線 (AV) JASO D 611 自動車用薄肉低圧電線 (AVS) 自動車用超薄肉低圧電線 (AVSS) コネクタ:ISO、JASO規格に準拠したHM社内規格
⑨	COMBI SW	35250	ライティングスイッチとディマースイッチを内蔵し、次の役割を果たしている。ディマースイッチにはパッシング機能が含まれている。 ・ヘッドライトバルブを点灯、消灯する。 ・走行ビームとすれ違いビームを切り替える。 ・コンビスイッチレバーを保持している間、走行ビームを点灯させる。(パッシング機能)	定格 DC12V DIMMER LO:11A HI:13A , PASSING:13A , HEAD:0.5A , SMALL:0.5A , TURN:5A , FR FOG:0.5A
⑩	COMBI HARN	32103	⑧と同内容	⑧と同内容
⑪	EARTH BOLT	90149	ヘッドライトバルブの電荷をハーネスを介しBODYに逃がすための電線端子をBODYに固定するボルト	M6 ボルト 締め付けトルク 6.86~11.76N.m 表面処理:MFZn

EA11-012

HONDA

4/20/2012

Q8

Theme	Headlight low beam does not come on <Lighting SW>
Part #	32103-S9A-A60
Part name	Combination sub cord

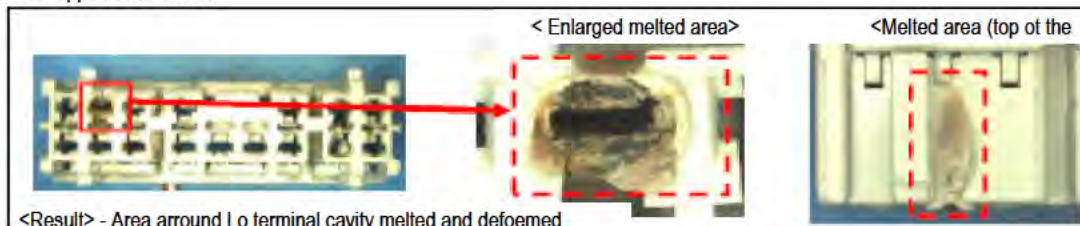
## Analysis Record [Analysis Report]

Sumitomo Electric Industries, Ltd. Sumitomo Wiring Systems, Ltd. Quality Control Division Second Quality Assurance Dept. Forth Quality Gr. Control No: HMQAR-20110502	Approved	Confirmed	Prepared

Occurrence situation (Symptoms, contention, number of cases, details of action)    Understanding facts (checking results, factor analysis, quality level of product)

Honda Control No.: AHOS2011051201-00  
 Concerned Model: 04M/CR-V  
 Type: CR-V  
 Transmission type: -  
 Frame No.: JHLRD684640  
 Engine No.: -  
 Production date: June 3, 2004  
 Registration date: August 7, 2004  
 Date problem occurred: February 9, 2011  
 Mileage: 133,000 miles  
 Region problem occurred: USA  
 Problem occurrence: Customer states that "headlights inoperative", "headlights sometimes operate intermittently", and "burnt smell from steering area".  
 Honda's confirmation results:  
 The dealer confirmed that No. 6 pin of headlight switch melted. Terminal discolored and also in some cases the coupler stuck with headlight switch (affected by thermal effect). The dealer is aware that there is a repair kit for the similar problem in Civic. It can also be used to repair CR-V. Parts for the vehicle of VIN: C018385.

**1. Appearance check**  
 - Connector appearance check



<Result> - Area around Lo terminal cavity melted and deformed.

**2. Terminal check**

① Terminal appearance    Terminal end discolored    Wire strand discolored  
 <Result> - Wire strand at terminal crimped area and terminal end discolored.  
 - Covering confirmed on the crimped end of resin, thus, covered area is in normal crimp condition.

② Gap height (Reference) Mating male tab thickness: 0.64mm  
 (Returned problem terminal)    (New terminal for reference)  
 Actual measurement of gap height:  
 <Result>- Terminal gap height is 0.65mm, spreading more than male tab thickness and deformed, thus, reduction in contact pressure of tongue plate is presumed.

③ Crimp condition  

	Internal control value	Measurement	Judgment
C/H	1.30±0.05	1.31	OK
Terminal stamp	E4		

 <Result> - Production control value met and no problem.

④ Tongue plate condition (Tongue plate fitted)  
 Area (1)    Area (2)  
 Enlarged    Enlarged  
 Adhesion of melted resin and discoloration confirmed    Adhesion of melted resin and discoloration confirmed

<Result>  
 - Adhesion of melted resin and discoloration confirmed on the end of tongue plate (1) and contact area of male and female terminals (2).  
 - No damage caused by insertion of foreign material evident on the terminal tongue plate.

⑤ Tongue plate bent area view  
 Tongue plate bent area view A    Tongue plate bent area view B  
 < Tongue plate bent area > View A SEM image    < Tongue plate bent area > View B SEM image  
 No stress corrosion crack  
 <Result> - No crack seen on the bent area of tongue plate and no stress corrosion crack formed.

**3. Component element analysis**

Measurement point	  - Cu and Sn, which are component elements of the terminal, and high C are detected.	<table border="1"> <tr><th>Elem</th><th>Wt %</th></tr> <tr><td>C</td><td>47.55</td></tr> <tr><td>O</td><td>23.32</td></tr> <tr><td>Sn</td><td>10.65</td></tr> <tr><td>Cu</td><td>18.47</td></tr> <tr><td>Total</td><td>100.00</td></tr> </table>	Elem	Wt %	C	47.55	O	23.32	Sn	10.65	Cu	18.47	Total	100.00		
Elem	Wt %															
C	47.55															
O	23.32															
Sn	10.65															
Cu	18.47															
Total	100.00															
Measurement point	  - Cu, Sn and Zn, which are component elements of the terminal, and high C are detected.	<table border="1"> <tr><th>Elem</th><th>Wt %</th></tr> <tr><td>C</td><td>41.44</td></tr> <tr><td>O</td><td>17.30</td></tr> <tr><td>Sn</td><td>7.87</td></tr> <tr><td>Cu</td><td>24.39</td></tr> <tr><td>Zn</td><td>9.00</td></tr> <tr><td>Total</td><td>100.00</td></tr> </table>	Elem	Wt %	C	41.44	O	17.30	Sn	7.87	Cu	24.39	Zn	9.00	Total	100.00
Elem	Wt %															
C	41.44															
O	17.30															
Sn	7.87															
Cu	24.39															
Zn	9.00															
Total	100.00															

< Result > - By the analysis, Cu, Sn and Zn, which are component elements of the terminal and high C, which is presumed to be melted resin, are detected.  
 [Reference : elements symbols] C: carbon, O: oxygen, Cu: copper, Sn: tin, Zn: zinc

**4. Summary**

Check items	Result
1 Connector appearance check	- Area around connector Lo terminal cavity melted and deformed.
2 Terminal check	① Terminal appearance - Wire strand at terminal crimped area and the terminal end discolored. - Covering confirmed on the crimped end of resin, thus, covered area is in normal crimp condition.
	② Gap height - Terminal gap height is 0.65mm, spreading more than male tab thickness and deformed, thus, reduction in contact pressure of tongue plate is presumed.
	③ Crimp condition - Production control value met and no problem.
	④ Tongue plate condition - Adhesion of melted resin and discoloration confirmed on the end of tongue plate (1) and contact area of male and female terminals (2). - No damage caused by insertion of foreign material evident on the terminal tongue plate.
⑤ Tongue plate bent area	No crack seen on the bent area of tongue plate and no stress corrosion crack formed.
3 Component element analysis	- No abnormal element other than component elements detected.

Based on the result of above problem part investigation, cause of heat generation and melting of the terminal could not be identified.

Investigation for problem cause (Occurrence mechanism, duplication test, Why-because analysis)

Appropriate C/M (C/M content, predict effect, PPA)

Confirm C/M's effectiveness (Effect result)

Step	1	2	3	4	5
Contents	Occurrence				
	Outflow				

--	--	--	--	--	--

テーマ	ヘッドライトロービーム点灯しない ＜ライティングSW＞
部番	32103-S9A-A60
部品名	コンビネーションサブコード

# 解析記録 [ 解析レポート ]

作成部門	住友電気工業株式会社 住友電装株式会社 品質管理本部 第2品質保証部第4品質グループ 管理No.:HMQ4R-20110502	承認	確認	作成
		荒木	岩淵	水谷
		11.6.2	11.6.2	11.6.2

## 発生状況 (現象・訴え内容・発生件数・処置内容)

御社管理No: AHOS2011051201-00  
 発生機種: 04M/CRV  
 型式: CR-V  
 ミッションタイプ: -  
 フレームNo: JHLRD684640  
 エンジンNo: -  
 製造日: 2004/6/3  
 登録日: 2004/8/7  
 不具合発生日: 2011/2/9  
 走行距離: 133,000 mile  
 発生地区: USA  
 発生状況: お客様訴え内容:「ヘッドライトが作動しない」「ヘッドライトが時々途切れながら作動する」「焼けた臭いがステアリング付近からする」  
 販社確認結果  
 ティーラーにて、ヘッドライトスイッチの6ピンが溶けていることを確認した。  
 ターミナル(端子)は変色しており時々カプラーもヘッドライトスイッチと固着している場合がある(熱影響による)。ティーラーでは、本件に関しては、Civicで類似の案件が起こった際の修理KITが存在すること知っている。  
 CR-Vに関しても、このKITで修理可能である。VINナンバー:C018385の車両の部品

## 事実の把握 (部品の確認結果・要因分析・生産品の品質状況)

### 1. 外観確認

コネクタ外観確認

＜結果＞・Lo端子キャビティの周囲が溶損、変形している。

### 2. 端子確認

#### ① 端子外観

端子先端部に変色  
電線素線に変色

＜結果＞  
 ・端子圧着部の電線素線及び端子先端部が変色している。  
 ・樹脂圧着部先端に被覆が確認できる事から被覆部は正規圧着状態である。

#### ② ギャップ寸法 (参考) 相手側オスタブ厚: 0.64mm (返却現品端子) (参考比較用: 新品端子)

＜結果＞  
 ・端子ギャップ寸法が0.65mmで、オスタブ厚以上開いて変形した状態であり、舌片接圧力が低下していると考えられる。

ギャップ寸法実測値: 0.65mm

#### ③ 圧着条件

	社内管理値	測定結果	判定
C/H	1.30±0.05	1.31	OK
端子刻印	E4		

＜結果＞  
 ・製造管理値を満たしており問題なし。

#### ④ 舌片状態 (舌片嵌合部)

(1)部位 (2)部位

樹脂溶融物付着と変色を確認

＜結果＞  
 ・(1)舌片先端と(2)オス・メス接触部に樹脂溶融物付着と変色を確認。  
 ・端子舌片部に異物挿入によるキズ痕跡は見られない

### ⑤ 舌片曲げ部位観察

＜舌片曲げ部> 矢視A側SEM写真  
 ＜舌片曲げ部> 矢視B側SEM写真

応力腐食割れなし

＜結果＞SEM写真より、舌片曲げ部にクラックは見られず、応力腐食割れは発生していない。

### 3. 成分分析

測定ポイント

Elem	Wt %
C	47.55
O	23.32
Sn	10.65
Cu	18.47
Total	100.00

・端子構成物質であるCu、SnとCが多く検出。

測定ポイント

Elem	Wt %
C	41.44
O	17.30
Sn	7.87
Cu	24.39
Zn	9.00
Total	100.00

・端子構成物質であるCu、Sn、ZnとCが多く検出。  
 ・分析結果より、端子構成物質であるCu、Sn、Znが検出され、樹脂溶融物と考えられるCが多く検出された。

【参考: 元素記号】 C:炭素 O:酸素 Cu:銅 Sn:スズ Zn:亜鉛

### 4. まとめ

確認項目	結果
1 コネクタ外観確認	・コネクタLo端子キャビティの周囲が溶損、変形している。
2 端子確認	① 端子外観 ・端子圧着部の電線素線及び端子先端部が変色している。 ・樹脂圧着部先端に被覆が確認できる事から被覆部は正規圧着状態である。
	② ギャップ寸法 ・端子ギャップ寸法が0.65mmで、オスタブ厚以上開いて変形した状態であり舌片接圧力が低下していると考えられる。
	③ 圧着条件 ・社内管理値内であり、問題なし。
	④ 舌片状態 ・(1)舌片先端と(2)オス・メス接触部に樹脂溶融物付着と変色を確認。 ・端子舌片部に異物挿入によるキズ痕跡は見られない。
	⑤ 舌片曲げ部位 ・舌片曲げ部にクラックが見られず、応力腐食割れは発生していない。
3 成分分析	・端子構成物質以外の特異な成分は認められなかった。

以上の調査結果より、現品状態から端子発熱・溶損に至った要因の特定には至りませんでした。

—以上—

## 原因の究明 (発生のメカニズム・再現テスト・なぜ・なぜ分析)

## 適切な対策 (対策内容・効果予測・PPA)

## 対策効果の確認 (効果実績)

ステップ	1	2	3	4	5
発生					
流出					

源流へのフィードバック (体制・仕組みへの反映内容)

Subject	Headlight low beam does not come on
Part #	35255-S5A-A02
Part name	SW ASSY, LIGHTING

## Analysis Record [Analysis Report]

Supplier, division	6/6/2011		
Toyoda Denso co., Ltd.	Approved	Confirmed	Prepared
Quality Department			
Quality assurance			
Market quality			

### Occurrence situation

(Symptoms, Alleged failure, the number of occurrence, C)

Type: RD6  
 Model: CR-V  
 FNo.: JHLRD684640  
 Pro. Date: June 3, 2004  
 Reg. Date: August 7, 2004  
 Occ. Date: February 9, 2011  
 Mileage: 133,000km  
 Occ. Country: U.S.A.  
 SW Lot: May 22, 2004

Alleged failure:  
 From customer:  
 "Headlight inoperative", "Headlight functions intermittently", "Burnt smell from around the headlight"  
 Result of diagnosis at the dealer:  
 Melted No 6 pin of the headlight SW was confirmed at the dealer. Terminal color change has occurred and the coupler and the headlight SW sometimes bond due to the heat.

Dealers know that the repair kit is available for the similar problem for Civic.

CR-V can be fixed with the same kit.  
 Part of VINNo: C

### Confirmed Facts

(Parts check results, factor analysis, and the quality of product)

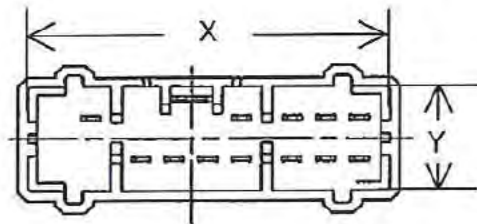
【Returned parts verification results】  
 Confirmed melting of the Lo circuit terminal for the lighting SW.

1. Returned parts investigation results
- 1) Appearance
- Oil adhesion was confirmed on the surface of the case etc
  - Inside the coupler and Lo terminal are discolored.
  - Damage was confirmed inside the coupler and on the terminal
  - Some returned parts applied plating.

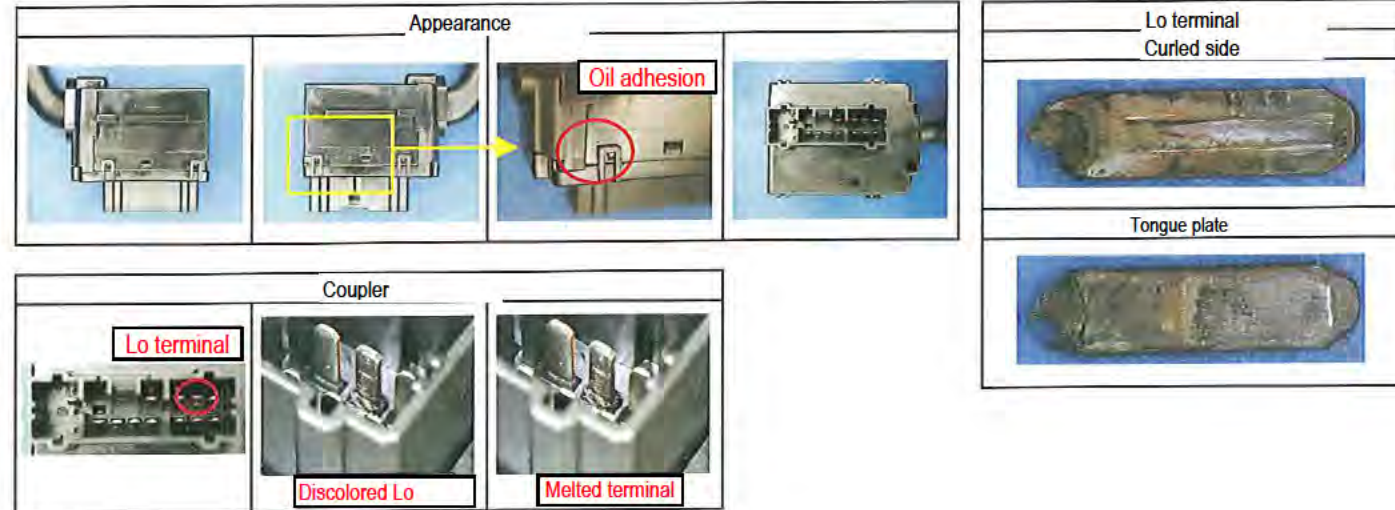
• Coupler inner dimension, Lo terminal thickness (Unit:mm)

	Spec value	Measure	Judgeme
Direction of X	43.2±0.1	43.2	OK
Direction of Y	12.7±0.1	12.7	OK
Lo terminal thickness	0.64±0.04	0.62	OK

• Coupler inner dimension and terminal thickness both satisfied the sp



- As a result of continuity check of each circuit (except for Lo circuit), no abnormality such as continuity failure was found.
- 2. disassembly results
- Local discoloration of the terminal was confirmed for both curled side and tongue plate side when checked its appearance by cutting the Lo terminal.



### Confirmed Facts (2) (Parts check results, factor analysis, and the quality of product)

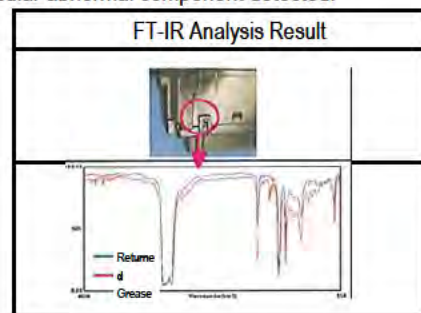
#### 2. Analysis results

##### 1) FT-IR analysis result

Analysis part	Analysis result
Adhesion on the case	Grease used for SW

##### 【Result】

No particular abnormal component detected.

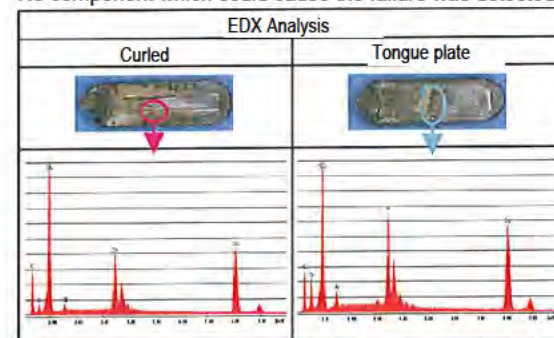


##### 2) EDX analysis results

Analysis part	Analysis result
Lo terminal	Copper (Cu) and tin (Sn) that are the components of SW terminal were detected. Other than that, carbon (C), oxygen (O), and aluminum (Al) that are SW resin components were detected.

##### 【Result】

No component which could cause the failure was detected.



#### 3. Summary

From the verification result above, No abnormality was found inside the circuit of the returned SW.  
 Although melting was confirmed on the Lo terminal, No cause which leads to heat generation and melting was found on the SW.  
 Loose connection is considered to be a cause of heat generation, so detailed inspection of the counterpart terminal is required.

#### Route cause investigation (Occurrence mechanism, reproducibility test, Why-why analysis)

Appropriate C/M (Detailed C/M, effect, PPA)

C/M effectiveness check (Actual record)

Feedback to Genryu (Reflection to the system and mechanism)

Step	1	2	3	4	5
Contents	Occurrence				
	Outflow				

テーマ	ヘッドライトロービーム点灯しない
部番	35255-S5A-A02
部品名	SW ASSY, LIGHTING

# 解析記録 [ 解析レポート ]

作成部門	課名又は取引先名 東洋電装株式会社 品質本部 品質保証部 市場品質課	2011年 06月 02日		
		承認	確認	作成
				中嶋

## 発生状況 (現象・訴え内容・発生件数・処置内容)

型式: RD6  
車種: CR-V  
FNo.: JHLRD68464C018385  
製造日: 2004年06月03日  
登録日: 2004年08月07日  
発生日: 2011年02月09日  
走行距離: 133,000km  
発生地区: USA  
SWロット: 2004年05月22日  
訴え事象: お客様訴え内容:「ヘッドライトが作動しない」「ヘッドライトが時々途切れながら作動する」「焼けた臭いがステアリング付近からする」

販社確認結果:ディーラーにて、ヘッドライトスイッチの6ピンが溶けていることを確認した。ターミナル(端子)は変色しており、時々カプラーもヘッドライトスイッチと固着している場合がある(熱影響による)。ディーラーでは、本件に関しては、Civicで類似の案件が起こった際の修理KITが存在することを知っている。CR-Vに関しても、このKITで修理可能である。VINNo.: C018385の車両の部品

## 事実の把握 (部品の確認結果・要因分析・生産品の品質状況)

【AQAO様 返却現品確認結果】

- ・ライティングSWのLO回路端子部が溶融している事を確認。
- ・各回路の導通確認(Lo回路は端子間を除く)を行ったところ、導通不良等の異常は見られなかった。

2)分解確認結果

- ・Lo端子を切断し、この外観を確認したところ、カール側・舌片共に、端子の一部が変色していることが確認できる。

1. 現品確認結果

1)外観確認結果

- ・ケース等の表面に油分の付着が確認できる。
- ・カプラー内部、Lo端子に変色が確認できる。
- ・カプラー内部、Lo端子根元に溶損が確認できる。
- ・端子外観より返却された現品はメッキ対策品である。

・カプラー内寸、Lo端子板厚確認 (単位:mm)

	規格値	実測値	判定
X方向	43.2±0.1	43.2	OK
Y方向	12.7±0.1	12.7	OK
Lo端子板厚	0.64±0.04	0.62	OK

・カプラー内寸、端子板厚共に規格を満足しており問題無し。

外観部

Lo端子

カプラー部

## 事実の把握(続き) (部品の確認結果・要因分析・生産品の品質状況)

2. 分析確認結果

1)FT-IR分析結果

分析箇所	分析結果
ケース側面付着物	SW使用グリス

【結果】  
特に異質な成分は検出されておりません。

FT-IR 分析結果

2)EDX分析結果

分析箇所	分析結果
Lo端子	SW端子成分の銅(Cu)、錫(Sn)が検出された。 上記成分の他にはSW樹脂成分の炭素(C)、酸素(O)、アルミニウム(Al)が検出された。

【結果】  
今回の事象に至らしめる様な成分は検出されておりません。

EDX 分析結果

3. まとめ

以上の確認結果より、返却されたSWの内部回路に異常な箇所は確認されませんでした。  
ただし、Lo端子の溶損が確認できましたが、本SWにおいて発熱・溶損に至る要因は確認されませんでした。  
なお、発熱に至った要因として、何らかの接触不良が考えられますがその原因については相手側端子の詳細確認が必要と判断致します。

## 原因の究明 (発生のメカニズム・再現テスト・なぜ・なぜ分析)

適切な対策 (対策内容・効果予測・PPA)

対策効果の確認 (効果実績)

源流へのフィードバック (体制・仕組みへの反映内容)

ステップ	1	2	3	4	5
内容	発生				
	流出				



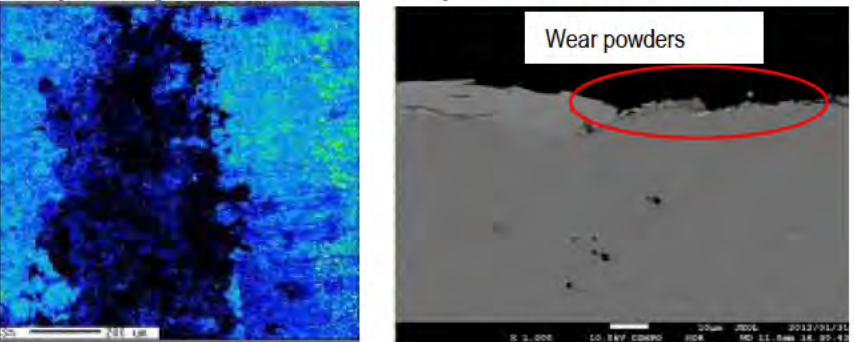
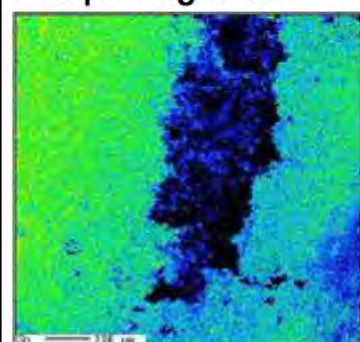
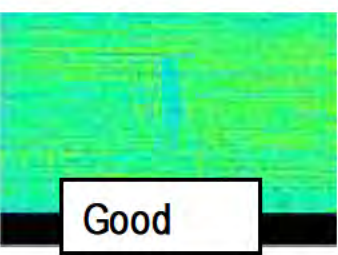
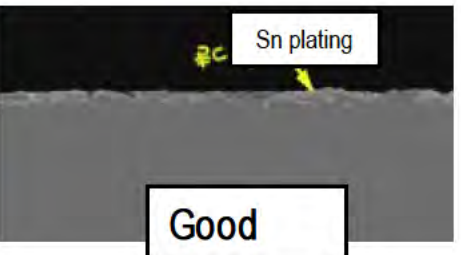
---

# **AQAO Analysis Result**

# Analysis results Returned part analysis

## ◇Returned part analysis results (Melting)

No.3 USA JHLRD684640 XXXXXXXXXX Customer contention : head light doesn't operate.

Male terminal in the lighting SW side	Female terminal in the harness side
<p data-bbox="174 391 750 438">Lo terminal is melting due to heat.</p> 	<p data-bbox="1086 391 1668 438">Lo terminal is melting due to heat.</p> 
<p data-bbox="174 742 996 790">Sn plating wear, and wear powder accumulation</p> 	<p data-bbox="1086 742 1377 790">Sn plating wear</p> 
 <p data-bbox="257 1348 369 1396">Good</p>  <p data-bbox="817 1181 929 1220">Sn plating</p> <p data-bbox="728 1356 840 1404">Good</p>	

SN plating wear, and accumulated wear powders indicate that the area had repeatedly been sliding.



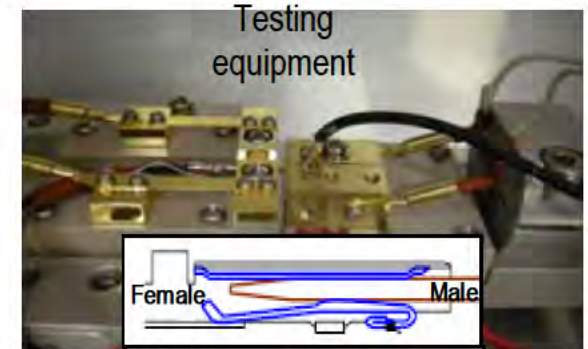
# Analysis results Recreation testing (Sliding)

## Purpose

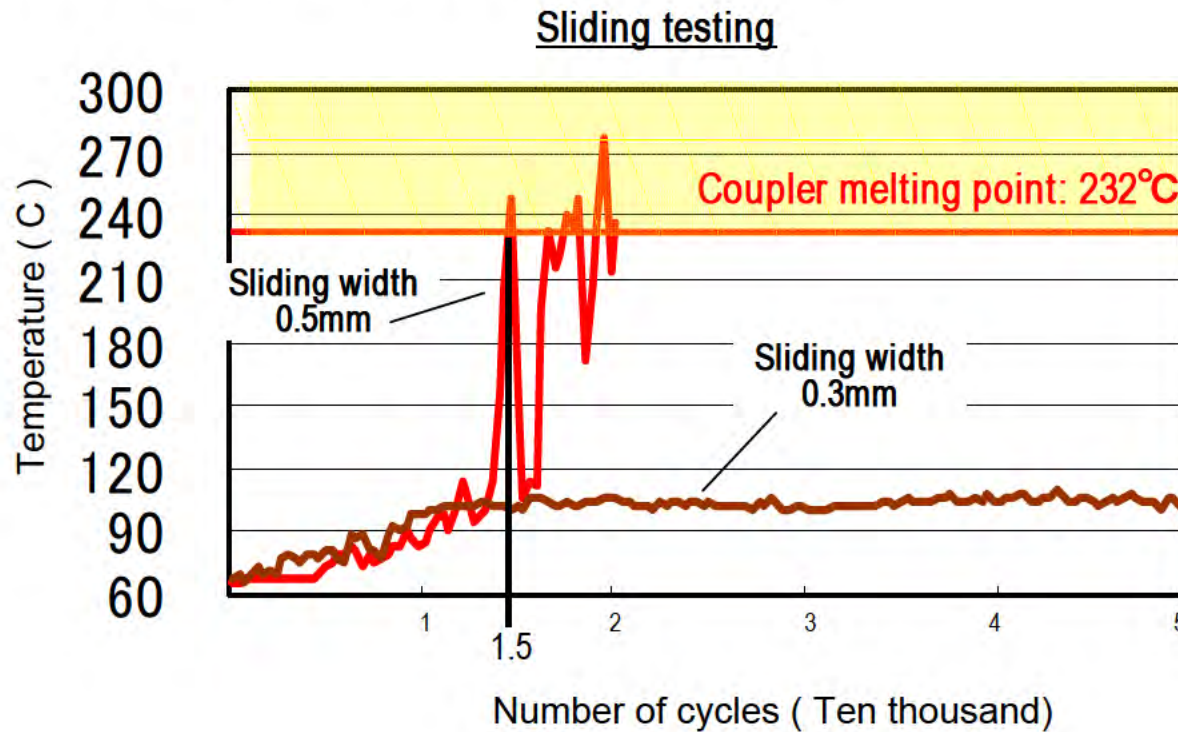
To identify conditions for temperature rising due to sliding of fitting area.

## Result

Recreation testing shows brass terminal (Sn plating) reaches the melting point after sliding of 150,000 cycles in 0.5 mm width. However, if it slides in 0.3mm width, or lower, this problem doesn't occur.



Mobile terminal	Static terminal
-----------------	-----------------



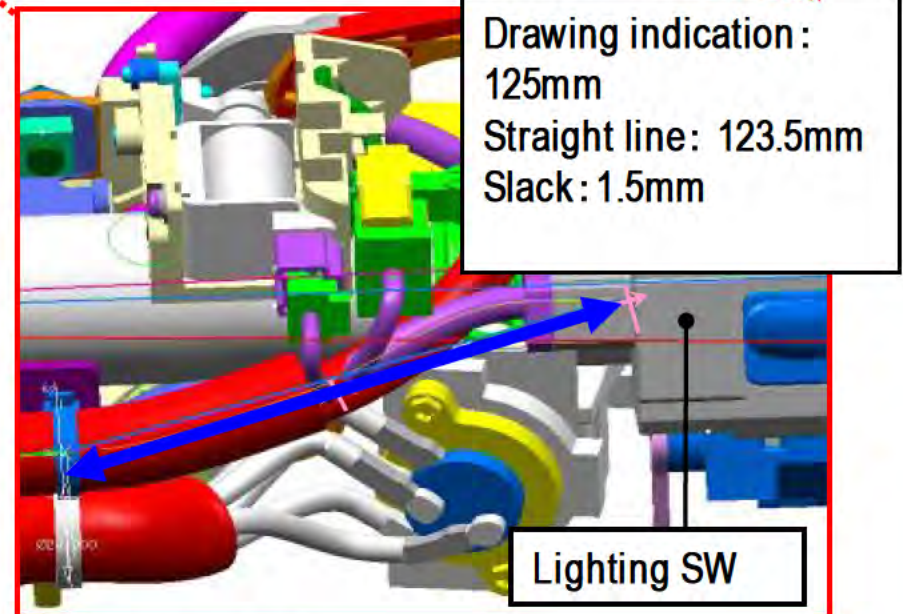
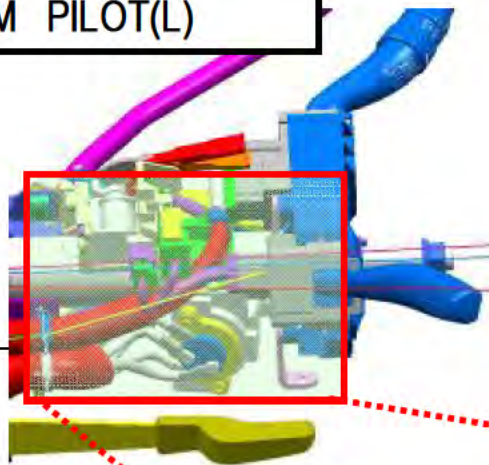
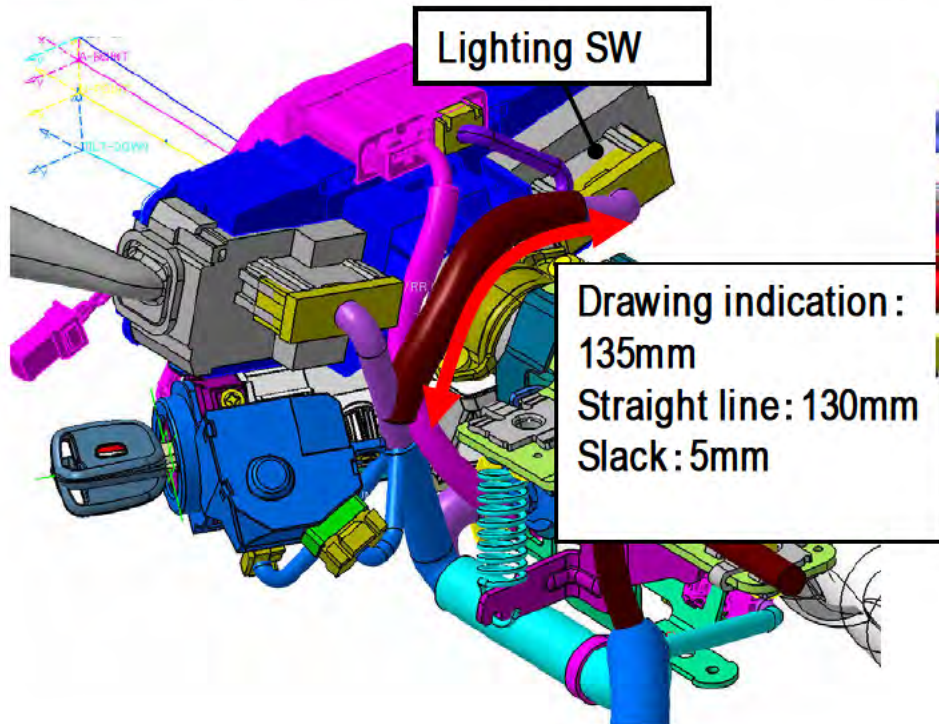
## Testing conditions

Terminal	: brass + Sn plating
Force	: 8N (minimum for manufacturing)
Oxidation	: left out under 100 C for 120 hours
Current	: 10A
Tem.	: 60C, 85% RH
Sliding width	: 0.5 mm
Sliding cycle	: 10,000 times sliding , and then pause for 24 hours

# Analysis results 5Drawing, and layout

02 - 04M CR-V(L)

03M PILOT(L)



02 to 04M CR-V(L), and 03M PILOT(L) show a smaller amount of wire slack.

# Analysis results Drawing, and CBU layout

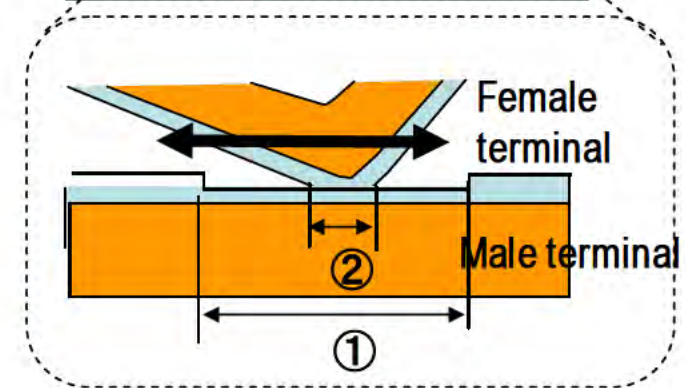
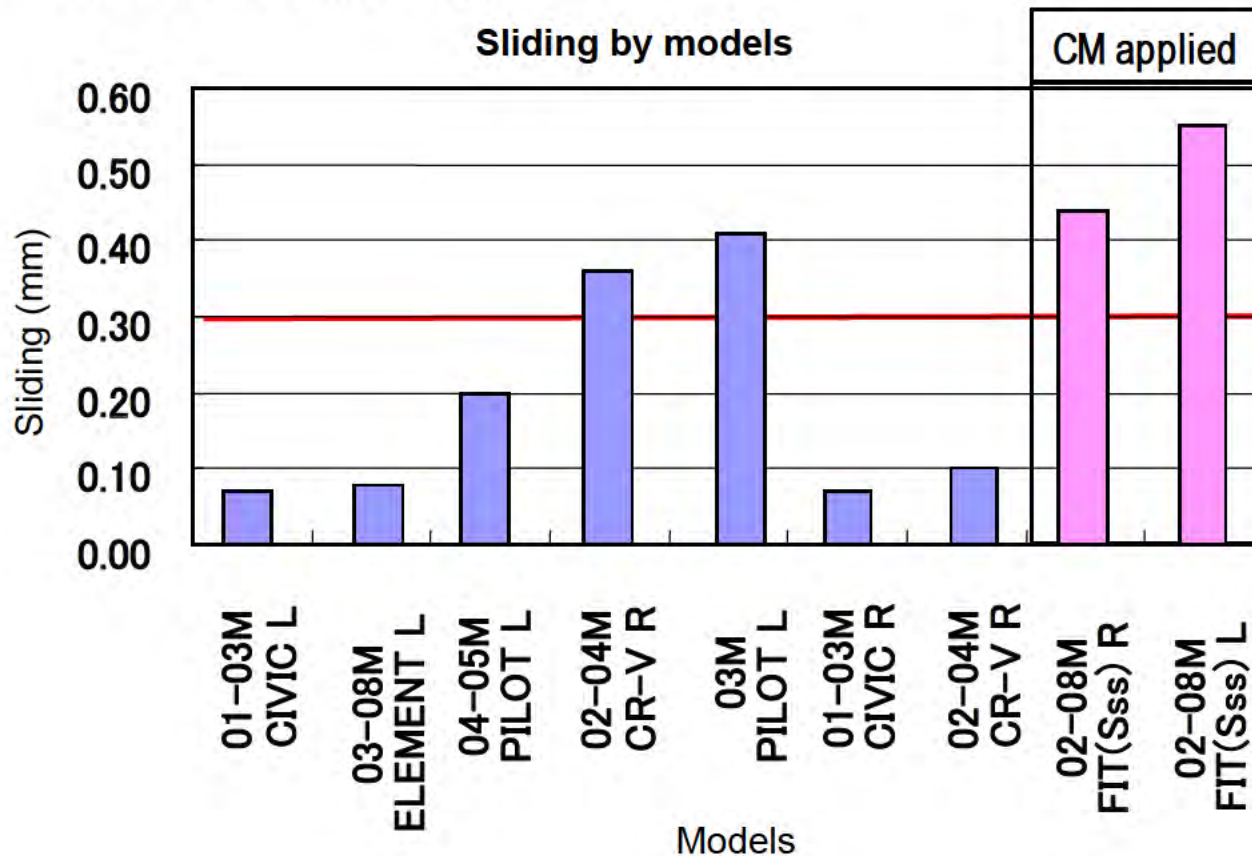
## Purpose

To compare actual terminal sliding width in each model CBU

## Measurement results

Sliding width exceeds 0.3mm in 02 - 04M CR-V(L), and 03M PILOT (L).

Sliding testing with 0.3mm width shows OK after 50,000 cycles by 8N.



Sliding width = Male terminal sliding width ① - Female terminal sliding width ②

## Testing conditions

Terminals that have 8N of contact pressure is installed in CBU. (The minimum management value in manufacturing.)

1 cycle of SW operation

R turn → Middle → L turn → Middle →

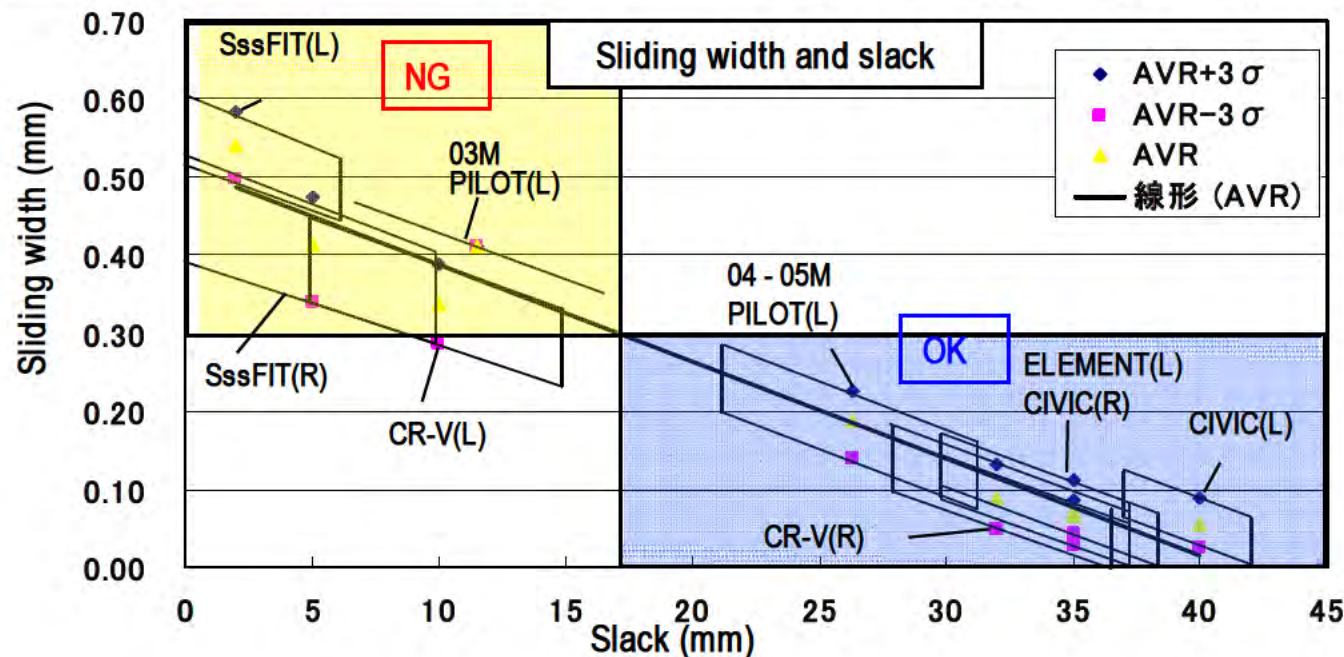
Passing → Middle

# of cycle

10,000 times operation by human

# Analysis results Drawing, and actual sliding in CBU

機種	Slack (mm)			Sliding (mm)				Judgment
	Design MIN	Mean	Variation	MAX	AVR	AVR+3 $\sigma$	AVR-3 $\sigma$	
02-08M FIT(Sss) L	15	2 (due to wiring)	0~7	0.55	0.54	0.58	0.50	CM Applied
02-08M FIT(Sss) R	9	5 (due to wiring)	0~10	0.44	0.41	0.47	0.34	CM Applied
03M PILOT L	1.5	11.5	6.5~16.5	0.41	0.41	0.41	0.41	△
02-04M CR-V L	5	10	5~15	0.36	0.34	0.39	0.29	△
04-05M PILOT L	16.3	26.3	21.3~31.3	0.20	0.19	0.23	0.14	OK
03-08M ELEMENT L	30	35	35~40	0.08	0.07	0.11	0.03	OK
02-04M CIVIC L	35	40	35~45	0.07	0.06	0.09	0.03	OK
02-04M CR-V R	27	32	27~36	0.10	0.09	0.13	0.05	OK
01-03M CIVIC R	30	35	35~40	0.07	0.07	0.09	0.04	OK

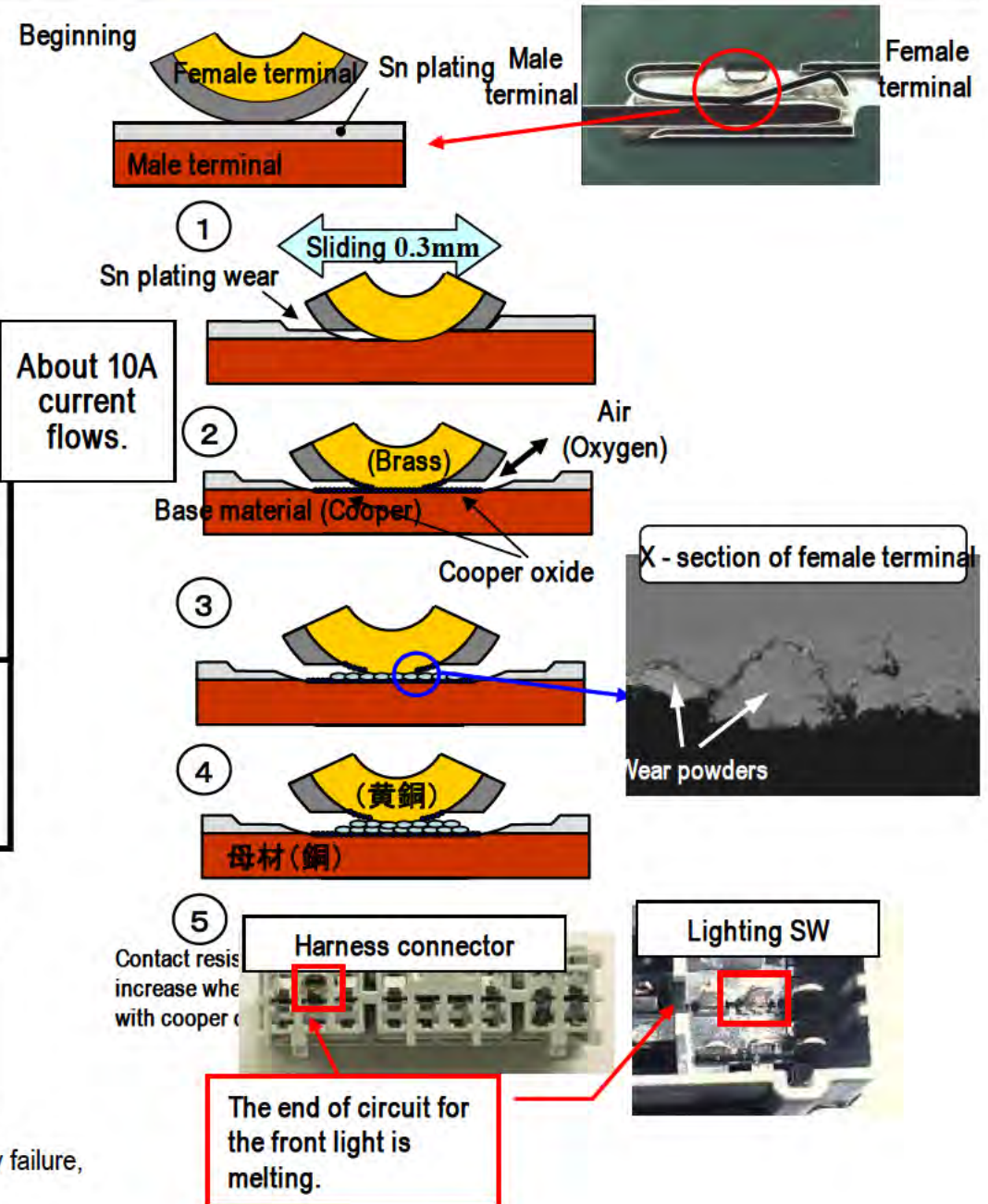


The result from 02 - 04M CR-V(L), and 03M PILOT is judged as NG since sliding width exceeds 0.3mm.

# Analysis results Failure occurrence mechanism

Electric wires connecting to lighting SW have a small slack.

- 1 Terminal fitting area of low beam excessively slides by SW lever operation. (more than 0.3mm)
- 2 As the terminal fitting area slides, Sn plating wears, and base material becomes exposed. Cooper oxidizes on the contact surface, and wears, accumulating wear powders on the sliding area.
- 3 As the terminal contacts with accumulated cooper oxide, contact resistance increases, causing the terminal fitting area to excessively heat when the front light illuminates.
- 4 Heat reduces stress application to the fitting area, causing more wear powders to accumulate on the fitting area, and also terminal to heat further.
- 5 After this condition continues, plastic of the coupler is melting, and flowing into the terminal fitting area, causing the low beam to fail to illuminate due to conductivity failure.



\*Surrounding parts are not burning since current doesn't flow due to conductivity failure, which is caused by melted plastic flowing into the fitting area.

# Analysis results Failure occurrence projection in the US market

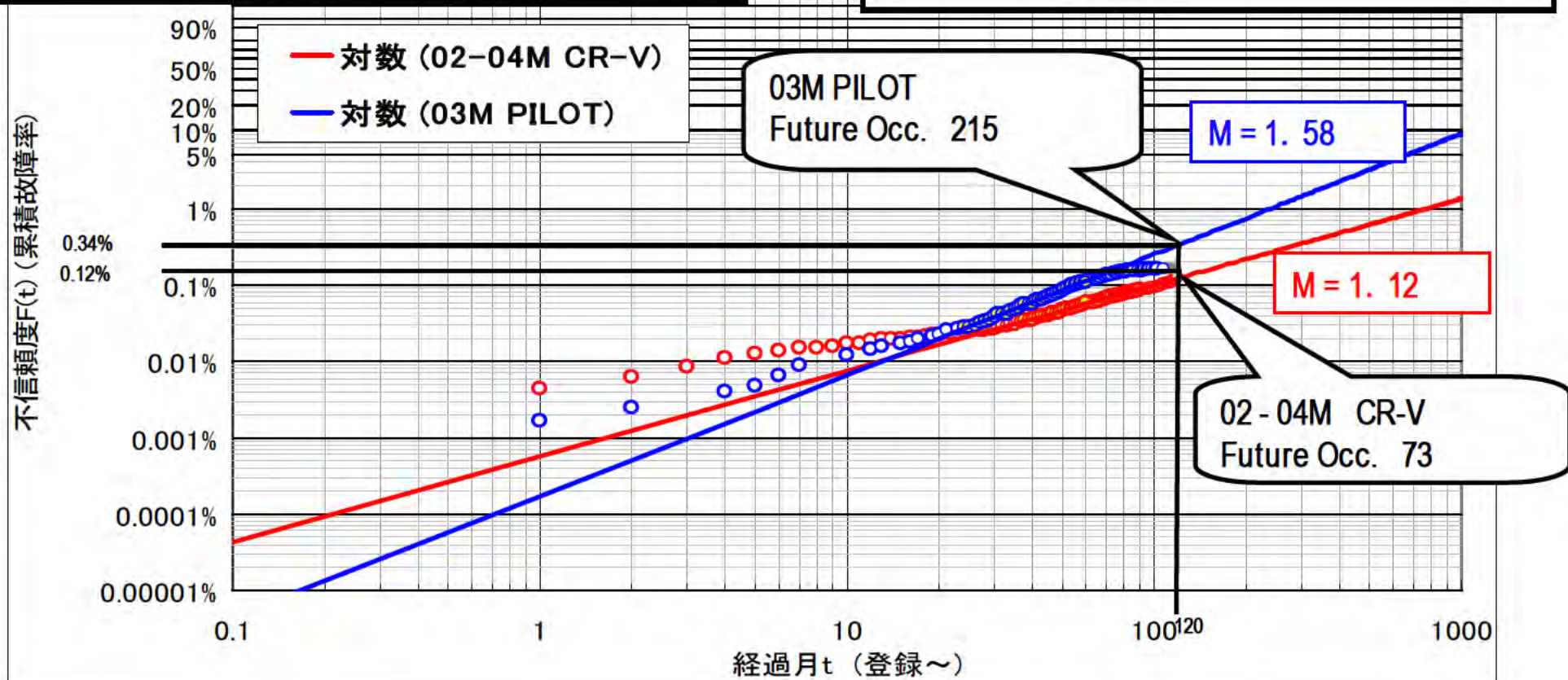
03M PILOT(L)


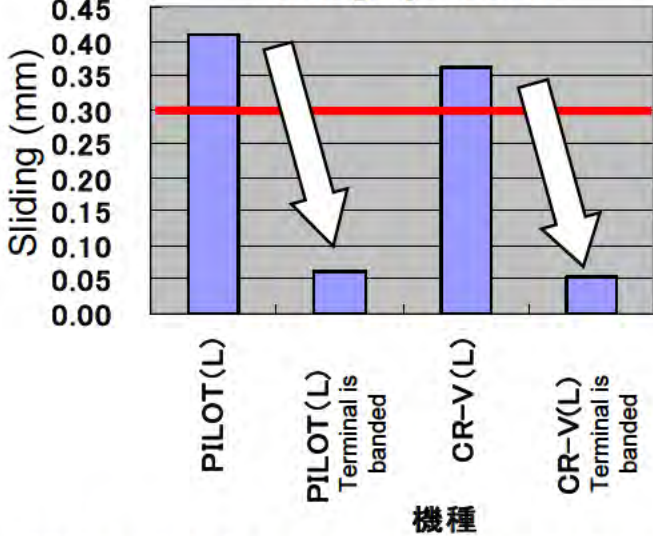
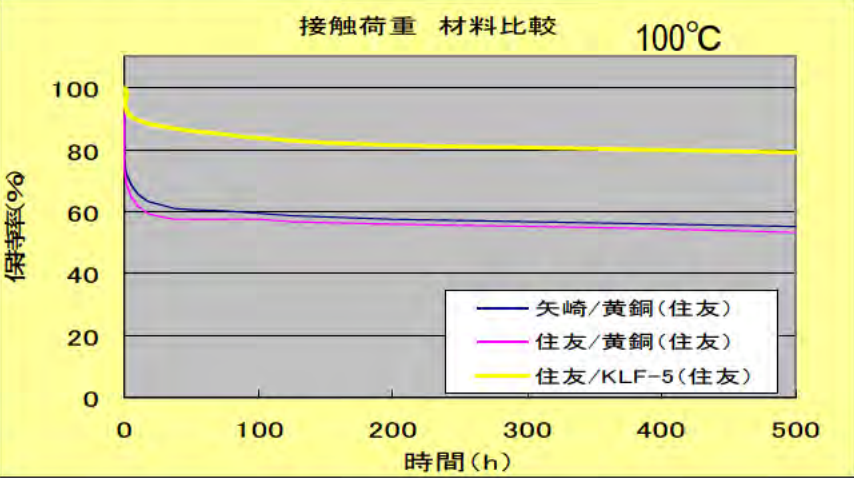
Years to fail	Current	10
Warranty situation	203	418
Occ. rate	0.17%	0.34%
122,946 units		

02 - 04M CR-V(L)

Years to fail	Current	10
Warranty situation	445	517
Occ. rate	0.10%	0.12%
431,244 units		

イブル確

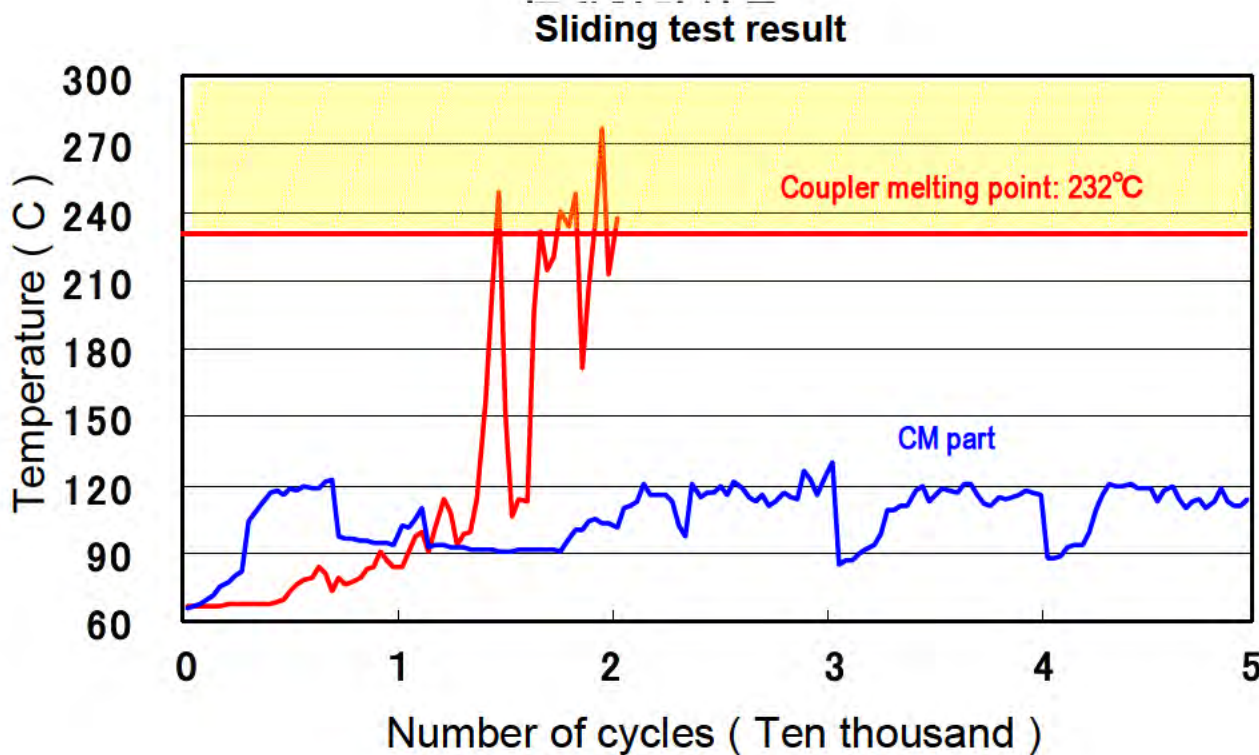
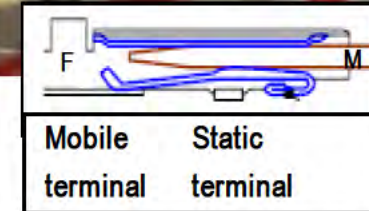
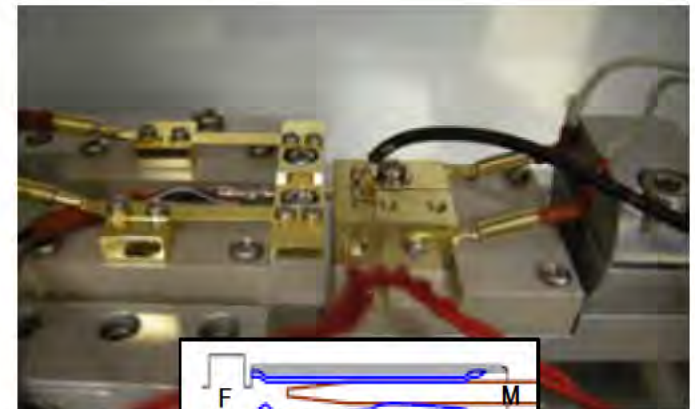


CM	Remarks																												
<p>▪ Sliding prevention by banding</p> <p>Harness for a female terminal is banded with a wire slack to lighting SW in order to make it follow the movement by SW manipulation, restricting the fitting area from sliding. (Harness need to be lengthen. )</p> <div data-bbox="226 730 629 935" style="border: 1px solid blue; padding: 5px; width: fit-content;"> <p>The harness for Lo terminal is banded with a band to lighting SW.</p> </div> 	<p style="text-align: center;"><b>Sliding by models</b></p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Sliding width data from chart</caption> <thead> <tr> <th>機種</th> <th>Sliding (mm)</th> </tr> </thead> <tbody> <tr> <td>PILOT(L)</td> <td>~0.41</td> </tr> <tr> <td>PILOT(L) Terminal is banded</td> <td>~0.06</td> </tr> <tr> <td>CR-V(L)</td> <td>~0.37</td> </tr> <tr> <td>CR-V(L) Terminal is banded</td> <td>~0.06</td> </tr> </tbody> </table> <p style="text-align: center;">機種</p> <p style="text-align: center;">Sliding width is reduced down to one-sixth.</p>	機種	Sliding (mm)	PILOT(L)	~0.41	PILOT(L) Terminal is banded	~0.06	CR-V(L)	~0.37	CR-V(L) Terminal is banded	~0.06																		
機種	Sliding (mm)																												
PILOT(L)	~0.41																												
PILOT(L) Terminal is banded	~0.06																												
CR-V(L)	~0.37																												
CR-V(L) Terminal is banded	~0.06																												
<p>The base material is changed to heat-resistant cooper alloy in order to suppress contact load decrease for a female terminal. (The current base is made from brass.)</p>	<p style="text-align: center;">接触荷重 材料比較 100°C</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Retention rate data from graph</caption> <thead> <tr> <th>時間 (h)</th> <th>矢崎/黄銅(住友) (%)</th> <th>住友/黄銅(住友) (%)</th> <th>住友/KLF-5(住友) (%)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>~60</td> <td>~65</td> <td>~95</td> </tr> <tr> <td>100</td> <td>~58</td> <td>~60</td> <td>~85</td> </tr> <tr> <td>200</td> <td>~57</td> <td>~58</td> <td>~82</td> </tr> <tr> <td>300</td> <td>~56</td> <td>~57</td> <td>~81</td> </tr> <tr> <td>400</td> <td>~55</td> <td>~56</td> <td>~80</td> </tr> <tr> <td>500</td> <td>~54</td> <td>~55</td> <td>~79</td> </tr> </tbody> </table>	時間 (h)	矢崎/黄銅(住友) (%)	住友/黄銅(住友) (%)	住友/KLF-5(住友) (%)	0	~60	~65	~95	100	~58	~60	~85	200	~57	~58	~82	300	~56	~57	~81	400	~55	~56	~80	500	~54	~55	~79
時間 (h)	矢崎/黄銅(住友) (%)	住友/黄銅(住友) (%)	住友/KLF-5(住友) (%)																										
0	~60	~65	~95																										
100	~58	~60	~85																										
200	~57	~58	~82																										
300	~56	~57	~81																										
400	~55	~56	~80																										
500	~54	~55	~79																										

# CM Sliding testing for CM effectiveness confirmation

The sliding testing shows this failure won't occur in the market after the harness is banded together with a band, and the material of female terminal is changed to heat - resistant cooper alloy even if Sn plating on male terminal flakes due to wear.

CM parts doesn't melt after sliding of 50,000 cycles.



### Testing conditions

Female terminal : heat - resistant cooper alloy (less contact pressure)  
 Male terminal : cooper (without plating: equivalent to market parts)

Force : 8N (minimum for manufacturing)

Oxidation : left out under 100 C for 120 hours

Current : 10A

Tem. : 60C, 85% RH

Sliding width : 0.1 mm (with a band)

Sliding cycle : 10,000 times sliding , and then pause for 24 hours



# AQAOでの調査解析結果

# 解析結果 返却現品解析

## ◇返却現品分解確認結果(溶損)

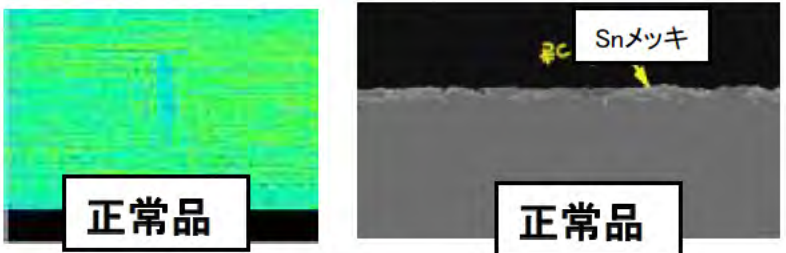
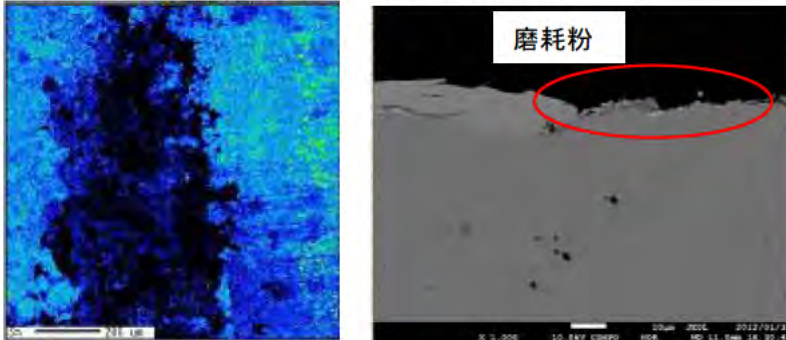
No.3 USA JHLRD68464C018385 訴え事象:ヘッドライトが作動しない

ライティングスイッチ側のオス端子

Lo端子が熱により、溶損している

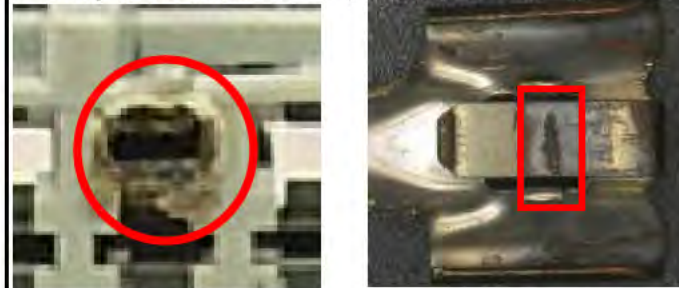


Snが磨耗し、磨耗分が堆積している

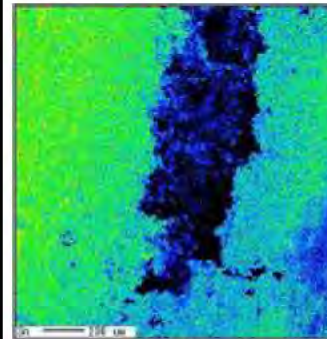


ハーネス側のメス端子

Lo端子が熱により、溶損している



Snが磨耗している



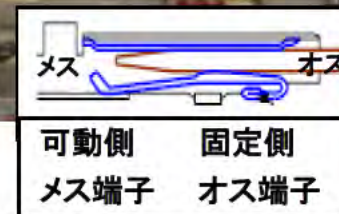
Snメッキが摩耗し、磨耗粉が堆積していることから、摺動の繰返しが発生している。

## 【目的】

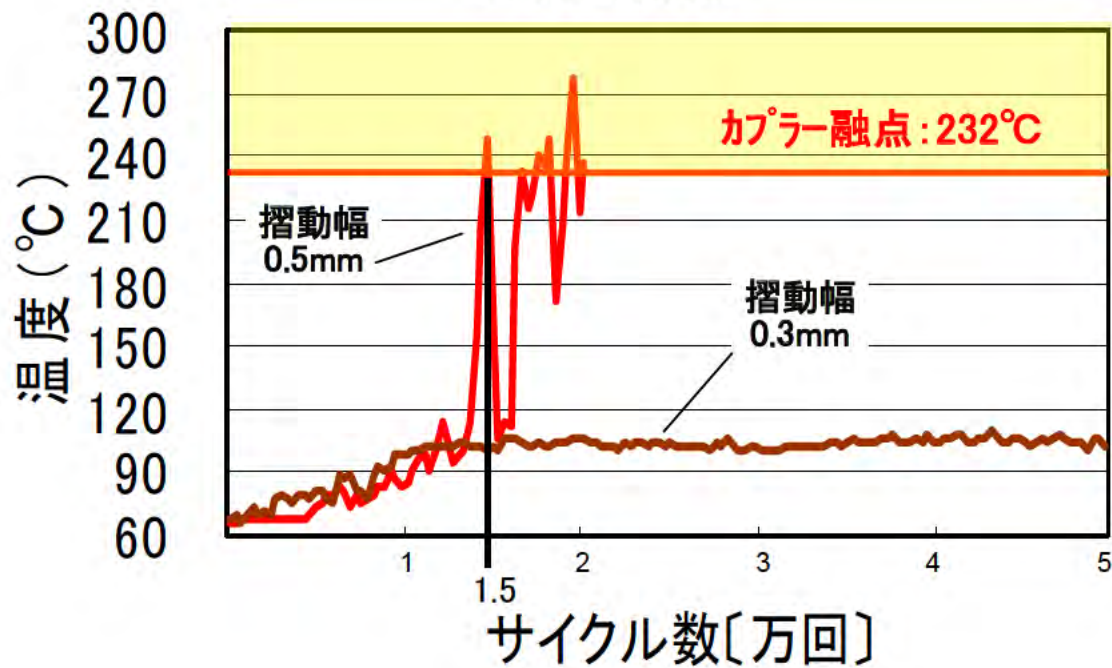
端子嵌合部の摺動繰返しにより、温度上昇が生じる条件を確認する

## 【試験結果】

黄銅端子(Snメッキ品)は、摺動幅 0.5mm/約1.5万サイクルでコネクタ樹脂(PBT)の溶融温度に至ることが判明。また、0.3mm以下であれば問題なしと判明



## 摺動試験結果



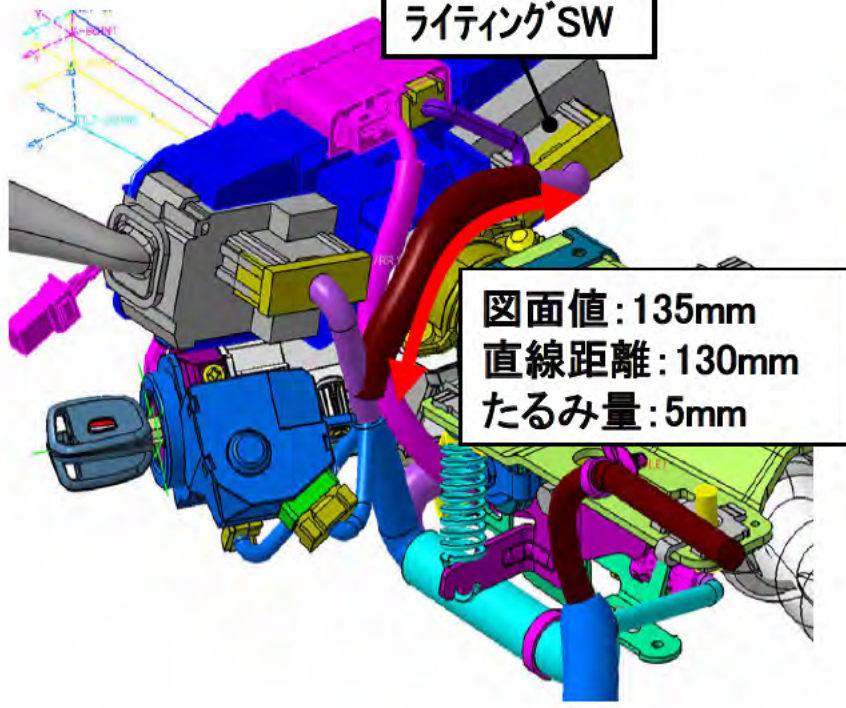
## 【試験条件】

- ・供試端子 : 黄銅+Snメッキ
- ・接圧荷重 : 8N(製造管理の下限值)
- ・酸化促進 : 試験前に100°C×120h放置
- ・通電電流 : 10A
- ・温湿度 : 60°C、85%RH
- ・摺動幅 : 0.5mm
- ・摺動サイクル: 摺動1万回後に24h停止

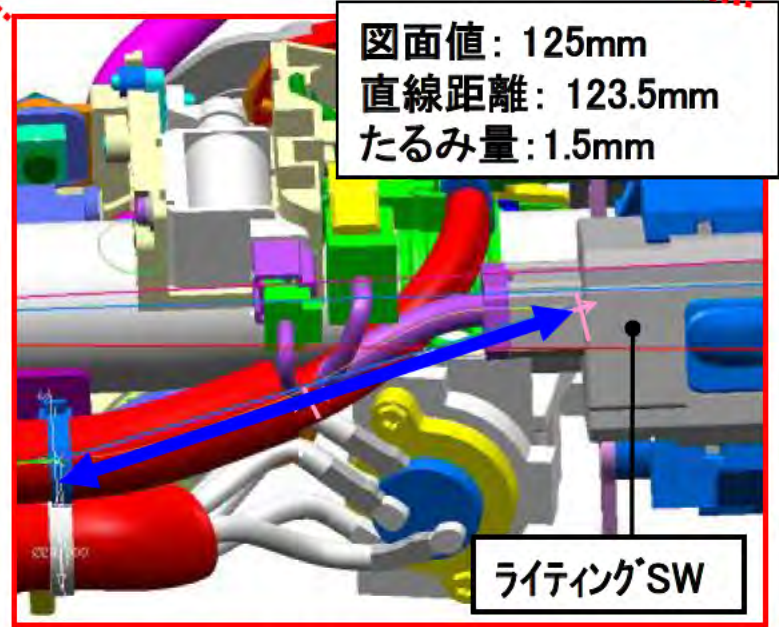
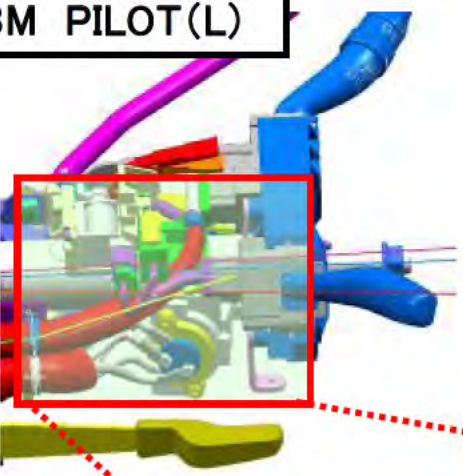
02-04M CR-V(L)

03M PILOT(L)

ライティングSW



図面值: 135mm  
直線距離: 130mm  
たるみ量: 5mm



図面值: 125mm  
直線距離: 123.5mm  
たるみ量: 1.5mm

ライティングSW

02-04M CR-V(L)と03M PILOT(L)のたるみ量が少ないことが判明

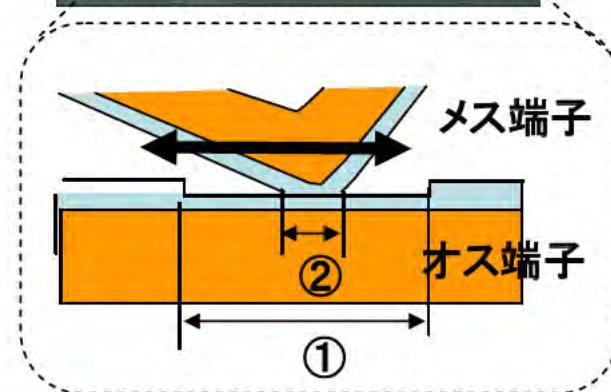
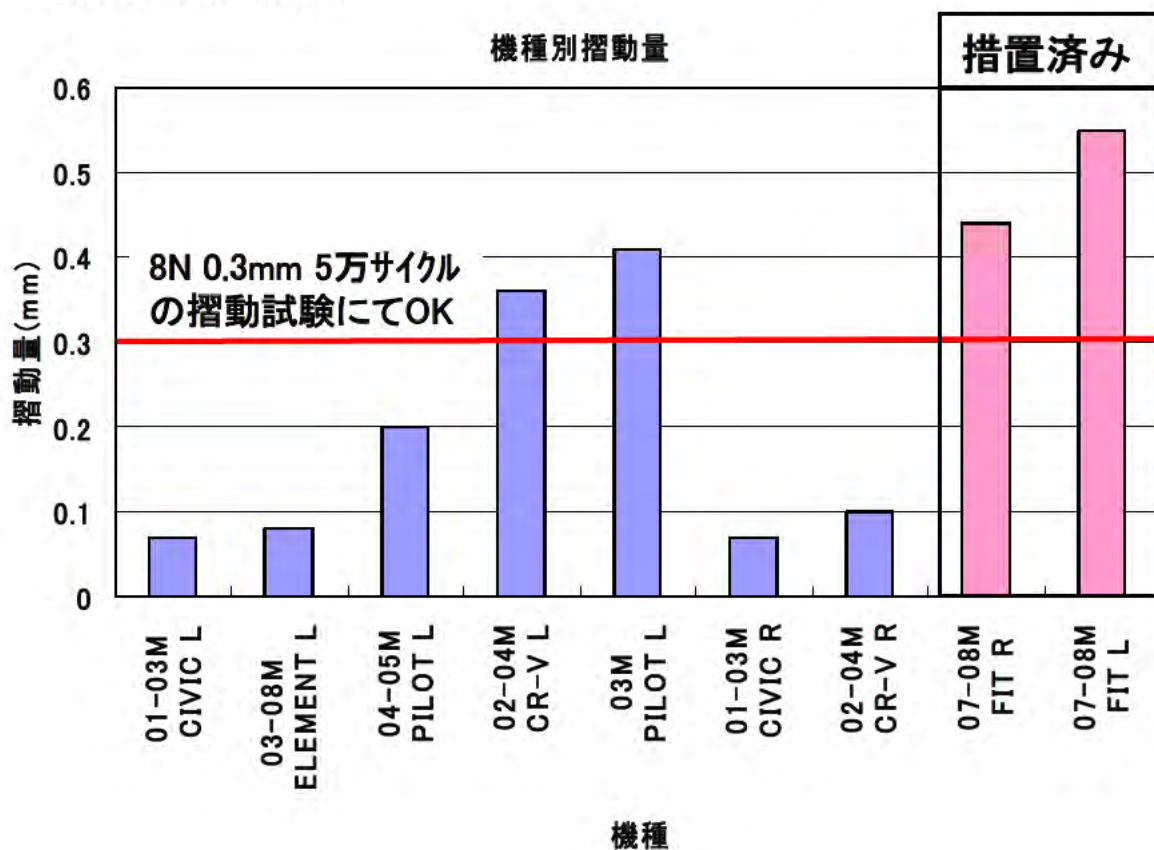
# 解析結果 図面及び実車レイアウト検証

## 【目的】

実車に於ける実際の端子の撓動幅を測定し、機種毎に比較する

## 【測定結果】

02-04M CR-V(L) と 03M PILOT(L)が撓動量0.3mmを超えることが判明



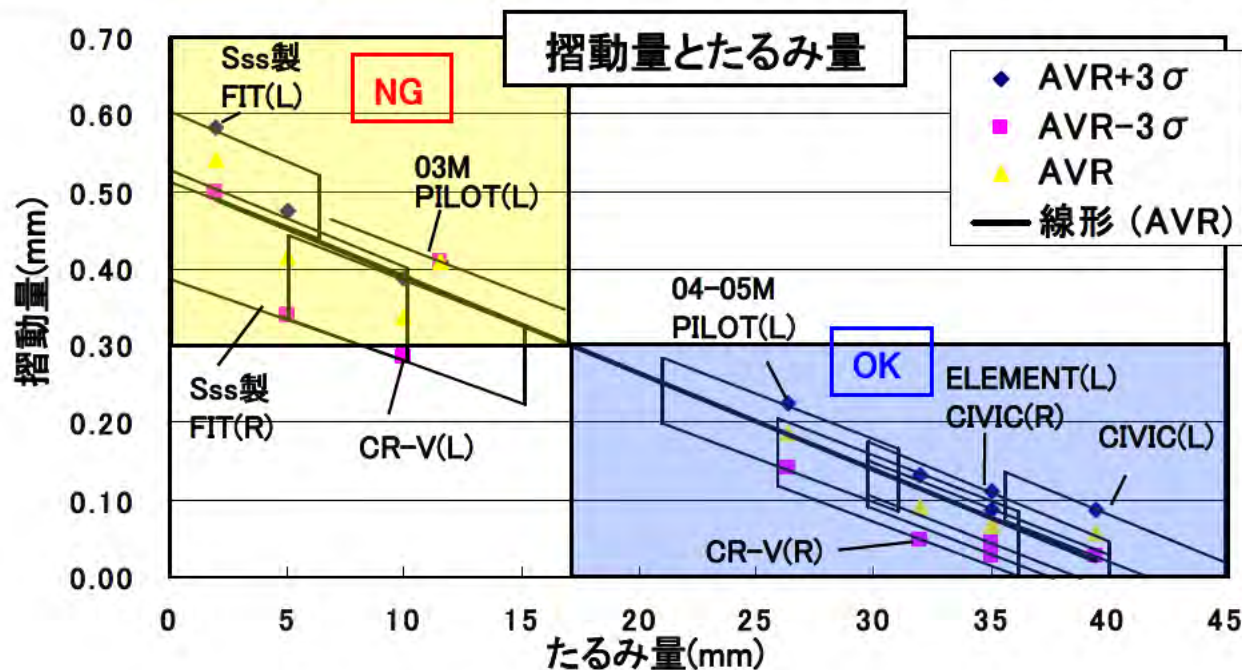
撓動幅 = オス端子撓動幅①  
- メス端子撓動幅②

## 【試験条件】

- ・実車に端子接圧8N品(製造管理下限品)を取り付ける
- ・1サイクル  
Rターン→中立→Lターン→中立→パッシング→中立のSW操作
- ・サイクル数  
人操作による1万サイクル

# 解析結果 図面及び実車検証と摺動量

機種	たるみ量(mm)			摺動量(mm)				判定
	設計MIN	センター値	バラツキ	MAX	AVR	AVR+3 $\sigma$	AVR-3 $\sigma$	
02-08M FIT(Sss) L	15	2 (配索による)	0~7	0.55	0.54	0.58	0.50	措置済み
02-08M FIT(Sss) R	9	5 (配索による)	0~10	0.44	0.41	0.47	0.34	措置済み
03M PILOT L	1.5	11.5	6.5~16.5	0.41	0.41	0.41	0.41	△
02-04M CR-V L	5	10	5~15	0.36	0.34	0.39	0.29	△
04-05M PILOT L	16.3	26.3	21.3~31.3	0.20	0.19	0.23	0.14	○
03-08M ELEMENT L	30	35	30~40	0.08	0.07	0.11	0.03	○
02-04M CIVIC L	34.5	39.5	34.5~44.5	0.07	0.06	0.09	0.03	○
02-04M CR-V R	27	32	27~36	0.10	0.09	0.13	0.05	○
01-03M CIVIC R	30	35	35~40	0.07	0.07	0.09	0.04	○



02-04M CR-V(L)と  
03M PILOTが摺動量  
0.3mmを超えることが判明

CIVICについては、摺動量が  
最も小さく、摺動量の解析から  
は問題なしと判断する

ライティングスイッチに接続する電気配線の長さ、たるみ量の少ない設定であった。

ライティングスイッチレバー操作でロービーム端子嵌合部が追従できず、大きく摺動する。  
(0.3mmを超える摺動量)

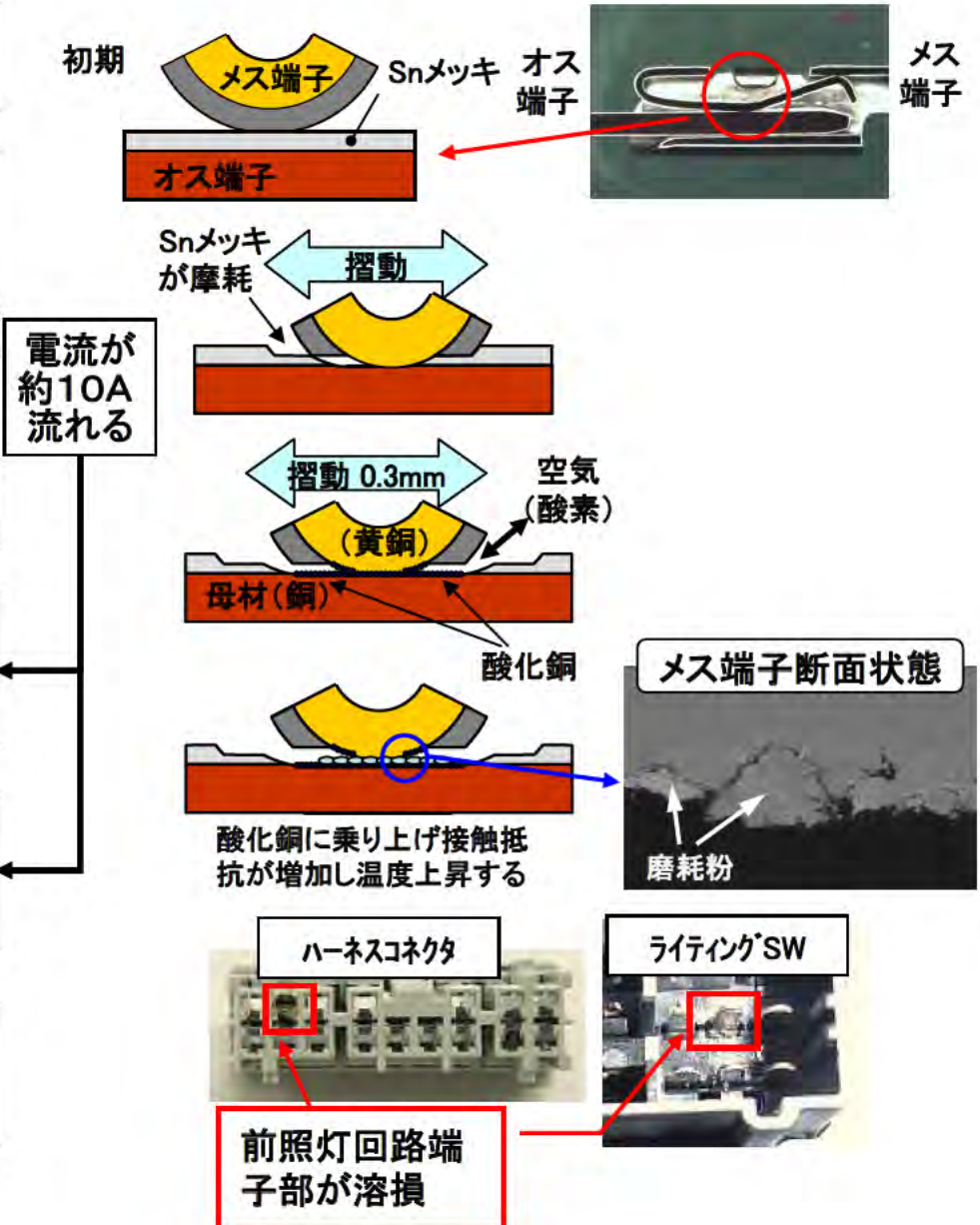
端子嵌合部の摺動でスズメッキが徐々に摩耗し、母材が露出して接触面に酸化銅が生成され、端子の摺動が繰返されると、酸化銅が磨耗粉となり摺動部に堆積する

端子摺動時に堆積した酸化銅の磨耗粉に端子が乗上げると接触抵抗が増加して前照灯点灯時に嵌合部が過度に発熱する

端子嵌合部の発熱で嵌合部に応力緩和が生じ、端子の接圧が低下すると磨耗粉の入込みが増え、端子がさらに発熱する

その状態を続けると、カプラーの樹脂が溶けて嵌合部に流込んで導通不良となり、ロービーム不灯となる

※カプラー樹脂が溶けて流れ込むと導通不良となり、電流が流れないため類焼はしない。



## 03M PILOT(L)

経過年数	現在	10年経過
発生件数	203件	418件
発生率	0.17%	0.34%

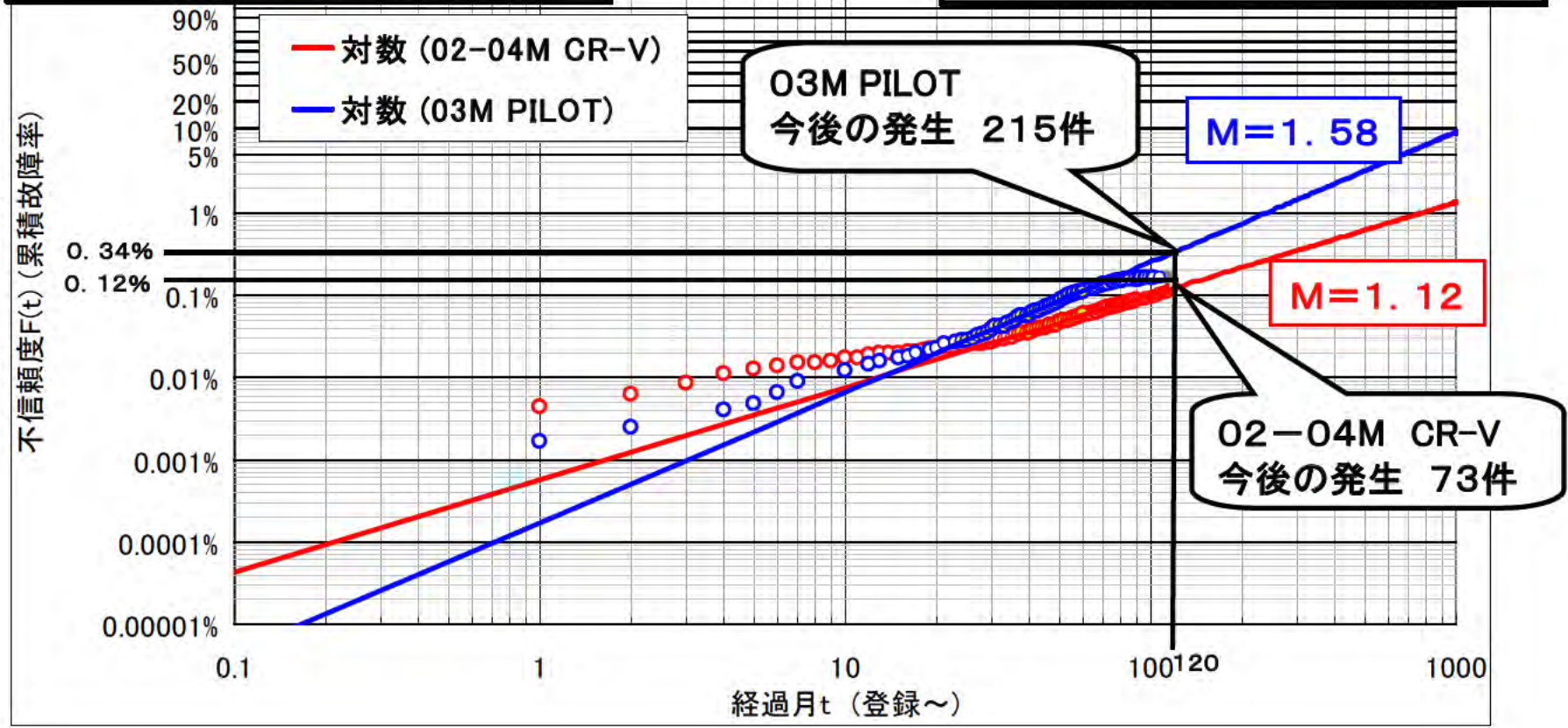
対象122,996台

## 02~04M CR-V(L)

経過年数	現在	10年経過
発生件数	445件	518件
発生率	0.10%	0.12%

対象431,431台

発生予測 ワイブル確率紙





対策内容

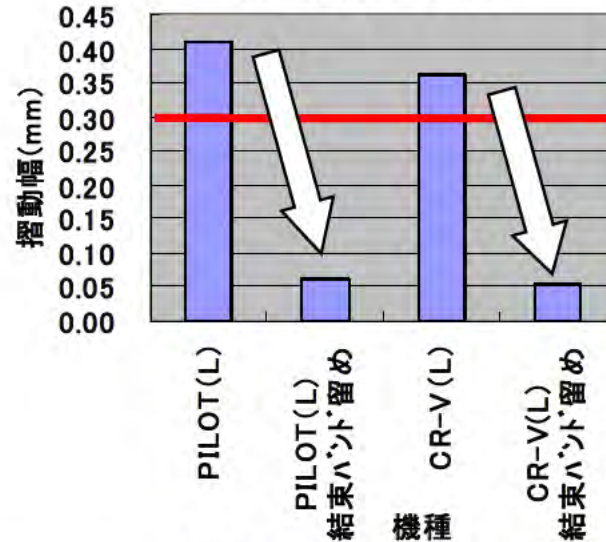
- ・結束バンド留めによる摺動防止  
たるみを確保した状態でメス端子ハーネスをライティンスイッチに結束バンドで固定することにより、スイッチ操作時の動きに追従させ、端子嵌合部の摺動を抑制する（ハーネスを長くする必要あり）

Lo端子ハーネスを結束バンドでライティングスイッチに固定



備考

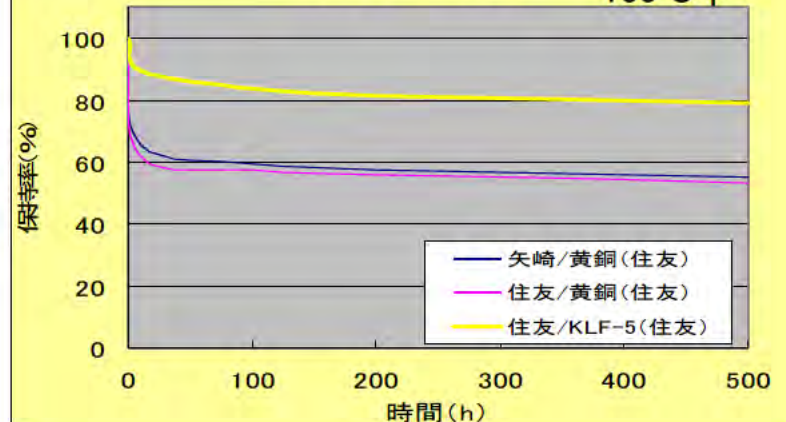
機種別の摺動幅



摺動量が約1/6に減少

- ・メス端子の接触荷重低下を抑える  
母材を接圧荷重低下が小さい耐熱銅合金に変更  
(現状は、黄銅)

接触荷重 材料比較 100°C中

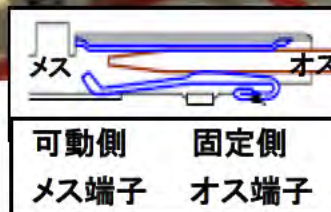
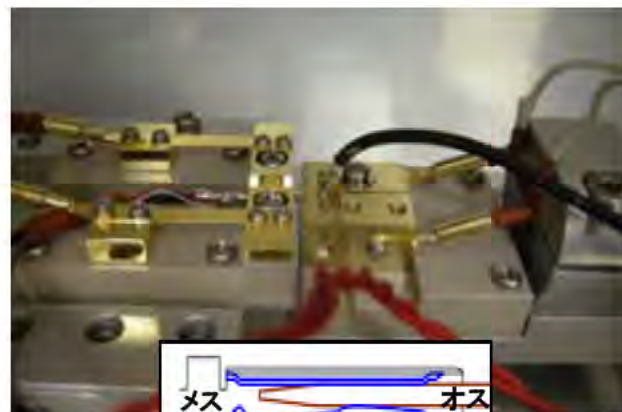
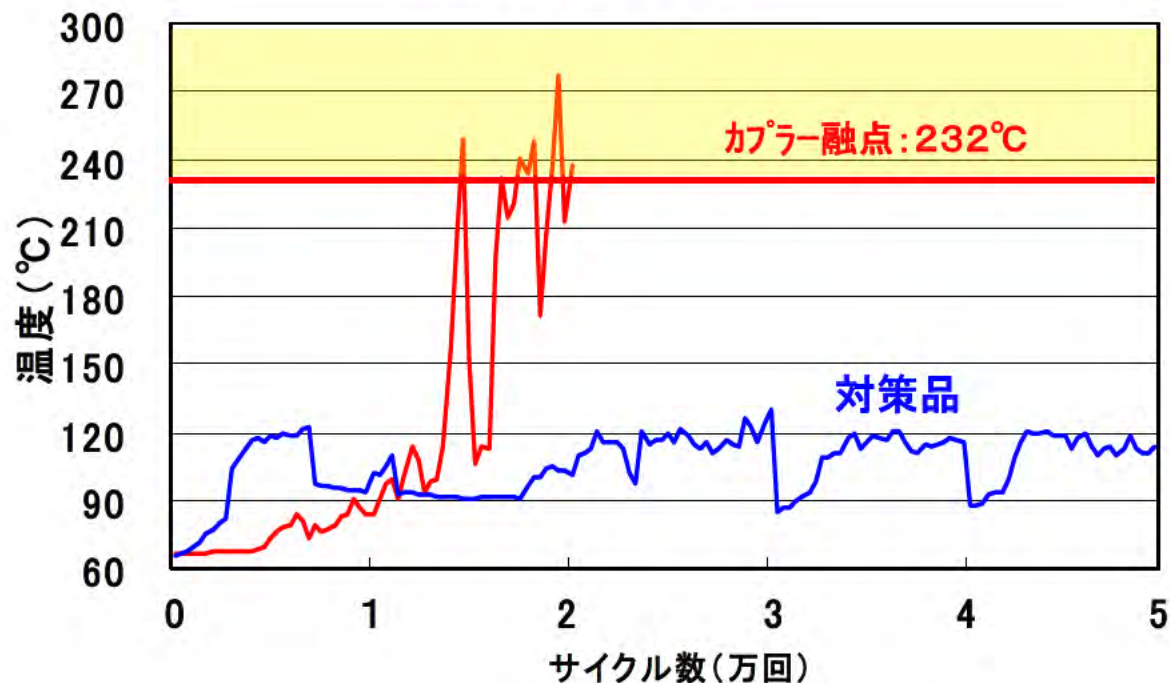


# 対策内容 対策効果確認結果

オス端子のSnメッキが磨耗により剥離したとしても、結束バンドによるハーネス固定とメス端子耐熱銅合金に変更すれば、今後の使用過程において不具合が発生しないことを確認した。

対策は5万サイクルでも溶損に至らない。

## 摺動試験結果



### 試験条件>

- メス端子：耐熱性銅合金（接圧低下が小さい）
- オス端子：銅無垢（メッキなし：市場想定品）
- 接圧荷重：8N（製造管理の下限値）
- 酸化促進：試験前に100°C×120h放置
- 通電電流：10A
- 温湿度：+60°C、85%RH
- 摺動幅：0.1mm（結束バンド留め相当）
- 摺動サイクル：摺動1万回後に24h時間停止を1サイクル

EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
QAuto Quality Analys Tadayoshi Fujio
2011/05/16
↓
INFORMATION INVESTIGATION
QAuto Quality Analys Hirotsugu Karahi
2011/05/30
↓
INVESTIGATION AND ANALYSIS
QAuto Quality Analys Akihiro Hatatani
2011/05/20
↓
COUNTERMEASURE REQUEST
QAuto Quality Analys Akihiro Hatatani
2011/05/23
↓
INTERMEDIATE REPLY
2011/06/07
↓
COUNTERMEASURE REPLY
2012/03/22
↓
COUNTERMEASURE ISSUED
↓
COUNTERMEASURE APPLICATION
↓
COMPLETED
QAuto Quality Analys Akihiro Hatatani
2011/09/21

COUNTERMEASURE REQUEST
ADDRESS
RECEPTION
RECEPTION

RANK
A
DATE:
APPROVAL
CHECK
CREATOR

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
RD6	02-06 CR-V Headlight Switch Inop <QAH3982>	MV20110530104500
04/CR-V		
OCCURRENCE DESCRIPTION	Customer contentions for "headlights don't work", "headlights work intermittently", "burning smell from steering wheel"	

REPLY	REPLY TO	QAuto Quality Analys	VIA	BY	May 2
-------	----------	----------------------	-----	----	-------

Returned part: lighting SW, and combination sub cord  
 1. Appearance check of lighting SW manufactured by Toyo Denso  
 A terminal for low beam is melting.  
 2. Appearance check of installment wire harness manufactured by Sumitomo Denso  
 A terminal for low beam is melting.  
 It is assumed that heat generates around a contact area with low beam terminal, so depth analysis was requested to the supplier.

Lighting SW detail analysis  
 1. Appearance check: a terminal for low beam in the coupler looks discolored, and melting.  
 2. The coupler internal dimension, and board thickness of a terminal for low beam are within the specification.  
 3. Tear down analysis: some areas of terminals in the curl, and tongue side look discolored.  
 4. Contaminant analysis on a case side: only grease for SW is detected. Any abnormal component was not detected.  
 5. Component analysis on a terminal for low beam: cooper from terminal component, and tin, carbon, oxygen, and aluminium from resin from SW are detected

Detail analysis for combination sub cord  
 1. Connector appearance: a terminal for low beam looks deformed, and melting.  
 2. Terminal condition: terminals connecting harness, and SW are thicker than the male tab. Enough load has not been applied to the tongue plate. The edge of tongue plate, and contact btw a male, and female terminals look discolored, and resin is melting.

Investigation, and analysis by AQAO  
 Melted parts  
 Sn plating is worn on male, and female terminals  
 Sliding testing was conducted since Sn plating was worn.  
 0.5mm of terminal sliding duplicated this problem. Also it was discovered that if terminals slide within 0.3mm, or smaller width, melting won't occur.  
 Terminal sliding width, and harness slack  
 Only models with lighting SW installed in the left side have smaller slack compared to other models, and their sliding width is larger.

Wires connecting to SW don't have enough slack, so the mated terminals slide every time a SW lever is operated, causing Sn plating to wear, and terminal base material to oxidize, and produce wear powders. Those wear powders enter into between the mated

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR
03/22														

CAUSE ANALYSIS	Wires connecting to SW don't have enough slack, so the terminal mating area slides when the SW lever is operated, causing Sn plating to wear, and terminal base material to oxidize, and produce wear powders. Those wear powders enter into the terminal mated area, leading to contact resistance increase. Eventually, parts melt.
COUNTERMEASURE	This model production has already been terminated, so any measure won't be taken for the mass-production line. A measure is taken for sold vehicles of 02-04 CR-V with lighting SW installed in the left side.
TREATMENT FOR STOCK & SOLD UNITS & PARTS	Since this is a problem that head light beam doesn't illuminate for both left, and right brought up at Global Quality Committee (GQC), and also this problem might occur in the future, proactive market actions will be taken.
COUNTERMEASURE EFFECTIVENESS	Sliding testing using countermeasure parts shows that parts don't heat. So, this countermeasure can be judged as effective.
FEED BACK TO THE SOURCE	

QUALITY IMPROVEMENT SHEET [ Q I S ]

ISSUED BY
QAuto Quality Analys

OCCURRENCE MARKET	
REPORT #	AHOS2011051201-00
FRAME #	JHLRD684640
ENGINE #	
TRANSMISSION #	
TRANSMISSION CATEGORY	4AT
MILEAGE OR HOURS	133000 Mile
REGISTRATION DATE	2004/08/07
OCCURRENCE DATE	2011/02/09
PRODUCT DATE	2004/06/03

SERVICE PART #	
MAIN CAUSAL PART #	35255-S5A-A02
CAUSAL PART SYMPTOM CODE AND DESCRIPTION	
MODEL CODE	
CAUSE CATEGORY	Specification
RES. DEPARTMENT	
SUPPLIER	TOYO DENSO CO. LTD. CODE 4533
COUNTERMEASURE CATEGORY	Only Market Disposal
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	6105 Change of Wi
OCCURRENCE FORECAST	Sporadic
COUNTERMEASURE PART AVAILABILITY	Yes
REVISED ITEM	DRAWING OPERATION STANDARD

2	2012/04/03	REVISE	Toru Aridom		Takeno ri Na	Akihiro H
1	2011/09/24	FINISH	Toru Aridom		Takeno ri Na	Akihiro H
0	2011/05/30	NEW	Toru Aridom			Hirotsugu K
ISSUE	DATE	VERSION	APPROVAL	CHECK	CHECK	CREATOR

**ANALYSIS RESULTS**

terminals, leading to contact resistance increase. Eventually, parts melt.



EA11-012

HONDA

4/20/2012

Q9c

CRV headlight switch kit  
knowlege base article

## LOW BEAM INOP (USE CIVIC KIT 35012-S5A-307)

<b>Tech Line Knowledge Base</b>				
<b>Name:</b>	16201	<b>Issue Date:</b>	22-Jun-2009	
<b>Source:</b>	HTL-INFO	<b>Expiration Date:</b>	(NOT SET)	
<b>Form?</b>	No	<b>Hot?</b>	No	
<b>Fax?</b>	Yes	<b>Hot Expiry Date:</b>	(NOT SET)	
<b>Rank:</b>	3	<b>Distribution:</b>	A-All	
<b>Remarks:</b>	CV/KH EB REMOVED FIT PER LL 8/13/09			
Application Matrix		Codes		Attachments / Linked Documents
<b>Model</b>	<b>Years</b>	<b>Code</b>	<b>Description</b>	
CR-V	2002- 2004	7310	HEADLIGHT PROB	
		7300	LIGHTING GENERAL	
Article Content				
<p>2002-2004 CRV                      Low beam headlights that won't turn on can be repaired with Civic Kit 35012-S5A-307. The connector housing, white/red wire, and terminal are the same as the Civic. The kit replaces about 3" of wire and terminal at cavity #6 of the Combi Light Switch connector. The wire color on the CRV is the same as the Civic kit (red/white),</p> <p><small>SAFETY INFORMATION: The information in this document is intended for use only by skilled Technicians who have the proper tools, equipment, and training to correctly and safely maintain the affected vehicle. These procedures should not be attempted by "do-it-yourselfers"</small></p>				

EA11-012

HONDA

4/20/2012

Q9d





Applies To: **See VEHICLES AFFECTED**

**April 1, 2004**

## Safety Recall: Combination Light Switch

(Supersedes 04-015, dated March 26, 2004)

### BACKGROUND

A terminal in the headlight wire harness connector can overheat and may cause the low-beam headlights to fail without warning. Although the high-beam position remains operational, an unexpected loss of low beams could result in a crash.

### VEHICLES AFFECTED

**2001 Civic: ALL**

**2002 Civic:**

2-door

From VIN 1HGEM2...2L000001 thru  
1HGEM2...2L024169

4-door

From VIN 1HGES1...2L000001 thru  
1HGES1...2L024203

From VIN 1HGES2...2L000001 thru  
1HGES2...2L028089

From VIN 2HGES...2H500001 thru  
2HGES...2H530552

From VIN JHMES1...2S000001 thru  
JHMES1...2S004507

From VIN JHMES2...2S000001 thru  
JHMES2...2S002838

Hatchback

From VIN SHHEP3...2U300001 thru  
SHHEP3...2U300222

■ GX

From VIN 1HGEN2...2L000001 thru  
1HGEN2...2L000181

**2000-01 Insight: ALL**

### CUSTOMER NOTIFICATION

All owners of affected vehicles will be sent a notification of this recall. An example of the customer notification is at the end of this service bulletin.

Not all vehicles within the VIN ranges are affected by this recall. Before beginning work on a vehicle, verify its eligibility by checking at least one of these items:

- The customer has a notification letter.
- The vehicle is shown on your campaign responsibility report.
- The vehicle is shown as eligible on an iN VIN status inquiry.

In addition to the bulleted verification items, check for a punch mark above the 12th character of the engine compartment VIN. A punch mark in that location means the combination light switch has already been repaired.

Some vehicles affected by this recall may be in your used car inventory. **According to federal law, these vehicles cannot be sold or leased until they are repaired.** To see if a vehicle is affected by this recall, do a VIN status inquiry before selling it.

### CORRECTIVE ACTION

Replace the combination light switch, the RED/WHT wire in the headlight wire harness, and if needed, the 16P headlight wire harness connector.

### PARTS INFORMATION

Combination Light Switch Repair Kit:

(Includes switch, wire harness connector, 250 mm wire with an attached terminal, and wire splice connector)

Civic: P/N 35012-S5A-307, H/C 7743875

Insight: P/N 35012-S3Y-306, H/C 7743883

### TOOL INFORMATION

Terminal Pin Kit C: T/N 07QAZ-003020C, or equivalent (Terminal Pin Kit C contains the wire crimper and the heat gun used for wire splicing.)

Terminal Maintenance Set: T/N 070AZ-S5A0100\* [Contains Terminal Remover Set (six small, plastic tools used to remove terminals from the 16P headlight wire harness connector), and Secondary Lock Opener (a miniature, flat-tip screwdriver used to open the secondary locks on the 16P headlight wire harness connector)]

\* This tool is being sent to your dealership along with your initial allocation of combination light switch repair kits.

NOTE: If you need additional tools, order them through the parts ordering system.

## WARRANTY CLAIM INFORMATION

OP#	Description	FRT
728103	Replace the combination light switch and the RED/WHT wire in the headlight wire harness	0.7
A	Do the cruise control learn (2001 Civic 2-door thru VIN 1HGEM2...1L016502)	0.3
728104	Replace the combination light switch, the RED/WHT wire in the headlight wire harness, and the 16P wire harness connector	0.8
A	Do the cruise control learn (2001 Civic 2-door thru VIN 1HGEM2...1L016502)	0.3

Failed Part: P/N 35255-S5A-A01  
H/C 6453336

Defect Code: 5CN

Symptom Code: P23

Skill Level: Repair Technician

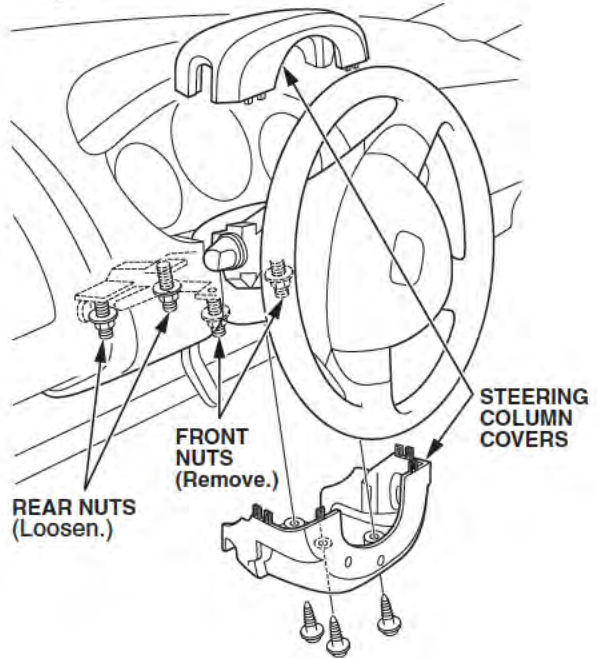
## REPAIR PROCEDURE

### NOTE:

- SRS components are located in this area. Before you begin, review the SRS component locations, cautions, and procedures in the service manual.
  - Be careful not to damage the dashboard or other interior trim pieces.
  - For information about wire terminal replacement and wire splicing, refer to service bulletin 00-099, *Terminal Replacement Instructions*.
1. Make sure you have the anti-theft code for the radio (if applicable), then write down your customer's radio station presets.
  2. Disconnect the negative cable from the battery.
  3. *On Civics*, remove the driver's dashboard lower cover. For Civic 2/4-door, see the 2001-04 Civic Service Manual, page 20-97. For Civic Hatchback, see the 2002-04 Civic Hatchback Service Manual, page 20-61.

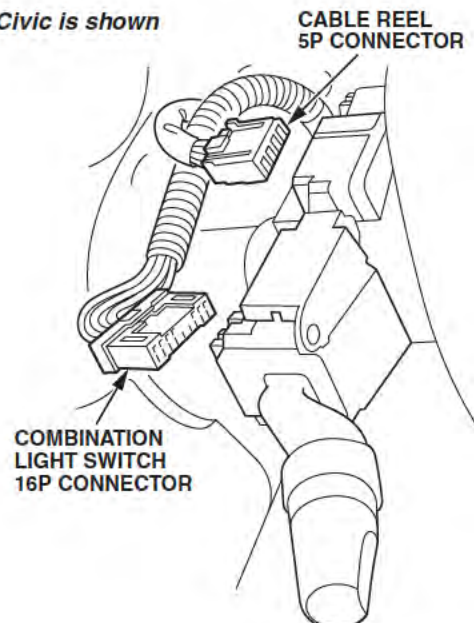
4. Remove the steering column covers (see the 2001-04 Civic Service Manual, page 17-27, step 4; the 2002-04 Civic Hatchback Service Manual, page 17-9, step 4; or the 2000-04 Insight Service Manual, page 17-9, step 5). *On the Insight* steering column, also remove the two front nuts, and loosen the two rear nuts.

*Insight is shown*

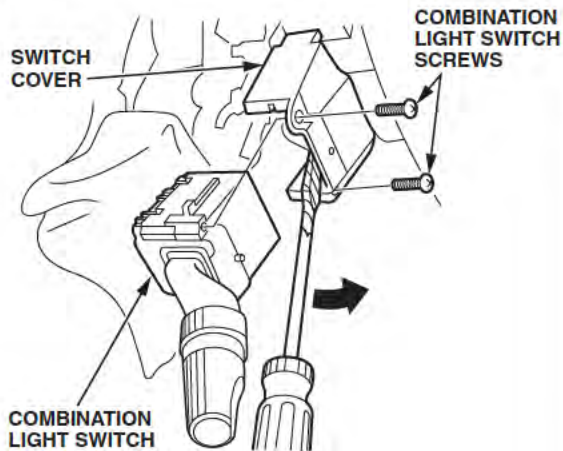


5. *On Civics*, disconnect the 16P connector from the combination light switch and the 5P connector from the cable reel. *On Civic Hatchbacks*, also disconnect the 14P connector from the wiper switch. Then carefully pull the wire harness to the right of the steering column. *On Insights*, disconnect the 16P connector from the combination light switch.

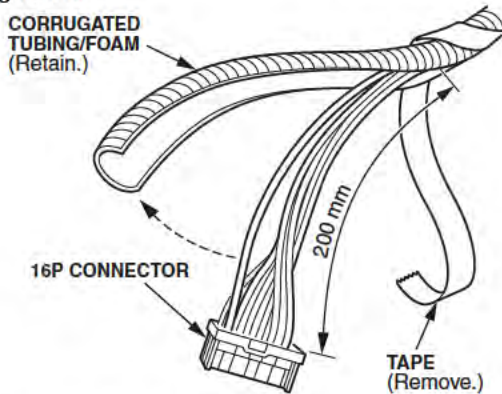
*Civic is shown*



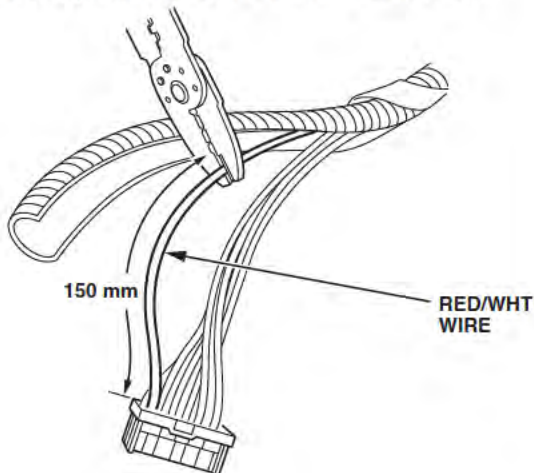
6. Turn the ignition switch to the ACCESSORY (I) position, then turn the steering wheel to the right.
7. Remove the two screws from the combination light switch.



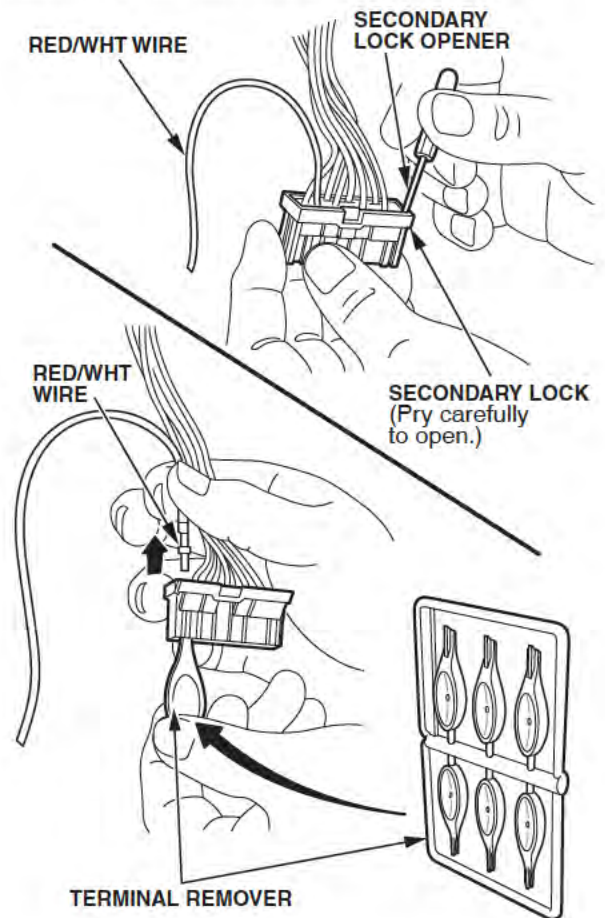
8. Using a flat-tip screwdriver wrapped with electrical tape, slightly lift the switch cover, then remove the switch, and discard it.
9. Remove the tape or corrugated tubing/foam from the 16P connector wire harness to expose about 200 mm of wire. Discard the tape, but retain the tubing/foam.



10. Locate the RED/WHT wire in the 16P connector. Then measure 150 mm from the end of the connector, and cut the RED/WHT wire there.

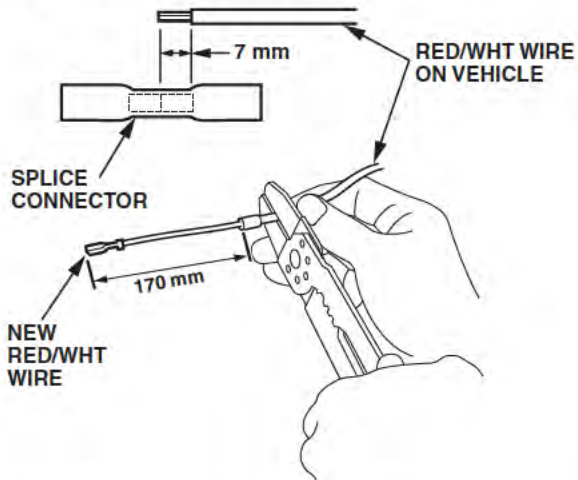


11. Inspect the 16P connector for heat damage or discoloration.
  - If the connector is OK, go to step 12.
  - If the connector is damaged or discolored, go to step 14.
12. Using the Secondary Lock Opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the secondary lock on the RED/WHT wire side of the 16P connector.



13. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into the center row cavity of the 16P connector, above the RED/WHT wire cavity, then remove and discard the RED/WHT wire.

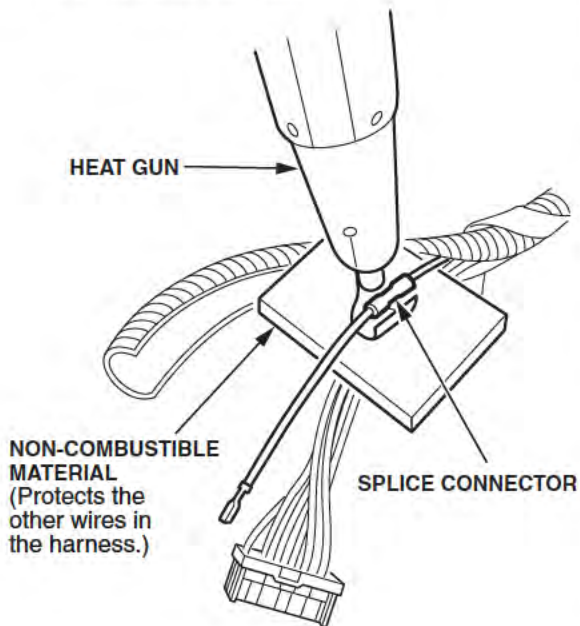
14. Strip off 7 mm of insulation from the vehicle wire harness side of the RED/WHT wire. Insert the stripped end into one side of the splice connector, and crimp the connector.



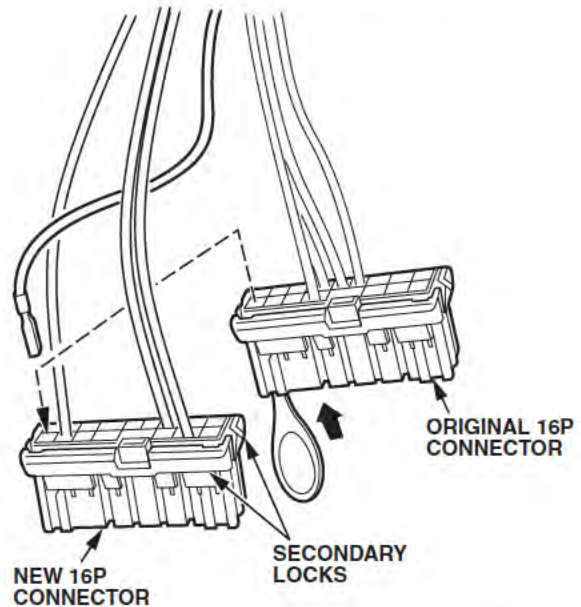
15. Cut the new RED/WHT wire 170 mm from the end of its terminal. Then strip off 7 mm of insulation from the cut end.
16. Insert the stripped end of the new RED/WHT wire into the other side of the splice connector, then crimp the connector.
17. With a non-combustible material between the RED/WHT wire and the vehicle wire harness, use a heat gun to shrink the splice connector casing.

**NOTE:**

- Be careful not to get burned.
- Do not overheat the wire.



18. If the original 16P connector is not heat damaged or discolored, insert the new RED/WHT wire into its proper terminal cavity on the connector, then go to step 22. If the 16P connector is damaged, go to step 19.
19. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A-010), carefully pry open the other secondary lock on the 16P connector.
20. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into a center row cavity of the original 16P connector, remove the corresponding wire from its cavity, and transfer it to the same cavity in the new 16P connector. Repeat this for all the wires except the original RED/WHT wire.



21. Insert the new RED/WHT wire into its proper terminal cavity in the new 16P connector.
22. Snap the secondary lock(s) closed on the 16P connector.
23. Using electrical tape, retape the wire harness or insert the wires into the corrugated tubing/foam and retape the tubing/foam.
24. Install the new combination light switch with the two original screws.
25. *On Civics*, reroute the wire harness over the steering column, then connect the 16P connector to the combination light switch, the 5P connector to the cable reel connector and, *on Civic Hatchbacks*, the 14P connector to the wiper switch. *On Insights*, connect the 16P connector to the combination light switch.
26. Connect the negative cable to the battery.
27. Check the operation of the headlights, the parking lights, and the turn signals.

28. On Civics, install the driver's dashboard lower cover.
29. Install the steering column covers.
30. Enter the radio anti-theft code (if applicable), then enter your customer's radio station presets. Set the clock.
31. Do the idle learn procedure:
  - Make sure all electrical items (A/C, audio unit, lights, etc.) are off, then start the engine.
  - Let the engine reach normal operating temperature (the cooling fans cycle twice).
  - Let the engine idle (throttle fully closed) for 10 minutes.
32. On 2001 Civic LX and EX 2-door models thru VIN 1HGEM2...1L016502, do the cruise control learn procedure:
  - Drive the vehicle, and set the cruise control above 40 miles per hour.
  - Drive the vehicle for 5 to 10 minutes at the set speed. If you cancel the set speed before driving 5 to 10 minutes, repeat the procedure.

NOTE: This procedure can also be done on a chassis dynamometer, but it cannot be done with the vehicle on a lift.
33. Center-punch a completion mark above the 12th character of the engine compartment VIN.

Center-punch here.

**1HGXXXXXXXXXXXXXX**

*Example of Customer Letter*

Spring 2004

### Safety Recall Campaign: Headlight Switch

Dear Honda Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

#### What is the reason for this notice?

Honda Motor Co., Ltd., has decided that a defect relating to motor vehicle safety exists in certain 2001–02 Civics and 2000–01 Insights. A terminal in the headlight wire harness can overheat and may cause the low-beams to fail without warning. Although the high-beam position remains operational, an unexpected loss of low beams could result in a crash.

#### What should you do?

Call any authorized Honda dealer and make an appointment to have your vehicle repaired. The dealer will inspect the headlight switch and replace all needed parts. This work will be done *free of charge*. Please plan to leave your vehicle for half a day to allow the dealer flexibility in scheduling.

#### Who to contact if you experience problems.

If you are not satisfied with the service you receive from your Honda dealer, you may write to:

American Honda Motor Co., Inc.  
 Honda Automobile Customer Service  
 Mail Stop 500-2N-7A  
 1919 Torrance Blvd.  
 Torrance, CA 90501-2746

If you believe that American Honda or the dealer has failed or is unable to remedy the defect in your vehicle, without charge, within a reasonable period of time (60 days from the date you first contact the dealer for a repair appointment), you may submit a complaint to:

Administrator  
 National Highway Traffic Safety Administration  
 400 Seventh Street, SW  
 Washington, DC 20590

Or call the toll-free Safety Hotline at (888) 327-4236.

#### What to do if you feel this notice is in error.

Our records show that you are the current owner or lessee of a 2001–02 Civic or 2000–01 Insight involved in this campaign. If this is not the case, or the name/address information is not correct, please fill out and return the enclosed, postage-paid *Information Change Card*. We will then update our records.

If you already paid to have a defective headlight switch replaced, you may be eligible for reimbursement. Refer to the attached instructions for eligibility requirements and the reimbursement procedure.

#### Lessor Information.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

#### If you have questions.

If you have any questions about this notice, or need assistance with contacting a Honda dealer, please call Honda Automobile Customer Service at (800) 999-1009, and select menu option #2.

We apologize for any inconvenience this campaign may cause you.

Sincerely,

**American Honda Motor Co., Inc.  
 Honda Automobile Division**

## LOW BEAM INOP (USE CIVIC KIT 35012-S5A-307)

<b>Tech Line Knowledge Base</b>				
<b>Name:</b>	16201	<b>Issue Date:</b>	22-Jun-2009	
<b>Source:</b>	HTL-INFO	<b>Expiration Date:</b>	(NOT SET)	
<b>Form?</b>	No	<b>Hot?</b>	No	
<b>Fax?</b>	Yes	<b>Hot Expiry Date:</b>	(NOT SET)	
<b>Rank:</b>	3	<b>Distribution:</b>	A-All	
<b>Remarks:</b>	CV/KH EB REMOVED FIT PER LL 8/13/09			
Application Matrix		Codes		Attachments / Linked Documents
<b>Model</b>	<b>Years</b>	<b>Code</b>	<b>Description</b>	
CR-V	2002- 2004	7310	HEADLIGHT PROB	
		7300	LIGHTING GENERAL	
Article Content				
<p>2002-2004 CRV</p> <p>Low beam headlights that won't turn on can be repaired with Civic Kit 35012-S5A-307. The connector housing, white/red wire, and terminal are the same as the Civic. The kit replaces about 3" of wire and terminal at cavity #6 of the Combi Light Switch connector. The wire color on the CRV is the same as the Civic kit (red/white),</p> <p><small>SAFETY INFORMATION: The information in this document is intended for use only by skilled Technicians who have the proper tools, equipment, and training to correctly and safely maintain the affected vehicle. These procedures should not be attempted by "do-it-yourselfers"</small></p>				



Applies To: 2007–08 Fit – ALL

March 11, 2011

## Safety Recall: 2007–08 Fit Low Beam Headlights May Not Work (Supersedes 10-082, dated January 28, 2011, to revise the information marked by the black bars)

### REVISION SUMMARY

Under REPAIR PROCEDURE, the illustrations in steps 22 and 23 were changed.

### BACKGROUND

A terminal in the combination light switch 16P harness connector can overheat and may cause the low-beam headlights to fail without warning. Although the high-beam position remains operational, an unexpected loss of low beam functionality could result in a crash.

### CUSTOMER NOTIFICATION

All owners of affected vehicles will be sent a notification of this campaign. An example of the customer notification is at the end of this service bulletin.

To verify vehicle eligibility, you must check at least one of these items:

- The customer has a notification letter.
- The vehicle is shown as eligible on an iN VIN status inquiry.

In addition to the listed items, check for a punch mark above the seventh character of the engine compartment VIN. A punch mark in that location means the vehicle has already been repaired.

Some of the vehicles affected by this campaign may be in your used vehicle inventory. **These vehicles must be repaired before they are sold or leased.** To see if a vehicle is affected by this campaign, do an iN VIN status inquiry before selling it, leasing it, or returning it to a service customer.

Should an unrepaired vehicle that was in inventory, or that came in for service after this service bulletin was issued, cause an injury or property damage because of the campaigned item, the dealership will be solely responsible to the damaged party, and will be required to defend and indemnify American Honda for any resulting claims.

### CORRECTIVE ACTION

Inspect the combination light switch wire harness 16P connector and, depending on what you find, install a Combination Light Switch Wire Kit, or a Combination Light Switch Repair Kit.

### PARTS INFORMATION

NOTE: Most vehicles require only the Combination Light Switch *Wire* Kit.

Combination Light Switch Wire Kit:

P/N 06322-SAA-305

(Includes 250 mm wire with attached terminal, wire splice connector, and wire tie)

Combination Light Switch Repair Kit:

Base models: P/N 06323-SAA-307

Sport models: P/N 06323-SAA-309

(Includes switch, 16P wire harness connector, 250 mm wire with attached terminal, wire splice connector, and wire tie)

### TOOL INFORMATION

NOTE: The tools listed below were previously sent to your dealership for the completion of Service Bulletin 04-015, *Safety Recall: Combination Light Switch*. If you need additional tools, order them through the parts ordering system.

Terminal Pin Kit C: T/N 07QAZ-003020C

(Contains the wire crimper and the heat gun used for wire splicing.)

Terminal Maintenance Set: T/N 070AZ-S5A0100

[Contains Terminal Remover Set (six small, plastic tools used to remove terminals from the 16P headlight wire harness connector), and Secondary Lock Opener (a miniature, flat-tip screwdriver used to open the secondary locks on the 16P headlight wire harness connector)]

### WARRANTY CLAIM INFORMATION

OP#	Description	FRT
7280A3	Install a Combination Light Switch <i>Wire</i> Kit.	0.6
7280A4	Install a Combination Light Switch <i>Repair</i> Kit.	0.7

Failed Part: P/N 35255-S5A-A02

Defect Code: 5LS00

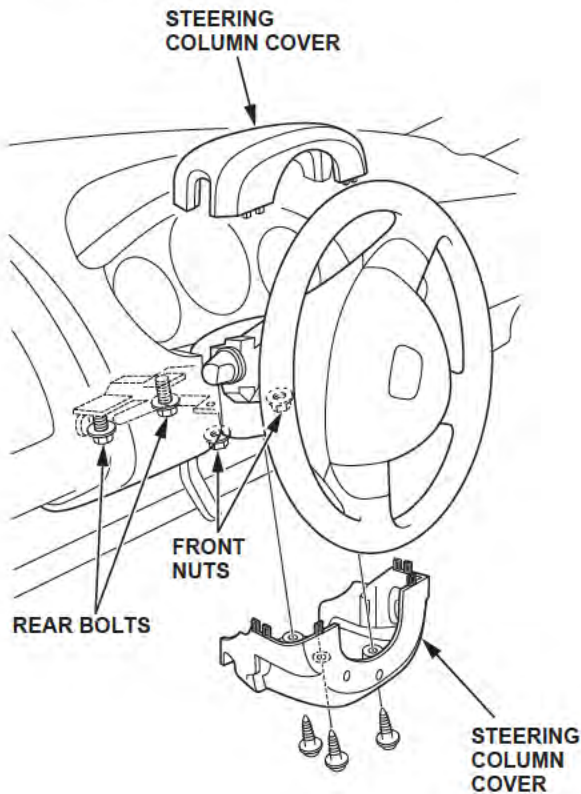
Symptom Code: R5800

Skill Level: Repair Technician

## REPAIR PROCEDURE

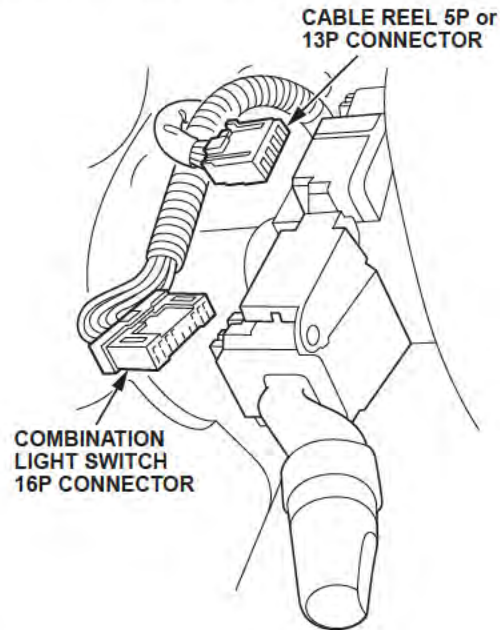
### NOTE:

- Over 90 percent of affected vehicles should be repairable with the Combination Light Switch *Wire Kit*.
  - SRS components are located in this area. Before you begin, review the SRS component locations, cautions, and procedures in the service manual.
  - Be careful not to damage the dashboard or other interior trim pieces.
  - For more information on wire terminal replacement and wire splicing, refer to Service Bulletin 00-099, *Terminal Replacement Instructions*.
1. Make sure you have the anti-theft code for the radio, then disconnect the negative cable from the battery.
  2. Remove the driver's dashboard undercover.
  3. Remove the steering column covers.

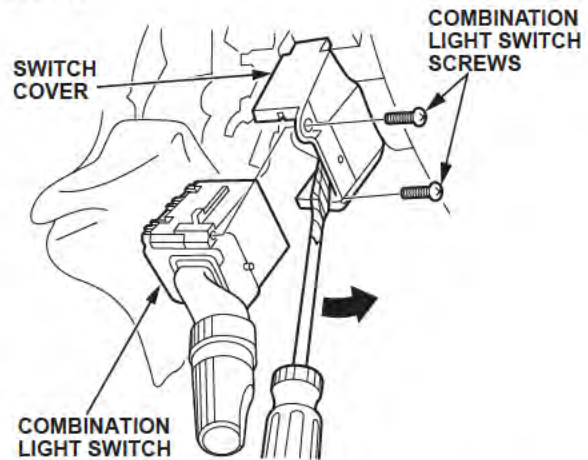


4. Remove the steering column front nuts and rear bolts.

5. Disconnect the 16P connector from the combination light switch and the 5P or 13P connector from the cable reel. Then carefully pull the wire harness to the right of the steering column.



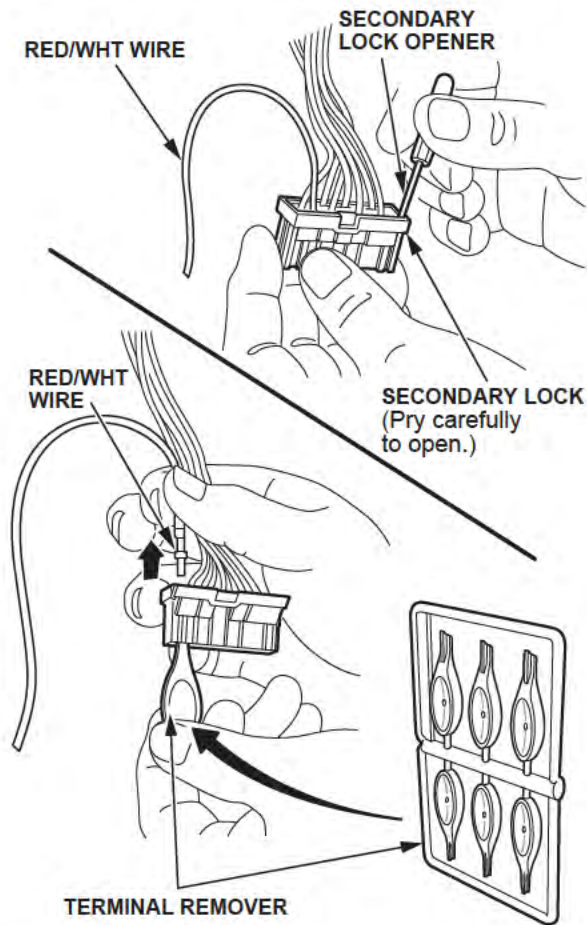
6. Turn the ignition switch to ACC (I), then turn the steering wheel 90 degrees to the left to allow room for removal of the combination light switch.
7. Remove the two screws from the combination light switch.



8. Using a flat-tip screwdriver wrapped with tape, slightly lift the switch cover, then remove the switch.  
**NOTE:** To allow removal clearance for the combination light switch, slightly shift the steering column to the right.



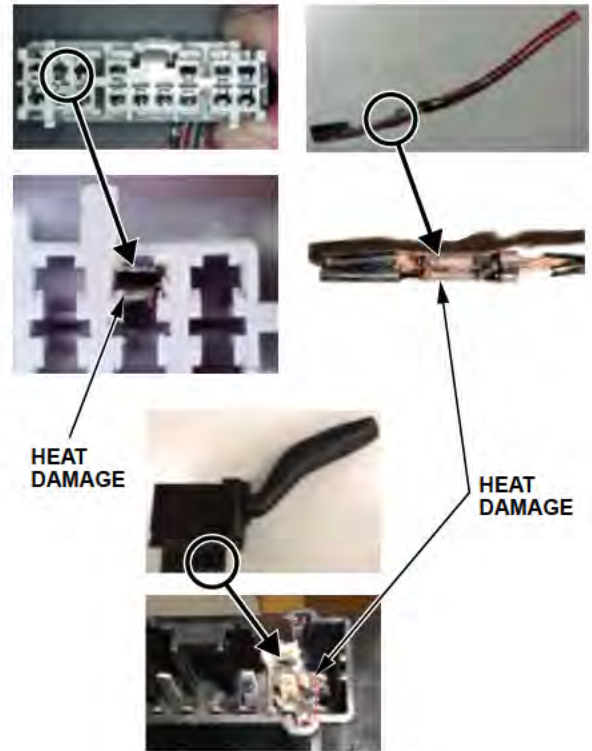
9. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the secondary lock on the RED/WHT wire side of the combination light switch 16P connector.



10. Twist off a terminal remover from the Terminal Maintenance Set (T/N 070AZ-S5A0100). Insert the terminal remover into the center row cavity of the 16P connector, above the RED/WHT wire cavity, then remove the RED/WHT wire from the 16P connector.

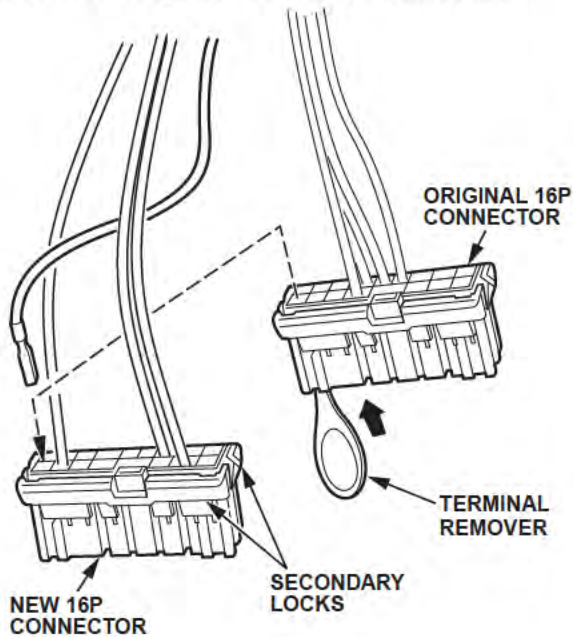
11. Using the photos below, check for signs of heat damage on the 16P connector, the terminal end of the RED/WHT wire, and the 16P terminals of the combination light switch.

- If you don't find any signs of heat damage, *retain the combination light switch* because you'll only be installing a Combination Light Switch Wire Kit. Go to step 14.
- If you do find signs of heat damage, *discard the combination light switch* because you'll be installing a Combination Light Switch Repair Kit. Go to step 12.

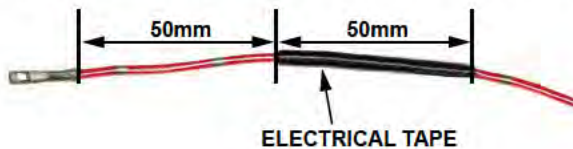


12. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the other secondary lock on the 16P connector.

13. Twist off a terminal remover from the Terminal Maintenance Set (T/N 070AZ-S5A0100). Insert the terminal remover into a center row cavity of the original 16P connector, remove the corresponding wire from its cavity, and transfer it to the same cavity in the new 16P connector from the repair kit. Repeat this for all the wires *except* the original RED/WHT wire; this wire will be installed later.



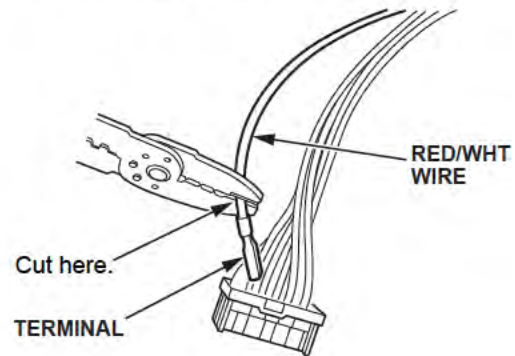
14. On the new RED/WHT wire provided in either kit, measure 50 mm from the terminal end, and wrap a 50 mm section of the wire with three turns of electrical tape. This taped section of the wire will be secured to the combination light switch in step 22.



15. Strip off 7 mm of insulation from the opposite end of the new RED/WHT wire.

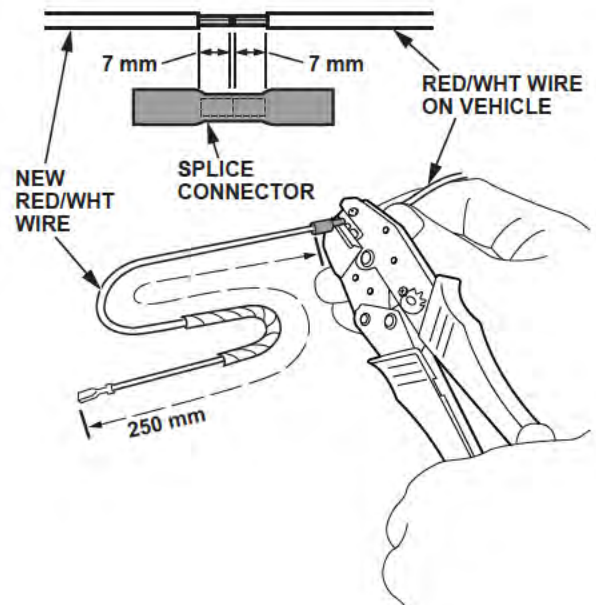
16. Cut the vehicle side RED/WHT wire near the terminal, then strip off 7 mm of insulation from the end of the wire.

NOTE: If there was any heat damage to the RED/WHT wire, make sure to cut off the damaged area before you strip off the insulation.



17. Insert the stripped end of the new and the original RED/WHT wire into each side of the splice connector from the kit, then, using the wire crimper from Terminal Pin Kit C, crimp the connector. Slightly pull on both sides of the wire to make sure it's secured in the splice connector.

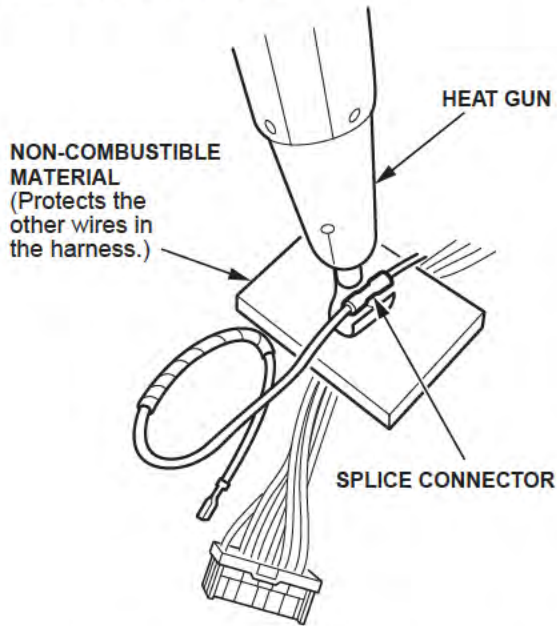
NOTE: To get the correct amount of pressure on the splice connector, you need to use the wire crimper from Terminal Pin Kit C.



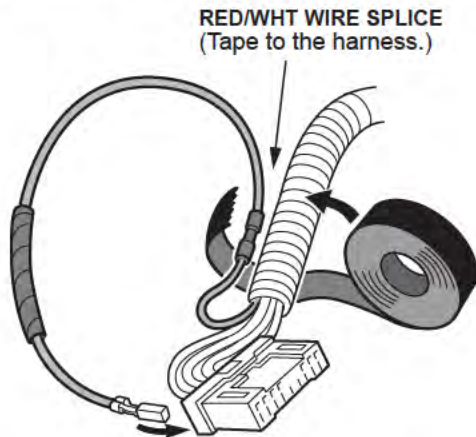
18. With a non-combustible material between the RED/WHT wire and the vehicle wire harness, use a heat gun to shrink the splice connector casing.

NOTE:

- Be careful not to get burned.
- Do not overheat the wire.



19. Place the wire splice on top of the combination switch wire harness, then attach the splice to the harness by wrapping them together with electrical tape.



20. Insert the new RED/WHT wire into its proper position in the 16P connector, then snap the connector secondary locks closed.

21. Release the cover locks on the combination light switch, then remove the switch cover.

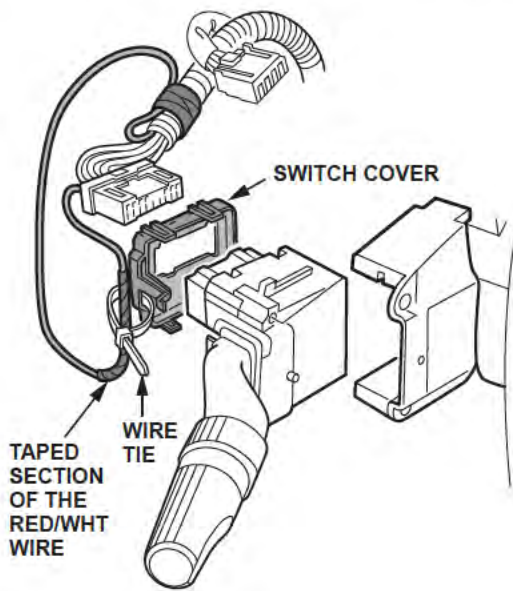
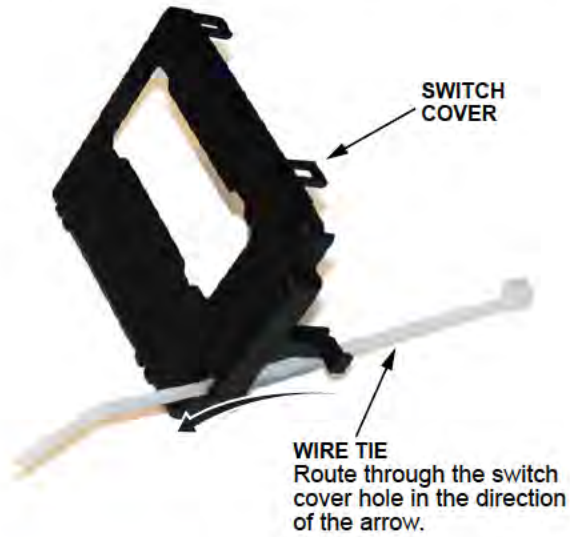
Release the switch cover locks.



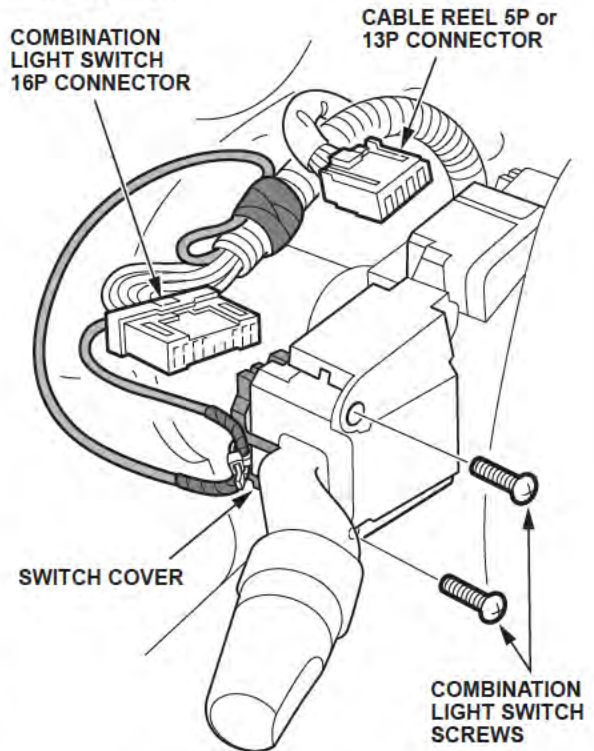
SWITCH COVER Remove.



22. As shown below, route the wire tie from the kit through the hole in the lower corner of the switch cover. Then use the wire tie to secure the RED/WHT wire (in the section you taped in step 14) to the switch cover. Cut off the excess wire tie.



23. Reattach the switch cover to the combination light switch. Make sure the switch cover is properly locked in place.



24. Connect the 16P connector to the combination light switch, then route the RED/WHT wire under the 5P or 13P cable reel connector, and reconnect the connector. Make sure the connectors are securely connected.
25. Install the combination light switch with the two original screws.
26. Connect the negative cable to the battery.
27. Check the operation of the headlights, the parking lights, and the turn signals.
28. Install the steering column front nuts and rear bolts.
29. Install the steering column covers.
30. Reinstall the driver's dashboard lower cover.
31. Enter the radio anti-theft code.
32. Center-punch a completion mark above the seventh character of the engine compartment VIN.

Center-punch here.

JHMGD3XXXXXXXXXXXX

January 2011

**Safety Recall Campaign: Headlight Switch**

Dear Fit Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

**What is the reason for this notice?**

Honda has decided that a defect which relates to motor vehicle safety exists in certain 2007–08 model year Fit vehicles. There is a potential failure with the wiring of the low beam headlights which may cause the low beam headlights to fail. The loss of the low beam headlights will increase the risk of a crash.

**What should you do?**

Call any authorized Honda dealer and make an appointment to have your vehicle repaired. The dealer will inspect and repair the headlight wiring if necessary. This work will be done free of charge. Please plan to leave your vehicle for half a day to allow the dealer flexibility in scheduling.

**Who to contact if you experience problems.**

If you are not satisfied with the service you receive from your Honda dealer, you may write to:

American Honda Motor Co., Inc.  
Honda Automobile Customer Service  
Mail Stop 500-2N-7A  
1919 Torrance Blvd.  
Torrance, CA 90501-2746

If you believe that American Honda or the dealer has failed or is unable to remedy the defect in your vehicle, without charge, within a reasonable period of time (60 days from the date you first contact the dealer for a repair appointment), you may submit a complaint to:

Administrator  
National Highway Traffic Safety Administration  
1200 New Jersey Ave., SE  
Washington, DC 20590

Or call the toll-free Safety Hotline at 888-327-4236 (TTY 800-424-9153), or go to <http://www.safercar.gov>.

**What to do if you feel this notice is in error.**

Our records show that you are the current owner or lessee of a 2007 or 2008 Fit involved in this campaign. If this is not the case, or the name/address information is not correct, please fill out and return the enclosed, postage-paid Information Change Card. We will then update our records.

If you previously paid to have the headlight switch replaced, you may be eligible for reimbursement. Refer to the attached Instructions for Reimbursement for the eligibility requirements and the reimbursement procedure.

**Lessor Information.**

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

**If you have questions.**

If you have any questions about this notice, or need assistance with contacting a Honda dealer, please call Honda Automobile Customer Service at 800-999-1009, and select option 4.

We apologize for any inconvenience this campaign may cause you.

Sincerely,

**American Honda Motor Co., Inc.  
Honda Automobile Division**

## LOW BEAM INOP (USE HSB 07-027)

<b>Tech Line Knowledge Base</b>				
<b>Name:</b>	11515	<b>Issue Date:</b>	14-Apr-2011	
<b>Source:</b>	HTL-INFO	<b>Expiration Date:</b>	(NOT SET)	
<b>Form?</b>	No	<b>Hot?</b>	No	
<b>Fax?</b>	No	<b>Hot Expiry Date:</b>	(NOT SET)	
<b>Rank:</b>	4	<b>Distribution:</b>	A-All	
<b>Remarks:</b>	NOT FOR SUMMARY			
Application Matrix		Codes		Attachments / Linked Documents
<b>Model</b>	<b>Years</b>	<b>Code</b>	<b>Description</b>	
PILOT	2004- 2005	7310	HEADLIGHTS	
Article Content				
<p>04-05 Pilot with low beam headlight that won't turn on can be repaired using the kit and procedure in Honda Service Bulletin 07-027. The combi switch, connector housing, wire size, and terminal are the same as 03 Pilot. The kit replaces about 3" of wire and terminal at cavity #6 of the Combi Light Switch connector. The wire in the kit is RED/WHT. The original 04 Pilot wire is WHT/RED and the 05 Pilot wire is YEL.</p> <p><b>SAFETY INFORMATION:</b> The information in this document is intended for use only by skilled Technicians who have the proper tools, equipment, and training to correctly and safely maintain the affected vehicle. These procedures should not be attempted by "do-it-yourselfers"</p>				


 Applies To: **2003 Pilot – ALL**
**May 12, 2007**

## Low Beam Headlights Intermittently Do Not Come On

### SYMPTOM

When you turn the combination light switch to the headlight "on" position, the low beams may not come on.

### PROBABLE CAUSE

In a rare case, the wire harness may have been misrouted, causing a terminal in the headlight wire harness connector to become heat-damaged, which may cause the low beam headlights to not come on.

### CORRECTIVE ACTION

Replace the combination light switch, the WHT/RED wire in the headlight wire harness and, if needed, the 16P headlight wire harness connector.

### PARTS INFORMATION

Combination Light Switch Repair Kit:  
 P/N 35012-S5A-307, H/C 7743875  
 (Includes a switch, a wire harness connector, a 250 mm length of wire with an attached terminal, and a wire splice connector)

### TOOL INFORMATION

Terminal Maintenance Set: T/N 070AZ-S5A0100\*  
 Contains a Terminal Remover Set (six small plastic tools used to remove terminals from the 16P headlight wire harness connector), and a Secondary Lock Opener (a miniature, flat-tip screwdriver used to open the secondary locks on the 16P headlight wire harness connector)

\* This tool was sent to your dealership in Spring 2004. If you need additional tools, order them through the parts ordering system.

### WARRANTY CLAIM INFORMATION

**In warranty:** The normal warranty applies.

OP#	Description	FRT
7280A1	Replace the combination switch and the WHT/RED wire in the 16P headlight wire harness connector.	0.8
7280A2	Replace the combination switch, the 16P headlight wire harness connector, and the WHT/RED wire in the connector.	1.3

Failed Part: P/N 35255-S5A-A02  
 H/C 6859953

Defect Code: 06401

Symptom Code: 03220

Template ID: 07-027A

Skill Level: Repair Technician

**Out of warranty:** Any repair performed after warranty expiration may be eligible for goodwill consideration by the District Parts and Service Manager or your Zone Office. You must request consideration, and get a decision, before starting work.

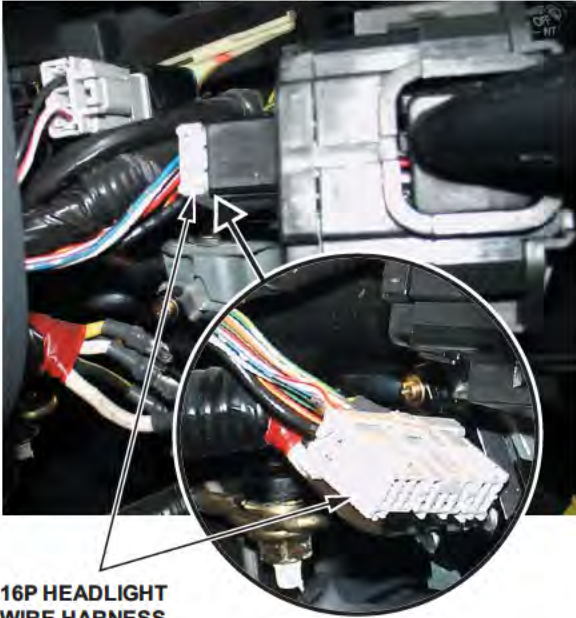
### REPAIR PROCEDURE

#### NOTE:

- SRS components are located in this area. Before you begin, review the SRS component locations, cautions, and procedures in the service manual.
- Be careful not to damage the dashboard or other interior trim pieces.
- For information about wire terminal replacement and wire splicing, refer to Service Bulletin 00-099, *Terminal Replacement Instructions*.

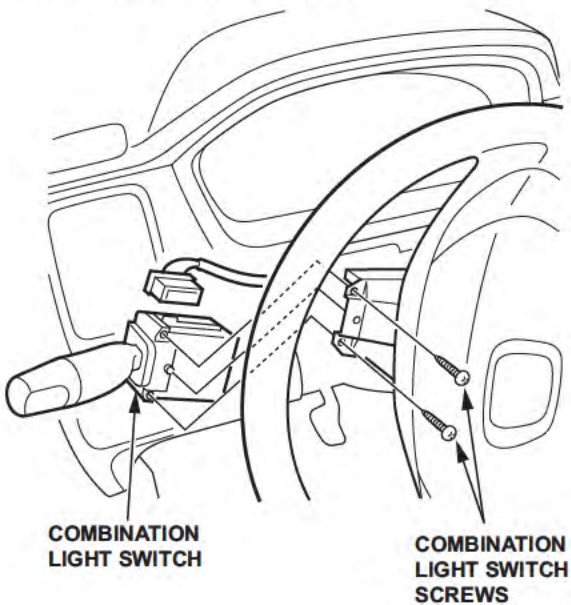
1. Apply the parking brake.
2. Move the shift lever to N.
3. Make sure you have the anti-theft code for the radio (if applicable), then write down your customer's radio station presets.
4. Disconnect the negative cable from the battery, and wait at least 3 minutes.

5. Remove the upper and lower steering column covers:  
NOTE: Be careful not to damage the instrument panel, the dashboard, or any other interior trim pieces.
  - Refer to page 17-25 of the *2003–2004 Pilot Service Manual*, or
  - Online, enter keyword **COLUMN**, and select **Steering Column Removal and Installation** from the list.
6. Disconnect the 16P headlight wire harness connector from the combination light switch.

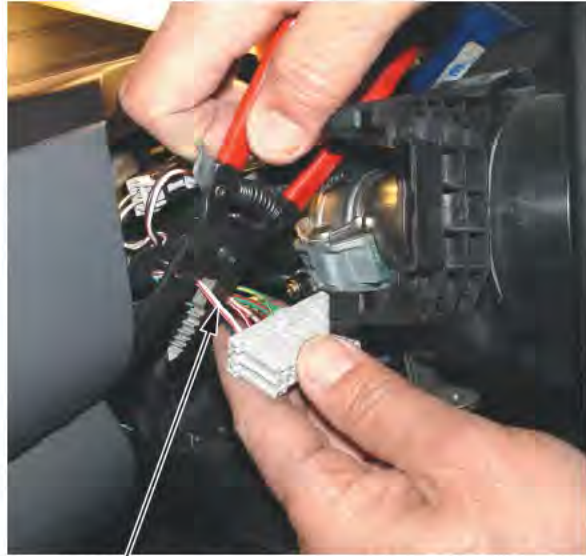


**16P HEADLIGHT WIRE HARNESS CONNECTOR**

7. Turn the ignition switch to ACCESSORY (I), then turn the steering wheel to the left.
8. Remove the two screws from the combination light switch, and remove the switch.



9. Locate the WHT/RED wire, terminal 6, in the 16P connector. Measure 20 mm from the end of the connector, then cut the WHT/RED wire.

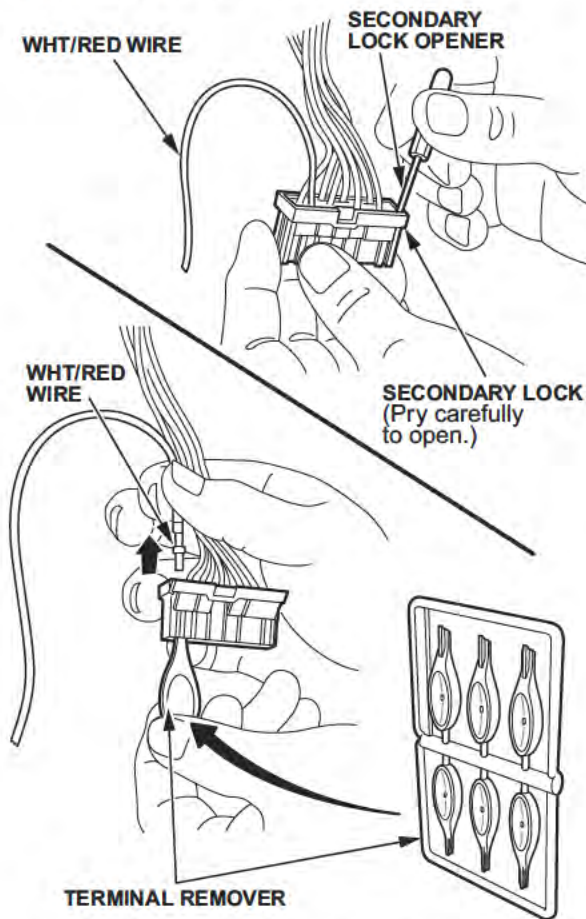


Cut WHT/RED wire 20 mm from the end of the connector.

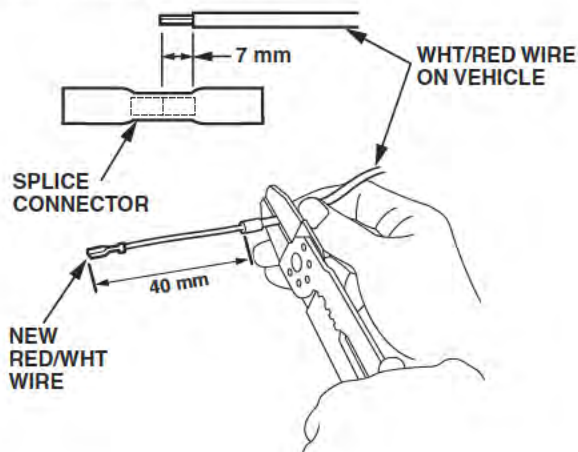
10. Inspect the 16P connector for heat damage or discoloration:
  - If the connector is OK, go to step 11.
  - If the connector is damaged or discolored, go to step 13.



11. Using the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A0100), carefully pry open the secondary lock on the WHT/RED wire side of the 16P connector.



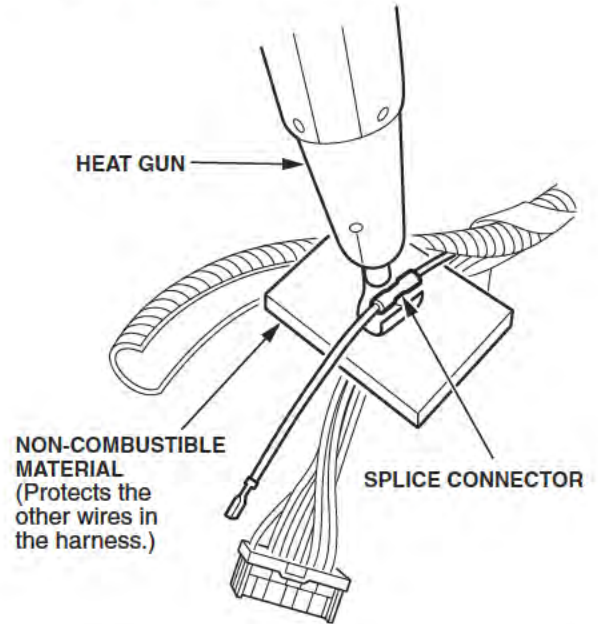
12. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into the center row cavity of the 16P connector, above the WHT/RED wire cavity (terminal 6), then remove the WHT/RED wire.
13. Strip off 7 mm of insulation from the vehicle wire harness side of the WHT/RED wire. Insert the stripped end into one side of the splice connector, and crimp the connector.



14. Cut the new RED/WHT wire 40 mm from the end of its terminal. Then strip off 7 mm of insulation from the cut end.
15. Insert the stripped end of the new RED/WHT wire into the other side of the splice connector, then crimp the connector.
16. With a non-combustible material between the RED/WHT wire and the vehicle wire harness, use a heat gun to shrink the splice connector casing.

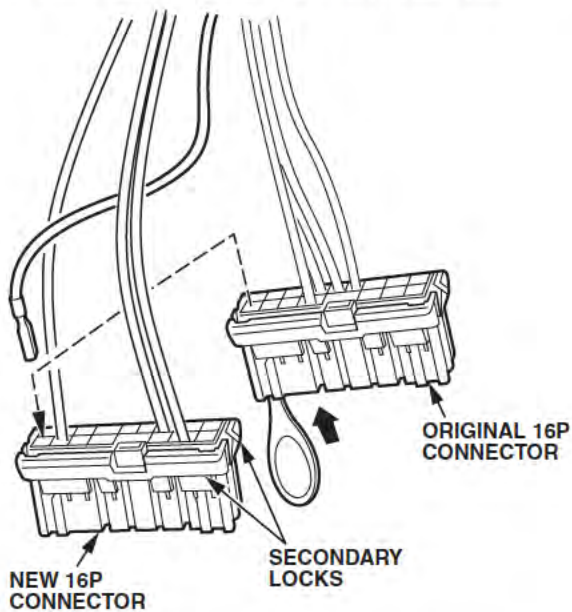
NOTE:

- Be careful to not get burned.
- Do not overheat the wire.



17. If the original 16P connector is *not* heat damaged or discolored, insert the new RED/WHT wire into its proper terminal cavity in the connector, then go to step 21. If the connector is *heat damaged*, go to step 18.
18. Use the secondary lock opener from the Terminal Maintenance Set (T/N 070AZ-S5A-011) to carefully pry open the secondary lock on the **new** 16P connector.

19. Twist off a terminal remover from the Terminal Remover Set (T/N 070AZ-S5A-011). Insert the terminal remover into a center row cavity of the original 16P connector, remove the corresponding wire from its cavity, and transfer it to the same cavity in the new 16P connector. Repeat this for all the wires except the original WHT/RED wire.



20. Insert the new RED/WHT wire into its proper terminal cavity in the new 16P connector.
21. Snap the secondary lock(s) closed on the 16P connector.
22. Using electrical tape, retape the wire harness.
23. Install the new combination light switch with the two original screws.
24. Connect the negative cable to the battery.
25. Check the operation of the headlights, the parking lights, and the turn signals.
26. Install the steering column covers.
27. Enter the radio anti-theft code (if applicable), then enter your customer's radio station presets. Set the clock.

EA11-012

HONDA

4/20/2012

Q10 E

Doc1 QIS MV20011212130757

EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
H Tomiji Komiya
2001/12/12
↓
INFORMATION INVESTIGATION
H Tomiji Komiya
2001/12/12
↓
INVESTIGATION AND ANALYSIS
H Hideto Yokoi
2001/12/12
↓
COUNTERMEASURE REQUEST
H Hideto Yokoi
2001/12/12
↓
INTERMEDIATE REPLY
↓
COUNTERMEASURE REPLY
AQAO Hideto Yokoi
2002/01/31
↓
COUNTERMEASURE ISSUED
HGT
2001/09/08
↓
COUNTERMEASURE APPLICATION
H Yonrin Hinkai Godo Hideto Yokoi
2001/11/06
↓
COMPLETED
H Yonrin Hinkai Godo Hideto Yokoi
2004/03/01

COUNTERMEASURE REQUEST
ADDRESSSEE
AQAO
RECEPTION RECEPTION
RECEPTION RECEPTION
RANK
B
DATE:
APPROVAL CHECK CREATOR

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
ES2	Head light low beam inoperative (light SW)	MV20011212130757
01/CIVIC		
OCCURRENCE DESCRIPTION	Headlight low beam inoperative.	

REPLY	REPLY TO H	VIA	BY Jan 25
-------	------------	-----	-----------

INVESTIGATION AND ANALYSIS RESULTS

Actual parts confirmation found melt on lighting SW/Lo terminal.

Detailed analysis including signs of terminal deformation, and terminal surface confirmation will be carried out at manufacturers Toyo Denso, and Sumitomo Electronics.

<Detailed confirmation>  
 1. Harness Lo circuit F terminal  
 - Some substance adhered on tongue contact point, and copper color confirmed around it (Sn has disappeared)

- Melt marks confirmed on part of terminal surface, however no significant chattering marks of Cu grain adhesion which comes with that was not confirmed.

- Tab gap is 0.3mm wider compared to other terminals (tab gap 0.59mm)

3. Combination SW Lo circuit/M terminal (Cu terminal)  
 .Obvious discoloration occurred on terminal surface, judged to be the heating area.  
 .Oxygen distribution detected on whole surface, oxidizing determined to have progressed due to heating.

\*From the state of terminal, it can be concluded that first, resistance value rose by moving /oxidizing of the connector and the terminal, causing over current (approx 10A)  
 As the result, heating->welding distortion occurred.

4. Confirmation of fluctuating voltage variation at the connector area. (sliding of terminal)  
 . When operated DIMMER, found the voltage varying to 10mV (peak), it can be concluded that the terminal had slid.

\*concluded it is due to the complex sources form 090 terminal/10A specification, oxidizing, sliding under the SW operation.

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR
01/31	AQAO			Hideto

CAUSE ANALYSIS	Concluded it is due to resistance value rising by the moving/oxidizing of the terminal->over current(10A) caused terminal heating->as the result, terminal area heating and melt occurred.
	*Contacting resistance value reduced through terminal coating specification after 02M.
COUNTERMEASURE	
TREATMENT FOR STOCK & SOLD UNITS & PARTS	<Sold vehicles> Market action (recall) taken as continued occurrence with in-range vehicles are suspected. <Stock vehicles> MP vehicles have already switched over to countermeasure parts.
COUNTERMEASURE EFFECTIVENESS	Verification on difference in toughness between C/M part (SW M terminal - Sn plating) and non-C/M part (Cu terminal) found that C/M is effective for sliding/resistance improvement.
	<Testing conditions> -2G/20Hz, ambient temperature 80C -10A (spec current) cycled -DIMMER switching operation included, apply vibrations at constant cycle.
FEED BACK TO THE SOURCE	<Recurrence prevention> Total quality checks implemented, if continuously cycled terminal width is below 2.3mm (090 terminal), plate it. (03M*)
	Terminals with width below 2.3mm to be plated: reflect this on design guide (application on models after 04M)

COUNTERMEASURE APPLICATION INFORMATION						
DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY	PRODUCT #	
2001/11/02	ES1	2002	JH	F	1100519	
2001/10/31	ES2	2002	JH	F	1100240	
2001/10/31	ES3	2002	JH	F	1100092	
2001/11/02	EU1	2002	JH	F	1101037	
2001/11/05	EU2	2002	JH	F	1100176	
2001/11/06	EU3	2002	JH	F	1100306	
2001/11/05	EU4	2002	JH	F	1100054	
2001/12/10	ES9	2002	JH	F	1000030	
2001/10/31	ES1	2002	JH	F	1200629	

QUALITY IMPROVEMENT SHEET [ Q I S ]						
ISSUED BY						
H						
OCCURRENCE MARKET						
REPORT #	A1S045-00					
FRAME #	JHMES26761S					
ENGINE #	D17A2-1003934					
TRANSMISSION #						
TRANSMISSION CATEGORY						
MILEAGE OR HOURS	11446	Mile				
REGISTRATION DATE	2001/04/12					
OCCURRENCE DATE	2001/11/15					
PRODUCT DATE						
SERVICE PART #	35255-S5A-J02					
	35255-S5A-J02					
MAIN CAUSAL PART #	35255-S5A-A01					
CAUSAL PART SYMPTOM CODE AND DESCRIPTION	032	(Not operating)				
MODEL CODE						
CAUSE CATEGORY	Specification					
DEPT. REF.	DEPARTMENT					
	SUPPLIER	SUMITOMO DENKIKOUG	CODE	3311		
COUNTERMEASURE CATEGORY	Closed					
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	7403	Plating addi				
OCCURRENCE FORECAST	Sporadic					
COUNTERMEASURE PART AVAILABILITY	No					
REVISED ITEM	DRAWING	OPERATION STANDARD				
	○					

△						
△						
2	2004/03/19	REVISE				Hideto Yoko
1	2003/12/11	FINISH				Hideto Yoko
△	2001/12/19	NEW	Umihito Mor			Tomiji Komi
ISSUE	DATE	VERSION	APPROVAL	CHECK	CHECK	CREATOR

DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR

COUNTERMEASURE APPLICATION INFORMATION

QIS CONTROL # MV20011212130757      YM    2001      MODEL CODE    ES2

PART # 35255-S5A-A01      RANK    B

TITLE Head light low bean inoperative (lig

COUNTERMEASURE APPLICATION INFORMATION						
	DATE	MODEL CODE	YM	DESTINATION	CATEGORY	PRODUCT #
10	2001/11/05	ES3	2002	JH	F	8100021
11	2001/11/01	EU1	2002	JH	F	1200522
12	2001/11/02	GD1	2002	JH	F	1067556
13	2001/11/03	GD1	2002	JH	F	8000161
14	2001/11/03	GD2	2002	JH	F	1005640
15	2001/11/13	GD2	2002	JH	F	8000026
16	2001/11/01	RF3	2002	JH	F	1065092
17	2001/10/25	RF3	2002	JH	F	8000249
18	2001/11/05	RF4	2002	JH	F	1016353
19	2001/11/06	RF4	2002	JH	F	8000105
20	2001/10/16	RN1	2002	JH	F	1102045
21	2001/10/15	RN2	2002	JH	F	1100287
22	2001/09/26	RN3	2002	JH	F	1057856
23	2001/09/27	RN4	2002	JH	F	1009641
24	2001/11/20	ES1	2002	D3	F	S200127
25	2001/12/04	ES1	2002	D6	F	S200140
26	2001/11/08	ES1	2002	D5	F	S400234
27	2001/11/05	ES1	2002	AH	F	S004508
28	2001/11/06	ES2	2002	AH	F	S002839
29	2001/11/06	ES4	2002	D2	F	S200221
30	2001/11/29	ES4	2002	EH	F	S200387
31	2001/11/02	ES5	2002	D5	F	S201791
32	2001/11/08	ES5	2002	D2	F	S201806
33	2001/11/20	ES5	2002	EH	F	S202241
34	2001/11/02	ES8	2002	D6	F	S201414
35	2001/11/02	ES8	2002	D3	F	S201438
36	2001/11/19	ES8	2002	D4	F	S201777
37	2001/11/15	ES8	2002	D5	F	S402913
38	2001/12/04	EU3	2002	D6	F	S200110
39	2001/12/04	EU3	2002	D7	F	S200137

COUNTERMEASURE APPLICATION INFORMATION

QIS CONTROL # MV20011212130757      YM    2001      MODEL CODE    ES2

PART # 35255-S5A-A01      RANK    B

TITLE Head light low bean inoperative (lig

COUNTERMEASURE APPLICATION INFORMATION						
	DATE	MODEL CODE	YM	DESTINATION	CATEGORY	PRODUCT #
40	2001/10/23	GD1	2002	EH	F	S200193
41	2001/11/02	GD1	2002	D2	F	S201542
42	2001/10/23	GD1	2002	UK	F	S200273
43	2001/10/26	GD5	2002	FH	F	S200009
44	2001/11/02	GD5	2002	D2	F	S200051
45	2001/11/06	GD5	2002	EH	F	S201499
46	2001/11/16	GD5	2002	UK	F	S201512
47	2001/12/03	RF3	2002	D3	F	S200222
48	2001/10/01	RN1	2001	D2	F	C205968
49	2001/10/11	RN1	2001	EH	F	C205984
50	2001/10/01	RN3	2001	D2	F	C209025
51	2001/10/10	RN3	2001	EH	F	C209048
52	2001/10/25	RN3	2001	UK	F	C209036
53	2001/10/25	RN3	2001	D3	F	C209072
54	2001/10/29	RN3	2002	D5	F	C400004
55	2001/08/29	ZE1	2001	AH	F	T003368
56	2001/09/11	ZE1	2002	UK	F	T200001

**INVESTIGATION RESULTS**

2. harness Hi circuit/F terminal
  - No substance adhesion which would block continuity.

イベント
担当部門氏名
完了年月日
↓
受付
H四輪解析情報
小宮 富次
2001/12/12
↓
情報調査
H四輪解析情報
小宮 富次
2001/12/12
↓
調査解析
H四輪解析解技
横井 英人
2001/12/12
↓
対策要求
H四輪解析解技
横井 英人
2001/12/12
↓
中間回答
↓
対策回答
H四輪品改合同
横井 英人
2002/01/31
↓
出図
HGT
2001/09/08
↓
対策実施
H四輪品改合同
横井 英人
2001/11/06
↓
完了
H四輪品改合同
横井 英人
2004/03/01

対策要求

型式/YM・通称名	件 名	推 進 No.
ES2	ヘッドライトロービーム不灯 (ライトSW)	MV20011212130757
01/CIVIC		
発生状況	ロービームヘッドライト作動不能。	

回 答 1月25日 までに 経由 H四輪解析解技 宛に回答願います。

調 査 結 果	<p>現品確認結果、ライティングSW/L端子部に溶損が認められる。</p> <p>端子部変形有無、端子表面確認等詳細解析を取引先【東洋電装（株）、住友電気工業（株）】にて行う。</p> <p>&lt;詳細確認&gt;</p> <p>①ハーネス側L回路/F端子</p> <ul style="list-style-type: none"> <li>舌片接点部に付着物があり、その周辺に銅色部分あり。(Snがなくなっている)</li> </ul> <p>・端子表面の一部に溶融痕が確認されたが、顕著なチャタリング痕やそれに伴うCuの粒付着は認められない。</p> <p>・タブギャップが他端子に比べ、0.3mm広い。(タブギャップ 0.59mm)</p> <p>③コンビSW側L回路/M端子(Cu端子)</p> <ul style="list-style-type: none"> <li>端子表面に変色があり、発熱部と判断する。</li> </ul> <p>・酸素分布は全面に検出され、発熱により酸化が進行したと判断する。</p> <p>※端子状態から判断して、コネクタや端子部の摺動/酸化により抵抗値が上昇し、電流値大(約10A)が起因し発熱→F端子舌片部が緩和し接触不安定→溶損に至ったと判断される。</p> <p>③コネクタ部電圧変動(端子摺動有無)確認</p> <ul style="list-style-type: none"> <li>DIMMER操作時、10mV程度の電圧変動(ピーク)が見られ、端子摺動有りと判断する。</li> </ul> <p>※SW操作等の動環境下での090端子/10A仕様、酸化状態、摺動の複合的原因と判断される。</p>
---------	--

月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所外)	承認	確認	作成
01/31	H四輪品改合同			横井 英										

宛先	H四輪品改合同	經由殿	受付	/		
		經由殿	受付	/		

重要度	B
-----	---

年 月 日	承認	確認	作成

原因	端子部摺動/酸化により接触抵抗値上昇、電流値大(約10A)が起因し端子部発熱→溶損に至ったと判断される。																																																																													
対策	<p>※0.2M中以降はM端子をSnメッキ仕様とし、接触抵抗値を低減している。</p> <p>既販車及び在庫品の処置</p> <table border="1"> <tr> <th colspan="7">対策適用号機</th> </tr> <tr> <th>年月日</th> <th>型式(通称名)</th> <th>年式</th> <th>仕向地</th> <th>区分</th> <th>号機</th> <th></th> </tr> <tr> <td>2001/11/02</td> <td>ES1</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1100519</td> <td></td> </tr> <tr> <td>2001/10/31</td> <td>ES2</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1100240</td> <td></td> </tr> <tr> <td>2001/10/31</td> <td>ES3</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1100092</td> <td></td> </tr> <tr> <td>2001/11/02</td> <td>EU1</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1101037</td> <td></td> </tr> <tr> <td>2001/11/05</td> <td>EU2</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1100176</td> <td></td> </tr> <tr> <td>2001/11/06</td> <td>EU3</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1100306</td> <td></td> </tr> <tr> <td>2001/11/05</td> <td>EU4</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1100054</td> <td></td> </tr> <tr> <td>2001/12/10</td> <td>ES9</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1000030</td> <td></td> </tr> <tr> <td>2001/10/31</td> <td>ES1</td> <td>2002</td> <td>JH</td> <td>F</td> <td>1200629</td> <td></td> </tr> </table> <p>対策効果確認</p> <ul style="list-style-type: none"> <li>対策品(SW側M端子-Snメッキ)と未対策品(Cu端子)のタフネス差を検証した結果、摺動/抵抗上昇に対しての効果認められた為、対策効果ありと判断する。</li> </ul> <p>&lt;試験条件&gt;</p> <ul style="list-style-type: none"> <li>2G/20Hz、周囲温度80℃の環境下</li> <li>10A(仕様電流値)を通電</li> <li>DIMMER切替操作含む振動を一定サイクルで加える。</li> </ul> <p>源流へのフィードバック</p> <p>&lt;再発防止&gt;</p> <p>品質総点検を実施し、連続通電される端子幅2.3mm(090端子)以下の端子はメッキ処理実施。(03M~)</p> <p>端子幅2.3mm以下の端子は、メッキ処理を原則とすることを設計ガイドへ反映。(04M以降の機種にて適用)</p>	対策適用号機							年月日	型式(通称名)	年式	仕向地	区分	号機		2001/11/02	ES1	2002	JH	F	1100519		2001/10/31	ES2	2002	JH	F	1100240		2001/10/31	ES3	2002	JH	F	1100092		2001/11/02	EU1	2002	JH	F	1101037		2001/11/05	EU2	2002	JH	F	1100176		2001/11/06	EU3	2002	JH	F	1100306		2001/11/05	EU4	2002	JH	F	1100054		2001/12/10	ES9	2002	JH	F	1000030		2001/10/31	ES1	2002	JH	F	1200629	
対策適用号機																																																																														
年月日	型式(通称名)	年式	仕向地	区分	号機																																																																									
2001/11/02	ES1	2002	JH	F	1100519																																																																									
2001/10/31	ES2	2002	JH	F	1100240																																																																									
2001/10/31	ES3	2002	JH	F	1100092																																																																									
2001/11/02	EU1	2002	JH	F	1101037																																																																									
2001/11/05	EU2	2002	JH	F	1100176																																																																									
2001/11/06	EU3	2002	JH	F	1100306																																																																									
2001/11/05	EU4	2002	JH	F	1100054																																																																									
2001/12/10	ES9	2002	JH	F	1000030																																																																									
2001/10/31	ES1	2002	JH	F	1200629																																																																									

市場品質情報 [ Q I S ]			
発行部門			
H四輪解析解技			
発生場所			
フレーム No.	JHMES267619		
エンジン No.	D17A2-1003934		
ミッション No.			
ミッション区分			
走行距離、時間	11446	Mile	
登録年月日	2001/04/12		
発生年月日	2001/11/15		
新部品番号	35255-S5A-J02		
	35255-S5A-J02		
主部品番号	35255-S5A-A01		
症状コード	032	作動不良	
EDP KEY 型式名			
原因区分	仕様		
責任区	部門		
	取引先名	住友電気工業(株)	コードNo. 3311
対策区分	完了		
対策内容コード	7403	メッキ追加	
発生予測	あり(散発)		
対策パーツ		無	
見直し項目	図面	作業標準	
	○		

発行年月日	記事	承認	確認	確認	作成
2004/03/19	改訂発行				横井 英人
2003/12/11	完了発行				横井 英人
2001/12/19	新規	森海人			小宮 富次

受付月日	/
------	---

問推表 適用号機明細

推進No MV20011212130757      年式 2001      型式 ES2  
 部品番号 35255-S5A-A01      重要度 B

件名 ヘッドライトロービーム不灯 (ライトSW)

対策適用号機						
	年月日	型式	年式	仕向地	区分	号機
10	2001/11/05	ES3	2002	JH	F	8100021
11	2001/11/01	EU1	2002	JH	F	1200522
12	2001/11/02	GD1	2002	JH	F	1067556
13	2001/11/03	GD1	2002	JH	F	8000161
14	2001/11/03	GD2	2002	JH	F	1005640
15	2001/11/13	GD2	2002	JH	F	8000026
16	2001/11/01	RF3	2002	JH	F	1065092
17	2001/10/25	RF3	2002	JH	F	8000249
18	2001/11/05	RF4	2002	JH	F	1016353
19	2001/11/06	RF4	2002	JH	F	8000105
20	2001/10/16	RN1	2002	JH	F	1102045
21	2001/10/15	RN2	2002	JH	F	1100287
22	2001/09/26	RN3	2002	JH	F	1057856
23	2001/09/27	RN4	2002	JH	F	1009641
24	2001/11/20	ES1	2002	D3	F	S200127
25	2001/12/04	ES1	2002	D6	F	S200140
26	2001/11/08	ES1	2002	D5	F	S400234
27	2001/11/05	ES1	2002	AH	F	S004508
28	2001/11/06	ES2	2002	AH	F	S002839
29	2001/11/06	ES4	2002	D2	F	S200221
30	2001/11/29	ES4	2002	EH	F	S200387
31	2001/11/02	ES5	2002	D5	F	S201791
32	2001/11/08	ES5	2002	D2	F	S201806
33	2001/11/20	ES5	2002	EH	F	S202241
34	2001/11/02	ES8	2002	D6	F	S201414
35	2001/11/02	ES8	2002	D3	F	S201438
36	2001/11/19	ES8	2002	D4	F	S201777
37	2001/11/15	ES8	2002	D5	F	S402913
38	2001/12/04	EU3	2002	D6	F	S200110
39	2001/12/04	EU3	2002	D7	F	S200137

問推表 適用号機明細

推進No MV20011212130757      年式 2001      型式 ES2  
 部品番号 35255-S5A-A01      重要度 B

件名 ヘッドライトロービーム不灯 (ライトSW)

対策適用号機						
	年月日	型式	年式	仕向地	区分	号機
40	2001/10/23	GD1	2002	EH	F	S200193
41	2001/11/02	GD1	2002	D2	F	S201542
42	2001/10/23	GD1	2002	UK	F	S200273
43	2001/10/26	GD5	2002	FH	F	S200009
44	2001/11/02	GD5	2002	D2	F	S200051
45	2001/11/06	GD5	2002	EH	F	S201499
46	2001/11/16	GD5	2002	UK	F	S201512
47	2001/12/03	RF3	2002	D3	F	S200222
48	2001/10/01	RN1	2001	D2	F	C205968
49	2001/10/11	RN1	2001	EH	F	C205984
50	2001/10/01	RN3	2001	D2	F	C209025
51	2001/10/10	RN3	2001	EH	F	C209048
52	2001/10/25	RN3	2001	UK	F	C209036
53	2001/10/25	RN3	2001	D3	F	C209072
54	2001/10/29	RN3	2002	D5	F	C400004
55	2001/08/29	ZE1	2001	AH	F	T003368
56	2001/09/11	ZE1	2002	UK	F	T200001



## 調 査

- ②ハーネス側Hi回路/F端子  
・導通を阻害する付着物は認められない。

EA11-012

HONDA

4/20/2012

Q10 E

Doc2 QIS MV20020523100005

EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
H Tomiji Komiya
2002/05/17
↓
INFORMATION INVESTIGATION
H Tomiji Komiya
2002/06/10
↓
INVESTIGATION AND ANALYSIS
H Hideto Yokoi
2002/06/10
↓
COUNTERMEASURE REQUEST
↓
INTERMEDIATE REPLY
↓
COUNTERMEASURE REPLY
AQAO Hideto Yokoi
2002/05/23
↓
COUNTERMEASURE ISSUED
↓
COUNTERMEASURE APPLICATION
H Yonrin Hinkai Godo Hideto Yokoi
2001/11/06
↓
COMPLETED
H Yonrin Hinkai Godo Hideto Yokoi
2004/02/26

COUNTERMEASURE REQUEST
ADDRESSEE
AQAO
RECEPTION
RANK
B
DATE:
APPROVAL
CHECK
CREATOR

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
ES1	Low beams inop (light s/w) QAH 15	MV20020523100005
01/CIVIC		
OCCURRENCE DESCRIPTION		

REPLY	REPLY TO	VIA	BY
-------	----------	-----	----

Found low beam terminal has melted away when inspecting actual part, and heat generation from terminal is recognized. Being promoted under MV20011212130757, being same symptom.

Investigation and Analysis Results

Occurrence Mechanism:  
 -When lighting s/w usage conditions are  
 1) Terminal contact surface slides.  
 2) Male terminal (s/w side) copper surface (unplated) oxidizes.  
 3) Current is approx 10A.  
 the terminal surfaces accumulate oxidization matter when terminals slide, and contact resistance increases.

-The terminal fittings create heat when sliding.  
 -The heat causes oxidization matter to form on the fittings (male terminal surface), contact resistance increases, and terminal fittings generate heat when sliding.  
 -From the heat the female terminal (harness side) relaxes causing contact load to drop.

\*The above repetition causes arcing between low beam terminal fittings, the coupler melts, and leads to low beams inop.  
 \*Determine cause to be a combination of the sliding, the oxidization conditions, and the dynamic environment (s/w operation etc) of the 090 terminal/10A spec.

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR
05/23	AQAO			Hideto										

CAUSE ANALYSIS	Being promoted under MV20011212130757. -Determine that terminal sliding/oxidization causes contact resistance value to rise, current max value (approx 10A) causes terminal heat, and leads to melting.																																																																													
COUNTERMEASURE	Being promoted under MV20011212130757. -Current has been c/m'ed by plating spec on the male terminal. *JPN production models application VINs input.																																																																													
TREATMENT FOR STOCK & SOLD UNITS & PARTS	<table border="1"> <tr><th colspan="7">COUNTERMEASURE APPLICATION INFORMATION</th></tr> <tr><th>DATE</th><th>MODEL CODE (MODEL NAME)</th><th>YM</th><th>DEST.</th><th>CATEGORY</th><th>PRODUCT #</th><th></th></tr> <tr><td>2001/10/16</td><td>RN1</td><td>2002</td><td>JH</td><td>F</td><td>1102045</td><td></td></tr> <tr><td>2001/10/15</td><td>RN2</td><td>2002</td><td>JH</td><td>F</td><td>1100287</td><td></td></tr> <tr><td>2001/09/26</td><td>RN3</td><td>2002</td><td>JH</td><td>F</td><td>1057856</td><td></td></tr> <tr><td>2001/09/27</td><td>RN4</td><td>2002</td><td>JH</td><td>F</td><td>1009641</td><td></td></tr> <tr><td>2001/11/02</td><td>ES1</td><td>2002</td><td>JH</td><td>F</td><td>1100519</td><td></td></tr> <tr><td>2001/10/31</td><td>ES2</td><td>2002</td><td>JH</td><td>F</td><td>1100240</td><td></td></tr> <tr><td>2001/10/31</td><td>ES3</td><td>2002</td><td>JH</td><td>F</td><td>1100092</td><td></td></tr> <tr><td>2001/11/02</td><td>EU1</td><td>2002</td><td>JH</td><td>F</td><td>1101037</td><td></td></tr> <tr><td>2001/11/05</td><td>EU2</td><td>2002</td><td>JH</td><td>F</td><td>1100176</td><td></td></tr> </table> <p>Sold vehicles: Subject vehicles (pre-C/M vehicles) are considered to still have possibility for this failure, and therefore market action (recall) will be done.</p> <p>Current stock: Mass production has already had C/M part application.</p>	COUNTERMEASURE APPLICATION INFORMATION							DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY	PRODUCT #		2001/10/16	RN1	2002	JH	F	1102045		2001/10/15	RN2	2002	JH	F	1100287		2001/09/26	RN3	2002	JH	F	1057856		2001/09/27	RN4	2002	JH	F	1009641		2001/11/02	ES1	2002	JH	F	1100519		2001/10/31	ES2	2002	JH	F	1100240		2001/10/31	ES3	2002	JH	F	1100092		2001/11/02	EU1	2002	JH	F	1101037		2001/11/05	EU2	2002	JH	F	1100176	
COUNTERMEASURE APPLICATION INFORMATION																																																																														
DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY	PRODUCT #																																																																									
2001/10/16	RN1	2002	JH	F	1102045																																																																									
2001/10/15	RN2	2002	JH	F	1100287																																																																									
2001/09/26	RN3	2002	JH	F	1057856																																																																									
2001/09/27	RN4	2002	JH	F	1009641																																																																									
2001/11/02	ES1	2002	JH	F	1100519																																																																									
2001/10/31	ES2	2002	JH	F	1100240																																																																									
2001/10/31	ES3	2002	JH	F	1100092																																																																									
2001/11/02	EU1	2002	JH	F	1101037																																																																									
2001/11/05	EU2	2002	JH	F	1100176																																																																									
COUNTERMEASURE EFFECTIVENESS	-Being promoted under MV20011212130757. -Results of verifying the toughness of pre-C/M (Cu plating) and post-C/M (S/W side male terminal Sn plating) shows effectiveness for sliding/resistance increase, and therefore C/M is determined effective.																																																																													
FEED BACK TO THE SOURCE	Being promoted under MV20011212130757.																																																																													

QUALITY IMPROVEMENT SHEET [ Q I S ]						
ISSUED BY						
H						
OCCURRENCE MARKET						
REPORT #	AQAH20020515-02					
FRAME #	2HGES15591H					
ENGINE #						
TRANSMISSION #						
TRANSMISSION CATEGORY						
MILEAGE OR HOURS	25850	Mile				
REGISTRATION DATE						
OCCURRENCE DATE	2002/04/18					
PRODUCT DATE						
SERVICE PART #	35255-S5A-A02					
	35255-S5A-A02					
MAIN CAUSAL PART #	35255-S5A					
CAUSAL PART SYMPTOM CODE AND DESCRIPTION	066	Poor connection cont				
MODEL CODE						
CAUSE CATEGORY	Specification					
DEPARTMENT						
SUPPLIER	TOYO DENSO CO. LTD.	CODE	4533			
COUNTERMEASURE CATEGORY	Closed					
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	7403	Plating addi				
OCCURRENCE FORECAST	Sporadic					
COUNTERMEASURE PART AVAILABILITY	Yes					
REVISED ITEM	DRAWING	OPERATION STANDARD				

2	2004/12/16	REVISE				Hideto Yoko
1	2003/03/01	FINISH				Tomiji Komi
0	2002/05/23	NEW	Umihito Mor			Tomiji Komi
ISSUE	DATE	VERSION	APPROVAL	CHECK	CHECK	CREATOR

COUNTERMEASURE APPLICATION INFORMATION

QIS CONTROL # MV20020523100005      YM    2001      MODEL CODE    ES1

PART # 35255-S5A      RANK    B

TITLE Low beams inop (light s/w) QAH 15

COUNTERMEASURE APPLICATION INFORMATION						
	DATE	MODEL CODE	YM	DESTINATION	CATEGORY	PRODUCT #
10	2001/11/06	EU3	2002	JH	F	1100306
11	2001/11/05	EU4	2002	JH	F	1100054
12	2001/12/10	ES9	2002	JH	F	1000030
13	2001/10/31	ES1	2002	JH	F	1200629
14	2001/11/05	ES3	2002	JH	F	8100021
15	2001/11/01	EU1	2002	JH	F	1200522
16	2001/11/02	GD1	2002	JH	F	1067556
17	2001/11/03	GD1	2002	JH	F	8000161
18	2001/11/03	GD2	2002	JH	F	1005640
19	2001/11/13	GD2	2002	JH	F	8000026
20	2001/11/01	RF3	2002	JH	F	1065092
21	2001/10/25	RF3	2002	JH	F	8000249
22	2001/11/05	RF4	2002	JH	F	1016353
23	2001/11/06	RF4	2002	JH	F	8000105
24	2001/11/20	ES1	2002	D3	F	S200127
25	2001/12/04	ES1	2002	D6	F	S200140
26	2001/11/08	ES1	2002	D5	F	S400234
27	2001/11/05	ES1	2002	AH	F	S004508
28	2001/11/06	ES2	2002	AH	F	S002839
29	2001/11/06	ES4	2002	D2	F	S200221
30	2001/11/29	ES4	2002	EH	F	S200387
31	2001/11/02	ES5	2002	D5	F	S201791
32	2001/11/08	ES5	2002	D2	F	S201806
33	2001/11/20	ES5	2002	EH	F	S202241
34	2001/11/02	ES8	2002	D6	F	S201414
35	2001/11/02	ES8	2002	D3	F	S201438
36	2001/11/19	ES8	2002	D4	F	S201777
37	2001/11/15	ES8	2002	D5	F	S402913
38	2001/12/04	EU3	2002	D6	F	S200110
39	2001/12/04	EU3	2002	D7	F	S200137

COUNTERMEASURE APPLICATION INFORMATION

QIS CONTROL # MV20020523100005      YM    2001      MODEL CODE    ES1

PART # 35255-S5A      RANK    B

TITLE Low beams inop (light s/w) QAH 15

COUNTERMEASURE APPLICATION INFORMATION						
	DATE	MODEL CODE	YM	DESTINATION	CATEGORY	PRODUCT #
40	2001/10/23	GD1	2002	EH	F	S200193
41	2001/11/02	GD1	2002	D2	F	S201542
42	2001/10/23	GD1	2002	UK	F	S200273
43	2001/10/26	GD5	2002	FH	F	S200009
44	2001/11/02	GD5	2002	D2	F	S200051
45	2001/11/06	GD5	2002	EH	F	S201499
46	2001/11/16	GD5	2002	UK	F	S201512
47	2001/12/03	RF3	2002	D3	F	S200222
48	2001/10/01	RN1	2001	D2	F	C205968
49	2001/10/11	RN1	2001	EH	F	C205984
50	2001/10/01	RN3	2001	D2	F	C209025
51	2001/10/10	RN3	2001	EH	F	C209048
52	2001/10/25	RN3	2001	UK	F	C209036
53	2001/10/25	RN3	2001	D3	F	C209072
54	2001/10/29	RN3	2002	D5	F	C400004
55	2001/08/29	ZE1	2001	AH	F	T003368
56	2001/09/11	ZE1	2002	UK	F	T200001

イベント
担当部門氏名
完了年月日
↓
受付
H四輪解析情報
小宮 富次
2002/05/17
↓
情報調査
H四輪解析情報
小宮 富次
2002/06/10
↓
調査解析
H四輪解析解技
横井 英人
2002/06/10
↓
対策要求
↓
中間回答
↓
対策回答
H四輪解析解技
横井 英人
2002/05/23
↓
出図
↓
対策実施
H四輪品改合同
横井 英人
2001/11/06
↓
完了
H四輪品改合同
横井 英人
2004/02/26

対策要求

型式/YM・通称名	件名	推進 No.
ES1 01/CIVIC	ロービーム不灯 (ライトSW) <QAH技術支援15>	MV20020523100005
発生状況	ロービームヘッドライトが作動しない。バルブに電気は通っている。	

回答 までに 経由 宛に回答願います。

調査結果	<p>・現品確認結果、ロービーム端子部が溶損しており、端子からの発熱が認められる。 ※MV20011212130757と同事象であり、統合推進とする。</p> <p>&lt;発生メカニズム&gt; ・ライティングSW使用環境が ①端子接触面が摺動する。 ②オス端子 (SW側) の銅表面 (メッキなし) が酸化する。 ③電流が10A前後流れる。 であり、端子摺動時に端子表面の酸化物を巻き込み、接触抵抗が増加する。</p> <p>・端子嵌合部位が摺動時に発熱する。</p> <p>・その熱により、更に嵌合部位 (オス端子表面) に酸化物が生成され、接触抵抗増加/摺動時の端子嵌合部位が発熱する。</p> <p>・熱によるメス端子 (ハーネス側) の緩和で接触荷重が低下する。</p> <p>※上記の繰り返しによりロービーム端子嵌合部にアークが発生し、カブラー部が溶損、ロービーム不灯に至る。</p> <p>※SW操作等の動環境下での090端子/10A仕様、酸化状態、摺動の複合的原因と判断する。</p>
------	---

月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所外)	承認	確認	作成
05/23	H四輪解析解技			横井 英										

宛先	H四輪解析解技	經由殿	受付	/		
		經由殿	受付	/		

重要度	B
-----	---

年	月	日
承認	確認	作成

原因	<p>・MV20011212130757にて統合推進</p> <p>・端子部摺動/酸化により接触抵抗値上昇、電流値大 (約10A) が起因し端子部発熱→溶損に至ったと判断する。</p>																																																																													
対策	<p>・MV20011212130757にて統合推進</p> <p>・現行はオス端子部Snメッキ仕様にて接触抵抗値を低減し、対策済 ※日本生産車の適用号機入力</p>																																																																													
既販車及び在庫品の処置	<table border="1"> <thead> <tr> <th colspan="7">対策適用号機</th> </tr> <tr> <th>年月日</th> <th>型式 (通称名)</th> <th>年式</th> <th>仕向地</th> <th>区分</th> <th colspan="2">号機</th> </tr> </thead> <tbody> <tr><td>2001/10/16</td><td>RN1</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1102045</td></tr> <tr><td>2001/10/15</td><td>RN2</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1100287</td></tr> <tr><td>2001/09/26</td><td>RN3</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1057856</td></tr> <tr><td>2001/09/27</td><td>RN4</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1009641</td></tr> <tr><td>2001/11/02</td><td>ES1</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1100519</td></tr> <tr><td>2001/10/31</td><td>ES2</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1100240</td></tr> <tr><td>2001/10/31</td><td>ES3</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1100092</td></tr> <tr><td>2001/11/02</td><td>EU1</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1101037</td></tr> <tr><td>2001/11/05</td><td>EU2</td><td>2002</td><td>JH</td><td>F</td><td colspan="2">1100176</td></tr> </tbody> </table> <p>&lt;既販車&gt; 対象車両 (対策前車両) から当該事象が今後も発生すると考えられる為、市場措置 (リコール) を実施する。</p> <p>&lt;在庫車&gt; 量産車に関しては、既に対策品に切替済み</p>	対策適用号機							年月日	型式 (通称名)	年式	仕向地	区分	号機		2001/10/16	RN1	2002	JH	F	1102045		2001/10/15	RN2	2002	JH	F	1100287		2001/09/26	RN3	2002	JH	F	1057856		2001/09/27	RN4	2002	JH	F	1009641		2001/11/02	ES1	2002	JH	F	1100519		2001/10/31	ES2	2002	JH	F	1100240		2001/10/31	ES3	2002	JH	F	1100092		2001/11/02	EU1	2002	JH	F	1101037		2001/11/05	EU2	2002	JH	F	1100176	
対策適用号機																																																																														
年月日	型式 (通称名)	年式	仕向地	区分	号機																																																																									
2001/10/16	RN1	2002	JH	F	1102045																																																																									
2001/10/15	RN2	2002	JH	F	1100287																																																																									
2001/09/26	RN3	2002	JH	F	1057856																																																																									
2001/09/27	RN4	2002	JH	F	1009641																																																																									
2001/11/02	ES1	2002	JH	F	1100519																																																																									
2001/10/31	ES2	2002	JH	F	1100240																																																																									
2001/10/31	ES3	2002	JH	F	1100092																																																																									
2001/11/02	EU1	2002	JH	F	1101037																																																																									
2001/11/05	EU2	2002	JH	F	1100176																																																																									
対策効果確認	<p>・MV20011212130757にて統合推進</p> <p>・対策品 (SW側オス端子-Snメッキ) と未対策品 (Cu端子) のタフネス差を検証した結果、摺動/抵抗上昇に対する効果が認められた為、対策効果ありと判断する。</p>																																																																													
源流へのフィードバック	<p>・MV20011212130757にて統合推進</p>																																																																													

市場品質情報 [ Q I S ]

発行部門	H四輪解析解技
------	---------

発生場所	
フレーム No.	2HGES15591H
エンジン No.	
ミッション No.	
ミッション区分	
走行距離、時間	25850 Mile
登録年月日	
発生年月日	2002/04/18

新部品番号	35255-S5A-A02
	35255-S5A-A02
主部品番号	35255-S5A
症状コード	066 接続不良・接触不良
EDP KEY 型式名	
原因区分	仕様
責任区	部門
	取引先名 東洋電装 (株) コードNo. 4533
対策区分	完了
対策内容コード	7403 メッキ追加
発生予測	あり (散発)
対策パーツ	有
見直し項目	図面 作業標準

発行年月日	記事	承認	確認	確認	作成
2004/12/16	改訂発行				横井 英人
2003/03/01	完了発行				小宮 富次
2002/05/23	新規	森海人			小宮 富次

受付月日	/
------	---

問推表 適用号機明細

推進No MV20020523100005      年式 2001      型式 ES1  
 部品番号 35255-S5A      重要度 B

件名 ロービーム不灯 (ライトSW) <QAH技術支援15>

対策適用号機						
	年月日	型式	年式	仕向地	区分	号機
10	2001/11/06	EU3	2002	JH	F	1100306
11	2001/11/05	EU4	2002	JH	F	1100054
12	2001/12/10	ES9	2002	JH	F	1000030
13	2001/10/31	ES1	2002	JH	F	1200629
14	2001/11/05	ES3	2002	JH	F	8100021
15	2001/11/01	EU1	2002	JH	F	1200522
16	2001/11/02	GD1	2002	JH	F	1067556
17	2001/11/03	GD1	2002	JH	F	8000161
18	2001/11/03	GD2	2002	JH	F	1005640
19	2001/11/13	GD2	2002	JH	F	8000026
20	2001/11/01	RF3	2002	JH	F	1065092
21	2001/10/25	RF3	2002	JH	F	8000249
22	2001/11/05	RF4	2002	JH	F	1016353
23	2001/11/06	RF4	2002	JH	F	8000105
24	2001/11/20	ES1	2002	D3	F	S200127
25	2001/12/04	ES1	2002	D6	F	S200140
26	2001/11/08	ES1	2002	D5	F	S400234
27	2001/11/05	ES1	2002	AH	F	S004508
28	2001/11/06	ES2	2002	AH	F	S002839
29	2001/11/06	ES4	2002	D2	F	S200221
30	2001/11/29	ES4	2002	EH	F	S200387
31	2001/11/02	ES5	2002	D5	F	S201791
32	2001/11/08	ES5	2002	D2	F	S201806
33	2001/11/20	ES5	2002	EH	F	S202241
34	2001/11/02	ES8	2002	D6	F	S201414
35	2001/11/02	ES8	2002	D3	F	S201438
36	2001/11/19	ES8	2002	D4	F	S201777
37	2001/11/15	ES8	2002	D5	F	S402913
38	2001/12/04	EU3	2002	D6	F	S200110
39	2001/12/04	EU3	2002	D7	F	S200137

問推表 適用号機明細

推進No MV20020523100005      年式 2001      型式 ES1  
 部品番号 35255-S5A      重要度 B

件名 ロービーム不灯 (ライトSW) <QAH技術支援15>

対策適用号機						
	年月日	型式	年式	仕向地	区分	号機
40	2001/10/23	GD1	2002	EH	F	S200193
41	2001/11/02	GD1	2002	D2	F	S201542
42	2001/10/23	GD1	2002	UK	F	S200273
43	2001/10/26	GD5	2002	FH	F	S200009
44	2001/11/02	GD5	2002	D2	F	S200051
45	2001/11/06	GD5	2002	EH	F	S201499
46	2001/11/16	GD5	2002	UK	F	S201512
47	2001/12/03	RF3	2002	D3	F	S200222
48	2001/10/01	RN1	2001	D2	F	C205968
49	2001/10/11	RN1	2001	EH	F	C205984
50	2001/10/01	RN3	2001	D2	F	C209025
51	2001/10/10	RN3	2001	EH	F	C209048
52	2001/10/25	RN3	2001	UK	F	C209036
53	2001/10/25	RN3	2001	D3	F	C209072
54	2001/10/29	RN3	2002	D5	F	C400004
55	2001/08/29	ZE1	2001	AH	F	T003368
56	2001/09/11	ZE1	2002	UK	F	T200001

EA11-012

HONDA

4/20/2012

Q10 F

20040212 GQC

Headlight Low Beam

01, 02M Civic STREAM, Fit, STEP-WGN  
Head light low beam doesn't illuminate

2004-2-12

HGT, AQAO, HAC



# **1. Summary**

(1) Failure

(2) Warranty situation

(3) Time line

# **2. Cause identification and CM/its effectiveness**

(1) Failure cause, and mechanism

(2) CM, and its effectiveness

# **3. Market action proposal, and failure recurrence prevention**

(1) Affected units

(2) Failure occurrence prediction/the reason for market action determination

(3) Failure recurrence prevention

(4) Schedule

# Problem situation

## Failure symptom

◇ Head light low beam doesn't illuminate in 01, 02M CIVIC, STREAM, FIT, STEP-WGN, and INSIGHT with L handle.

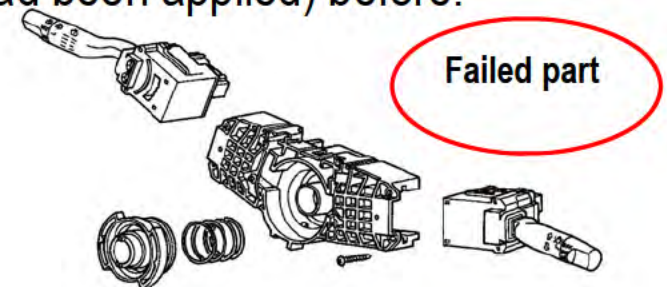
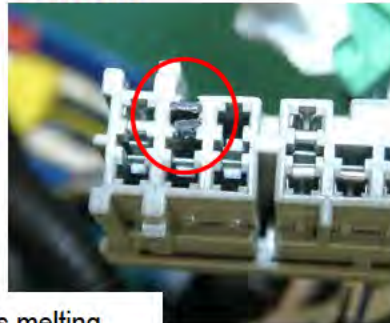
◇ Affected part confirmation shows the low terminal for lighting SW/harness connector is melting, causing the low beam lamp to fail to illuminate. This is the same symptom that has occurred from LOGO • INSIGHT/RH (a market action had been applied) before.

The terminal looks discolored due to heat, and the bottom made from resin is melting.



\*Terminal is melting.




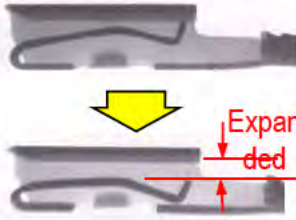




The housing is melting, and force of tongue plate is decreased at the bottom.



\*Terminal was heated.



# Affected part confirmation results

	Logo	01M CIVIC
VIN	F No. GA3—3208802 Failure occurred 2000/8/31 Manufactured 1999/2/9 Mileage 56,636km	VIN JHMES15581S [REDACTED] Failure occurred 2002/2/13 Manufactured 2000/9/12 Mileage 40,188km
Outer	 <p>A terminal of the low circuit is melting.</p>	 <p>A terminal of the low circuit is melting.</p>
F terminal	 <p>A gap btw tab, and tongue plate is expanded to 0.58mm since force of the plate has been relived.</p>  <p>The base material of terminal appears exposed.</p>	 <p>A gap btw tab, and tongue plate is 0.50mm.</p>  <p>Terminals of other circuit: Terminals of other circuit; 0.18~0.27mm</p> <p>The base material of terminal appears exposed since Sn came off.</p>
M terminal	 <p>A large amount of resin adheres due to heat.</p>	 <p>Copper terminals are discolored.</p>

## Warranty situation (Hinjurens from the Japanese market)

No	Regions	Type(Model)	Affected VINs	Failure occurred	Registered	Manufactured	Mileage	Failure details
1	Hiroshima	LA-EU2 (CIVIC)	EU2-1000521	H13.12.27	H12.11.13	H12.11.7	16,417km	Head light low beam doesn't illuminate.
2	Tokyo	LA-EU1 (CIVIC)	EU1-1014619	H14.3.20	H12.12.27	H12.12.19	40,059km	After head light low beam went off, it doesn't illuminate.
3	Tokyo	LA-RN1 (STREAM)	RN1-1009035	H14.4.10	H12.12.20	H12.12.8	44,119km	Head light low beam doesn't illuminate.
4	Tokyo	LA-EU1 (CIVIC)	EU1-1004558	H14.4.11	H12.10.5	H12.9.28	66,266km	Head light low beam doesn't illuminate.
5	Tokyo	LA-RN1 (STREAM)	RN1-1008712	H14.9.12	H12.12.19	H12.12.7	74,456km	Head light low beam doesn't illuminate.
6	Kanagawa	LA-ES3 (CIVIC ferio)	ES3-1001047	H14.9.17	H13.2.21	H13.2.16	50,538km	Both head light low beams don't illuminate.
7	Saga	LA-GD1 (Fit)	GD1-1007085	H14.10.18	H13.7.10	H13.6.27	75,236km	Head light suddenly went off. Only low beam doesn't illuminate.
8	Kanagawa	LA-EU1 (CIVIC)	EU1-1017252	H14.12.4	H13.1.15	H13.1.8	41,183km	Head light low beam doesn't illuminate.
9	Hyogo	LA-ES2 (CIVIC ferio)	ES2-1000797	H14.12.13	H13.2.1	H13.1.27	80,000km	Head light beam doesn't sometime illuminate. (The low beam)
10	Hokkaido	LA-EU1 (CIVIC)	EU1-1008342	H14.12.15	H12.10.27	H12.10.18	29,329km	Head light low beam in both sides doesn't illuminate.

## Warranty situation (Hinjurens from the Japanese market)

No	Regions	Type(Model)	Affected VINs	Failure occurred	Registered	Manufactured	Mileage	Failure details
11	Shizuoka	LA-GD1 (Fit)	GD1-1059857	H15.1.23	H13.10.22	H13.10.17	19,792km	Both head light low beams don't illuminate.
12	Kanagawa	LA-GD1 (Fit)	GD1-1041125	H15.2.5	H13.9.19	H13.9.12	33,015km	Both head light low beams don't illuminate.
13	Kanagawa	LA-EU1 (CIVIC)	EU1-1017556	H15.3.2	H13.2.7	H13.1.17	90,760km	Head light low beam doesn't illuminate.
14	Saitama	LA-GD1 (Fit)	GD1-1033774	H15.3.16	H13.9.4	H13.8.30	33,000km	Both head light low beams don't illuminate.
15	Nara	LA-GD1 (Fit)	GD1-1036108	H15.4.6	H13.9.7	H13.9.3	43,806km	Both head light low beams don't illuminate.
16	Tokyo	LA-EU1 (CIVIC)	EU1-1018130	H15.4.24	H13.2.9	H13.1.29	48,611km	Head light low beam doesn't illuminate.
17	Hokkaido	LA-RN2 (STREAM)	RN2-1000039	H15.6.2	H12.11.16	H12.10.17	78,763km	Both head light low beams don't illuminate.
18	Nagano	LA-EU2 (CIVIC)	EU2-1000875	H15.6.12	H12.12.20	H12.12.13	50,622km	Both head light low beams don't illuminate.
19	Kagoshima	LA-GD1 (Fit)	GD1-1039742	H15.6.12	H13.9.20	H13.9.10	45,803km	Head light low beam doesn't illuminate.
20	Okayama	LA-RN1 (STREAM)	RN1-1001516	H15.6.13	H12.10.31	H12.10.25	46,271km	Both head light low beams don't illuminate.

## Warranty situation (Hinjurens from the Japanese market)

No	Regions	Type(Model)	Affected VINs	Failure occurred	Registered	Manufactured	Mileage	Failure details
21	Kanagawa	LA-ES1 (CIVIC ferio)	ES1- 1005226	H15.7.6	H12.12.21	H12.12.8	35,803km	Head light low beam doesn't illuminate.
22	Okayama	LA-GD1 (Fit)	GD1- 1016655	H15.7.6	H13.8.3	H13.7.13	21,905km	Both head light low beams don't illuminate.
23	Aichi	LA-EU1 (CIVIC)	EU1- 1016171	H15.7.10	H12.12.25	H12.12.20	75,115km	Head light low beam doesn't illuminate.
24	Tokushima	LA-ES1 (CIVIC ferio)	ES1- 1002172	H15.7.20	H12.11.10	H12.9.25	37,053km	Head light low beam doesn't illuminate.
25	Hyogo	LA-EU1 (CIVIC)	EU1- 1013586	H15.7.25	H12.12.15	H12.11.30	49,350km	Head light low beam doesn't illuminate.
26	Osaka	LA-RN1 (STREAM)	RN1- 1003820	H15.8.2	H12.12.13	H12.11.7	58,598km	Both head light low beams don't illuminate.
27	Aichi	LA-RF4 (Stepwagon)	RF4- 1001039	H15.8.6	H13.4.13	H13.4.6	52,329km	Head light low beam doesn't illuminate.
28	Chiba	LA-EU3 (CIVIC)	EU3- 1000281	H15.8.17	H12.9.26	H12.9.20	52,630km	Both head light low beams don't illuminate.
29	Chiba	LA-ES3 (CIVIC ferio)	ES3- 1000869	H15.8.23	H12.12.26	H12.12.20	51,079km	Both head light low beams don't illuminate.
30	Mie	LA-ES3 (CIVIC ferio)	ES3- 1000899	H15.9.1	H13.1.18	H13.1.12	58,741km	Head light suddenly went off.

## Warranty situation (Hinjurens from the Japanese market)

No	Regions	Type(Model)	Affected VINs	Failure occurred	Registered	Manufactured	Mileage	Failure details
31	Fukuoka	LA-GD1 (Fit)	GD1- 1012129	H15.9.24	H13.8.27	H13.7.5	44,352km	Head light low beam doesn't illuminate.
32	Fukuoka	LA-ES1 (CIVIC ferio)	ES1- 1004105	H15.9.26	H12.11.27	H12.10.27	56,569km	Head light low beam doesn't illuminate.
33	Chiba	LA-EU1 (CIVIC)	EU1- 1021053	H15.9.28	H13.3.29	H13.3.7	51,466km	Both head light low beams don't illuminate.
34	Miyazaki	LA-RN3 (STREAM)	RN3- 1002098	H15.10.5	H13.9.11	H12.10.25	28,670km	Head light suddenly went off during driving.
35	Mie	LA-RF3 (Stepwagon)	RF3- 1000125	H15.10.7	H13.6.29	H13.3.28	44,722km	Head light low beam doesn't illuminate.
36	Ibaraki	LA-ES1 (CIVIC ferio)	ES1- 1002423	H15.10.9	H12.10.25	H12.9.27	98,974km	Both head light low beams don't illuminate.
37	Hokkaido	LA-GD2 (Fit)	GD2- 1003226	H15.10.12	H13.9.20	H13.9.13	59,827km	Both head light low beams don't illuminate.
38	Yamagata	LA-ES1 (CIVIC ferio)	ES1- 1005225	H15.10.17	H12.12.15	H12.12.8	64,643km	Both head light low beams don't illuminate.
39	Saitama	LA-ES1 (CIVIC ferio)	ES1- 1006401	H15.10.17	H13.3.16	H13.3.8	51,278km	Both head light low beams don't illuminate.
40	Tokyo	LA-RN3 (STREAM)	RN3- 1008350	H15.10.20	H12.11.30	H12.11.24	50,169km	Head light low beam doesn't illuminate.

## Warranty situation (Hinjurens from the Japanese market)

No	Regions	Type(Model)	Affected VINs	Failure occurred	Registered	Manufactured	Mileage	Failure details
41	Aichi	LA-EU1 (CIVIC)	EU1-1004893	H15.10.24	H12.10.16	H12.10.4	51,265km	Head light low beam doesn't illuminate.
42	Aichi	LA-GD1 (Fit)	GD1-1015007	H15.10.29	H13.7.23	H13.7.11	46,423km	Head light low beam doesn't illuminate.
43	Nara	LA-RN3 (STREAM)	RN3-1007702	H15.12.4	H12.12.20	H12.11.22	47,267km	Both head light low beams don't illuminate.
44	Tokyo	LA-RN1 (STREAM)	RN1-1004194	H15.12.4	H13.2.23	H12.11.9	41,820km	Head light low beam doesn't illuminate.
45	Kanagawa	LA-ES1 (CIVIC ferio)	ES1-1004187	H15.12.6	H12.12.11	H12.10.31	49,650km	Head light beam doesn't sometime illuminate.
46	Kanagawa	LA-GD1 (Fit)	GD1-1027537	H15.12.11	H13.8.23	H13.8.8	34,615km	Head light doesn't illuminate.
47	Osaka	LA-GD1 (Fit)	GD1-1017855	H15.12.15	H13.7.25	H13.7.18	42,970km	Head light low beam doesn't illuminate.
48	Shizuoka	LA-EU1 (CIVIC)	EU1-1017559	H15.12.25	H13.1.30	H13.1.23	69,850km	Head light low beam doesn't illuminate.
49	Tochigi	LA-EU3 (CIVIC)	EU3-1001115	H16.1.10	H12.10.24	H12.10.17	60,041km	Head light low beam doesn't illuminate.
50	Kanagawa	LA-GD1 (Fit)	GD1-1043322	H16.1.14	H13.9.21	H13.9.15	62,708km	Head light doesn't illuminate.

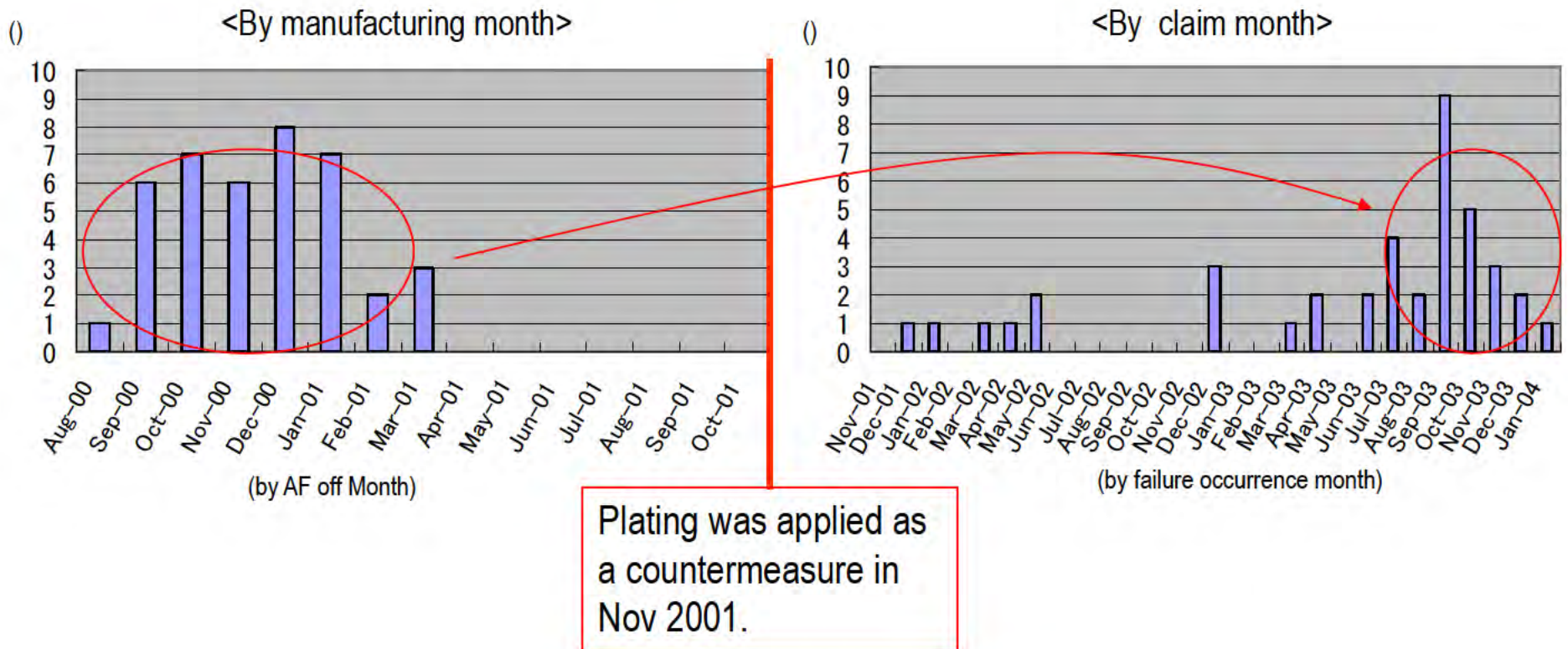


## Parts with melted terminals Confirmation results (Japanese market)

<Warranty situation in the Japanese market>

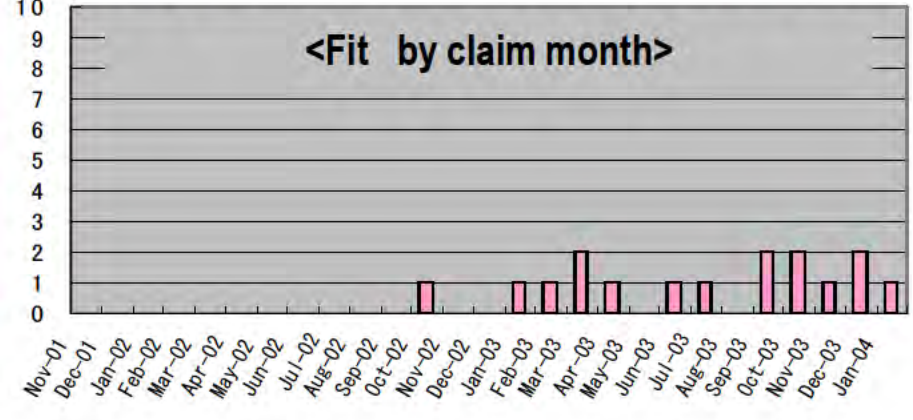
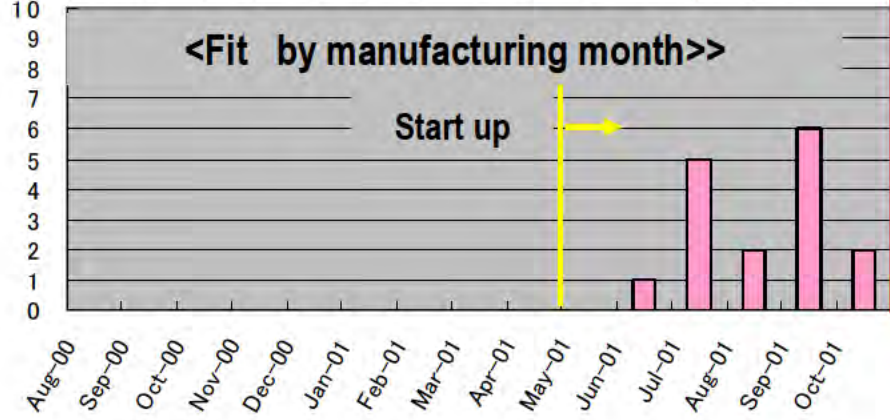
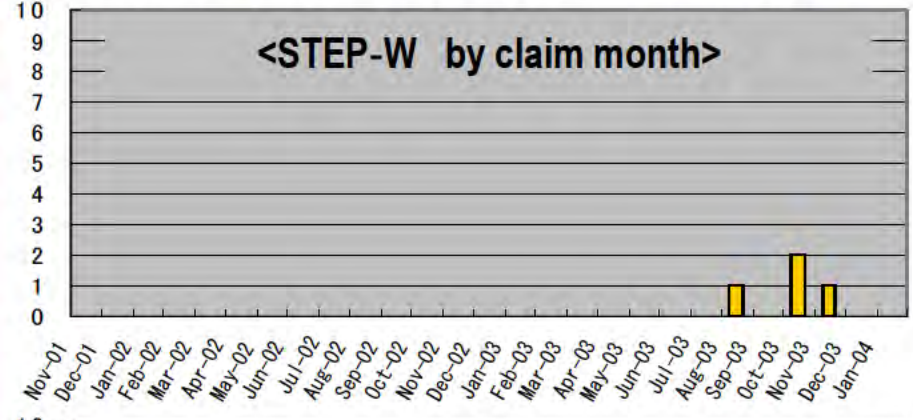
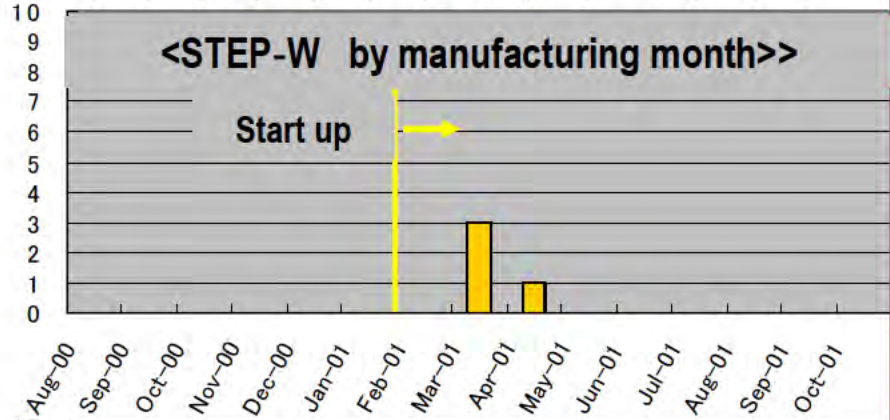
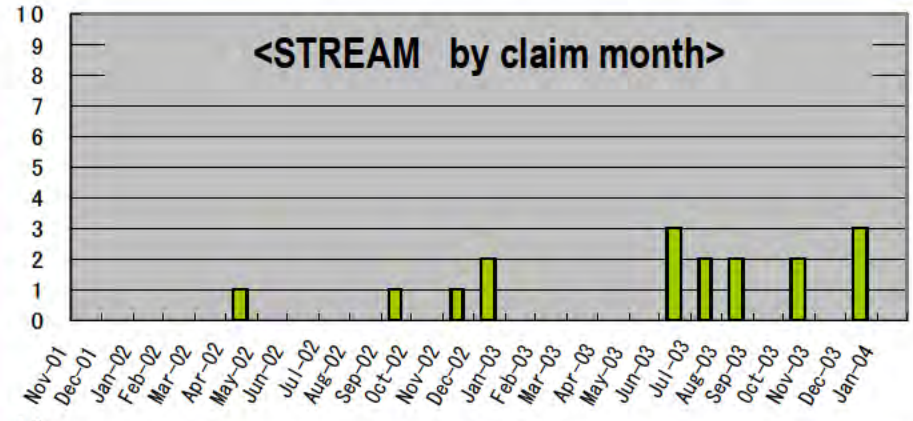
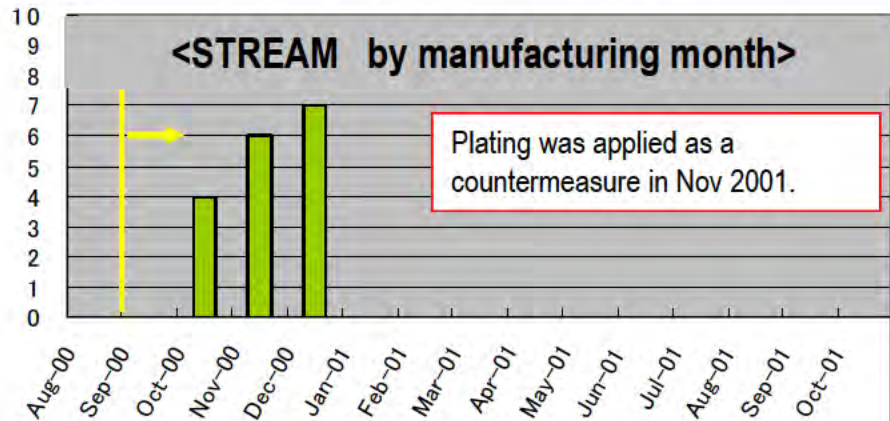
Information	Civic	STREAM	STEP-WGN	Fit
Hinjorens (Totally 50 cases)	4Dr 11 5Dr 15	9	2	13
Collected pats (Totally 27 cases)	4Dr 5 5Dr 9	8	2	3
Total 77 cases	40	17	4	16
Affected units	42,928	39,543	34,606	73,347
Warranty claim rate	0.093%	0.043%	0.012%	0.022%
Months to fail	40	40	35	32

# CIVIC with melted terminals Confirmation results (Japanese market)

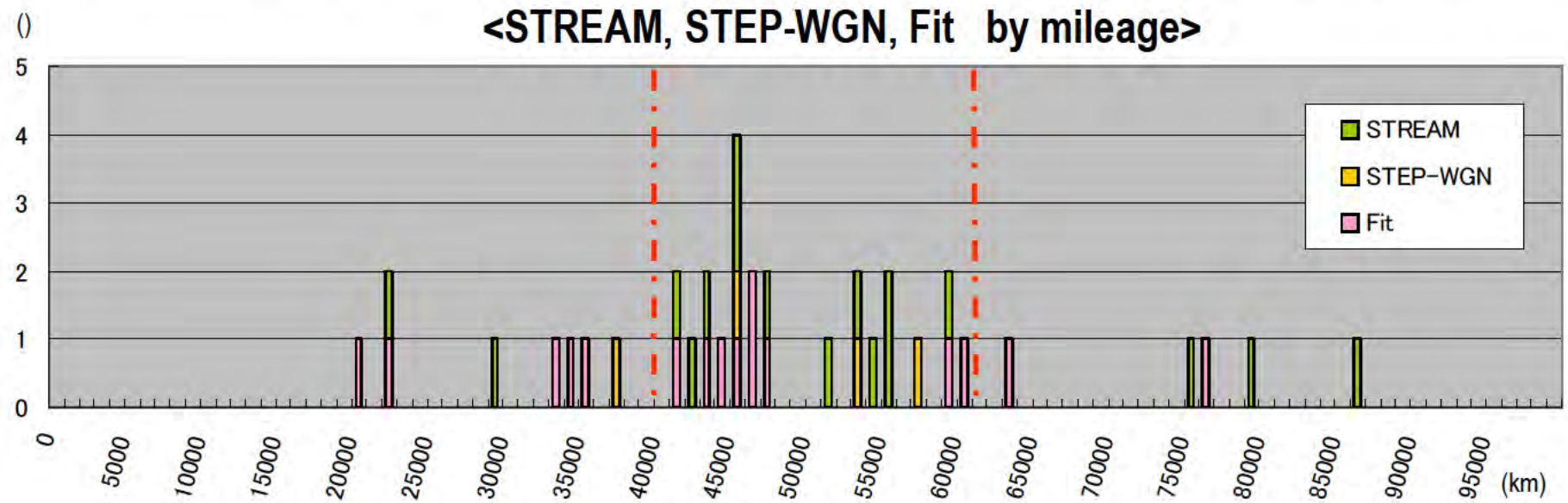
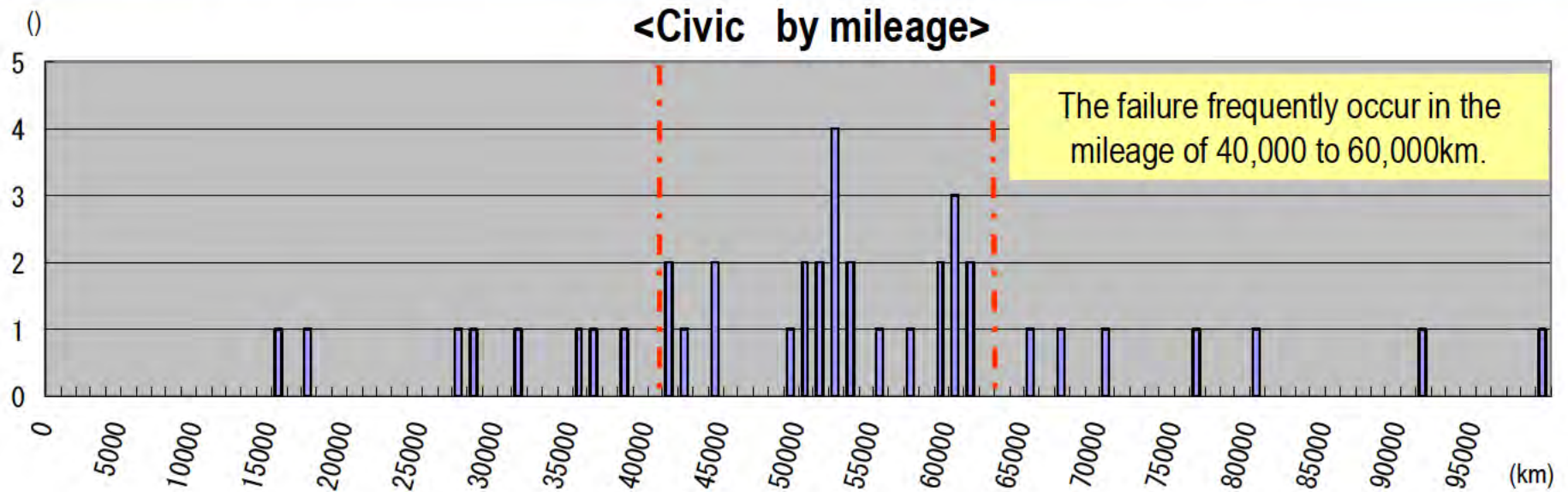


- This failure tends to increase from CIVIC in the Japanese market that had been manufactured in the early stage of production.
- Recently, failure occurrence has increased.

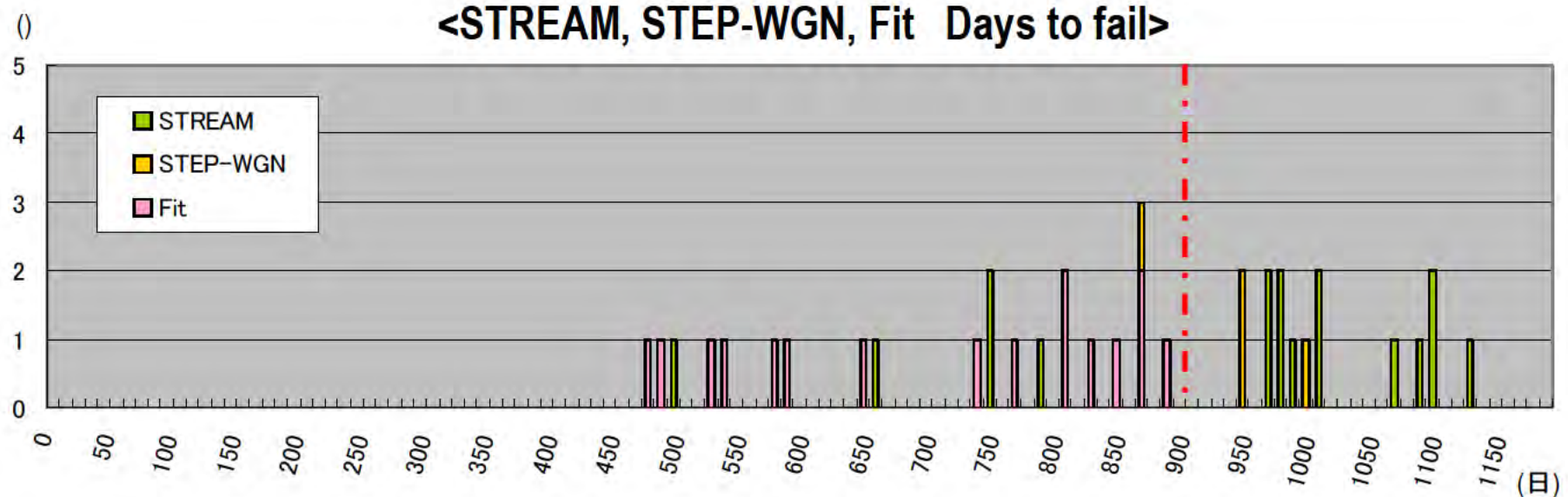
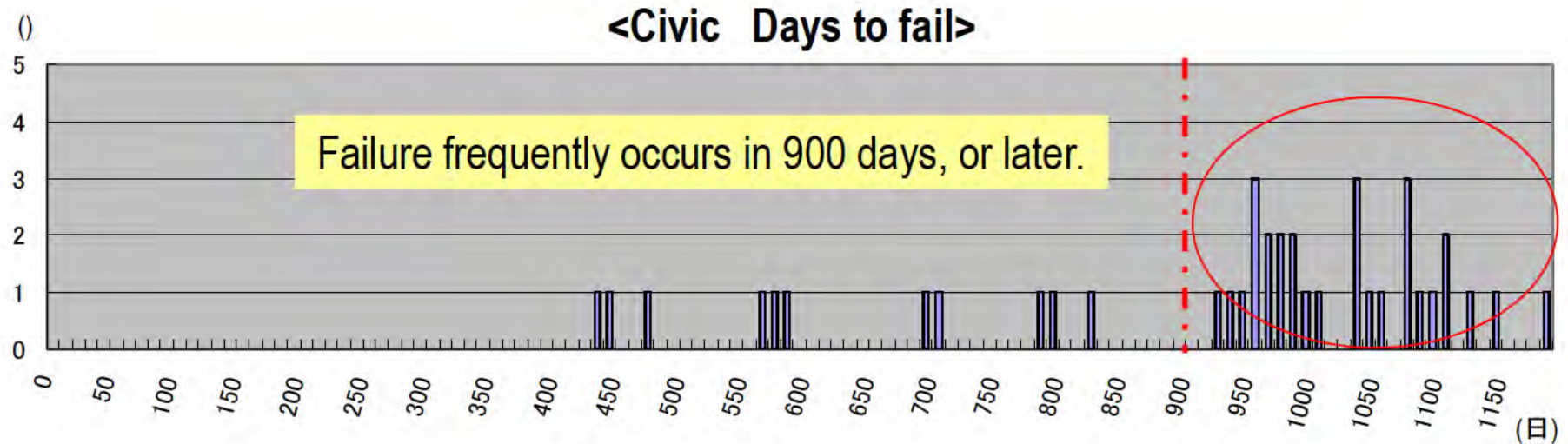
# Other models with melted terminals Confirmation results (Japanese market)



CVIC, and other models with melted terminals Confirmation results (Japanese market)



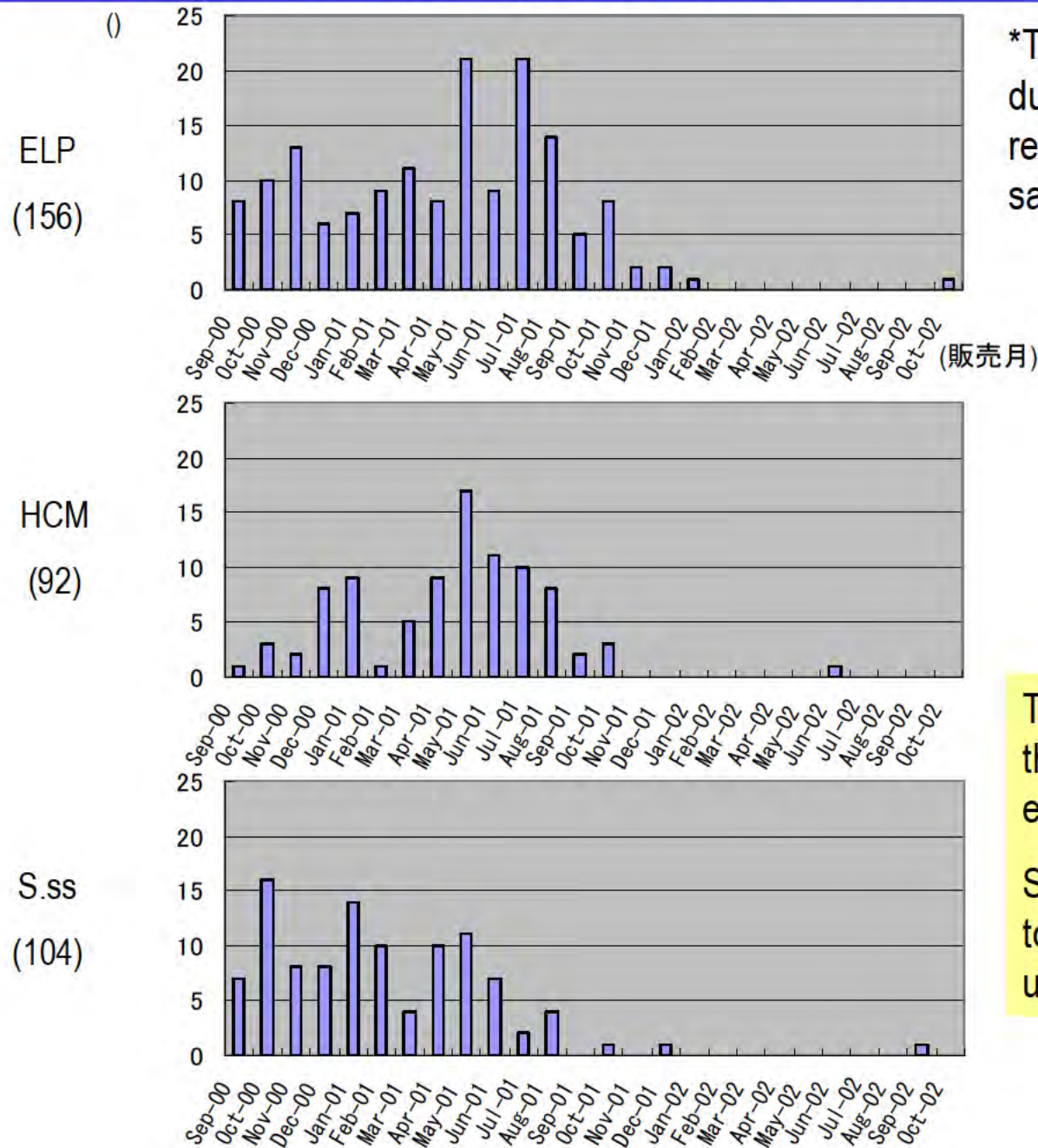
# Parts with melted terminals Confirmation results (Japanese market)



# Warranty claim analysis by AH(US/Civic by HAM, HCM, S.ss)

		ELP		HCM		Sss		
		Claims	Rate	Claims	Rate	Claims	Rate	
Low went off	Melting	94	0.037%	14	0.009%	35	0.133%	
	溶損と判断できる	(62)		(78)		(69)		
		Cumulative total		0.061%	Cumulative total		Cumulative total	0.396%
		156		92		104		
		(50)		(63)		(56)		
		Cumulative total	0.080%	Cumulative total	0.103%	Cumulative total	0.610%	
		206		155		160		
Others		149		92		76		
Total		355		247		236		
Affected units		254,838		150,895		26,237		

# Warranty claim analysis by AH(US/Civic due to melting)

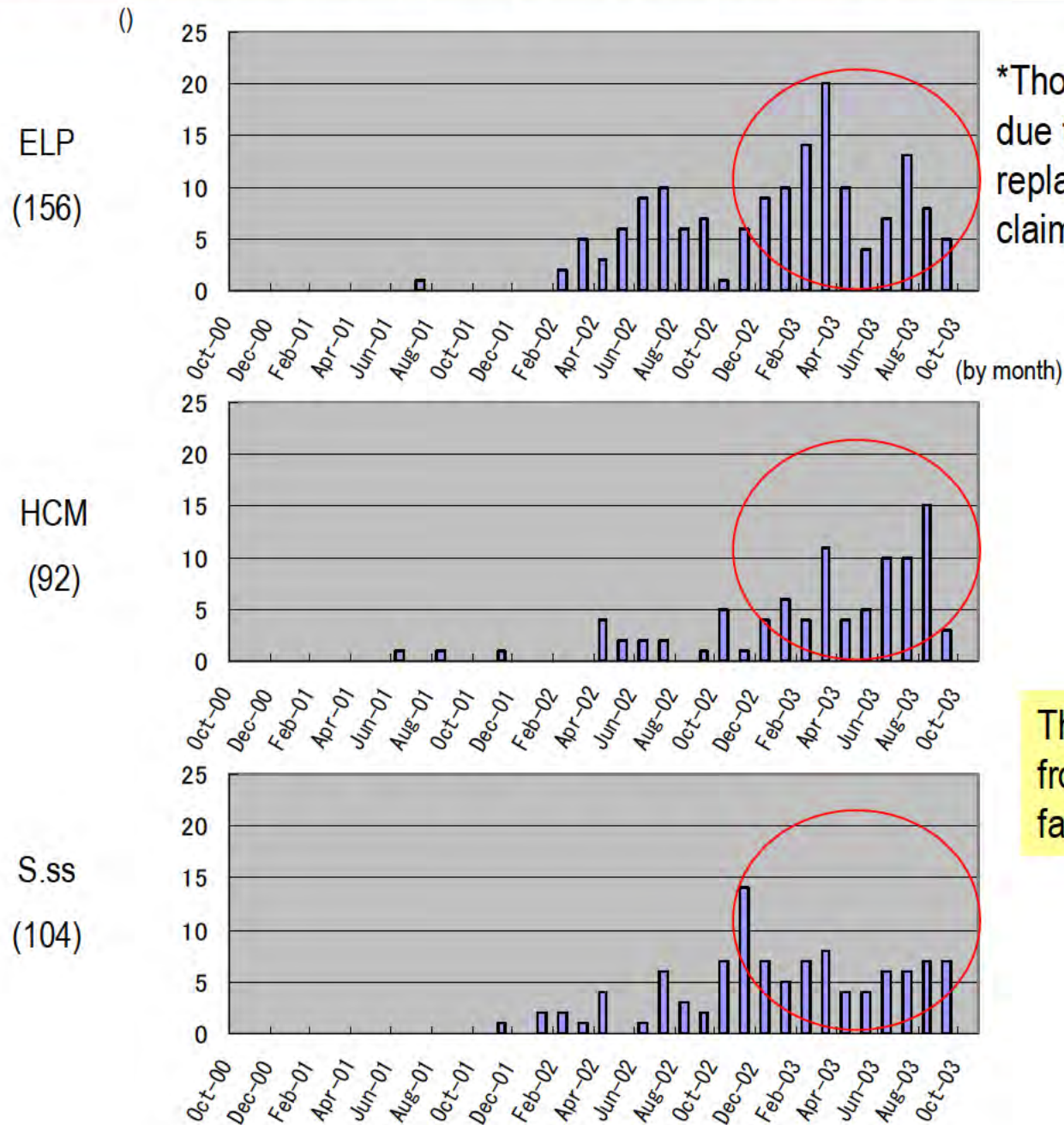


\*Those three graphs show claims due to smoke, melting, and wire replacement related to head light by sale month, and factory.

This failure has increased from the units manufactured in the early stage of production.

So this failure tends to occur due to durability deterioration from units of each factory.

# Warranty claim analysis by AH(US/Civic due to melting)

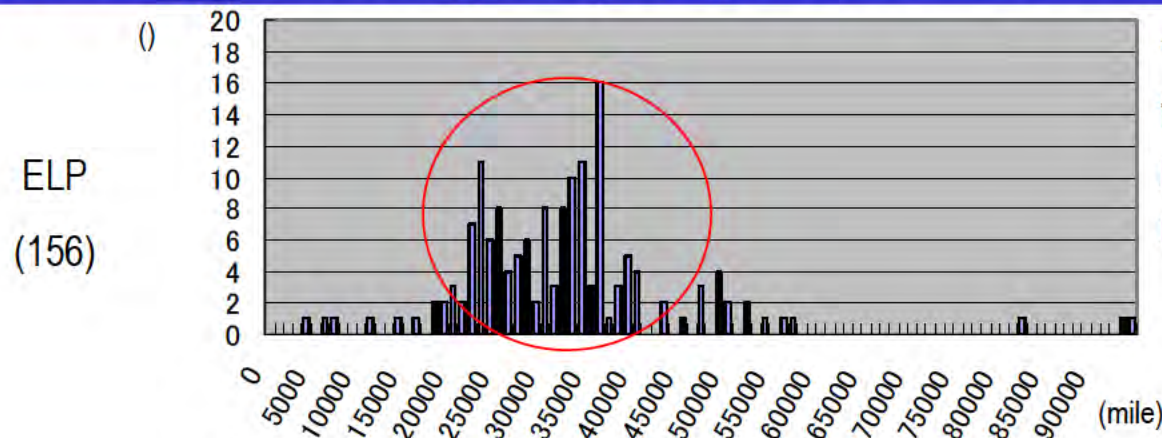


\*Those three graphs show claims due to smoke, melting, and wire replacement related to head light by claim month, and factory.

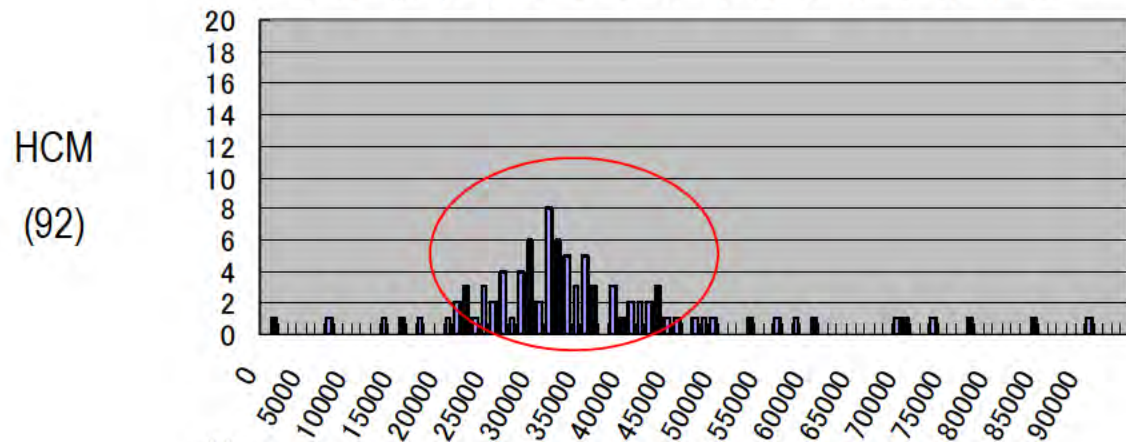
This failure has recently increased from units produced by each factory.



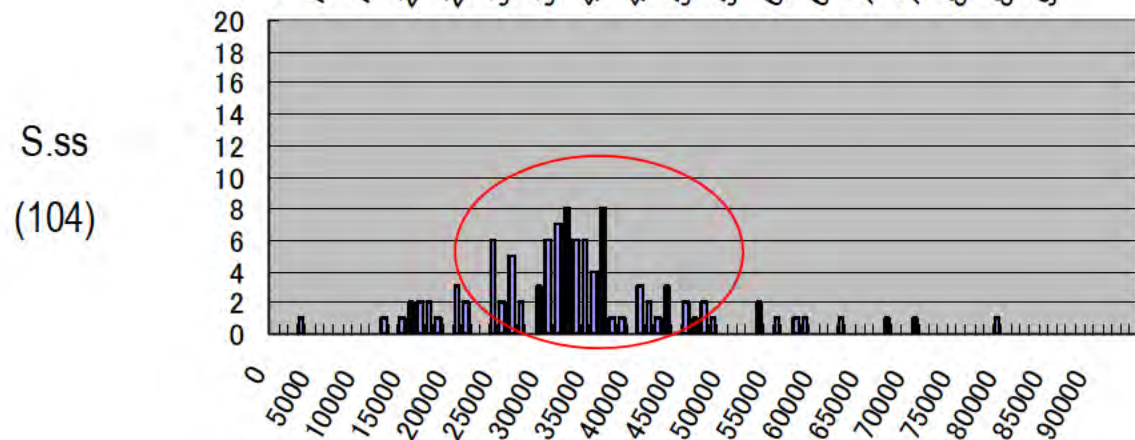
# Warranty claim analysis by AH(US/Civic due to melting)



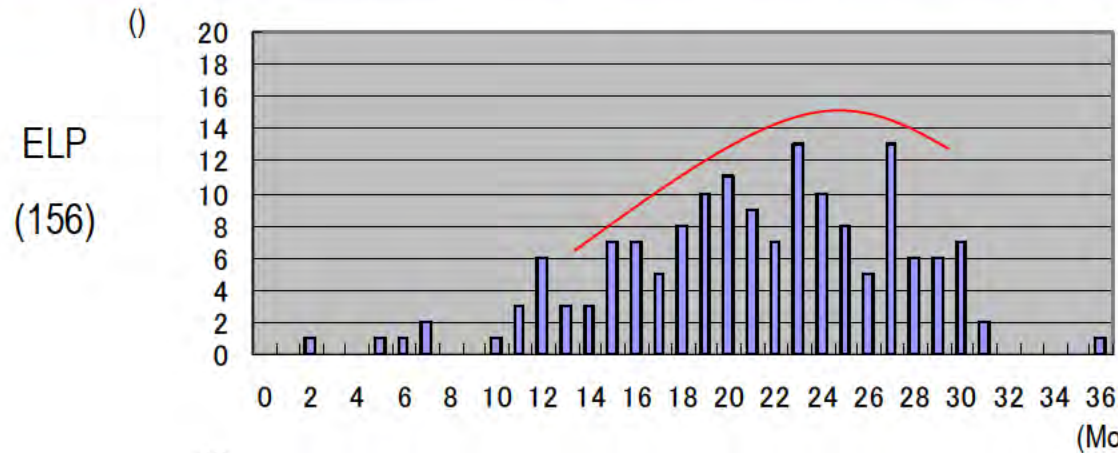
\*Those three graphs show claims from smoke, melting, and wire replacement related to head light by mileage, and factory.



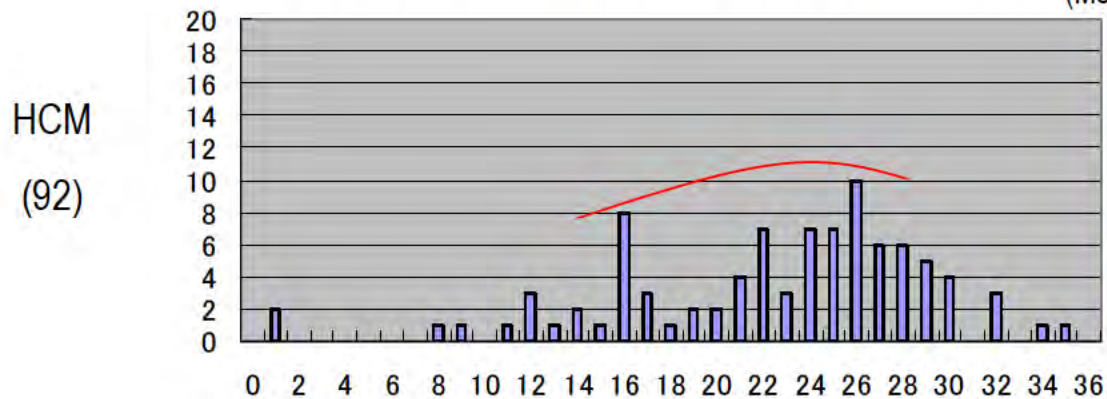
This failure from each factory tends to occur around 25,000 to 50,000 miles., and also has a similar tendency.



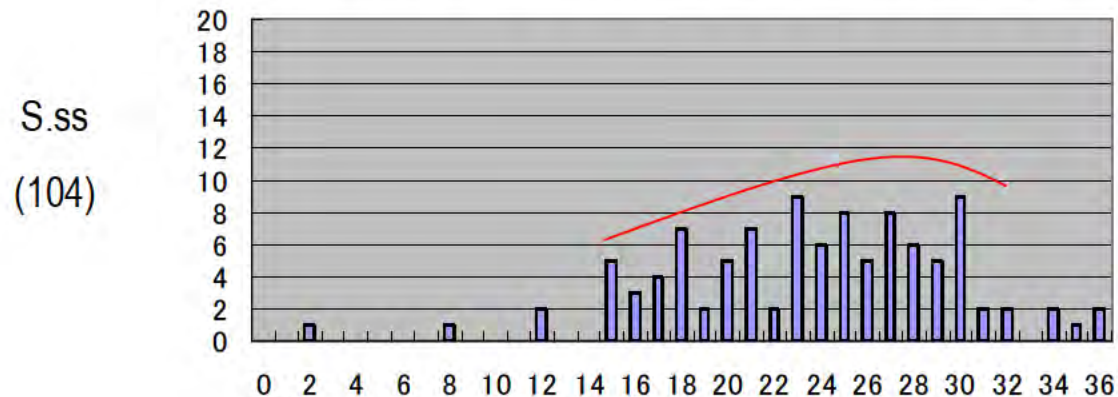
# Warranty claim analysis by AH(US/Civic due to melting)



\*Those three graphs show claims due to smoke, melting, and wire replacement related to head light by month to fail, and factory.



This failure from each factory tends to significantly occur in 15 months from, and has a similar tendency.



This failure from each factory is durability deterioration judging from faire situation, and shows a similar tendency.

## Parts with melted terminals from other regions Warranty situation

< Warranty claims from exported vehicles >

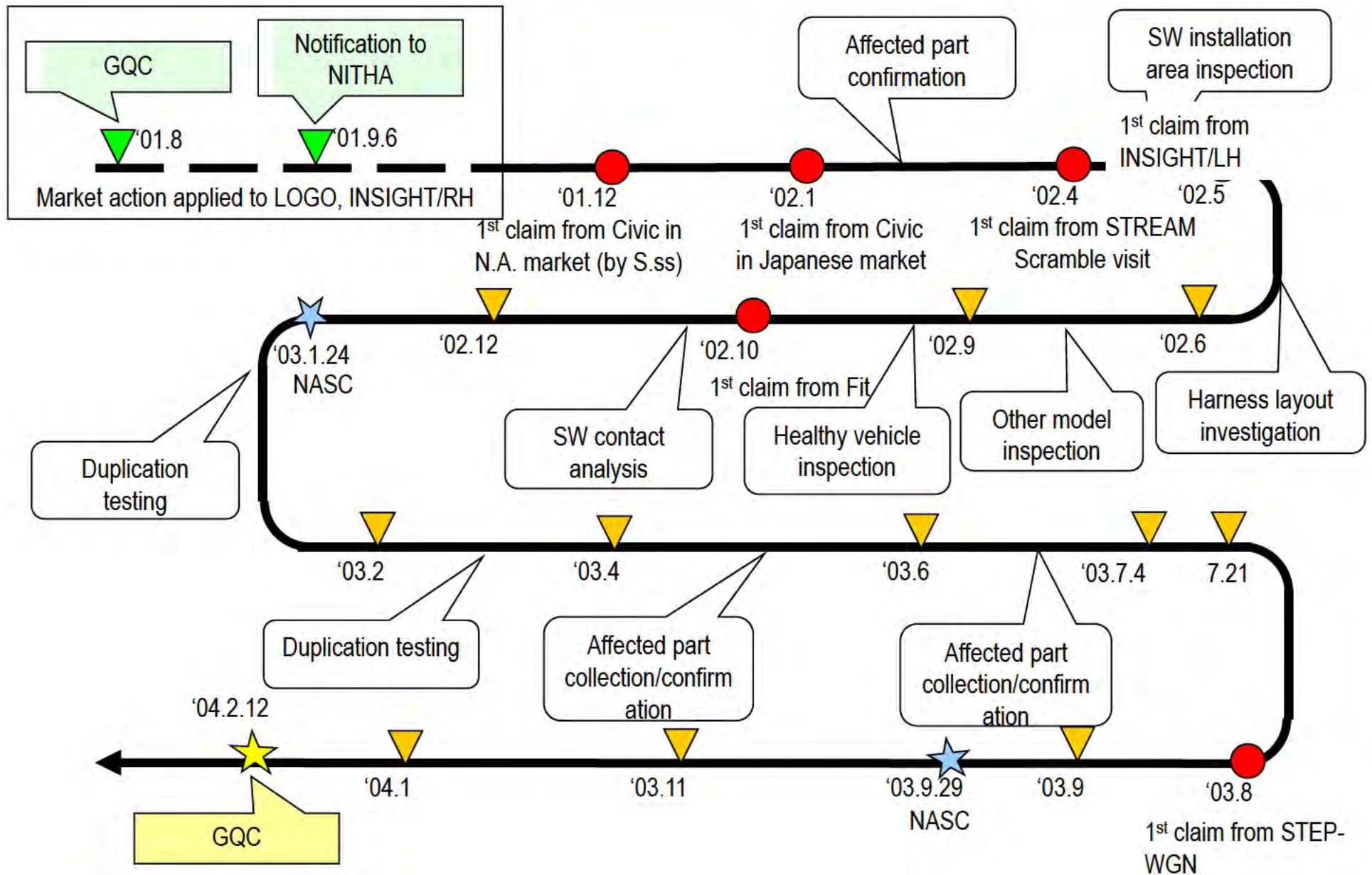
	CIVIC			INSIGHT LH
Regions	UAE, Qatar	Singapore Hong Kong	Austria	USA
Claims	5	3	4	4
Affected units	12,797	7,250	8,677	8,775
Warranty claim rate	0.04%	0.04%	0.05%	0.05%

\*This failure of terminal melting has been confirmed in the Poland market from a unit manufactured by HUM.

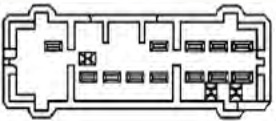

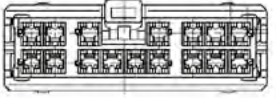

•This failure of terminal melting has been confirmed in the Brazilian market from a unit manufactured by HAB.

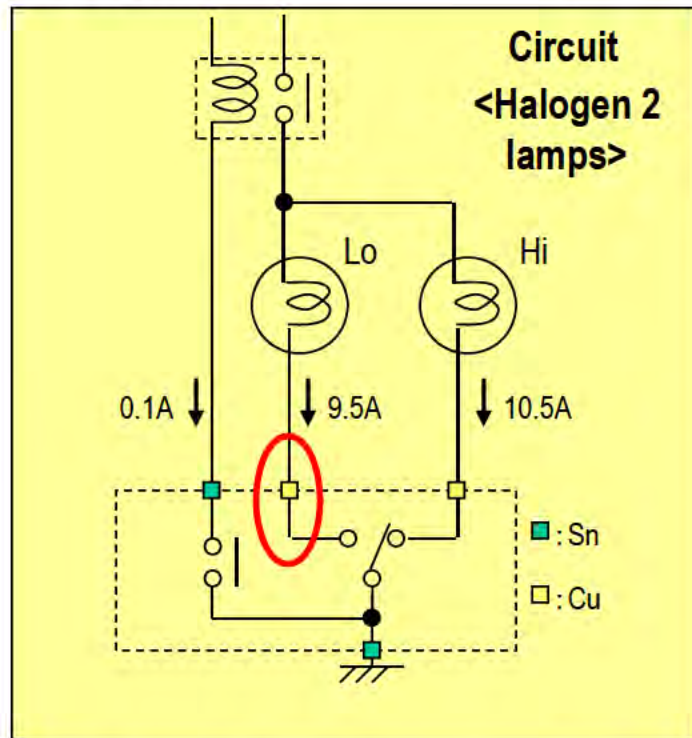
# Time line

▼ : Japan Steering Committee (JSC), 
 ● Information Exchange Meeting (IEM): 1<sup>st</sup> claim from each model

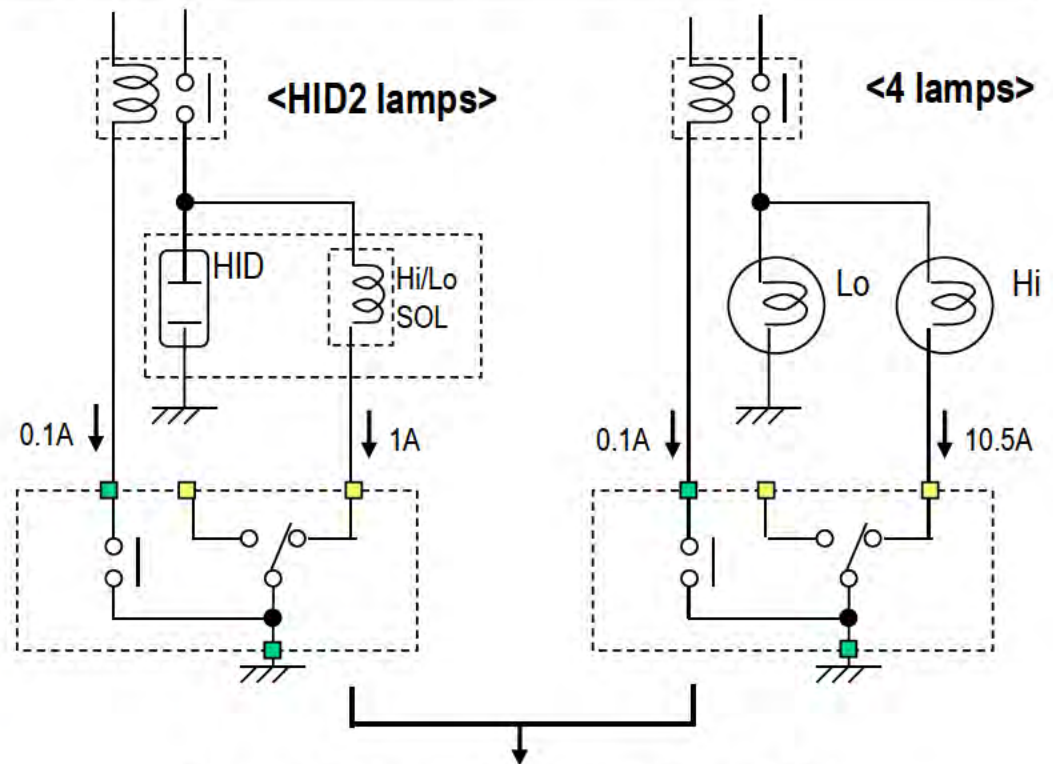


# Specification of terminal, and circuit

	Connector shape	Terminal shape	Reference
SW		M terminal 	Three terminals for Hi, Lo, and the other are not plated. (Cu terminal) SW supplier: Toyo Denso
Harness layout investigation		F terminal 	Sn plating    Harness layout investigation Manufactured by: Sumitomo Denso, Yasaki



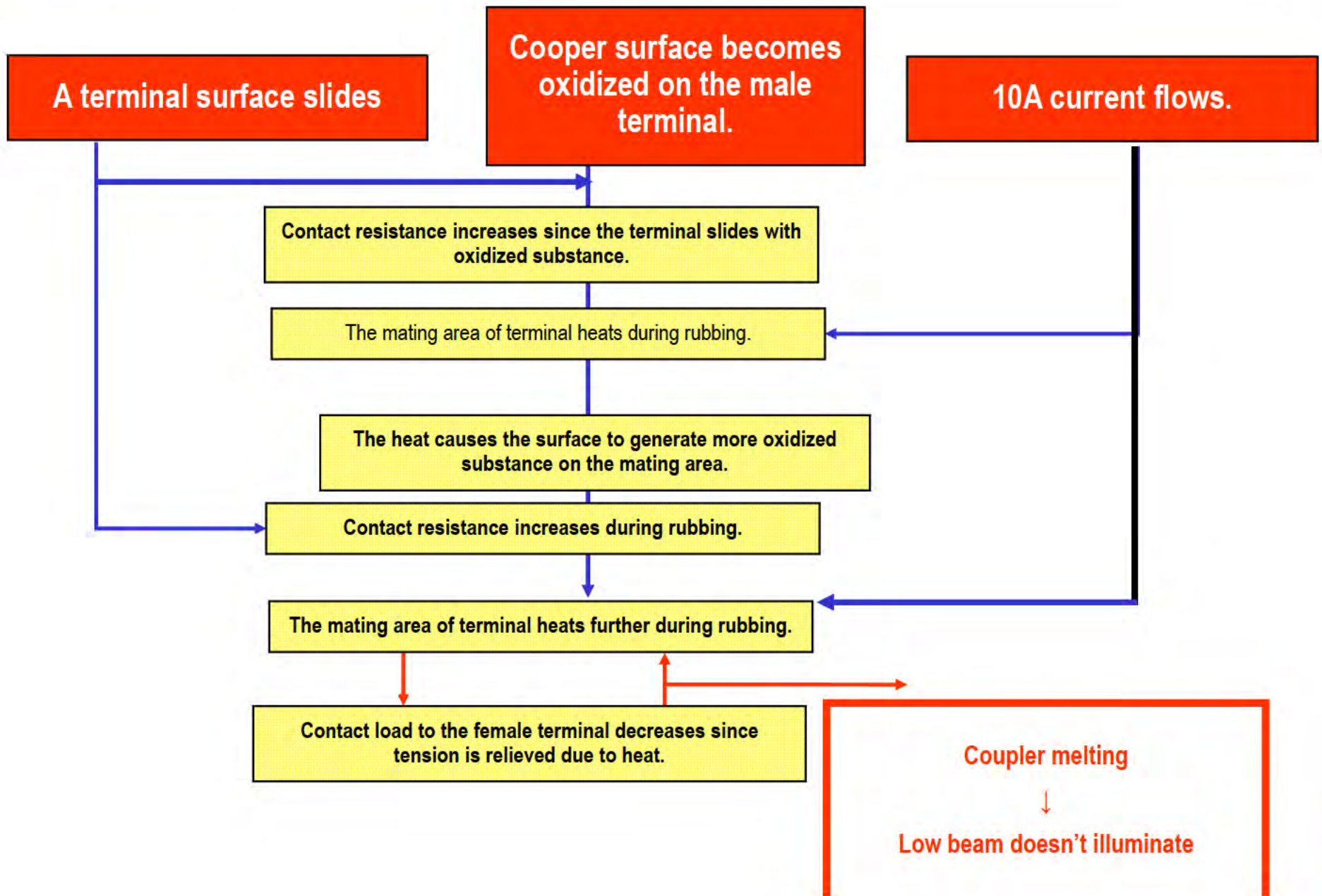
Current for low beam flows via SW.



Current for low beam doesn't flow via SW.

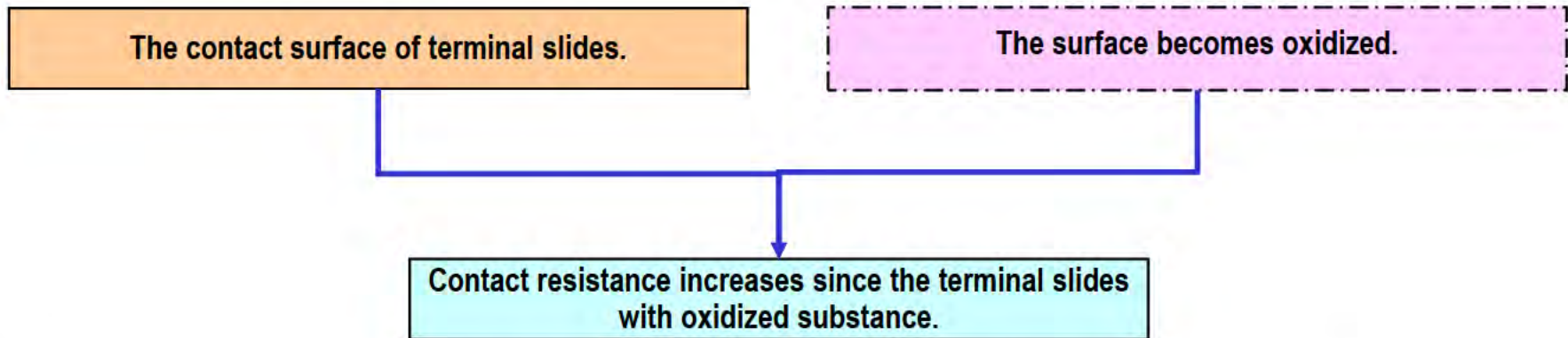
The current is a reference value.

# Failure mechanism

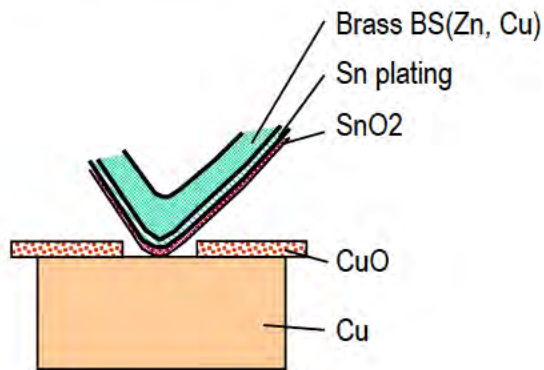


# Failure mechanism

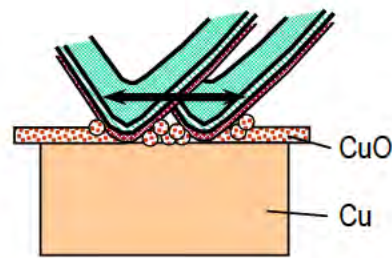
## <Mechanism for contact resistance increase>



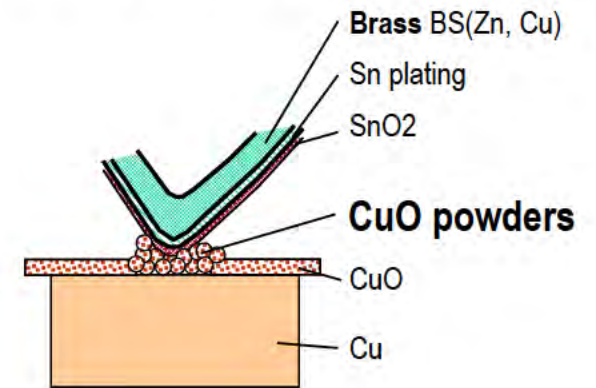
① When contact resistance is low



② Rubbing produces wear powders



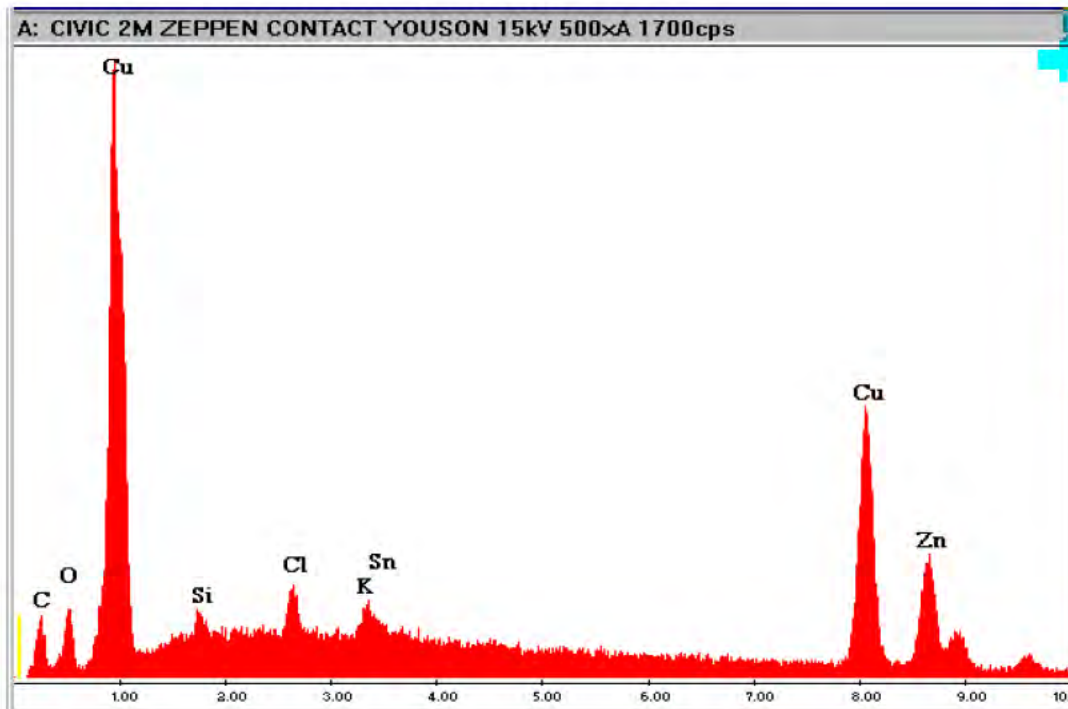
③ When contact resistance is high



**Terminal slides on oxidized copper (CuO), causing contact resistance to increase.**

# Failure mechanism (Affected part analysis result)

Those pictures show that wear powders adhere around the contact area on the surface of tongue plate.



Oxidized cooper is seen on the rub area on the affected part.



## Failure mechanism (Feature of Cu, Sn)

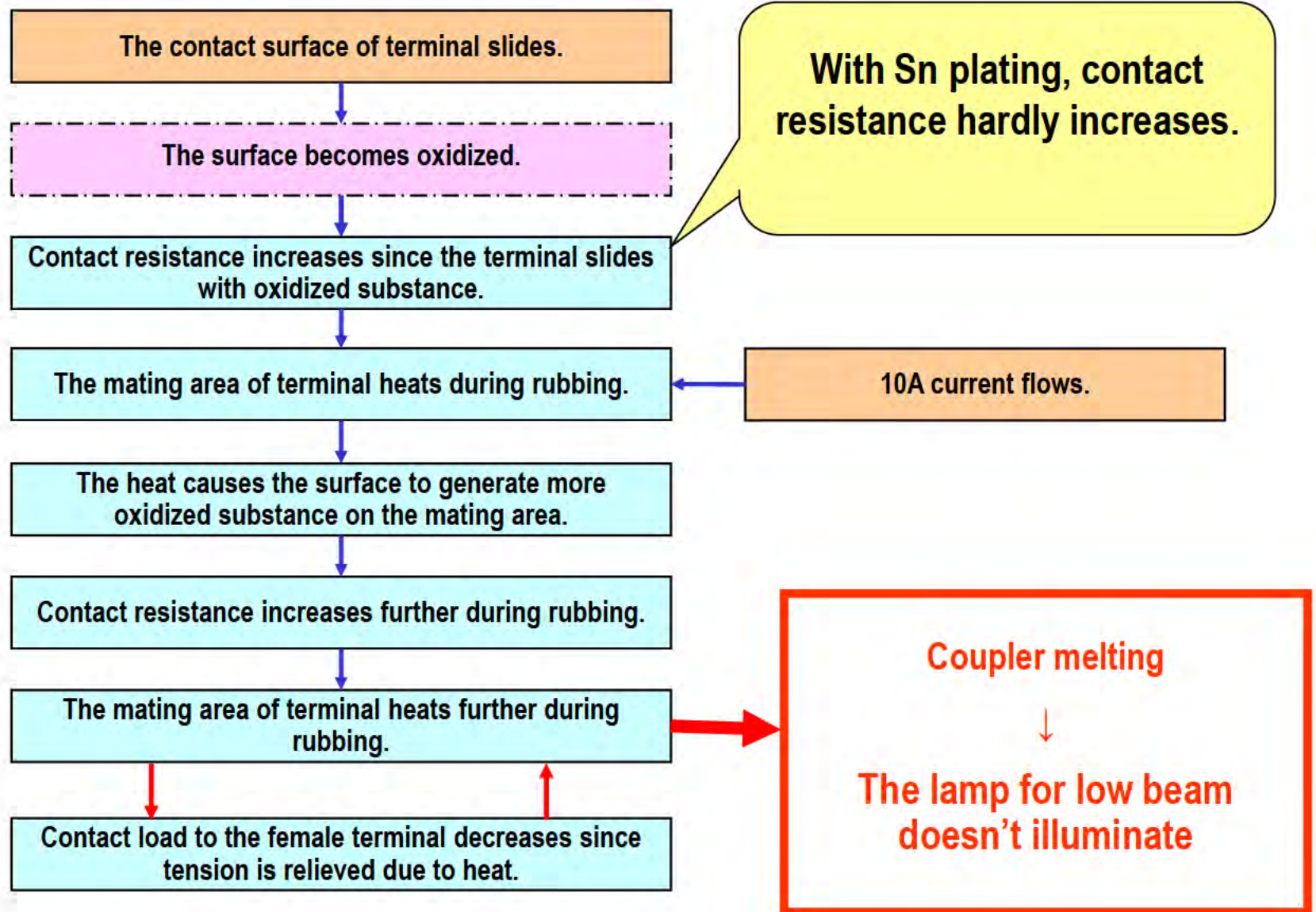
<Electrical, and mechanical feature for Cu, Sn>

物質		導電率 (Ω · m)	硬度 (Hv)	被膜破壞荷重 (N)
Cu	一般的物性値	1.70E-08	114	
	電線使用材	1.70E-08		
Sn		1.14E-07	7	
CuO		2.10E+04	(≒130)	
Cu2O		1.0E+07 ~ 1.0E+08	130	10
SnO2		1 ~ 10	1650	1 ~ 2

Continuity rate is 2000 times higher in oxidized copper than oxidized Sn. Therefore, it can be said that oxidized copper causes a higher resistance on the contact area, causing more heat.

# Function for Sn plating

Plating is effective to prevent the contact surface from both wear, and resistance increase.



# Duplication testing

## <Duplication testing by SW manipulation>

昼間: 0.5 hr ( SWレバーのLo ⇄ Hi 切り替え、1 SET / 1 分)  
(手動で強さ強: 50 ~ 70 G 程度)  
→ 2.75 hr ( 振動+Lo 回路通電: ON 45 min ⇄ OFF 15 min )  
を1日3セット実施

夜間: 連続で振動+Lo 回路通電: ON 45 min ⇄ OFF 15 min  
(土日は、夜間同等条件にて実施)

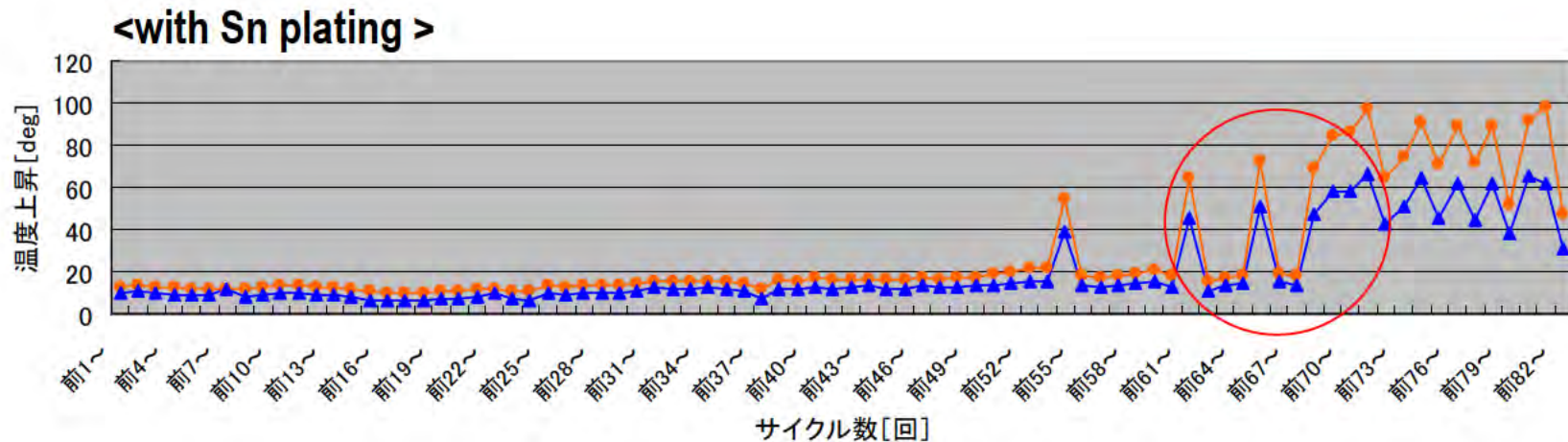
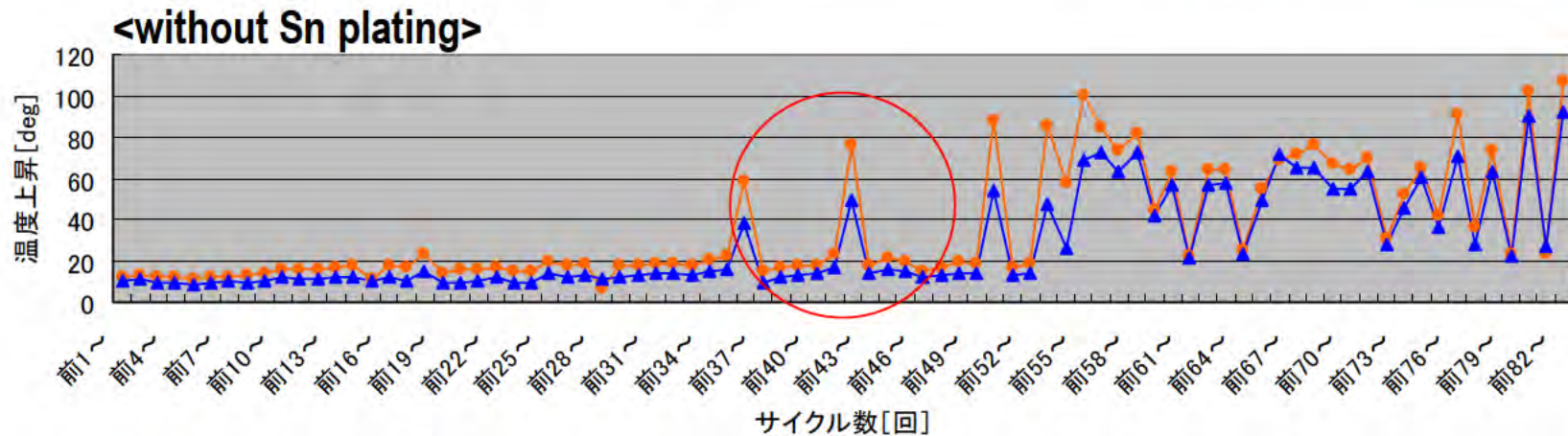
振動条件 : 25度取付、方向上下、2G、20Hz  
通電条件: 実負荷(実車ランプ取付して常時電流9.5A、突入46A程度)  
雰囲気温度: 80℃  
Mタブ酸化: 強制酸化品  
Mタブローリング: SW実車品の為、追加工なし  
接触荷重 : 量産実力下限レベル(9.4N)  
レイアウト : コラムカバーを取り付ける

## <Testing setup>



# Duplication testing result

- Temperature of LO terminal increases.
- Without Sn plating, temperature significantly rises at **45 cycles, or later.**
- With Sn plating, temperature significantly rises at **70 cycles, or later.**

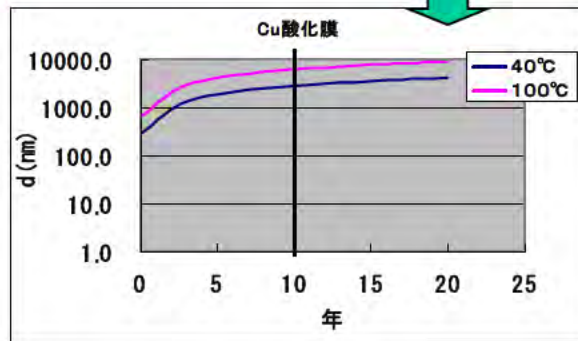


## Duplication testing Sn plating effectiveness

◆ Duplication testing proves that parts with Sn plating are twice more effective under 80 degrees (terminal temperature is 100 degrees.) In the next step, life time is predicted under 20 degrees equivalent to the market environment.

• Susceptible features to temperature, and its coefficient. (What is the severity for 100 degrees when 40°C is regarded as 1.)

	Sn plating無し
Contact load to F terminal	1.3
Sn plating stiffness	—
Rate of oxidized film thickness	2.17



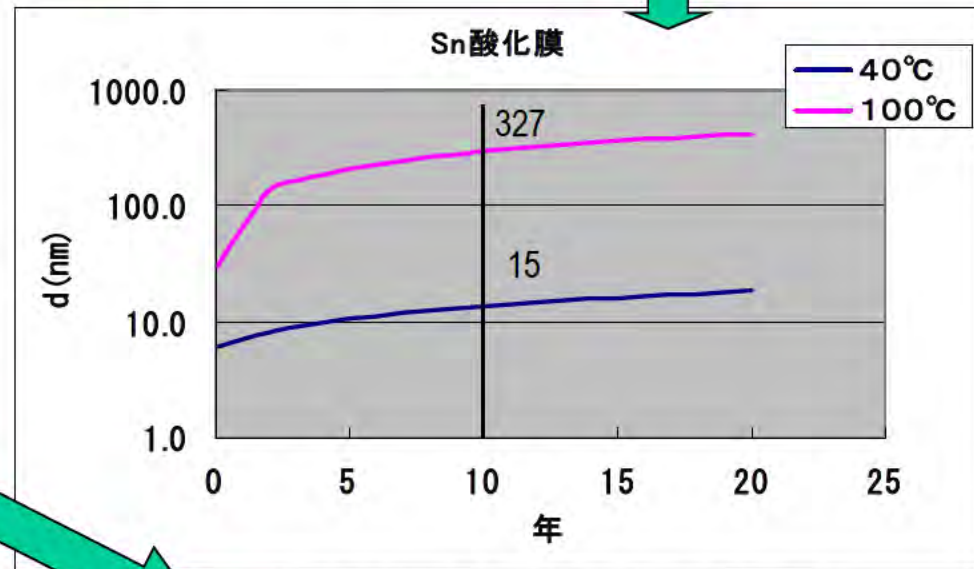
Predictable life time without Sn plating under 40 degrees.

$$45 \text{ cycles} \times 2.17 = 98 \text{ cycles}$$

**Sn plating effectiveness:  $1526/98 = 15.6$  times**

	Sn plating
Contact load to F terminal	1.3
Sn plating stiffness	1.5
Rate of oxidized film thickness	21.8

An oxidized film on Sn plating is susceptible to temperature.





• Predictable life time for parts with Sn plating under 40 degrees.  $70 \text{ cycles} \times 21.8 = 1526 \text{ cycles}$

**Predictable life time for Sn plating is 150,000km (The minimum mileage for failure occurrence)  $\times 15.6 = 234,000$  km**  
(HS part assurance: 220,000km in North America)

# Affected range

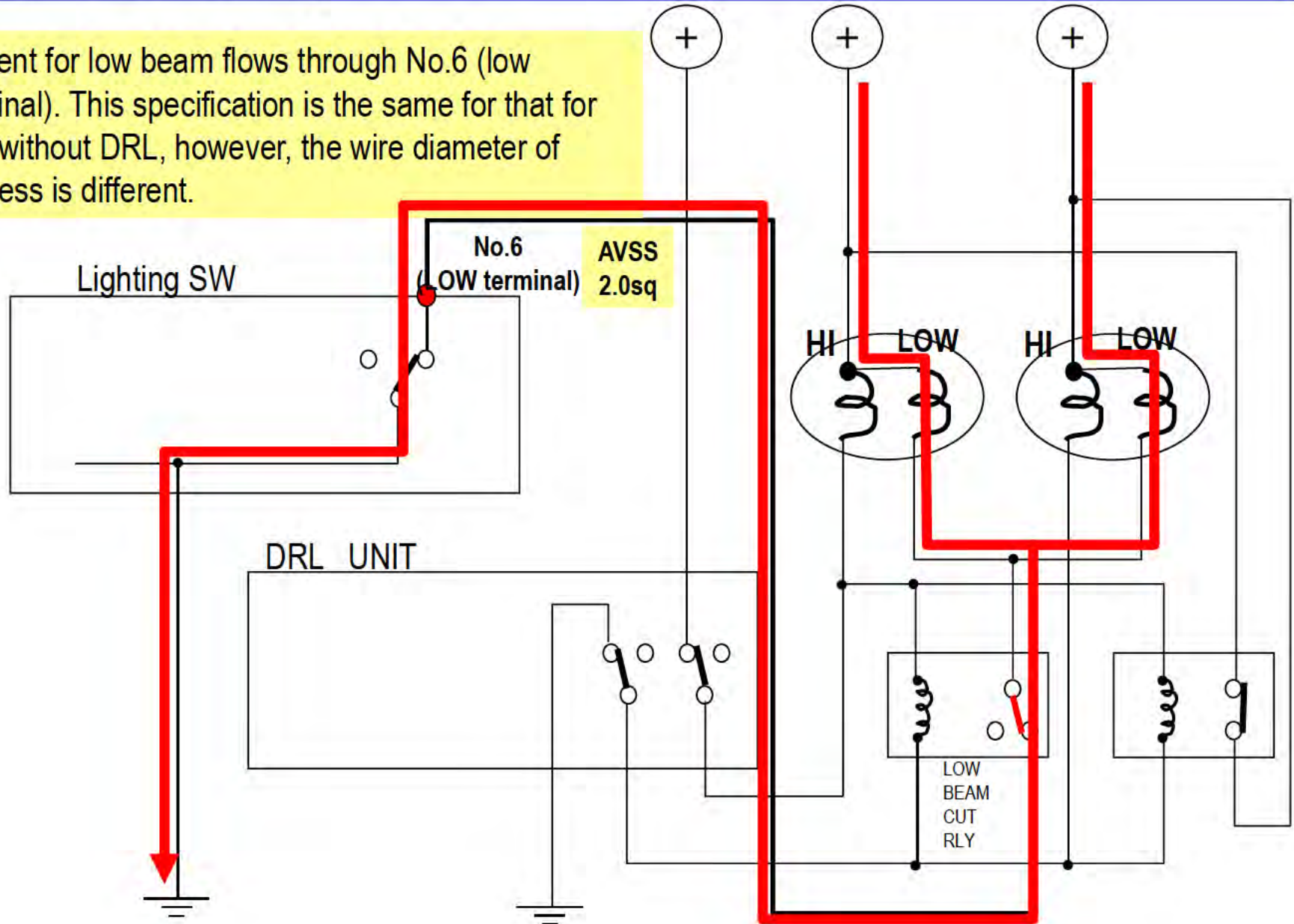
Market \ Models	JH	KA	KC	KE	EU	Others
Civic	×	×	○	×	×	×
STREAM	×	/	/	×	×	×
STEP-WGN	×	/	/	/	/	×
Fit (JAZZ)	×	/	/	×	×	×
CR-V	/	/	/	×	×	/
Insight	Already applied	×	○	×	×	×
Logo	Already applied	/	/	×	○	×
Compact vehicles	○	/	/	/	/	/

 : action target

 : not target

# KC specification study

Current for low beam flows through No.6 (low terminal). This specification is the same for that for 10A without DRL, however, the wire diameter of harness is different.



# KC specification study

A table of wire size

M/Y	Model	Model code	Market	Low	High	COM
01	CIVIC 4dr	S5A	Except for KC	0.85(R/W)	1.25	2
			KC	2(R/Y)	1.25	2
01	CIVIC 5dr	S6A	ALL	0.85(R/W)	1.25	2
01	CIVIC 2dr	S5P	Except for KC	0.85(R/W)	1.25	2
			KC	2(R/Y)	1.25	2
01	STREAM	S7A	ALL	0.85(R/W)	1.25	2
01.5	Stepwagon	S7S	ALL	0.85(R/W)	0.85	2
02	Fit	SAA	ALL	0.85(R/W)	0.85	0.85
02	CR-V	S9A	Except for KC	1.25(R/W)	1.25	2
			KC	2(R/Y)	2	2
99	Logo(LH)	S50	ALL	2(R/Y)	0.85	2
99	Insight(LH)	S3Y	Except for KC	1.25(R/W)	0.85	1.25
			KC	2(R/Y)	0.85	2

99	Logo(RH)	S50	ALL	1.25	0.85	1.25
99	Insight(RH)	S3Y	Except for KC	1.25	0.85	1.25



# Comparison with KC harness

---

## ◆ Specification comparison (CIVIC LH)

	Wire size*	F terminal material
KC	2 sq	Heat-resistant cooper alloy
Except for KC	0.85 sq	Brass
Effectiveness	Heat dissipation ability	Tension relief decrease

## ◆ Effectiveness study

Effectiveness 1

Heat dissipation ability:  $\ominus 10\text{deg}$  (SW ASSY)

\*Heat amount from a connector is half .

Effectiveness 2

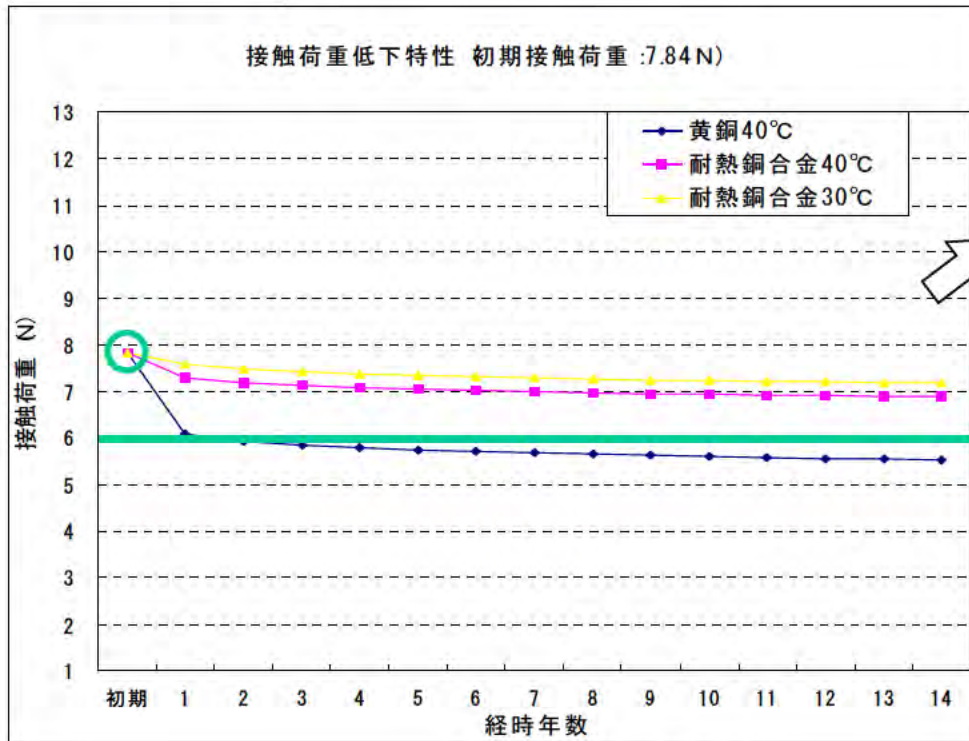
Stress relief decreases.

Contact load change is predicted using the condition below for material comparison.

- Condition
- Terminal temperature: 40°C, and 30°C
  - Contact load in the early stage: 7.84N (the lower value of manufacturing management)  
in the final stage ; 6N (the lower value of stable resistance : Sn-Cu)

# Comparison with KC harness

## Effectiveness 2 Stress relief decrease (Detail)



Result: durability comparison by time when brass 40°C is regarded as 1.

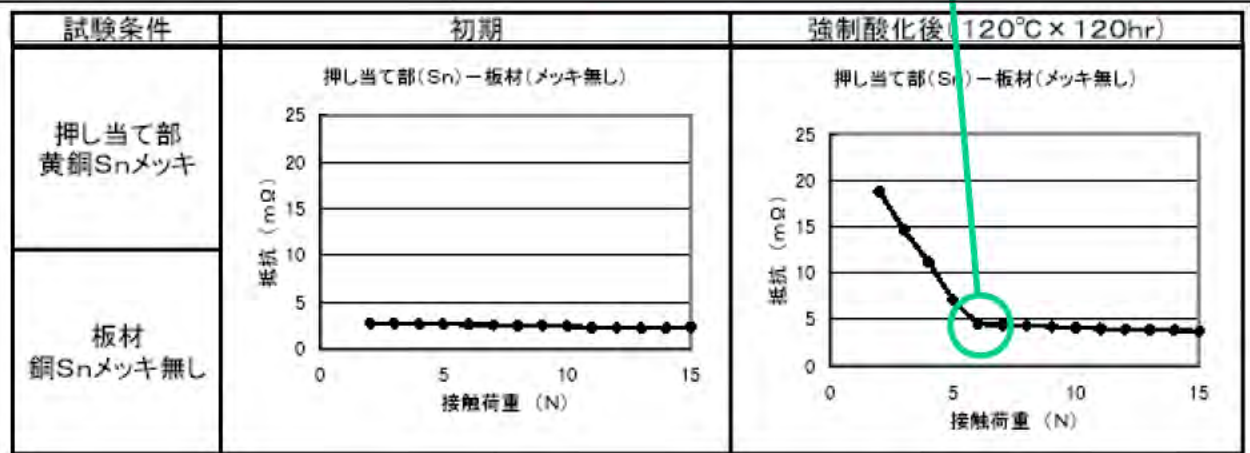
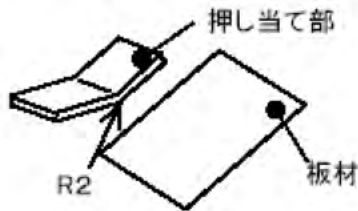
	Brass	Heat-resistant cooper alloy
40°C	1	2500
30°C	—	15000

\*A gap btw brass, and heat resistant cooper alloy becomes larger when contact load increases to 7.84N(the lower value of manufacturing management), or higher in the early stage.

**The final stage : 6N**

**Combination of Cu - Sn :  
resistance becomes stable  
at 6N, or higher**

<Sample>



# Comparison with KC harness\_ - Summary -

---

## 1.Circuit

- DRL is not affected.
- The same amount of current for other types of part flows into terminal No.6 when the low beam lamp lights up.

## 2.Harness layout size, terminal material

①The harness connecting to terminal No6 is different in size.

DRL specification: 2.0sq / normal specification : 0.85sq

Reason: adding "LOW BEAM CUT RLY" satisfied the requirements for voltage drop to head light bulb.



Terminals are effectively restrained from heating.

Effectiveness: -10deg

②The material for female terminal is different. 2.0sq → heat resistant cooper alloy / 0.85sq → Brass



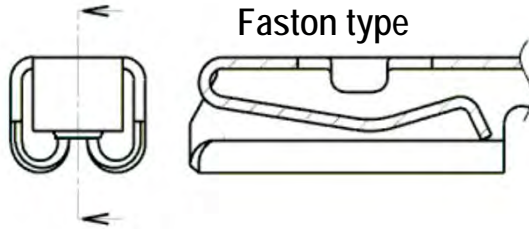
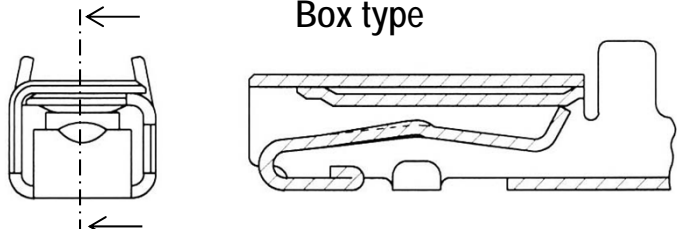
The difference in stress relief durability duration became larger.

Effectiveness: Brass 1 : 2500 Heat resistance cooper alloy (at 40°C)

## 3.Summary

**It is judged that the KC market doesn't require a market action since any failure hasn't occurred from the market, and the specification (2.0sq & heat resistant cooper alloy) for the market has a enough durability to heat.**

# Compact vehicle specification study

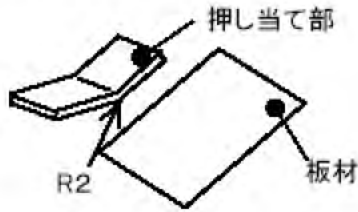
Female terminal	MT090 terminal (CR-V、CIVIC、FIT series)	HE090 terminal
Rough sketch	 <p>Faston type</p>	 <p>Box type</p>
Tongue plate shape	Without emboss	With emboss
Contacting face to male	Faton (break section contact)	Contacting face to male
With/without Sn plating	With plating	With plating
Terminal materials	AVSS0.3~1.25 terminal : Brass (AVSS2 terminal : Heat resisting alloy)	AVSS0.2 ~1.25 terminal : Brass AVSS2 terminal : Heat resisting alloy
Contact loading	Mfg control : 7. 84N~14. 7N	Mfg control : 7. 84N~12. 74N
Contact pressure	75 N/mm <sup>2</sup>	114 N/mm <sup>2</sup>

Terminal HE090 (for compact models) has a emboss structure in the tongue plate. So, its contact pressure is higher, and it is more stable than MT090 (for CIVIC series)

# Influence by contact load decrease (Terminal MT090 for CIVIC)

◆ Influence to resistance when contact load decrease.

<Sample>

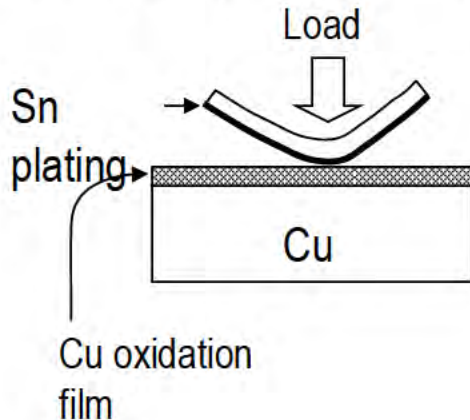


<Conditions>

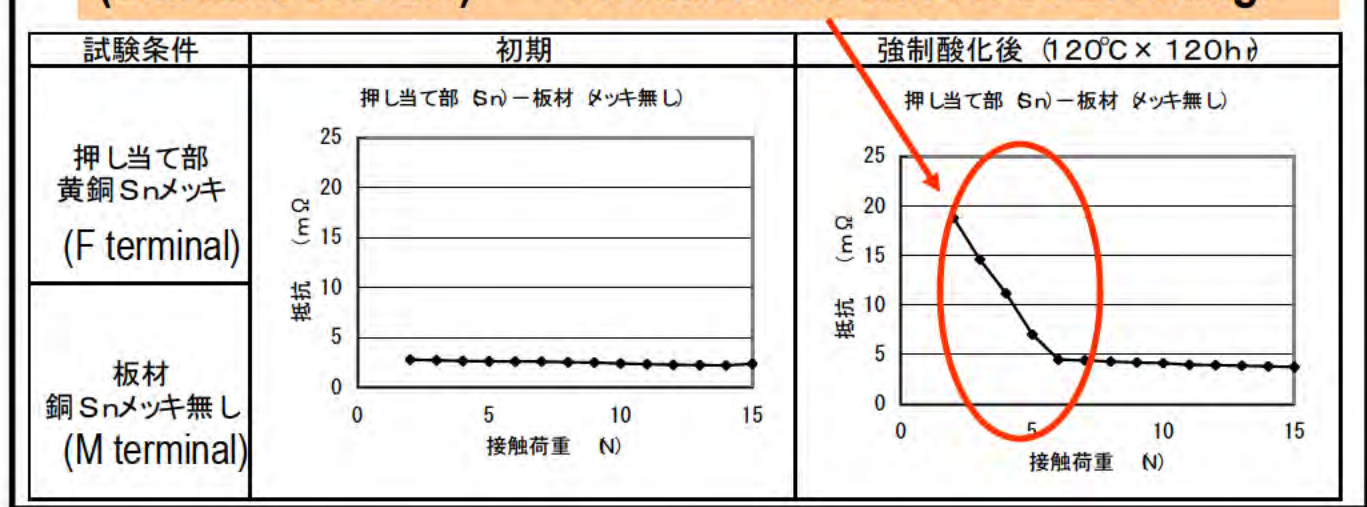
Surface oxidation: only board material

120°C × left uncontrolled for 120hr · Current 10A

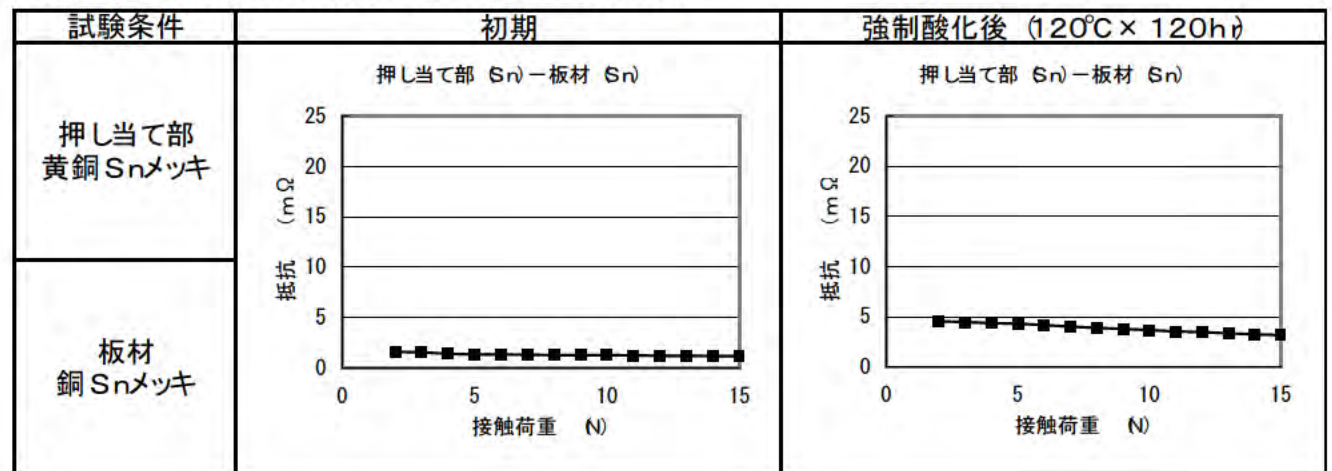
<Testing setup>



**Combination of Cu-Sn: higher resistance at 5N, or lower (unstable contact) → oxidation film cannot be breaking.**



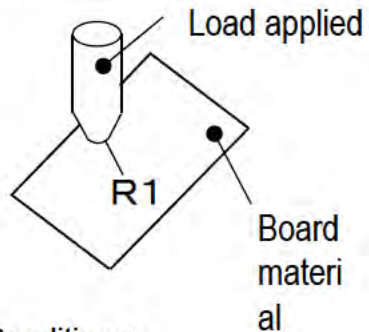
**Ref.: Combination of Sn-Sn: stable**



# Influence by contact load decrease (Terminal HE090 for compact models)

◆ Influence to resistance when contact load decrease. (Different contact area in shape)

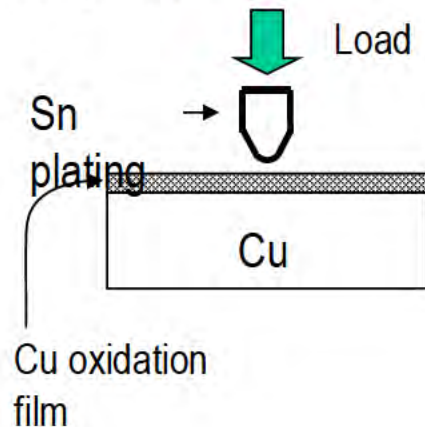
<Sample>



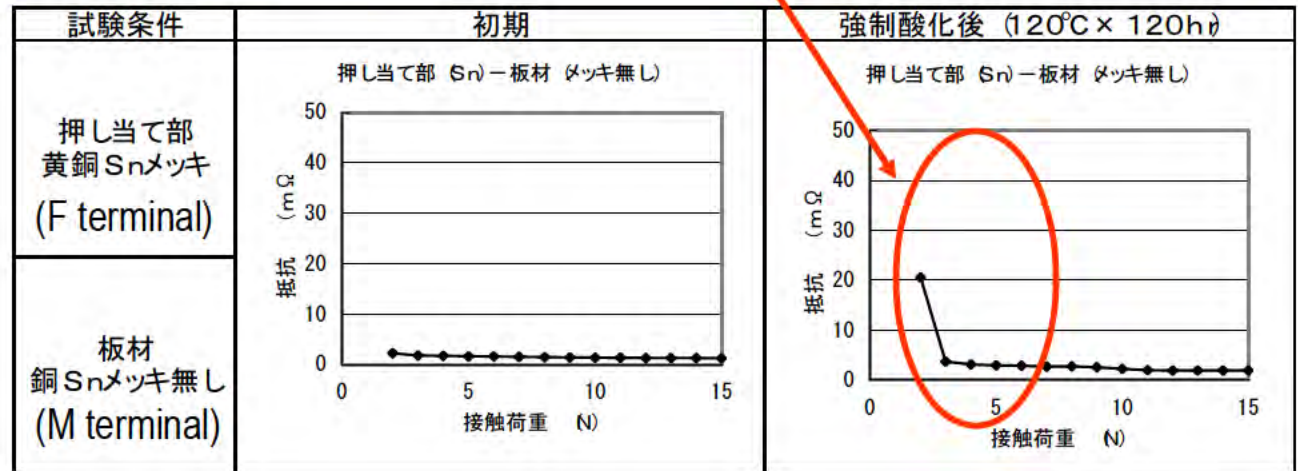
<Conditions>

Surface oxidation: only board material  
 120°C × left uncontrolled for 120hr • Current 10A

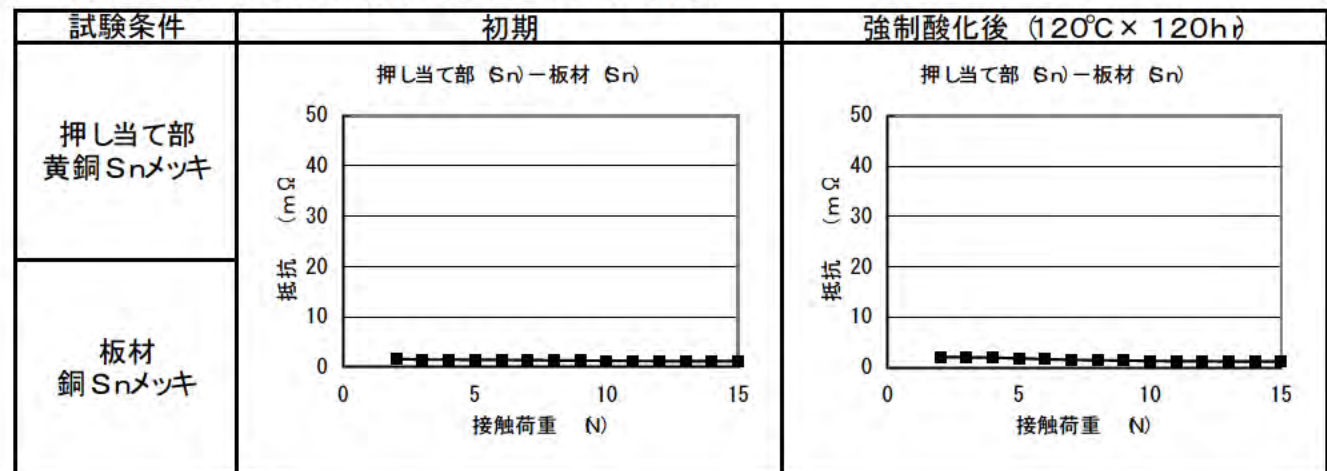
<Testing setup>



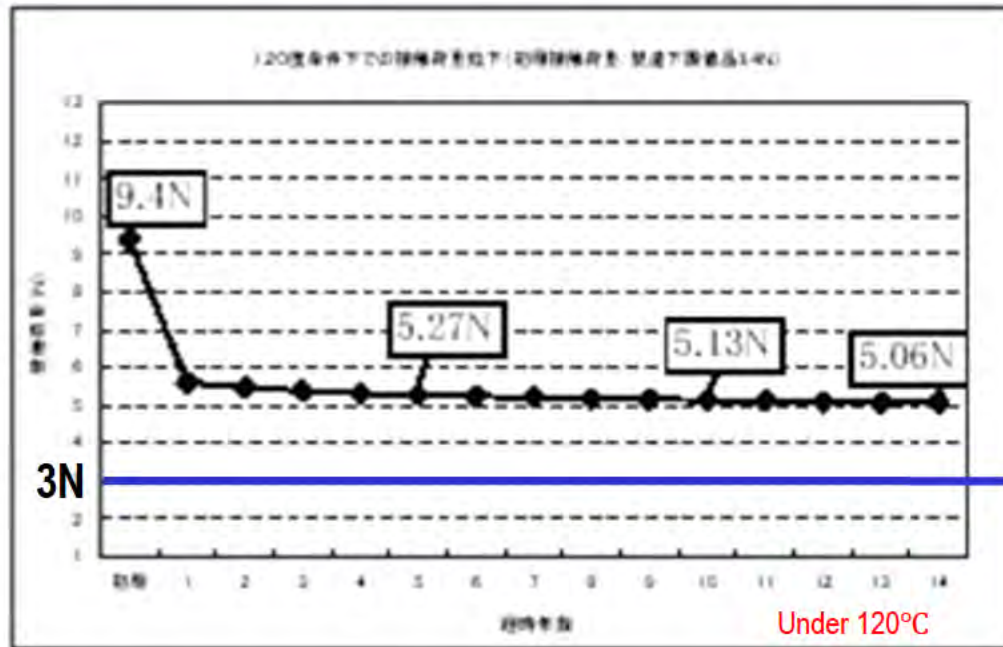
**Resistance continues to be stable at 3N, or lower with combination of Cu-Sn.**



**Ref.: Combination of Sn-Sn : stable**



# Contact load aging change (Terminal HE090 for compact models)



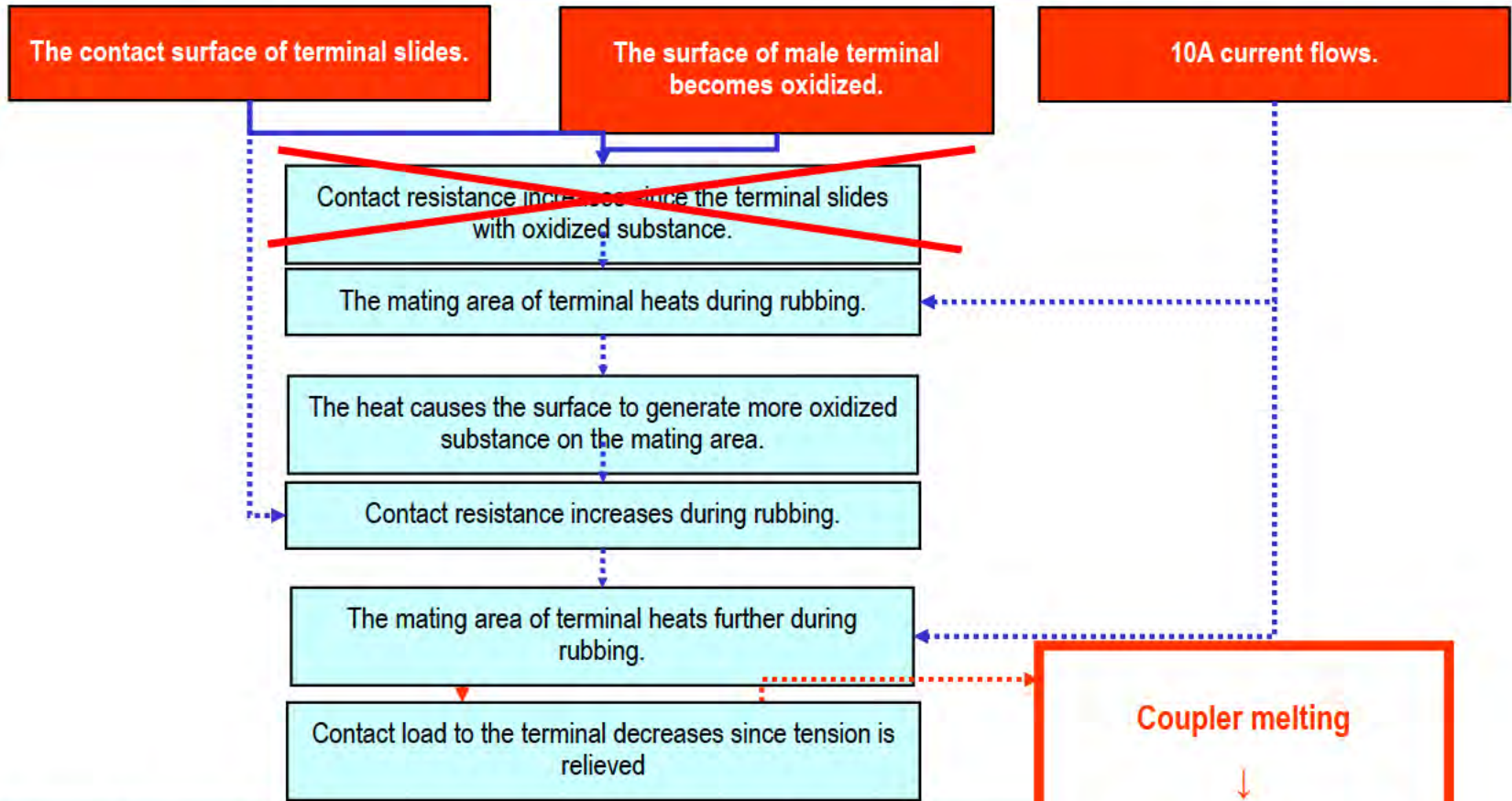
Contact load for stable HE terminal

Contact load of MP parts is 9.4N, so it has enough room to 3N even if it ages.



Terminal HE090 has contact load high enough to remove oxidation film.  
(Oxidized cooper)

# The reason why failure “lamp for low beam doesn’t illuminate” doesn’t occur



A flow of contact resistance increase is not established since terminal HE090 can retain contact load. So, failure “ lamp for low beam doesn’t illuminate” doesn’t occur.

Failure “lamp for low beam doesn’t illuminate” doesn’t occur from compact models.



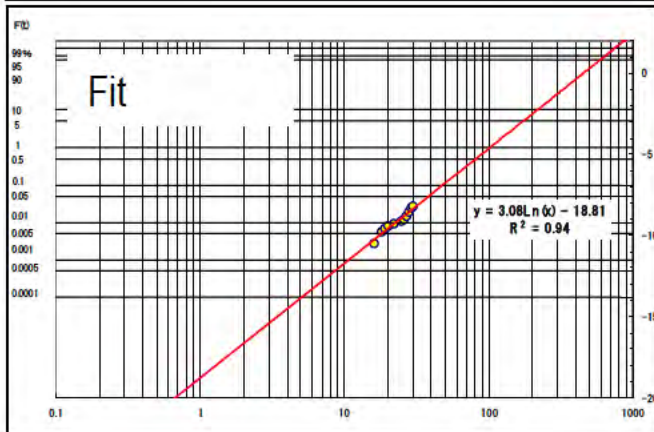
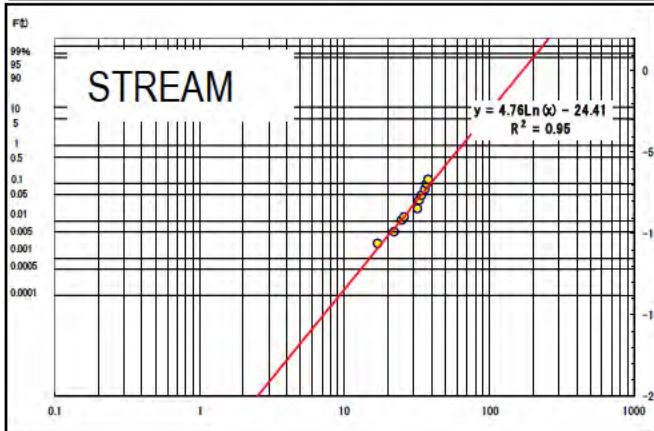
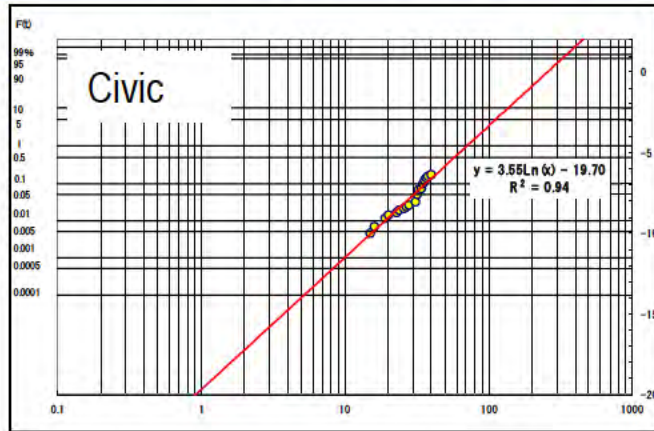
# Affected range, and units (for KC, and LOGO : except for LH)

Models	Market	99M	00M	01M	02M	03M
<b>CIVIC</b> 692,380	Japan			43,048		
	North America			449,658		
	EU			98,584		
	Others			101,090		
<b>Fit</b> 73,525	Japan				73,347	
	EU				177	
	Others				1	
<b>STREAM</b> 54,391	Japan			39,543		
	North America			1		
	EU			11,301		
	Others			3,546		
<b>STEP WGN</b> 34,827	Japan			34,606		
	Others				221	
<b>LOGO RH</b> 3,013	EU	2,445				
	Others	568				
<b>INSIGHT LH</b> 9,147	North America		8,775			
	EU		368			
	Others			4		
<b>CR-V</b> 630	EU				629	
	Others				1	

**Plating was applied to terminals since 01/11.**

TOTAL (Market base)	
Japan	190,544
North America	458,434
EU	113,504
Others	105,431
<b>Total</b>	
<b>867,913</b>	

# Failure occurrence prediction for the Japanese market

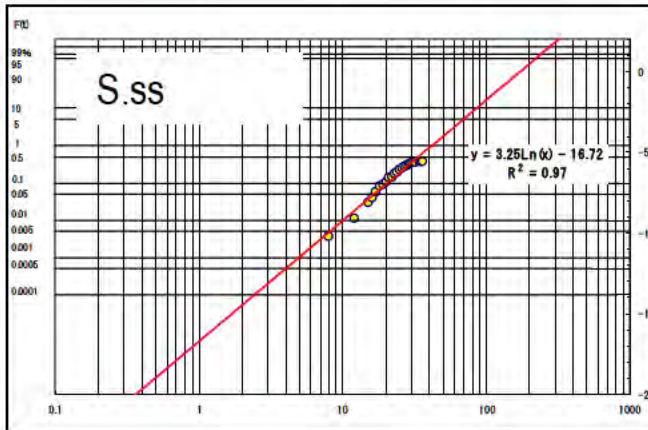
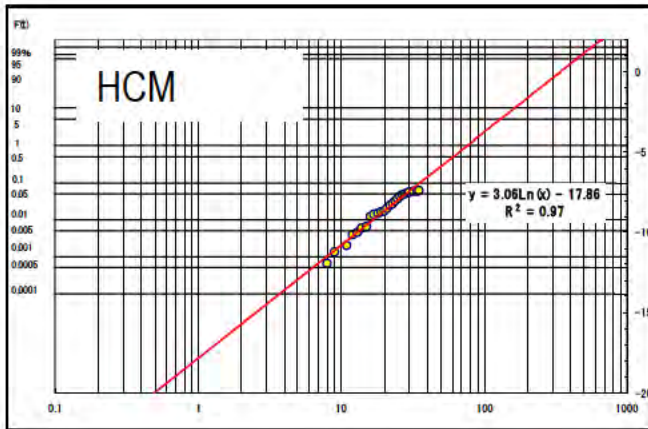
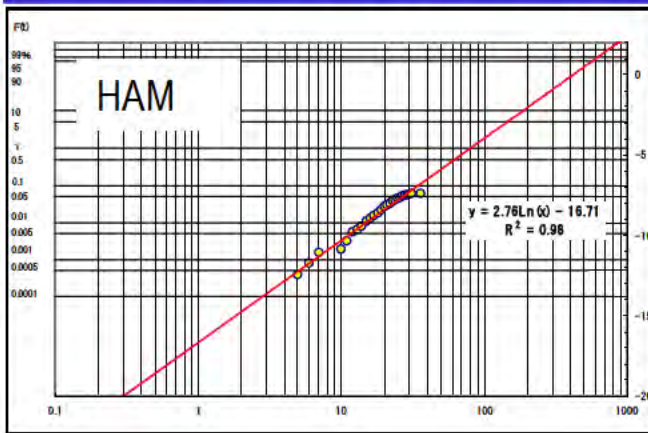


Models \ Months to fail	Civic	STREAM	Fit
36	40 0.09 %	26 0.06 %	31 0.041 %
60	242 0.56 %	284 0.72 %	146 0.20 %
120	2741 6.39 %	6987 17.67 %	1219 1.66 %

\*As to STEP-WGN, Weibull prediction is not possible since the current failure occurrence is 4 cases.

Judging from warranty situation, and failure occurrence prediction by Weibull, this symptom will continue to occur.

# AH Failure occurrence prediction (by HAM, HCM, and S.ss)



	HAM	HCM	S.ss
Months to fail	Melting	Melting	Melting
36	282 0.111%	153 0.102%	163 0.618%
60	1154 0.453%	725 0.484%	841 3.204%
120	7732 3.034%	5943 3.968%	6983 26.614%

Judging from warranty situation, and failure occurrence prediction by Weibull, this symptom will continue to occur.

## Market action proposal

---

### [Market action proposal]

A proactive market action is proposed since this failure is predicted to increase in the future, and disturbs users when it occurs. (The head light suddenly goes off.) This is a flaw in safety.

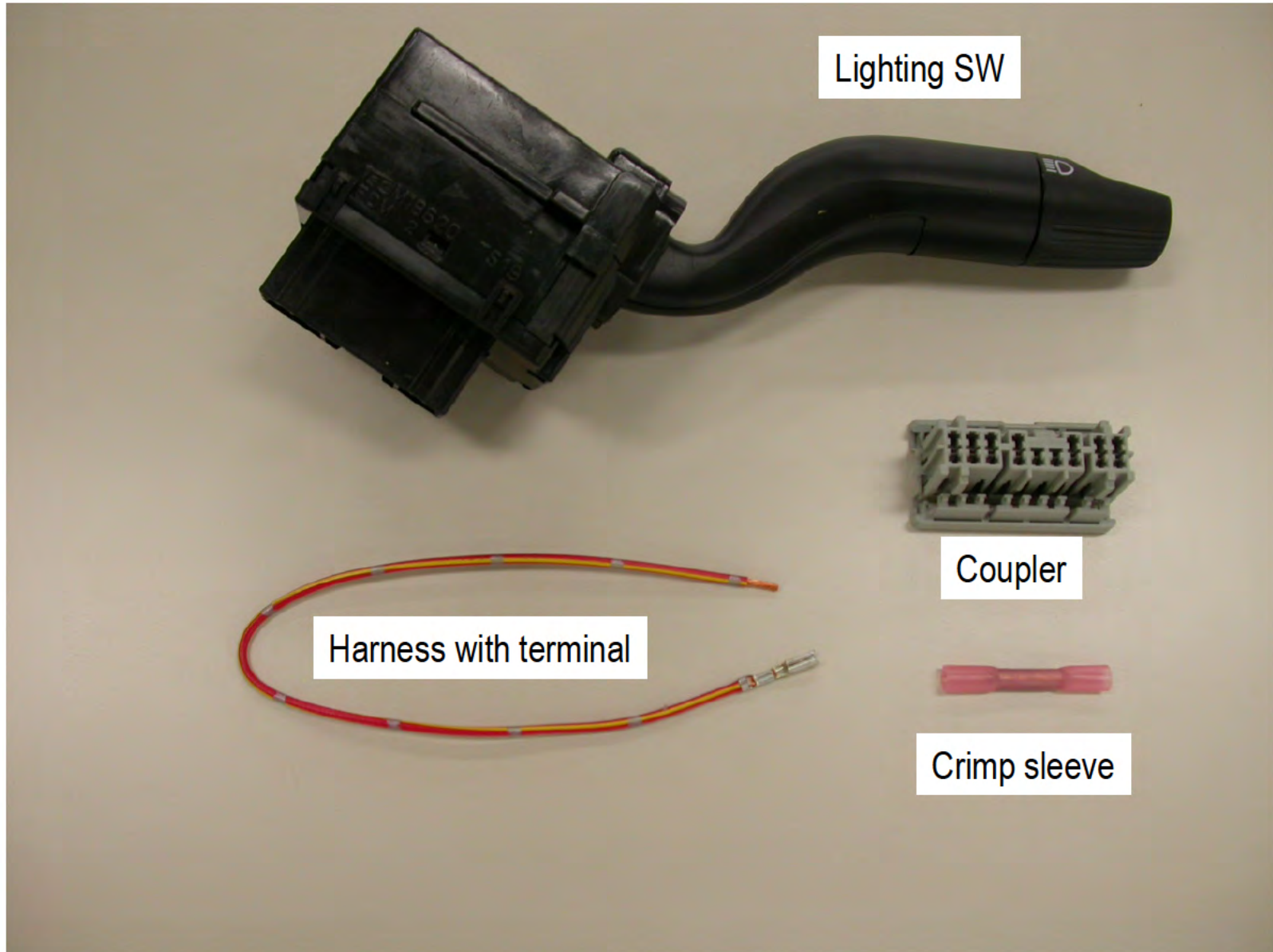
#### (1) Target models, and units

- CIVIC, STREAM, STEP-WGN, FIT, CR-V
- INSIGHT(LH), LOGO(KE • KU)

Totally about 860,000units

(2) Action: operation SWs of all target units are replaced with CM parts. Female terminals that connects to harness for front lamps are replaced with good parts. Also, couplers are replaced with good parts if they are damaged.

# Service kit content



Lighting SW

Coupler

Harness with terminal

Crimp sleeve

# Action (Replacement method)

改善措置説明図

ライトイングスイッチASSY

① The lighting SW is replaced with a CM part.

② The harness is modified, and Lo terminal is replaced with a new part since the Lo terminal might deteriorate.

If the coupler is melting, it is replaced with a new part.

Service kit is setup.

Service kit

- Lighting SW(13 types)
- Harness with terminals
- Coupler
- Crimp sleeve

Totally 13 types for each model, and market

Service news is issued in order to make the replacement method well known.

**HONDA**  
サービスニュース ●平成12年 8月

ライトイングスイッチASSY交換用部品表 (Vゴール)

●内 容 下記対象年車種範囲に該当する車種は、次の要領に従ってライトイングスイッチASSYの交換用部品を交換します。

●対 象

車種	型式	適用年	対象車種(車種年)の範囲	対象台数
V-F	DP-GAS	L2000	CA3-120007 ~ CA3-120012	8,178
			CA3-120011 ~ CA3-120015	2,173
			CA3-020008 ~ CA3-020018	38,213
			CA3-020002 ~ CA3-020014	22,672
			CA3-020001 ~ CA3-020010	161
			CA3-020001 ~ CA3-020008	88
	DP-GAS	L2000	CA3-110001 ~ CA3-110002	623
			CA3-110001 ~ CA3-110011	271
			CA3-000008 ~ CA3-000009	3,002
			CA3-010002 ~ CA3-010008	1,907
			CA3-000001 ~ CA3-000003	12

# The reason why those models were absent from the previous action target

- ① M terminal w/o plating
- ② A terminal slides at the connector.
- ③ High current

The basis for target separation is clear. (99M, or later)

The basis for target separation is clear. (2, or 4 lamps)

If ①, ②, and ③ occur at the same time, the contact area melts.

Basis

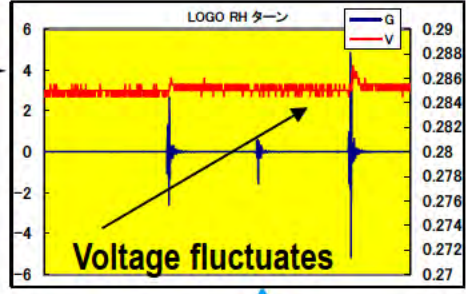
L/O

機種	L/O	Reference
LOG O &		COMB. STAY 取付けタイプ
Insight CIVIC 他		高剛性タイプ
軽シリーズ		LOCK 一体式 COMB. BODY

MARU W

G measurement

車種名	R/L	PASSING		DIMER		TURN	
		T MAX	H MAX	T MAX	H MAX	T MAX	H MAX
Logo	RH	11.0	2.8	11.1	3.5	4.2	5.2
Logo	LH	3.4	1.3	3.7	3.7	2.2	3.9
insight	RH	10.2	1.9	13.8	2.5	5.7	4.8
insight	LH	4.4	1.3	5.2	1.3	2.3	2.8
CIVIC (4Dr)	RH	3.7	0.9	5.8	1.7	3.7	3.5
CIVIC (5Dr)	RH	1.7	0.3	4.8	1.3	3.1	3.9
LIFE	RH	0.5	0.4	0.9	0.6	0.7	2.8
FIT	RH	3.3	3.1	3.7	3.5	1.6	1.8

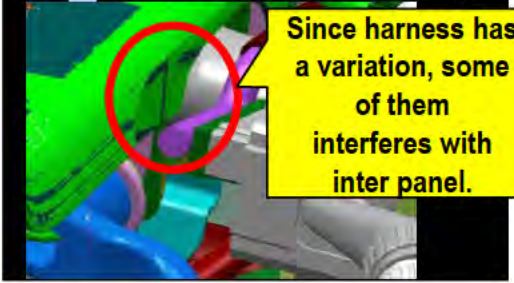


Criteria for terminal rub is voltage fluctuation.



Wiring study in CBU

Lack of variation study



Since harness has a variation, some of them interferes with inter panel.

That harness varies in routing, and SW varies in assembly were not considered when terminal sliding amount was studied, resulting in wrong identification for target units. From the reason, those models were absent from the previous action target.

## Why Why analysis — Failure recurrence prevention —

---

1		2	3	4
Both H/L low beam doesn't illuminate.	Occurrence	The connector area of COMB.SW. melts, causing continuity failure.	Terminal rub Terminal oxidation Large current flow When those three factors occur at the same timing, this failure occurs.	Terminal slides due to Insufficient robustness of installation area for COMB.SW., and terminal shape change
	Outflow	The specification testing didn't show any (Only SPEC cannot prevent this failure.)	The symptom that terminal moves on to the oxidized substance due to sliding had not been fully acknowledged.	A lack of problem consciousness for terminal rub.

### — Failure recurrence prevention —

**STEP-1:** Plating was applied to terminals with 2.3mm sliding width, or less where current continuously flows. Quality Total Check was conducted for 03M.

**STEP-2:** A rule was added to the design guide; terminal that slides in 2.3mm, or less should have plating applied. This was applied to 04M, or later.

**STEP-3:** design requirements are under review. (For all department of HGT)



# Affected range — Affected units

地域	出荷国	製作所												計	
		Css	Sss	Tss	HAM	HCM	HUM	HCPI	HATC	台湾	HPM	HAB	HACPL		TAH
	日本	39,543	150,881		120										190,544
北米	アメリカ	1	26,216	8,775	254,115	150,853	161								458,434
	メキシコ				18,313										
欧州	UK	2,856	9,653	178	3,198		28,784								113,504
	ドイツ	2,486	156	109	1,096	29	14,934								
	イタリア	961		5			6,571								
	ポルトガル	336	2,378		191		2,781								
	スペイン	362	4		206		4,630								
	その他	4,300	7,043	76	769		18,938							474	
アジア	タイ			4					17,753						46,336
	台湾	362	1							8,640					
	フィリピン		1					7,142							
	香港	1,560	2,643												
	シンガポール	290	3,012												
	その他	687	1,353						8		2,880				
中南米	ブラジル		1									14,570			19,744
	チリ	55				760									
	ドミニカ	28			785										
	アルゼンチン	82			407							254			
	ベネズエラ				660										
	その他	152	694		1,295	1									
中近東	トルコ	60	5				131							5,136	24,351
	イスラエル	160	4,578				261								
	UAE	21	3,711												
	サウジアラビア		3,715												
	パキスタン											3,060			
	その他	65	2,932		9		507								
アフリカ	ナイジェリア		2,240				19								4,302
	南アフリカ	1	1,137												
	モロッコ	20	471				76								
	モーリシャス		95												
	レユニオン		14				59								
	その他	3	164				3								
大洋州	オーストラリア		7,675						304						10,698
	ニュージーランド		2,508												
	グアム				156										
	サイパン				28	11									
	タヒチ		16												
	その他														
計		54,391	233,297	9,147	281,348	151,654	77,855	7,142	18,065	8,640	2,880	14,824	3,060	5,610	867,913

**<Total>**

- Affected units  
868,000
- Cost per unit  
6,645 yen (Ave.)
- Total action cost  
5,770,000,000 yen

# Affected range – Affected units/Cost

生産地	機種	対象台数																台数合計	台数合計
		日本		北米(USA、メキシコ)		欧州		アジア		中近東		中南米		アフリカ		大洋州			
		台数	費用	台数	費用	台数	費用	台数	費用	台数	費用	台数	費用	台数	費用	台数	費用		
Css	STREAM	39,543	¥245,003,428	1	¥7,000	11,301	¥77,976,900	2,899	¥13,915,200	306	¥1,530,000	317	¥1,204,600	24	¥105,600	0	¥0	54,391	¥339,747,728
Sss	CIVIC 4Dr	14,193	¥87,939,828	26,216	¥183,512,000	9,142	¥63,079,800	6,771	¥32,500,800	14,941	¥74,705,000	694	¥2,637,200	4,079	¥17,947,600	5,100	¥25,500,000	81,136	¥487,822,228
	CIVIC 5Dr	23,735	¥178,042,060			7,470	¥51,543,000	1	¥4,800					42	¥184,800	4,548	¥22,740,000	40,796	¥252,514,660
	FIT	73,347	¥500,668,622			177	¥1,469,100					1	¥4,200					73,525	¥502,139,922
	LOGO					2,445	¥20,293,500	17	¥68,000							551	¥3,361,100	3,013	¥23,722,600
	STEP WGN	34,606	¥214,418,776					221	¥1,060,800									34,827	¥215,479,576
	小計	153,881	¥981,067,286	26,216	¥183,512,000	19,234	¥136,385,400	7,010	¥33,634,400	14,941	¥74,705,000	695	¥2,641,400	4,121	¥18,132,400	10,199	¥51,601,100	233,297	¥1,481,578,996
Tss	INSIGHT	0	¥0	8,775	¥75,466,000	368	¥3,054,400	4	¥16,000	0	¥0	0	¥0	0	¥0	0	¥0	9,147	¥78,535,400
HAM	CIVIC 2Dr			153,300	¥1,073,100,000	5,135	¥35,431,500			9	¥45,000	154	¥623,200			15	¥75,000	158,623	¥1,109,274,700
	CIVIC 4Dr			118,138	¥826,966,000	325	¥2,242,500					2,933	¥11,335,400			169	¥845,000	121,615	¥841,388,900
	CIVIC CNG	120	¥743,520	990	¥6,930,000													1,110	¥7,673,520
	小計	120	¥743,520	272,428	¥1,906,996,000	5,460	¥37,674,000	0	¥0	9	¥45,000	3,147	¥11,958,600	0	¥0	184	¥920,000	281,348	¥1,958,337,120
HCM	CIVIC 4Dr	0	¥0	150,853	¥1,055,971,000	29	¥200,100	0	¥0	0	¥0	751	¥2,891,800	0	¥0	11	¥55,000	151,654	¥1,059,117,900
HUM	CIVIC 3Dr			161	¥1,127,000	22,213	¥153,269,700			87	¥435,000			12	¥52,800			22,473	¥154,384,500
	CIVIC 5Dr					53,796	¥371,192,400			811	¥4,055,000			145	¥638,000			54,752	¥375,385,400
	CR-V					629	¥4,340,100			1	¥5,000							630	¥4,345,100
	小計	0	¥0	161	¥1,127,000	76,638	¥528,802,200	0	¥0	899	¥4,495,000	0	¥0	157	¥690,800	0	¥0	77,855	¥535,115,000
HAB	CIVIC 4Dr	0	¥0	0	¥0	0	¥0	0	¥0	0	¥0	14,824	¥56,331,200	0	¥0	0	¥0	14,824	¥56,331,200
HACPL	CIVIC 4Dr	0	¥0	0	¥0	0	¥0	0	¥0	3,060	¥15,300,000	0	¥0	0	¥0	0	¥0	3,060	¥15,300,000
HATC	CIVIC 4Dr	0	¥0	0	¥0	0	¥0	17,761	¥85,252,800	0	¥0	0	¥0	0	¥0	304	¥1,520,000	18,065	¥86,772,800
HCP1	CIVIC 4Dr	0	¥0	0	¥0	0	¥0	7,142	¥34,281,600	0	¥0	0	¥0	0	¥0	0	¥0	7,142	¥34,281,600
HPM	CIVIC 4Dr	0	¥0	0	¥0	0	¥0	2,880	¥13,824,000	0	¥0	0	¥0	0	¥0	0	¥0	2,880	¥13,824,000
TAH	CIVIC 4Dr	0	¥0	0	¥0	474	¥3,270,600	0	¥0	5,136	¥25,690,000	0	¥0	0	¥0	0	¥0	5,610	¥28,960,600
台湾	CIVIC 4Dr	0	¥0	0	¥0	0	¥0	8,640	¥41,472,000	0	¥0	0	¥0	0	¥0	0	¥0	8,640	¥41,472,000
		190,544	¥1,226,819,234	458,434	¥3,223,078,000	113,504	¥787,363,600	46,336	¥222,396,000	24,351	¥121,755,000	19,744	¥75,027,600	4,302	¥18,928,800	10,698	¥54,096,100	867,913	¥5,729,454,334

固定費	治具費 (3,720円×10,000個)	¥37,200,000
	ハーネス固定用テープ (95円×6,600個)	¥627,000

**- Affected units 868,000**  
**- Cost per unit 6,645 yen(Ave.)**  
**- Action cost 5,770,000,000 7 yen**

金額合計 ¥5,767,291,334

57.7億円



# HAC FOG Lamp Affected range, and Warranty situation

Japan market: FIT with FOG lamp mounted ⇒ 8,150 (6/1/2001 to 2001/12/31)

	01M	02M										
	00/6~	01/6	7	8	9	10	11		12			
W/o FOG		Registered units 57,624台 (封筒前)					Registered units 32,647台 (良品)					
W/ FOG	Sパッケージ	9,373台					4,104台 (良品)					
Kits	市場発生の販売日	(1件目) ☆登録日; 8月27日 6,017キット					(2件目) ☆登録日 11月29日 2,133 Before CM 1,598 (良品)					
P/N 08V31-SAA-A60 (白)6020キット 08V31-SAA-B60 (黄)2130キット		HM recall target					不具合品 最終出荷日 11月30日 出荷~登録 (4~5日) マージン(1ヶ月) Action target after CM					

## Warranty situation

発生数	2台
対象台数	8150台
発生率	0.03%
平均経過月	20ヶ月

	発生地区	型式 (通称名)	不具合車 車台番号	発生 年.月.日	HAC出荷 年.月.日	登録 年.月.日	走行 距離	不具合状況
1	青森県	LA-GD2 (フィット)	GD2 1001322	H15.5.22	H13.8.24	H13.8.27	40,274	ヘッドライト左右ともロービーム不灯
2	茨城県	LA-GD1 (フィット)	GD1 1075347	H15.6.7	H13.11.24	H13.11.29	56,652	左右フロントディマラーライトが灯かない

# <HAC Market action proposal>

(Japan)

Notification to METI, and MLIT

Action (Replacement)/timing: following to the model

Notice method for customers

- Send direct mail to users for each model (Service news, website )

Notice contents

- To users: check operation SW for the right-front lamp

If FOG light is mounted, please visit a dealership.

-To dealership: if the part is a targeted lot, replace the part.

Part kit for replacement :8,150

- For recall target: 6,017 (DM is not send to users for the recall for this models)

- For stock after recall: 2,133 (sold in Nov, and Dec)

Estimated cost: 18,000,000 yen (100% replacement)

\*the number of direct mails: 32,647

(the number of registered unit in Nov, and Dec)



Unit: yen

Cost for replacement	10,660,000
DM	3,590,000
Inspection for non target units	3,830,000
Cost per unit	8,400

# Schedule

	2004.2	3	4
Report	<p>12 ★ GQC</p> <p>19 ▽ Leak</p> <p>26 📁 Notification to MLIT</p>	<p>Market action start</p>	
Notification	<p>19 📁 Notification to NHTSA</p> <p>26 📁 HAC—report to METI</p> <p>Arrangement for overseas notification →</p>	<p>Market action start</p>	
Part procurement for Japan	<p>S5A—J02(Standard) 19 ▽ 110,000(65% of the target)</p> <p>S7A—J02(with FOG) 26 ▽ 14,000(including 60% for HAC)</p>	<p>Part delivery plan is under review</p>	
Part Procurement for AH	<p>S5A—A02(Standard) 27 ▽ 40,000</p> <p>19 ▽ 128,000</p>		
Part Procurement for other regions	<p>S5A—G02(with rear FOG)</p> <p>19 ▽</p> <p>1000 part as initial lot</p> <p>19 ▽</p> <p>S3Y—G02(InsightLH)</p>		

EA11-012

HONDA

4/20/2012

Q13E

EA11-012

HONDA

4/20/2012

Q13E

Doc1 QIS

MV20080418134750\_E



EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
Q 4Rin Hinkai Godo Tadayoshi Fujio 2008/04/11
↓
INFORMATION INVESTIGATION
Q 4Rin Hinkai Godo Teiichi Harada 2008/04/18
↓
INVESTIGATION AND ANALYSIS
Q 4Rin Hinkai Godo Masayuki Kawamura 2008/04/21
↓
COUNTERMEASURE REQUEST
Q 4Rin Hinkai Godo Masayuki Kawamura 2008/04/23
↓
INTERMEDIATE REPLY
↓
COUNTERMEASURE REPLY
AQAO Masayuki Kawamura 2008/07/10
↓
COUNTERMEASURE ISSUED
↓
COUNTERMEASURE APPLICATION
↓
COMPLETED
Q 4Rin Hinkai Godo Masayuki Kawamura 2008/07/31

COUNTERMEASURE REQUEST
ADDRESS
AQAO
RECEPTION
RANK
A
DATE:
APPROVAL
CHECK
CREATOR

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
GD3	2007 FIT LOW BEAMS INOP <QAH2562>	MV20080418134750
07/FIT/JAZ		
OCCURRENCE DESCRIPTION	Customer complaint "Low Beam Headlamps Inop." (VIN JHMGD38647S ) Dealer confirmed and found that both the headlight switch and harness connector where burnt and melted at terminal #6 of the RED/WHT wire. AHM received warranty parts and photo's are provided in the Data Pack.	

REPLY	REPLY TO	Q 4Rin Hinkai Godo	VIA	BY	May 13
-------	----------	--------------------	-----	----	--------

INVESTIGATION AND ANALYSIS RESULTS
Country of occurrence: USA
Returned parts:
- Instrument wire harness
- Lighting SW
Initial analysis results
<Instrument wire harness>
- Terminals of red/black wires (H/L LO circuit) inside the coupler for lighting SW connection are discolored by heat generation and the resin around it is melted.
- Wire coating of the LO circuit terminal connection is discolored.
<Lighting SW>
- Lo circuit terminal inside the coupler of lighting SW is discolored due to heat.
- Resin at the bottom of LO circuit terminal is melted.
* Detailed analysis will be requested to Yazaki.
Detailed analysis results by supplier
1. Production history
1) Production process: Tochigi factory Production Dev.
2) 17-Jan-2007 Conduction inspection, exterior inspection passed parts
3) No history of manual repair
2. Exterior confirmation
1) Gap dimension of fitting of LO circuit female terminal is 0.72mm (male tab thickness: 0.64mm) being more than male tab thickness, so no contact load applied.
2) Male terminal (lighting SW side) has contact trace similar to normal circuit terminal, so it is assumed that the fitting condition at initial stage was normal.
3. Confirmation of inserted/removed trace and spark trace on LO circuit female terminal
- Inserted/ removed trace and spark trace were observed clearly.
4. Stress corrosion crack investigation of LO circuit female terminal bent area
- No crack observed in the cross sectional confirmation, so the contact pressure reduction is not due to stress corrosion crack.
Summary
- It is assumed that the fitting condition at initial stage was normal, however the contact pressure decreased from some factor(s) and increased contact resistance or spark lead to heat generation.
Occurrence situation of the same failure:
USA: 1 case/ 134,930units Occ rate: 0.0007% (7ppm)
WTY investigation
No failures that can be judged as the same type failure of instrument wire harness (YAZAKI) and lighting SW (TOYO DENSO) in the warranty.

CAUSE ANALYSIS	We assume that the initial fitting condition was normal, but contact pressure decreased due to some kind of factors and generated heat from contact resistance increase or spark, however the cause of contact pressure decrease could not be identified and the cause is unknown.
COUNTERMEASURE	True cause is unknown. No countermeasures will be applied.
TREATMENT FOR STOCK & SOLD UNITS & PARTS	There are no secondary occurrences of the same failure and no failures that can be judged as the same type failure in the warranty situation. No treatment will be taken.
COUNTERMEASURE EFFECTIVENESS	
FEED BACK TO THE SOURCE	

COUNTERMEASURE APPLICATION INFORMATION					
DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY	PRODUCT #

QUALITY IMPROVEMENT SHEET [ Q I S ]						
ISSUED BY						
Q 4Rin Hinkai Godo						
OCCURRENCE MARKET						
REPORT #	AHOS2008041001-00					
FRAME #	JHMGD38647S					
ENGINE #						
TRANSMISSION #						
TRANSMISSION CATEGORY	5AT					
MILEAGE OR HOURS	22000	Mile				
REGISTRATION DATE	2007/04/28					
OCCURRENCE DATE	2008/03/07					
PRODUCT DATE	2007/02/08					
SERVICE PART #						
MAIN CAUSAL PART #	32117-SLN-A30					
CAUSAL PART SYMPTOM CODE AND DESCRIPTION						
MODEL CODE						
CAUSE CATEGORY	Unknown					
RES. DEPARTMENT						
SUPPLIER	YAZAKI CORPORATION	CODE	8133			
COUNTERMEASURE CATEGORY	No Action					
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	4105	no action				
OCCURRENCE FORECAST						
COUNTERMEASURE PART AVAILABILITY	No					
REVISED ITEM	DRAWING	OPERATION STANDARD				

RECEPTION DATE
/

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR
07/10	AQAO			Masayuki										

1	2008/07/31	FINISH	Junichi Kam			Kenta Sato	Masayuki Ka							
0	2008/04/18	NEW	Junichi Miy				Teiichi Har							
ISSUE	DATE	VERSION	APPROVAL	CHECK	CHECK	CREATOR								

イベント
担当部門氏名
完了年月日
↓
受付
Q四輪品改合同
藤尾 忠義
2008/04/11
↓
情報調査
Q四輪品改合同
原田 倅一
2008/04/18
↓
調査解析
Q四輪品改合同
川村 将之
2008/04/21
↓
対策要求
Q四輪品改合同
川村 将之
2008/04/23
↓
中間回答
↓
対策回答
四輪品改合同
川村 将之
2008/07/10
↓
出図
↓
対策実施
↓
完了
Q四輪品改合同
川村 将之
2008/07/31

対策要求	宛先	四輪品改合同	經由 殿	受付 /				重要度	A	年 月 日		
			經由 殿	受付 /						承認	確認	作成

型式/YM・通称名	件 名	推 進 No.
GD3 07/FIT/JAZ	(QAH2562) ロービーム作動せず<ライティングSW>	MV20080418
発生状況	ヘッドライトのロービームが作動しないとの訴え	

回答 5月13日 までに 經由 Q四輪品改合同 宛に回答願います。

調 査 結 果	●発生地域 : USA
	●返却現品 ・インストメントワイヤーハース ・ライティングスイッチ
調 査 結 果	●現品一次解析確認結果 <インストメントワイヤーハース> ・ライティングスイッチ接続のカプ内の赤/黒線 (H/L L0回路) の端子が発熱により、変色し、周辺の樹脂が溶融している ・L0回路端子接続の電線被覆が変色している。
	<ライティングスイッチ> ・ライティングスイッチのカプ内のL0回路端子が熱により、変色している。 ・L0回路端子の根元の樹脂が溶融している。
調 査 結 果	※詳細解析を取引先の矢崎総業㈱に依頼する。
	○取引先詳細解析結果 1. 製造履歴 ①製造工程 : 栃木工場 製造部 ②2007/1/17 導通検査、外観検査合格品 ③手直し履歴なし。
調 査 結 果	2. 外観確認 ①L0回路端子 (インストメントワイヤーハース側) の嵌合部の隙間寸法は0.72mm (オスタフ厚 : 0.64mm) とオスタフ厚以上で接触荷重はない状態である。 ②オス端子 (ライティングSW側) には正常回路端子と同様な接触痕があり、初期段階では正常嵌合状態であったと推定する。
	3. L0回路端子挿抜痕及びスパーク痕確認 ・明確な挿抜痕及び、スパーク痕が観られる。
調 査 結 果	4. L0回路端子舌片曲げ部応力腐食割れ調査 ・断面確認にてクラックの発生はなく、応力腐食割れによる接圧低下ではない。
	まとめ ・初期的には正規嵌合状態であったが、何らかの要因により、接圧が低下し、接触抵抗が増大やスパークにより、発熱したと推測する。
調 査 結 果	○同種不具合発生状況 ・USA 1件/134,930台 発生率 : 0.0007% (7ppm)
	○ランティ調査 ・インストメントワイヤーハース (矢崎総業製) 及び、ライティングスイッチ (東洋電装製) のランティの調査結果、同種不具合と判断できるものはなし。

原 因	○初期的には正規嵌合状態であったが、何らかの要因により、接圧が低下し、接触抵抗が増大やスパークにより、発熱したと推測するが端子の接圧低下原因を特定はできず、原因不明である。						
	○真の原因が不明の為、対策せず。						
対 策	○続発性はなく、ランティで同種不具合と判断出来る発生がないため、措置せず。						
	対策適用号機						
既 販 車 及 び 在 庫 品 の 処 置	年月日	型式 (通称名)	年 式	仕 向 地	区 分	号 機	
対 策 効 果 確 認							
源 流 へ の フ ィ ード バ ッ ク							

市場品質情報 [ Q I S ]
------------------

発行部門
Q四輪品改合同

発生場所	
フレーム No.	JHMGD386479
エンジン No.	
ミッション No.	
ミッション区分	5AT
走行距離、時間	22000 Mile
登録年月日	2007/04/28
発生年月日	2008/03/07

新部品番号	
主部品番号	32117-SLN-A30
症状コード	
EDP KEY 型式名	
原因区分	不明
責任区	部 門
	取引先名 矢崎総業 (株) コードNo. 8133
対策区分	せず
対策内容コード	4105 対策せず
発生予測	
対策パーツ	無
見直し項目	図面 作業標準

受付月日
/

月日	回答部門(所内)	承認	確認	作成
07/10	四輪品改合同			川村 将

月日	回答部門(所内)	承認	確認	作成

月日	回答部門(所外)	承認	確認	作成

発行年月日	記事	承認	確認	確認	作成
1	2008/07/31	完了発行	鎌田 淳一	佐藤 健太	川村 将之
0	2008/04/18	新規	三宅 準一		原田 倅一

EA11-012

HONDA

4/20/2012

Q13E

Doc2 Analysis report

MV20081201091352

テーマ	ロービーム作動せず<QAH2946> (ライティングSW)
部番	35255-S5K-F12
部品名	SW ASSY, LIGHTING

# 解析記録 [ 解析レポート ]

作成部門	課名又は取引先名 東洋電装株式会社 品質部 品質保証室 市場品質課	2009年 2月 16日		
		承認	確認	作成
		中	海	池

## 発生状況 (現象・訴え内容・発生件数・処置内容)

型式: GD3  
車種: Fit/JAZZ  
VinNo.: JHMGD38607S031047  
登録日: 2006年12月4日  
製造日: 2007年01月17日  
発生日: 2009年1月12日  
走行距離: 60,558mile  
発生地区: U.S.A.  
SWロット: 6X30 (2006年10月30日)  
訴え事象: ロービームが作動しない

### 【AQAO様 返却現品確認結果】

- ・Lo回路端子が熱により変色している。
- ・Lo回路端子の根元の樹脂が溶融している。

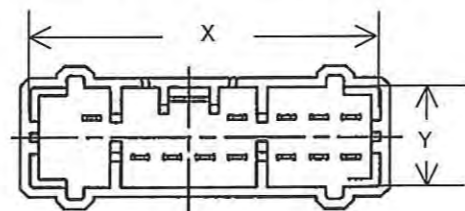
## 事実の把握 (部品の確認結果・要因分析・生産品の品質状況)

### 1. 現品確認結果

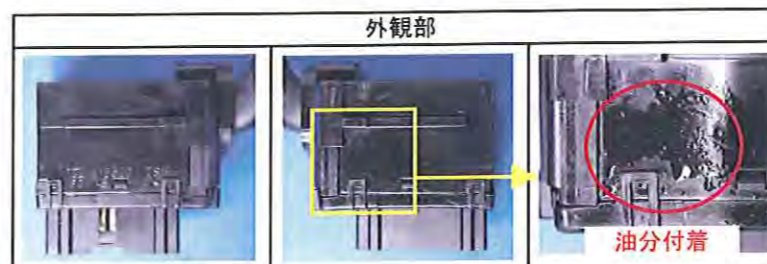
- 1) 外観確認結果
- ・ライティングSW外観に傷、打痕等の異常なし。
  - ・ケース等の表面に油分の付着が確認できる。
  - ・カバー内部、Lo端子に変色が確認できる。
  - ・カバー内部、Lo端子周辺に付着物が確認できる。
  - ・端子外観より返却された現品はメッキ対策品である。
  - ・カバー内寸、Lo端子板厚確認(単位:mm)

	規格値	実測値	判定
X方向	43.2±0.1	43.2	OK
Y方向	12.7±0.1	12.7	OK
Lo端子板厚	0.64±0.04	0.66	OK

・カバー内寸、端子板厚共に規格を満足しており問題無し。



・各回路の導通確認(Lo回路は端子間を除く)を行ったところ、導通不良等の異常は見られなかった。



### 2) 分解確認結果

・Lo端子を切断し、この外観を確認したところ、カール側・舌片共に、端子全体が変色していることが確認できる。また、接触部及びその周辺に樹脂が付着していることも確認できる。



## 事実の把握(続き) (部品の確認結果・要因分析・生産品の品質状況)

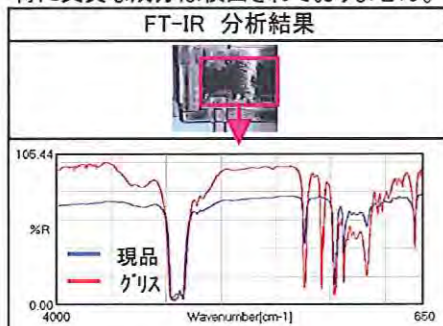
### 2. 分析確認結果

#### 1) FT-IR分析結果

分析箇所	分析結果
ケース側面付着物	SW使用グリス

#### 【結果】

特に異質な成分は検出されていません。

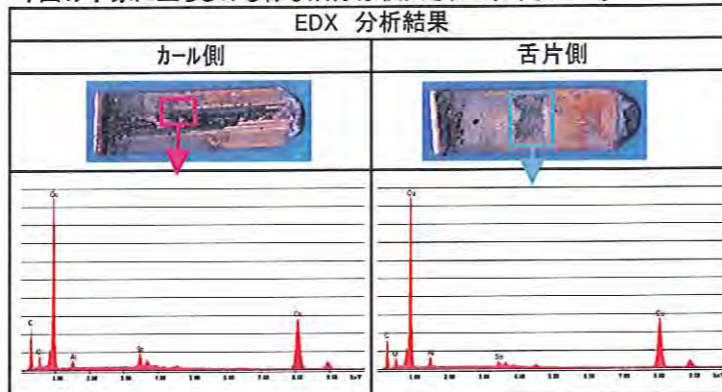


#### 2) EDX分析結果

分析箇所	分析結果
Lo端子	SW端子成分の銅(Cu), 錫(Sn)が検出された。 上記成分の他には、SW樹脂成分の炭素(C)、酸素(O)、アルミニウム(Al)が検出された。

#### 【結果】

今回の事象に至らしめる様な成分は検出されていません。

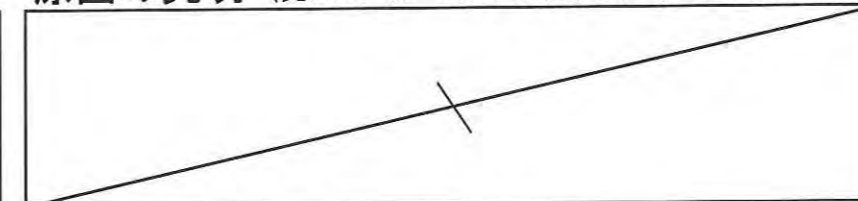


### 3. まとめ

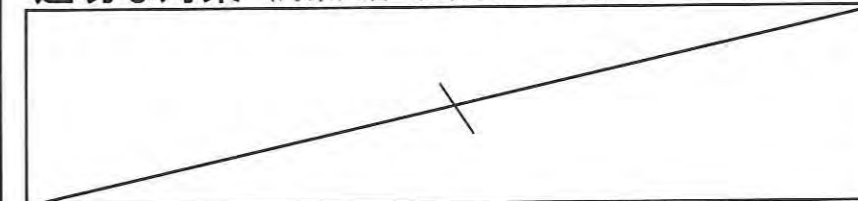
以上の確認結果より、返却されたSWの内部回路に異常な箇所は確認されませんでした。ただし、Lo端子の溶損が確認できましたが、本SWにおいて発熱・溶損に至る要因は確認されませんでした。なお、発熱に至った要因として、何らかの接触不良が考えられますがその原因については相手側端子の詳細確認が必要と判断致します。

ステップ	1	2	3	4	5
内容	発生				
	流出				

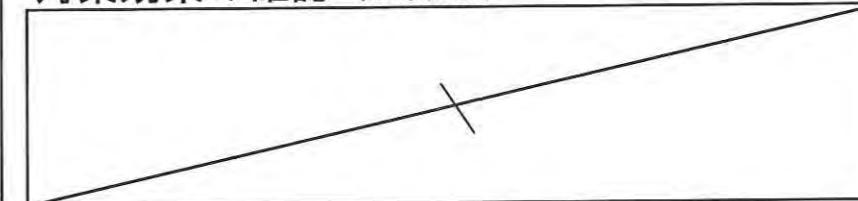
## 原因の究明 (発生のメカニズム・再現テスト・なぜ・なぜ分析)



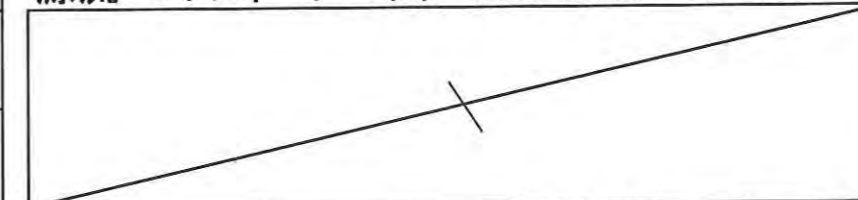
## 適切な対策 (対策内容・効果予測・PPA)



## 対策効果の確認 (効果実績)



## 源流へのフィードバック (体制・仕組みへの反映内容)



原本保存期限: 年 月

EA11-012

HONDA

4/20/2012


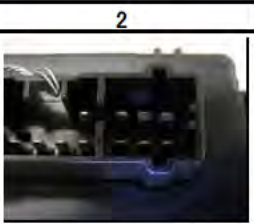





















Q13E

Doc2 Analysis result

MV20081201091352

# Analysis results (Comparison of US FIT and Japanese FIT)

## U.S. Market Parts confirmation results

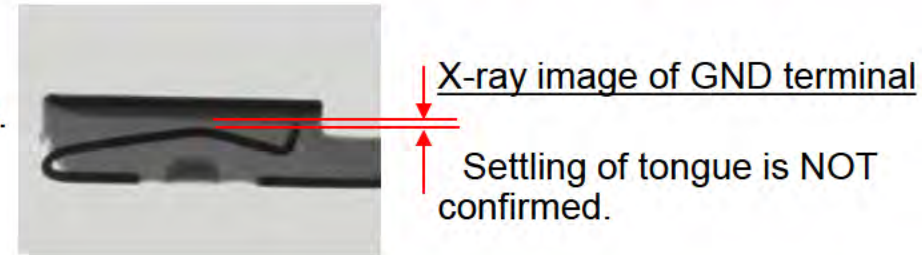
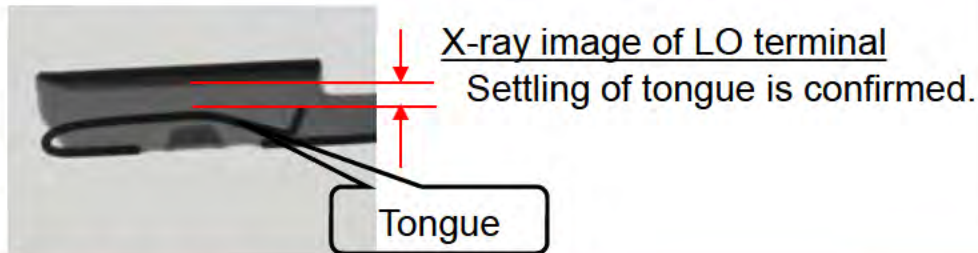
		1	2	3	4	5	JPN
Lighting switch	Coupler area						
	Curled side						
	Tongue side						
Instrument wire harness	Coupler		No part returned.		No part returned.	No part returned.	
	LO female terminal						
VIN No	JHMGD38647S	JHMGD38637S	JHMGD38647S	JHMGD38617S	JHMGD38607S	GD1-1141663	
Occ. date	2008/3/7	2008/10/4	2008/10/4	2008/10/30	2009/1/17	2005/10/27	
Prod. date	2007/2/8	2007/2/6	2007/2/5	2007/2/5	2006/12/4	2002/3/20	
Mileage	21676Mile (34682km)	35285Mile (56456km)	13659Mile (21855km)	31378Mile (50205km)	60558Mile (96893km)	36196mile (58380km)	

Heat discoloration is found on the returned lighting switches on LO circuit terminal and resin is melted at the root.

**It is similar to a symptom occurred on FIT in Japan market.**

# Analysis results (Analysis results on Japanese FIT)

## Analysis results by X-ray (Harness side)



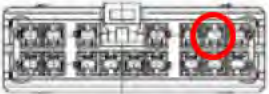



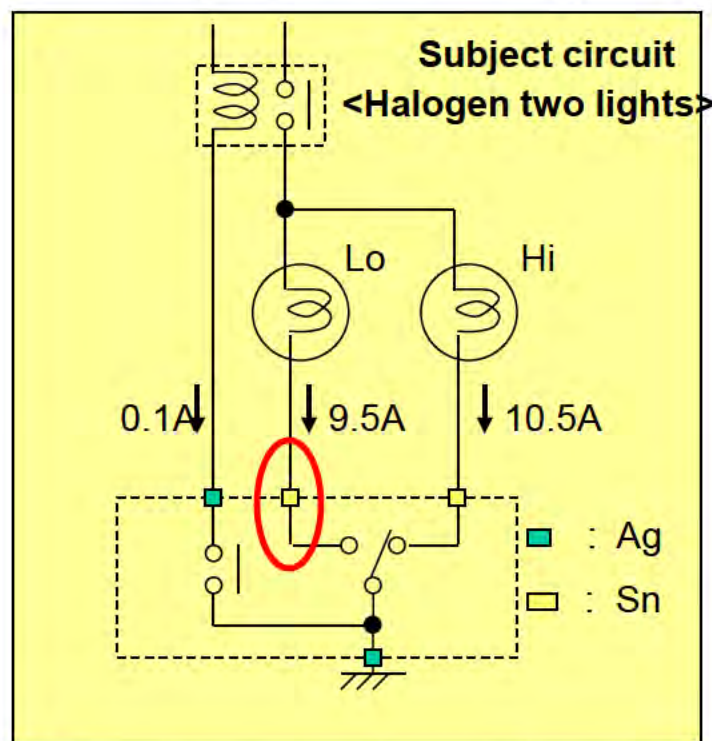
## EPMA Analysis results (SW side)

		Sn	Cu	C	O	Confirmation results
LO male terminal, on tongue side						C and O (resin?) is heavily adhered around contact area and heating over resin melting temperature can be considered to have occurred.
LO female terminal, on tongue side						

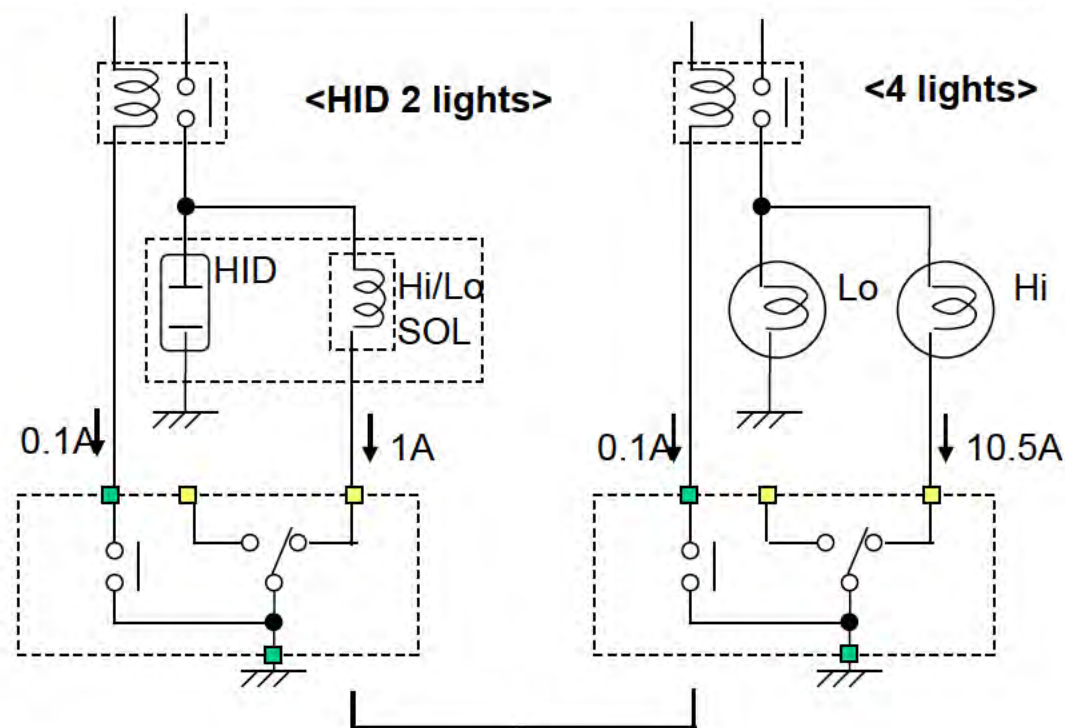
# Analysis results

## Subject circuit

	Connector shape	Terminal shape	Remarks
SW side		M terminal 	3 terminals including Hi and Lo are Sn plated spec. and others are Ag plated. Switch is produced by TOYO DENSO CO.,LTD.
Harness side		F terminal 	All is Sn plated Harness is manufactured by YAZAKI CORPORATION.



Low beam current passes through combination switch.



Low beam current does not pass through combination switch.

\*Current is reference value.



# Analysis results

## Recreation test: Minute sliding and wear test

### <Test specimen and test conditions>

- ① Contact load: 1N ~ 8N (Lower limit of mass prod. Control value) ~ 10N
- ② Plating type and current direction: Sn $\Rightarrow$ Cu, Sn $\Rightarrow$ Sn, Ag $\Rightarrow$ Sn,
- ③ Conductive current: 10A
- ④ Accelerated oxidation:

Before testing, leave test specimen that is not fitted at 100 deg C X 120hrs

Sliding cycle: Repeat sliding 10,000 times $\Rightarrow$ 24hrs stopped.

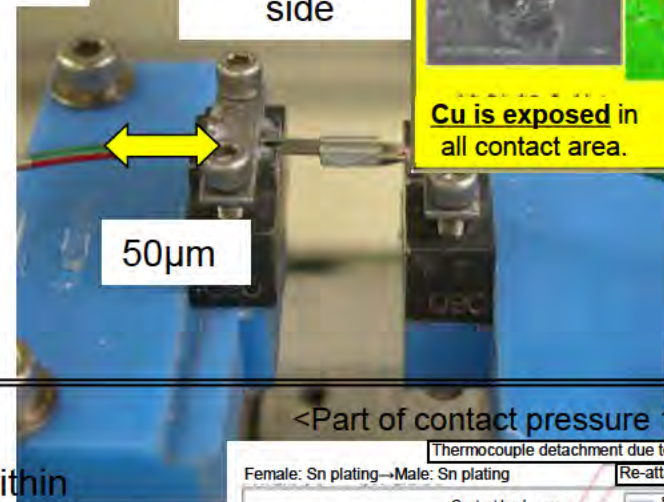
### <Summary of sliding test>

- ◆ No abnormalities confirmed when contact pressure is within mass production control value (8N or more).
- ◆ GND (Ag-Sn) spec. has advantage so Ag plating is a factor to improve toughness of GND terminal. (Cu-Sn, Sn-Sn: 6N, Ag-Sn: 4N)
- ◆ Increased resistance is caused by exposed base material, copper.
- ◆ If contact load is high, resistance is stabilized from "oxide film is torn" that is a known effect and from "terminal sliding is reduced and plating wear is unlikely to be advanced" from the results of this time.  **$\Rightarrow$ It revealed that reduced contact load causes plating to wear, leading to heating and melt.**

### <Tester appearance>

Male terminal on fixed side

Female terminal on movable side



50µm

### <Surface observation>

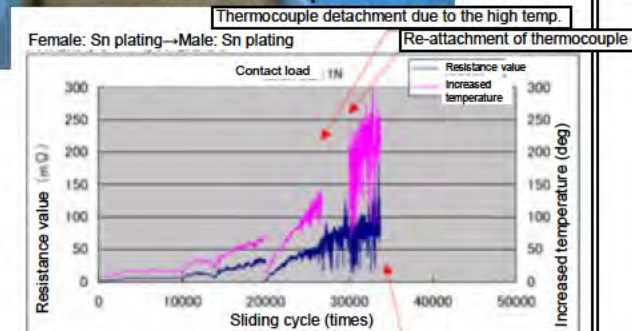
[When 10m ohm increased]



**Cu is exposed** in all contact area.

Green: Sn  
Red: Cu  
Blue: O

### <Part of contact pressure 1N>



# Analysis results

## Recreation test: Thermal humidity vibration durability test

<Test specimen and test conditions>

- Test voltage : 13.5V +/- 0.5V
- Temperature & humidity: 80deg C 90%RH
- Test load: Apply load that is equal to on car bulb load to DIM circuit.
- SW location : DIM Lo
- Vibrating direction : Up-and-down direction
- SW installation angle : Equal to on car
- Harness routing method: Equal to on car
- Vibrational frequency : 10 ~ 500Hz (sweep time 15 minutes)
- Acceleration : 19.6m/s<sup>2</sup>
- Vibration time : **70Hrs (After 10Hrs vibration, left it to sit for 24Hrs for one cycle. Conduct seven cycles.)**

<Origin of test sample>

- Combination SW

Lighting SW unit from current mass prod, that was left at 120 deg C for 129 hrs.

- **Harness whose LO terminal and GND terminal are replaced with that of NG (1.5N) terminal contact pressure.**

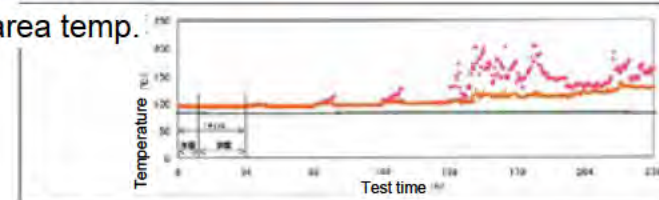


Melted terminal

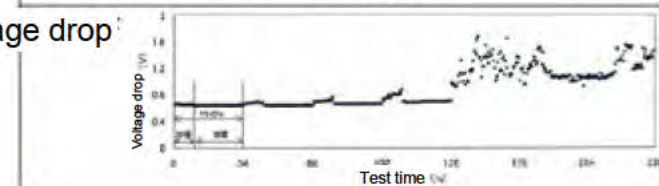
The same appearance to market failed part



Terminal area temp.



Voltage drop



<Summary of thermal humidity conduction test>

- ◆ No abnormalities confirmed at contact pressure within mass production control value.
- ◆ Lowered contact pressure to 1.5N and added a mode that promotes oxidation as acceleration factor then the symptom was recreated under equivalent condition to on car.
- ◆ Evaluated by replacing GND terminal only with that of NG contact pressure but a little voltage drop only could be confirmed and it did not lead to melt. (Test cycle was conducted twice as much as normal.)
- ◆ Evaluated with sample by replacing plating material then melt was recreated on Ag plated Lo terminal.

**⇒It was clarified that the symptom occurred on LO terminal only.**

# Analysis results (Confirmation by collecting healthy cars.)

Market return parts indicate that terminals on the upper stage couplers are worn heavily

Healthy vehicle FIT GD1-2000904, mileage 39,949kms

Wear amount measurement results on male terminal surface

LT RELAY	LO	(AUTO OFF)	Locked area		Hi		R TURN	
146 $\mu\text{m}$	207 $\mu\text{m}$	—			202 $\mu\text{m}$		188 $\mu\text{m}$	
	FOG +	FOG -	SMALL RELAY	GND	L TURN	RELAY OUT		
	82 $\mu\text{m}$	110 $\mu\text{m}$	95 $\mu\text{m}$	72 $\mu\text{m}$	104 $\mu\text{m}$	103 $\mu\text{m}$		

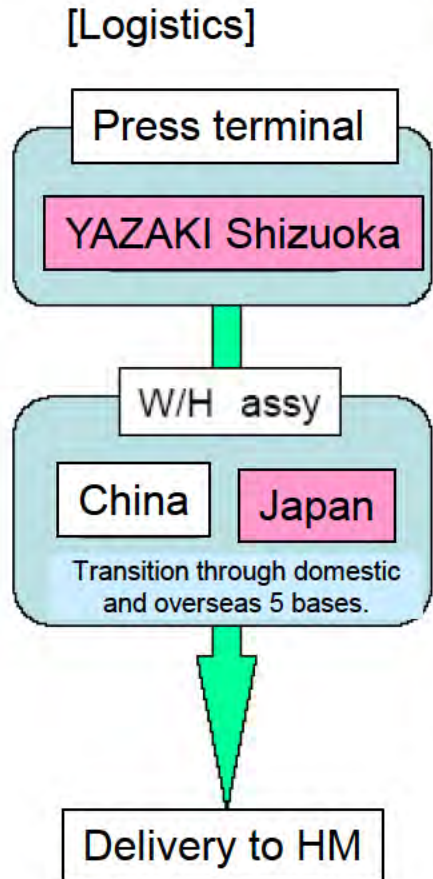


Small amount of wear = > Plating wear is not advanced and melt is unlikely to be led.

# Analysis results (Investigation into factor contact pressure to lower)

◇ Verified two bases mass production is going on in Japan for FIT

<Results> Implemented an improvement in W/H assy process.

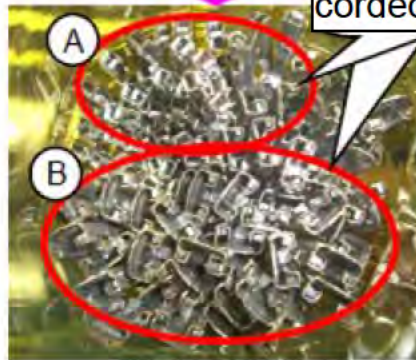


Verified factory	Concern items	Results
Shizuoka / Ohama factory	No concern found.	
Tochigi / Karasuyama factory	Corded condition of work in progress	See the following page.
Area contacted by conductive pin	Contact by conduction checker	-Pressing load is controlled at 0.2N or less.
	Conductive pin	OK
	<Section view>	
	<Correction after arrangement >	-Exclusive associate who was trained, carries out terminal removal.
Insert for terminal removal jig	Contact by terminal removal jig	-Terminal deformation is checked by jig after process.
	Terminal removal jig	OK
	<Section view>	

# Analysis results (Investigation into factor contact pressure to lower)

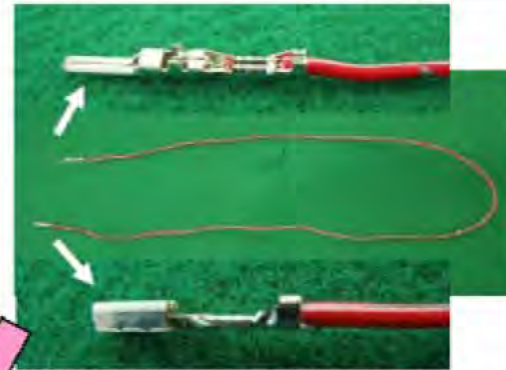
◆ Corded condition of work in process has a factor causing terminal deformation and improvement was instructed.

Current process condition



A and B are corded together.

Work in process of FIT Lo circuit



Male terminal gets in female terminal and tongue may be deformed.

<Improvement instruction>

Terminals should be corded separately without fail.



# Analysis results

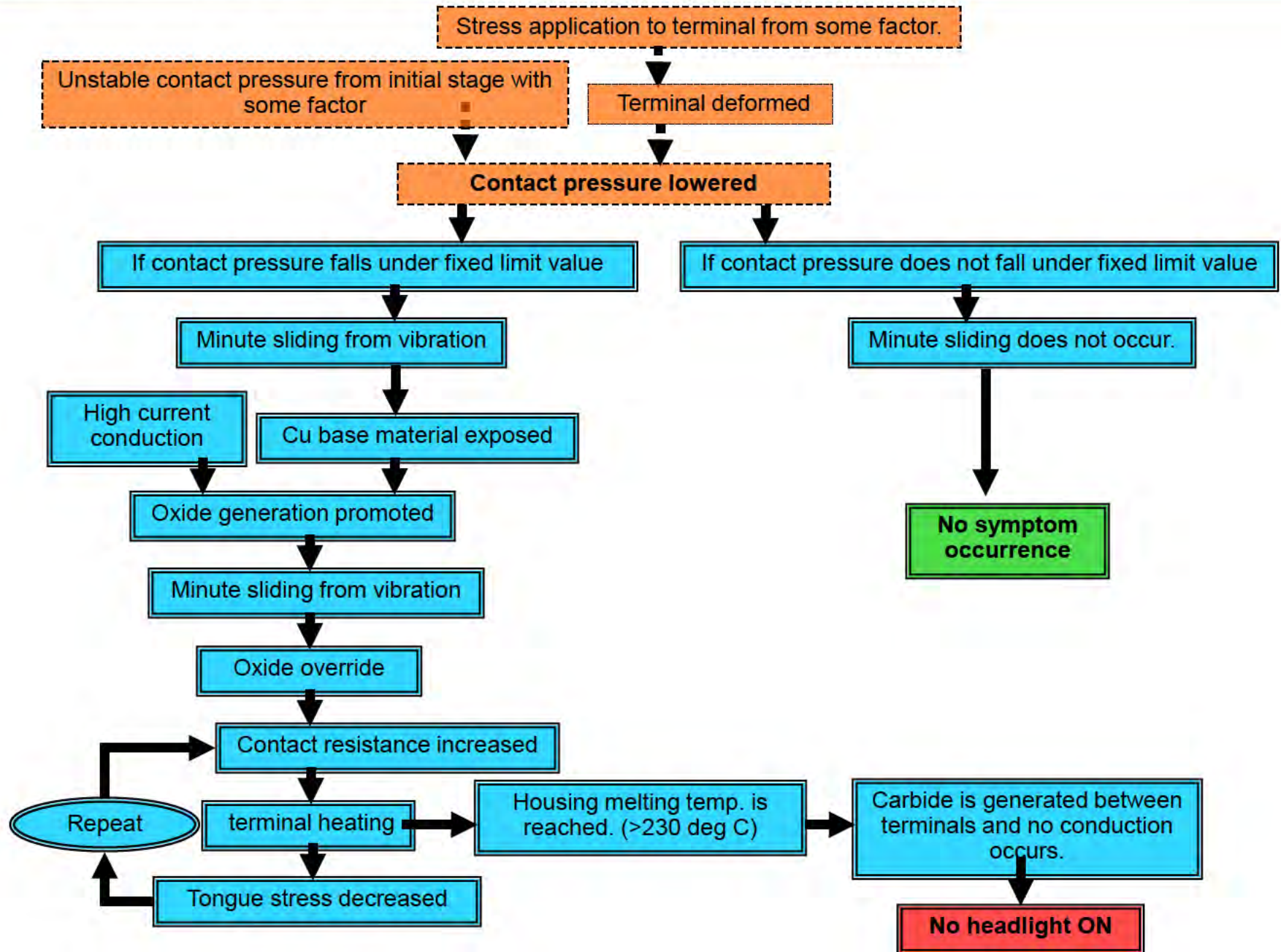
---

## Summary

**Lowered contact pressure on terminal is considered to be the main factor but failure leading to the factor is not found in harness and vehicle manufacturing processes.**

**The reason why it occurs on Lo terminal only instead of Hi or GND terminals, is considered that Lo terminal is in a location minute sliding is likely to occur and use frequency of low beam is higher than low beam.**

# Presumed occurrence mechanism



# Claimed symptom

No	Occ. region	Type (Model)	VIN	Occ date	Registration date	Production date	Mileage (km)	Failed situation
1	USA	GD3 (FIT)	JHMGD38647 S [REDACTED]	2008/3/7	2007/4/30	2007/2/8	35,200	Claim of no headlight low beam ON
2	USA	GD3 (FIT)	JHMGD38617 S [REDACTED]	2008/10/30	2007/3/22	2007/2/5	31,378	No low beam ON.
3	USA	GD3 (FIT)	JHMGD38647 S [REDACTED]	2008/10/4	2007/4/21	2007/2/5	13,659	No low beam ON.
4	USA	GD3 (FIT)	JHMGD38637 S [REDACTED]	2008/10/4	2007/3/29	2007/2/6	35,285	No low beam ON.
5	USA	GD3 (FIT)	JHMGD38607 S [REDACTED]	2009/1/12	2007/1/17	2006/12/4	96,893	No low beam ON.

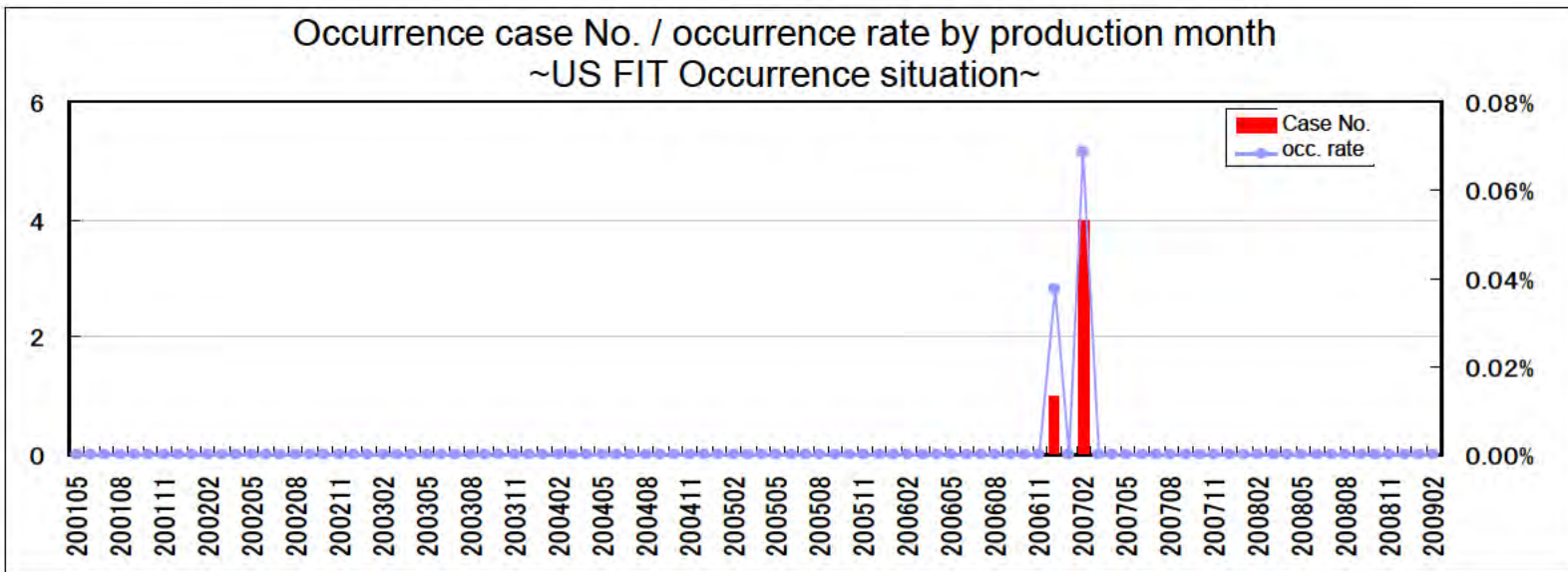
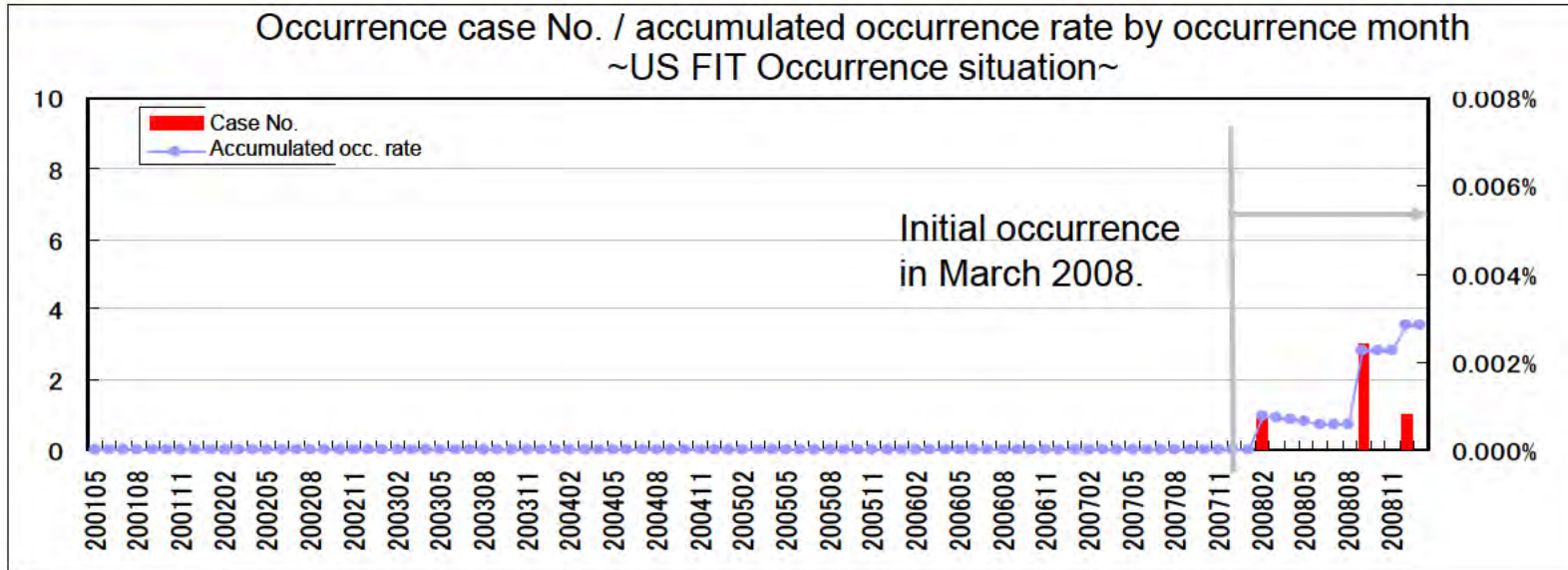
Number of confirmed parts: 5 cases

Affected units: 177,517 units

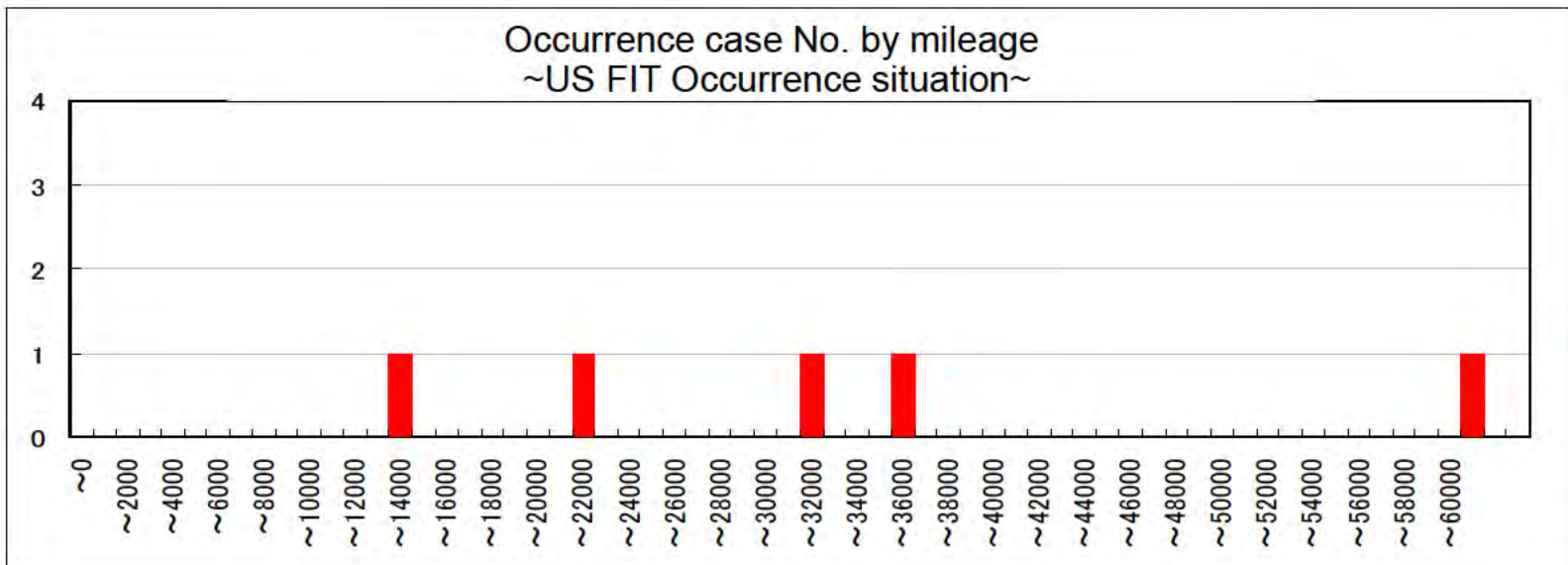
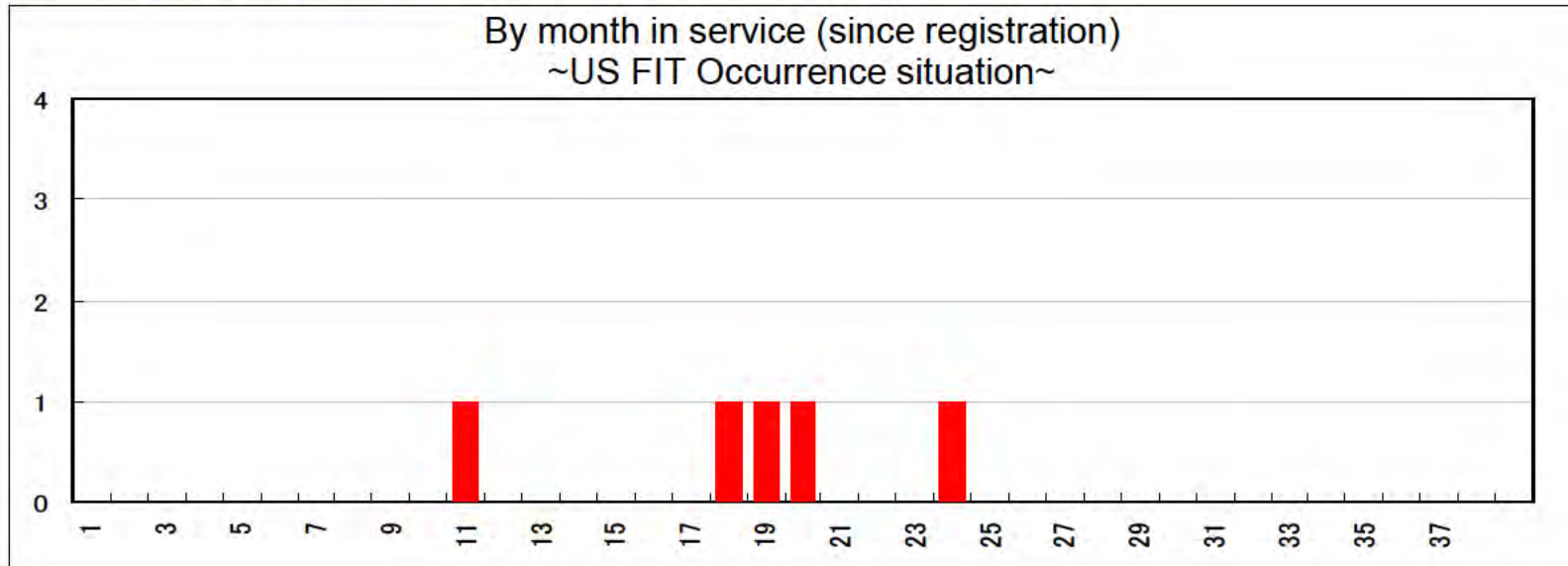
Occurrence rate: 0.0029%



# Occurrence situation



# Occurrence situation



US市場 現品確認結果

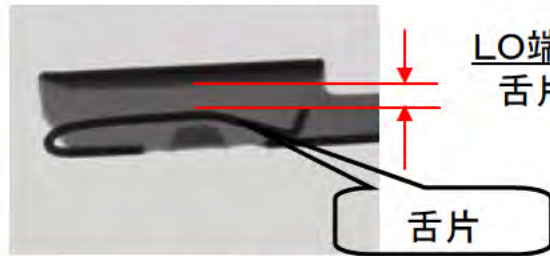
		1	2	3	4	5	JPN
ライティングスイッチ	カプラ部						
	カール側						
	舌片側						
インストルメントクォンヤーマーハース	カプラ		返却なし		返却なし	返却なし	
	LOメス端子						
VIN No	JHMGD38647S	JHMGD38637S	JHMGD38647S	JHMGD38617S	JHMGD38607S	GD1-1141663	
発生日	2008/3/7	2008/10/4	2008/10/4	2008/10/30	2009/1/17	2005/10/27	
製造日	2007/2/8	2007/2/6	2007/2/5	2007/2/5	2006/12/4	2002/3/20	
走行距離	21676Mile (34682km)	35285Mile (56456km)	13659Mile (21855km)	31378Mile (50205km)	60558Mile (96893km)	36196mile (58380km)	

返却現品のライティングスイッチLO回路端子が熱変色 根元樹脂が溶損している

**日本市場FITで発生した事象と同様である**

# 解析結果 (日本 FIT 解析結果)

## X線解析結果(ハーネス側)



LO端子 X線画像  
舌片がへたっていることが分る。



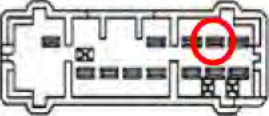

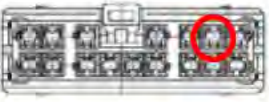

GND端子 X線画像  
舌片がへたっていない。

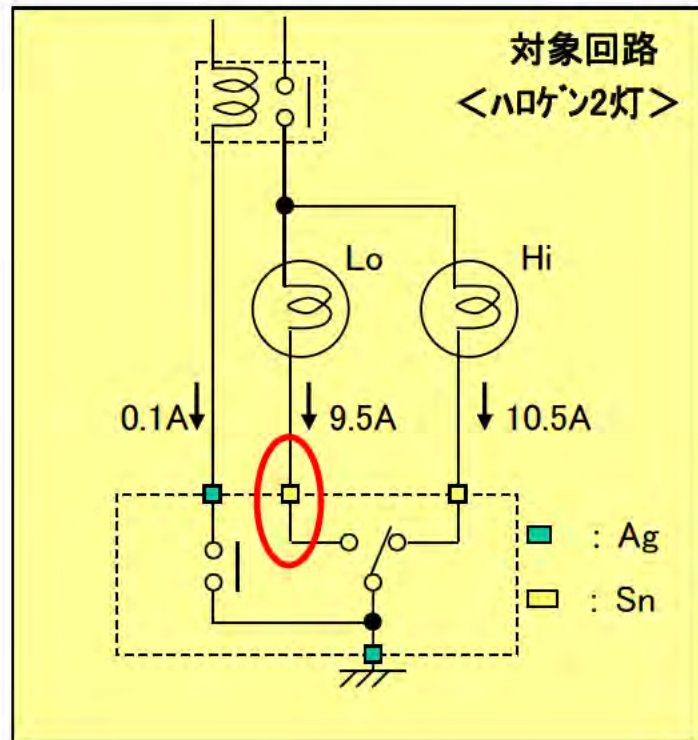
## EPMA解析結果(SW側)

		Sn	Cu	C	O	確認結果
LO端子 オス、舌片側						接触部近傍にC、O (樹脂?)の付着が 激しく、樹脂熔融 温度以上に発熱 したと考えられる。
LO端子 メス、舌片側						

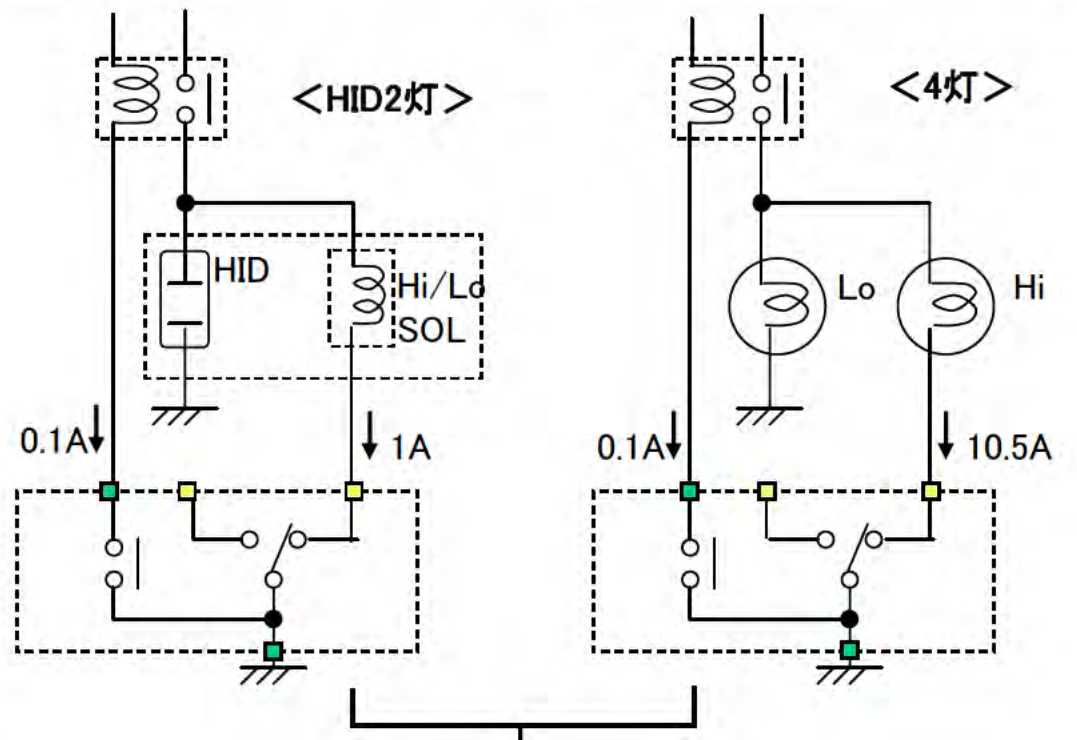
# 解析結果

## 対象回路

	コネクタ形状	端子形状	備考
SW側		M端子 	Hi、Lo含め 3端子がSnメッキ仕様、その他はAgメッキ SW生産：東洋電装(株)
ハーネス側		F端子 	全てSnメッキ ハーネス生産：矢崎総業(株)



Loビームの電流がコンビSWを通過



LoビームはコンビSWを通過しない \*電流は参考値

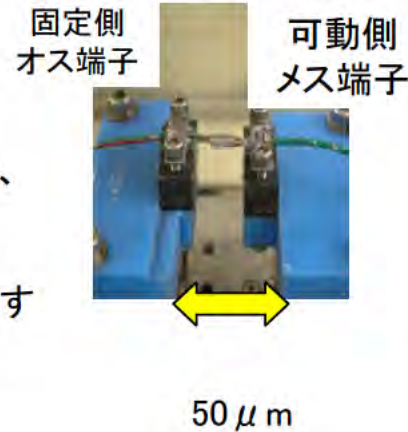
# 解析結果

## 再現試験：微摺動磨耗テスト

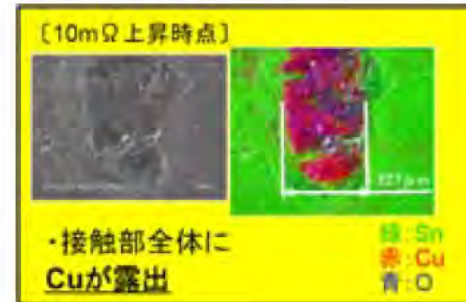
### <試料及び試験条件>

- ①接触荷重：1N ~ 8N(量産管理値下限)~10N
- ②めっき種類と電流の方向：Sn⇒Cu、Sn⇒Sn、Ag⇒Sn、
- ③通電電流量：10A
- ④酸化促進：試験前 未嵌合で100°C×120h放置  
摺動サイクル 摺動1万回⇒24h停止を繰り返す

### <試験機概観>



### <表面観察>

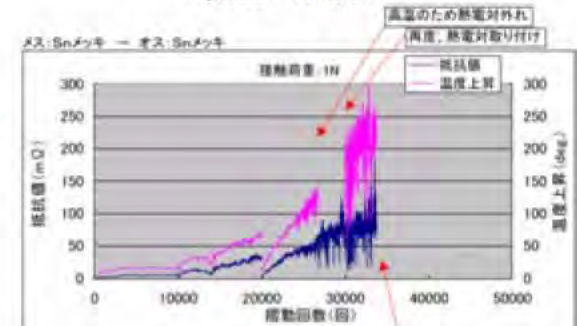


### <摺動試験 まとめ>

- ◆ 接触圧 量産管理値内(8N以上)では異常が認められない。
- ◆ GND(Ag-Sn)の仕様に優位性が見られることから、AgメッキがGND端子のタフネスアップの一つの要因である。(Cu-Sn、Sn-Sn:6N、Ag-Sn:4N)
- ◆ 抵抗値上昇の原因は、母材である銅の露出である。
- ◆ 接触荷重が高いと  
従来より確認されていた効果「酸化膜を破る」ことと  
今回の結果より「端子の摺動が抑えられ、メッキの磨耗が進みにくい」ことで、抵抗値は安定する。

⇒接触荷重の低下がメッキの磨耗を招き、発熱・溶損に至ることがわかった。

### <接圧 1N品>



# 解析結果

## 再現試験：高温高湿振動耐久テスト

### <試料及び試験条件>

- ・試験電圧 : 13.5V±0.5V
- ・温度、湿度 : 80°C 90%RH
- ・試験負荷 : DIM回路に実機バルブ負荷接続
- ・SW位置 : DIM Lo
- ・振動方向 : 上下方向
- ・SW取り付け角度 : 実車相当
- ・ハーネス組み付け方法 : 実車相当
- ・振動周波数 : 10~500Hz(スイープ時間15Min)
- ・加速度 : 19.6m/s<sup>2</sup>
- ・振動時間 : 70Hr(10Hr加振後、24Hr放置を1サイクルとし7サイクル実施)

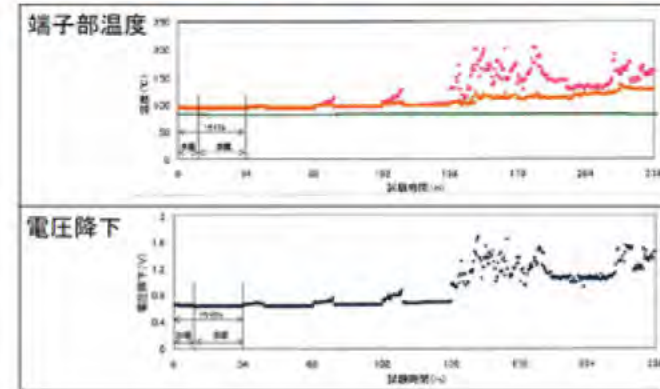
### <試験サンプル素性>

- ・コンビSW  
現行量産品に対し、SW単体にて120°C雰囲気中に129Hr放置したもの。
- ・ハーネス  
端子接圧NG品(1.5N)をLo端子とGND端子に入れたもの



### 溶損端子

市場不具合品と同じ顔つき



### <高温高湿通電試験 まとめ>

- ◆接触圧、量産管理値内では異常が認められない。
- ◆接触圧1.5Nまで落とし、酸化を促進させるモードを加速要因として入れると、実車振動相当で事象再現した。
- ◆GND端子のみ接圧NG品を組み込み評価したが、若干の電圧降下が確認出来たのみで、溶損には至らなかった。(通常の倍のサイクル数実施)
- ◆メッキ材質を入れ替えたサンプルで評価したが、AgメッキのLo端子で溶損が再現。

⇒Lo端子にのみ発生する事象であるということが明確になった。

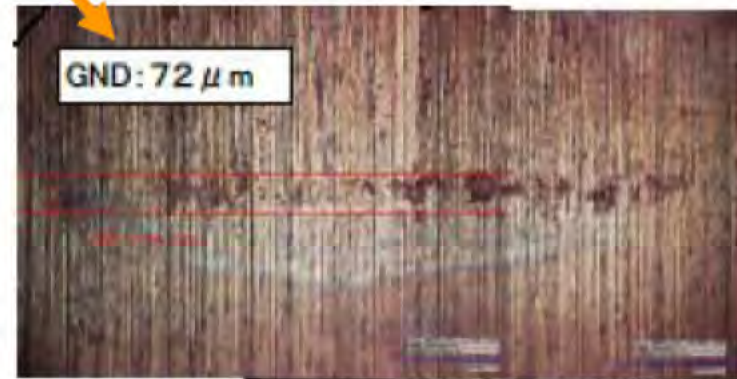
# 解析結果

(健康車回収品確認)

市場回収品を見ると、カプラー上段にL/Oされる端子の摩耗量が大きい傾向がある。

Fit 健康車 GD1-2000904 39,949km走行 オス端子表面摩耗量測定結果

LT RELAY	LO	(AUTO OFF)	ロック部		Hi		R TURN	
146 $\mu\text{m}$	207 $\mu\text{m}$	-			202 $\mu\text{m}$		188 $\mu\text{m}$	
	FOG +	FOG -	SMALL RELAY	GND	L TURN	RELAY OUT		
	82 $\mu\text{m}$	110 $\mu\text{m}$	95 $\mu\text{m}$	72 $\mu\text{m}$	104 $\mu\text{m}$	103 $\mu\text{m}$		



摩耗量が小さい⇒メッキの摩耗が進まない為、溶損に至りにくい。

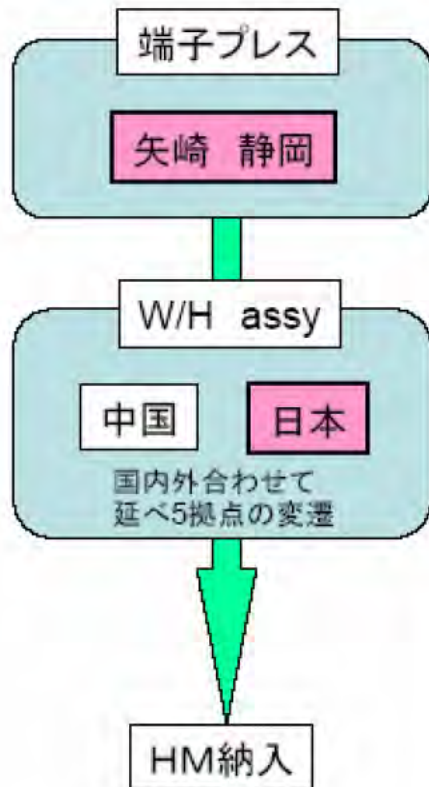



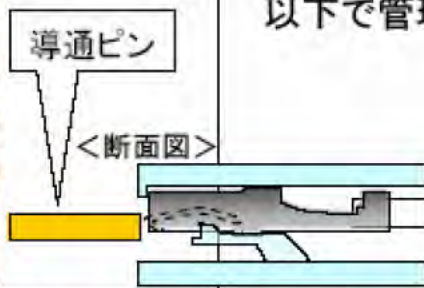


# 解析結果 (接圧低下要因調査)

## ◇ FIT向けで量産中の国内2拠点の検証を実施

<結果> W/H assy工程にて一箇所の改善を実施

[ 物流 ]

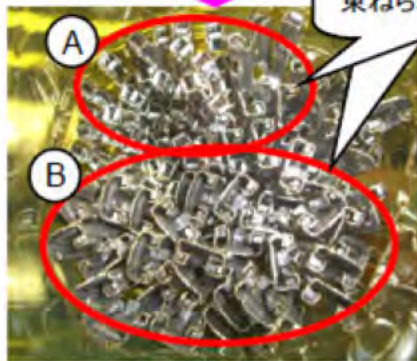


検証工場名	懸案項目	結果
静岡/大浜工場	特に発見されず	
栃木/烏山工場	切圧品の結束状態	次ページ参照
	導通チェッカーの接触	<ul style="list-style-type: none"> <li>・押し当てる荷重は、0.2N以下で管理されている。</li> </ul>
	 導通ピン 端子接触部  <断面図>	OK
	<後配列修正> 端子抜きジグの接触  端子抜きジグ 挿入口  <断面図>	<ul style="list-style-type: none"> <li>・教育を受けた専任の作業者が端子抜き作業を実施している。</li> <li>・作業後の端子変形をジグを用い確認している。</li> </ul>
		OK

# 解析結果 (接圧低下要因調査)

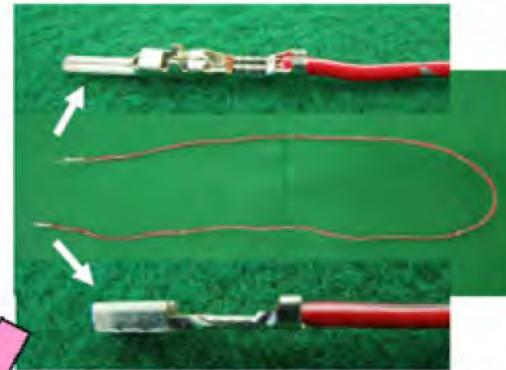
## ◆ 切圧品の結束状態に端子変形を起こす要因があり、改善を指示

### 工程の現状



AとBがまとまって束ねられている。

### FIT Lo回路の切圧品



オス端子がメス端子に入り込み舌片を変形させる恐れがある

<改善指示>  
端子は、必ず別々に束ねること



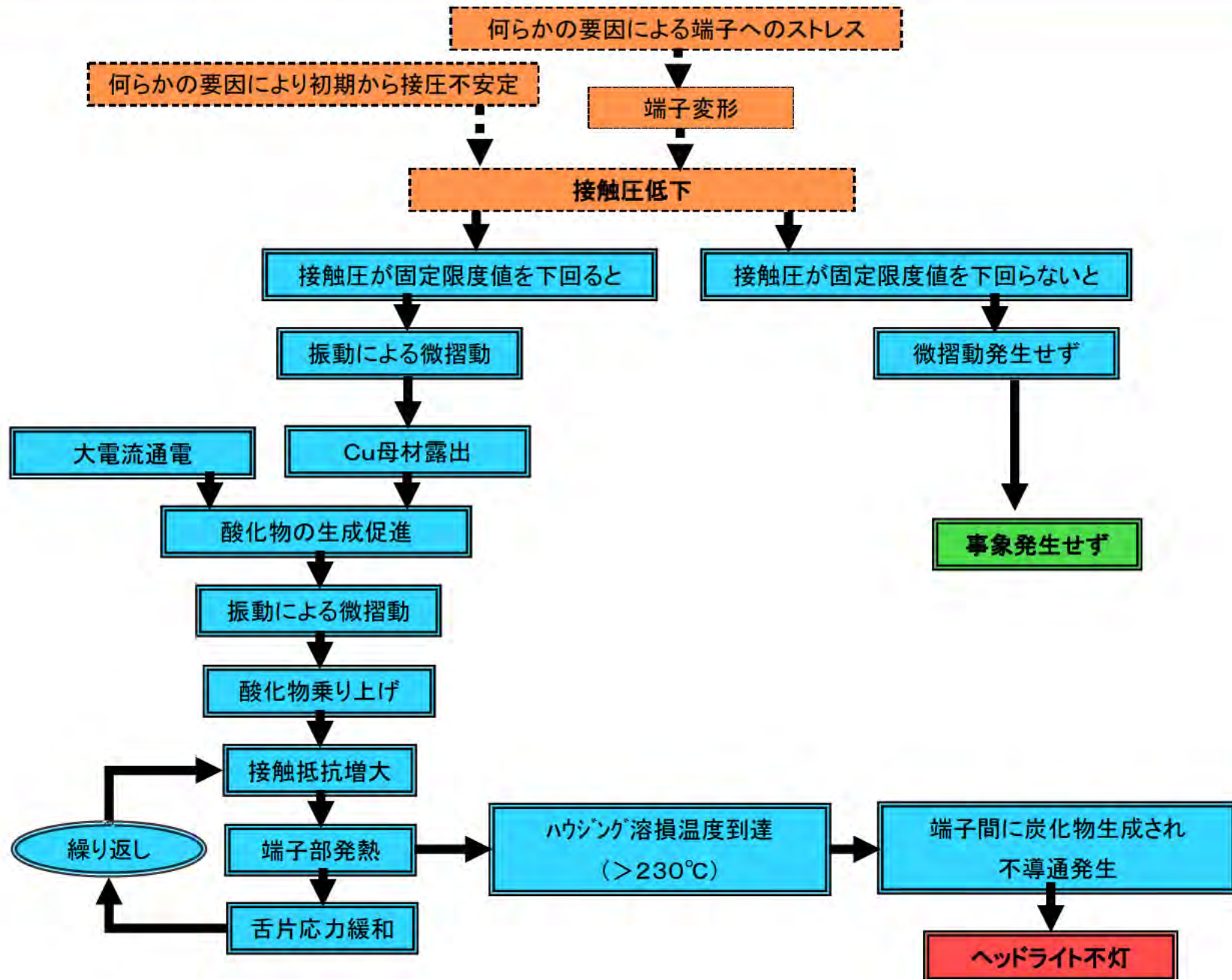
# 解析結果

## まとめ

端子の接圧低下が主要因と考えられるがハーネス、車輛製造工程では要因に繋がる不具合は見つかっていない。

Hi端子やGND端子ではなくLo端子にだけ発生するのはLo端子が微摺動しやすい位置にありHiビームよりLoビームの使用頻度が高いためと考えられる。

## 推定発生メカニズム



# 訴え事象

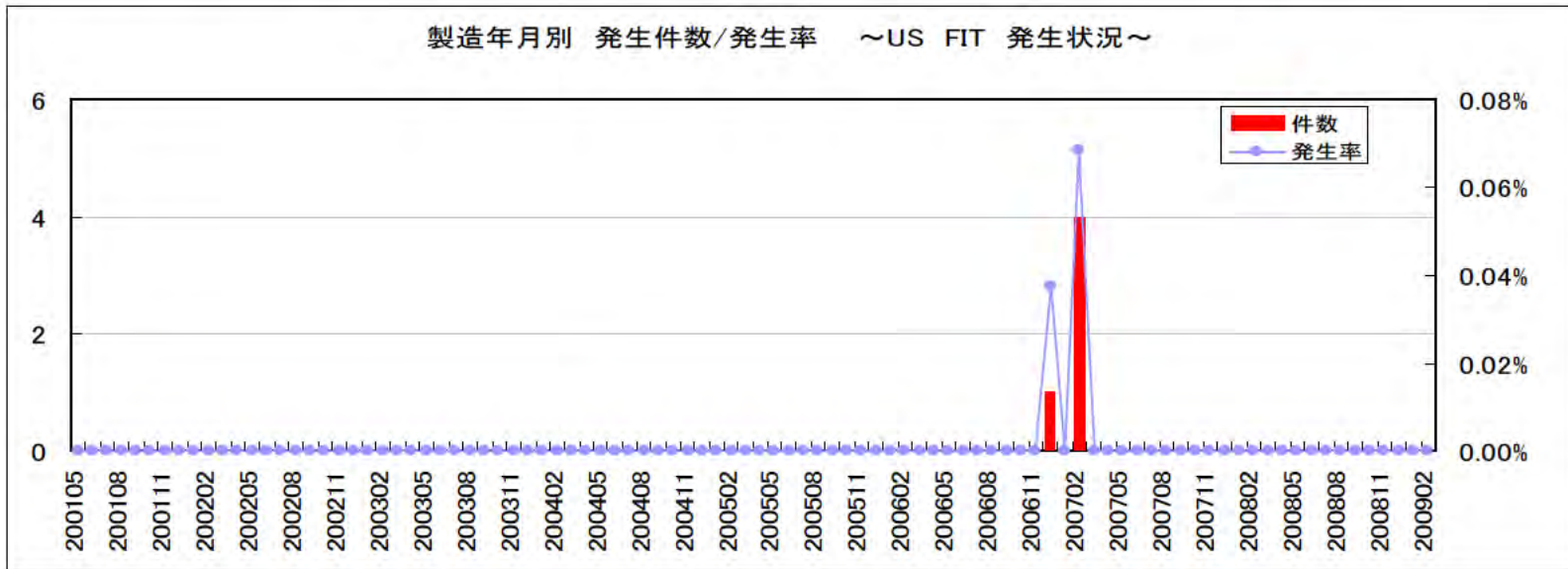
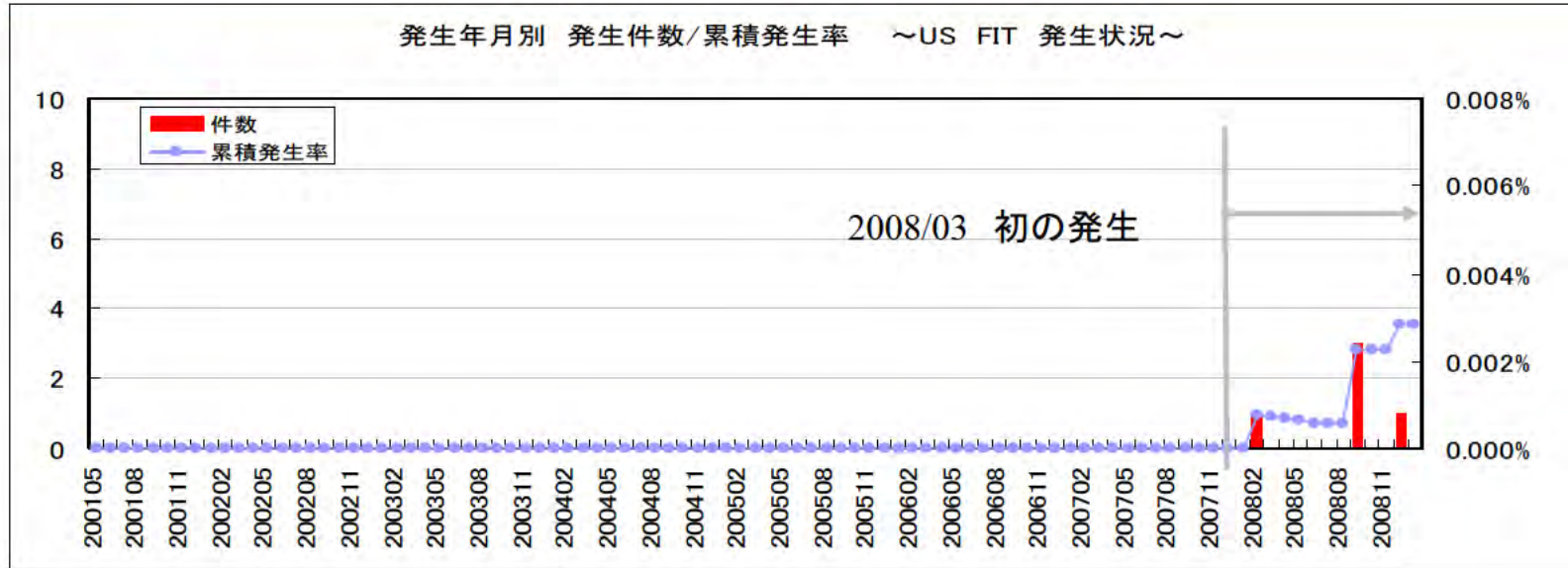
N o.	発生 地区	型式 (通称 名)	不具合 車体番号	発生 年月日	登録 年月日	生産 年月日	走行距 離 (km)	不具合状況
1	USA	GD3 (FIT)	JHMGD38647 S■■■■	2008/3/7	2007/4/30	2007/2/8	35,200	ヘッドライトのロービームが 作動しないとの訴え
2	USA	GD3 (FIT)	JHMGD38617 S■■■■	2008/10/30	2007/3/22	2007/2/5	31,378	ロービームが作動しない
3	USA	GD3 (FIT)	JHMGD38647 S■■■■	2008/10/4	2007/4/21	2007/2/5	13,659	ロービームが作動しない
4	USA	GD3 (FIT)	JHMGD38637 S■■■■	2008/10/4	2007/3/29	2007/2/6	35,285	ロービームが作動しない
5	USA	GD3 (FIT)	JHMGD38607 S■■■■	2009/1/12	2007/1/17	2006/12/4	96,893	ロービームが作動しない

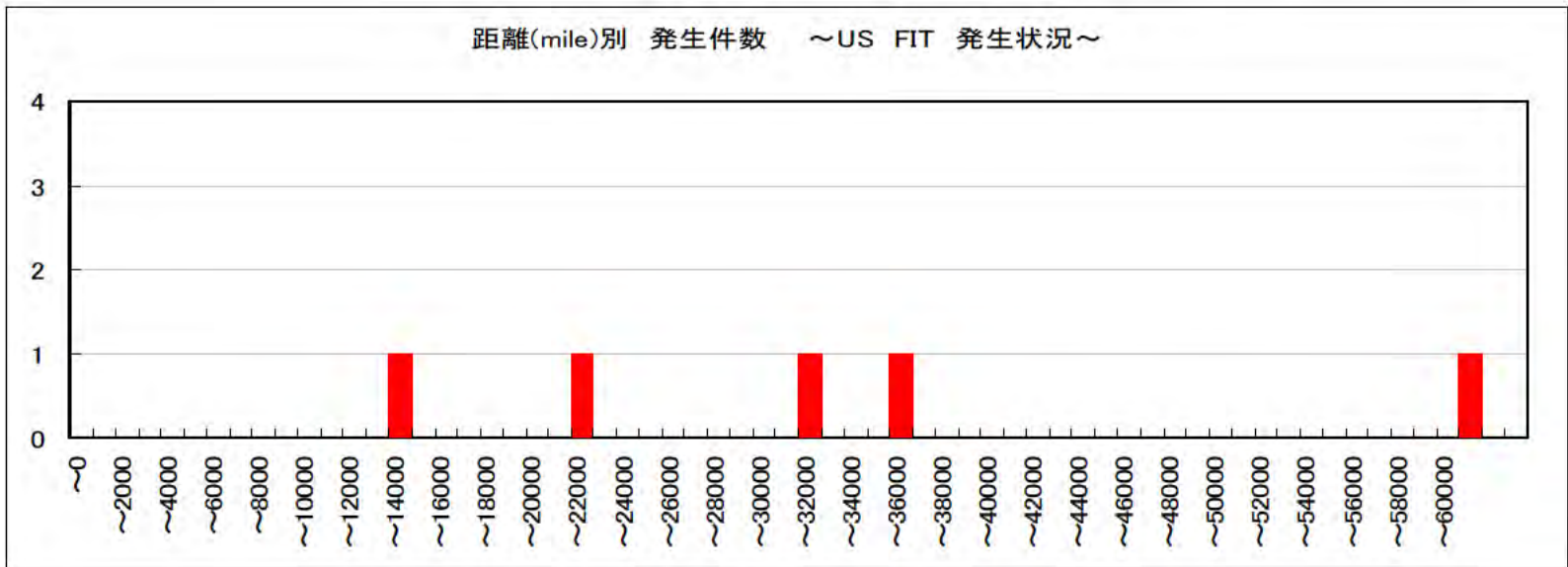
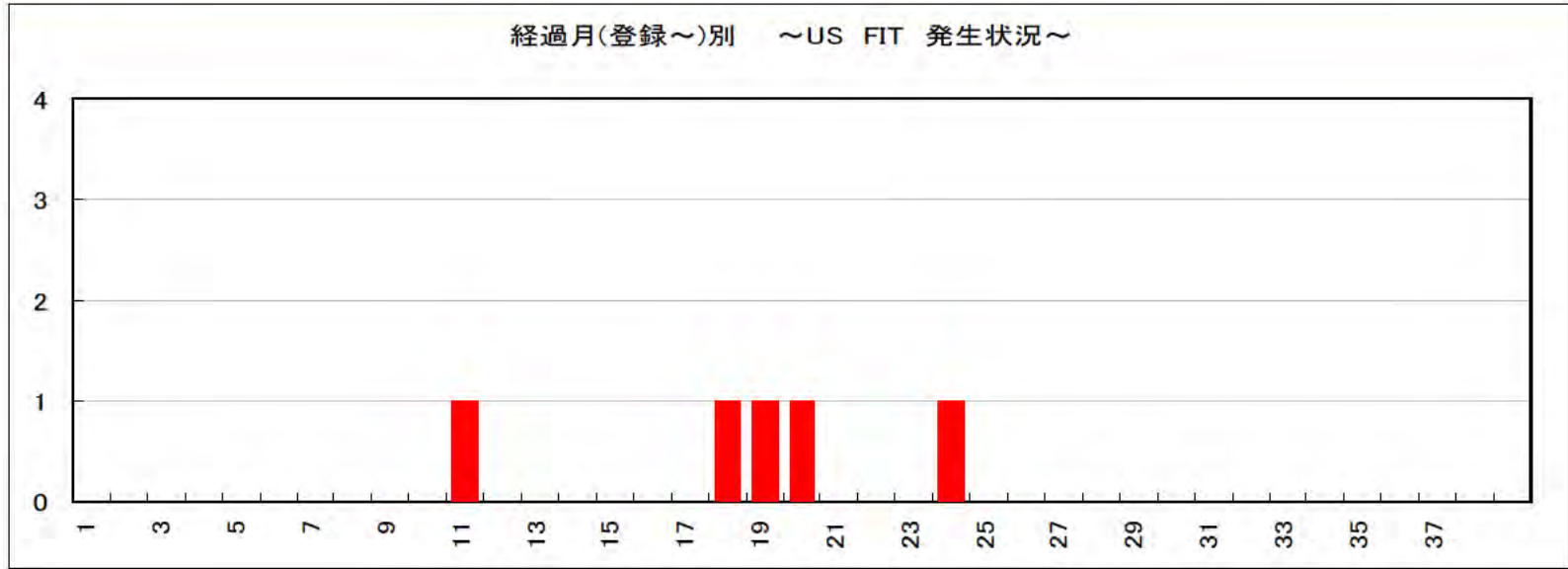
現品確認件数 : 5件

対象台数 : 177,517台

発生率 : 0.0029%

# 発生状況





EA11-012

HONDA

4/20/2012

Q13E

Doc2 QIS MV20081201091352



EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
Q 4Rin Hinkai Godo Tadayoshi Fujio
2008/11/24
↓
INFORMATION INVESTIGATION
Q 4Rin Hinkai Godo Teiichi Harada
2008/12/01
↓
INVESTIGATION AND ANALYSIS
Q 4Rin Hinkai Godo Masayuki Kawamura
2008/12/01
↓
COUNTERMEASURE REQUEST
Q 4Rin Hinkai Godo Masayuki Kawamura
2008/12/02
↓
INTERMEDIATE REPLY
↓
COUNTERMEASURE REPLY
↓
COUNTERMEASURE ISSUED
↓
COUNTERMEASURE APPLICATION
↓
COMPLETED
Q 4Rin Hinkai Godo Masayuki Kawamura
2009/03/09

COUNTERMEASURE REQUEST
ADDRESS
RECEPTION
RECEPTION

RANK
A
DATE:
APPROVAL
CHECK
CREATOR

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
GD3	Headlight Switch Inop (terminal #6) <QAH2946>	MV20081201091352
07/FIT/JAZ		
OCCURRENCE DESCRIPTION	Low Beams Inop	

REPLY	REPLY TO	Q 4Rin Hinkai Godo	VIA	BY	Dec 12
-------	----------	--------------------	-----	----	--------

INVESTIGATION AND ANALYSIS RESULTS

Country of occurrence: USA  
Returned part: lighting SW from 3 units  
VIN No:  
JHMGD38617S 31378 Km  
JHMGD38647S 13659 Km  
JHMGD38637S 35285 Km

Additional returned parts  
- Lighting switch from 1 unit  
JHMGD38607S 60558 mile (37546km)

Returned parts initial analysis results  
- LO circuit terminal is discolored by heat.  
- Resin at the root of LO circuit terminal is melted.

Returned parts detailed analysis results  
1) Exterior confirmation results  
- There are no abnormalities such as flaws or dents on the exterior of lighting SW.  
- Adhesion of grease which is used for the SW was observed on the case surface.  
- Discoloration was confirmed inside the coupler and LO circuit terminal.  
- Melted resin is adhered inside the coupler and LO circuit terminal.  
- From the terminal exterior, the returned part is Sn plating C/M part.  
2) Disassembly confirmation results  
- All over the terminals on both sides are discolored.  
- Resin is adhered on the contact area and around it.  
3) Analysis results  
- No unusual elements were detected.

\* Since the discoloration of LO circuit terminal contact area is severe, it is assumed that the heat was generated from the terminal contact area. However the cause for the heat generation could not be identified.

Occurrence situation  
- There have been 5 occurrences including this case, 29ppm (as of 5-Mar-2009)

CAUSE ANALYSIS	It was confirmed that this failure would not occur if the terminal contact pressure is within the control values. We assume that some had decreased terminal contact pressure due to some factors, however we could not identify the root cause even though we carried out factor investigation on the production and spec.
	Root cause is unknown. No Countermeasures will be applied.
COUNTERMEASURE	
TREATMENT FOR STOCK & SOLD UNITS & PARTS	The occurrence rate is low and there is not a increasing trend. No treatment will be taken.
	COUNTERMEASURE APPLICATION INFORMATION
COUNTERMEASURE EFFECTIVENESS	
FEED BACK TO THE SOURCE	

QUALITY IMPROVEMENT SHEET [ Q I S ]					
ISSUED BY					
Q 4Rin Hinkai Godo					
OCCURRENCE MARKET					
REPORT #	AHOS2008112401-00				
FRAME #	JHMGD38617S				
ENGINE #					
TRANSMISSION #					
TRANSMISSION CATEGORY	5AT				
MILEAGE OR HOURS	31378	Km			
REGISTRATION DATE	2007/03/22				
OCCURRENCE DATE	2008/10/30				
PRODUCT DATE	2007/02/05				
SERVICE PART #					
MAIN CAUSAL PART #	35255-S5K-F12				
CAUSAL PART SYMPTOM CODE AND DESCRIPTION					
MODEL CODE					
CAUSE CATEGORY	Unknown				
RES. DEPT.	DEPARTMENT				
	SUPPLIER	TOYO DENSO CO.LTD.	CODE	4533	
COUNTERMEASURE CATEGORY	No Action				
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	4105	no action			
OCCURRENCE FORECAST					
COUNTERMEASURE PART AVAILABILITY	No				
REVISED ITEM	DRAWING		OPERATION STANDARD		

RECEPTION DATE
/

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR

1	2009/03/10	FINISH	Junichi Kam	Masaki Amaki	Masayuki Ka	
0	2008/12/01	NEW	Junichi Miy		Teiichi Harada	
ISSUE	DATE	VERSION	APPROVAL	CHECK	CHECK	CREATOR

**INVESTIGATION RESULTS**

\* Detailed analysis will be requested to the supplier (TOYO DENSO).

イベント
担当部門氏名
完了年月日
↓
受付
Q四輪品改合同
藤尾 忠義
2008/11/24
↓
情報調査
Q四輪品改合同
原田 倭一
2008/12/01
↓
調査解析
Q四輪品改合同
川村 将之
2008/12/01
↓
対策要求
Q四輪品改合同
川村 将之
2008/12/02
↓
中間回答
↓
対策回答
↓
出図
↓
対策実施
↓
完了
Q四輪品改合同
川村 将之
2009/03/09

対策要求	宛先	經由殿	受付	／						
		經由殿	受付	／						
	重要度	A			年	月	日	承認	確認	作成
	型式/YM・通称名	件名			推進 No.					
	GD3	ロービーム作動せず<QAH2946> (ライティングSW)			MV20081201091352					
	07/FIT/JAZ									
	発生状況	ロービームが作動しない								

回答 12月12日までに 經由 Q四輪品改合同 宛に回答願います。

調査・解析結果	○発生国 ・U.S.A.
	○返却現品 ・ライティングスイッチ 3台分 VIN No JHMGD38617S 31378 Km JHMGD38647S 13659 Km JHMGD38637S 35285 Km
追加現品 ・ライティングスイッチ 1台分 VIN No JHMGD38607S <b>03T047</b> 60558 mile (37546km)	
○返却現品一次解析結果	
○現品詳細解析結果 ①外観確認結果 ・ライティングSW外観に傷、打痕の異常はなし ・ケースの表面にSWに使用のグリス油分の付着が観られる ・カブラ内部、L0回路端子に変色が観られる ・カブラ内部、L0回路端子周辺に溶融した樹脂が付着している ・端子の外観より現品はSn (錫) メッキ対策品である ②分解確認結果 ・カール側、舌片側共に端子全体が変色している ・接触部及び周辺に樹脂が付着している ③分析結果 ・特異な元素の検出はなし	
※L0回路端子接触部の変色が激しいことから端子接触部より発熱したと推測されるが、発熱に至った原因は特定できず。	
○発生状況 ・同種不具合発生は本件を含め 5件 29ppm (2009/03/05 現在)	

原因	○端子接圧管理値以内であれば、本不具合の発生はないことを確認した。何らかの要因により、端子接圧が低下されたものがあったと推測されるが、製造、仕様上の要因調査を行なったが、真の原因の特定には至らず。																																																																																								
	○真の原因が不明のため対策せず。																																																																																								
対策	○発生率が低く、発生状況に増加の傾向がみられないことより処置せず。																																																																																								
	<table border="1"> <thead> <tr> <th colspan="7">対策適用号機</th> </tr> <tr> <th>年月日</th> <th>型式 (通称名)</th> <th>年式</th> <th>仕向地</th> <th>区分</th> <th colspan="2">号機</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>						対策適用号機							年月日	型式 (通称名)	年式	仕向地	区分	号機																																																																						
対策適用号機																																																																																									
年月日	型式 (通称名)	年式	仕向地	区分	号機																																																																																				
既販車及び在庫品の処置																																																																																									
対策効果確認																																																																																									
源流へのフィードバック																																																																																									

市場品質情報 [ Q I S ]					
発行部門					
Q四輪品改合同					
発生場所					
フレーム No.	JHMGD38617S				
エンジン No.					
ミッション No.					
ミッション区分	5AT				
走行距離、時間	31378	Km			
登録年月日	2007/03/22				
発生年月日	2008/10/30				
新部品番号					
主部品番号	35255-S5K-F12				
症状コード					
EDP KEY 型式名					
原因区分	不明				
責任区	部門				
	取引先名	東洋電装 (株)	コードNo.	4533	
対策区分	せず				
対策内容コード	4105	対策せず			
発生予測					
対策パーツ	無				
見直し項目	図面	作業標準			

受付月日
／

月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所外)	承認	確認	作成

発行	年月日	記事	承認	確認	確認	作成
1	2009/03/10	完了発行	鎌田 淳一		天海 正樹	川村 将之
0	2008/12/01	新規	三宅 準一			原田 倭一

## 調 査

- ・L0回路端子が熱により変色している。
- ・L0回路端子の根元の樹脂が溶融している。

※取引先（東洋電装）に詳細解析を依頼する。

EA11-012

HONDA

4/20/2012

Q13E

Doc3 QIS

MV20090617153846\_E

EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
Q 4Rin Hinkai Godo Tadayoshi Fujio 2009/06/02
↓
INFORMATION INVESTIGATION
Q 4Rin Hinkai Godo Teiichi Harada 2009/06/17
↓
INVESTIGATION AND ANALYSIS
Q 4Rin Hinkai Godo Masayuki Kawamura 2009/06/19
↓
COUNTERMEASURE REQUEST
Q 4Rin Hinkai Godo Masayuki Kawamura 2009/06/23
↓
INTERMEDIATE REPLY
↓
COUNTERMEASURE REPLY
AQAO Masayuki Kawamura 2009/06/23
↓
COUNTERMEASURE ISSUED
↓
COUNTERMEASURE APPLICATION
↓
COMPLETED
Q 4Rin Hinkai Godo Masayuki Kawamura 2009/07/29

COUNTERMEASURE REQUEST

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
GD3	07 Fit Low Beams Inop Headlight Switch<QAH3239>	MV20090617153846
07/FIT/JAZ		
OCCURRENCE DESCRIPTION		

REPLY      REPLY TO    Q 4Rin Hinkai Godo      VIA      BY

INVESTIGATION AND ANALYSIS RESULTS

Country of occurrence: USA

Returned part: Instrument wire harness, lighting SW  
Returned part x 10  
1. JHMGD38667S  
2. JHMGD38687S  
3. JHMGD38687S  
4. JHMGD38457S  
5. JHMGD38647S  
6. JHMGD37627S  
7. JHMGD38667S  
8. JHMGD38437S  
9. JHMGD38697S  
10. JHMGD38447S

Analysis confirmation results  
<Instrument wire harness>  
- Red/black wire (H/L LO circuit) terminal in the coupler for lighting SW connection is discolored due to heat and the resin around it is melted.  
- Wire coating of LO circuit terminal connection is discolored.

<Lighting SW>  
- LO circuit terminal in the coupler for lighting SW is discolored due to heat.  
- Resin at the root of the LO circuit terminal is melted.

\* It is judged that the failure is the same with MV20080418134750 (QAH 2562 ) Low beam inop (Lighting SW).

Occurrence situation  
15/ 142,952 units  
Occ. rate: 0.010% (As of July 17 2009)

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR
06/23	AQAO			Masayuki										

RECEPTION DATE
/

ADDRESSEE	AQAO	RECEPTION	/		
		RECEPTION	/		

RANK
A

DATE:		
APPROVAL	CHECK	CREATOR

CAUSE ANALYSIS	Confirmed that this failure does not occur if the terminal contact pressure is within the control values. It is assumed that the terminal contact pressure decreased for some reasons, however the true cause could not be identified from the production and spec factor investigation.																																																																		
	True cause is unknown. No C/M will be applied.																																																																		
COUNTERMEASURE																																																																			
TREATMENT FOR STOCK & SOLD UNITS & PARTS	<p>The occurrence rate is low and the occurrence situation does not show increase trend. Therefore no treatment will be taken.</p> <table border="1"> <thead> <tr> <th colspan="6">COUNTERMEASURE APPLICATION INFORMATION</th> </tr> <tr> <th>DATE</th> <th>MODEL CODE (MODEL NAME)</th> <th>YM</th> <th>DEST.</th> <th>CATEGORY</th> <th>PRODUCT #</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	COUNTERMEASURE APPLICATION INFORMATION						DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY	PRODUCT #																																																						
	COUNTERMEASURE APPLICATION INFORMATION																																																																		
DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY	PRODUCT #																																																														
COUNTERMEASURE EFFECTIVENESS																																																																			
FEED BACK TO THE SOURCE																																																																			

QUALITY IMPROVEMENT SHEET [ Q I S ]

ISSUED BY  
Q 4Rin Hinkai Godo

OCCURRENCE MARKET	
REPORT #	AHOS2009060102-00
FRAME #	JHMGD38667S
ENGINE #	
TRANSMISSION #	
TRANSMISSION CATEGORY	5AT
MILEAGE OR HOURS	86601 Km
REGISTRATION DATE	2007/06/02
OCCURRENCE DATE	2009/05/11
PRODUCT DATE	2007/04/20

SERVICE PART #		
MAIN CAUSAL PART #	35255-S5K-F12	
CAUSAL PART SYMPTOM CODE AND DESCRIPTION		
MODEL CODE		
CAUSE CATEGORY	Unknown	
RES.	DEPARTMENT	
	SUPPLIER	TOYO DENSO CO.LTD. CODE 4533
COUNTERMEASURE CATEGORY	No Action	
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	4105	no action
OCCURRENCE FORECAST	Sporadic	
COUNTERMEASURE PART AVAILABILITY		Yes
REVISED ITEM	DRAWING	OPERATION STANDARD

1	2009/07/29	FINISH	Junichi Kam		Masaki Amaki	Masayuki Ka
0	2009/06/17	NEW	Junichi Miy			Teiichi Harada
ISSUE	DATE	VERSION	APPROVAL	CHECK	CHECK	CREATOR

イベント
担当部門氏名
完了年月日
↓
受付
Q四輪品改合同
藤尾 忠義
2009/06/02
↓
情報調査
Q四輪品改合同
原田 倂一
2009/06/17
↓
調査解析
Q四輪品改合同
川村 将之
2009/06/19
↓
対策要求
Q四輪品改合同
川村 将之
2009/06/23
↓
中間回答
↓
対策回答
四輪品改合同
川村 将之
2009/06/23
↓
出図
↓
対策実施
↓
完了
Q四輪品改合同
川村 将之
2009/07/29

宛先	四輪品改合同	經由殿	受付	/			重要度	A	年 月 日			
		經由殿	受付	/					承認	確認	作成	
対策要求		型式/YM・通称名	件 名		推 進 No.							
		GD3	07 Fit ロービーム作動せず<QAH3239>		MV20090617153846							
		07/FIT/JAZ										
		発生状況	ヘッドライトスイッチのロービームが作動しない。									

回答 までに 經由 Q四輪品改合同 宛に回答願います。

調 査 結 果	○発生地域 : USA
	○返却現品 ・インストルメントワイヤーハーネス ・ライティング スイッチ
調 査 結 果	○返却現品数 10件 1. JHMGD386679 2. JHMGD386879 3. JHMGD386879 4. JHMGD384579 5. JHMGD386479 6. JHMGD376279 7. JHMGD386679 8. JHMGD384379
	○解析確認結果 <インストルメントワイヤーハーネス> ・ライティングスイッチ接続のケーブル内の赤/黒線 (H/L L0回路) の端子が発熱により、変色し、周辺の樹脂が溶融している ・L0回路端子舌片に緩和している。
調 査 結 果	<ライティングスイッチ> ・ライティングスイッチのカプラ内のL0回路端子が熱により、変色している。 ・L0回路端子の根元の樹脂が溶融している。
	ライティングスイッチのカプラ内のL0回路端子近傍での発熱と推測する。
調 査 結 果	※MV20080418134750 (QAH2562) ロービーム作動せず<ライティングSW>と同種不具合と判断する。
	○発生状況 15件/142,952台 発生率 : 0.010% (2009/7/17現在)

原 因	○端子接圧管理値以内であれば、本不具合の発生はないことを確認した。何らかの要因により、端子接圧が低下されたものがあったと推測されるが、製造、仕様上の要因調査を行なったが、真の原因の特定には至らず。										
	因	○真の原因が不明のため対策せず。									
策		既 販 車 及 び 在 庫 品 の 処 置	対策適用号機								源 流 へ の フ ィ ー ド バ ッ ク
	年月日		型式 (通称名)	年 式	仕 向 地	区 分	号 機				
策	既 販 車 及 び 在 庫 品 の 処 置	○発生状況に増加の傾向が見られないことより処置せず。									
策	既 販 車 及 び 在 庫 品 の 処 置										

市場品質情報 [ Q I S ]					
発行部門					
Q四輪品改合同					
発生場所					
フレーム No.	JHMGD386679				
エンジン No.					
ミッション No.					
ミッション区分	5AT				
走行距離、時間	86601	Km			
登録年月日	2007/06/02				
発生年月日	2009/05/11				
新部品番号					
主部品番号	35255-S5K-F12				
症状コード					
EDP KEY 型式名					
原因区分	不明				
責任区	部門				
	取引先名	東洋電装 (株)	コードNo.	4533	
対策区分	せず				
対策内容コード	4105	対策せず			
発生予測	あり(散発)				
対策パーツ					有
見直し項目	図面		作業標準		

受付月日
/

月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所内)	承認	確認	作成	月日	回答部門(所外)	承認	確認	作成
06/23	四輪品改合同			川村 将										

発行	年月日	記事	承認	確認	確認	作成
1	2009/07/29	完了発行	鎌田 淳一		天海 正樹	川村 将之
0	2009/06/17	新規	三宅 準一			原田 倂一

調査

- 9. JHMGD38697S [REDACTED]
- 10. JHMGD38447S [REDACTED]



EA11-012

HONDA

4/20/2012

Q13E

Doc4 Analysis report by TEC

Subject	Burnt smell while driving at night, and headlight failed
Part #	35255-S5A-J02
Part name	SW ASSY, LIGHTING

## Analysis Record [Analysis Report]

Supplier, division Toyo Denso co., Ltd. Quality Department Quality assurance Market quality	1/27/2010						
	<table border="1"> <tr> <td>Approved</td> <td>Confirmed</td> <td>Prepared</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Approved	Confirmed	Prepared			
Approved	Confirmed	Prepared					

### Occurrence situation

(Symptoms, Alleged failure, the number of occurrence, C/M)

Type: GD1  
Model: FIT  
FNo.: 1096326  
Pro. Date: December 20, 2001  
Reg. Date: December 25, 2001  
Occ. Date: December 12, 2009  
Mileage: 119,615km  
Occ. Country: Kyoto, Japan  
SW Lot: December 5, 2001

#### Alleged failure:

On December 11, 2009 while driving the vehicle in an urban area of kyoto-city, I detected burnt smell of the plastic, and then the headlight went OFF.

#### <Results of Returned part analysis>

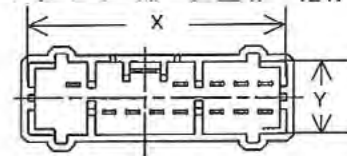
- Melted SW-side Lo circuit terminal was found. Please analyze details on all the terminals from sliding width measurements, components analysis, and plating thickness of Sn

### Confirmed Facts

(Returned parts verification r  
1) Appearance

- No abnormality such as scratch and dent on the lighting SW appearance
- Surface of the case-side was melted and the oil adhesion was the surface of the case etc.
- Lo terminal was discolored and resin of the terminal root was r
- Some returned parts applied plating.
- Coupler inner dimension and terminal thickness both sa

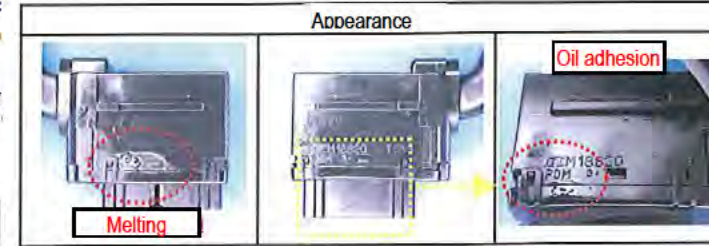
	Spec value	Measure	Judgeme
Direction of X	43.2±0.1	43.2	OK
Direction of Y	12.7±0.1	12.7	OK
Lo terminal thickness	0.64±0.04	0.62	OK



- As a result of continuity check of each circuit (except for Lo circuit), no abnormality such as continuity failure

#### 2) Disassembly results

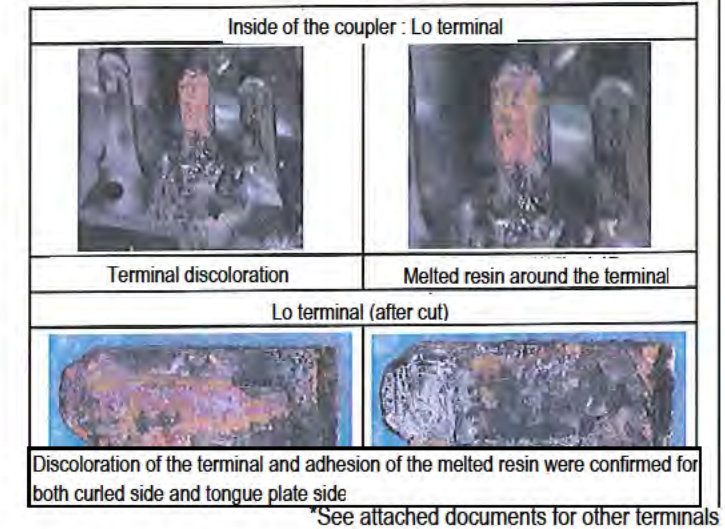
- Discoloration of the whole terminal and multiple arc marks were confirmed for both curled side and tongue plate side when checked its appearance by cutting the Lo terminal.



#### Analysis of substance attached to the

Analysis Part	FT-IR Analysis
	① Grease — returned
	② Grease — returned
<b>Analysis results</b>	Both substances were grease used for SW ⇒ No abnormal component

#### 2. Result of analyzing inside the coupler



### Confirmed Facts (2) (Parts check results, factor analysis, and the quality of product)

#### 2) EDX analysis results

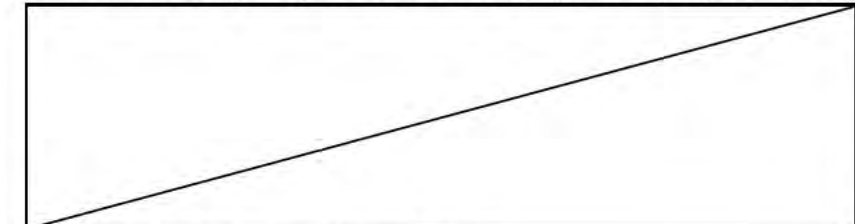
Analysis part	Analysis result
Lo terminal	Copper (Cu) and tin (Sn) that are the components of SW terminal were detected. Other than that, carbon (C), oxygen (O), and aluminum (Al) that are SW resin components were detected. ⇒ No abnormal component detected
Curled	Tongue plate
Slide width	Slide width Cannot be measured due to the attached melted resin
Plating width	Plating width N/A

From the analysis result above, no abnormality was found in the terminals and plating width other than Lo terminal

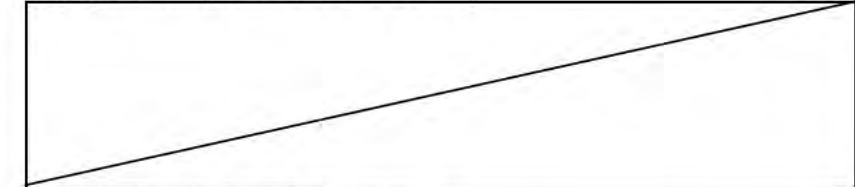
#### 3. Summary

From the analysis result above, No abnormality was found inside the circuit of the returned SW. Although melting was confirmed on the Lo terminal, No cause which leads to heat generation and melting was found on the SW. Loose connection is considered to be a cause of heat generation, so detailed inspection of the counterpart terminal is required.

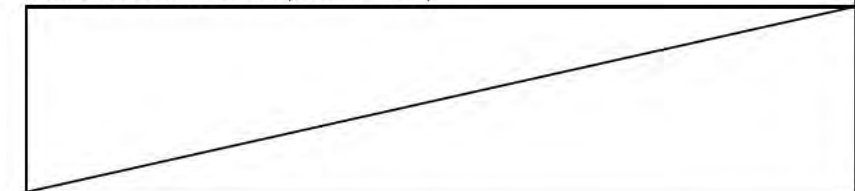
#### Route cause investigation (Occurrence mechanism, reproducibility test, Why-why analy



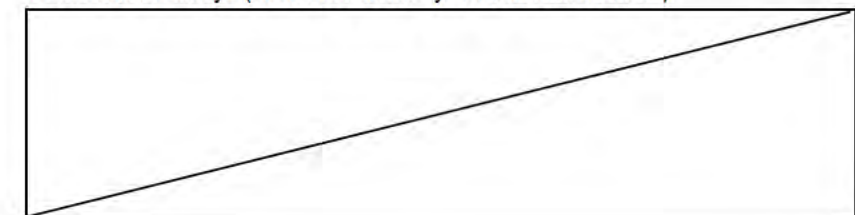
#### Appropriate C/M (Detailed C/M, effect, PPA)



#### C/M effectiveness check (Actual record)

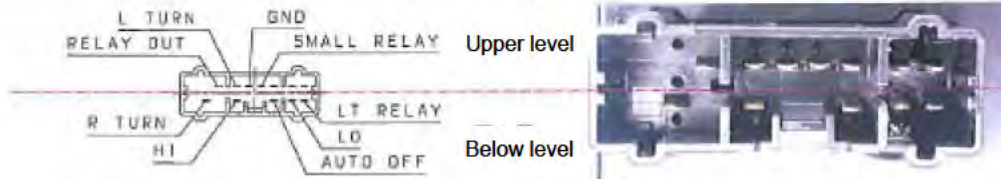


#### Feedback to Genryu (Reflection to the system and mechanism)



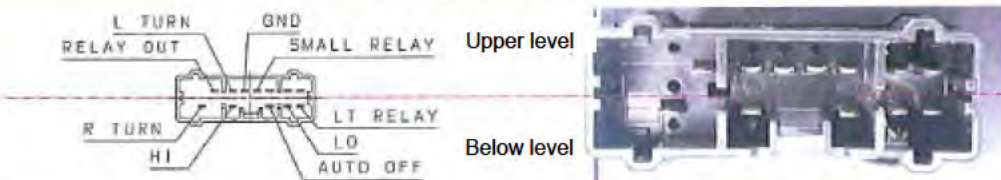
Step	1	2	3	4	5
Contents	Occurrence				
	Outflow				

### Terminal analysis result (excluding Lo terminal)



Terminal name/plating spec		RELAY OUT(Ag)		L TURN(Ag)		GND(Ag)		SMALL RELAY(Ag)	
		Curled side	Tongue plate side	Curled side	Tongue plate side	Curled side	Tongue plate side	Curled side	Tongue plate side
Terminal thickness [mm]		0.65		0.65		0.65		0.65	
Terminal plating thickness [um]		0.8	0.8	0.9	0.8	0.7	0.8	0.8	0.7
Slide width [mm] Tongue plate side		0.07		0.13		0.13		0.12	
Terminal pic	Curled side								
	Tongue plate side								
EDX Analysis									
Analysis Results		Peak value was detected for applied materials only. No abnormality.		Peak value was detected for applied materials only. No abnormality.		Peak value was detected for applied materials only. No abnormality.		Peak value was detected for applied materials only. No abnormality.	

### Terminal analysis result (excluding Lo terminal)



Terminal name/plating spec		R TURN(Ag)		HI(Sn)		AUTO OFF(Sn)		LT RELAY(Sn)	
		Curled side	Tongue plate side	Curled side	Tongue plate side	Curled side	Tongue plate side	Curled side	Tongue plate side
Terminal thickness [mm]		0.65		0.65		0.65		0.65	
Terminal plating thickness [um]		0.8	0.9	2.0	2.0	1.8	1.8	2.0	1.8
Slide width [mm] Tongue plate side		0.32		0.35		NA		0.55	
Terminal pic	Curled side								
	Tongue plate side								
EDX Analysis									
Analysis Results		Peak value was detected for applied materials only. No abnormality.		Peak value was detected for applied materials only. No abnormality.		Peak value was detected for applied materials only. No abnormality.		Peak value was detected for applied materials only. No abnormality.	

EA11-012

HONDA

4/20/2012

Q13E

Doc4 Analysis report by Yazaki

# Analysis Record [Analysis Report]

Subject	Burnt smell while driving at night, and headlight fail
Part #	32117-SAA-J10
Part name	Instrument Wire Harness

Approved	Confirmed	Prepared

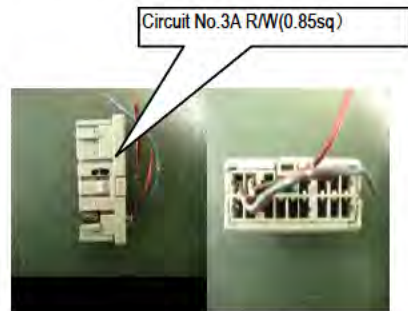
### Occurrence situation

(Symptoms, Alleged failure, the number of occurrence, C/M)

- Occ date
- Frame No.
- Reg. date
- Pro. Date
- Mileage
- Added failure
- Harness No.
- Analysis Result

Picture of defective part

Terminal COMBI SW TURN & LT(1)



### Confirmed Facts

(Parts check results, factor analysis, and the quality of product)

#### 【Returned parts verification results】

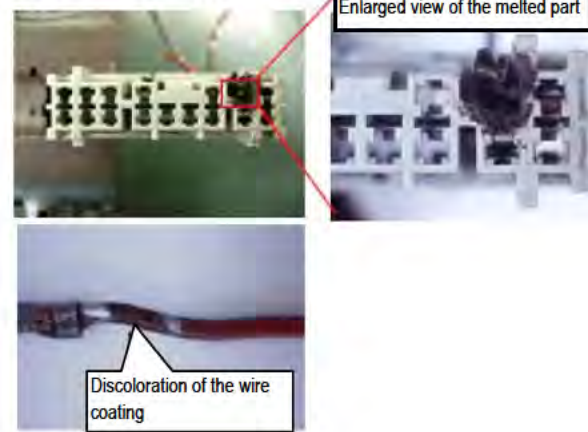
##### 1. Returned parts investigation results

- COMBI SW TURN & LT (1) (Coupler PN: 98630-00016-01)
- Melting of the wire harness coupler was confirmed inside the coupler CP 090 16P F
- \* See appendix 1 for details.

##### 2. Connector appearance

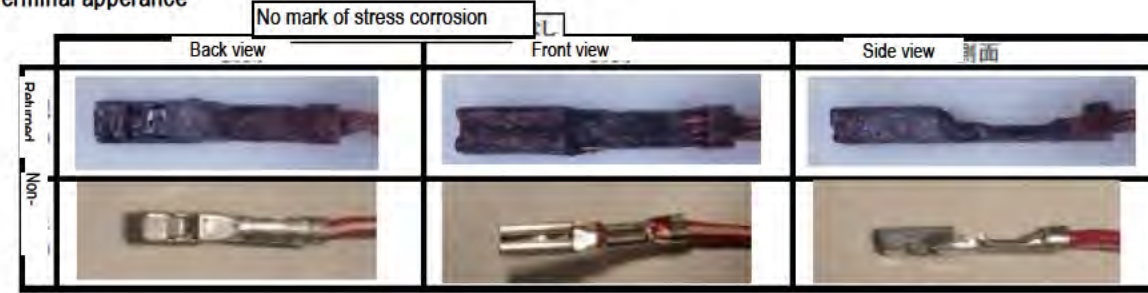
- Melting and discoloration of the wire coating were confirmed.
- Fitting mark due to contact pressure was confirmed.
- \* See appendix 2 for details.

Front view of the coupler (joint side)



##### 3. Terminal appearance, spring investiga \* See appendix 2 for details.

###### • Terminal appearance

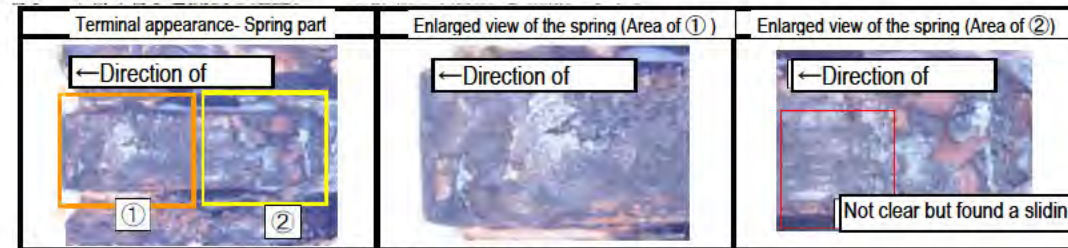


###### • Opening between terminals \* See appendix 2 for details.



Since spring gap is over the male tab, contact load estimated is 0N.

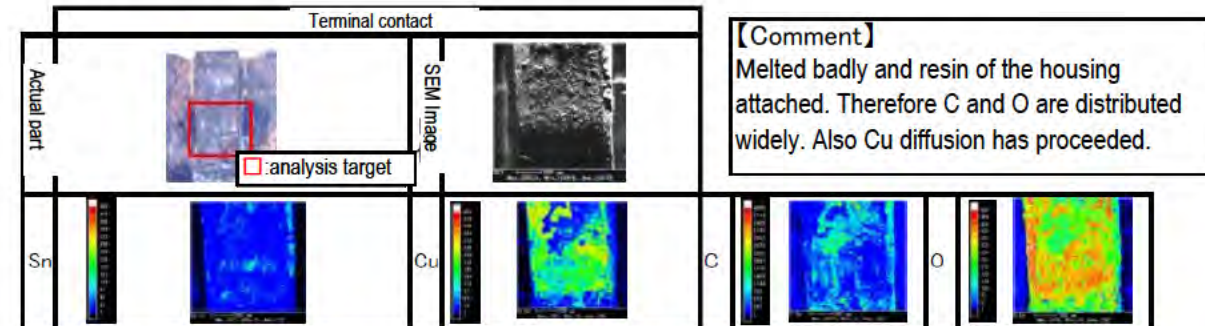
###### • Terminal spring (Opened terminal to ch \* See appendix 2 for details.



【Comment】: No cause which could lead to melting was found from the appearance observation.

Not clear but found a sliding mark. (Shown in red box)

###### • Melted surface analysis results \* See appendix 3 for details.



### Investigation of root cause (Occurrence mechanism, duplication test, Why-because analysis)

### Appropriate C/M (Detailed C/M, predicted effect, PPA)

### Confirm C/M's effectiveness (Effect result)

Step		1	2	3	4	5
Contents	Occurrence	/	/	/	/	/
	Outflow	/	/	/	/	/

Feedback to Genryu (Reflection to the system and mechanism)	

Appendix 1

《Contact surface analysis of Lo circuit terminal inside the Lighting SW (Frame No. GD1-









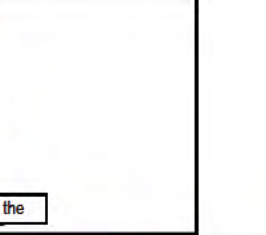
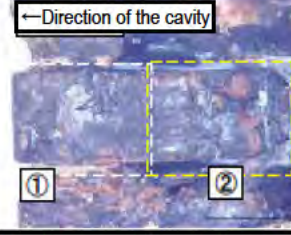


• Appearance

<p>Returned female</p> 		
<p>Appearance of female</p> 	<p>Cavities of female connector</p> 	
<p>Female connector-side view 1</p> 	<p>Female connector-side view 2</p> 	
<p>Enlarged view of melted part of female</p> 	<p>Enlarged view of melted part of female</p> 	
<p>Comment: No abnormal scratch or deformation found around the melted</p>		

Appendix 2

《Contact surface analysis of Lo circuit terminal inside the Lighting SW (Frame No. GD1-

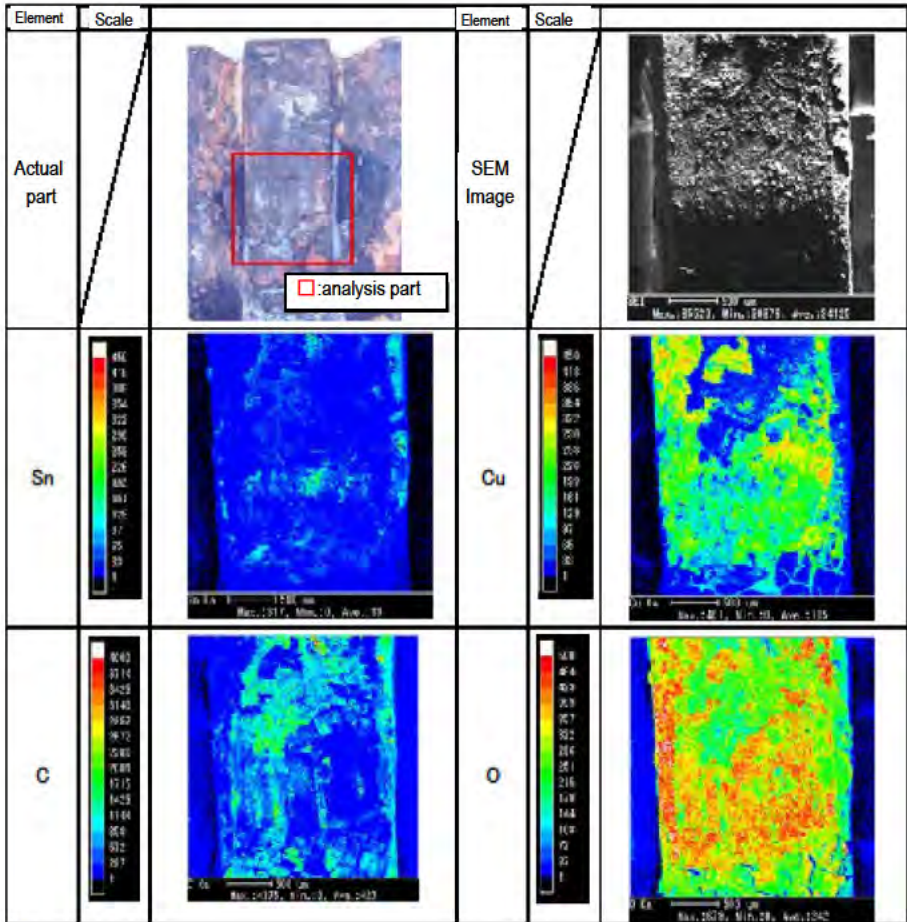
• Appearance analysis of female

<p>Lo circuit direction 1</p> 	<p>Lo circuit direction 2</p> 	
<p>Lo circuit direction 4</p> 	<p>Lo circuit bonded part</p> 	
<p>Lo circuit opening</p> 	<p>Lo circuit Enlarged</p>  <p>No mark of stress corrosion crack of the</p>	
<p>Terminal appearance- spring</p> <p>←Direction of the cavity</p> 	<p>Enlarged view of the spring (Area of</p> 	 <p>Not clear but found a sliding</p>
<p>Note: No cause which could lead to melting was found from appearance.          Not clear but found a slide mark (shown in red box)</p>		

Appendix 3

《Contact surface analysis of Lo circuit terminal inside the Lighting SW (Frame No. GD1-

Surface analysis of Lo circuit terminal contact area (EPMA)



**[Comment]**  
 Melted badly and resin of the housing attached. Therefore, C and O are distributed widely. Also Cu diffusion has proceeded.



EA11-012

HONDA

4/20/2012

Q13E

Doc4 MV20091223094027

Analysis report by TEC

テーマ	夜間走行中、焦げる臭いがしてヘッドライトが点かなくなった<ライティングSW>
部番	35255-S5A-J02
部品名	SW ASSY LIGHTING

# 解析記録 [ 解析レポート ]

作成部門	課名又は取引先名 東洋電装株式会社 品質部 品質保証室 市場品質課	2010年 1月 15日	承認	確認	作成
		2010年 1月 27日	中田		坂本

## 発生状況 (現象・訴え内容・発生件数・処置内容)

型式: GD1  
車種: FIT  
FNo.: 1096326  
製造日: 2001年12月20日  
登録日: 2001年12月25日  
発生日: 2009年12月12日  
走行距離: 119,615km  
発生地区: 京都府  
SW割ト: 2001年12月05日  
訴え事象: 12月11日夜間、ヘッドライトロービーム点灯で京都市市街地走行中、ビニールの焦げるような臭いがして、何か変だと感じたところヘッドライトが消えて点かなくなった

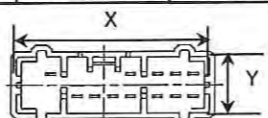
<AQAO様返却現品確認結果>  
・スイッチ側のLO回路端子部が溶融している事を確認以上、全ての端子について、摺動幅測定、成分分析、Snのメッキ厚等から詳細解析をお願いします。

## 事実の把握 (部品の確認結果・要因分析・生産品の品質状況)

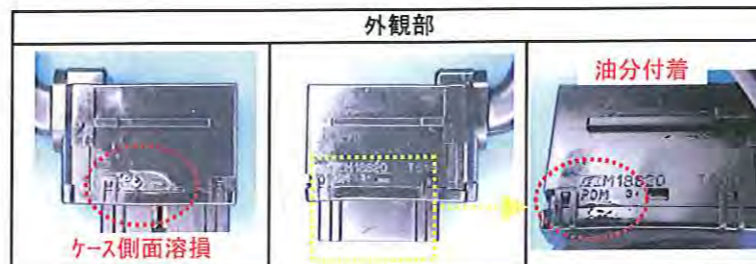
1. 現品確認結果  
1) 外観確認結果  
・ライティングSW外観に傷、打痕等の異常なし。  
・ケース側面が溶損しており、油分の付着も確認できる。  
・Lo端子が変色しており、根元の樹脂が溶融している。  
・端子外観より返却された現品はメッキ対策品である。  
・カプラー内寸、Lo端子板厚を確認したところ規格を満足しており問題なし。

<単位: mm>

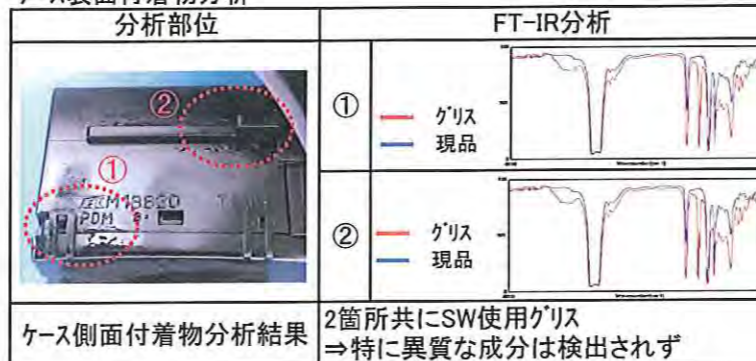
	規格値	実測値	判定
X方向	43.2±0.1	43.2	OK
Y方向	12.7±0.1	12.7	OK
Lo端子板厚	0.64±0.04	0.66	OK



・各回路の導通確認(Lo回路は端子間を除く)を行ったところ、導通不良等の異常は見られなかった。  
2) 分解確認結果  
・Lo端子を切断し、この外観を確認したところ、カール側・舌片側共に端子全体が変色しており複数のアーク痕が確認できる。

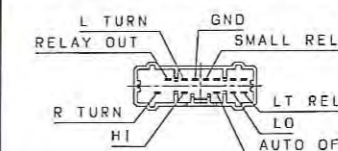


### ケース表面付着物分析

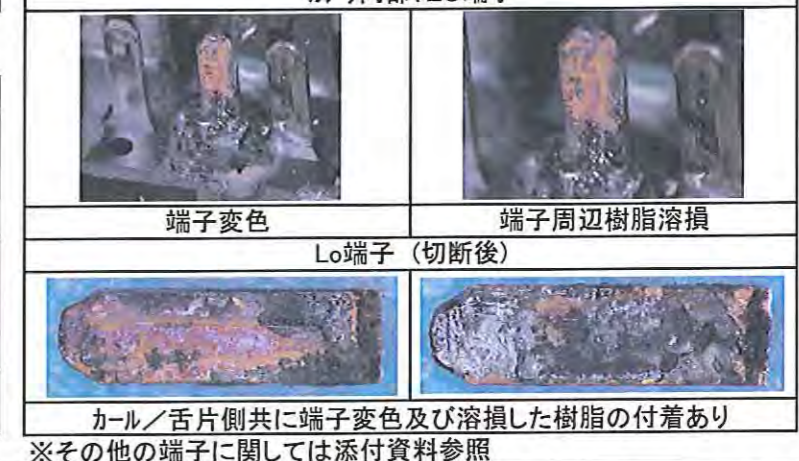


## 2. カプラー内確認結果

[カプラー端子配列 (参考資料)]



### カプラー内部: LO端子



## 事実の把握(続き) (部品の確認結果・要因分析・生産品の品質状況)

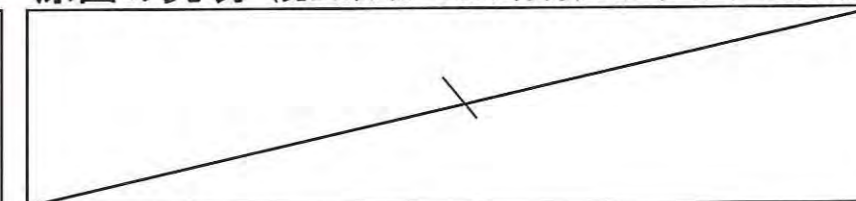
2) EDX分析結果

分析箇所	分析結果
Lo端子	SW端子成分の銅(Cu)、錫(Sn)が検出された。 上記成分の他には相手端子成分の亜鉛(Zn)とSW樹脂成分の炭素(C)、酸素(O)が検出された。 ⇒特に異質な成分は検出されず
カール側	舌片側
摺動幅	摺動幅
メッキ厚	メッキ厚
測定不可	測定不可

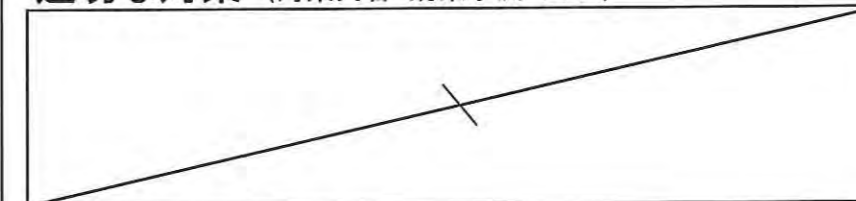
以上の結果より、LO端子以外の端子分析及びメッキ厚等に異常は認められず異常ありませんでした。

3. まとめ  
以上の確認結果より、返却されたSWの内部回路に異常な箇所は確認されませんでした。ただし、Lo端子の溶損が確認できましたが、本SWにおいて発熱・溶損に至る要因は確認されませんでした。  
なお、発熱に至った要因として、何らかの接触不良が考えられますがその原因については相手側端子の詳細確認が必要と判断致します。

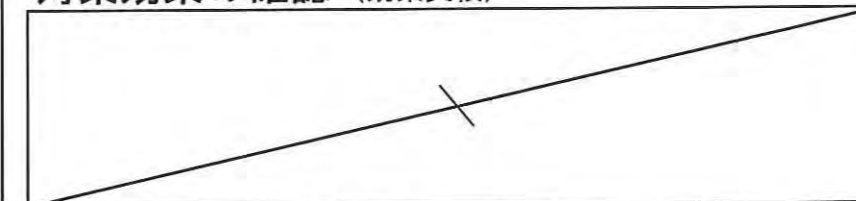
## 原因の究明 (発生のメカニズム・再現テスト・なぜ・なぜ分析)



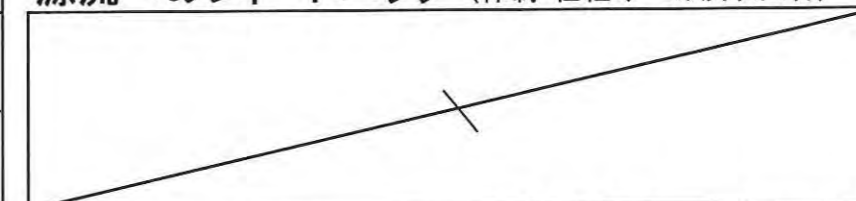
## 適切な対策 (対策内容・効果予測・PPA)



## 対策効果の確認 (効果実績)



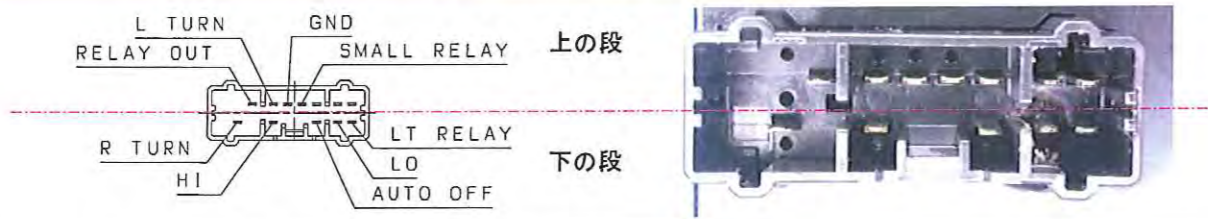
## 源流へのフィードバック (体制・仕組みへの反映内容)



ステップ	1	2	3	4	5
内容	発生				
	流出				

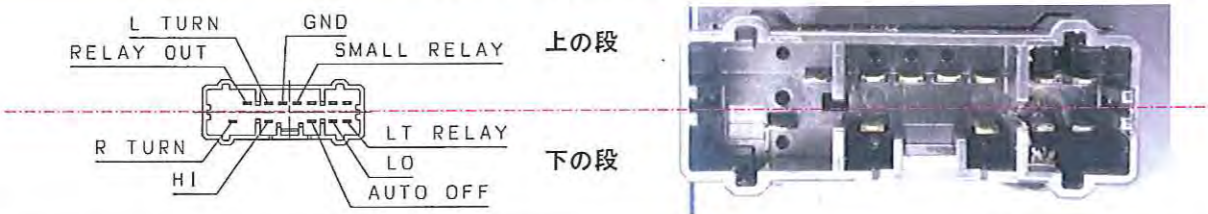
原本保存期限: 年 月

端子確認結果(LO端子以外)



端子名/メッキ仕様	RELAY OUT(Ag)		L TURN(Ag)		GND(Ag)		SMALL RELAY(Ag)	
	カール側	舌片側	カール側	舌片側	カール側	舌片側	カール側	舌片側
端子板厚【mm】	0.65		0.65		0.65		0.65	
端子メッキ厚【μm】	0.8	0.8	0.9	0.8	0.7	0.8	0.8	0.7
摺動幅【mm】	0.07		0.13		0.13		0.12	
端子写真	カール側							
	舌片側							
EDX分析								
分析結果	使用材料以外のピーク検出なく異常なし		使用材料以外のピーク検出なく異常なし		使用材料以外のピーク検出なく異常なし		使用材料以外のピーク検出なく異常なし	

端子確認結果(LO端子以外)



端子名/メッキ仕様	R TURN(Ag)		HI(Sn)		AUTO OFF(Sn)		LT RELAY(Sn)	
	カール側	舌片側	カール側	舌片側	カール側	舌片側	カール側	舌片側
端子板厚【mm】	0.65		0.65		0.65		0.65	
端子メッキ厚【μm】	0.8	0.9	2.0	2.0	1.8	1.8	2.0	1.8
摺動幅【mm】	0.32		0.35		測定不可		0.55	
端子写真	カール側							
	舌片側							
EDX分析								
分析結果	使用材料以外のピーク検出なく異常なし		使用材料以外のピーク検出なく異常なし		使用材料以外のピーク検出なく異常なし		使用材料以外のピーク検出なく異常なし	

EA11-012

HONDA

4/20/2012

Q13E

Doc4 MV20091223094027

Analysis report by Yazaki

テーマ	夜間走行中、焦げ臭いにおいが出てヘッドライトが点かなくなった<ライティングSW>
部番	32117-SAA-J10
部品名	インストメントワイヤーハーネス

# 解析記録 [解析レポート]

作成部門	矢崎総業株	承認	確認	作成
	矢崎部品株 栃木工場 品質管理部 品質保証チーム 作成日 2010年 1月 19日			

## 発生状況 (現象・訴え内容・発生件数・処置内容)

## 事実の把握 (部品の確認結果・要因分析・生産品の品質状況)

- 発生日
- 発生場所
- フレームNo.
- 登録月日
- 製造月日
- 走行距離
- 不具合内容
- ハーネス品番
- 確認結果

不具合現品写真

### 返却品の確認結果

- 不具合部位の状況**
  - COMBI SW TURN & LT(1) (カプラー品番:98630-00016-01)
  - CP 090 16P F カプラー内
  - 回路No.3A R/W線 (0.85sq)において、ワイヤーハーネスカプラー部の溶損を確認。
  - ※詳細は別紙1参照願います。
- コネクタ外観**
  - 溶損及び、電線被覆の変色が確認された
  - 接圧による嵌合痕を確認しました。
  - ※詳細は別紙1、2参照願います。

カプラー正面(結合側)

### 3. 端子外観、ハネ部調査 ※詳細は、別紙2参照願います。

端子外観

	裏側	表側	側面
現品			
良品			

端子間口 ※詳細は、別紙2参照願います。

間口拡大写真

参考:オス端子 タブ厚 0.64mm  
ハネ隙間がオスタブ以上という結果から、接触荷重 ON と推定される。

### 端子ハネ部(端子を開封し確認) ※詳細は、別紙2参照願います。

端子外観 ハネ部	ハネ部 拡大(左図①部)	ハネ部 拡大(左図②部)

【コメント】:外観観察からは溶損に至る原因は確認できなかった。  
明確ではないが摺動痕が確認できる。(□部)

### 溶損部表面分析結果 ※詳細は、別紙3参照願います。

端子接点部

実体写真		SEM像	
Sn		Cu	
C		O	

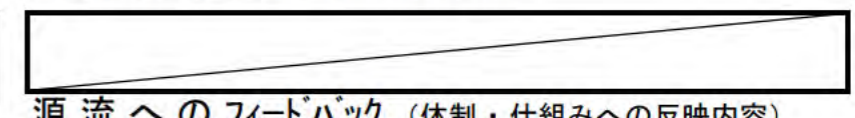
【コメント】:溶損が激しく、ハウジングの樹脂が付着している。その為、C、Oが広く分布している。また、Cuの拡散が進んでいる。

## 原因の究明 (発生のメカニズム・再現テスト・なぜ・なぜ分析)

## 適切な対応 (対策内容・効果予測・PPA)

## 対策効果の確認 (効果実績)

今回の調査の結果、Lo回路メス端子ハネ隙間が広く(0.70mm)、接触荷重が0(N)の状態であったと推測される(オス端子タブ厚:0.64mmより広い為)また、メス端子接点部に摺動痕が確認された為、当初は接触荷重が確保されていたと推測できる。その他、溶損が激しく、接点部にハウジングの樹脂が付着している。また、応力腐食による端子ハネ部の破損や、スパーク痕といった異常は確認できなかった。



なぜ・なぜ分析



ステップ	1	2	3	4	5
内容	発生				
	流出				

源流へのフィードバック (体制・仕組みへの反映内容)

原本保存期限: \_\_\_\_\_ 年 月

《 ライティングSW内 Lo回路端子接触面調査(フレームNo.GD1-1096326) 》

・外観調査

<p>メス側 回収状態</p> 		
<p>メスコネクタ 外観</p> 	<p>メスコネクタ 間口</p> 	
<p>メスコネクタ 側面1</p> 	<p>メスコネクタ 側面2</p> 	
<p>メスコネクタ溶損部拡大</p> 	<p>メスコネクタ溶損部(間口)拡大</p> 	

所見: 溶損部付近以外に特に異常な傷、変形は見られない。

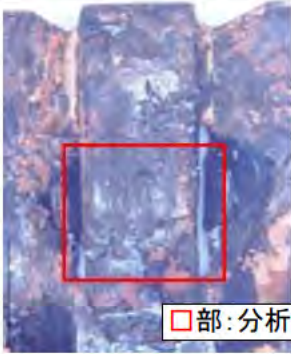
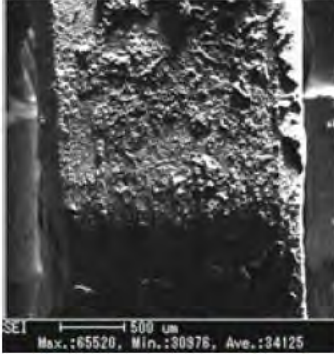

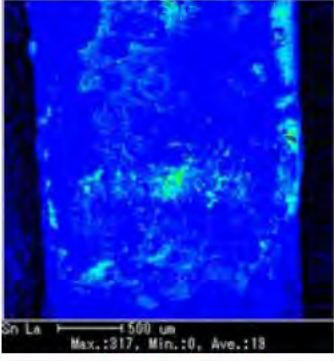

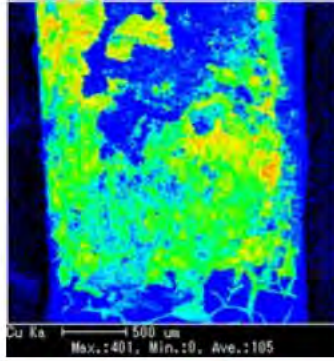

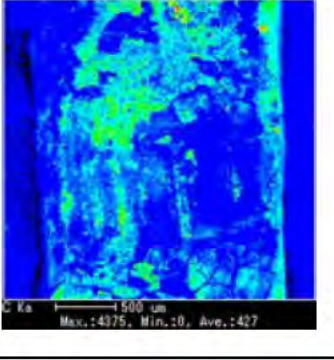

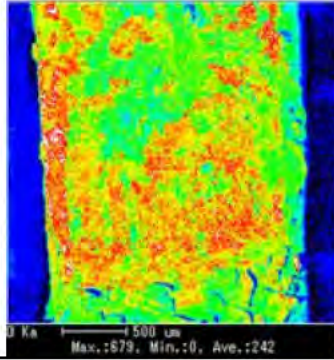
《 ライティングSW内 Lo回路端子接触面調査(フレームNo.GD1-1096326) 》

・メス端子(Lo) 外観観察

Lo回路 方向1	Lo回路 方向2	
Lo回路 方向4	Lo回路 圧着部	
Lo回路 間口	Lo回路 間口拡大	
端子外観 ハネ部	ハネ部 拡大(左図①部)	
<p>所見: 外観観察からは溶損に至る原因は確認できなかった。          明確ではないが、摺動痕が確認できる。(□部)</p>		<p>明確ではないが、摺動痕あり</p>

## 《 ライティングSW内 Lo回路端子接触面調査(フレームNo.GD1-1096326) 》

## ・Lo回路 端子接点部 表面分析(EPMA マッピング)

元素	スケール		元素	スケール	
実体 写真			SEM像		
		□部:分析箇所			
Sn			Cu		
C			O		
<p>所見:溶損が激しく、ハウジングの樹脂が付着している。その為、C、Oが広く分布している。 また、Cuの拡散が進んでいる。</p>					



EA11-012

HONDA

4/20/2012

Q13E

Doc4 QIS MV20091223094027

EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE

COUNTERMEASURE REQUEST

ADDRESS/EE		REVISION				RANK	DATE:
						A	APPROVAL
							CHECK
							CREATOR

RECEPTION
Q 4Rin Hinkai Godo
Tadayoshi Fujio
2009/12/15

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
GD1	While driving at night, driver felt the burning smell, and headlights stopped illuminating <lighting switch>	MV20091223094027
02/F11/JAZ		

INFORMATION INVESTIGATION
Q 4Rin Hinkai Godo
Teiichi Harada
2009/12/23

OCURRENCE DESCRIPTION
On December 11 night, while driving urban district of Kyoto city with head light low beams on, the driver smelled like a plastic burning, and felt something strange. Then, the headlight stopped illuminating

INVESTIGATION AND ANALYSIS
Q 4Rin Hinkai Godo
Akihiro Hatatani
2009/12/23

REPLY	REPLY TO	Q 4Rin Hinkai Godo	VIA	BY	Jan 15
-------	----------	--------------------	-----	----	--------

COUNTERMEASURE REQUEST
Q 4Rin Hinkai Godo
Akihiro Hatatani
2009/12/23

INVESTIGATION AND ANALYSIS RESULTS	<p>■ Confirmation of returned lighting SW and instrument wire harness</p> <p>1 Exterior confirmation of lighting SW (Supplier: TOYO Denso) Confirmed that the low beam terminal inside the coupler has been melted.</p> <p>2 Exterior confirmation of returned instrument wire harness (Supplier: Yazaki) Confirmed that the low beam terminal inside the coupler has been melted.</p>
	<p>From the above the symptom is determined to have been caused by instrument wire harness terminal contact pressure etc., detailed analysis was requested to the supplier.</p>
	<p>Detailed analysis by supplier</p> <p>Lighting SW                      Low beam terminal melted from heat on instrument wire harness, but the cause of heat is unknown.</p> <p>Instrument wire harness      Low beam terminal melted from heat on instrument wire harness, but the cause of heat is unknown.</p>
	<p>***AQAO's analysis result</p> <p>1) Female terminal x-section analysis of additional returned part Sn plating has worn and wear particle has accumulated therefore it revealed to have occurred from repeated sliding.</p> <p>2) Sliding test It was found that sliding width 0.5mm (conducting current 10A, temperature +60 degree C, humidity 85% RH, contact load 8N) increases contact resistance value and coupler melting temperature (232 degree C) is reached.</p> <p>3) Confirmation of low beam wiring on car It was found that there is not enough slack on low beam wiring and it is pulled condition.</p> <p>4) Correlation between slack amount and sliding width Increased slack amount and measured sliding width by lever operation. It was found that when there is a lot of slack, sliding width became smaller.</p> <p>5) Slack amount investigation at factories other than Sss It was found that Sss FIT only had different wiring condition and the wiring for low beam had pulled condition.</p> <p>6) Investigation on mounting procedure at factories It was found that Sss FIT only had different mounting procedure for combi switch coupler, IG switch coupler and the wiring for low beam was mounted pulled. And it was also found that the length of wiring connecting to lighting switch had little slack by setting. (See the attached material for details.)</p>

INTERMEDIATE REPLY

COUNTERMEASURE REPLY
Q 4Rin Hinkai Godo
Akihiro Hatatani
2010/01/27

COUNTERMEASURE ISSUED
Honda R&D
2010/10/10

COUNTERMEASURE APPLICATION

COMPLETED
Q 4Rin Hinkai Godo
Akihiro Hatatani
2011/01/21

RECEPTION DATE
/

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR
01/27	AQAO			Akihiro										

CAUSE ANALYSIS	<p>***It had a setting there is little slack on the length of electric wiring connecting to lighting switch, therefore wiring was pulled by wiring work on some parts. From this, terminal joint area was moved by operation switching headlight, contact resistance increased, terminal heated and coupler melted, leading to the claimed symptom.</p>
	<p>***No countermeasure applied because the concern model has discontinued.</p> <p>In market to replace low beam terminals on all vehicles with terminals using long wiring and to fix wiring with banding band.</p> <p>If connecting coupler is melted, to replace lighting switch and coupler on wiring side with new ones.</p>

COUNTERMEASURE	<p>From decision by Quality Committee on December 8, 2010, proactive market action for affected units will be carried out since January 7, 2011.</p>
	<p>Performed sliding test with countermeasure part and confirmed heating would not occur. Therefore countermeasure is determined to be effective.</p>

TREATMENT FOR STOCK & SOLD UNITS & PARTS	COUNTERMEASURE APPLICATION INFORMATION					
	DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY	PRODUCT #

COUNTERMEASURE EFFECTIVENESS	<p>Wiring length that can absorb the displacement amount of switch while lighting switch operation and impact to terminals from mounting work, should be set.</p>

FEED BACK TO THE SOURCE	

QUALITY IMPROVEMENT SHEET [ Q I S ]

ISSUED BY
Q 4Rin Hinkai Godo

OCURRENCE MARKET	
REPORT #	008165020091214173308
FRAME #	GD1-1096326
ENGINE #	L13A-1107172
TRANSMISSION #	1089251
TRANSMISSION CATEGORY	HMM
MILEAGE OR HOURS	119615 Km
REGISTRATION DATE	2001/12/25
OCURRENCE DATE	2009/12/12
PRODUCT DATE	2001/12/20

SERVICE PART #	06322-SAA-305
	06323-SAA-305
	06323-SAA-306

MAIN CAUSAL PART #	35255-S5A-J02
CAUSAL PART SYMPTOM CODE AND DESCRIPTION	Q3227 Does not illuminate
MODEL CODE	
CAUSE CATEGORY	Specification
RESD. DEPT.	DEPARTMENT
	SUPPLIER TOYO DENSO CO. LTD. CODE 4533
COUNTERMEASURE CATEGORY	Only Market Disposal
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	6105 Change of WI
OCURRENCE FORECAST	Sporadic
COUNTERMEASURE PART AVAILABILITY	Yes
REVISED ITEM	DRAWING
	OPERATION STANDARD

△					
△					
△					
1	2011/01/25	FINISH	Kiyota ka Ha	Takeno ri Na	Akihiro H
0	2009/12/23	NEW	Yasuta ka Ta		Teiichi Har
ISSUE	DATE	VERSION	APPROVAL	CHECK	CREATOR

EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
Q四輪品改合同
藤尾 忠義
2009/12/15
↓
INFORMATION INVESTIGATION
Q四輪品改合同
原田 梯一
2009/12/23
↓
INVESTIGATION AND ANALYSIS
Q四輪品改合同
畑谷 彰宏
2009/12/23
↓
COUNTERMEASURE REQUEST
Q四輪品改合同
畑谷 彰宏
2009/12/23
↓
INTERMEDIATE REPLY
↓
COUNTERMEASURE REPLY
合同解析室
畑谷 彰宏
2010/01/27
↓
COUNTERMEASURE ISSUED
Honda R&D
2010/10/10
↓
COUNTERMEASURE APPLICATION
↓
COMPLETED
Q四輪品改合同
畑谷 彰宏
2011/01/21

COUNTERMEASURE REQUEST

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
GD1	夜間走行中、焦げる臭いがしてヘッドライトが点かなくなった<ライティングSW>	MV20091223094027
02/FIT/JAZ		
OCCURRENCE DESCRIPTION	12月11夜間、ヘッドライトロービーム点灯で京都市街地走行中、ビニールの焦げるような臭いがして、何か変だと感じたところヘッドライトが消えて点かなくなった。	

REPLY      REPLY TO    Q四輪品改合同      VIA      BY      Jan 15

INVESTIGATION AND ANALYSIS RESULTS	<p>■返却現品のライティングスイッチとインストルメントワイヤー束の確認</p> <p>①ライティングスイッチ(取引先:東洋電装)の外観確認 カブラ内部のロービーム端子部が溶融している事を確認</p> <p>②インストルメントワイヤー束(取引先:矢崎総業)の外観確認 カブラのロービーム端子部が溶融している事を確認</p> <p>以上、ロービーム端子の接触部近傍からの発熱と推測されるため、詳細解析を各取引先に依頼</p>
	<p>■取引先での詳細解析</p> <p>ライティングスイッチ 発熱によるロービーム端子の溶融は確認できたが、発熱の原因については不明 インストルメントワイヤー束 発熱によるロービーム端子の溶融は確認できたが、発熱の原因については不明</p> <p>■AQAOでの解析結果</p> <p>①追加現品での端子断面解析 Snメッキが磨耗し、磨耗粉が堆積していることから摺動の繰り返しにより発生していると判明</p> <p>②摺動試験 摺動幅0.5mm(通電電流10A、温度+60°C、湿度85%RH、接触荷重8N)にて接触抵抗値が増大しカブラ溶融温度(232°C)に至る事が判明</p> <p>③実車でのレバー操作1万サイクルによる摺動幅確認 FITが他機種に比べ、摺動幅(0.5mm以上)が大きいことが判明</p> <p>④実車のロービーム配線の確認 ロービーム配線がたるみ量が少なく、張った状態である事が判明</p> <p>⑤たるみ量と摺動幅の相関調査 たるみ量を増やしレバー操作による摺動幅を測定した結果、たるみ量が大きいと摺動幅が小さくなる事が判明</p> <p>⑥Sss製以外の他拠点のFITのたるみ量調査 Sss製FITのみが配索状態が異なり、ロービーム配線が張った状態である事が判明</p> <p>⑦製造拠点別の組付手順調査 Sss製FITのみがコンビSWカブラ、IG SWカブラの組付手順が異なり、ロービーム配線が張った状態で組付けていた事が判明、また、ライティングスイッチに接続する配線の配索長さに余裕が少ない設定であったことも判明 (詳細は添付資料参照)</p>

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR
01/27	合同解析室			畑谷彰宏

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR

DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR

ADDRESSEE	合同解析室	RECEPTION	/
		RECEPTION	/

RANK	A
------	---

DATE:	APPROVAL	CHECK	CREATOR

CAUSE ANALYSIS

■ライティングスイッチに接続する電気配線の配索長さに余裕が少ない設定のため、配索作業で配線を張り過ぎたものがある。そのため、ヘッドライトの切替えスイッチを操作すると、端子結合部が動いて接触抵抗が増え端子が発熱してカブラが溶け、訴え事象に至る。

COUNTERMEASURE

■該当機種、生産終了のため対策せず。市場にて、全車両ロービーム端子を長い配線を用いた端子と交換し、配線を結束バンドで固定する。なお、接続カブラが溶損しているものは、ライティングスイッチと配線側カブラを新品に交換する。

TREATMENT FOR STOCK & SOLD UNITS & PARTS	<p>■2010年12月08日の品質委員会での決定により、2010年12月17日から対象車両の積極的市場措置(R2678)を実施する</p>	COUNTERMEASURE APPLICATION INFORMATION				
		DATE	MODEL CODE (MODEL NAME)	YM	DEST.	CATEGORY

COUNTERMEASURE EFFECTIVENESS

対策品にて摺動試験を実施し、発熱に至らないことを確認、よって、効果ありと判断する。

FEED BACK TO THE SOURCE

ライティングスイッチを操作した際のスイッチ変位量と組付け作業による端子への影響を吸収できる配線長の設定とする

QUALITY IMPROVEMENT SHEET [ Q I S ]

ISSUED BY

Q四輪品改合同

OCCURRENCE MARKET	(株)ホンダカーズ京都 北山店
REPORT #	008165020091214173308
FRAME #	GD1-1096326
ENGINE #	L13A-1107172
TRANSMISSION #	1089251
TRANSMISSION CATEGORY	HMM
MILEAGE OR HOURS	119615 Km
REGISTRATION DATE	2001/12/25
OCCURRENCE DATE	2009/12/12
PRODUCT DATE	2001/12/20

SERVICE PART #	06322-SAA-305
	06323-SAA-305
	06323-SAA-306

MAIN CAUSAL PART #	35255-S5A-J02	
CAUSAL PART SYMPTOM CODE AND DESCRIPTION	03227 点灯しない	
MODEL CODE		
CAUSE CATEGORY	仕様	
S. RE	DEPARTMENT	
	SUPPLIER	東洋電装(株) CODE 4533
COUNTERMEASURE CATEGORY	市場処置/ミ	
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	6105 配線変更	
OCCURRENCE FORECAST	あり(散発)	
COUNTERMEASURE PART AVAILABILITY	Yes	
REVISED ITEM	DRAWING	OPERATION STANDARD
	○	

1	2011/01/25	完了発行	林清孝	中司剛徳	畑谷彰宏
0	2009/12/23	新規	田中康隆		原田梯一
ISSUE	DATE	VERSION	APPROVAL	CHECK	CREATOR

EA11-012

HONDA

4/20/2012

Q13E

Doc4&Doc5 Analysis result

---





# **AQAO Analysis Result**

# Analysis results Returned parts confirmation results (1)

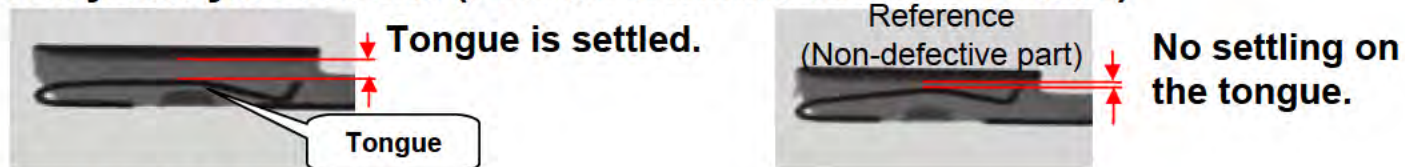
## ◇ Returned parts disassembly confirmation results (Melted)

No.4 Japan GD1-1072865 Claimed symptom: Headlight low beam does not come on

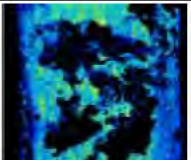
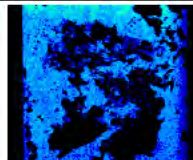
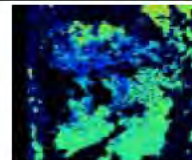

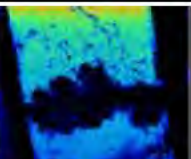
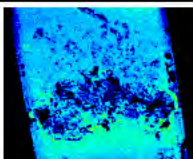

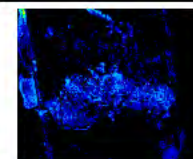
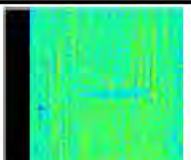
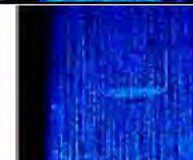


### - Appearance confirmation

Male terminal at lighting switch side		Female terminal at harness side	
			
Lo terminal is melted by heat.		Lo terminal is melted by heat.	

### - X-ray analysis results (Female terminal at harness side)



### - Surface analysis results





	Sn	Cu	C	O	
Male terminal tongue					C and O (resin) adhered heavily in the vicinity of contact area that was heated over resin melting temperature.
Female terminal tongue					
Reference) Non-defective Male, tongue side					Sn plating remains sufficiently and wear particles are not found.

# Analysis results Returned parts confirmation results (2)

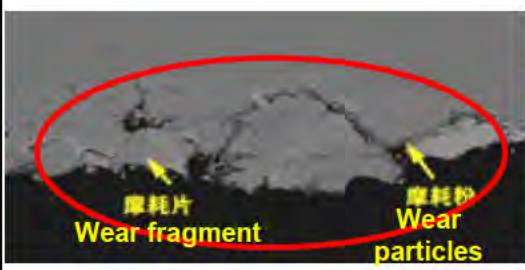

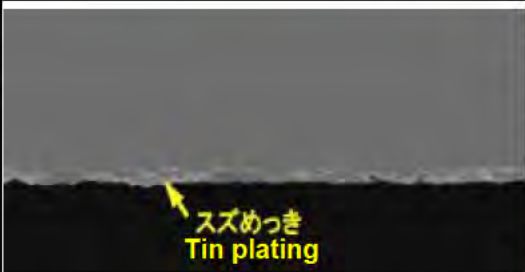
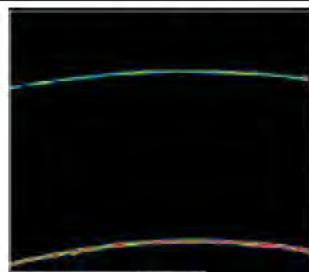
## ◇Market return parts dismantle confirmation results (Melted)

No.12 U.S.A. JHMGD37627S [REDACTED] Claimed symptom: Low beam does not come on

- Appearance confirmation

Male terminal at lighting switch side		Female terminal at harness side			
		Lo terminal is melted by heat.			Lo terminal is melted by heat.

## • Cross-sectional analysis

	Female terminal at harness side			
Returned part		There is no Sn plating any more and wear particles of base material have accumulated.		Sn plating is worn.
Non-defective part		Sn plating remains and no wear particles found.		Sn plating remains and no wear particles found.

Sn plating is worn and wear particles have accumulated. Repetitive sliding has occurred.

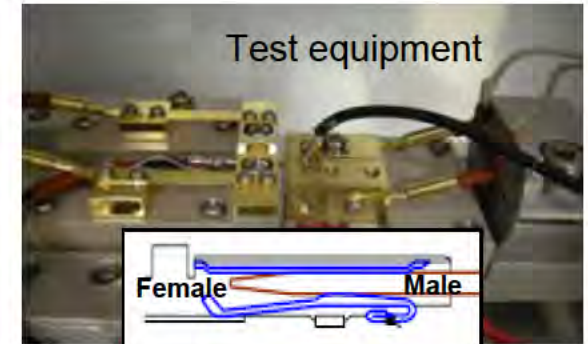
# Analysis results Recreation test (sliding test) results

## [Purpose]

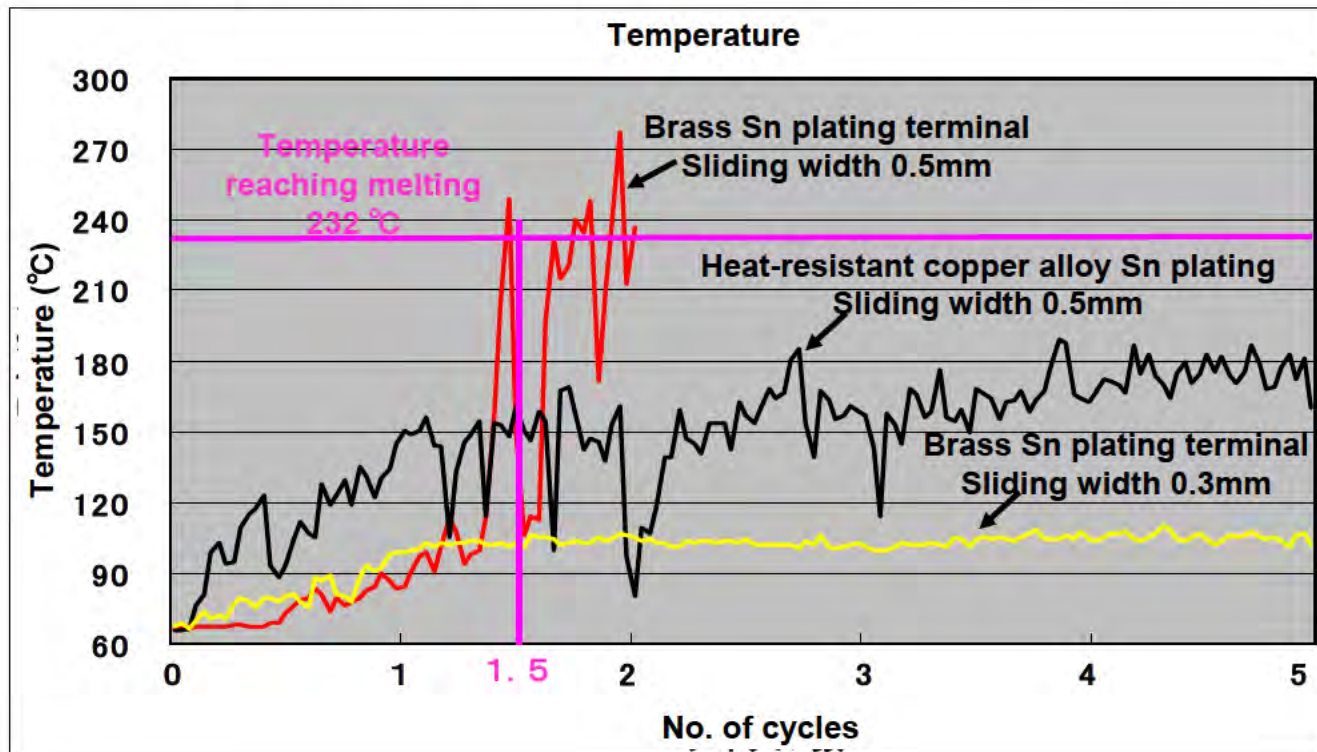
Confirm conditions of an increase in temperature due to repetitive sliding at joint area of the terminal.

## [Test result]

Brass terminal (Sn plating terminal) is confirmed to have achieved connector resin (PBT) melt temperature with sliding width 0.5mm/approx. 1.5 cycles.



Movable side      Fixed side  
Female terminal      Male terminal



## [Test conditions]

- Terminal: Brass + Sn plating
- Contact pressure: 8N (Lower limit of production control)
- Oxidation acceleration : Leave at 100 °C for 120hrs before testing
- Current: 10A
- Temperature & humidity: 60°C, 85%RH
- Sliding width: 0.5mm
- Sliding cycles: Stop for 24hrs after sliding of 10,000times (1 cycle)
- $\Delta T$  calculation formula:  
$$\Delta T = a \times [\text{Contact resistance}] \times [\text{Current}]^2$$
$$a = 17.91 \text{ (laser heat input test result)}$$



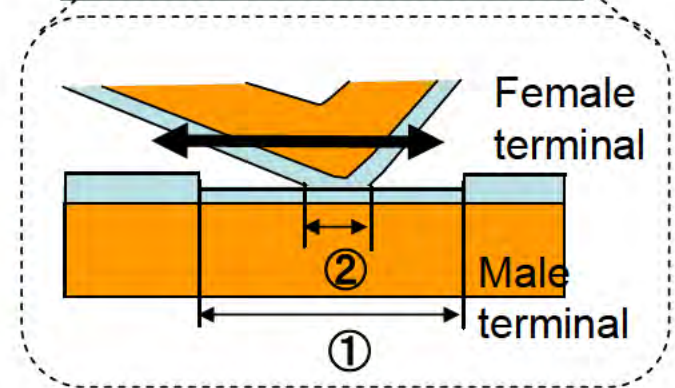
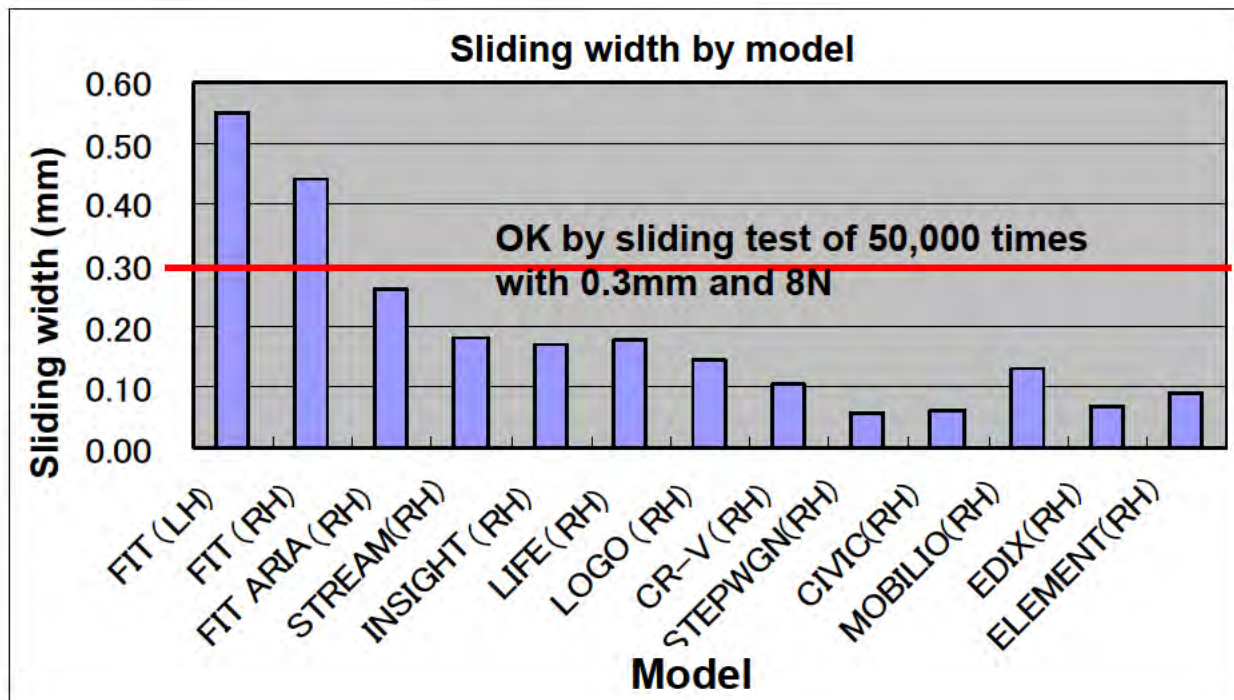
# Analysis results Sliding width confirmation results by operating lighting switch on car

**[Purpose]**

Measure actual sliding width of the terminal on car and compare it by model.

**[Measurement result]**

FIT/JAZZ has larger sliding width than other models.



**Sliding width=**  
**(Male terminal sliding width ①)**  
**- (Female terminal sliding width ②)**

**[Test condition]**

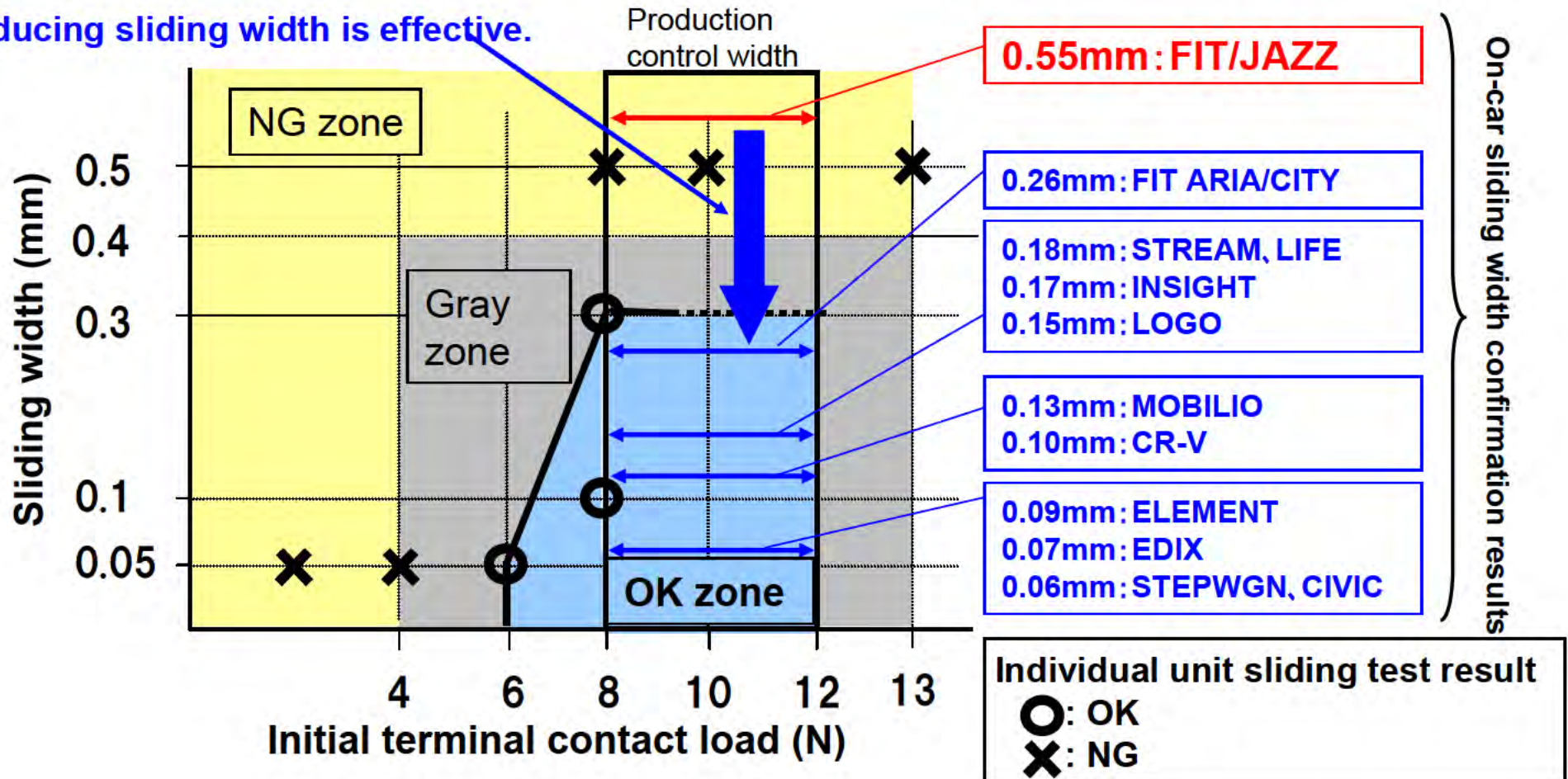
- Install lighting switch of terminal contact pressure 8N (at the lower limit of production control) into a test car.
- 1 cycle: Lighting switch operation from right turn -> center -> left turn -> center -> flashing -> center
- No. of tests: 10,000 times manually

# Analysis results Summary of sliding test results

## [Purpose]

Judge if sliding width is OK or not based on the on-car terminal sliding width confirmation results and the individual unit sliding test results.

Reducing sliding width is effective.

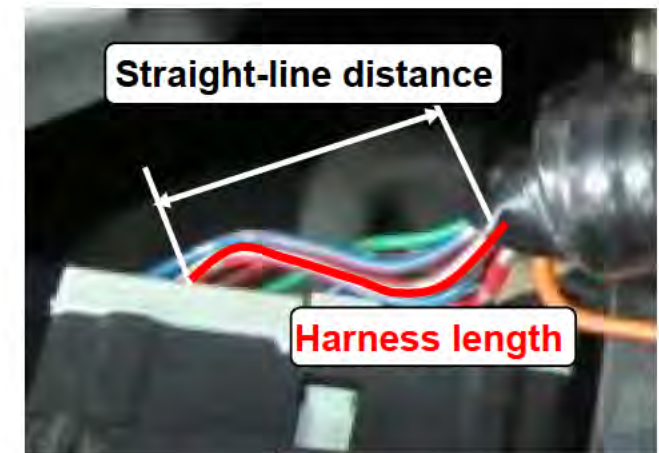
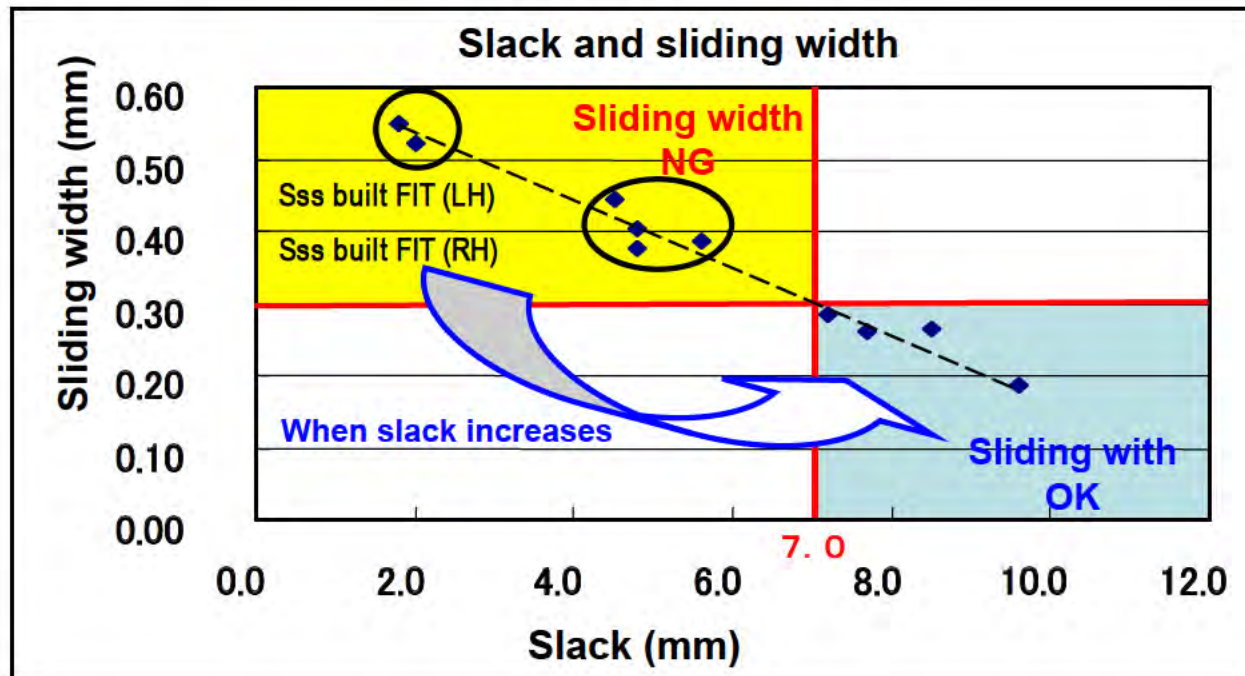


It is confirmed that only FIT/JAZZ is in NG zone where resistance increases. Reducing sliding width is the most effective countermeasure.

# Analysis results

Investigation results of sliding width and harness slack

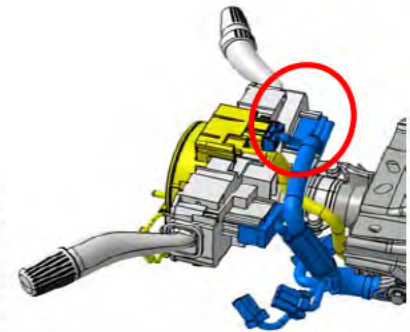
- Comparison between Sss built FIT and FIT built at other factories showed difference in slack, so correlation between slack and sliding width will be confirmed.



**Slack = Harness length – Straight-line distance**

We found that sliding width decreases when slack increases.

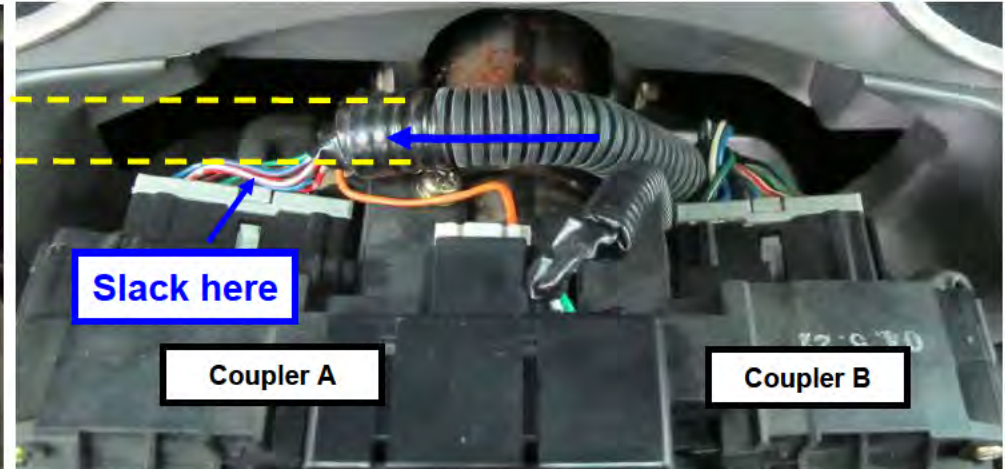
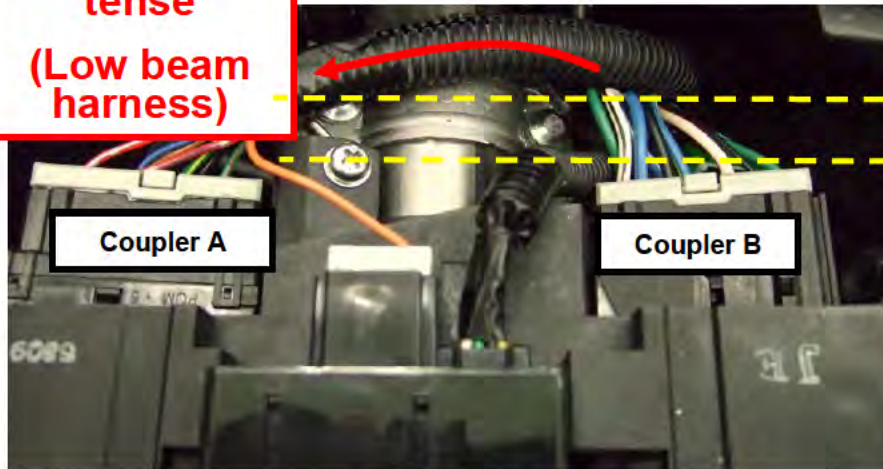
# Analysis results Routing investigation results by factory (LH) ①



Sss built FIT/JAZZ

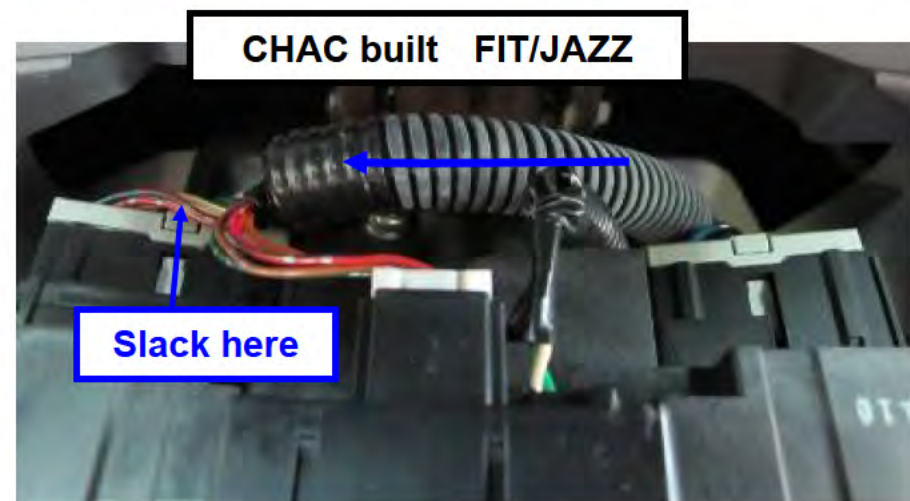
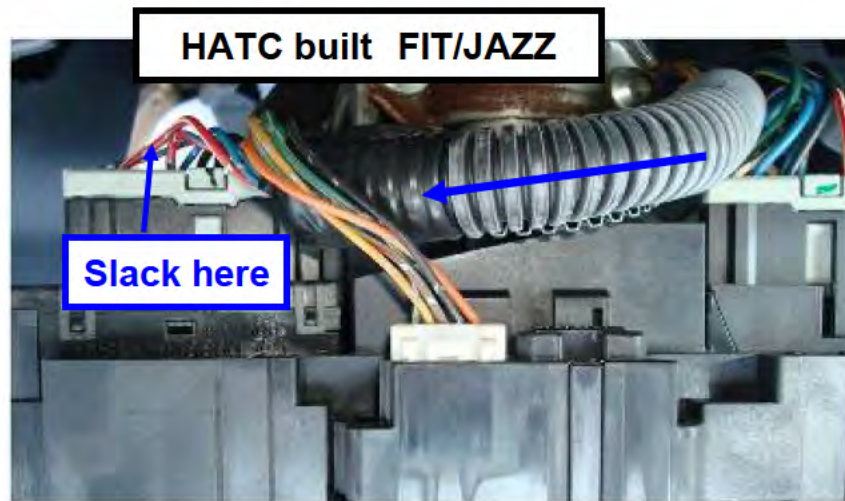
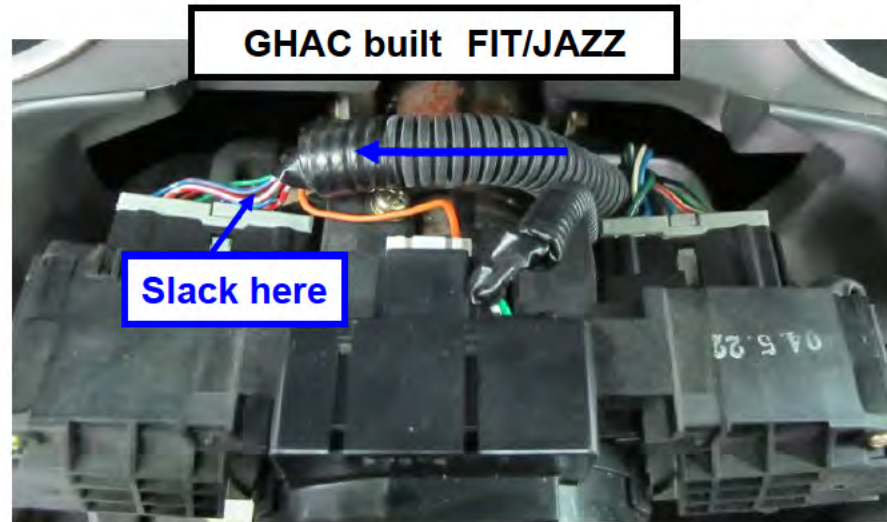
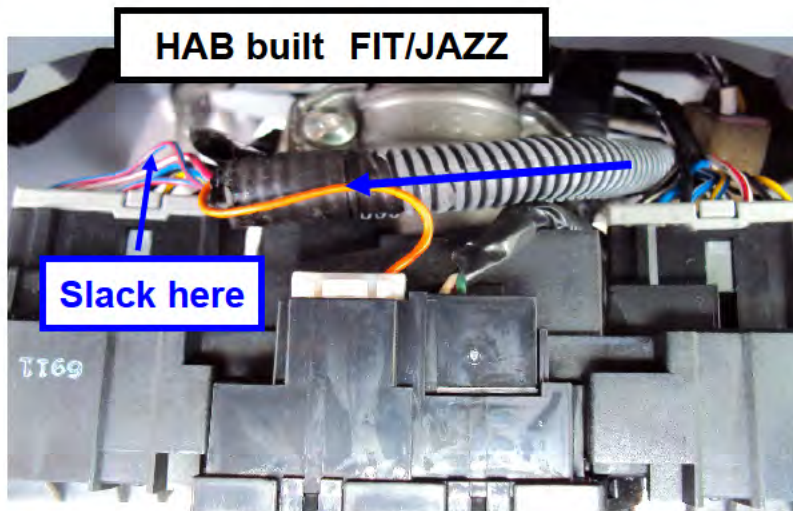
GHAC built FIT/JAZZ

Harness is tense  
(Low beam harness)



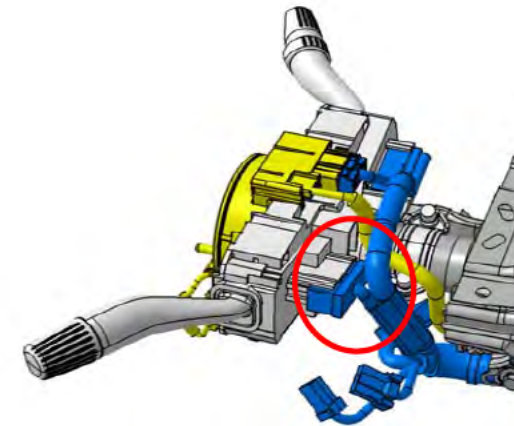
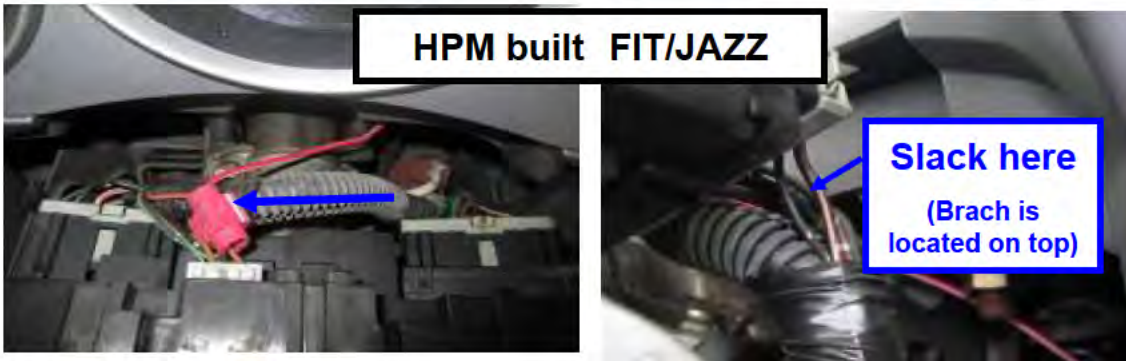
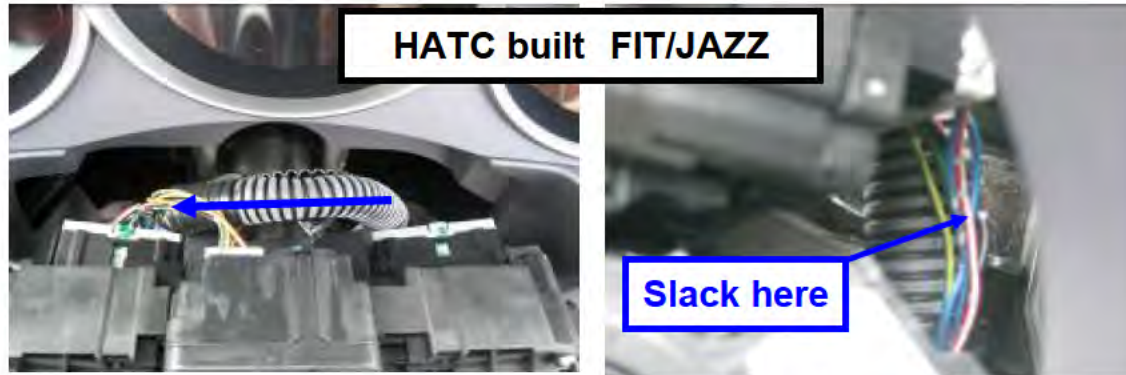
When coupler B is set first, then coupler A is set on COMBI SW side, harness comes off from coupler, and low beam harness tends to be tense.

# Analysis results Routing investigation results by factory (LH)②



Low beam harness is tense for only Sss built FIT/JAZZ.

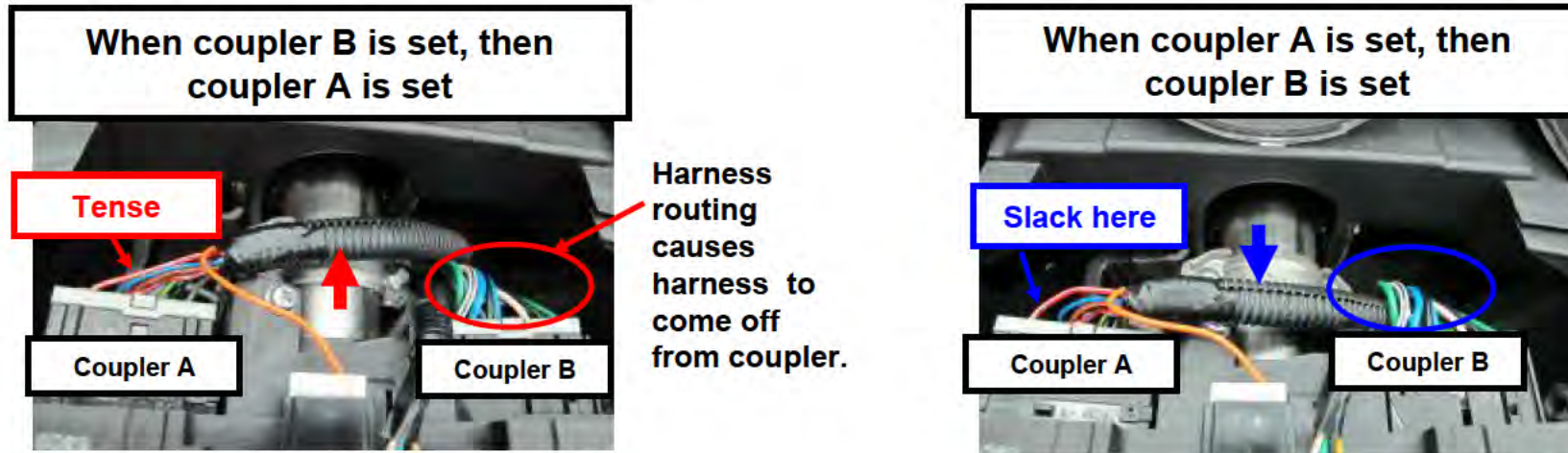
# Analysis results Routing investigation results by factory (RH)



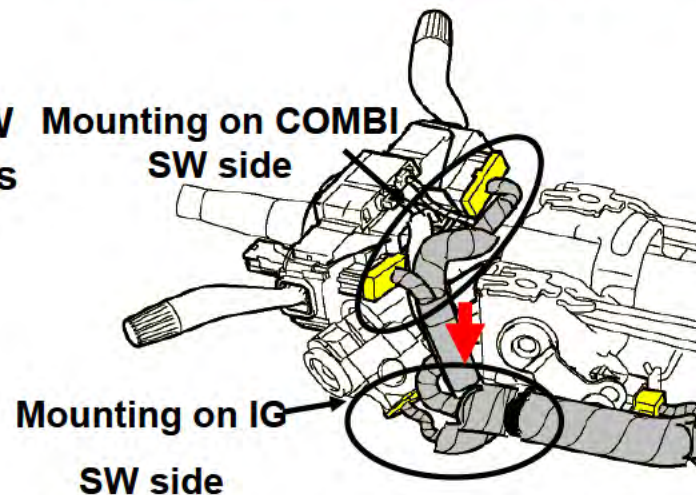
**Low beam harness is tense for only Sss built FIT/JAZZ.**

# Analysis results Investigation results of mounting order

- ① When coupler B is set, then coupler A is set on COMBI SW side, harness comes off from coupler, and low beam harness tends to be tense.



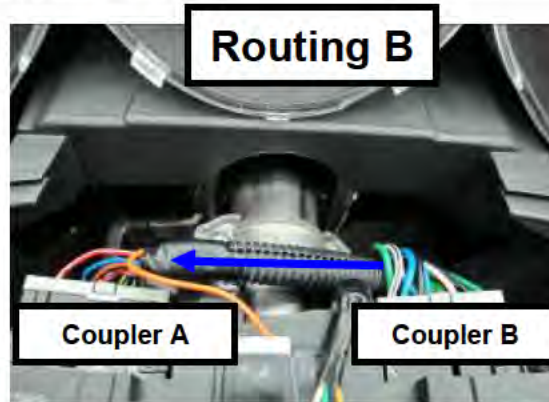
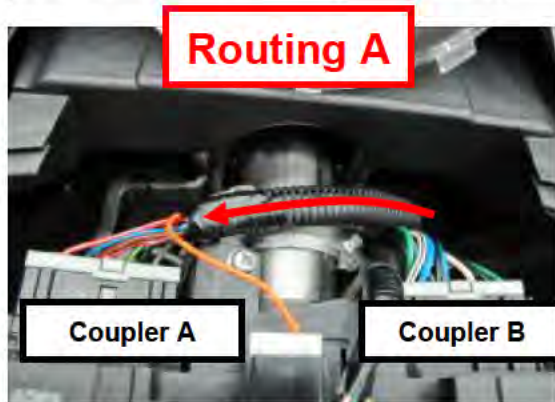
- ② When harness is mounted to COMBI SW, then mounted to IG SW, harness on COMBI SW side moves down, and low beam harness tends to be tense.



When coupler B is mounted, then coupler A is mounted on IG SW side per mounting order of Sss built FIT/JAZZ, low beam harness is tense.

# Analysis results Summary of factor investigation results by model ①

Model	Factory	Routing	Slack (mm)	Sliding width (mm)	Mounting order			Judgment
					1	2	3	
FIT/JAZZ(LH)	Sss	A	1.8	0.55	※	※	IG SW	NG
FIT/JAZZ(RH)			Coupler A	Coupler B	Coupler A			
FIT/JAZZ(LH)	CHAC	B	13.9	0.24	Coupler A	Coupler B	IG SW	OK
FIT/JAZZ(LH)	HAB	B	8.9	—	Coupler A	Coupler B	IG SW	OK
FIT/JAZZ(RH)	HPM	B	14.0	—	IG SW	Coupler A	Coupler B	OK
FIT/JAZZ(LH)	GHAC	B	9.6	0.19	IG SW	Coupler B	Coupler A	OK
FIT/JAZZ(RH)	HATC	B	9.3	—	IG SW	Coupler B	Coupler A	OK
FIT/JAZZ(LH)			9.4	—				



\* For Sss built FIT/JAZZ, coupler mounting order is coupler A => coupler B, but video recording at the time of production showed that mounting order is coupler B => coupler A. So, we determine that both types (coupler A => coupler B / coupler B => coupler A) are mixed.

**Judgment : Slack is more than 7mm.  
OK**

**Due to different mounting order, low beam harness is tense for only Sss built FIT/JAZZ.**



# Analysis results summary of factor investigation results by model ②

Model	Factory	Slack (mm)	Sliding width (mm)	Judgment
FIT ARIA/CITY(RH)	HATC	10.3	0.26	OK
FIT ARIA/CITY(LH)	GHAC	7.2	0.28	OK
FIT ARIA/CITY(RH)	HSCI	18.3	—	OK
FIT ARIA/CITY(RH)	HCPI	10.5	—	OK
FIT ARIA/CITY(RH)	HMSB	13.8	—	OK
FIT ARIA/CITY(RH)	HACPL	9.6	—	OK
CR-V(RH, LH)	Css	23.4	0.10	OK
LOGO(RH)	Sss	15.4	0.15	OK
INSIGHT(RH)	Sss	22.8	0.17	OK
STEPWGN(RH)	Sss, Css	37.4	0.06	OK
CIVIC(RH)	Sss	48.3	0.06	OK
STREAM(RH)	Sss	26.5	0.18	OK
MOBILIO(RH)	Sss	32.9	0.13	OK
EDIX. (RH)	Sss	16.1	0.07	OK
ELEMENT(RH)	Sss	33.5	0.09	OK
LIFE(RH)	Sss	26.7	0.18	OK
PILOT(LH)	HMA	21.3	—	OK
FIT ARIA/CITY(LH)	HTR	11.6	—	OK

Slack is maintained for other models, with no problem.

**INSIGHT**



Low beam harness

**CIVIC**



Low beam harness

**STREAM**



Low beam harness

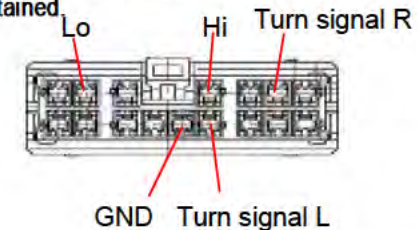
**STEPWGN**



Low beam harness

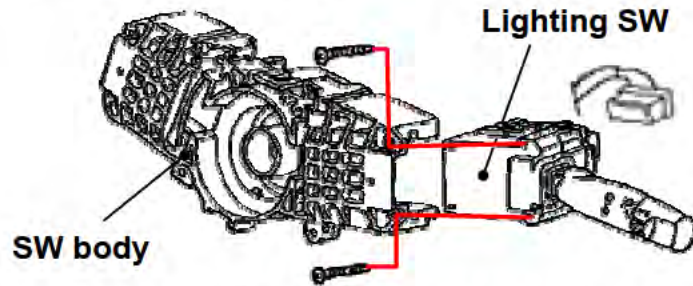
The reason why other terminals show no problem

1. Current of terminals other than Lo / Hi / GND is 3.5A when turn signal is working, and less than 0.2A when turn signal is not working.
2. Hi / GND terminal is located on the center of the coupler, so slack is maintained.



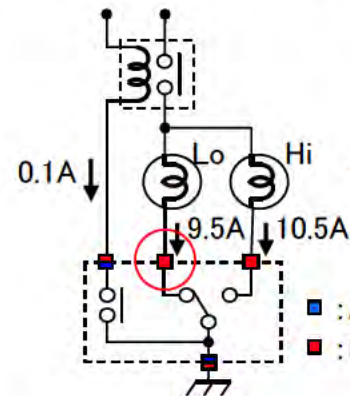
# Analysis results Occurrence mechanism ①

## Lighting SW structure



When lever is worked (Switching from Hi to Lo, turning lever while pulling the lever toward driver), with SW tightening screw as supporting point, the SW slightly moves.

## Explanation of circuit (2 lamp system)

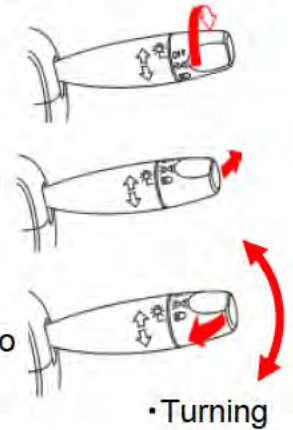


## Explanation of lever operation

• Light illumination

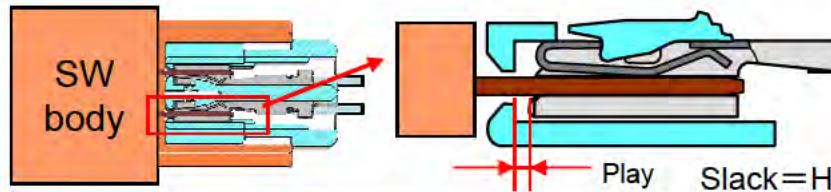
• Switching to Hi beam

• Passing  
• Switching to Lo beam

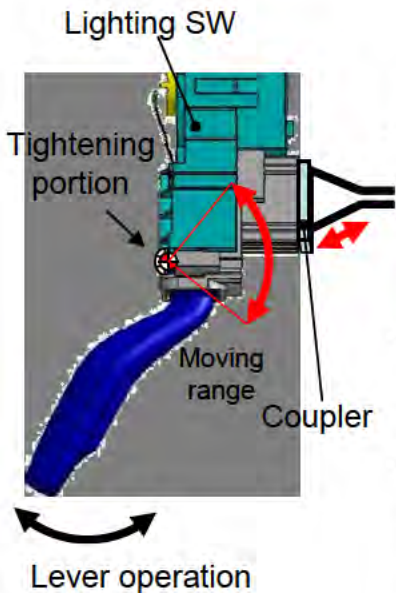


• Turning

## Terminal sliding mechanism



Play found between coupler and female terminal because of assembly and part tolerance.



	When harness is tense	When harness shows slack
Switching from Hi => Lo Passing Turning lever while pulling Operating direction Force (Return)	<p>Coupler, Female terminal, Male terminal, Headlight operating SW, (Reaction)</p>	<p>Harness slack absorbs dislocation</p>
Before / after operation		
Switching from Lo => Hi Turning lever while pushing Operating direction Force (Return)	<p>Slack does not easily occur</p>	<p>Harness slack absorbs dislocation</p>

# Analysis results Occurrence mechanism ②

Harness length, which is connected FIT lighting SW, was set to be less slack, so some low beam harness were too tense during routing operation.

When SW body moved by lighting SW lever operation, low beam terminal connection area can not move with the SW, so male / female terminals slide very much.  
(Sliding width : Approx 0.5mm)

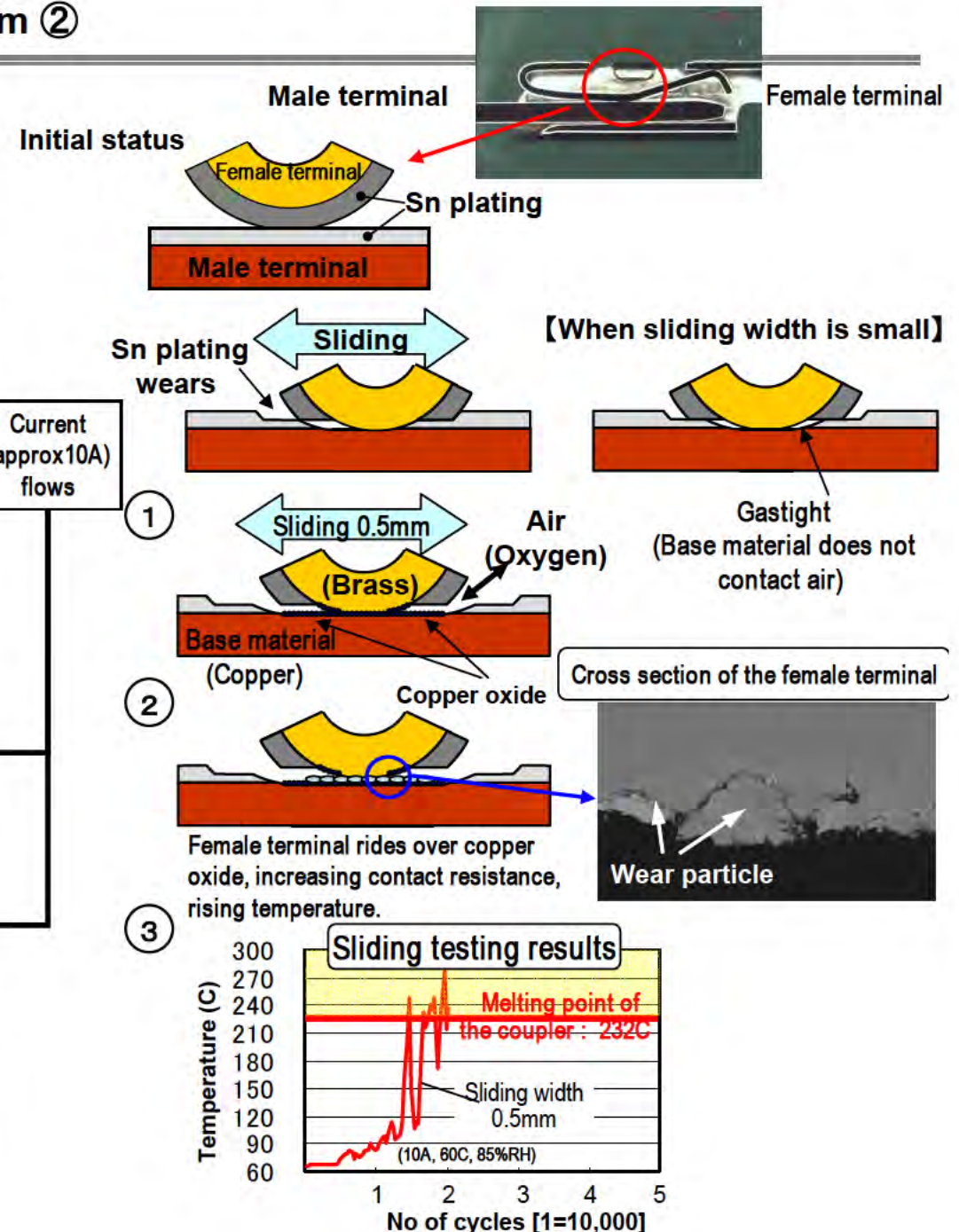
① Sn plating gradually wears from sliding of terminal connection area, base material is exposed, copper oxide generates on connection area between male and female terminal.  
When terminal repeatedly slides, copper oxide turns into wear particle, and wear particle builds up sliding portion.

② When terminal overrides wear particle from copper oxide, which built up when sliding, contact resistance increases, and connection area excessively heats up when headlight illuminates.

③ Less stress is applied to connection area of the terminal from heat, and contact pressure of the terminal drops.  
As a result, more wear particle enters between male and female terminal and the terminal further heats up.

If this condition continues, coupler plastic melts and flows into connection area, leading to no continuity, resulting in **no illumination of the low beam.**

\* No continuity occurs when coupler plastic melts and flows into connection area. Current does not flow, so fire does not spread.



# Analysis results

Occ forecast of Japan and US based on HINJOREN and QIC

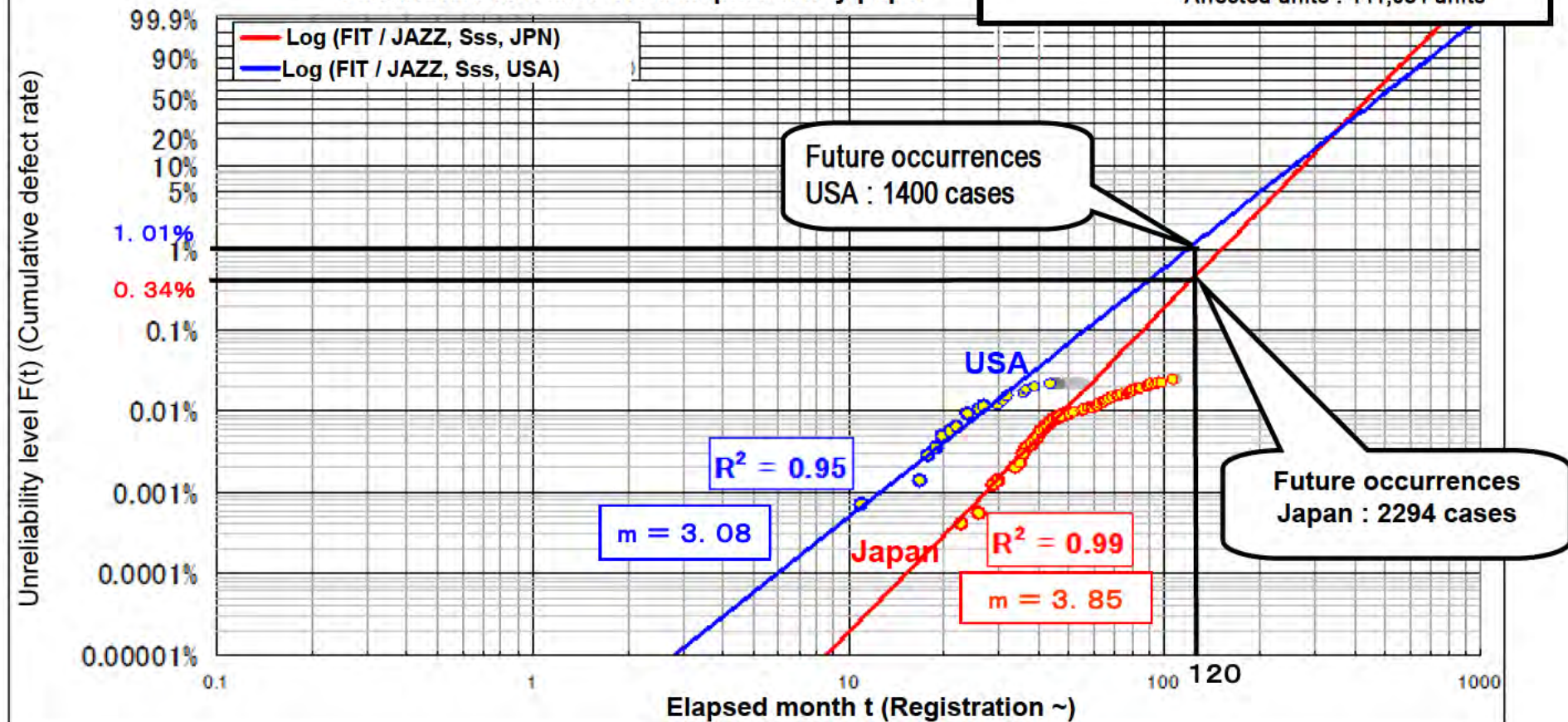
## Japan

Elapsed years	Current	In 10 years
Occurrences	130 cases	2424 cases
Occ rate	0.018%	0.33%
Affected units : 734,392 units		


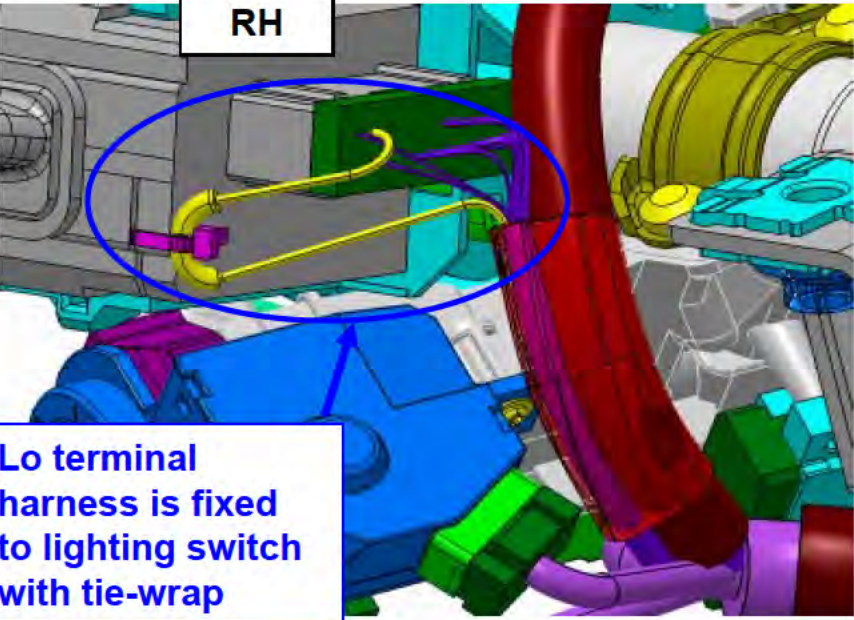
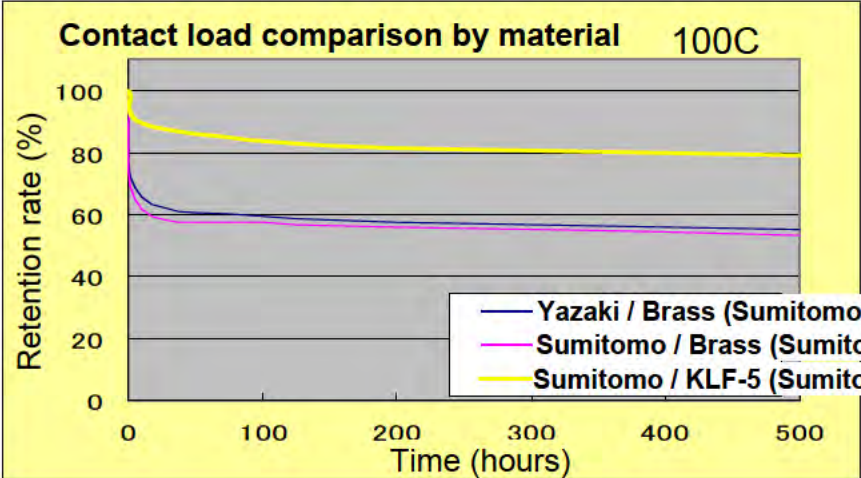
## USA

Elapsed years	Current	In 10 years
Occurrences	25 cases	1425 cases
Occ rate	0.018%	1.01%
Affected units : 141,084 units		

Occurrence forecast Weibull probability paper

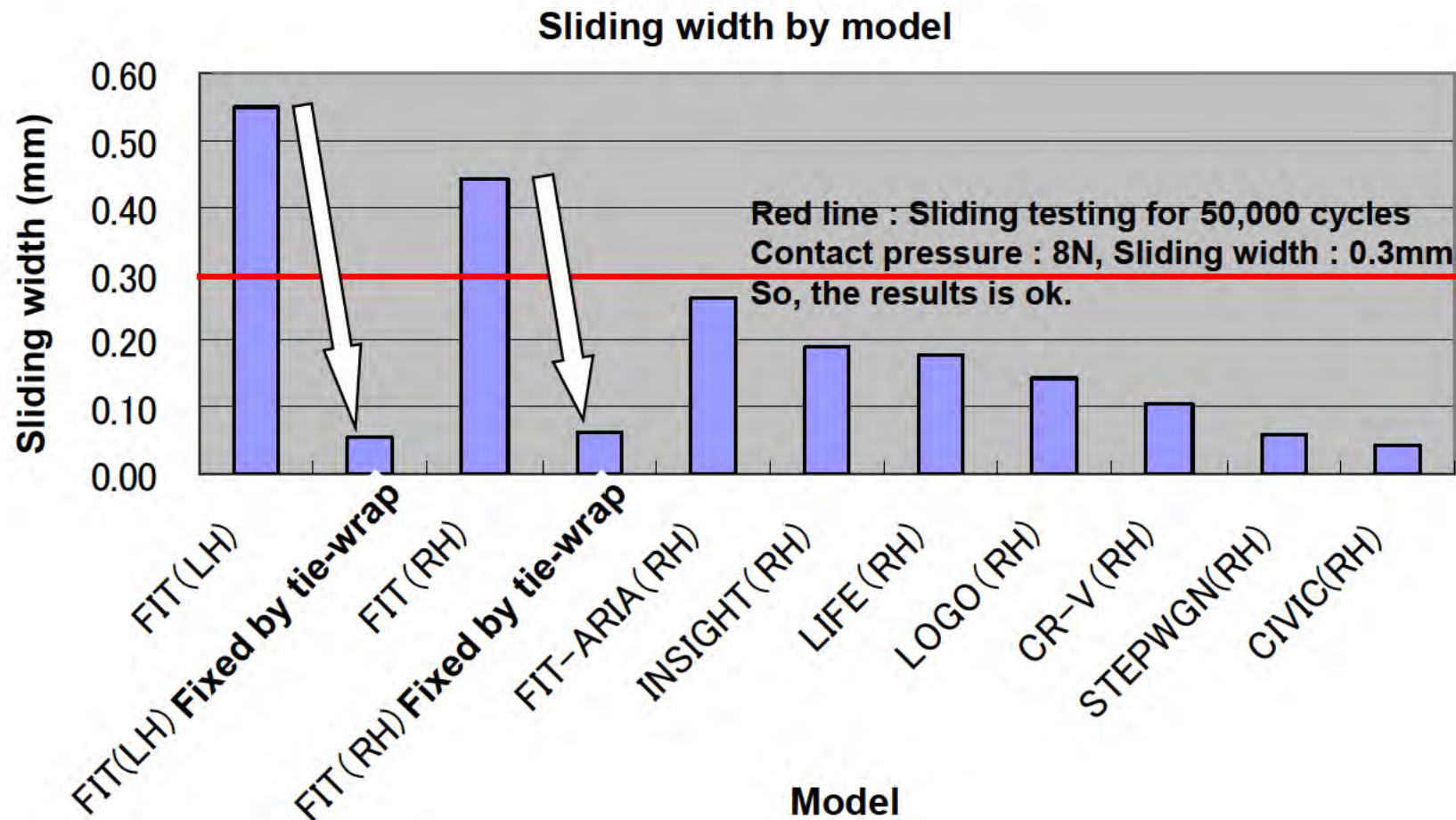


# Countermeasure Countermeasure

Countermeasure	Remarks																												
<p>- Sliding is prevented by tie-wrap</p> <p>By fixing female terminal harness (slack is maintained) to lighting switch with tie-wrap, the harness can move with the switch during operation, preventing sliding of the terminal connection area. (Harness has to be extended.)</p> 	 <p>RH</p> <p>Lo terminal harness is fixed to lighting switch with tie-wrap</p>																												
<p>- Contact load reduction of female terminal will be less</p> <p>Material will be changed to heat resistance copper alloy with smaller reduction of contact pressure load (Current : Brass)</p>	 <p>Contact load comparison by material 100C</p> <p>Retention rate (%)</p> <p>Time (hours)</p> <p>— Yazaki / Brass (Sumitomo) — Sumitomo / Brass (Sumitomo) — Sumitomo / KLF-5 (Sumitomo)</p> <table border="1"> <caption>Approximate data from the contact load comparison graph</caption> <thead> <tr> <th>Time (hours)</th> <th>Yazaki / Brass (Sumitomo) (%)</th> <th>Sumitomo / Brass (Sumitomo) (%)</th> <th>Sumitomo / KLF-5 (Sumitomo) (%)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>100</td> <td>100</td> <td>100</td> </tr> <tr> <td>100</td> <td>55</td> <td>60</td> <td>80</td> </tr> <tr> <td>200</td> <td>55</td> <td>60</td> <td>80</td> </tr> <tr> <td>300</td> <td>55</td> <td>60</td> <td>80</td> </tr> <tr> <td>400</td> <td>55</td> <td>60</td> <td>80</td> </tr> <tr> <td>500</td> <td>55</td> <td>60</td> <td>80</td> </tr> </tbody> </table>	Time (hours)	Yazaki / Brass (Sumitomo) (%)	Sumitomo / Brass (Sumitomo) (%)	Sumitomo / KLF-5 (Sumitomo) (%)	0	100	100	100	100	55	60	80	200	55	60	80	300	55	60	80	400	55	60	80	500	55	60	80
Time (hours)	Yazaki / Brass (Sumitomo) (%)	Sumitomo / Brass (Sumitomo) (%)	Sumitomo / KLF-5 (Sumitomo) (%)																										
0	100	100	100																										
100	55	60	80																										
200	55	60	80																										
300	55	60	80																										
400	55	60	80																										
500	55	60	80																										

# Countermeasure Confirmation of sliding prevention effectiveness on car

- Confirm countermeasure effectiveness by operating lighting switch for 10,000 cycles on car. (1 cycle : Activate turn signal (Right) -> Neutral -> Activate turn signal (Left) -> Neutral -> Passing -> Neutral)



**Tie-wrap reduced sliding width to approx 1/10.**

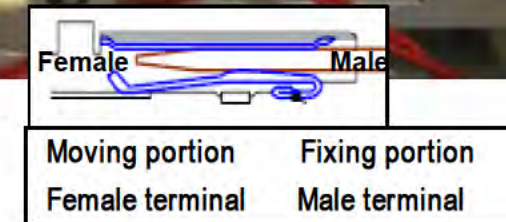
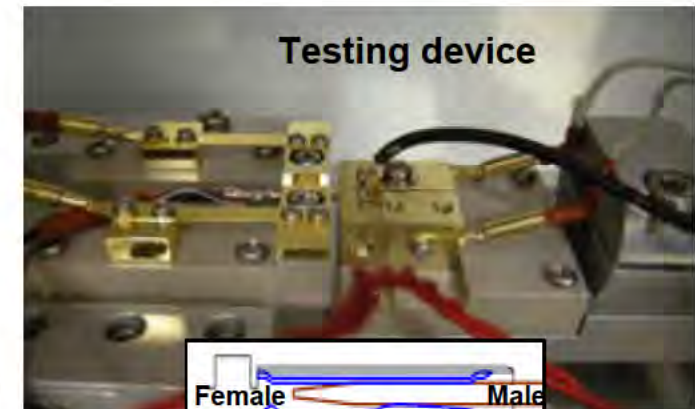
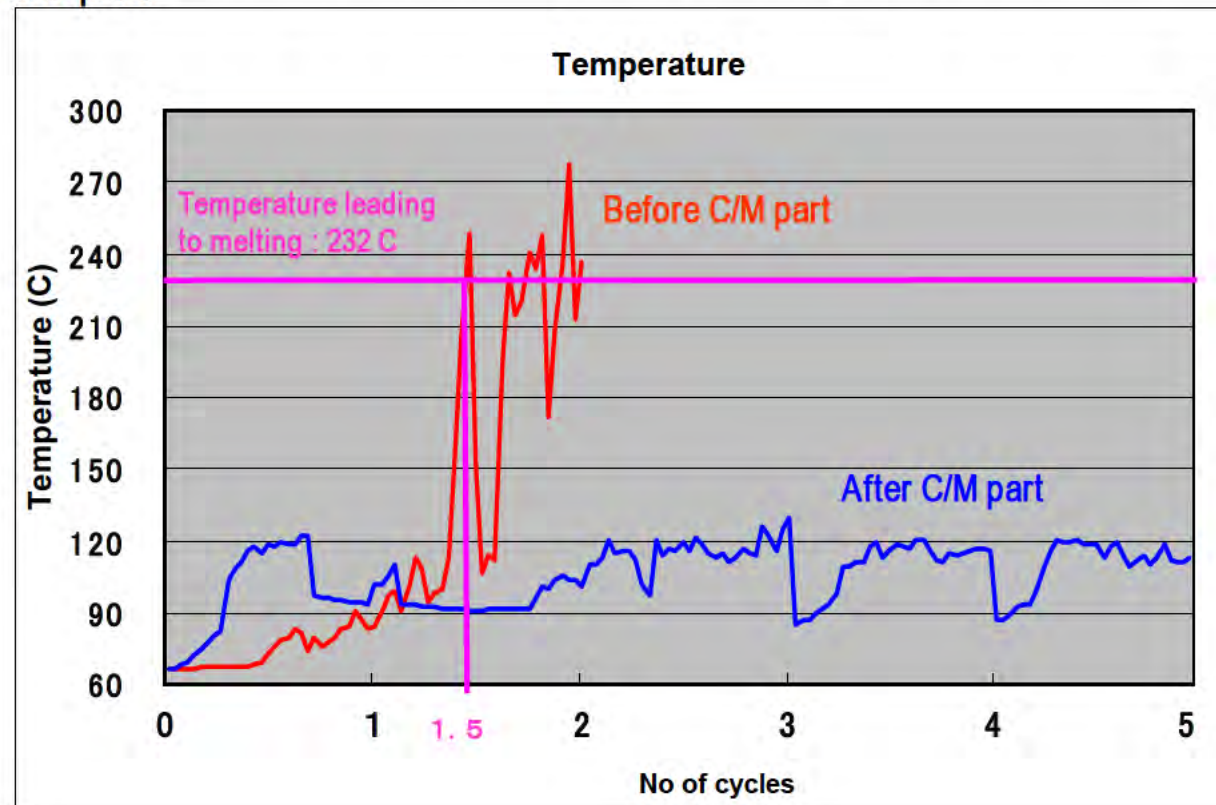
## Countermeasure C/M effectiveness confirmation results by sliding testing using market action part

We found that the failure will not occur by fixing the harness by tie-wrap and changing material of the female terminal to heat resistance copper alloy, even if Sn plating of the male terminal separates from wear.

Before C/M part : Melting damage occurs in approx 1.5 cycles.

After C/M part : Melting damage does not occur in 5 cycles.

After C/M part shows at least more than 3 fold toughness than before C/M part.



<Testing condition>

- Female terminal : Heat resistance copper alloy (Reduction of contact pressure is small)
- Male terminal : Copper (No plating : Equivalent to market parts)
- Contact pressure load : 8N (Production control lower limit)
- Oxide acceleration : The part was left at 100C for 120 hours before testing
- Current : 10A
- Temperature / humidity : +60C, 85%RH
- Sliding width : 0.1mm (Equal to condition that the harness was fixed by tie-wrap)
- Sliding cycle : 1 cycle (Sliding for 10,000 cycles ->Stop for 24 hours)

# Recurrence prevention

---





**Harness will extend so that the harness can absorb dislocation of the switch during operation, and harness routing will have no effect on terminal.**



# AQAOでの解析結果

## ◇返却現品分解確認結果(溶損)

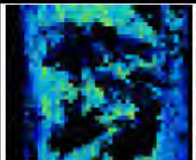
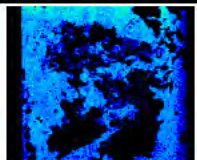
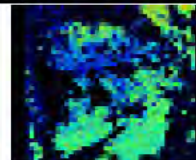

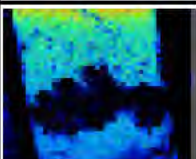
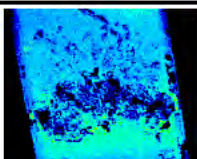
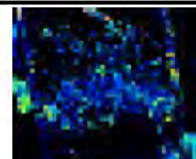
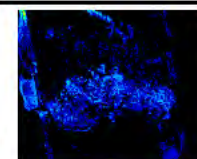
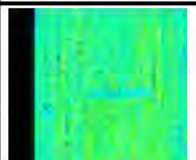



### ・外観確認

ライティングSW側のオス端子		ハーネス側のメス端子	
 	Lo端子が熱により、溶損している	 	Lo端子が熱により、溶損している

### ・X線解析結果(ハーネス側のメス端子)



### ・表面解析結果


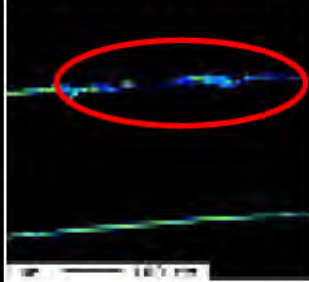

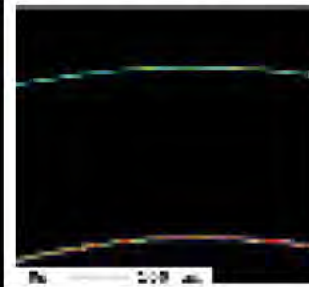
	Sn	Cu	C	O	
オス端子の舌片部					接触部近傍にC、O(樹脂)の付着が激しく樹脂溶融温度以上に発熱している
メス端子の舌片部					
参考)良品オス、舌片側					Snメッキは十分残っており、異常摩耗は発生していない。

## ◇返却現品分解確認結果(溶損)

### ・外観確認

ライティングスイッチ側のオス端子			ハーネス側のメス端子		
		Lo端子が熱により、溶損している			Lo端子が熱により、溶損している

### ・断面解析

	ハーネス側のメス端子			
返却品		Snメッキがなくなり、母材の磨耗粉が堆積している		Snメッキが磨耗している
良品		Snメッキが残り、磨耗粉はなし		Snメッキが残り、磨耗粉はなし

Snメッキが摩耗し、磨耗粉が堆積していることから、摺動の繰返しが発生している。

## 【目的】

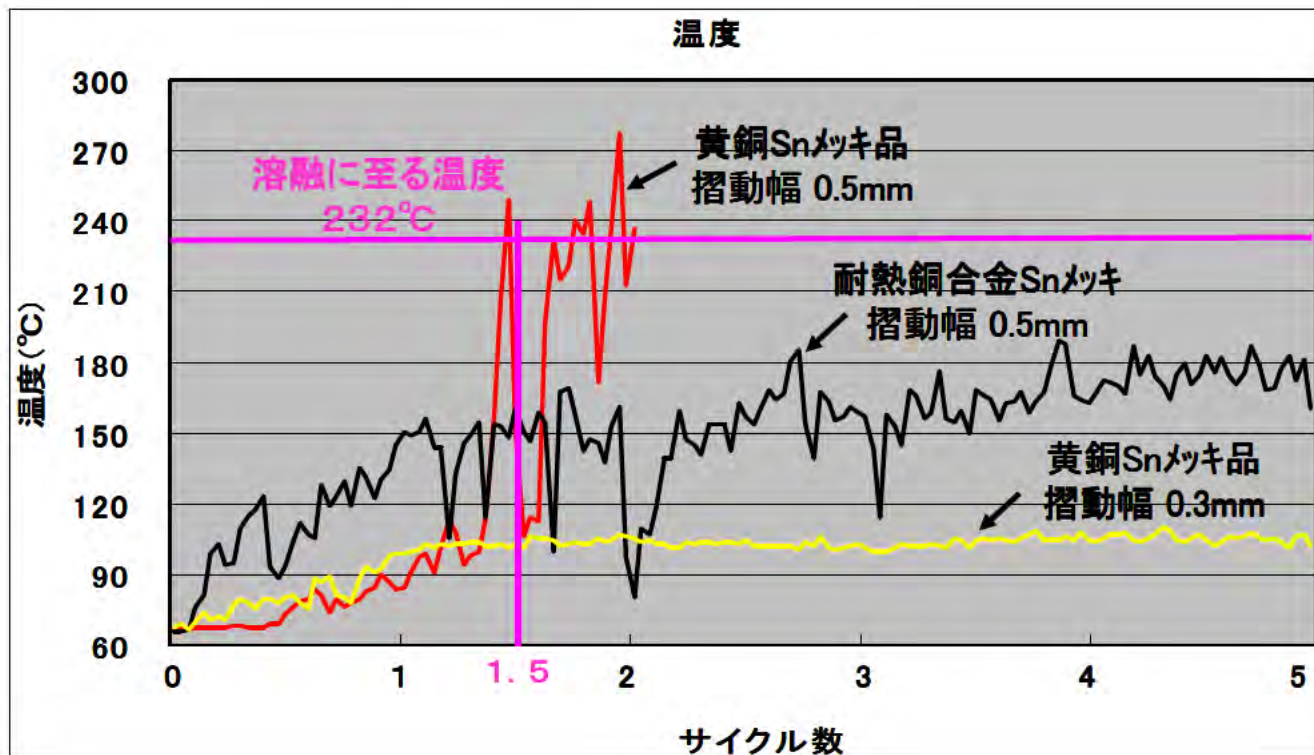
端子嵌合部の摺動繰返しにより、温度上昇が生じる条件を確認する

## 【試験結果】

黄銅端子(Snメッキ品)は、摺動幅 0.5mm/約1.5サイクルでコネクタ樹脂(PBT)の熔融温度に至ることが判明



可動側	固定側
メス端子	オス端子



## 【試験条件】

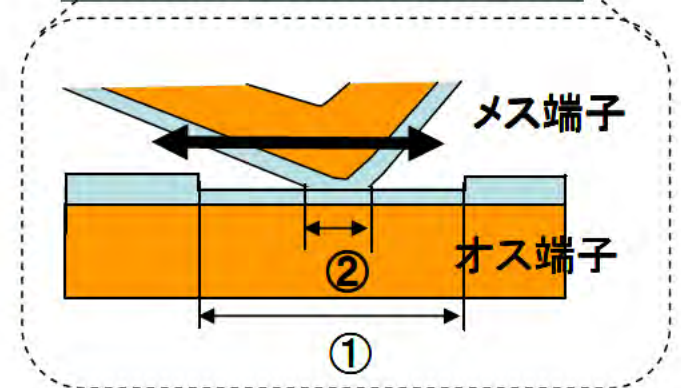
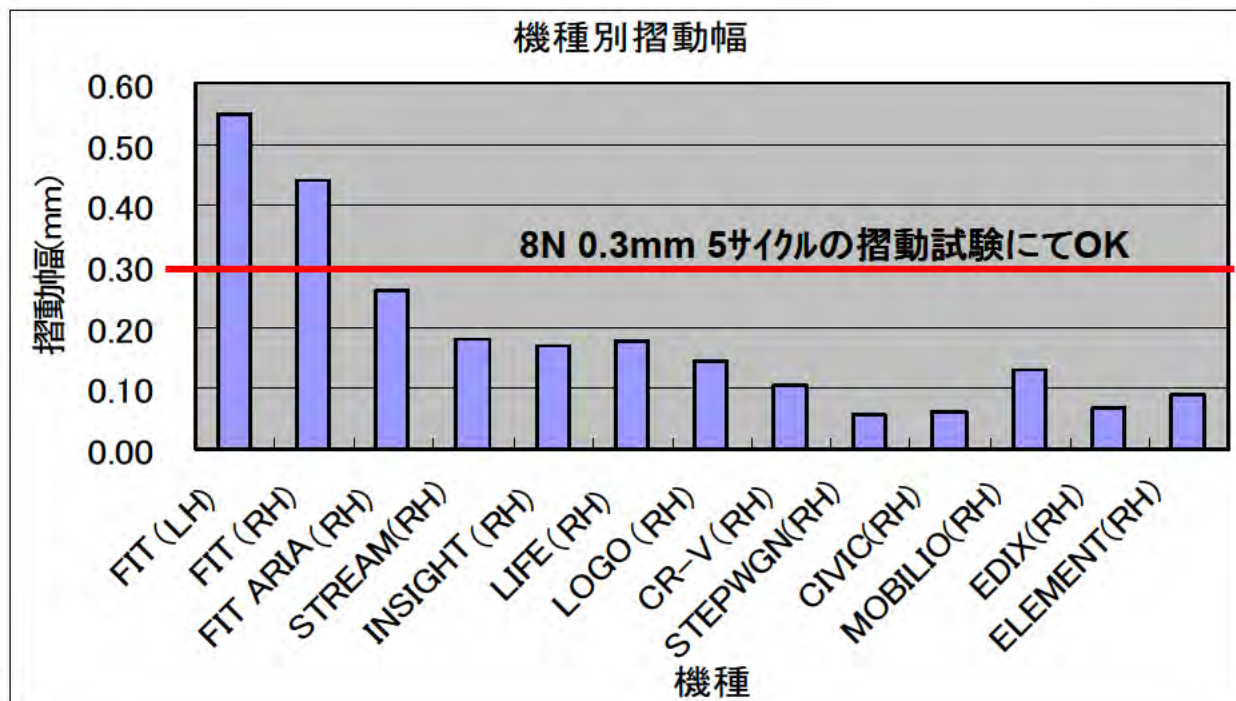
- ・供試端子 : 黄銅+Snメッキ
- ・接圧荷重 : 8N(製造管理の下限值)
- ・酸化促進 : 試験前に100°C×120h放置
- ・通電電流 : 10A
- ・温湿度 : 60°C、85%RH
- ・摺動幅 : 0.5mm
- ・摺動サイクル : 摺動1万回後に24h停止を1サイクル
- ・ΔT換算式 :  $\Delta T = a \times [\text{接触抵抗}] \times [\text{電流}]^2$   
a=17.91(レーザ入熱試験結果)

## 【目的】

実車に於ける実際の端子の摺動幅を測定し、機種毎に比較する

## 【測定結果】

FIT/JAZZが他機種に比べ、摺動幅が大きいことが判明



摺動幅＝オス端子摺動幅①  
－メス端子摺動幅②

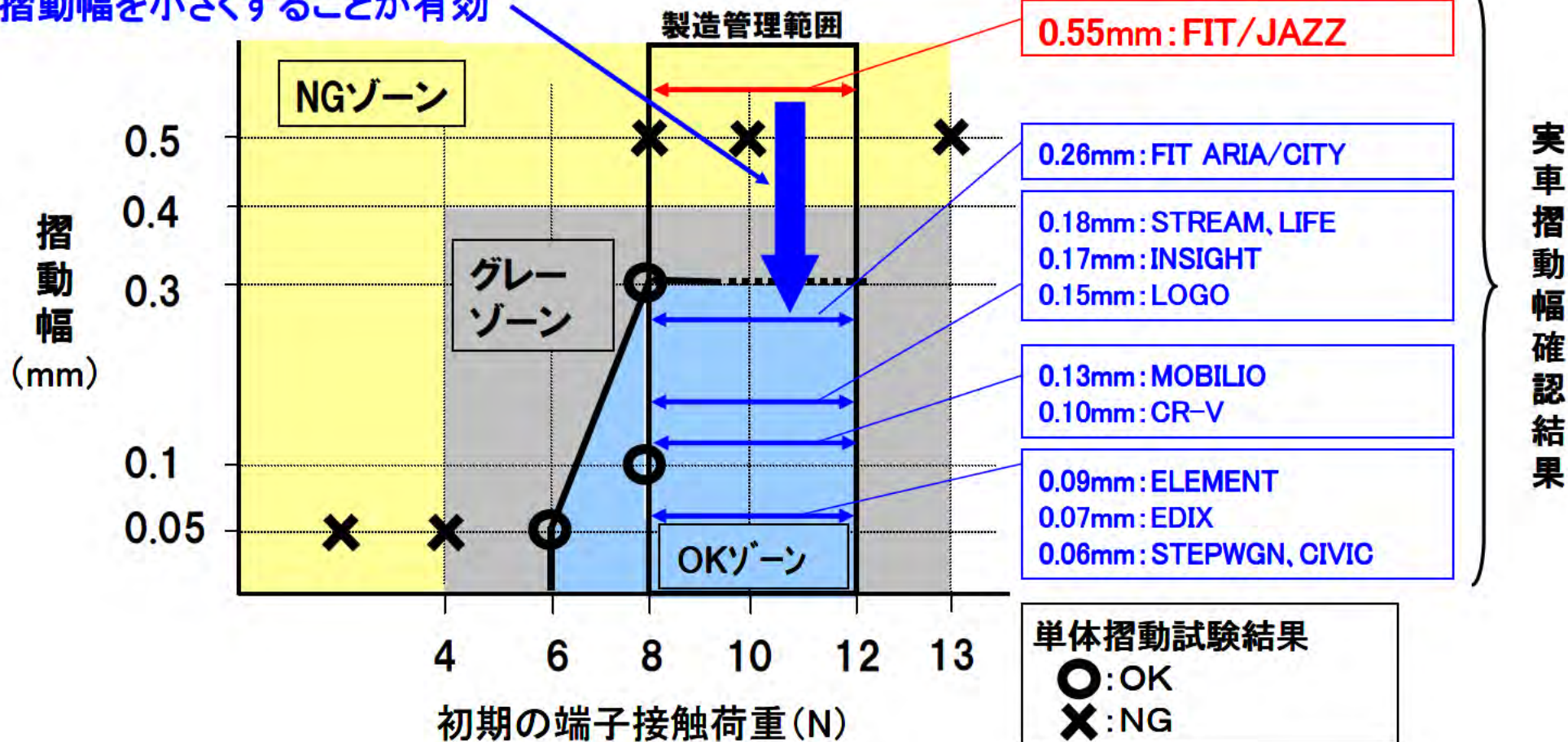
## 【試験条件】

- ・実車に端子接圧8N品(製造管理下限品)を取り付ける
- ・1サイクル : Rターン→中立→Lターン→中立  
→パッシング→中立 のSW操作
- ・サイクル数 : 人操作による1万サイクル

【目的】

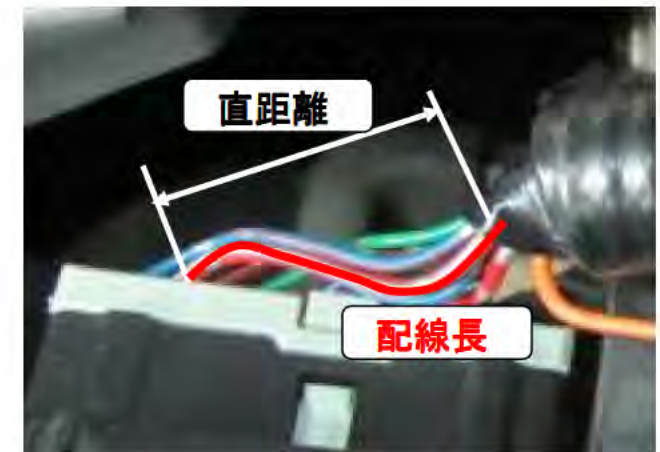
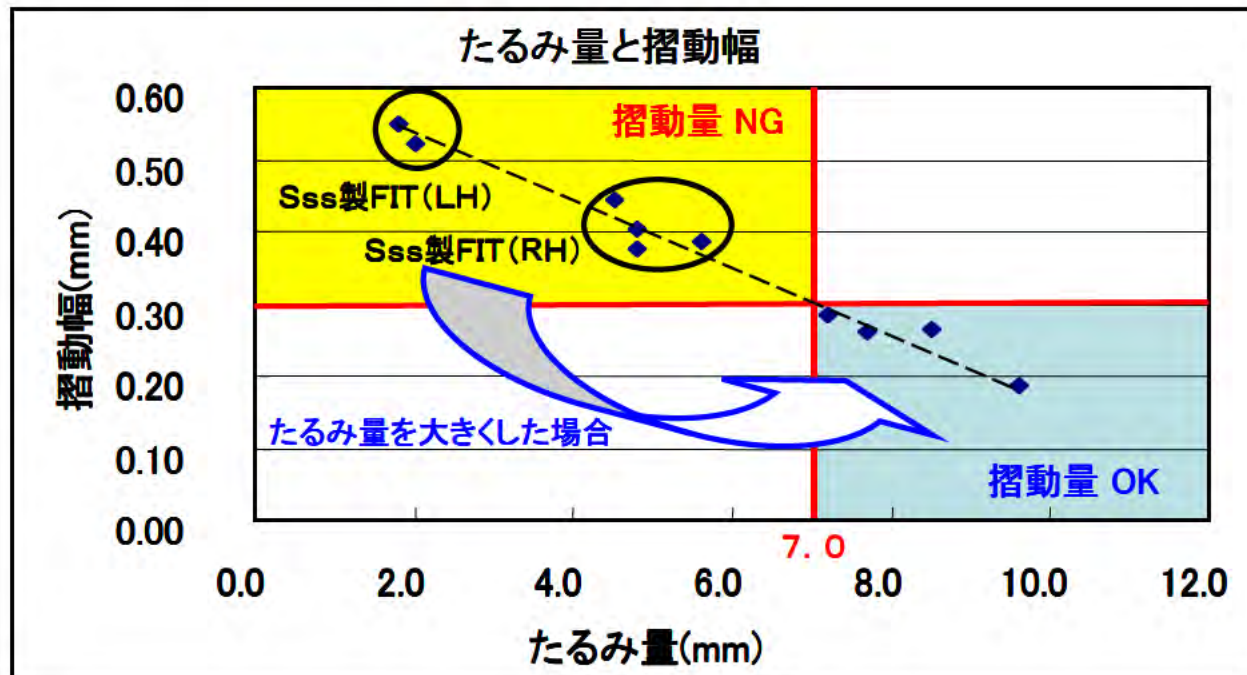
実車に於ける端子摺動幅と単体摺動試験結果を重ねて、摺動幅の良否を判定する

摺動幅を小さくすることが有効



FIT/JAZZの実車摺動幅のみが、抵抗値増大が認められるNGゾーンにいたることが判明  
また、摺動幅を抑えることが最も有効な対策である

- ・Sss製のFITと他製造拠点のFITを比較し、たるみ量に違いがあることから、たるみ量と摺動幅の相関を確認する



たるみ量 = 配線長 - 直距離

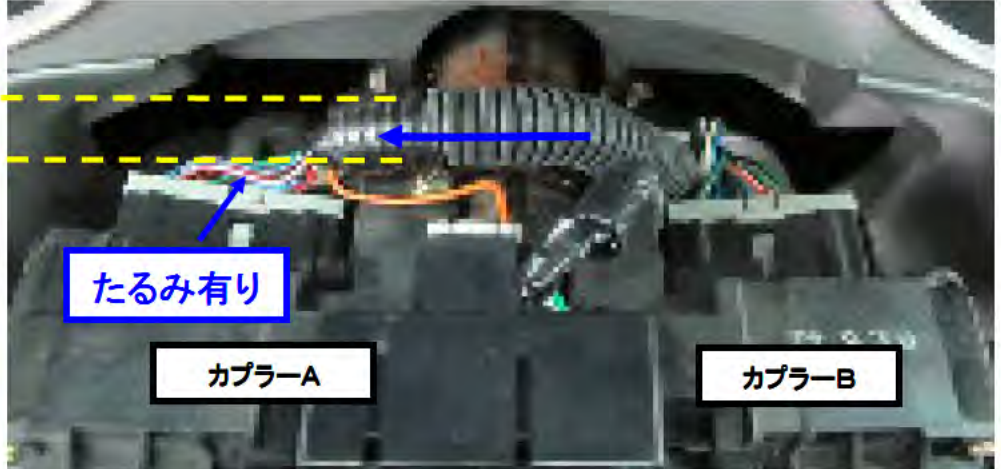
たるみ量が大きいと摺動幅も小さくなることを確認



Sss製 FIT/JAZZ

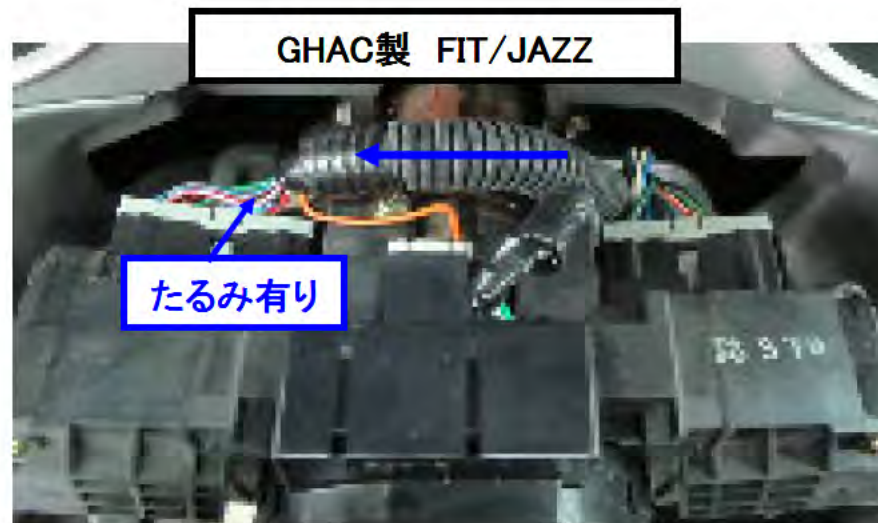
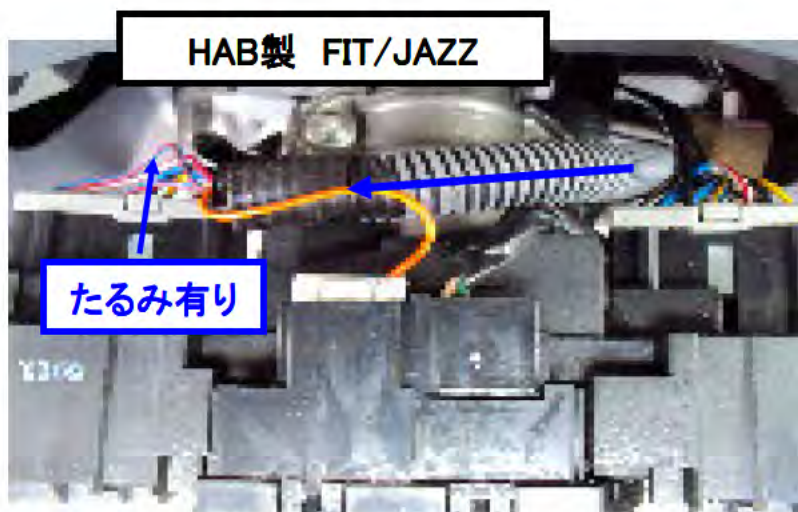
GHAC製 FIT/JAZZ

張った状態  
(ロービーム配線)



コンビSW側組付でカプラーB ⇒ カプラーAの順で組付を行うとハーネスがカプラーから離れ、ロービーム配線が張る傾向になる



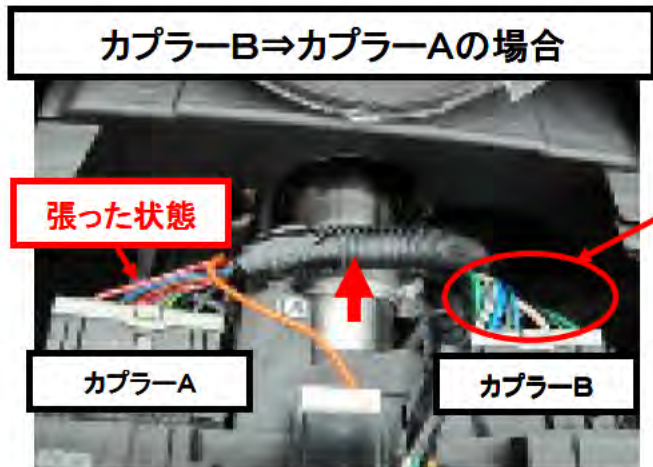


ロービーム配線が張った状態になる配索は、Sss製 FIT/JAZZのみである。

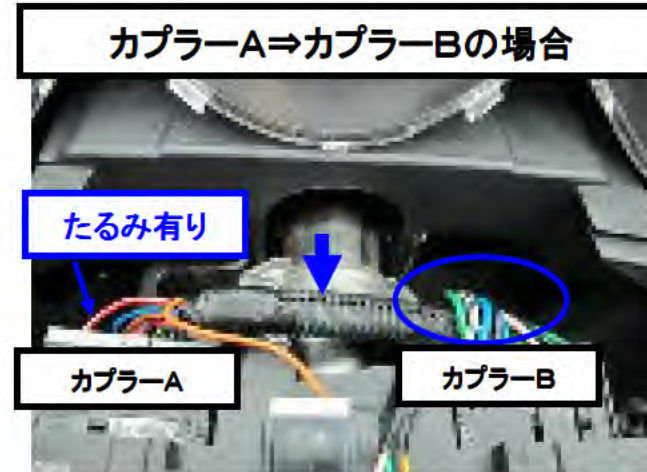


ロービーム配線が張った状態になる配素は、Sss製 FIT/JAZZのみである。

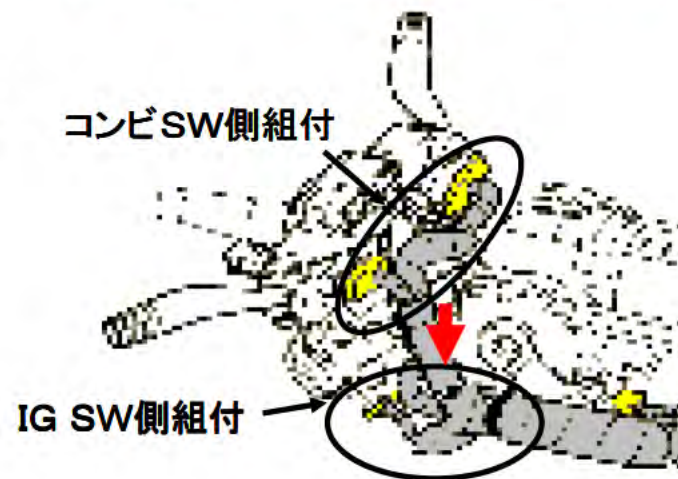
①コンビSW側組付でカプラーB ⇒ カプラーAの順で組付を行うとハーネスがカプラーから離れ、ロービーム配線が張る傾向になる



この部分の取り合いでカプラーから離れる



②コンビSW側組付 ⇒ IG SW側組付の順で行うとコンビSWの配線が引き下げられ、ロービーム配線が張る傾向になる



Sss製 FIT/JAZZの組付手順のカプラーB ⇒ カプラーA ⇒ IG SW側組付で行うとロービーム配線が張った状態になる。

機種	製造SS	配索	たるみ量 (mm)	摺動幅 (mm)	組付手順			判定
					1	2	3	
FIT/JAZZ(LH)	Sss	A	1.8	0.55	※ カプラーA	※ カプラーB	IG SW	NG
FIT/JAZZ(RH)			4.5	0.44	カプラーB	カプラーA		
FIT/JAZZ(LH)	CHAC	B	13.9	0.24	カプラーA	カプラーB	IG SW	OK
FIT/JAZZ(LH)	HAB	B	8.9	—	カプラーA	カプラーB	IG SW	OK
FIT/JAZZ(RH)	HPM	B	14.0	—	IG SW	カプラーA	カプラーB	OK
FIT/JAZZ(LH)	GHAC	B	9.6	0.19	IG SW	カプラーB	カプラーA	OK
FIT/JAZZ(RH)	HATC	B	9.3	—	IG SW	カプラーB	カプラーA	OK
FIT/JAZZ(LH)			9.4	—				



※Sss製FIT/JAZZのカプラー組付手順調査結果は、カプラーA⇒カプラーBの順であるが、製造当時のVTRにて確認するとカプラーB⇒カプラーAの順に取付ている。よって、カプラー取付手順は、両方の手順のものが混在していると判断する。

判定:たるみ量が7mm以上でOK

組付手順が異なることにより、Sss製FIT/JAZZのみが、ロービーム配線が張った状態となる。

機種	製造SS	たるみ量(mm)	摺動幅(mm)	判定
FIT ARIA/CITY(RH)	HATC	10.3	0.26	OK
FIT ARIA/CITY(LH)	GHAC	7.2	0.28	OK
FIT ARIA/CITY(RH)	HSCI	18.3	—	OK
FIT ARIA/CITY(RH)	HCPI	10.5	—	OK
FIT ARIA/CITY(RH)	HMSB	13.8	—	OK
FIT ARIA/CITY(RH)	HACPL	9.6	—	OK
CR-V(RH, LH)	Css	23.4	0.10	OK
LOGO(RH)	Sss	15.4	0.15	OK
INSIGHT(RH)	Sss	22.8	0.17	OK
STEPWGN(RH)	Sss, Css	37.4	0.06	OK
CIVIC(RH)	Sss	48.3	0.06	OK
STREAM(RH)	Sss	26.5	0.18	OK
MOBILIO(RH)	Sss	32.9	0.13	OK
EDIX.(RH)	Sss	16.1	0.07	OK
ELEMENT(RH)	Sss	33.5	0.09	OK
LIFE(RH)	Sss	26.7	0.18	OK
PILOT(LH)	HMA	21.3	—	OK
FIT ARIA/CITY(LH)	HTR	11.6	—	OK

他の機種については、たるみ量が確保されており問題はない。

INSIGHT



CIVIC



STREAM

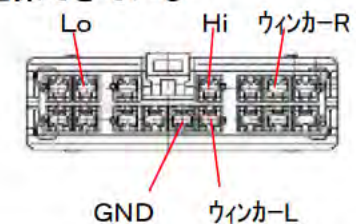


STEPWGN

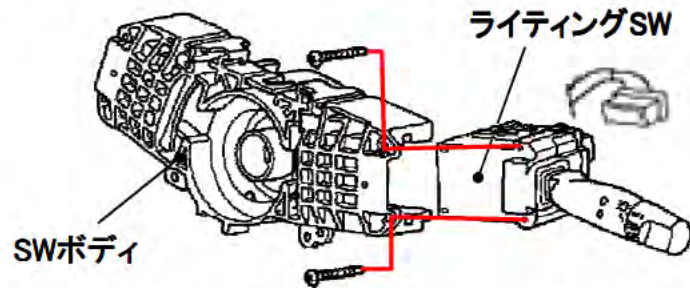


他の端子が問題ない理由

1. Lo/Hi/GND端子以外の電流値はウインカー作動時3.5Aであり、その他は0.2A以下である
2. Hi/GND端子はカプラーの真ん中位置にあり、たるみを確保できている

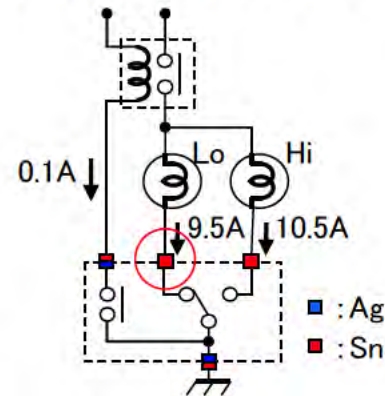


## ■ライティングSW構造

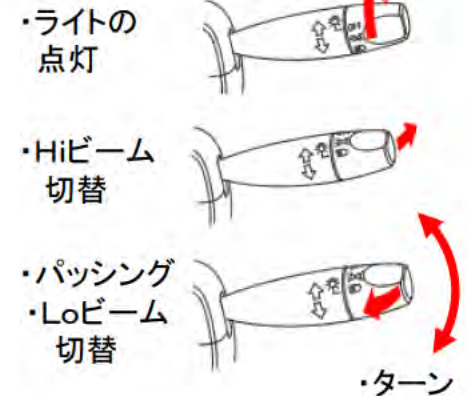


ライティングSWの締め付けネジを支点として、レバー操作(Hi-Lo切替や手前に引きながらのターン操作)を行うとSWが微かに動く

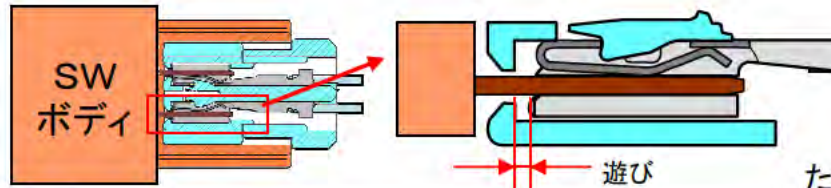
## ■回路説明(2灯式)



## ■レバー操作説明

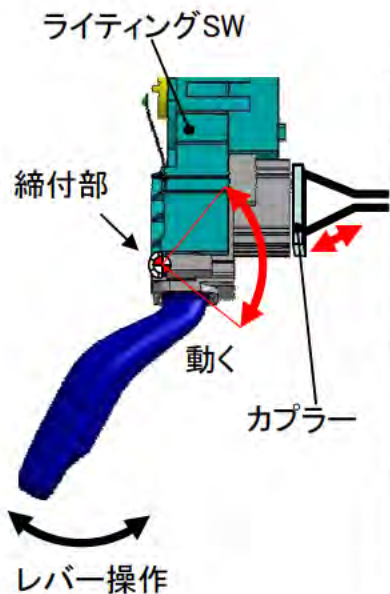


## ■端子が摺動するメカニズム



組立て性と部品の公差のためカプラーとメス端子に遊びがある

たるみ量 = 配線長(A) - レイアウト直距離(B)



	配線が張っている場合	配線にたるみがある場合
<ul style="list-style-type: none"> <li>Hi⇒Lo切替</li> <li>パッシング</li> <li>引きながらターン</li> </ul> 操作方向 力		
操作前後		
<ul style="list-style-type: none"> <li>Lo⇒Hi切替</li> <li>押しながらターン</li> </ul> 操作方向 力		

# 解析結果 発生メカニズム②

フィットのライティングスイッチに接続する配線長は、たるみ量の少ない設定であったため、配線作業でロービームの配線が張りすぎたものがある

ライティングスイッチレバー操作でスイッチボディが動いた際にロービーム端子嵌合部が追従できず、オス端子とメス端子間で大きく摺動する(摺動幅:約0.5mm)

① 端子嵌合部の摺動でスズメッキが徐々に摩耗し、母材が露出して接触面に酸化銅が生成され、端子の摺動が繰返されると、酸化銅が磨耗粉となり摺動部に堆積する

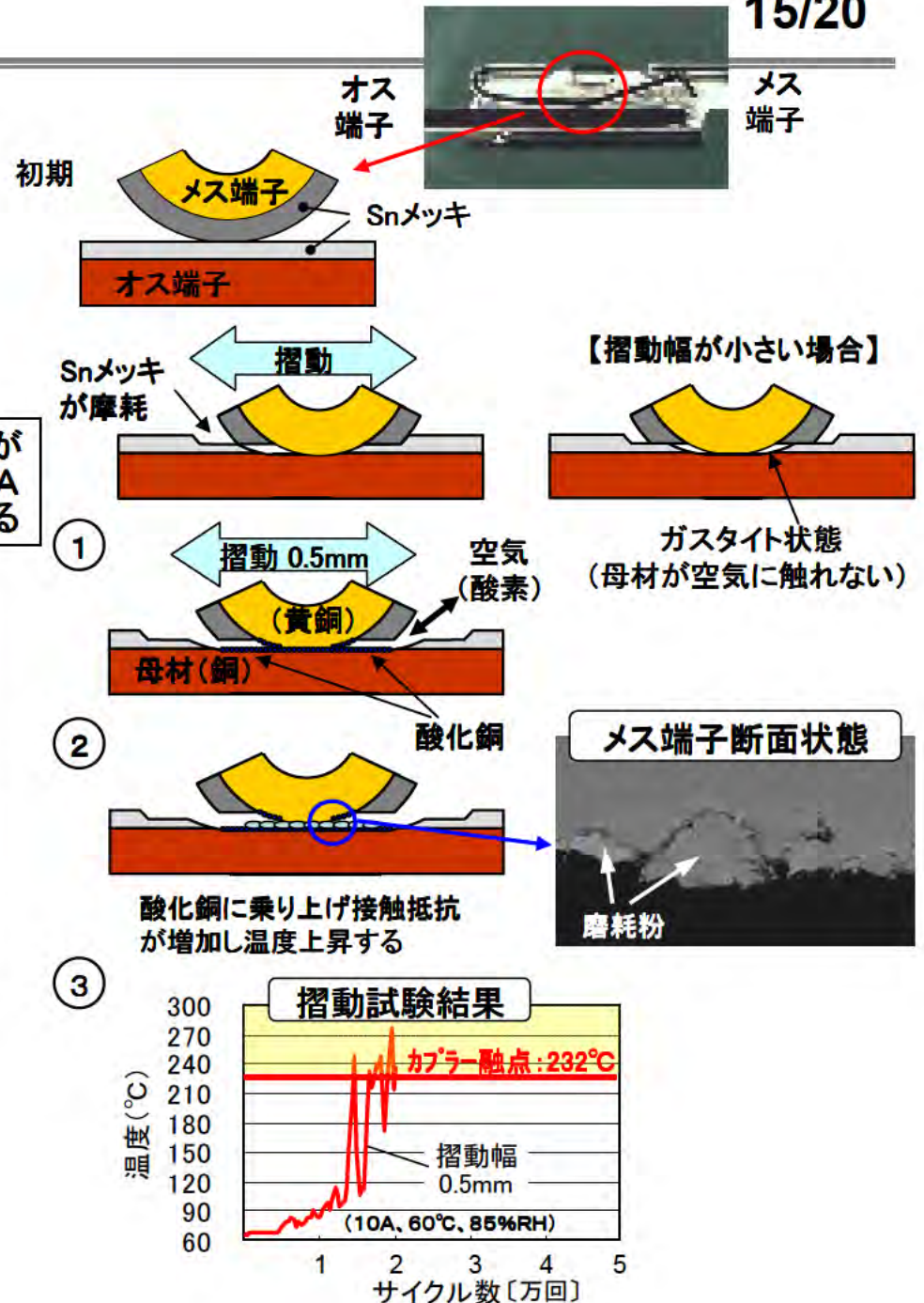
② 端子摺動時に堆積した酸化銅の磨耗粉に端子が乗上げると接触抵抗が増加して前照灯点灯時に嵌合部が過度に発熱する

③ 端子嵌合部の発熱で嵌合部に応力緩和が生じ、端子の接圧が低下すると磨耗粉の入込みが増え、端子がさらに発熱する

その状態を続けると、カプラーの樹脂が溶けて嵌合部に流込んで導通不良となり、ロービーム不灯となる

※カプラー樹脂が溶けて流れ込むと導通不良となり、電流が流れないため類焼はしない。

電流が約10A流れる



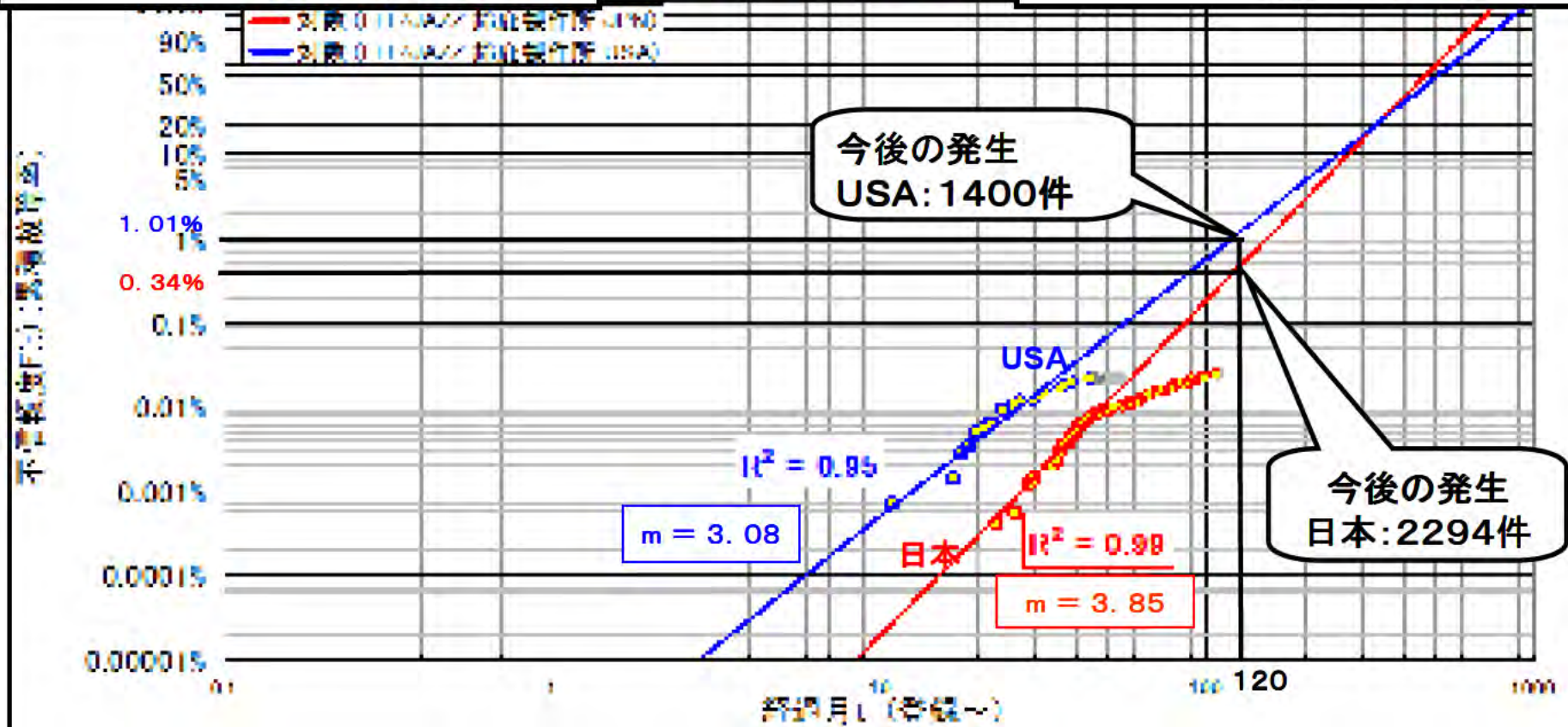
## 日本

経過年数	現在	10年経過
発生件数	130件	2424件
発生率	0.018%	0.33%
対象734,392台		


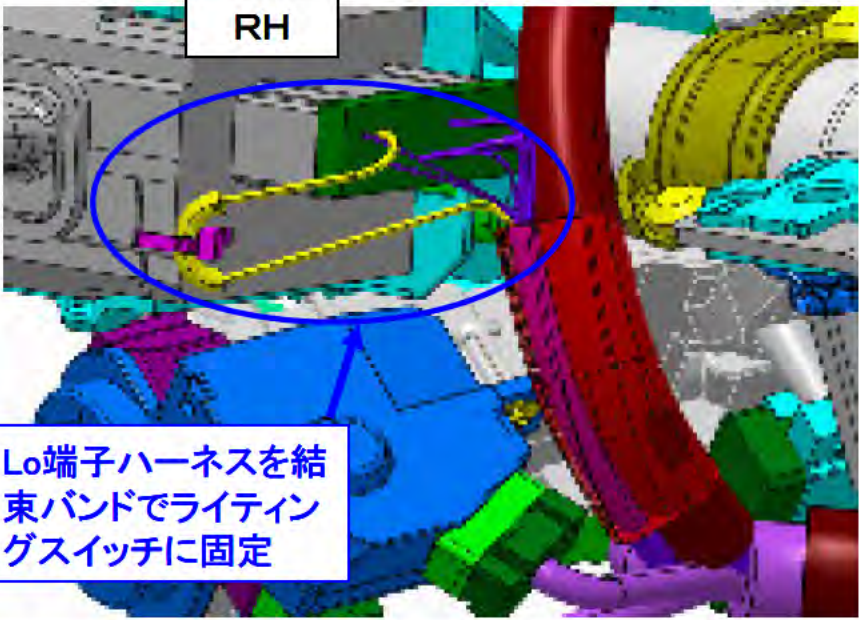
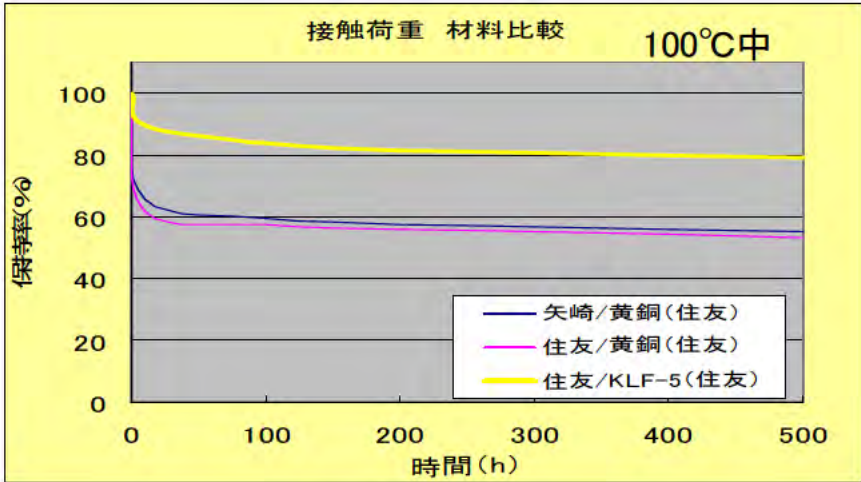
## USA

経過年数	現在	10年経過
発生件数	25件	1425件
発生率	0.018%	1.01%
対象141,084台		

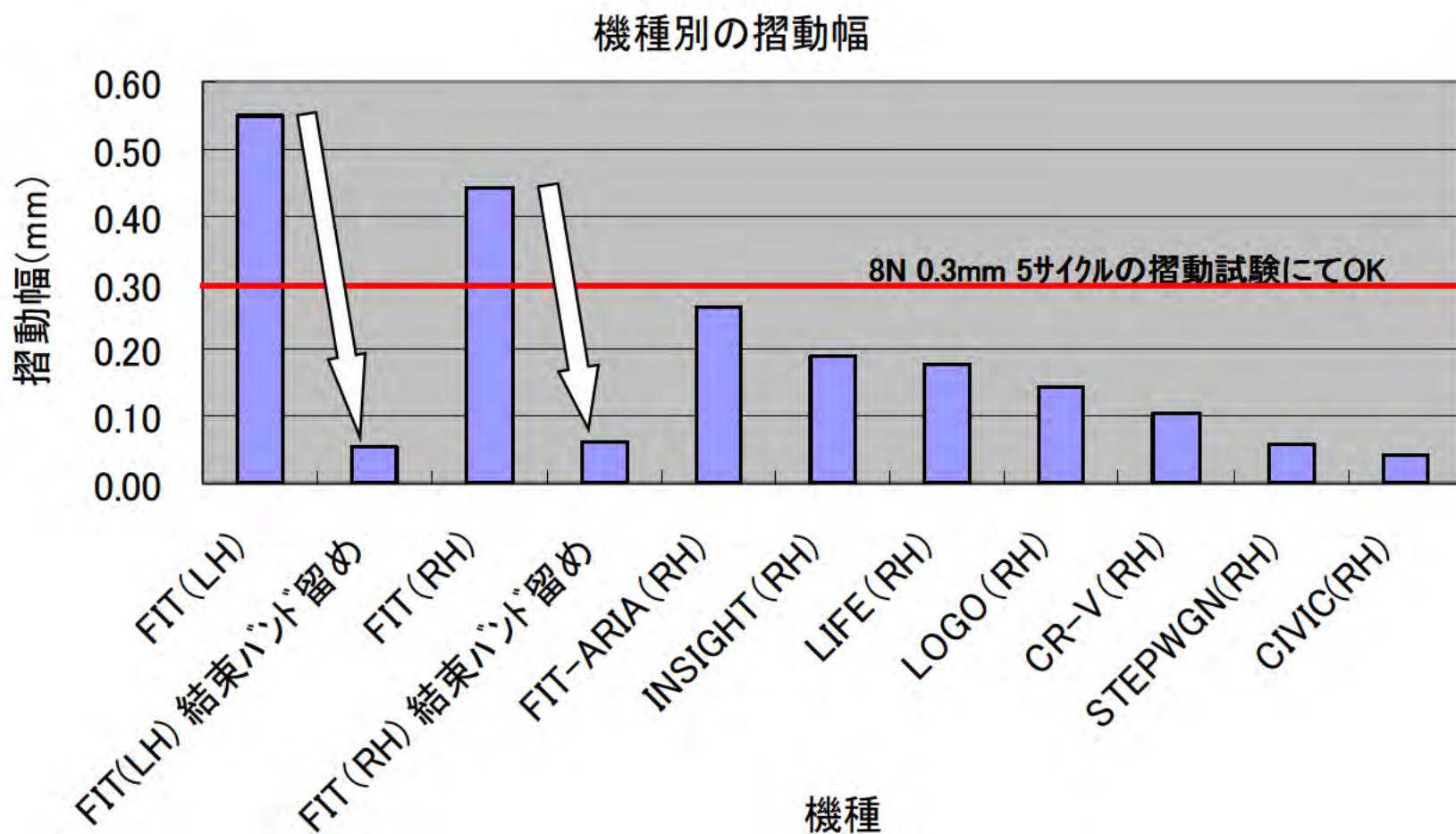
発生予測 ワイブル確率紙





対策内容	備考																												
<p>・結束バンド留めによる摺動防止 たるみを確保した状態でメス端子ハーネスをライティンスイッチに結束バンドで固定することにより、スイッチ操作時の動きに追従させ、端子嵌合部の摺動を抑制する（ハーネスを長くする必要あり）</p> 																													
<p>・メス端子の接触荷重低下を抑える 母材を接圧荷重低下が小さい耐熱銅合金に変更 （現状は、黄銅）</p>	<p>接触荷重 材料比較 100°C中</p>  <table border="1"> <caption>接触荷重 材料比較 100°C中</caption> <thead> <tr> <th>時間 (h)</th> <th>矢崎/黄銅(住友)</th> <th>住友/黄銅(住友)</th> <th>住友/KLF-5(住友)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>100</td> <td>100</td> <td>100</td> </tr> <tr> <td>100</td> <td>65</td> <td>60</td> <td>85</td> </tr> <tr> <td>200</td> <td>60</td> <td>58</td> <td>82</td> </tr> <tr> <td>300</td> <td>58</td> <td>56</td> <td>80</td> </tr> <tr> <td>400</td> <td>56</td> <td>54</td> <td>78</td> </tr> <tr> <td>500</td> <td>54</td> <td>52</td> <td>76</td> </tr> </tbody> </table>	時間 (h)	矢崎/黄銅(住友)	住友/黄銅(住友)	住友/KLF-5(住友)	0	100	100	100	100	65	60	85	200	60	58	82	300	58	56	80	400	56	54	78	500	54	52	76
時間 (h)	矢崎/黄銅(住友)	住友/黄銅(住友)	住友/KLF-5(住友)																										
0	100	100	100																										
100	65	60	85																										
200	60	58	82																										
300	58	56	80																										
400	56	54	78																										
500	54	52	76																										

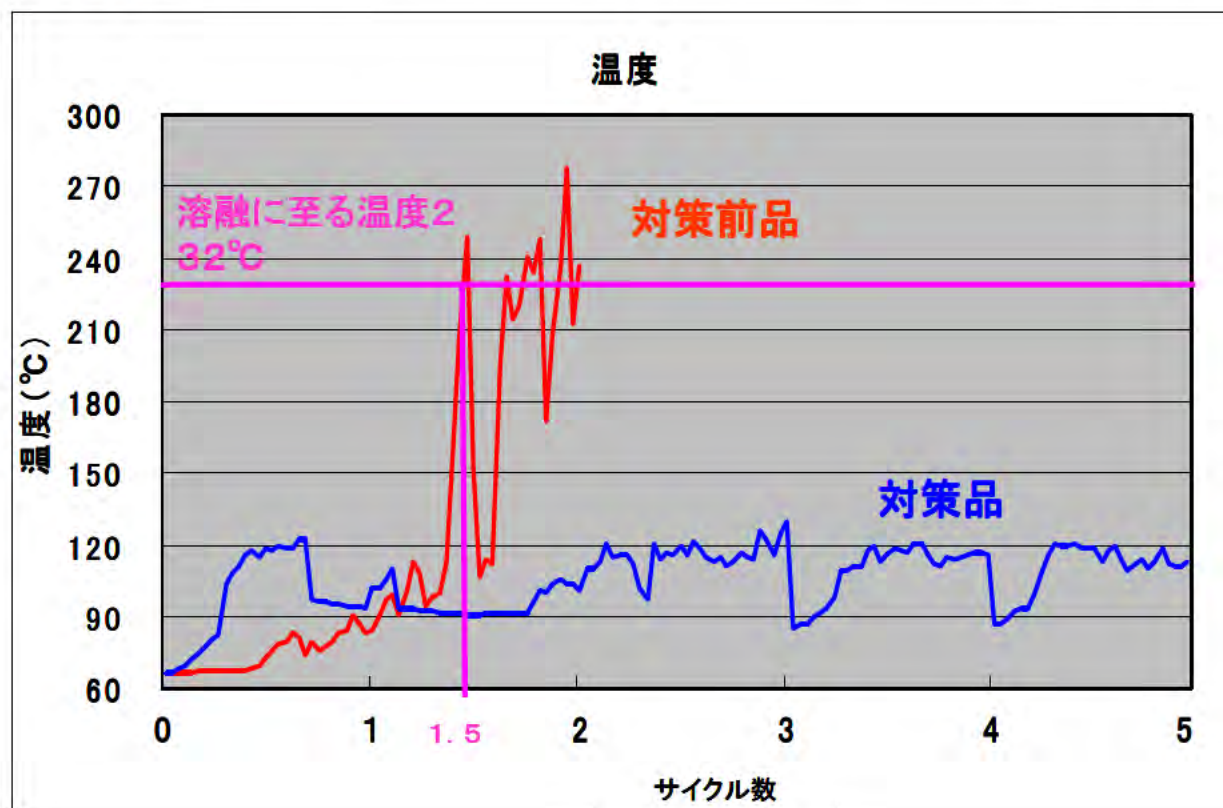
- ・実車にてライティングスイッチ操作1万サイクルによる対策効果を確認する  
 (1サイクル:Rターン→中立→Lターン→中立→パッシング→中立 のSW操作)



結束バンド留めによりで摺動幅が約1/10に減少

オス端子のSnメッキが磨耗により剥離したとしても、結束バンドによるハーネス固定とメス端子耐熱銅合金に変更すれば、今後の使用過程において不具合が発生しないことを確認した。

従来品が約1.5サイクルで溶損に至っているのに対して、対策は5サイクルでも溶損に至らない。従来より、最低でも約3倍以上のタフネスあり。



<試験条件>

- ・メス端子：耐熱性銅合金（接圧低下が小さい）
- ・オス端子：銅無垢（メッキなし：市場想定品）
- ・接圧荷重：8N（製造管理の下限値）
- ・酸化促進：試験前に100℃×120h放置
- ・通電電流：10A
- ・温湿度：+60℃、85%RH
- ・摺動幅：0.1mm（結束バンド留め相当）
- ・摺動サイクル：摺動1万回後に24h時間停止を1サイクル

「ライティングスイッチを操作した際のスイッチ変位量と組付け作業による端子への影響を吸収できる配線長の設定とする」

EA11-012

HONDA

4/20/2012

Q13E

Doc5 QIS MV20100208102731

EVENT FLOW
RESPONSIBLE DEPARTMENT AND PERSON
COMPLETION DATE
↓
RECEPTION
Q 4Rin Hinkai Godo Tadayoshi Fujio 2010/01/26
↓
INFORMATION INVESTIGATION
Q 4Rin Hinkai Godo Teiichi Harada 2010/02/08
↓
INVESTIGATION AND ANALYSIS
Q 4Rin Hinkai Godo Akihiro Hatatani 2010/02/10
↓
COUNTERMEASURE REQUEST
Q 4Rin Hinkai Godo Akihiro Hatatani 2010/02/10
↓
INTERMEDIATE REPLY
↓
COUNTERMEASURE REPLY
AQAO Akihiro Hatatani 2010/03/24
↓
COUNTERMEASURE ISSUED
Honda R&D 2010/10/10
↓
COUNTERMEASURE APPLICATION
↓
COMPLETED
Q 4Rin Hinkai Godo Akihiro Hatatani 2011/01/31

COUNTERMEASURE REQUEST
ADDRESSEE
AQAO
RECEPTION
RECEPTION
RANK
A
DATE:
APPROVAL
CHECK
CREATOR

MODEL CODE YM/MODEL NAME	TITLE	QIS CONTROL #
GD5	Headlights do not illuminate <lighting switch>	MV20100208102731
07/Jazz		
OCCURRENCE DESCRIPTION	Customer came to dealer with complaint "headlamps do not work". This was two weeks ago. Dealer technician noticed both H4 bulbs faulty and replaced them with aftermarket Narva H4 12V 55/60 W units. Last week customer drove to dealer with same problem but this time bulbs were found OK. No abnormality at bulb couplers found, so investigation went on. Finally, coupler at headlamp switch assy. found to be the cause for the symptom.	

REPLY	REPLY TO	Q 4Rin Hinkai Godo	VIA	BY	Feb 20
-------	----------	--------------------	-----	----	--------

Confirmation of returned lighting SW (Supplier: TOYO Denso)  
Exterior confirmation  
Confirmed that the L0 circuit terminal has been melted.

Confirmation of returned instrument wire harness (Supplier: Yazaki)  
Exterior confirmation  
Confirmed that the L0 circuit terminal has been melted.

From the above the symptom is determined to have been caused by instrument wire harness terminal contact pressure etc., detailed analysis was requested to the supplier.

Detailed analysis by supplier  
Low beam terminal melted from heat on instrument wire harness, but the cause of heat is unknown.

\*\*\*AQAO's analysis result  
1) Female terminal x-section analysis of additional returned part  
Sn plating has worn and wear particle has accumulated therefore it revealed to have occurred from repeated sliding.  
2) Sliding test  
It was found that sliding width 0.5mm (conducting current 10A, temperature +60 degree C, humidity 85% RH, contact load 8N) increases contact resistance value and coupler melting temperature (232 degree C) is reached.  
3) Confirmation of low beam wiring on car  
It was found that there is not enough slack on low beam wiring and it is pulled condition.  
4) Correlation between slack amount and sliding width  
Increased slack amount and measured sliding width by lever operation. It was found that when there is a lot of slack, sliding width became smaller.  
5) Slack amount investigation at factories other than Sss  
It was found that Sss FIT only had different wiring condition and the wiring for low beam had pulled condition.  
6) Investigation on mounting procedure at factories  
It was found that Sss FIT only had different mounting procedure for combi switch coupler, IG switch coupler and the wiring for low beam was mounted pulled. And it was also found that the length of wiring connecting to lighting switch had little slack by setting. (See the attached material for details.)

DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (IN-HOUSE)	APPROVAL	CHECK	CREATOR	DATE	REPLY DEPARTMENT (OUTSIDE)	APPROVAL	CHECK	CREATOR
03/24	AQAO			Akihiro										

CAUSE ANALYSIS	***It had a setting there is little slack on the length of electric wiring connecting to lighting switch, therefore wiring was pulled by wiring work on some parts. From this, terminal joint area was moved by operation switching headlight, contact resistance increased, terminal heated and coupler melted, leading to the claimed symptom.
	***No countermeasure applied because the concern model has discontinued. In market to replace low beam terminals on all vehicles with terminals using long wiring and to fix wiring with banding band. If connecting coupler is melted, to replace lighting switch and coupler on wiring side with new ones.
COUNTERMEASURE	
TREATMENT FOR STOCK & SOLD UNITS & PARTS	From decision by Quality Committee on December 8, 2010, proactive market action for affected units will be carried out since January 7, 2011.
COUNTERMEASURE EFFECTIVENESS	Performed sliding test with countermeasure part and confirmed heating would not occur. Therefore countermeasure is determined to be effective.
FEED BACK TO THE SOURCE	Wiring length that can absorb the displacement amount of switch while lighting switch operation and impact to terminals from mounting work, should be set.

QUALITY IMPROVEMENT SHEET [ Q I S ]						
ISSUED BY						
Q 4Rin Hinkai Godo						
OCCURRENCE MARKET						
REPORT #	4CZ2010004-00					
FRAME #	JHMGD57307S					
ENGINE #						
TRANSMISSION #						
TRANSMISSION CATEGORY						
MILEAGE OR HOURS	39161					
REGISTRATION DATE	2007/05/31					
OCCURRENCE DATE	2010/01/11					
PRODUCT DATE						
SERVICE PART #	06322-SAA-305					
	06323-SAA-305					
	06323-SAA-306					
	06323-SAA-307					
MAIN CAUSAL PART #	35012-S5A-405					
CAUSAL PART SYMPTOM CODE AND DESCRIPTION	03265	Control malfunction				
MODEL CODE						
CAUSE CATEGORY	Specification					
RES. DEPARTMENT						
	SUPPLIER	YAZAKI CORPORATION	CODE	8133		
COUNTERMEASURE CATEGORY	Only Market Disposal					
COUNTERMEASURE PART SYMPTOM CODE AND DESCRIPTION	6105	Change of Wi				
OCCURRENCE FORECAST	Sporadic					
COUNTERMEASURE PART AVAILABILITY						Yes
REVISED ITEM	DRAWING		OPERATION STANDARD			
	○					

△						
△						
△						
△	2011/01/31	FINISH	Kiyota ka Ha		Takeno ri Na	Akihiro H
△	2010/02/08	NEW	Yasuta ka Ta			Teiichi Har
ISSUE	DATE	VERSION	APPROVAL	CHECK	CHECK	CREATOR

SERVICE PART #

QIS CONTROL # MV20100208102731

YM 2007

MODEL CODE GD5

PART # 35012-S5A-405 SET, COMBI SW SERVICE

RANK A

TITLE Headlights do not illuminate <lighti

	PART NUMBER	PART NAME
5	06323-SAA-309	KIT, LIGHTING SW SUB CORD
6	06323-SAA-405	KIT, LIGHTING SW SUB CORD
7	06323-SAA-406	KIT, LIGHTING SW SUB CORD

イベント
担当部門氏名
完了年月日
↓
受付
Q四輪品改合同
藤尾 忠義
2010/01/26
↓
情報調査
Q四輪品改合同
原田 倅一
2010/02/08
↓
調査解析
Q四輪品改合同
畑谷 彰宏
2010/02/10
↓
対策要求
Q四輪品改合同
畑谷 彰宏
2010/02/10
↓
中間回答
↓
対策回答
合同解析室
畑谷 彰宏
2010/03/24
↓
出図
Honda R&D
2010/10/10
↓
対策実施
↓
完了
Q四輪品改合同
畑谷 彰宏
2011/01/31

対策要求

型式/YM・通称名	件名	推進 No.
GD5	ヘッドライト点灯しない<ライティングSW>	MV20100208102731
07/Jazz		

発生状況

ヘッドライトが正常に作動しないとお客様より苦情があった。1度目の修理では、左右のバルブが切れており、新品に交換した。その1週間後、再びヘッドライトが点灯しなくなったため、再度ディーラーに来院した。この時は、バルブに異常は無かった。バルブ側のコネクタに異常は見つからない。

回答 2月20日 までに 経由 Q四輪品改合同 宛に回答願います。

調査・解析結果

■返却現品のライティングスイッチ(取引先:東洋電装)の確認  
外観確認  
LO回路端子が溶融している事を確認

■返却現品のインストルメントワイヤース(取引先:矢崎総業)の確認  
外観確認  
LO回路端子が溶融している事を確認

以上、インストルメントワイヤースの端子接圧等に起因していると判断し、細解析を取引先に依頼

■取引先での詳細解析  
インストルメントワイヤース 発熱によるロビーム端子の溶融は確認できたが、発熱の原因については不明

■AQAOでの解析結果

- 追加現品での端子断面解析  
Snメッキが磨耗し、磨耗粉が堆積していることから摺動の繰り返しにより発生していると判明
- 摺動試験  
摺動幅0.5mm(通電電流10A、温度+60℃、湿度85%RH、接触荷重8N)にて接触抵抗値が増大しカプラー溶融温度(232℃)に至る事が判明
- 実車でのバネ操作1万サイクルによる摺動幅確認  
FITが他機種に比べ、摺動幅(0.5mm以上)が大きいことが判明
- 実車のロビーム配線の確認  
ロビーム配線がたるみ量が少なく、張った状態である事が判明
- たるみ量と摺動幅の相関調査  
たるみ量を増やしバネ操作による摺動幅を測定した結果、たるみ量が大きいと摺動幅が小さくなる事が判明
- Sss製以外の他拠点のFITのたるみ調査  
Sss製FITのみが配線状態が異なり、ロビーム配線が張った状態である事が判明
- 製造拠点別の組付手順調査  
Sss製FITのみがコンビSWカプラー、IG SWカプラーの組付手順が異なり、ロビーム配線が張った状態で組付けていた事が判明。また、ライティングスイッチに接続する配線の配線長さに余裕が少ない設定であったことも判明  
(詳細は添付資料参照)

月日	回答部門(所内)	承認	確認	作成
03/24	合同解析室			畑谷彰宏

宛先	合同解析室	経由	受付	受付	受付
			受付	受付	受付

重要度	年	月	日
A	承認	確認	作成

原因

■ライティングスイッチに接続する電気配線の配線長さに余裕が少ない設定のため、配線作業で配線を張り過ぎたものがある。そのため、ヘッドライトの切替えスイッチを操作すると、端子結合部が動いて接触抵抗が増え端子が発熱してカプラーが溶け、訴え事象に至る。

対策

■該当機種、生産終了のため対策せず。市場にて、全車両ロビーム端子を長い配線を用いた端子と交換し、配線を結束バンドで固定する。なお、接続カプラーが溶損しているものは、ライティングスイッチと配線側カプラーを新品に交換する。

既販車及び在庫品の処置	対策適用号機					
	年月日	型式(通称名)	年式	仕向地	区分	号機
<p>■2010年12月08日の品質委員会での決定により、2011年1月7日から対象車両の積極的市場措置を実施する</p>						

対策効果確認

対策品にて摺動試験を実施し、発熱に至らないことを確認、よって、効果ありと判断する。

源流へのフィードバック

ライティングスイッチを操作した際のスイッチ変位量と組付け作業による端子への影響を吸収できる配線長の設定とする

月日	回答部門(所外)	承認	確認	作成

市場品質情報 [ Q I S ]

発行部門

Q四輪品改合同

発生場所	
フレーム No.	JHMGD573079
エンジン No.	
ミッション No.	
ミッション区分	
走行距離、時間	39161
登録年月日	2007/05/31
発生年月日	2010/01/11

新部品番号	06322-SAA-305	
	06323-SAA-305	
	06323-SAA-306	
	06323-SAA-307	
主部品番号	35012-S5A-405	
症状コード	03265	コントロールが効かない
EDP KEY 型式名		
原因区分	仕様	
責任区	部門	
	取引先名	矢崎総業(株)
対策区分	市場処置/ミ	
対策内容コード	6105	配線変更
発生予測	あり(散発)	
対策パーツ		有
見直し項目	図面	作業標準
	○	

受付月日	/
------	---

発行年月日	記事承認	確認	確認	作成
2011/01/31	完了発行	林清孝	中司剛徳	畑谷彰宏
2010/02/08	新規	田中康隆		原田倅一



問推表 新部品番号明細

推進No MV20100208102731 年式 2007 型式 GD5

部品番号 35012-S5A-405 SET, COMBI SW SERVICE 重要度 A

件名 ヘッドライト点灯しない<ライティングSW>

	部 品 番 号	部 品 名 称
5	06323-SAA-309	KIT, LIGHTING SW SUB CORD
6	06323-SAA-405	KIT, LIGHTING SW SUB CORD
7	06323-SAA-406	KIT, LIGHTING SW SUB CORD

**発生状況**

最終的にヘッドライトスイッチに異常発見した為、交換した。

EA11-012

HONDA

4/20/2012

Q13F

EA11-012

HONDA

4/20/2012

Q13f

101206 NASC Headlight

Low Beam FINAL


**02-08M Sss FIT/JAZZ Japan, U.S.A., Europe, Asia and Oceania**  
**Lighting SW Coupler Terminal Worn**

**MV20091223094027 (Japan)**

**MV20100208102731 (Overseas)**

- 1. Previous directives**
- 2. Overview**
- 3. Background**
- 4. Claimed symptom**
- 5. No. of occurrence**
- 6. Analysis results**
- 7. Countermeasure**
- 8. Proposal**
- 9. Development schedule**



 Revised : 2010/12/06

**NASC**  
**2010/12/06**

## 1. JQC (Nov 23, 2010)

### ■ Decision

Please make a proposal to GQC.

# 2. Outline

## 1.Symptom

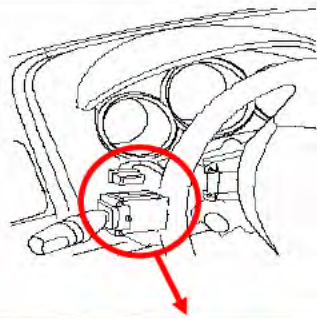
Headlight low beam not come ON, burnt smell, smoke

## 2.Occ. situation

No. of Hinjoren and QIC: 164 cases Occ. rate 0.013%

## 3.Occurrence cause

Due to inappropriate length setting for lighting SW wiring in instrument panel, lighting SW Lo terminal wiring is in pulled condition, from repeated large sliding in terminal joint area from turning operation or headlight switching operation etc. Sn plating on male terminal and female terminal is peeled, base material is worn and contact resistance increases from accumulated copper oxide, melted resin coupler flowed into contact surface and carbonized, leading to poor continuity.



## 4. Counter-measure

No countermeasure applied due to discontinued model. To reduce sliding in terminal area in market, to fix Lo terminal harness to lighting switch by TY-RAP. And to change base material of female terminal from brass to heat resistant copper alloy.

## 5. Action proposal

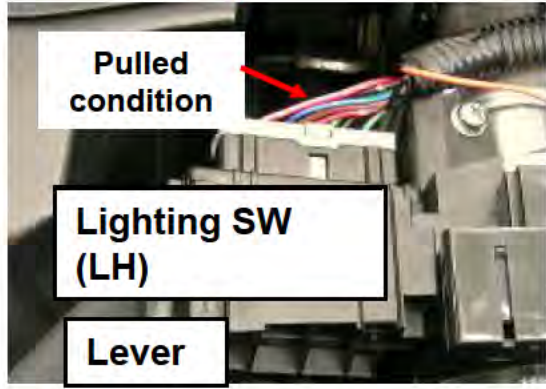
We propose proactive market action.

## 6.Reason for the proposal

The symptom is headlight low beam not comes ON and further occurrences are predicted.

## 7. Action content

- Check Lo terminal for melt
- 1)If melted, replace lighting switch and Lo terminal harness and fix it to the lighting switch by TY-RAP.
- 2) If not melted, replace Lo terminal only and fix it to lighting switch by TY-RAP.



## 8.Affected range

Halogen spec. 02M~08M FIT/JAZZ manufactured by Sss (Excluding models for Canada with daylight spec.) From products on Oct 22, 2001 to had been discontinued.



## 9.Affected No.

1,355,217 units  
Japan:734,392, U.S.A.:141,084,  
Europe:386,952, Asia and Oceania:51,642  
Other: 41,147

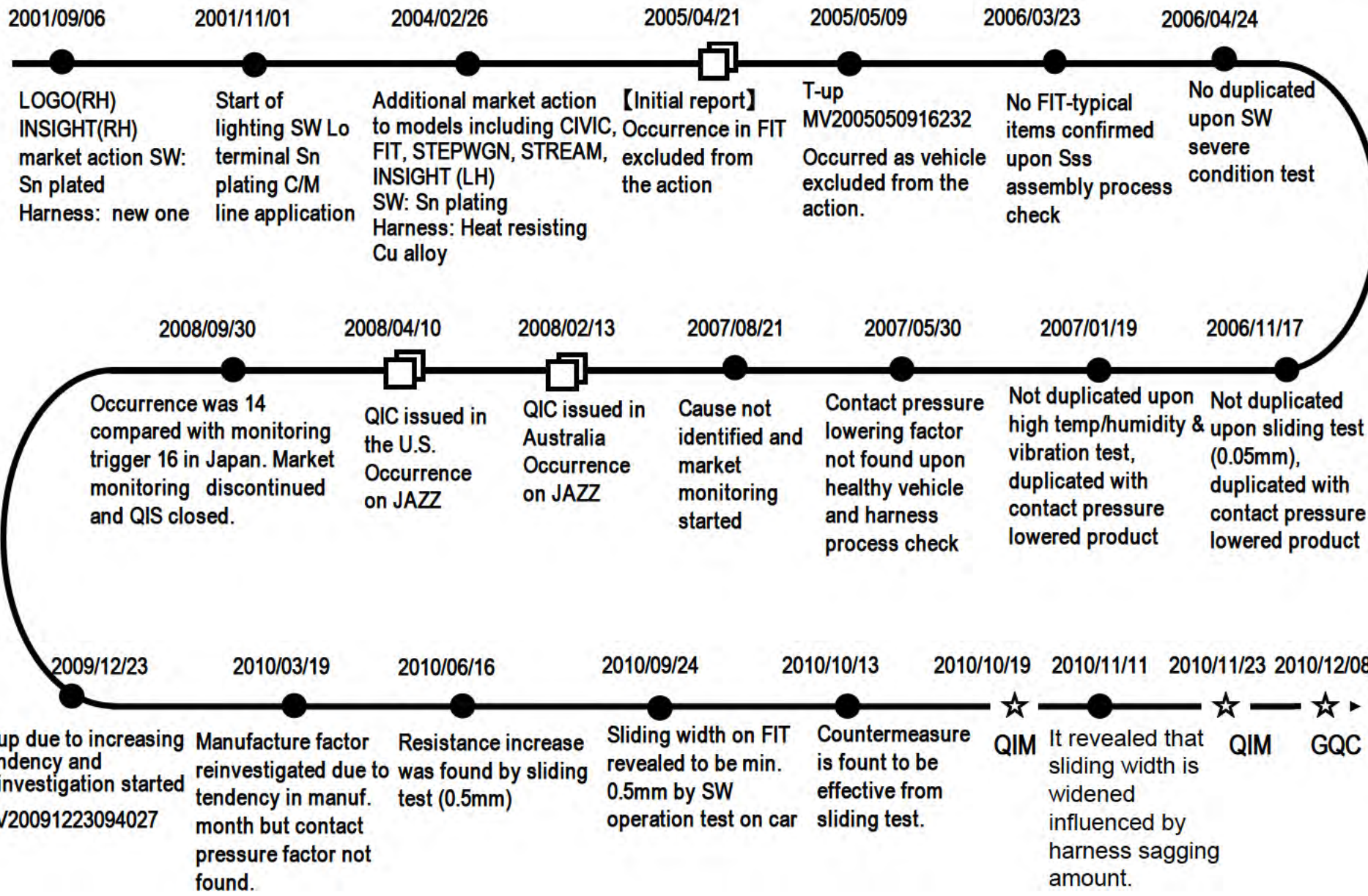
Resin of melted coupler flows in, poor continuity occurs, leading to no illumination.



## 10.Action cost

Approx. 72.7 billion yen

# 3. Background





## (JAPAN 130cases)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	日本	GD1	GD1-1728129	2005/04/21	2003/08/26	2003/06/23	60651	走行中突然ヘッドライトが両方つかなくなっ
2	日本	GD2	GD2-1020582	2005/06/18	2002/06/26	2002/06/17	39494	ヘッドライト点灯しない
3	日本	GD1	GD1-1094570	2005/09/02	2001/12/25	2001/12/18	76599	ヘッドライト点灯しない
4	日本	GD1	GD1-1072865	2005/09/05	2001/11/22	2001/11/09	166938	ヘッドライト点灯しない
5	日本	GD1	GD1-1210960	2005/09/14	2002/07/19	2002/07/09	87855	ヘッドライトが点かない
6	日本	GD1	GD1-1141663	2005/10/27	2002/03/26	2002/03/20	58380	ヘッドライト左右点灯しない
7	日本	GD1	GD1-1145644	2006/05/15	2003/08/07	2002/03/26	53381	ヘッドライトLOビーム点灯しない。(HIビームは点灯する)
8	日本	GD1	GD1-2113275	2006/06/24	2004/08/03	2004/07/08	105125	ヘッドライトLOビーム点灯しない
9	日本	GD1	GD1-1119787	2006/11/22	2002/02/20	2002/02/11	57826	ヘッドライト点灯せず(左右)
10	日本	GD2	GD2-1509358	2007/01/21	2003/04/24	2003/04/17	76755	ヘッドライト急に点灯しなくなった
11	日本	GD1	GD1-1563270	2007/02/11	2003/03/14	2003/03/07	131871	ハンドル付近より煙が出た
12	日本	GD2	GD2-1702888	2007/06/24	2004/05/28	2004/03/12	59206	ヘッドライト近目がつかない
13	日本	GD1	GD1-1152646	2007/06/29	2002/04/15	2002/04/08	57356	ヘッドライト点灯不良
14	日本	GD1	GD1-1703160	2007/08/05	2004/03/31	2004/03/23	31771	ヘッドライト点灯しない
15	日本	GD1	GD1-1141998	2007/08/08	2002/04/24	2002/03/21	23754	ヘッドライトロービームが点灯しなくなる。
115	日本	GD1	GD1-2308348	2010/08/17	2006/01/10	2005/12/23	121207	ヘッドライト不灯
116	日本	GD1	GD1-2155735	2010/08/20	2004/11/26	2004/11/12	84223	焦臭くなってヘッドライト点灯しない。
117	日本	GD1	GD1-2363097	2010/08/31	2006/09/28	2006/09/22	52527	左右ヘッドライトロービーム点灯しない
118	日本	GD1	GD1-2032282	2010/09/02	2004/04/26	2004/03/30	83126	ヘッドライトロービームつかない。[配線焼け]
119	日本	GD1	GD1-2154158	2010/09/06	2004/12/17	2004/11/05	73296	ヘッドライト点灯せず
120	日本	GD1	GD1-2367510	2010/08/28	2006/11/21	2006/10/14	64144	ヘッドライト両方ともつかない(点灯しない)
121	日本	GD1	GD1-2397604	2010/09/06	2007/03/16	2007/03/06	82729	ヘッドライトのロービームが左右不灯になった。
122	日本	GD1	GD1-2421610	2010/09/13	2007/09/27	2007/06/26	69384	左右ヘッドライトロービームが点灯しない
123	日本	GD2	GD2-1912050	2010/09/14	2007/02/14	2007/02/05	86094	ヘッドライト(LOWビーム)点灯しなくなった。
124	日本	GD1	GD1-2008448	2010/10/03	2004/02/24	2004/01/28	124436	ライティングスイッチから煙が出た
125	日本	GD1	GD1-2387678	2010/10/06	2007/03/28	2007/01/30	83234	左右ヘッドライトロービーム点灯しない
126	日本	GD1	GD1-2146979	2010/10/18	2004/11/11	2004/10/18	51701	ヘッドライト点かない(LO)
127	日本	GD1	GD1-2372739	2010/10/20	2006/12/08	2006/11/14	67310	左右ヘッドライト下向き点灯しない
128	日本	GD1	GD1-2116395	2010/10/22	2004/07/23	2004/07/15	82224	ヘッドライト点灯しない。
129	日本	GD1	GD1-1075680	2010/10/23	2001/11/28	2001/11/15	79810	左右ヘッドライト点灯しない。
130	日本	GD1	GD2-1911890	2010/11/03	2007/02/20	2007/01/31	69097	ヘッドライト点灯しない(ロービーム)

## (U.S.A. 25cases)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	アメリカ	GD3	JHMGD38647S	2008/03/07	2007/04/30	2007/02/08	34,682	ヘッドライトのロービームが作動しない
2	アメリカ	GD3	JHMGD38637S	2008/10/04	2007/03/29	2007/02/06	56,456	ロービームが作動しない
3	アメリカ	GD3	JHMGD38647S	2008/10/04	2007/04/21	2007/02/05	21,854	ロービームが作動しない
4	アメリカ	GD3	JHMGD38617S	2008/10/15	2007/06/15	2007/05/18	44,534	ロービームが作動しない
5	アメリカ	GD3	JHMGD38617S	2008/10/30	2007/03/22	2007/02/05	50,205	ロービームが作動しない
6	アメリカ	GD3	JHMGD37417S	2008/11/06	2007/03/31	2007/02/20	25,453	ロービームが作動しない
7	アメリカ	GD3	JHMGD38607S	2009/01/12	2007/01/17	2006/12/04	96,893	ロービームが作動しない
8	アメリカ	GD3	JHMGD38667S	2009/03/07	2007/03/16	2007/02/02	26,467	ヘッドライトのロービームが作動しない
9	アメリカ	GD3	JHMGD38417S	2009/03/14	2007/09/30	2007/06/19	54,131	ヘッドライトが作動しない
10	アメリカ	GD3	JHMGD38687S	2009/03/20	2007/05/22	2007/04/11	92,083	ロービームが作動しない
11	アメリカ	GD3	JHMGD38687S	2009/03/24	2007/07/06	2007/06/09	52,928	ロービームが作動しない
12	アメリカ	GD3	JHMGD38457S	2009/03/26	2007/04/16	2006/12/04	105,200	ロービームが作動しない
13	アメリカ	GD3	JHMGD38647S	2009/05/04	2007/02/12	2006/12/11	64,490	ロービームが作動しない
14	アメリカ	GD3	JHMGD37627S	2009/05/09	2007/03/15	2007/02/01	66,595	ロービームが作動しない
15	アメリカ	GD3	JHMGD38667S	2009/05/11	2007/06/04	2007/04/20	86,602	ロービームが作動しない
16	アメリカ	GD3	JHMGD38447S	2009/05/26	2006/12/12	2006/10/23	127,730	ロービームが作動しない
17	アメリカ	GD3	JHMGD38697S	2009/06/09	2006/10/19	2006/09/06	52,264	ロービームが作動しない
18	アメリカ	GD3	JHMGD38437S	2009/06/11	2006/11/13	2006/10/09	32,701	ロービームが作動しない
19	アメリカ	GD3	JHMGD38647S	2009/12/30	2007/05/10	2007/03/29	74,024	ヘッドライト不灯
20	アメリカ	GD3	JHMGD38687S	2010/01/04	2007/06/20	2007/04/10	52,755	ロービームが作動しない
21	アメリカ	GD3	JHMGD38677S	2010/07/15	2007/08/15	2007/05/21	100,744	ロービームが作動しない
22	アメリカ	GD3	JHMGD37658S	2010/09/01	2008/07/26	2008/06/12	34,318	ロービームが作動しない
23	アメリカ	GD3	JHMGD38407S	2010/09/14	2007/01/16	2006/11/02	126,243	ヘッドライト不灯
24	アメリカ	GD3	JHMGD38607S	2010/09/22	2007/06/27	2007/05/12	93,557	煙がでた
25	アメリカ	GD3	JHMGD38677S	2010/08/04	2007/07/07	2007/04/24	116,659	ロービームが作動しない

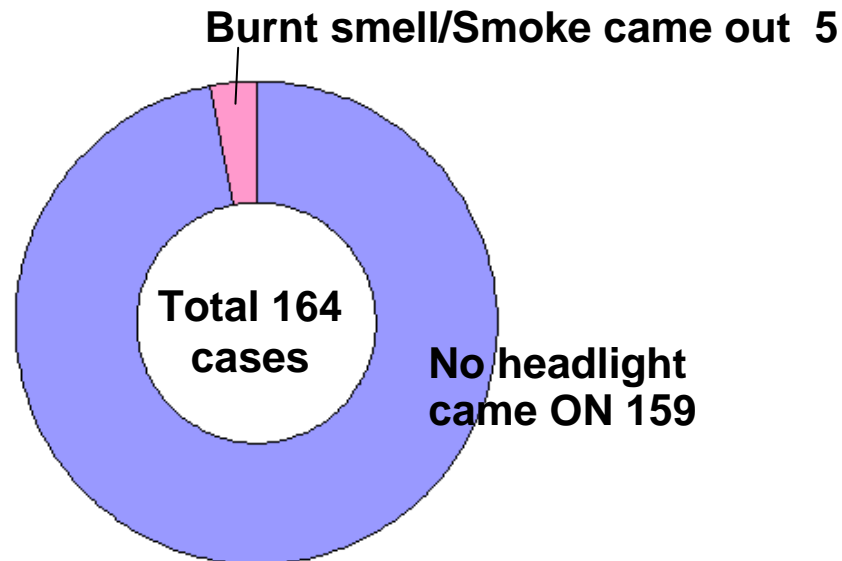
## (EUROPE 6cases)

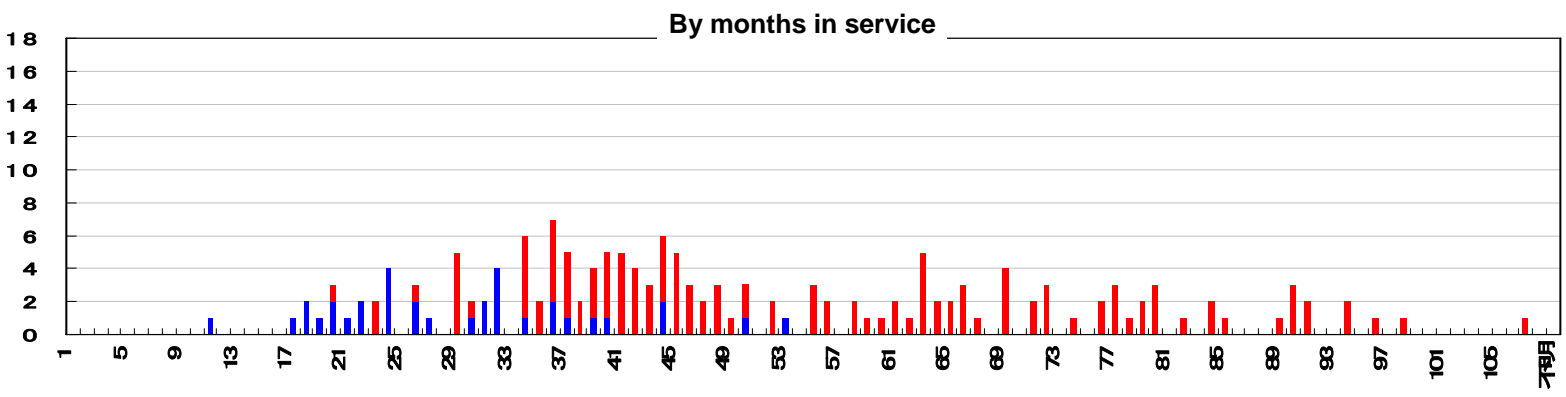
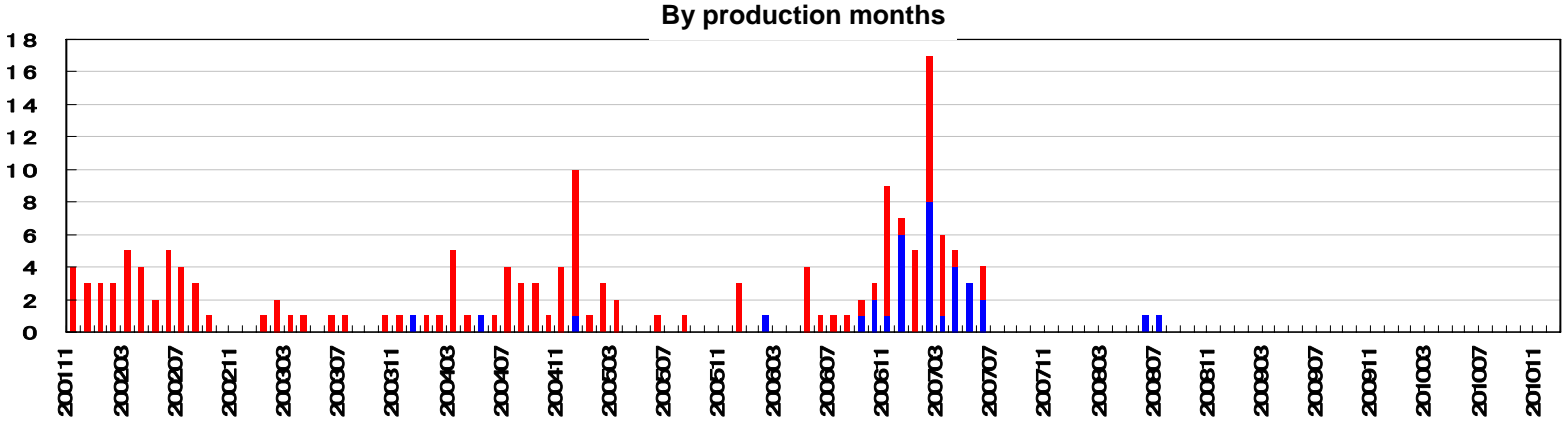
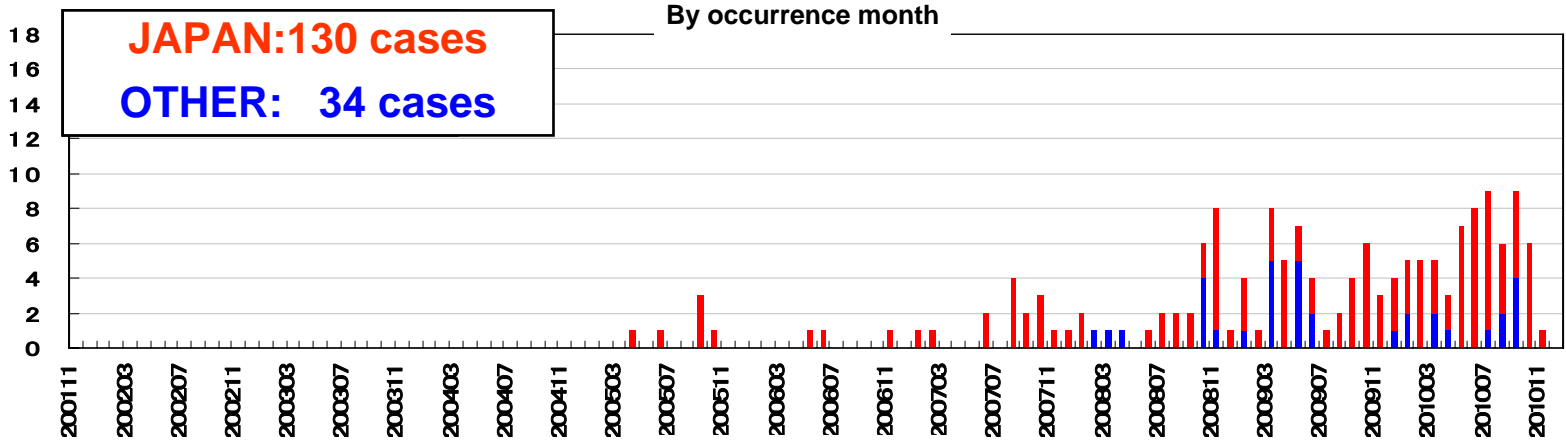
No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	チェコ	GD3	JHMGD57307S	2010/01/11	2007/05/31	2006/12/13	39,161	ヘッドライト点灯しない
2	ハンガリー	GD3	JHMGD57307S	2010/03/04	2007/07/17	2006/12/19	94,494	車内に煙と焦げたプラスチックの臭いがする
3	イタリア	GD3	JHMGD18906S	2010/03/17	2007/03/26	2006/02/06	45,000	ライティングスイッチのカプラ部に小さな溶損
4	イタリア	GD5	JHMGD57307S	2010/04/26	2007/06/29	2006/12/19	42,447	ヘッドライトが作動しない
5	イスラエル	GD1	JHMGD18608S	2010/08/22	2008/10/28	2008/07/15	58,825	お客様からヘッドライトに問題があるとの訴えを受けた
6	ルーマニア	GD1	JHMGD17507S	2010/09/29	2007/06/08	2007/02/09	47,864	運転して15分後、煙が出た

## (ASIA/PACIFIC 3cases)

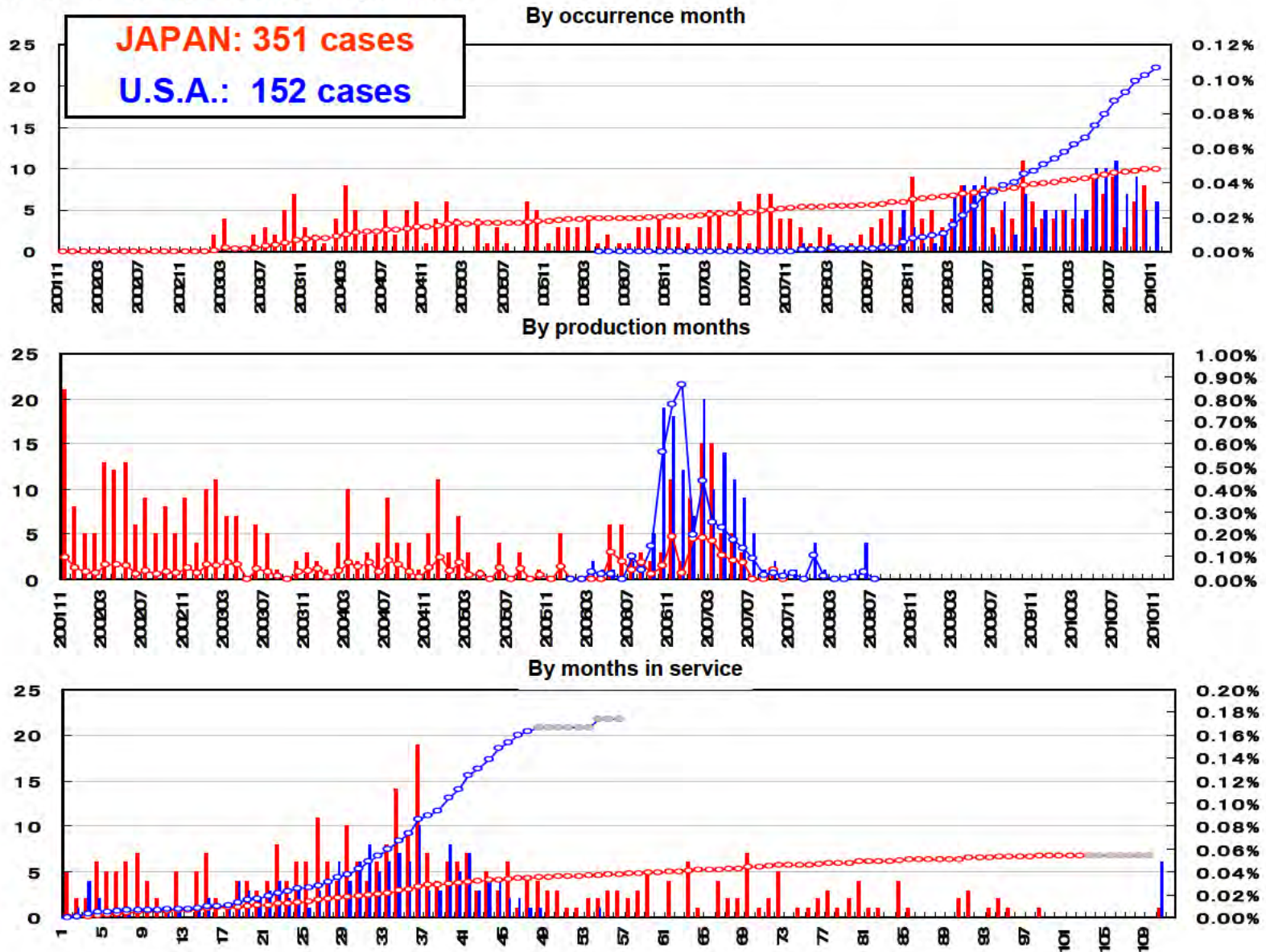
No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	オーストラリア	GD3	JHMGD38504S	2008/02/11	2004/07/09	2004/05/20	108,794	ヘッドライトが点灯しない
2	オーストラリア	GD3	JHMGD38504S	2008/04/10	2004/02/19	2003/12/22	70,821	ヘッドライトのロービームが点かないと、お客様は訴えた。
3	オーストラリア	GD3	JHMGD37505S	2009/05/28	2005/01/27	2004/12/09	85,693	ヘッドライト(ロービーム)が作動しない。

## 3-2 Hinjiren / QIC breakdown





Part: Lighting switch, Contention: No headlight coming ON, smoke, melt,  
Symptom code: Melt, seizure, deposition



# 5. Occurrence case No. 5-3 Occurrence situation analysis

by Hinjoren & QIC

Model	Model year											Global sales volume	Hinjoren, QIC		Switch M/L	Harness M/L
	99	00	01	02	03	04	05	06	07	08	09		10	Case #		
FIT/JAZZ	Second action			Line application								2,002,870	164	0.008%	Toyo Denso	Yazaki
FIT ARIA /CITY				Line application								709,489	9	0.001%		Yazaki
CR-V				Line application								674,592	6	0.001%		Sumitomo
LOGO	First action											80,016	17	0.021%		Sumitomo
INSIGHT	First action		Line application								7,282	4	0.055%	Sumitomo		
STEPWGN	Line application											47,389	1	0.002%		Sumitomo
CIVIC	Second action			Line application								830,266	0	0.000%		Sumitomo
STREAM	Line application											39,264	0	0.000%		Sumitomo
MOBILIO				Line application								85,739	0	0.000%		Yazaki
EDIX/FR-V				Line application								87,412	0	0.000%		Sumitomo
ELEMENT				Line application								320,962	0	0.000%		Sumitomo
PILOT				Line application								401,348	0	0.000%		Yazaki
LIFE				Parking assist only								55,753	0	0.000%		Sumitomo
											5,342,382	*Excluding 4 light type car with HID *Excluding car for KC				

First recall

Second recall

Line application

Blue arrow pointing to the period between 2001 and 2002: No occurrence on approx. 870,000 units

Since Nov 2001 line application of Sn plating for SW

# 5. Occurrence case No. 5-4 Occurrence situation analysis by factory 11/33

Model	Model year										Factory	Sales volume	Accumulated sales volume	Hinjoren, QIC/C		Male terminal	Female terminal		
	99	00	01	02	03	04	05	06	07	08				09	10			Case #	Occ. rate
FIT/JAZZ	Second action		[Timeline bars for FIT/JAZZ]										Sss	1,290,137	2,002,870	164	0.013%	Toyo Denso	Yazaki
	[Timeline bars for FIT/JAZZ]										HAB	185,966	0	0.000%					
	[Timeline bars for FIT/JAZZ]										HATC	118,060	0	0.000%					
	Line application										HPM	74,282	0	0.000%					
	[Timeline bars for FIT/JAZZ]										GHAC	227,855	0	0.000%					
	[Timeline bars for FIT/JAZZ]										CHAC	106,570	0	0.000%					
FIT ARIA /CITY	[Timeline bars for FIT ARIA /CITY]										HATC	195,557	709,489	6	0.003%	Toyo Denso	Yazaki		
	[Timeline bars for FIT ARIA /CITY]										HSCI	134,347		0	0.000%				
	[Timeline bars for FIT ARIA /CITY]										HCPI	16,541		3	0.018%				
	[Timeline bars for FIT ARIA /CITY]										HMSB	60,100		0	0.000%				
	[Timeline bars for FIT ARIA /CITY]										HACPL	60,198		0	0.000%				
	[Timeline bars for FIT ARIA /CITY]										HTR	20,458		0	0.000%				
CR-V	[Timeline bars for CR-V]										GHAC	222,288	674,592	0	0.000%	Sumitomo			
	[Timeline bars for CR-V]										Css	347,545		3	0.001%				
	[Timeline bars for CR-V]										HUM	255,207		0	0.000%				
	[Timeline bars for CR-V]										HATC	30,832		0	0.000%				
	[Timeline bars for CR-V]										HMSB	3,862		0	0.000%				
	[Timeline bars for CR-V]										HCPI	25,515		0	0.000%				
STEPWGN	Second action		[Timeline bars for STEPWGN]										WDHAC	14,051	47,389	0	0.000%	Sumitomo	
	[Timeline bars for STEPWGN]										HTW	23,095	3	0.013%					
											Sss	17,716	3,434,340	1	0.006%				
											Sss, Ccss	29,673		0	0.000%				

Since Nov 2001 line application of Sn plating for SW \*Excluding 4 light type car with HID \*Excluding car for KC







• A lot of failure confirmed parts are from Sss FIT/JAZZ. (164 cases)

◇Market return parts dismantle confirmation results (Melted)

No.4 Japan GD1-1072865 Claimed symptom: No headlight low beam comes ON

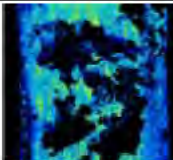
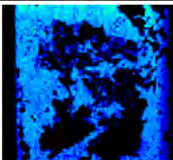
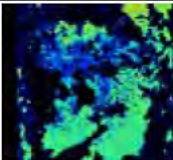

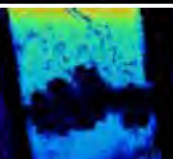
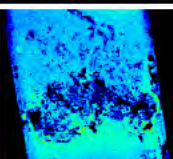
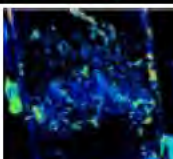
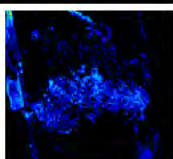
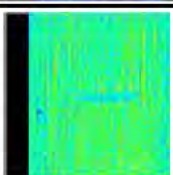
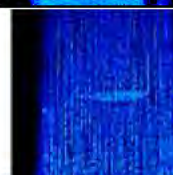


•Appearance confirmation

Male terminal on lighting switch side			Female terminal on harness side		
		Lo terminal is melted from heat.			Lo terminal is melted from heat.

•X-ray analysis results (Female terminal on harness side)



•Surface analysis results





	Sn	Cu	C	O	
Male terminal tongue					C and O (resin) adhered heavily in the vicinity of contact area that was heated over resin melting temperature.
Female terminal tongue					
Reference) Non-defective Male, tongue side					Sn plating remains sufficiently and wear particle is not found.




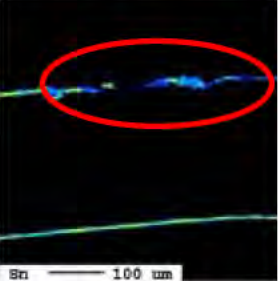

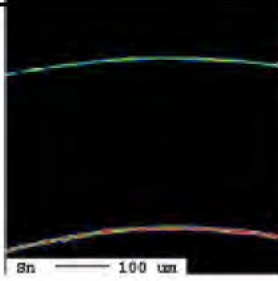
◇ Market return parts dismantle confirmation results (Melted)

No.12 U.S.A. JHMGD37627S [REDACTED] Claimed symptom: No low beam comes ON

▪ Appearance confirmation

Male terminal on lighting switch side		Female terminal on harness side	
		Lo terminal is melted from heat.	
			
			Lo terminal is melted from heat.

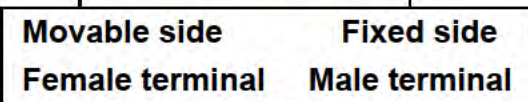
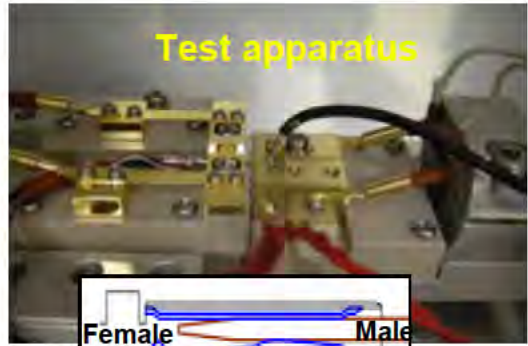
▪ Cross-sectional analysis

	Male terminal on lighting switch side	Female terminal on harness side
Returned part	 <p>There is no Sn plating any more and wear particle of base material has accumulated.</p>	 <p>Sn plating is worn.</p>
Non-defective part	 <p>Sn plating remains and no wear particle found.</p>	 <p>Sn plating remains and no wear particle found.</p>

There is no Sn plating any more and wear particle has accumulated therefore it is caused by sliding.

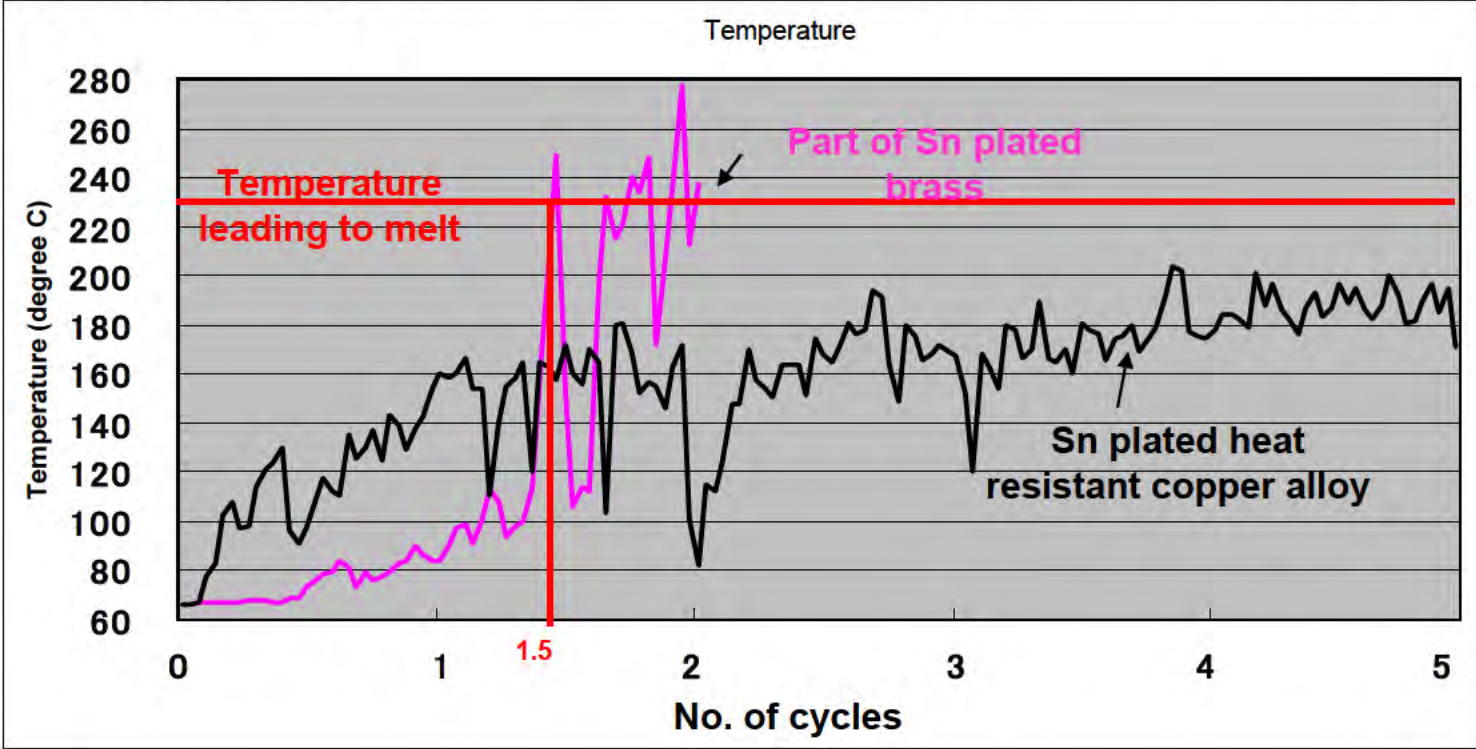
### Test conditions

- Test terminal: Brass + Sn plating
- Contact pressure load: 8N (Lower limit value of production control)
- Accelerated oxidation: Leave to sit at 100 deg C x120 hrs
- Conductive current: 10A
- Temperature, humidity: +60 deg C, 85%RH
- Sliding width: 0.5mm
- Sliding cycle: Repeat sliding x 10,000 times then stopped for 24 hrs



### Test results

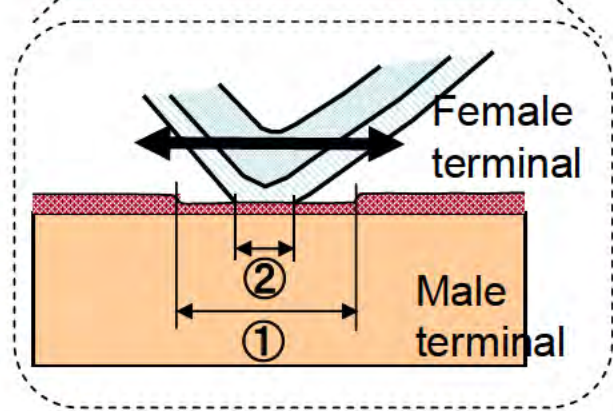
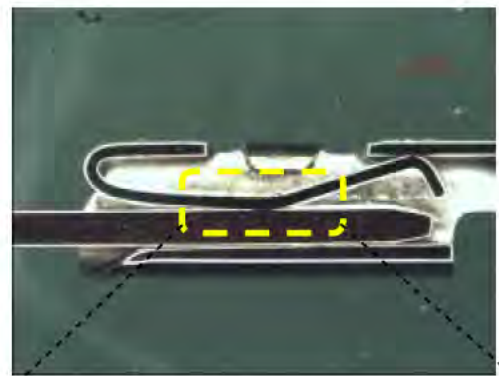
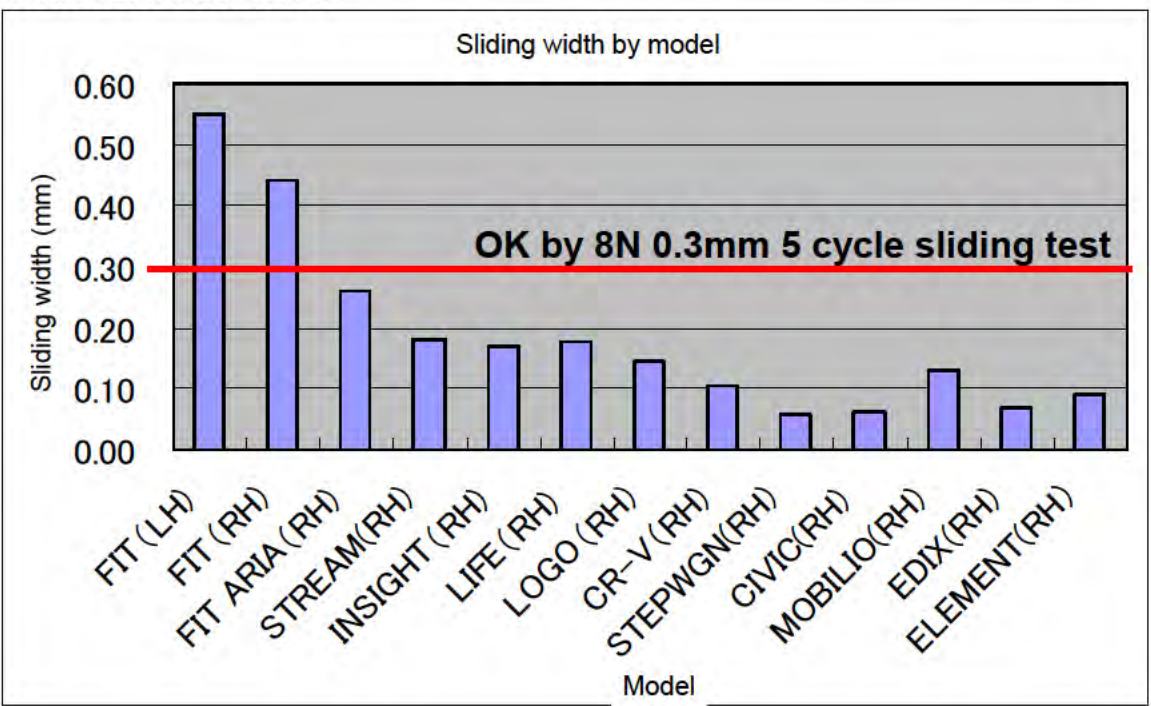
It revealed that connector melting temperature is reached by approx. 1.5 cycle.



- To measure sliding width of terminal  
 To install lighting switch of terminal contact pressure 8N (at the lower limit of manufacturing control) to a test car. Lighting switch operation from right turn -> center -> left turn -> center -> flashing -> center makes one cycle. After conducting 10,000 cycles, compare sliding width by model.

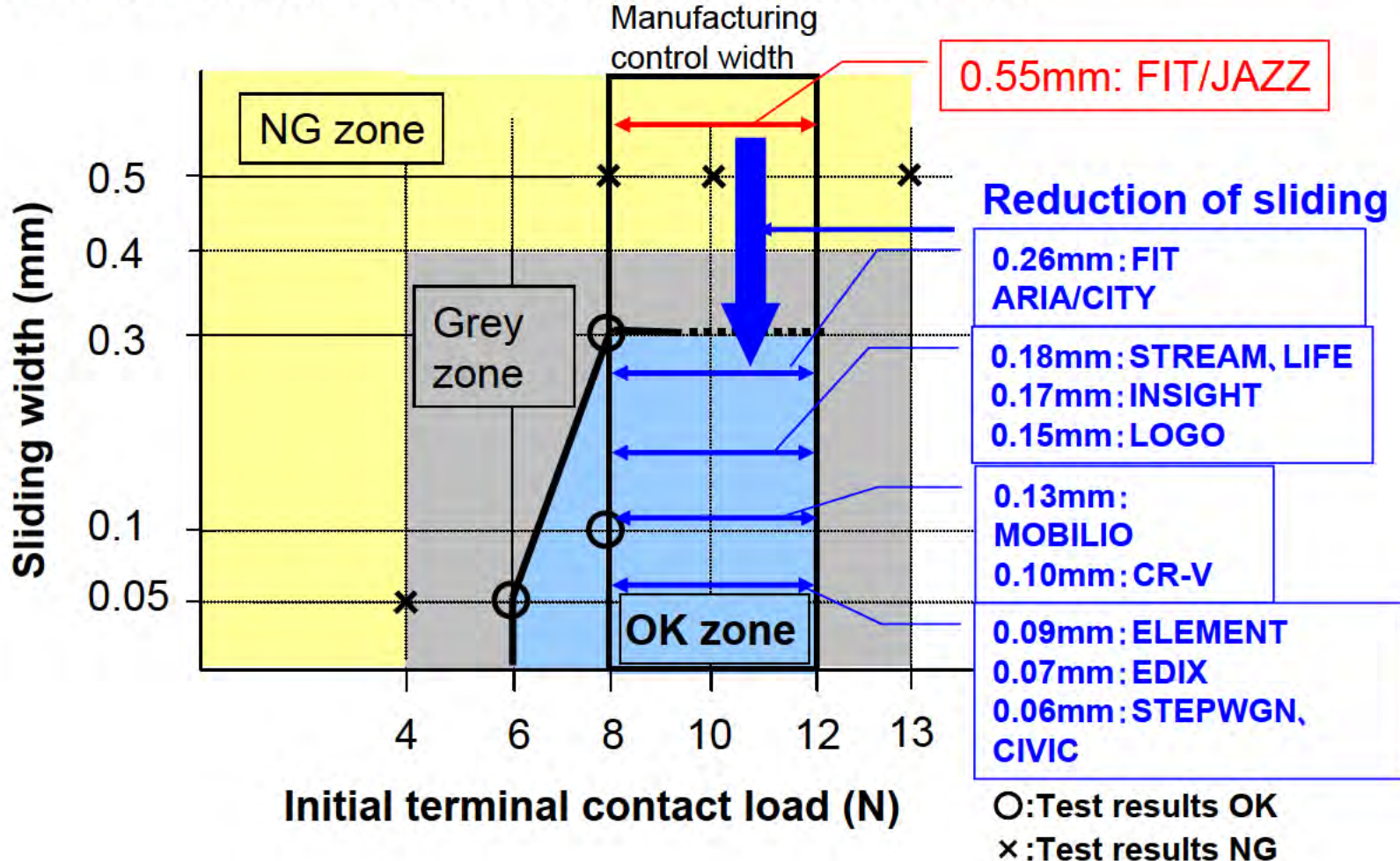
• Measurement results

It revealed that FIT/JAZZ has large sliding width compared with other models.

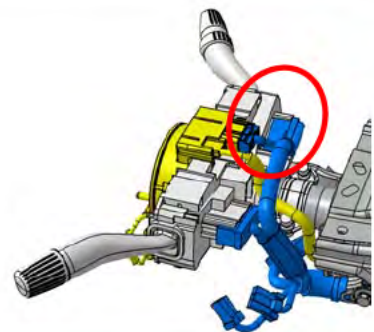
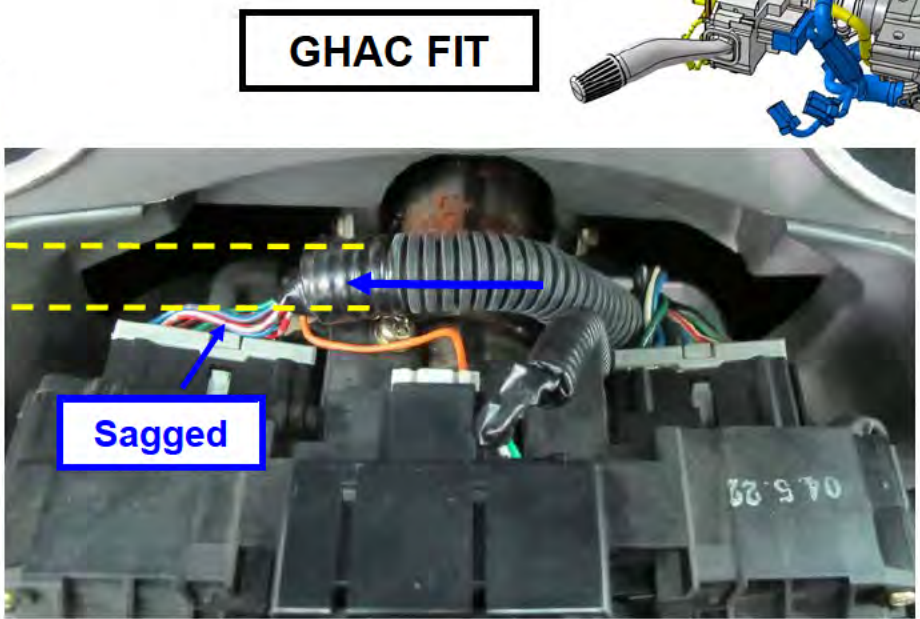
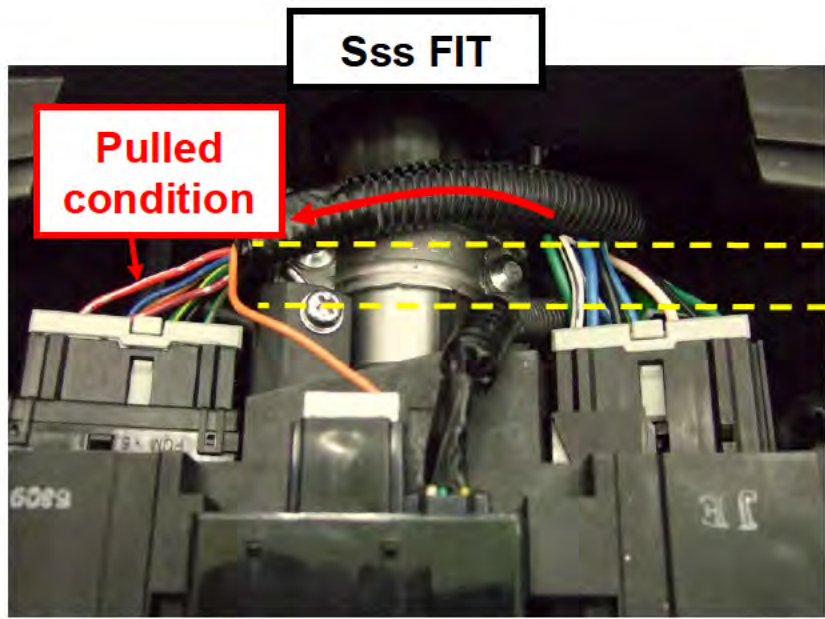


Sliding width =  
 (Male terminal sliding width①)  
 - (Female terminal sliding width②)

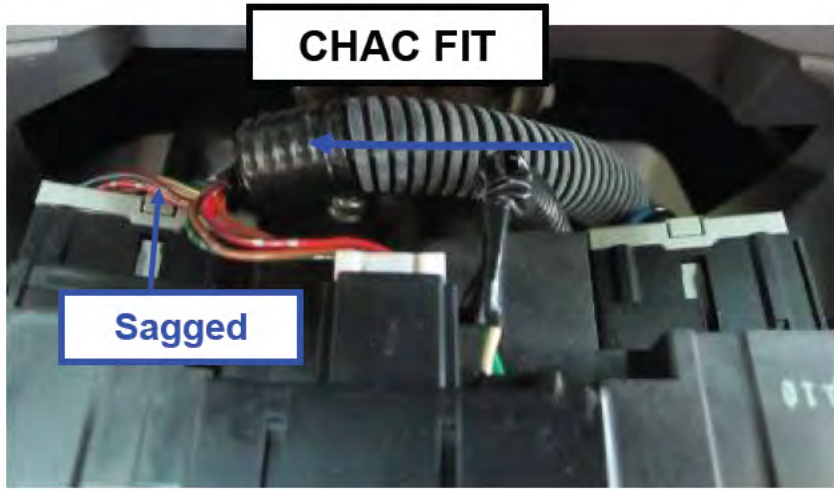
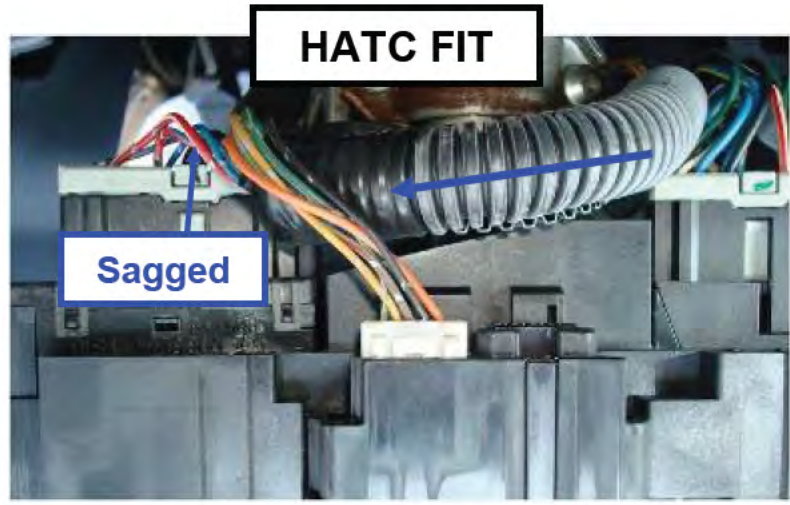
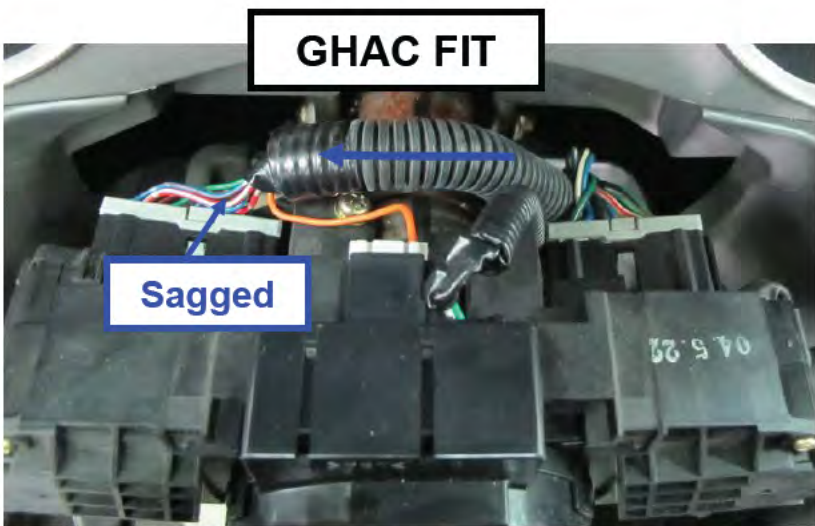
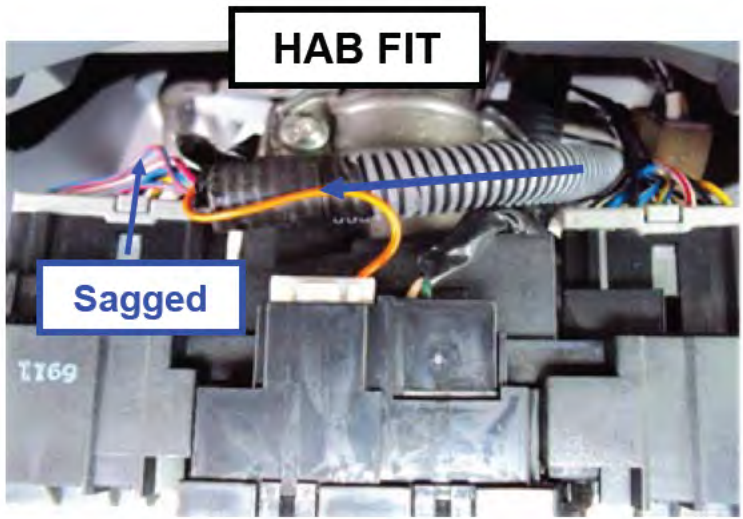
It revealed that sliding width on FIT/JAZZ is in NG zone where resistance increase is confirmed from the unit sliding test results.



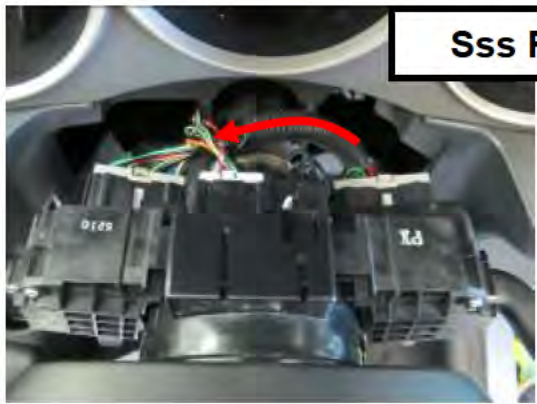
It revealed that FIT/JAZZ only is in NG zone. Reduction of sliding width is the most effective countermeasure.



Difference in sagging amount of Lo terminal wiring is caused by harness layout.



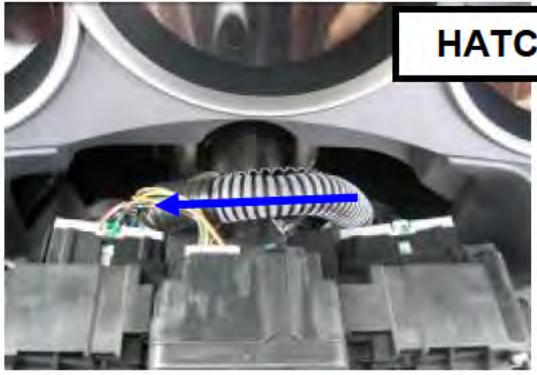
Only Sss FIT has a layout pulled condition of Lo terminal wiring occurs.



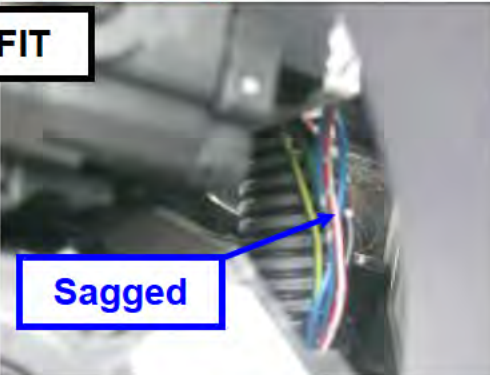
Sss FIT



Pulled condition



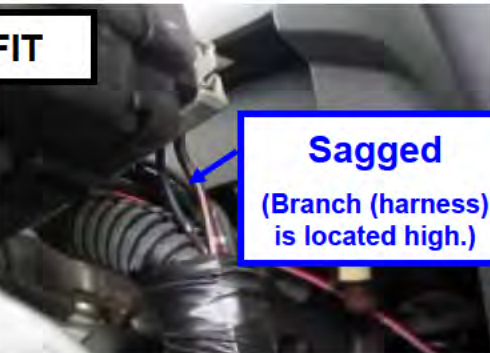
HATC FIT



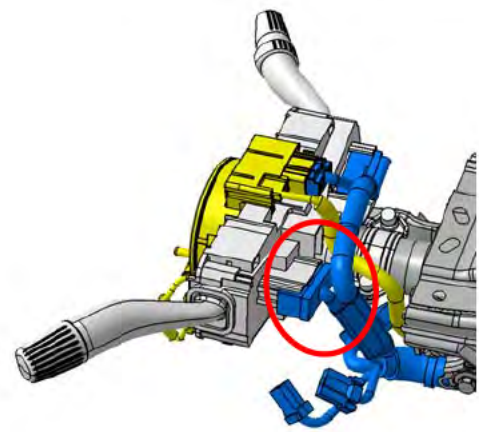
Sagged



HPM FIT



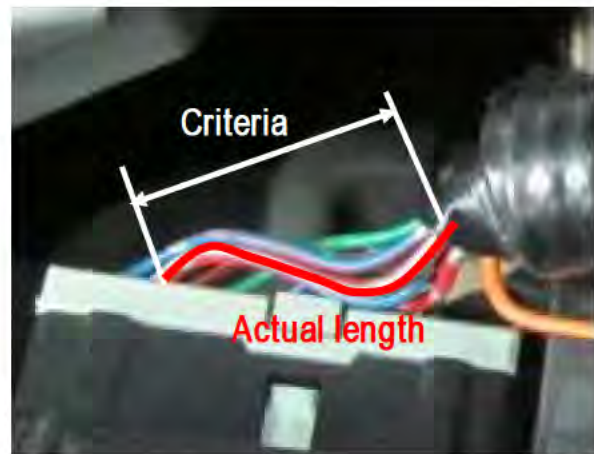
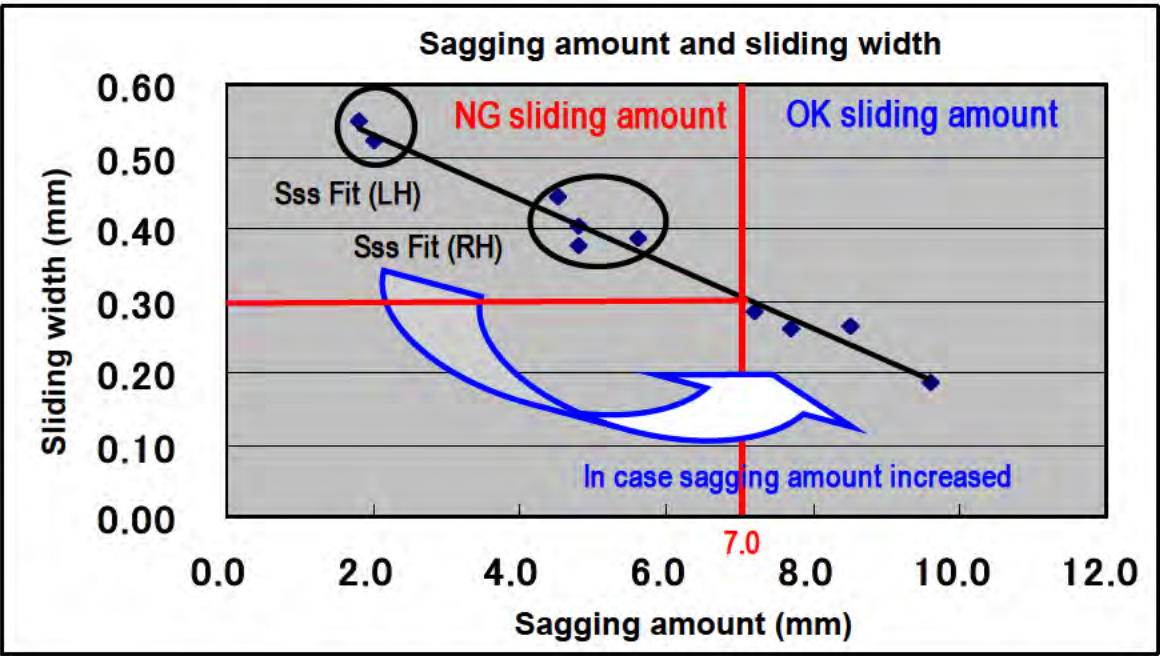
Sagged  
(Branch (harness) is located high.)



Only Sss FIT has a layout pulled condition of Lo terminal wiring occurs.

# 6. Analysis results 6-9 Investigation results on sliding width and harness sagging amount 20/31

Investigation results of correlation of sagging amount and sliding width as sagging amount of Sss FIT is different from FIT of other factories



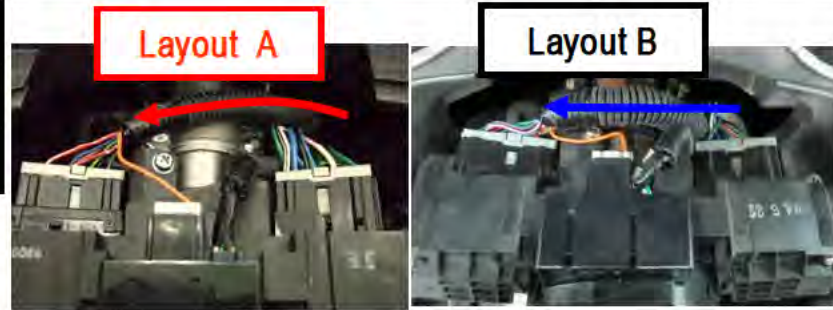
$$\text{Sagging amount} = \text{Actual length} - \text{Criteria}$$

Confirmed that if sagging amount is large, sliding amount becomes small.

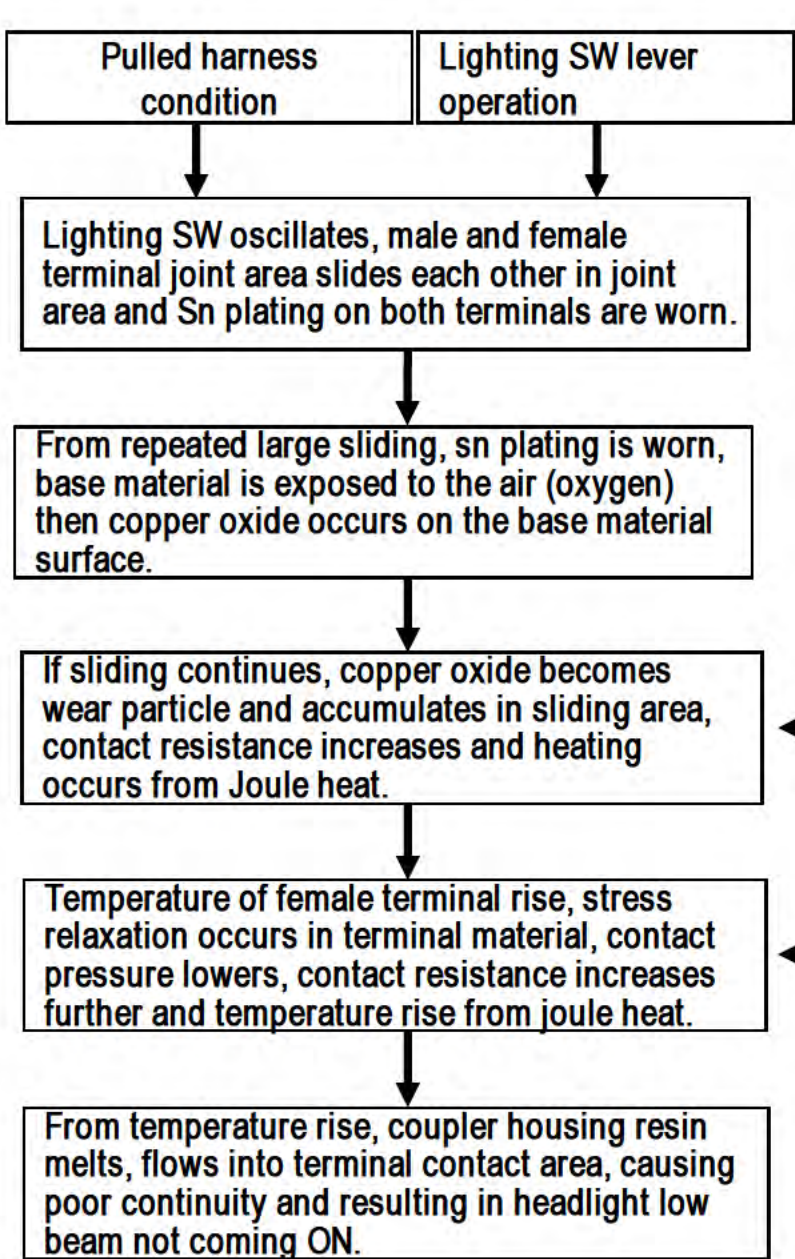


Model	Factory	Layout	Sagging amount (mm)	Sliding width (mm)	Judgment
FIT/JAZZ(LH)	Sss	A	1.8	0.55	NG
FIT/JAZZ(RH)	Sss	A	4.5	0.44	NG
FIT/JAZZ(LH)	GHAC	B	9.6	0.19	OK
FIT/JAZZ(LH)	CHAC	B	13.9	0.24	OK
FIT/JAZZ(LH)	HAB	B	8.9	—	OK
FIT/JAZZ(RH)	HATC	B	9.3	—	OK
FIT/JAZZ(RH)	HPM	B	14.0	—	OK
FIT ARIA/CITY(RH)	HATC	B	10.3	0.26	OK
FIT ARIA/CITY(LH)	GHAC	B	7.2	0.28	OK
FIT ARIA/CITY(RH)	HSCI	B	18.3	—	OK
FIT ARIA/CITY(RH)	HCPI	B	10.5	—	OK
FIT ARIA/CITY(RH)	HMSB	B	13.8	—	OK
FIT ARIA/CITY(RH)	HACPL	B	9.6	—	OK
FIT ARIA/CITY(LH)	HTR	B	11.6	—	OK

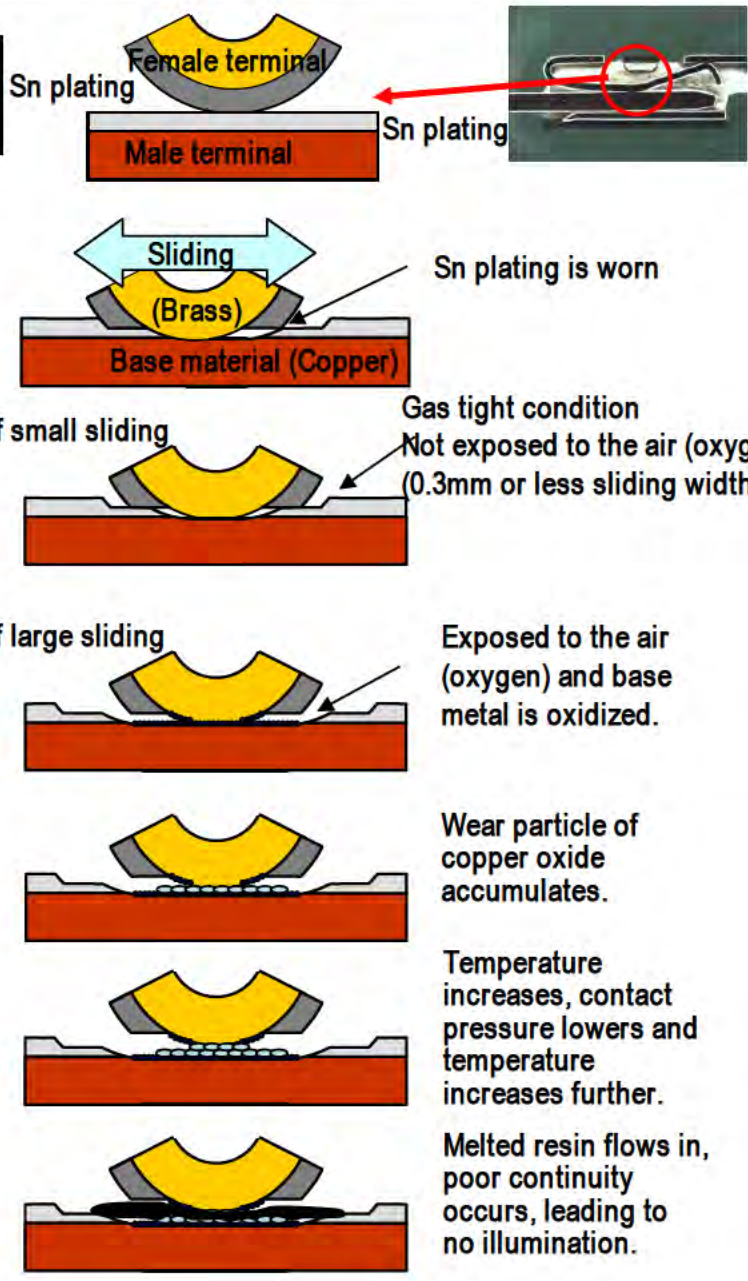
Model	Factory	Sagging amount (mm)	Sliding width (mm)	Judgment
CR-V(RH)	Css	23.4	0.10	OK
LOGO(RH)	Sss	15.4	0.15	OK
INSIGHT(RH)	Sss	22.8	0.17	OK
STEPWGN(RH)	Sss, Css	37.4	0.06	OK
CIVIC(RH)	Sss	48.3	0.06	OK
STREAM(RH)	Sss	26.5	0.18	OK
MOBILIO(RH)	Sss	32.9	0.13	OK
EDIX.(RH)	Sss	16.1	0.07	OK
ELEMENT(RH)	Sss	33.5	0.09	OK
LIFE(RH)	Sss	26.7	0.18	OK
PILOT	HMA	21.3	—	OK



We determined that market action is necessary for Sss FIT/JAZZ only.



Current flows approx. 10A continuously.



# 6. Analysis results

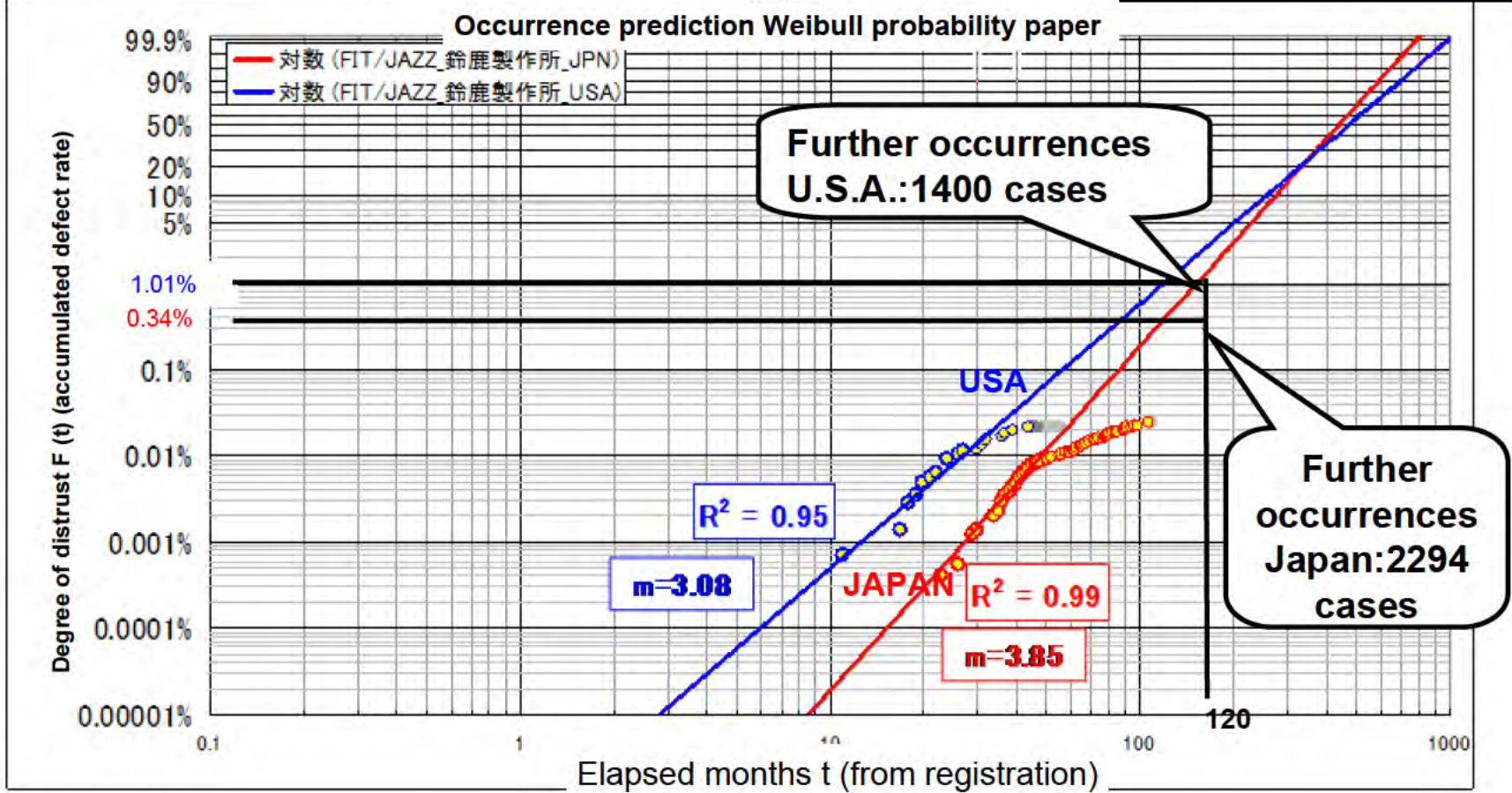
6-12 Occurrence prediction in Japan and in the U.S. from Hinjoren / QIC

## Japan

Years in service	At present	In 10 years
Occurrence case No.	130	2424
Occ. rate	0.018%	0.33%
<b>Affected No.: 735,750 units</b>		

## U.S.A.

Years in service	At present	In 10 years
Occurrence case No.	25	1425
Occ. rate	0.018%	1.01%
<b>Affected No.: 141,084 units</b>		



## Countermeasure

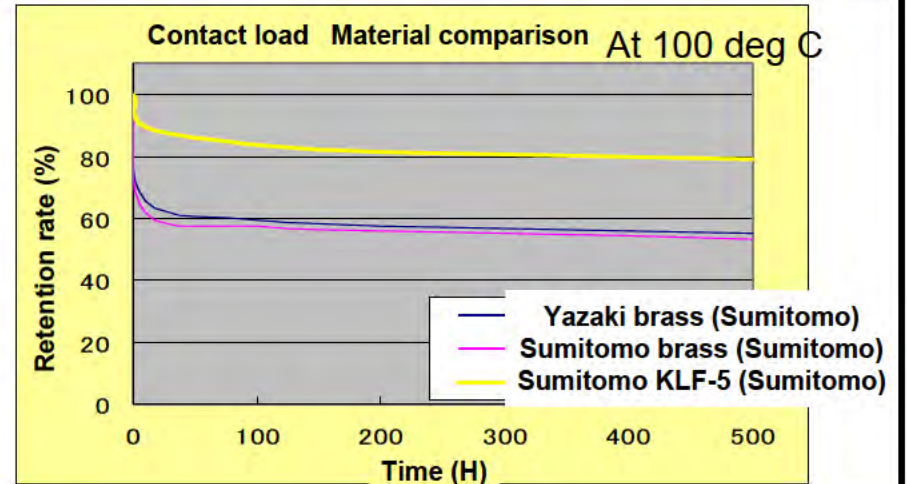
• Sliding prevention by applying TY-RAP  
 By fixing female terminal harness to the lighting switch by TY-RAP, harness follows movement of switch when it is operated and to reduce sliding between terminals.  
 (Harness needs to be lengthened.)



## Remarks



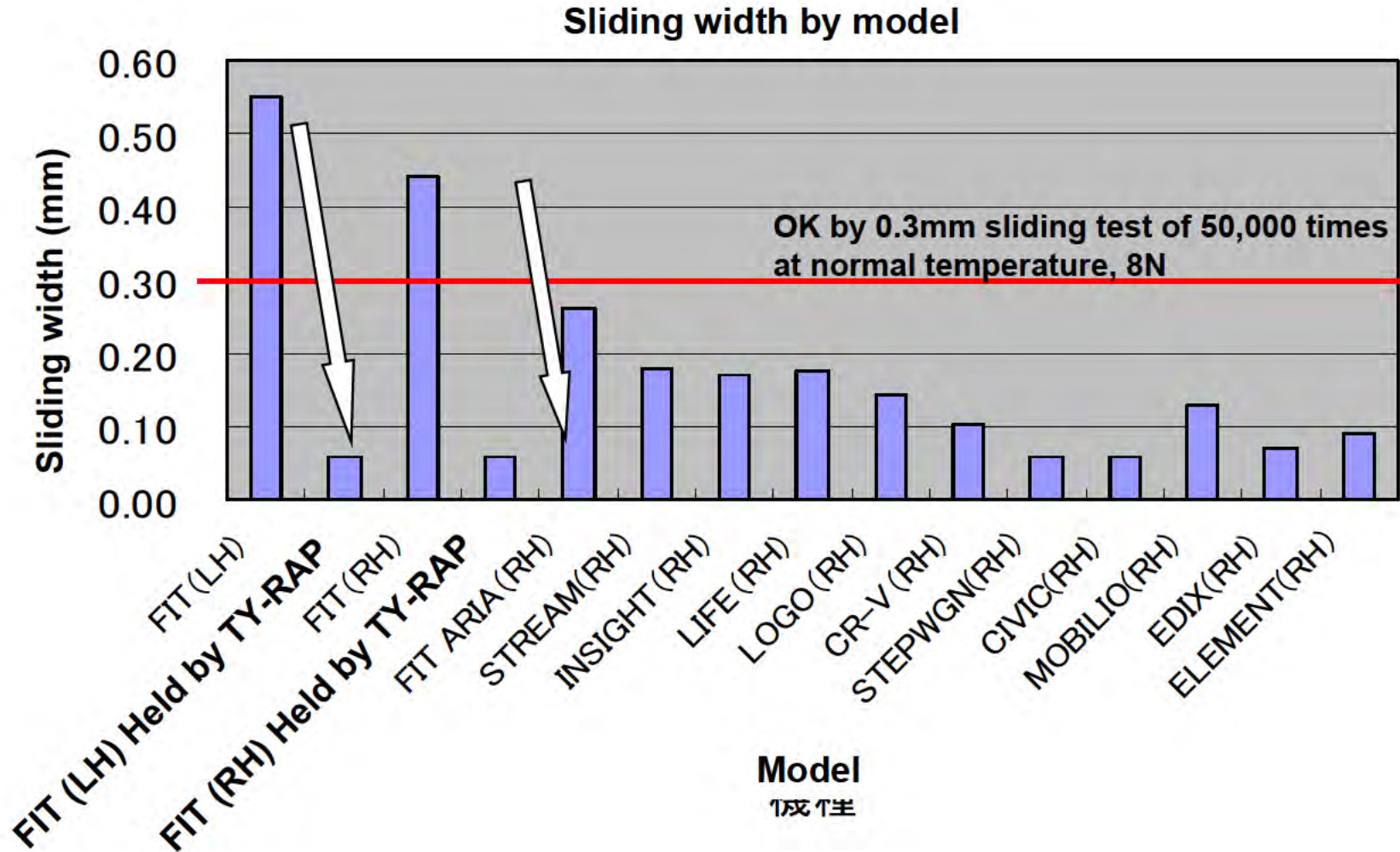
• To reduced contact pressure lowering at female terminal  
 Change base material to a heat resistant copper alloy that has low contact pressure lowering  
 (Currently base metal is brass.)



# 7.Countermeasure 7-2 On car effect confirmation on sliding prevention 25/31

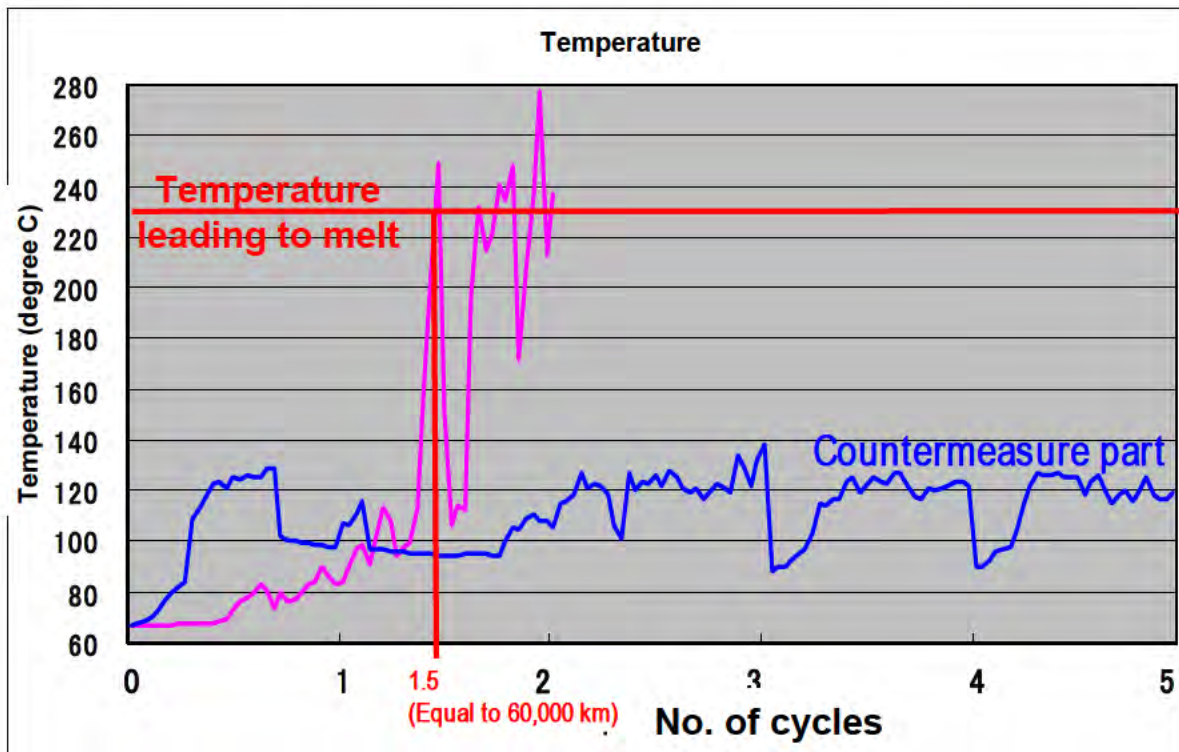
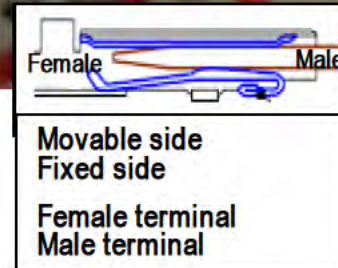
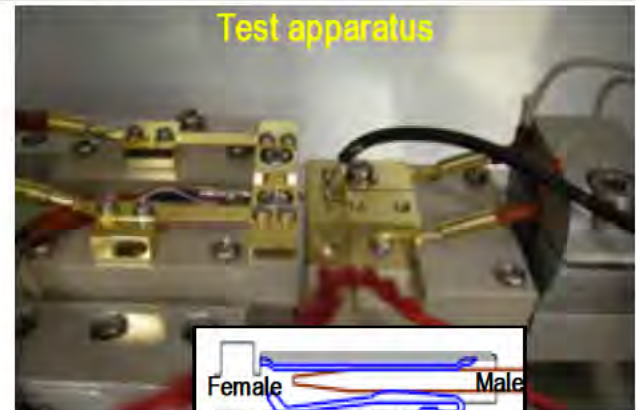
Sliding width confirmation results by operation lighting switch 10,000 cycles on car

Sliding width decreased to approx. 1/10 by holding with TY-RAP to prevent sliding.



## <Test conditions>

- Female terminal : Heat resistant copper alloy  
(Contact pressure lowering is small)
- Male terminal : Solid copper (Not plated : Market assumed part)
- Contact pressure load : 8N (Lower limit value of production control)
- Accelerated oxidization : Leave to sit at 100 deg C for 120 hrs before test
- Conducting current : 10A
- Temperature and humidity : +60degree C, 85% RH
- Sliding width : 0.1mm (Equal to tightening by TY-RAP)
- Sliding cycle : Sliding 10,000 times then stopped for 24 hrs is 1 cycle



Compared with the existing part that melted by about 1.5 cycle, countermeasure part did not melt after five cycles.

Toughness is at least approx. three-fold or more compared with before.

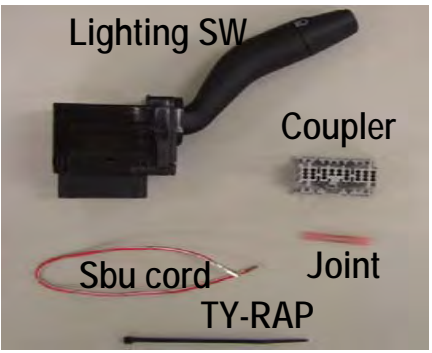
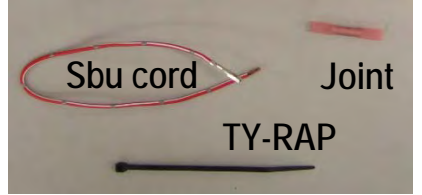
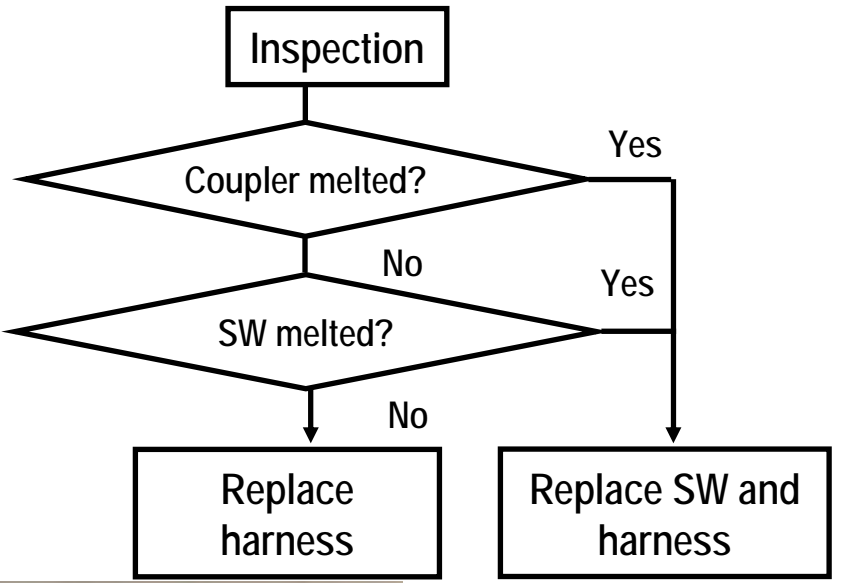
Currently mileage has increasing trend from approx. 60,000 km, so toughness is approx. 180,000 km or more.

7-1. Action proposal: We propose proactive market action.

7-2. Reason for the proposal: It is a safety issue and further occurrences are predicted.

7-3. Action content: Check the Lo terminal area for melt

- 1) If melted, replace lighting SW and Lo terminal and fix the harness to the lighting SW by TY-WRAP.
- 2) If not melted, replace Lo terminal only and fix it by TY-WRAP.



In case of LH Lighting SW

In case of RH Lighting SW

Normal part

Melted part

In case of RH Lighting SW

In case of LH Lighting SW

Normal part

Melted part

Coordinated with related sections.

7-4. Affected range Halogen spec. 02M~08M FIT/JAZZ manufactured by Sss  
(Excluding models for Canada with daylight spec.)  
Products since Oct 22, 2001 to have been discontinued.

## 7-5. No. of affected units

Factory	Market	02M	03M	04M	05M	06M	07M	08M	計
Sss	Japan	238,193	147,751	59,564	162,984	125,900	–	–	734,392
	USA	–	–	–	–	–	67,091	73,993	141,084
	Europe	62,300	48,344	53,921	114,827	55,737	33,777	18,046	386,952
	Asia & Oceania	1,629	16,200	7,059	16,177	2,469	5,185	2,923	51,642
	Other	3,976	3,042	3,333	8,831	6,704	9,780	5,481	41,147

Total: 1,355,217 units



Model	Factory	Market	Affected NO.	Hinjoren / QIC					Action required or not
				At present		Prediction in ten years			
				Case No.	Occ. rate	Case No.	Occ. rate	Further occ. No.	
FIT/JAZZ	Sss	Japan	734,392	130	0.018%	2,424	0.33%	2,294	Required
		USA	141,084	25	0.018%	1,425	1.01%	1,400	
		Other	479,920	9	0.002%	143	0.03%	134	
	HAB	S.Ameri ca	185,966	0	0%	Further 1, 2 cases of occurrences are predicted.			Not required
	HATC	Asia & Oceania	118,060	0	0%				
	HPM	Asia & Oceania	74,282	0	0%				
	GHAC	CHINA	227,855	0	0%				
	CHAC	Europe	106,570	0	0.001%				
FIT ARIA	HATC	Japan	21,700	2	0.009%	—	0.02%	2	Not required
CR-V	Css		15,677	1	0.007%	—	0.01%	1	
STEPWGN	Sss, Css		47,119	1	0.002%	—	0.00%	1	

**Future sporadic occurrences are predicted on Sss FIT /JAZZ only.**

## Action cost approx. 7.27 billion yen

Market	Action method	F.R.T	Man hour	Part cost	PLCA	H/Charge	DM	Cost per unit	Affected units	1)&2) ratio	Cost	
Japan	1) Replace SW & harness	0.7	¥4,200	¥914	-	¥1,200	¥432	¥6,746	5,000	0.7%	¥33,730,000	Approx 3.89 Billion Yen
	2) Replace harness only	0.6	¥3,600	¥60	-	¥1,200	¥432	¥5,292	729,392	99.3%	¥3,859,942,464	
USA	1) Replace SW & harness	0.8	¥6,659	¥1,590	-	¥636	¥93	¥8,978	2,000	1.4%	¥17,956,000	Approx 0.86 Billion Yen
	2) Replace harness only	0.7	¥5,827	¥113	-	¥45	¥93	¥6,078	139,084	98.6%	¥845,352,552	
Europe	1) Replace SW & harness	0.8	¥5,507	¥1,556	¥725	-	¥500	¥8,288	2,600	0.7%	¥21,548,800	Approx 2.13 Billion Yen
	2) Replace harness only	0.7	¥4,818	¥113	¥52	-	¥500	¥5,483	384,352	99.3%	¥2,107,402,016	
Asia & Oceania	1) Replace SW & harness	0.8	¥5,783	¥1,036	¥583	-	¥82	¥7,484	200	0.4%	¥1,496,800	Approx 0.27 Billion Yen
	2) Replace harness only	0.7	¥5,060	¥76	¥42	-	¥82	¥5,260	51,442	99.6%	¥270,584,920	
Other	1) Replace SW & harness	0.8	¥2,726	¥1,635	¥968	-	¥113	¥5,442	200	0.5%	¥1,088,400	Approx 0.11 Billion Yen
	2) Replace harness only	0.7	¥2,385	¥113	¥67	-	¥113	¥2,678	40,947	99.5%	¥109,656,066	
	Other cost (Terminal remover, Tape etc)										¥9,535,000	Approx 0.01 Billion Yen

※ No. to be replaced for action procedure 1) and 2)

It is presumed that kit with SW is necessary for 0.1% of lighting SW replaced under warranty and out of warranty but we prepared 10,000 sets to secure minimum one unit for each dealer so that no trouble would be caused to customers.

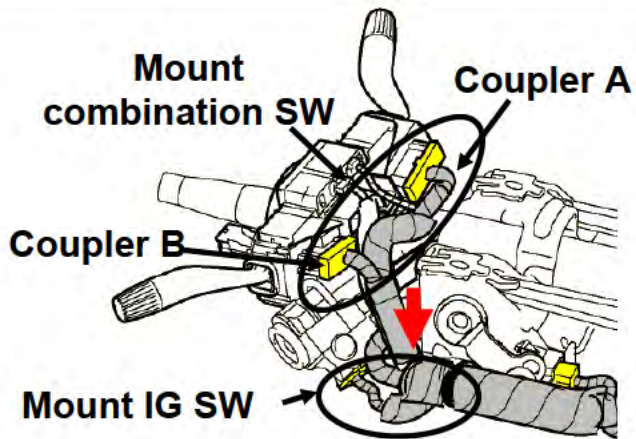
For Japan and the U.S. where occurrence is high, two sets per dealer is prepared and one set for other regions.

# 9. Specific action plan

9-1 Overall

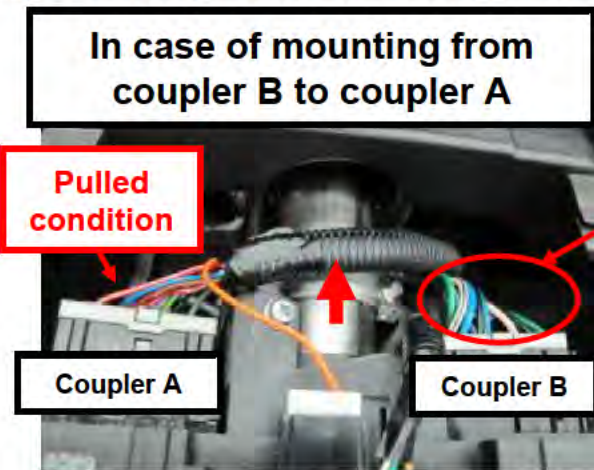
31/33

	2010		2011		
	Dec		Jan		Feb
Notification Treatment	▼12/16 Notification (US Time 12/15) ▼12/17 Start of action (JPN)				
QIM GQC	▼ 12/8 GQC			▼:Start of action scheduled	
Parts Procurement	JAPAN 734,392	12/17 ▼ 12/28	1/14 ▼ 1/31	2/28 ▼	2/28 ▼
	USA 141,084	14.7 (20%) 25.7 (35%)	36.8 (50%) 1/18 ▼	44.1 (60%) 2/1 ▼	66.2 (90%) 2/28 ▼
	Europe 386,952		3.5 (25%) 1/18 ▼	7.1 (50%) 2/1 ▼	11.3 (80%) 2/28 ▼
	Asia 51,642		9.6 (25%) 1/18 ▼	18.8 (50%) 2/1 ▼	26.3 (70%) 2/28 ▼
	Other 41,147		1.3 (25%) 1/18 ▼	2.5 (50%) 2/1 ▼	3.6 (70%) 2/28 ▼
			1.0 (25%)	2.6 (50%)	3.6 (70%)
	Date ▼ Quantity (Ten Thousand) %				

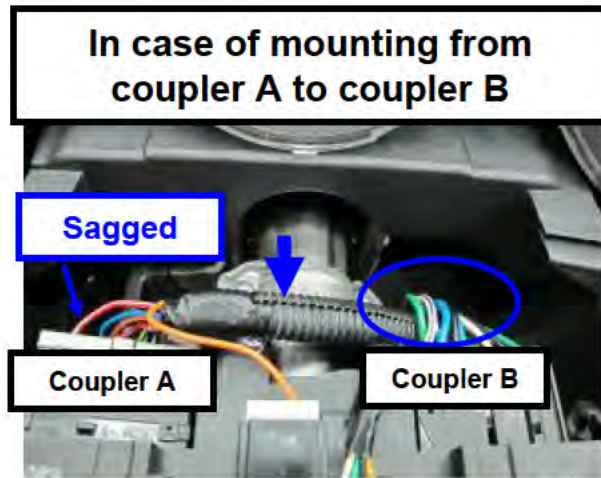


① If it is mounted in the order from combination SW to IG SW, wiring of combination SW is pulled down.

② If combination SW is mounted in the order from coupler B to coupler A, harness gets away from the coupler.



It gets away from the coupler due to rigidity in this area.



Low beam wiring is pulled because of the above mounting procedure. Sss FIT / JAZZ only is mounted in this mounting procedure.

**END**

02-08M Sss製 FIT/JAZZ 日本、USA、欧州、アジア大洋州、南米

## ライティングスイッチカプラー端子磨耗不具合

MV20091223094027(日本)

MV20100208102731(海外)

1. 前回指摘事項
2. 概要
3. 経緯
4. 訴え事象
5. 発生件数
6. 解析結果
7. 対策内容
8. 提案内容
9. 展開日程



△ 1 改訂：2010/12/06

**NASC**  
**2010/12/06**

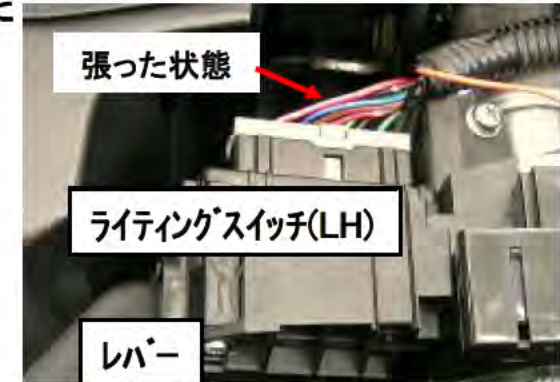
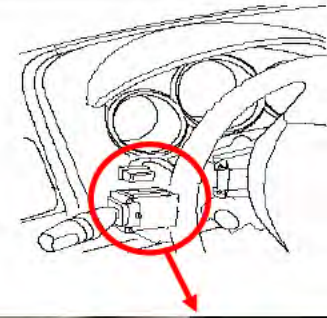
## 1. 品質検討会（2010年11月23日）

### ■決定事項

品質委員会に提案してください。

## 2. 概要

- 1.不具合事象 ヘッドライトロービーム不灯、焦げ臭い、煙が出た
- 2.発生状況 品情連とQIC件数 164件 発生率 0.013%
- 3.発生原因 インパネ配線のライティングスイッチへの分岐配線長の設定が不適切なためライティングスイッチのLO端子配線が張られた状態にあり、ターン操作またはヘッドライト切り替え操作などで端子嵌合部が繰返し大きく摺動したため、オス端子とメス端子のSnメッキが剥がれ、母材が磨耗して堆積した酸化銅により接触抵抗値が増大し、溶損した樹脂カプラーが接触面に流れ込み炭化し導通不良となる
- 4.対策内容 該当機種、生産終了のため対策せず。市場にて端子部の摺動を抑えるためにLo端子ハーネスをライティングスイッチにタイラップで固定。また、メス側の端子の母材を黄銅から耐熱銅合金に変更
- 5.措置提案 積極市場措置を提案する
- 6.提案理由 ヘッドライトロービーム不灯の事象であり、今後も発生が予測されるため
- 7.措置内容 Lo端子部の溶損を点検し  
 ①溶損している場合は、ライティングスイッチ交換とLo端子ハーネスを交換し、ライティングスイッチにタイラップで固定  
 ②溶損していない場合は、Lo端子ハーネスのみを交換しライティングスイッチにタイラップで固定
- 8.対象範囲 ハロゲン仕様の02M~08M Sss製FIT/JAZZ  
 (但し、カナダ仕向けはデイライト仕様のため除く)  
 2001年10月22日以降の生産から生産終了まで
- 9.対象台数 1,355,217台  
 日本:734,392台、USA:141,084台、  
 欧州:386,952台、ア大:51,642台、一般:41,147台
- 10.措置費用 約72.7億円

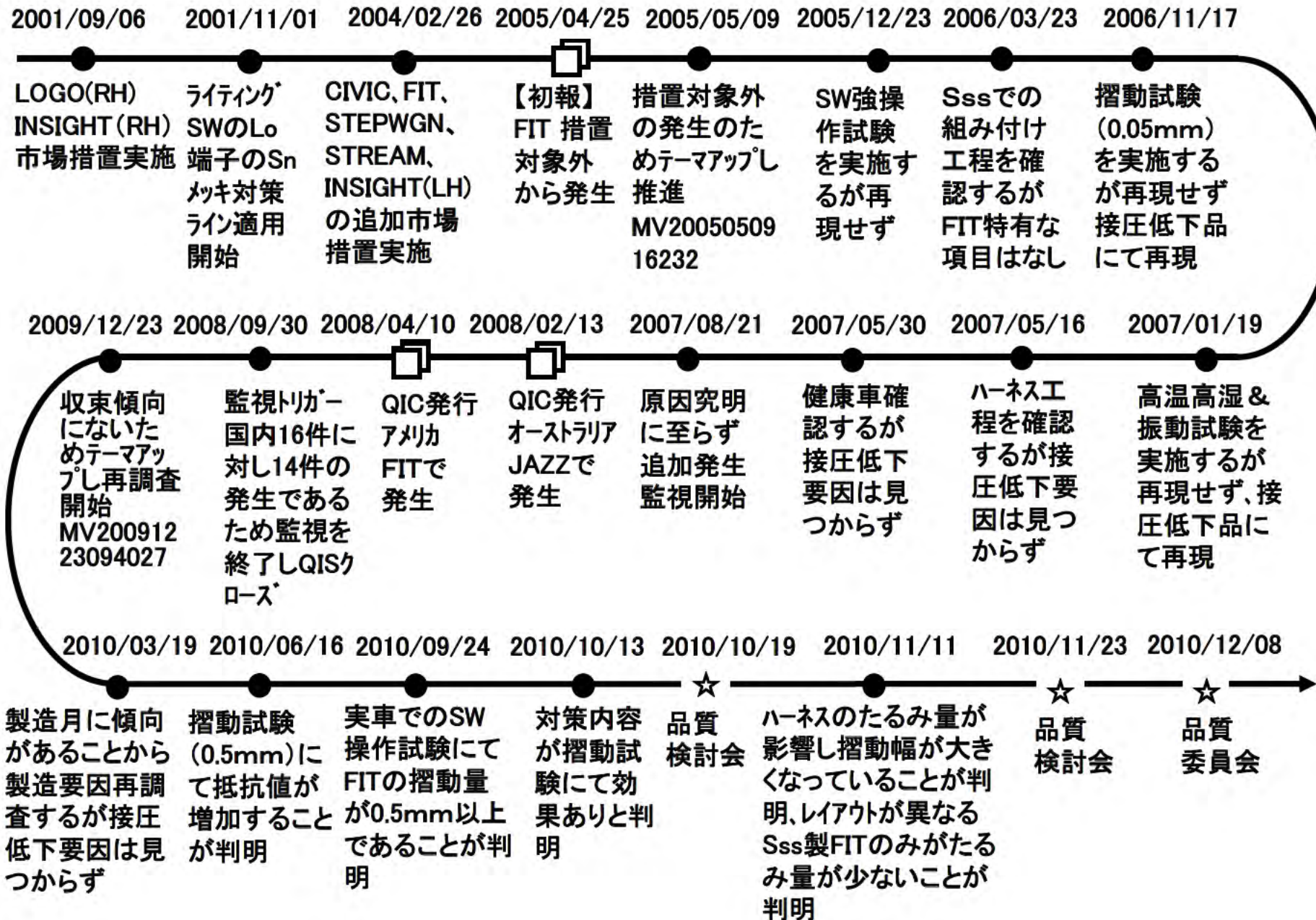


溶損したカプラーの樹脂が入り込み導通不良となり不灯になる





## 3. 経緯



## 日本(130件)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	日本	GD1	GD1-1728129	2005/04/21	2003/08/26	2003/06/23	60651	走行中突然ヘッドライトが両方つかなくなっ
2	日本	GD2	GD2-1020582	2005/06/18	2002/06/26	2002/06/17	39494	ヘッドライト点灯しない
3	日本	GD1	GD1-1094570	2005/09/02	2001/12/25	2001/12/18	76599	ヘッドライト点灯しない
4	日本	GD1	GD1-1072865	2005/09/05	2001/11/22	2001/11/09	166938	ヘッドライト点灯しない
5	日本	GD1	GD1-1210960	2005/09/14	2002/07/19	2002/07/09	87855	ヘッドライトが点かない
6	日本	GD1	GD1-1141663	2005/10/27	2002/03/26	2002/03/20	58380	ヘッドライト左右点灯しない
7	日本	GD1	GD1-1145644	2006/05/15	2003/08/07	2002/03/26	53381	ヘッドライトLOビーム点灯しない。(HIビームは点灯する)
8	日本	GD1	GD1-2113275	2006/06/24	2004/08/03	2004/07/08	105125	ヘッドライトLOビーム点灯しない
9	日本	GD1	GD1-1119787	2006/11/22	2002/02/20	2002/02/11	57826	ヘッドライト点灯せず(左右)
10	日本	GD2	GD2-1509358	2007/01/21	2003/04/24	2003/04/17	76755	ヘッドライト急に点灯しなくなった
11	日本	GD1	GD1-1563270	2007/02/11	2003/03/14	2003/03/07	131871	ハンドル付近より煙が出た
12	日本	GD2	GD2-1702888	2007/06/24	2004/05/28	2004/03/12	59206	ヘッドライト近目がつかない
13	日本	GD1	GD1-1152646	2007/06/29	2002/04/15	2002/04/08	57356	ヘッドライト点灯不良
14	日本	GD1	GD1-1703160	2007/08/05	2004/03/23	2004/03/23	31771	ヘッドライト点灯しない
15	日本	GD1	GD1-1111998	2007/08/08	2002/04/24	2002/04/21	23754	ヘッドライトロービームが点灯しなくなる。
115	日本	GD1	GD1-2308348	2010/08/17	2006/01/10	2005/12/23	121207	ヘッドライト不灯
116	日本	GD1	GD1-2155735	2010/08/20	2004/11/26	2004/11/12	84223	焦臭くなってヘッドライト点灯しない。
117	日本	GD1	GD1-2363097	2010/08/31	2006/09/28	2006/09/22	52527	左右ヘッドライトロービーム点灯しない
118	日本	GD1	GD1-2032282	2010/09/02	2004/04/26	2004/03/30	83126	ヘッドライトロービームつかない。[配線焼け]
119	日本	GD1	GD1-2154158	2010/09/06	2004/12/17	2004/11/05	73296	ヘッドライト点灯せず
120	日本	GD1	GD1-2367510	2010/08/28	2006/11/21	2006/10/14	64144	ヘッドライト両方ともつかない(点灯しない)
121	日本	GD1	GD1-2397604	2010/09/06	2007/03/16	2007/03/06	82729	ヘッドライトのロービームが左右不灯になった。
122	日本	GD1	GD1-2421610	2010/09/13	2007/09/27	2007/06/26	69384	左右ヘッドライトロービームが点灯しない
123	日本	GD2	GD2-1912050	2010/09/14	2007/02/14	2007/02/05	86094	ヘッドライト(LOWビーム)点灯しなくなった。
124	日本	GD1	GD1-2008448	2010/10/03	2004/02/24	2004/01/28	124436	ライティングスイッチから煙が出た
125	日本	GD1	GD1-2387678	2010/10/06	2007/03/28	2007/01/30	83234	左右ヘッドライトロービーム点灯しない
126	日本	GD1	GD1-2146979	2010/10/18	2004/11/11	2004/10/18	51701	ヘッドライト点かない(LO)
127	日本	GD1	GD1-2372739	2010/10/20	2006/12/08	2006/11/14	67310	左右ヘッドライト下向き点灯しない
128	日本	GD1	GD1-2116395	2010/10/22	2004/07/23	2004/07/15	82224	ヘッドライト点灯しない。
129	日本	GD1	GD1-1075680	2010/10/23	2001/11/28	2001/11/15	79810	左右ヘッドライト点灯しない。
130	日本	GD1	GD2-1911890	2010/11/03	2007/02/20	2007/01/31	69097	ヘッドライト点灯しない(ロービーム)

## 4. 訴え事象 4-2 品情連とQICの一覧

## USA(25件)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	アメリカ	GD3	JHMGD38647S	2008/03/07	2007/04/30	2007/02/08	34,682	ヘッドライトのロービームが作動しない
2	アメリカ	GD3	JHMGD38637S	2008/10/04	2007/03/29	2007/02/06	56,456	ロービームが作動しない
3	アメリカ	GD3	JHMGD38647S	2008/10/04	2007/04/21	2007/02/05	21,854	ロービームが作動しない
4	アメリカ	GD3	JHMGD38617S	2008/10/15	2007/06/15	2007/05/18	44,534	ロービームが作動しない
5	アメリカ	GD3	JHMGD38617S	2008/10/30	2007/03/22	2007/02/05	50,205	ロービームが作動しない
6	アメリカ	GD3	JHMGD37417S	2008/11/06	2007/03/31	2007/02/20	25,453	ロービームが作動しない
7	アメリカ	GD3	JHMGD38607S	2009/01/12	2007/01/17	2006/12/04	96,893	ロービームが作動しない
8	アメリカ	GD3	JHMGD38667S	2009/03/07	2007/03/16	2007/02/02	26,467	ヘッドライトのロービームが作動しない
9	アメリカ	GD3	JHMGD38417S	2009/03/14	2007/09/30	2007/06/19	54,131	ヘッドライトが作動しない
10	アメリカ	GD3	JHMGD38687S	2009/03/20	2007/05/22	2007/04/11	92,083	ロービームが作動しない
11	アメリカ	GD3	JHMGD38687S	2009/03/24	2007/07/06	2007/06/09	52,928	ロービームが作動しない
12	アメリカ	GD3	JHMGD38457S	2009/03/26	2007/04/16	2006/12/04	105,200	ロービームが作動しない
13	アメリカ	GD3	JHMGD38647S	2009/05/04	2007/02/12	2006/12/11	64,490	ロービームが作動しない
14	アメリカ	GD3	JHMGD37627S	2009/05/09	2007/03/15	2007/02/01	66,595	ロービームが作動しない
15	アメリカ	GD3	JHMGD38667S	2009/05/11	2007/06/04	2007/04/20	86,602	ロービームが作動しない
16	アメリカ	GD3	JHMGD38447S	2009/05/26	2006/12/12	2006/10/23	127,730	ロービームが作動しない
17	アメリカ	GD3	JHMGD38697S	2009/06/09	2006/10/19	2006/09/06	52,264	ロービームが作動しない
18	アメリカ	GD3	JHMGD38437S	2009/06/11	2006/11/13	2006/10/09	32,701	ロービームが作動しない
19	アメリカ	GD3	JHMGD38647S	2009/12/30	2007/05/10	2007/03/29	74,024	ヘッドライト不灯
20	アメリカ	GD3	JHMGD38687S	2010/01/04	2007/06/20	2007/04/10	52,755	ロービームが作動しない
21	アメリカ	GD3	JHMGD38677S	2010/07/15	2007/08/15	2007/05/21	100,744	ロービームが作動しない
22	アメリカ	GD3	JHMGD37658S	2010/09/01	2008/07/26	2008/06/12	34,318	ロービームが作動しない
23	アメリカ	GD3	JHMGD38407S	2010/09/14	2007/01/16	2006/11/02	126,243	ヘッドライト不灯
24	アメリカ	GD3	JHMGD38607S	2010/09/22	2007/06/27	2007/05/12	93,557	煙がでた
25	アメリカ	GD3	JHMGD38677S	2010/08/04	2007/07/07	2007/04/24	116,659	ロービームが作動しない

## 欧州(6件)

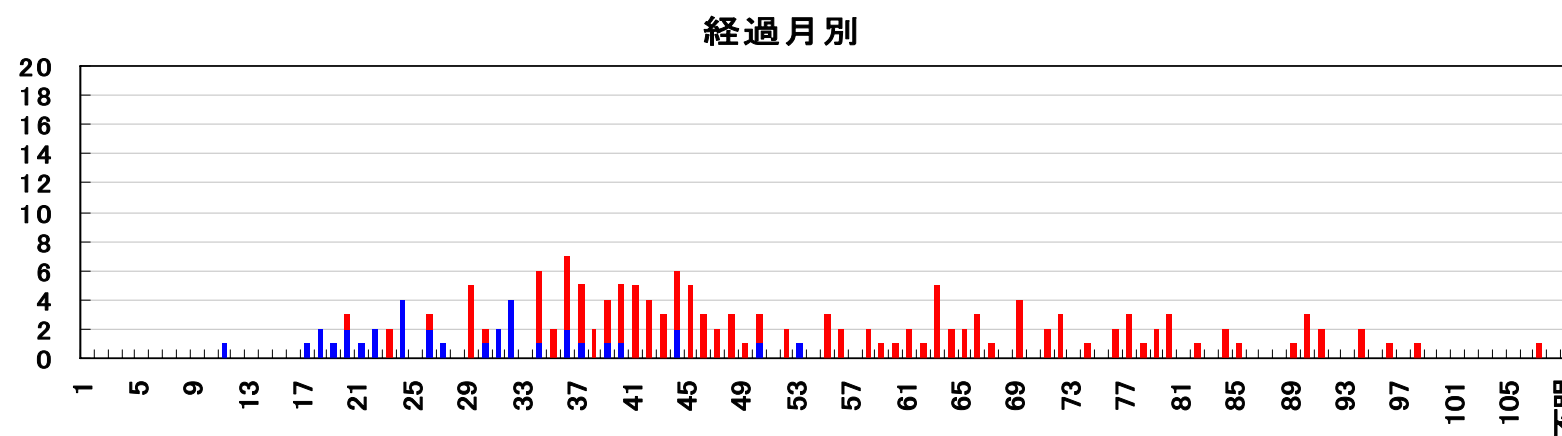
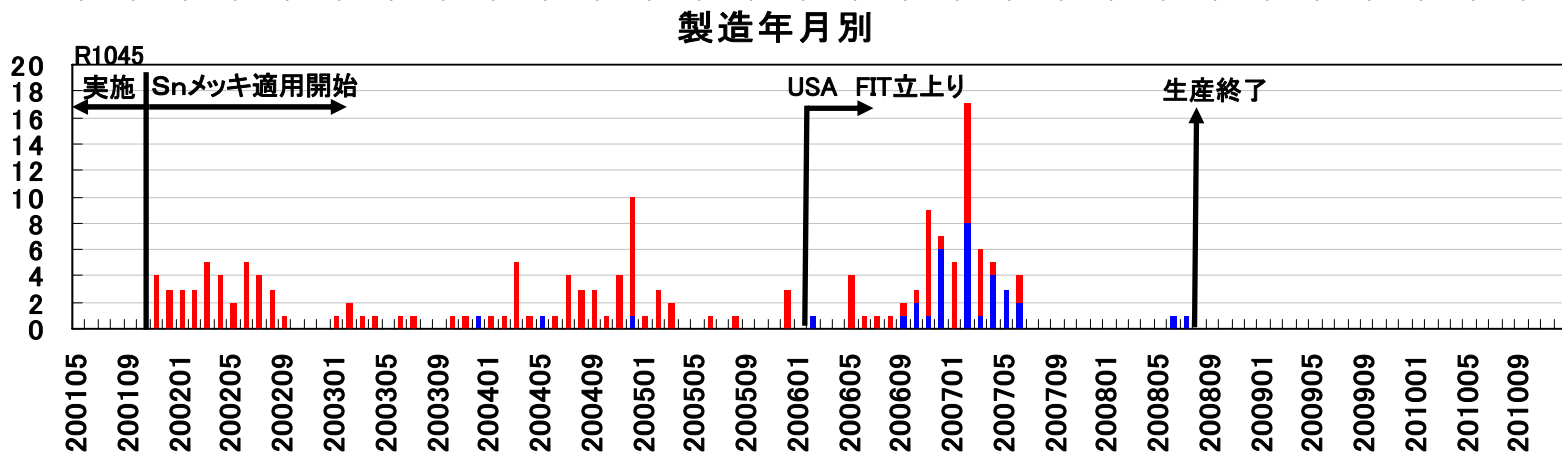
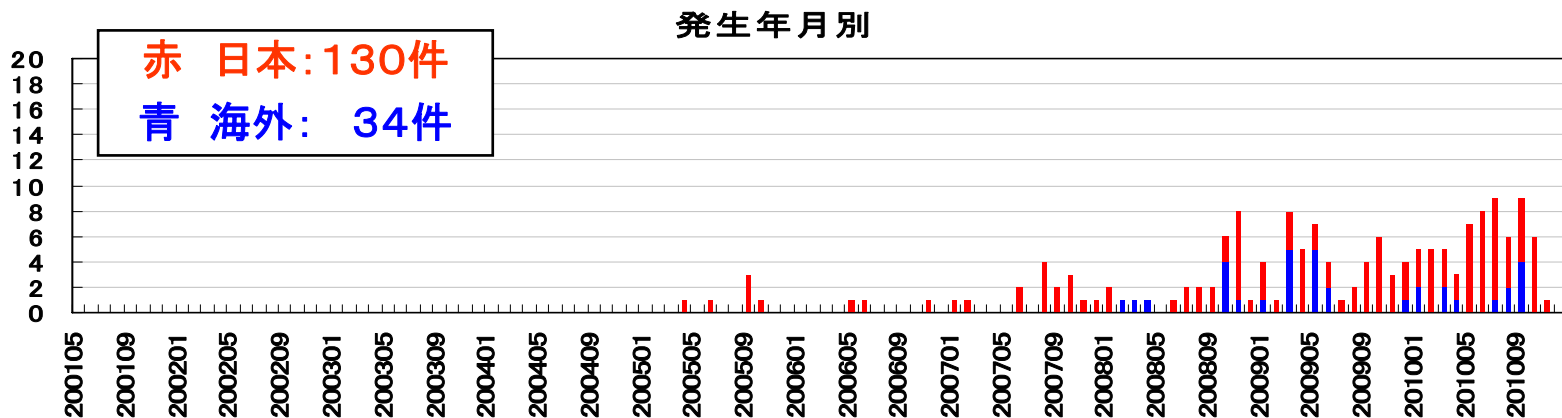
No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	チェコ	GD3	JHMGD57307S	2010/01/11	2007/05/31	2006/12/13	39,161	ヘッドライト点灯しない
2	ハンガリー	GD3	JHMGD57307S	2010/03/04	2007/07/17	2006/12/19	94,494	車内に煙と焦げたプラスチックの臭いがする
3	イタリア	GD3	JHMGD18906S	2010/03/17	2007/03/26	2006/02/06	45,000	ライティングスイッチのカブラ部に小さな溶損
4	イタリア	GD5	JHMGD57307S	2010/04/26	2007/06/29	2006/12/19	42,447	ヘッドライトが作動しない
5	イスラエル	GD1	JHMGD18608S	2010/08/22	2008/10/28	2008/07/15	58,825	お客様からヘッドライトに問題があるとの訴えを受けた
6	ルーマニア	GD1	JHMGD17507S	2010/09/29	2007/06/08	2007/02/09	47,864	運転して15分後、煙が出た

## アジア大洋州(3件)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	オーストラリア	GD3	JHMGD38504S	2008/02/11	2004/07/09	2004/05/20	108,794	ヘッドライトが点灯しない
2	オーストラリア	GD3	JHMGD38504S	2008/04/10	2004/02/19	2003/12/22	70,821	ヘッドライトのロービームが点かかないと、お客様は訴えた。
3	オーストラリア	GD3	JHMGD37505S	2009/05/28	2005/01/27	2004/12/09	85,693	ヘッドライト(ロービーム)が作動しない。

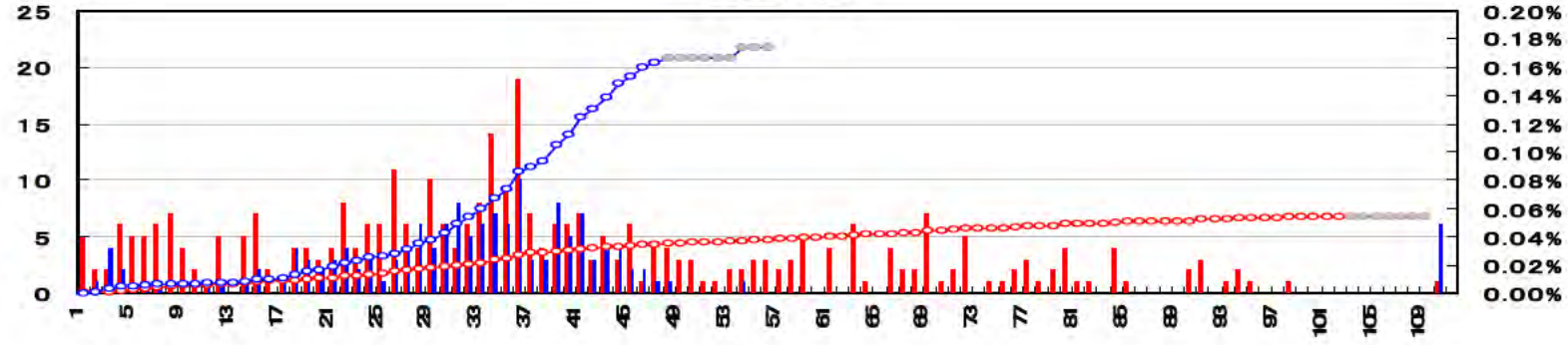
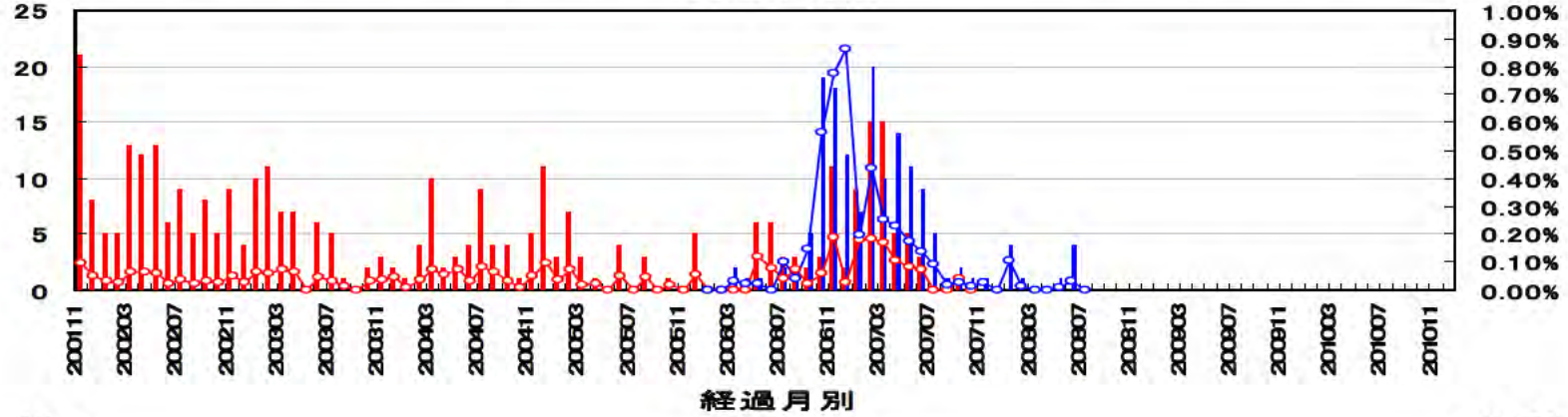
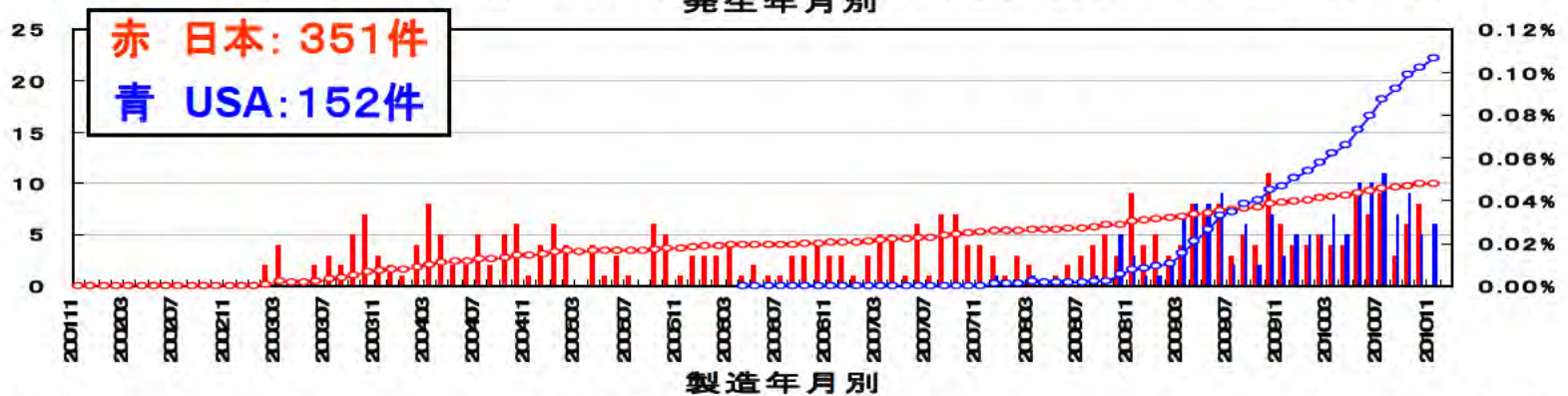
## 3-2 品情連とQICの分類





## ワランティ抽出条件

部品:ライティングスイッチ、訴え内容:ヘッドライト不灯、煙、溶損 症状コード:溶損、焼付き、溶着



# 5. 発生件数 5-3 同じ構造の機種別の発生状況分析(品情連とQIC)

機種	年式											全世界 販売台数	品情連、QIC		スイッチ M/L	ハーネス M/L	
	99	00	01	02	03	04	05	06	07	08	09		10	件数			発生率
FIT/JAZZ		第2弾											2,002,870	164	0.008%	東洋電装	矢崎
FIT ARIA /CITY													709,489	9	0.001%		矢崎
CR-V													674,592	6	0.001%		住友
LOGO													80,016	17	0.021%		住友
INSIGHT		第1弾											7,282	4	0.055%		住友
STEPWGN													47,389	1	0.002%		住友
CIVIC		第2弾											830,266	0	0.000%		住友
STREAM													39,264	0	0.000%		住友
MOBILIO													85,739	0	0.000%		矢崎
EDIX/FR-V													87,412	0	0.000%		住友
ELEMENT													320,962	0	0.000%		住友
PILOT													401,348	0	0.000%		矢崎
LIFE													55,753	0	0.000%		住友
													5,342,382	※4灯式、HID車、KC仕向けは除く			

第1弾リコール

第2弾リコール

ライン適用

約87万台で発生なし

# 5. 発生件数 5-4 発生機種種の各製作所別の発生状況分析(品情連とQIC)

機種	年式										製作所	販売台数	販売累計	品情連、QIC		スイッチ オス端子	ハーネス メス端子		
	99	00	01	02	03	04	05	06	07	08				09	10			件数	発生率
FIT/JAZZ			第2弾										Sss	1,290,137	2,002,870	164	0.013%	東洋電装	矢崎
													HAB	185,966		0	0.000%		
													HATC	118,060		0	0.000%		
													HPM	74,282		0	0.000%		
													GHAC	227,855		0	0.000%		
													CHAC	106,570		0	0.000%		
FIT ARIA /CITY													HATC	195,557	709,489	6	0.003%	東洋電装	矢崎
													HSCI	134,347		0	0.000%		
													HCPI	16,541		3	0.018%		
													HMSB	60,100		0	0.000%		
													HACPL	60,198		0	0.000%		
													HTR	20,458		0	0.000%		
CR-V													Css	347,545	674,592	3	0.001%	住友	
													HUM	255,207		0	0.000%		
													HATC	30,832		0	0.000%		
													HMSB	3,862		0	0.000%		
													HCPI	25,515		0	0.000%		
													WDHAC	14,051		0	0.000%		
STEPWGN			第2弾										Sss	17,716	47,389	1	0.006%	住友	
													Sss, Css	29,673		0	0.000%		
												→'01/11からSW Snメッキライン適用		3,434,340		※4灯式、HID車、KC仕向けは除く			

第1弾リコール

第2弾リコール

ライン適用

約87万台で発生なし

・Sss製のFIT/JAZZのみが多い(164件)



## ◇返却現品分解確認結果(溶損)

No.4 日本 GD1-1072865 訴え事象:ヘッドライトロービーム点灯せず

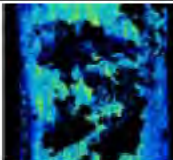
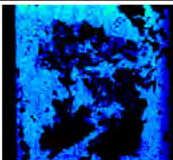
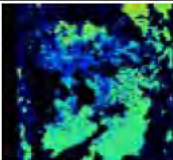

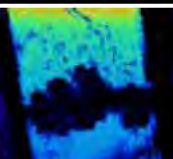
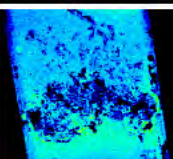
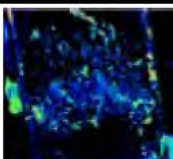
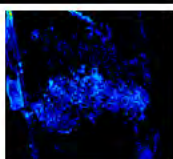
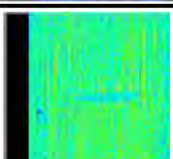
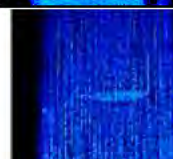
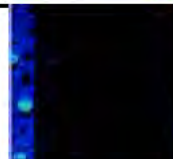

### ・外観確認

ライティングSW側のオス端子		ハーネス側のメス端子	
			
LO端子が熱により、溶損している		LO端子が熱により、溶損している	

### ・X線解析結果(ハーネス側のメス端子)



### ・表面解析結果

	Sn	Cu	C	O	
オス端子の舌片部					接触部近傍にC、O(樹脂)の付着が激しく樹脂溶融温度以上に発熱している
メス端子の舌片部					
参考) 良品 オス、舌片側					Snメッキは十分残っており、異常摩耗は発生していない。

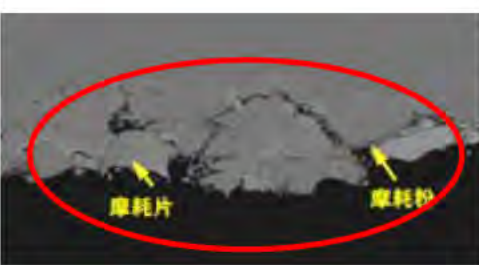
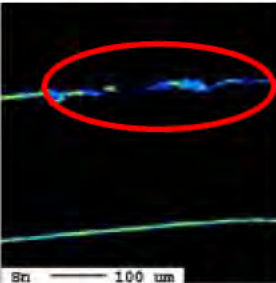

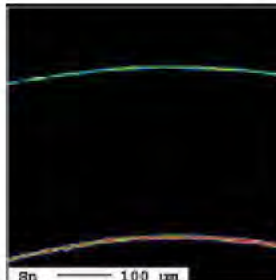
◇返却現品分解確認結果(溶損)

No.12 USA JHMGD37627S ████████ 訴え事象:ロービーム作動せず

・外観確認

ライティングスイッチ側のオス端子		ハーネス側のメス端子			
		LO端子が熱により、溶損している			LO端子が熱により、溶損している

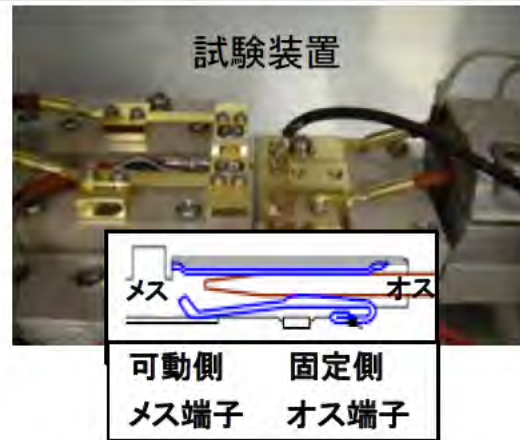
・断面解析

	ハーネス側のメス端子			
返却品		Snメッキがなくなり、母材の磨耗粉が堆積している		Snメッキが磨耗している
良品		Snメッキが残り、磨耗粉はなし		Snメッキが残り、磨耗粉はなし

Snメッキが摩耗し、磨耗粉が堆積していることから、摺動の繰返しが発生している。

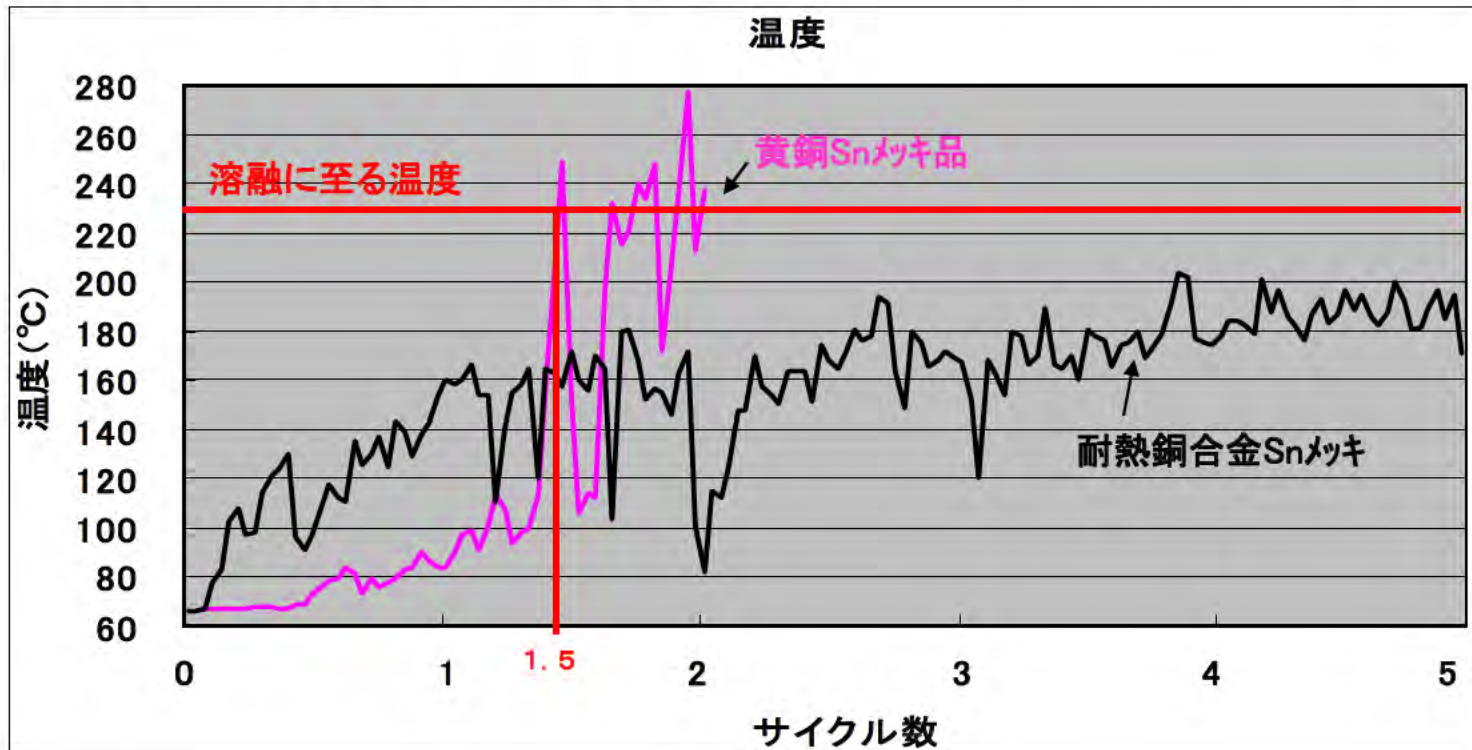
## 試験条件

- ・供試端子:黄銅+Snメッキ
- ・接圧荷重:8N(製造管理の下限值)
- ・酸化促進:試験前に100°C×120h放置
- ・通電電流:10A
- ・温湿度 :+60°C、85%RH
- ・摺動幅 :0.5mm
- ・摺動サイクル:摺動1万回後に24h時間停止を1サイクル



## 試験結果

約1.5サイクルでコネクタの溶融温度に至ることが判明

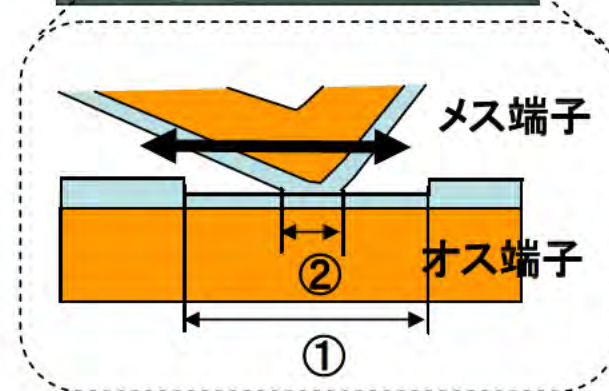
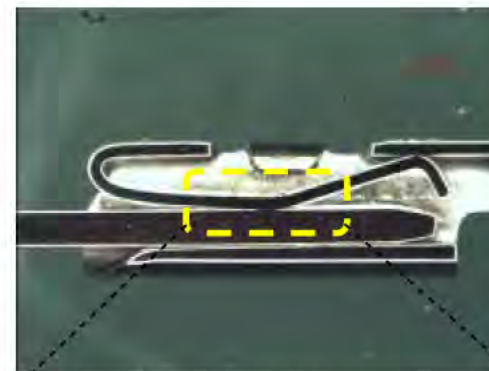
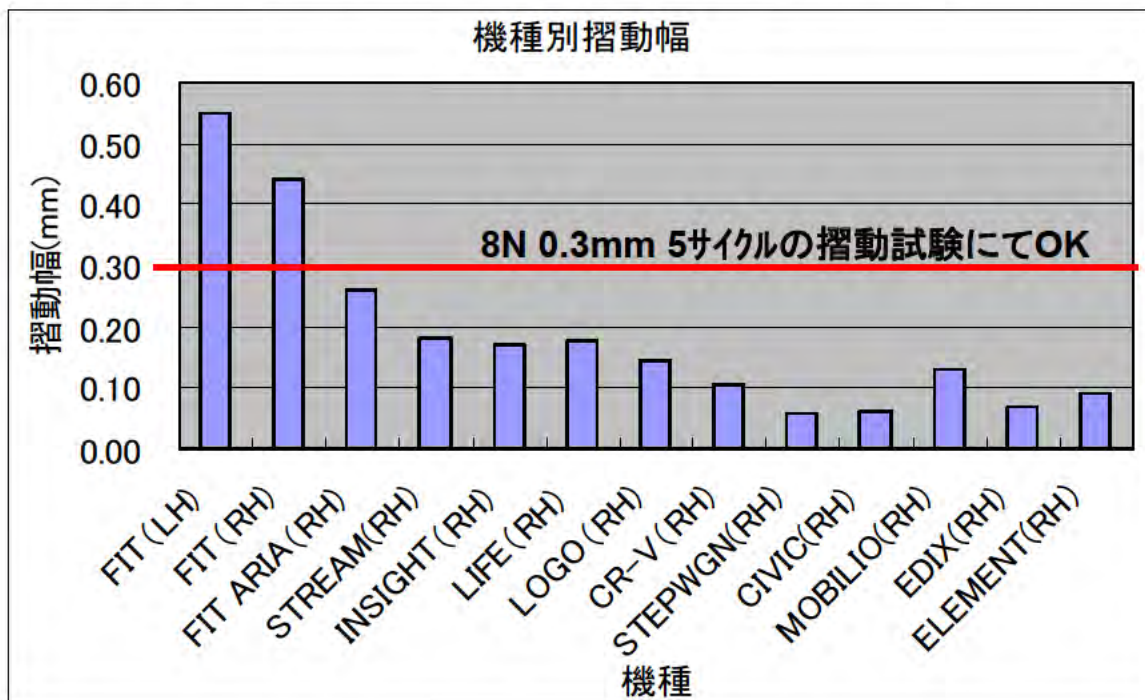


### ・端子の摺動幅の測定

実車に端子接圧8N品(製造管理下限品)を取り付け、Rターン→中立→Lターン→中立→パッシング→中立のライティングSW操作を1サイクルとし、1万サイクル実施後の摺動幅を機種毎に比較する

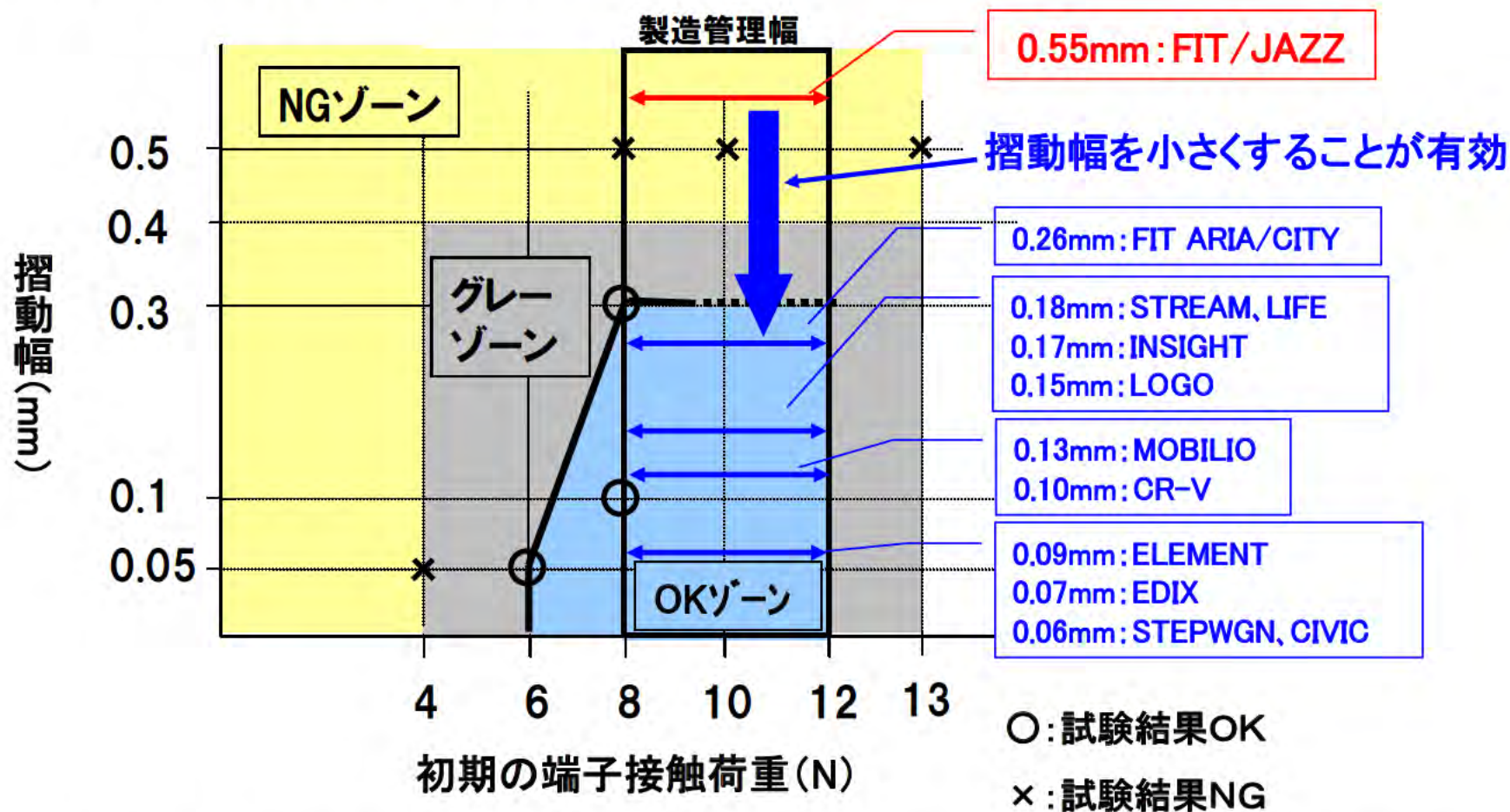
### ・測定結果

FIT/JAZZが他機種に比べ、摺動幅が大きいことが判明

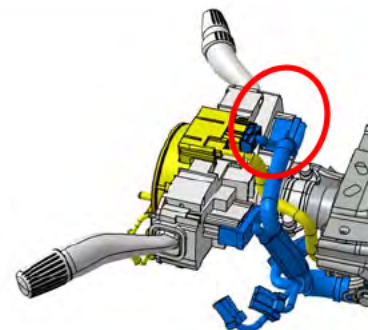


摺動幅 = オス端子摺動幅①  
 - メス端子摺動幅②

FIT/JAZZの実車摺動幅は、単体摺動試験結果から得られた抵抗値増大が認められるNGゾーンにあることが判明。



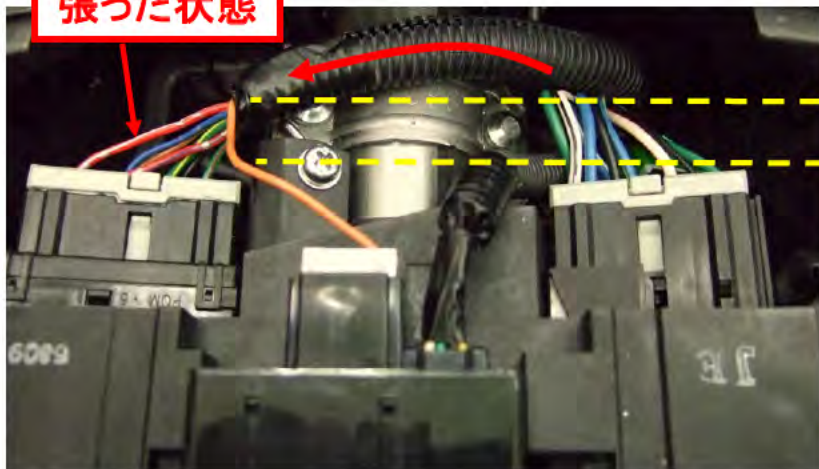
FIT/JAZZのみがNGゾーンいることが判明、また、摺動幅を抑えることが最も有効な対策である



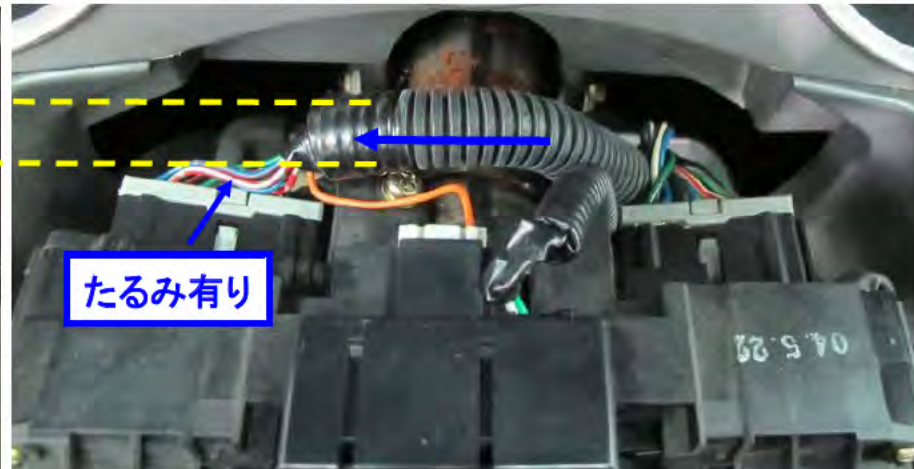
Sss製 FIT

GHAC製 FIT

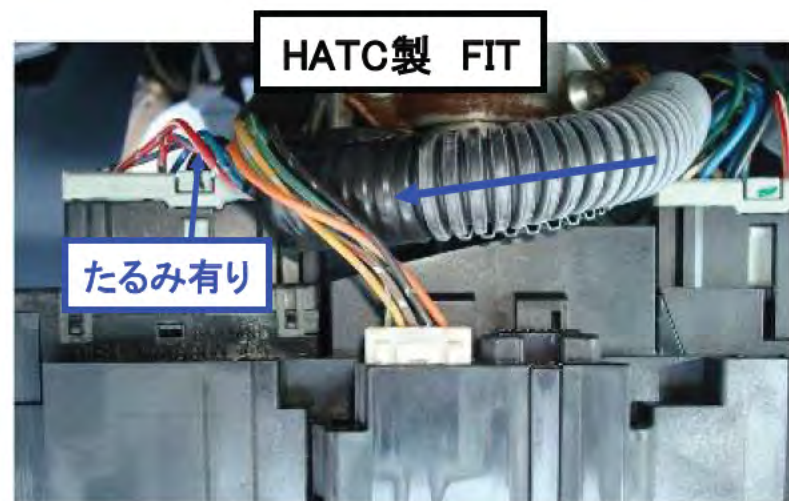
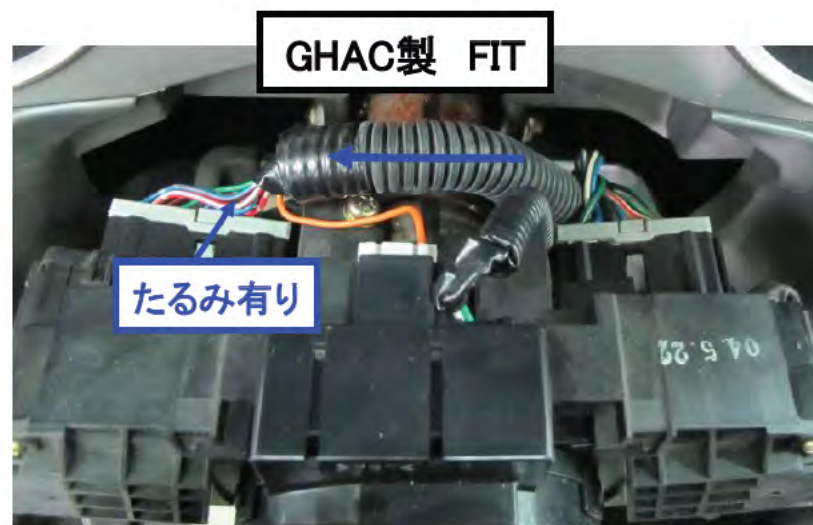
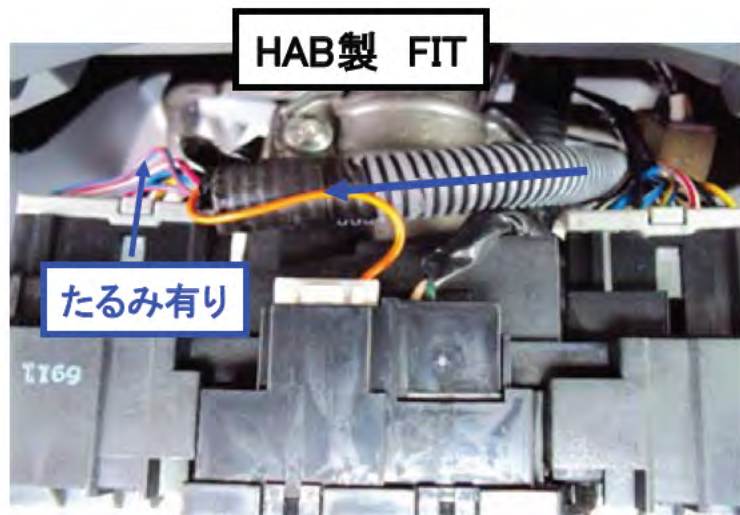
張った状態



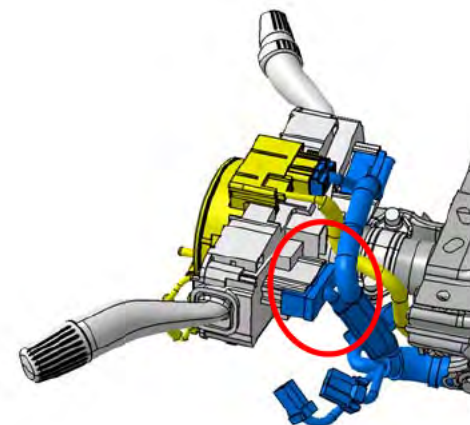
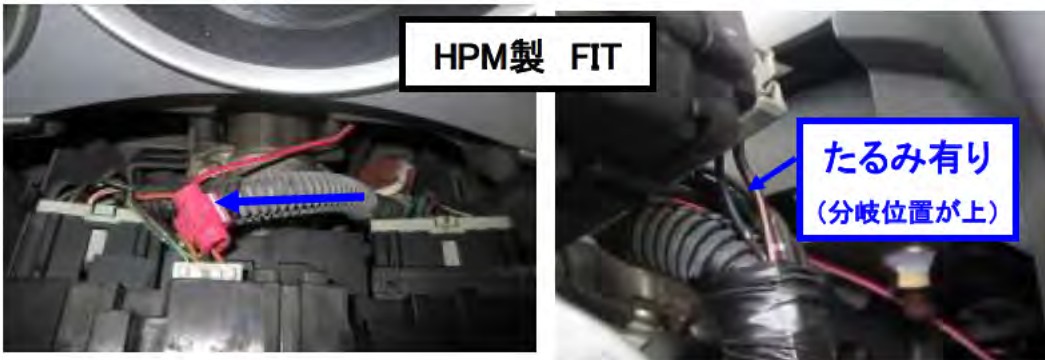
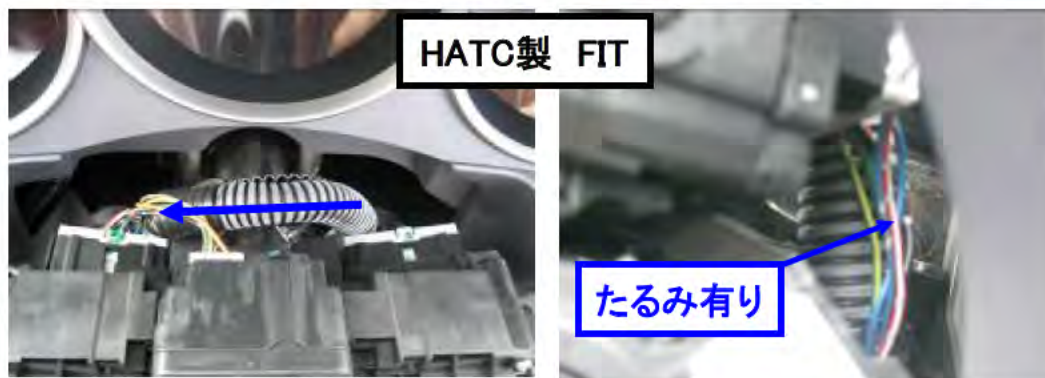
たるみ有り



LO端子配線のたるみ量の差は、ハーネスレイアウトが原因である。



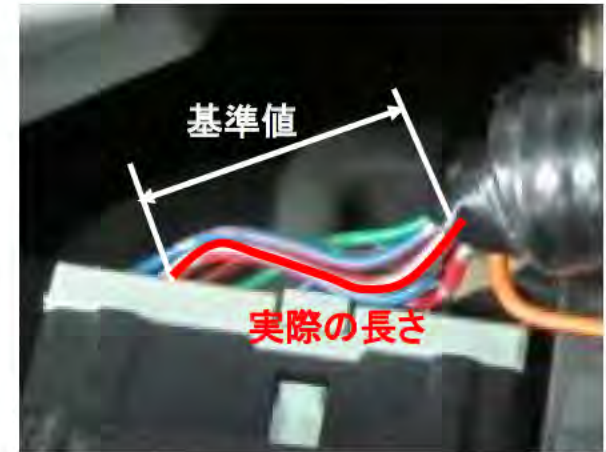
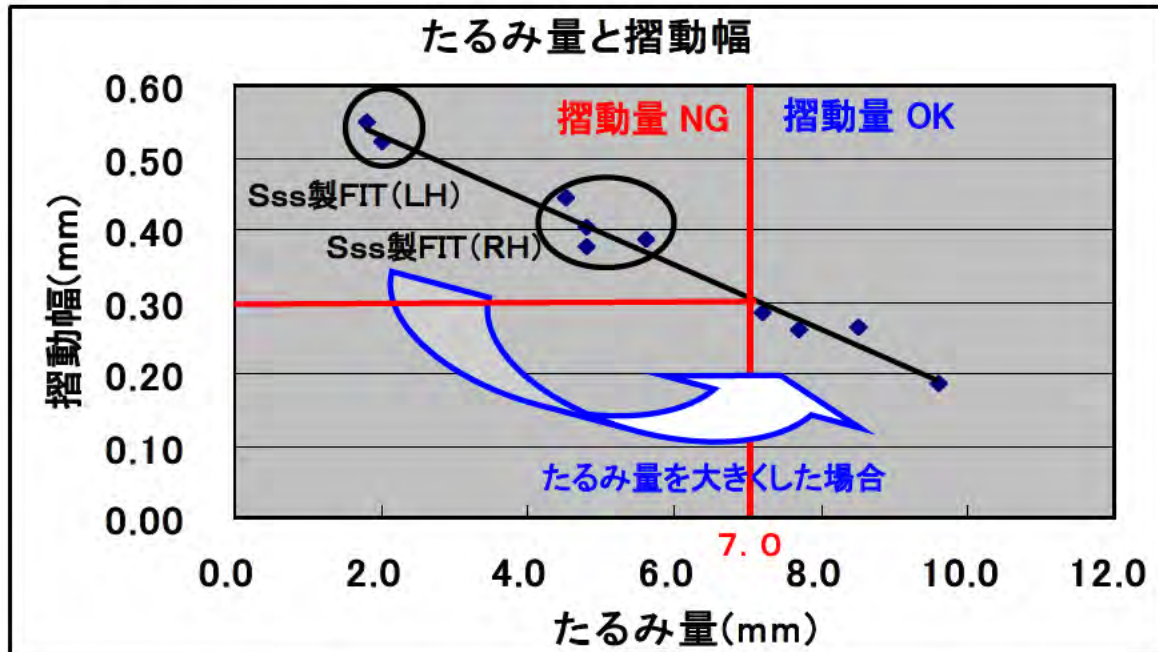
LO端子配線が張った状態になるレイアウトは、Sss製 FITのみである。



LO端子配線が張った状態になるレイアウトは、Sss製 FITのみである。



- ・Sss製のFITが他製造拠点のFITと比較し、たるみ量の違いがあることから、たるみ量と摺動幅の相関を調査した結果

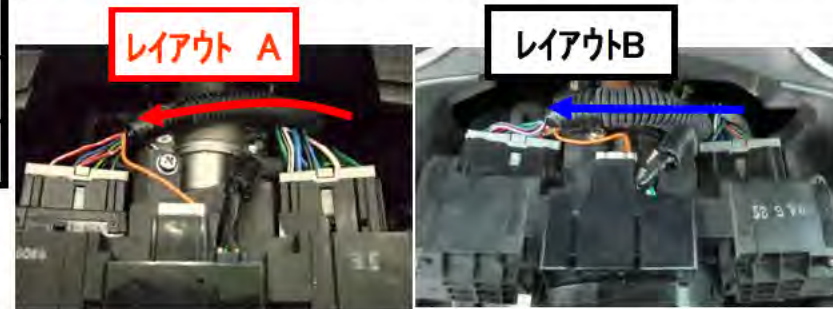


たるみ量 = 実際の長さ - 基準値

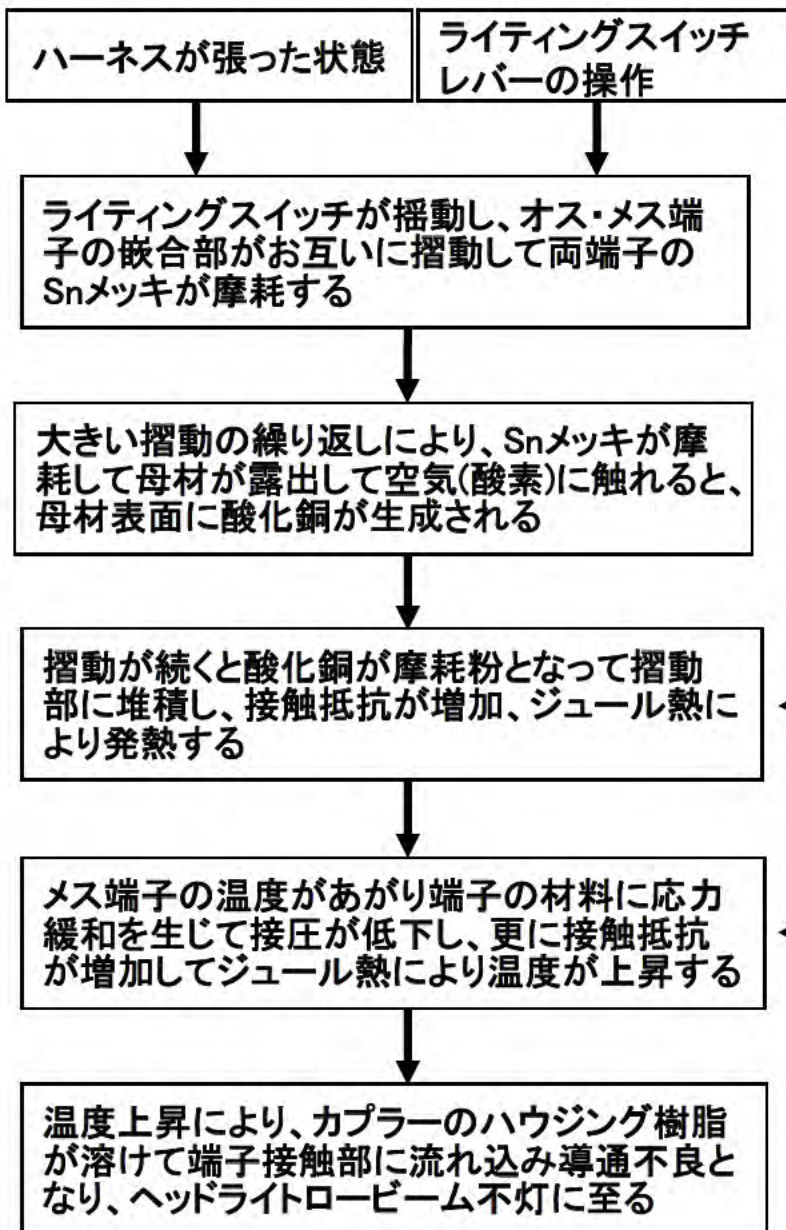
たるみ量が大きいと摺動幅も小さくなることを確認

機種	製造SS	レイアウト	たるみ 量(mm)	摺動幅 (mm)	判定
FIT/JAZZ(LH)	Sss	A	1.8	0.55	NG
FIT/JAZZ(RH)	Sss	A	4.5	0.44	NG
FIT/JAZZ(LH)	GHAC	B	9.6	0.19	OK
FIT/JAZZ(LH)	CHAC	B	13.9	0.24	OK
FIT/JAZZ(LH)	HAB	B	8.9	—	OK
FIT/JAZZ(RH)	HATC	B	9.3	—	OK
FIT/JAZZ(RH)	HPM	B	14.0	—	OK
FIT ARIA/CITY(RH)	HATC	B	10.3	0.26	OK
FIT ARIA/CITY(LH)	GHAC	B	7.2	0.28	OK
FIT ARIA/CITY(RH)	HSCI	B	18.3	—	OK
FIT ARIA/CITY(RH)	HCPI	B	10.5	—	OK
FIT ARIA/CITY(RH)	HMSB	B	13.8	—	OK
FIT ARIA/CITY(RH)	HACPL	B	9.6	—	OK
FIT ARIA/CITY(LH)	HTR	B	11.6	—	OK

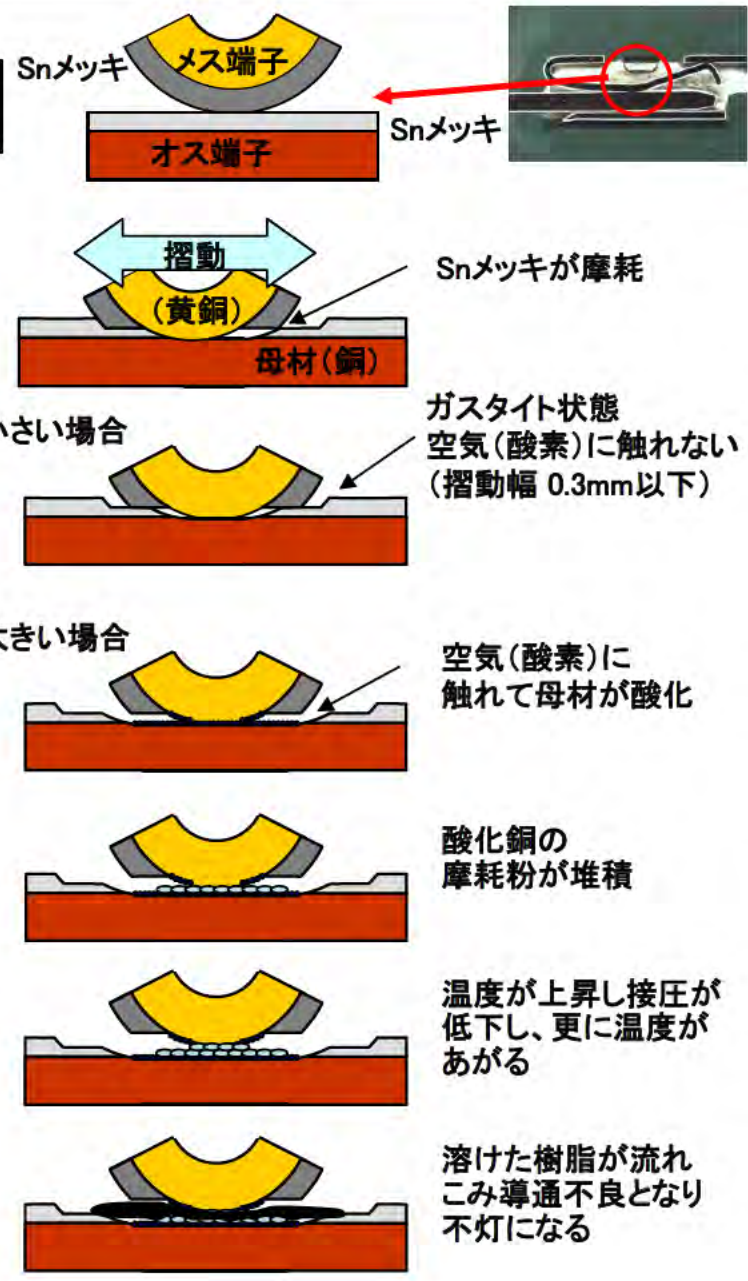
機種	製造SS	たるみ 量(mm)	摺動幅 (mm)	判定
CR-V(RH)	Css	23.4	0.10	OK
LOGO(RH)	Sss	15.4	0.15	OK
INSIGHT(RH)	Sss	22.8	0.17	OK
STEPWGN(RH)	Sss, Ccss	37.4	0.06	OK
CIVIC(RH)	Sss	48.3	0.06	OK
STREAM(RH)	Sss	26.5	0.18	OK
MOBILIO(RH)	Sss	32.9	0.13	OK
EDIX.(RH)	Sss	16.1	0.07	OK
ELEMENT(RH)	Sss	33.5	0.09	OK
LIFE(RH)	Sss	26.7	0.18	OK
PILOT	HMA	21.3	—	OK



Sss製FIT/JAZZのみが、措置が必要と判断する。



連続して電流が約10A流れる



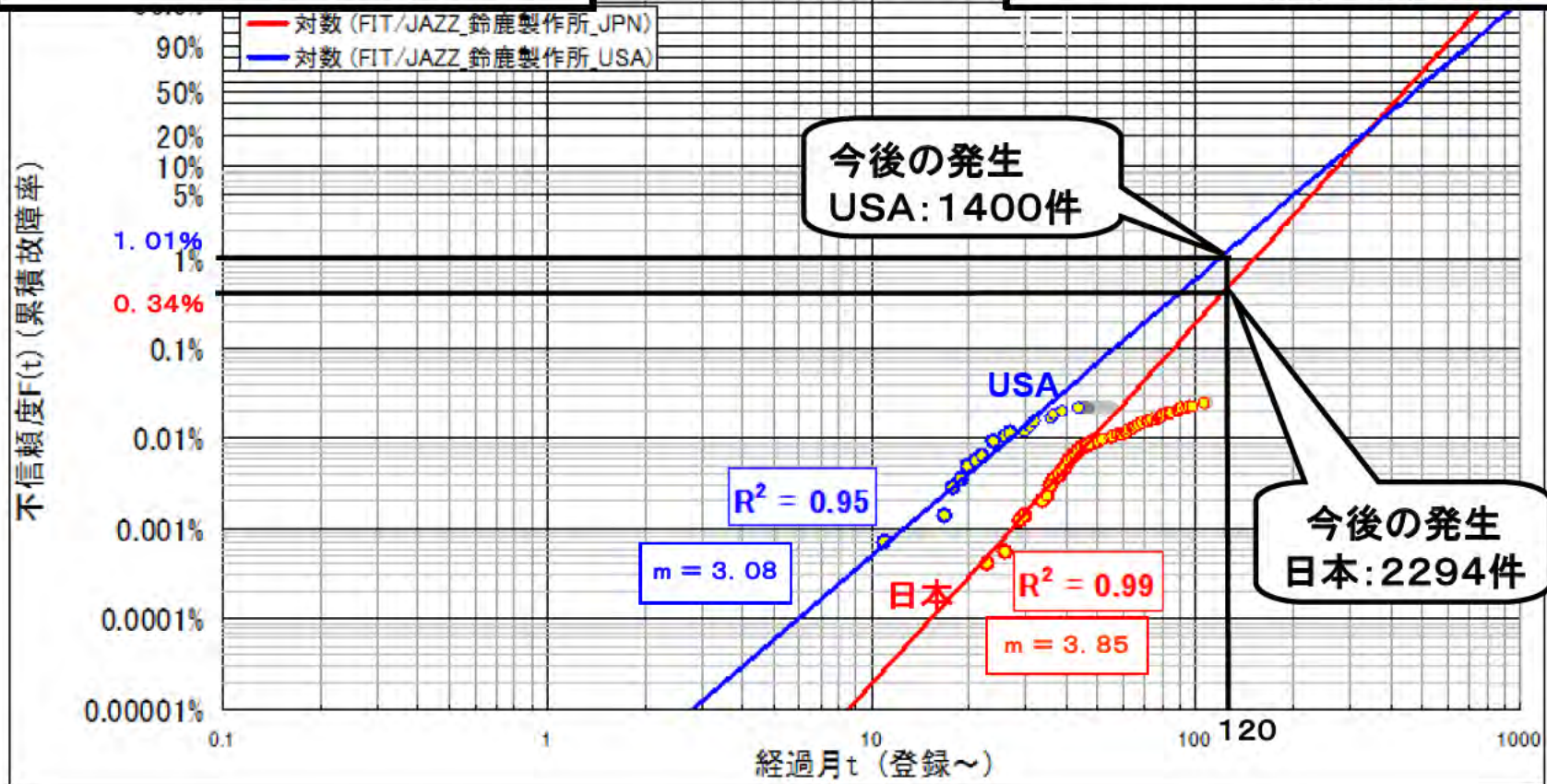
日本



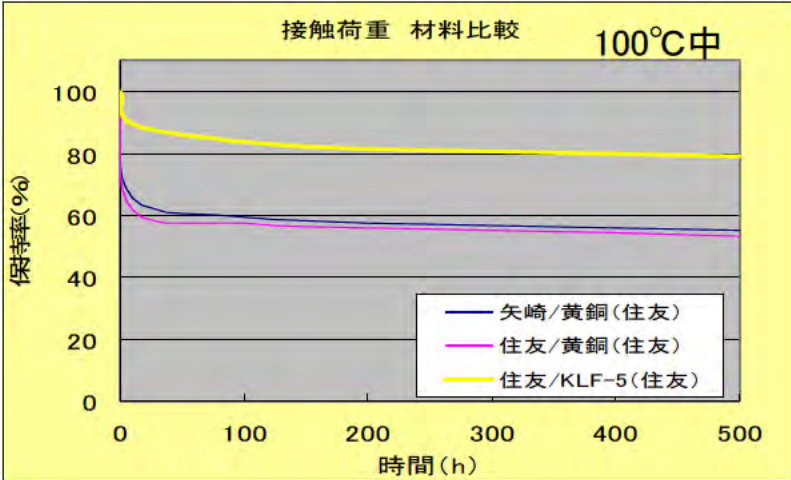
経過年数	現在	10年経過
発生件数	130件	2424件
発生率	0.018%	0.33%
対象734,392台		

USA

経過年数	現在	10年経過
発生件数	25件	1425件
発生率	0.018%	1.01%
対象141,084台		

発生予測 ワイブル確率紙

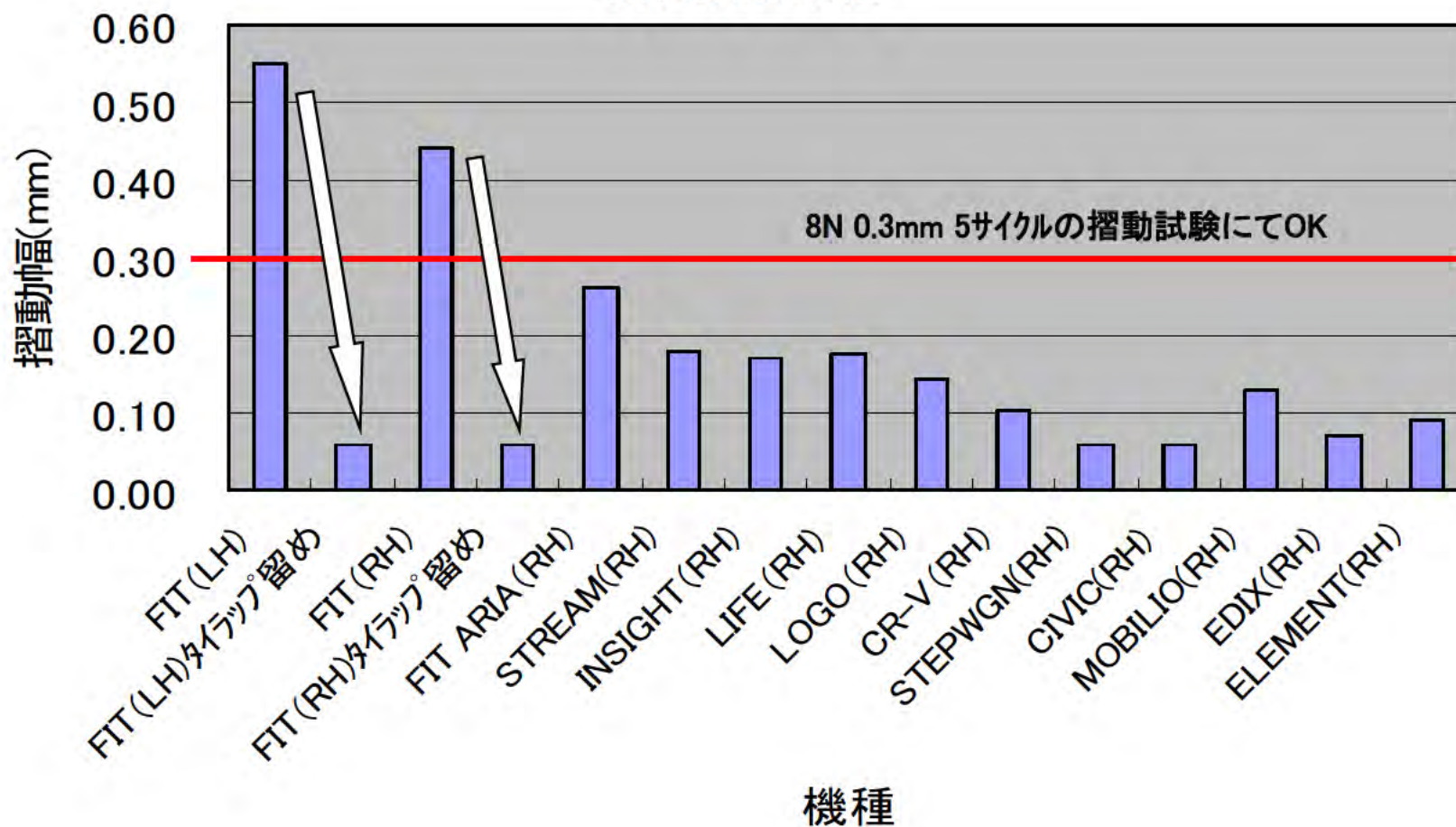


対策内容	備考																												
<p>・タイラップ留めによる摺動防止 たるみを確保した状態でメス端子ハーネスをライティングスイッチにタイラップで固定することにより、スイッチ操作時の動きに追従させ、端子嵌合部の摺動を抑制する（ハーネスを長くする必要あり）</p> 	 <p>LO端子ハーネスをタイラップでライティングスイッチに固定</p>																												
<p>・メス端子の接触荷重低下を抑える 母材を接圧荷重低下が小さい耐熱銅合金に変更 (現状は、黄銅)</p>	<p>接触荷重 材料比較 100°C中</p>  <table border="1"> <caption>接触荷重 材料比較 100°C中 (推定値)</caption> <thead> <tr> <th>時間 (h)</th> <th>矢崎/黄銅 (住友) (%)</th> <th>住友/黄銅 (住友) (%)</th> <th>住友/KLF-5 (住友) (%)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>65</td> <td>65</td> <td>100</td> </tr> <tr> <td>100</td> <td>60</td> <td>60</td> <td>85</td> </tr> <tr> <td>200</td> <td>58</td> <td>58</td> <td>82</td> </tr> <tr> <td>300</td> <td>57</td> <td>57</td> <td>81</td> </tr> <tr> <td>400</td> <td>56</td> <td>56</td> <td>80</td> </tr> <tr> <td>500</td> <td>55</td> <td>55</td> <td>80</td> </tr> </tbody> </table>	時間 (h)	矢崎/黄銅 (住友) (%)	住友/黄銅 (住友) (%)	住友/KLF-5 (住友) (%)	0	65	65	100	100	60	60	85	200	58	58	82	300	57	57	81	400	56	56	80	500	55	55	80
時間 (h)	矢崎/黄銅 (住友) (%)	住友/黄銅 (住友) (%)	住友/KLF-5 (住友) (%)																										
0	65	65	100																										
100	60	60	85																										
200	58	58	82																										
300	57	57	81																										
400	56	56	80																										
500	55	55	80																										

・実車でのライティングスイッチ操作1万サイクルによる摺動幅の確認結果

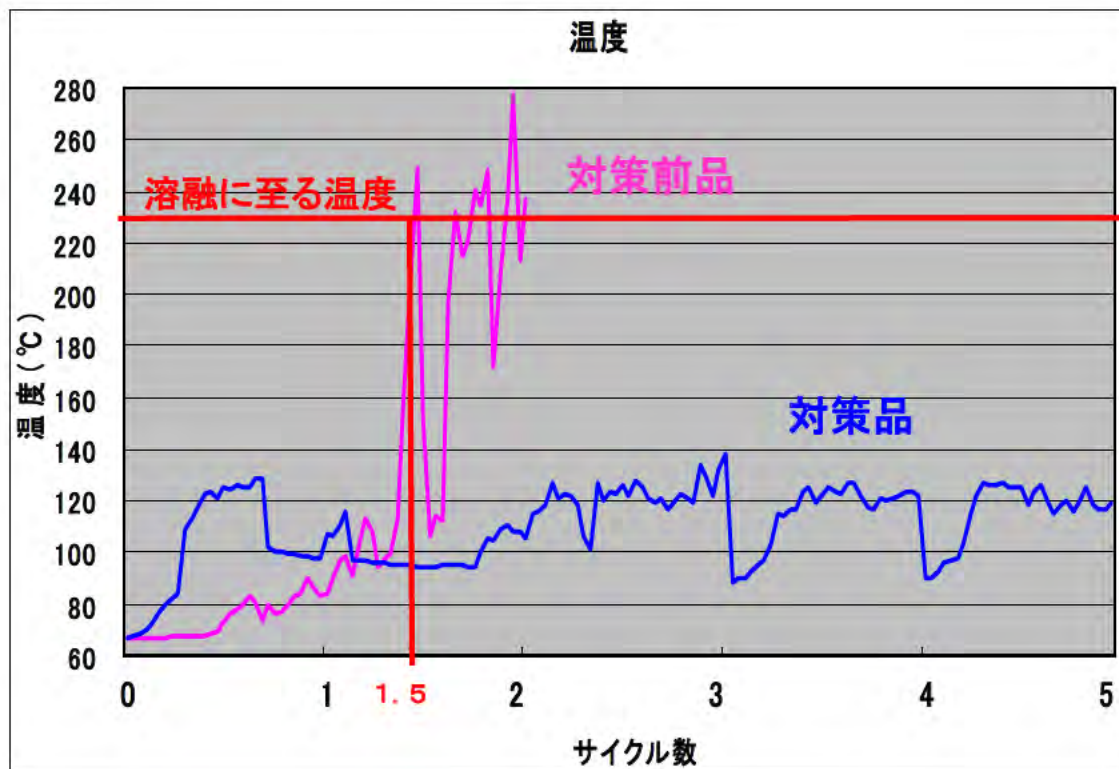
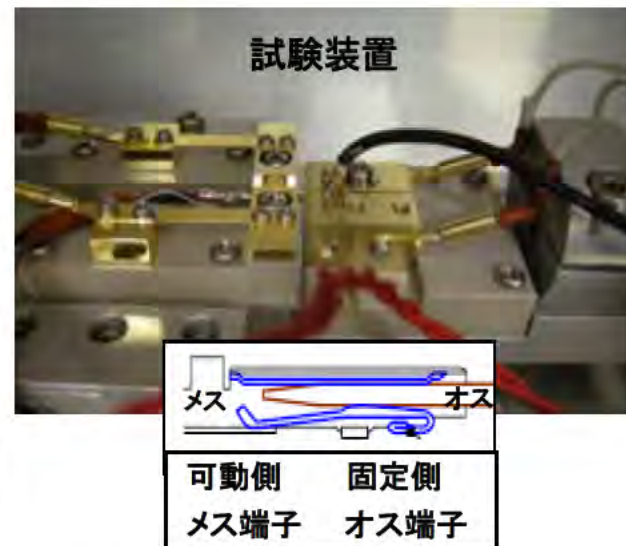
タイヤラップ留めによる摺動防止で摺動幅が約1/10に減少

機種別摺動幅



オス端子のSnメッキが磨耗により剥離したとしても、タイラップによるハーネス固定とメス端子耐熱銅合金に変更すれば、今後の使用過程において不具合が発生しないことを確認した。

従来品が約1.5サイクルで溶損に至っているのに対して、対策は5サイクルでも溶損に至らない。従来より、最低でも約3倍以上のタフネスあり。



<試験条件>

- ・メス端子：耐熱性銅合金(接圧低下が小さい)
- ・オス端子：銅無垢(メッキなし:市場想定品)
- ・接圧荷重:8N(製造管理の下限值)
- ・酸化促進:試験前に100°C×120h放置
- ・通電電流:10A
- ・温湿度：+60°C、85%RH
- ・摺動幅：0.1mm(タイラップ留め相当)
- ・摺動サイクル:摺動1万回後に24h時間停止を1サイクル

- 8-1. 措置提案
- 8-2. 提案理由
- 8-3. 措置内容

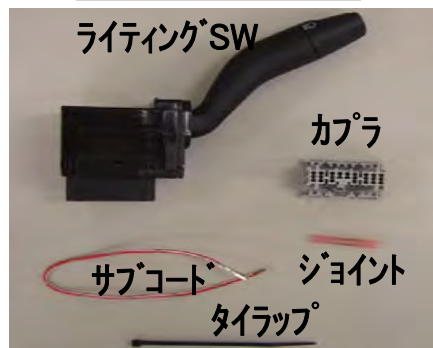
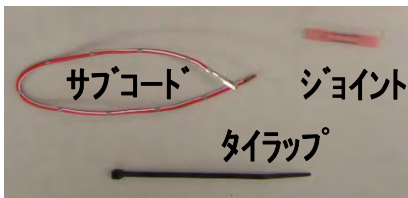
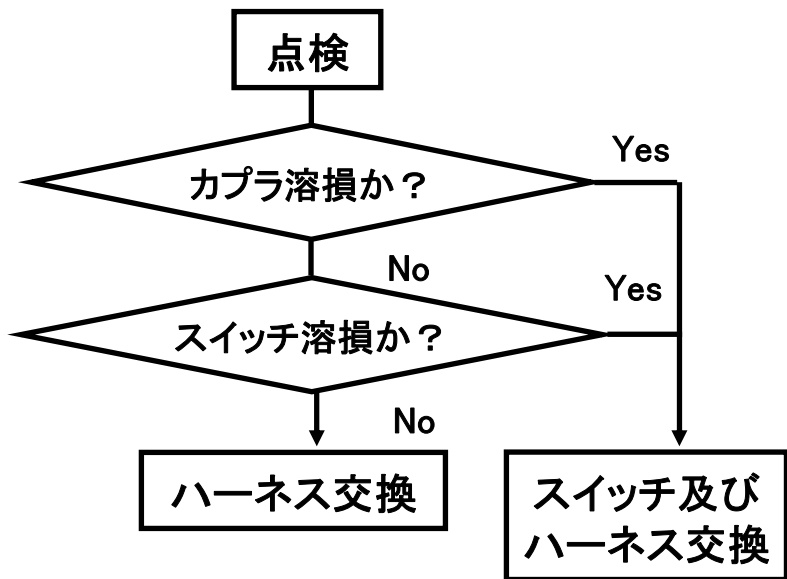
積極市場措置を提案する

ヘッドライトロービーム不灯の事象であり、今後も発生が予測されるため

Lo端子部の溶損を点検し、

①溶損している場合は、ライティングSW交換とLo端子ハーネスを交換し、  
ライティングスイッチにタイラップで固定

②溶損していない場合は、Lo端子ハーネスのみを交換後、タイラップで固定



L側のライティングSWの場合

R側のライティングSWの場合

正常品

溶損品

正常品

溶損品

関連部門と整合済み



8-4. 対象範囲 ハロゲン仕様の02M~08M Sss製FIT/JAZZ  
 (但し、カナダ仕向けはデイライト仕様のため除く)  
 2001年10月22日以降の生産から生産終了まで

8-5. 対象台数

製造工場	市場	02M	03M	04M	05M	06M	07M	08M	計
Sss	日本	238,193	147,751	59,564	162,984	125,900	-	-	734,392
	USA	-	-	-	-	-	67,091	73,993	141,084
	欧州	62,300	48,344	53,921	114,827	55,737	33,777	18,046	386,952
	ア大	1,629	16,200	7,059	16,177	2,469	5,185	2,923	51,642
	一般	3,976	3,042	3,333	8,831	6,704	9,780	5,481	41,147

総計：1,355,217台

機種	製作所	市場	対象台数	品情連、QIC					措置要否
				現状		10年発生予測			
				件数	発生率	件数	発生率	今後の発生件数	
FIT/JAZZ	Sss	日本	734,392	130	0.018%	2,424	0.33%	2,294	要
		USA	141,084	25	0.018%	1,425	1.01%	1,400	
		他	479,920	9	0.002%	143	0.03%	134	
	HAB	南米	185,966	0	0%	今後1~2件の発生と推測			否
	HATC	ア大	118,060	0	0%				
	HPM	ア大	74,282	0	0%				
	GHAC	中国	227,855	0	0%				
CHAC	欧州	106,570	0	0.001%					
FIT ARIA	HATC	日本	21,700	2	0.009%	—	0.02%	2	否
CR-V	Css		15,677	1	0.007%	—	0.01%	1	
STEPWGN	Sss, Css		47,119	1	0.002%	—	0.00%	1	

Sss製のFIT/JAZZのみが、今後も継続的に散発発生する

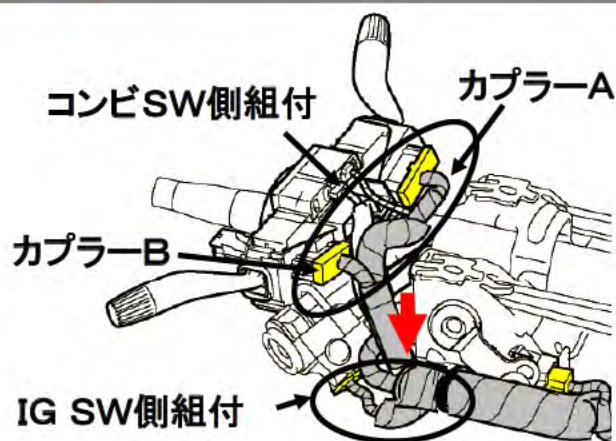
## 措置費用 約 72.7億円

市場	措置方法	工数	工賃	部品代	PLCA	事務 手数料 or H/C	DM	台当たり 費用	対象台数	①と② 割合	費用	
日本	①SW、ハーネス交換	0.7	¥4,200	¥914	-	¥1,200	¥432	¥6,746	5,000	0.7%	¥33,730,000	約38.9億円
	②ハーネス交換	0.6	¥3,600	¥60	-	¥1,200	¥432	¥5,292	729,392	99.3%	¥3,859,942,464	
USA	①SW、ハーネス交換	0.8	¥6,659	¥1,590	-	¥636	¥93	¥8,978	2,000	1.4%	¥17,956,000	約8.6億円
	②ハーネス交換	0.7	¥5,827	¥113	-	¥45	¥93	¥6,078	139,084	98.6%	¥845,352,552	
欧州	①SW、ハーネス交換	0.8	¥5,507	¥1,556	¥725	-	¥500	¥8,288	2,600	0.7%	¥21,548,800	約21.3億円
	②ハーネス交換	0.7	¥4,818	¥113	¥52	-	¥500	¥5,483	384,352	99.3%	¥2,107,402,016	
ア大	①SW、ハーネス交換	0.8	¥5,783	¥1,036	¥583	-	¥82	¥7,484	200	0.4%	¥1,496,800	約2.7億円
	②ハーネス交換	0.7	¥5,060	¥76	¥42	-	¥82	¥5,260	51,442	99.6%	¥270,584,920	
一般その他	①SW、ハーネス交換	0.8	¥2,726	¥1,635	¥968	-	¥113	¥5,442	200	0.5%	¥1,088,400	約1.1億円
	②ハーネス交換	0.7	¥2,385	¥113	¥67	-	¥113	¥2,678	40,947	99.5%	¥109,656,066	
その他費用(国内DM、端子抜き治具、テープ等)											¥9,535,000	約0.1億円

## ※ 措置方法①②の交換数について

スイッチ付キッドについては、ワランティと有償データから0.1%が必要と推測するが、お客様にご迷惑を掛けないように販売店に1つ以上確保できる数とし1万セットを準備  
発生が多い日本、USAは、販売店に2個、他地域については、1個を準備

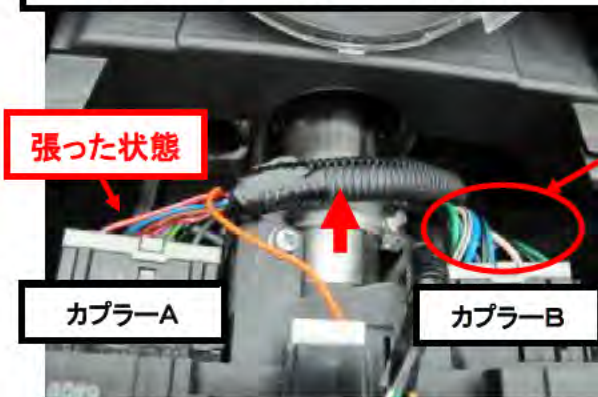
	2010年		2011年		
	12月		1月		2月
届出 措置	▽ 12/16(USA時間 12/15) 届出 ▽12/17日本措置開始				
検討会 委員会	▽ 12/8 委員会		▼:措置開始予定日		
部品 手配	日本 734,392	12/17 ▽ 12/28	1/14 ▽	1/31 ▽	2/28 ▽
	USA 141,084	14.7万 (20%) 25.7万 (35%)	36.8万 (50%) 1/18 ▽	44.1万 (60%) 2/1 ▽	66.2万 (90%) 2/28 ▽
	欧州 386,952		3.5万 (25%) 1/18 ▽	7.1万 (50%) 2/1 ▽	11.3万 (80%) 2/28 ▽
	ア大 51,642		9.6万 (25%) 1/18 ▽	18.8万 (50%) 2/1 ▽	26.3万 (70%) 2/28 ▽
	一般 41,147		1.3万 (25%) 1/18 ▽	2.5万 (50%) 2/1 ▽	3.6万 (70%) 2/28 ▽
			1.0万 (25%)	2.6万 (50%)	3.6万 (70%)



①コンビSW側組付 ⇒ IG SW側組付の順で行うとコンビSWの配線が引き下げられる

②コンビSW側組付でカプラーB ⇒ カプラーAの順で組付を行うとハーネスがカプラーから離れる。

カプラーB⇒カプラーAの場合



この部分の剛性でカプラーから離れる

カプラーA⇒カプラーBの場合



上記の組付手順でロービーム配線が張った状態となる。この組付手順で行っているのは、Sss製FIT/JAZZのみである

**END**

EA11-012

HONDA

4/20/2012

Q13f

20101208 GQC Headlight

Low Beam

02-08M Sss FIT/JAZZ Japan, U.S.A., Europe, Asia and Oceania  
**Lighting switch coupler terminal wear**

MV20091223094027 (Japan)

MV20100208102731 (Overseas)

GQC

1. Directive given by JSC
2. Results of quality committees in other regions
3. Overview
4. Timeline
5. Claimed symptoms
6. No. of occurrences
7. Analysis results
8. Countermeasure
9. Proposal
10. Schedule
11. Recurrence prevention



12/8/2010

QID

**大浦**

Oura



## 1. JSC (Nov. 23, 2010)

### ■ Decision

Market action plan should be proposed to GQC.

■ NASC result (Dec. 7, 2010)

AQAO's proposal

- Take positive market action for Sss-built 07-08M FIT/JAZZ lighting switch coupler terminal wear issue in the US.

**Decision: NASC agrees with the AQAO's proposal. The market action plan should be proposed to GQC.**

Date : 12 / 06 / 2010

**NASC**

NASC Present:

Decision Maker : S. Taguchi ( AH Service / NASC Chairman ) , Ken Dick (CH), C.Hale (AH-PRO), A.Yasuoka (AH-PRO)  
Meeting Minutes by Y.Takatsuka ( AH-Service )

Not Present  
K. Toshimitsu(HAM) ---- Delegated rights to NASC Chairman.

Title: 07-08YM FIT Headlight Low Beam

Symptom: Headlight low beam not come ON, burnt smell,smoke.

Occurrence Rate: QIC: 164cases / Occ. rate0.013%

Occurrence Cause: From large sliding in terminal area from switch operation, Sniplating on male terminal and female terminal is worn, base material is exposed and oxidized, wear particle is generated and contact resistance increases, leading to melting.

Countermeasure: To reduce sliding in terminal area, fixed Lo terminal harness to lighting switch by TY-RAP. And changed base material of female terminal from brass to heat resistant copper alloy.

Affected Units

Market	02M	03M	04M	05M	06M	07M	08M	Total
USA	---	---	---	---	---	67,091	73,993	141,084
Japam	238,193	147,751	59,564	162,984	125,900	---	---	734,392
Europe	62,300	48,344	53,921	114,827	55,737	33,777	18,046	386,952
Asia & Oceania	1,629	16,200	7,059	16,177	2,469	5,185	2,923	51,642
Other	3,976	3,042	3,333	8,831	6,704	9,790	5,481	41,147
G-Total								1,355,217

Last QIM Discussion : (Nov 03, 2010 ) As a result of investigation by AQAO, Road Trucking Vehicle Act in Japan specifies "Start to take action promptly." Quality Audit & Compliance Division and AQID take "promptly" as start action on the following day of notification but it is not law and regulations.  
NASC agreed AQAO's future schedule proposal that a proactive market treatment will be started from mid January 2011.  
Final NASC meeting will be held on December 6 or 7.  
AQAO will provide C/M parts before mid January 2011 to take action for stop sales vehicles quickly as well as affected vehicles in the market.  
AQAO also make clear which country have to conduct a proactive market treatment besides Japan, USA and Canada, and report at next NASC meeting with clear reason.

Today's NASC Discussion: NASC propose Safety Recall Campaign should be conducted as a market action since this is considered a safety issue.

## ■ EQC result (Dec. 6, 2010)

### AQAO's proposal

- Take positive market action for Sss-built 02-08M FIT/JAZZ lighting switch coupler terminal wear issue in Europe.

**Decision: EQC agrees with the AQAO's proposal.**

		EQC
Title	件名	02-08 Jazz/Fit ヘッドライトロービーム点灯しない
Problem Description	不具合内容	ヘッドライトロービームが点灯しない、焦げ臭い/発煙
Occurrence	発生状況	164 件 / 0.013%
Cause	原因	ヘッドライトスイッチカプラー内の端子が磨耗し酸化、コネクターの抵抗が高くなる
Countermeasure	対策	1. メス端子の材料を耐熱性のある銅合金に変更 2. 摺動接触を最小限に抑えるためハーネスをタイラップでライティングスイッチに固定
Affected Units	対象台数	全世界 = 135万台. EU = 381,798台.
Discussion	討議内容	AQAOはハーネスレイアウトからSss製車両のみが対象であることを確認。 他の製作所で製造した同じスイッチを使った他機種は組付け工程で端子部分の張力を緩和する「ハーネスのたるみ」があり、接点の磨耗に至らない。  安全リコールを提案する  日本は2010年12月16日に届出し、2010年12月17日に措置を開始する。 EUでの措置開始日は2011年1月18日頃。  EQCは日本の提案を承認する

		EQC
Title		02-08 Jazz/Fit headlight low beam not coming on
Problem Description		The headlight low beam does not come on or burnt smell/smoke
Occurrence		164 cases / 0.013% Occ.
Cause		Terminal wear within the headlight switch coupler leading to oxidization and high resistance of the connector.
Countermeasure		1. Female terminal material changed to heat resistant copper alloy 2. Harness secured to lighting switch with ty-rap to minimise sliding contact.
Affected Units		Worldwide = 1.35million. EU = 381,798.
Discussion		AQAO confirmed that Sss built vehicles only are affected due to harness layout. Other factory built models using same switch have additional 'sag' in the harness due to assembly process which reduces the tension on the terminal and does not lead to wear of the contact.  Proposal is to carry out safety recall.  Japan will announce on 16th Dec 2010 and action will start on 17th December 2010. EU estimated start date is 18th Jan 2011.  EQC Committee agree with Japan proposal.

## ■ AQC result (Dec. 3, 2010)

### AQAO's proposal

- Take positive market action for Sss-built 02-08M FIT/JAZZ lighting switch coupler terminal wear issue in Asia and Oceania.

Decision: AQC agrees with the AQAO's proposal.

レベル: <input checked="" type="checkbox"/> AQC <input type="checkbox"/> AQM <input type="checkbox"/> AQIM		【確認者】
件名	1. 02-08 Fit/Jazz (Sss生産) ロービーム不灯 (TV会議) 提案内容確認	ASH-CS 江口(GM) 田屋(BM)
AQCの バー 見解	<ul style="list-style-type: none"> <li>・Sss製FIT/JAZZの提案を了承する。JQCに提案して下さい。</li> <li>・Sss製以外については継続して解析が必要と考えます。</li> </ul>	HATC-M 遠藤(CEQ) HRAP カニツ(GC MG)
討議内容	<ul style="list-style-type: none"> <li>・訴え事象 : ヘッドライトロービーム不灯、焦げ臭い、煙が出た</li> <li>・発生件数 : 品情連とQC件数 154件 発生率 0.013%</li> <li>・発生原因 : インパネ配線のライティングスイッチへの分岐配線長の設定が不適切なためライティングスイッチのLO端子配線が張られた状態にあり ターン操作またはヘッドライト切り替え操作などで端子嵌合部が繰返し大きく摺動したため、オス端子とメス端子のSnメッキが剥がれ、母材が磨耗して堆積した酸化銅により接触抵抗が増大し、溶損した樹脂カプラーが接触面に流れ込み炭化し導通不良となる</li> <li>・措置提案 : 積極市場措置を提案する</li> <li>・措置理由 : ヘッドライトロービーム不灯の事象であり 今後も発生が予測されるため</li> <li>・市場措置内容: Lo端子部の溶損を点検し               <ul style="list-style-type: none"> <li>①溶損している場合は、ライティングスイッチ交換とLo端子ハーネスを交換し、ライティングスイッチにタイラップで固定</li> <li>②溶損していない場合は、Lo端子ハーネスのみを交換しライティングスイッチにタイラップで固定</li> </ul> </li> <li>・対象範囲 : ハロゲン仕様の02M~08M Sss製FIT/JAZZ(但し、カナダ仕向けはヘッドライト仕様のため除く) 2001年10月22日以降の生産から生産終了まで</li> <li>・対象台数 : 1,355,396台               <ul style="list-style-type: none"> <li>日本:734,392台、USA:141,070台、欧州:375,783台、ア大:59,147台、一般:45,004台</li> </ul> </li> </ul> <p>&lt;審議内容&gt;</p> <ul style="list-style-type: none"> <li>・各SSのレイアウトを確認した結果、Sssのみがレイアウトが異なり たわみ量が小さい</li> <li>・作業手順の違いでもハーネスたわみ量に差が生じている</li> </ul> <ul style="list-style-type: none"> <li>・WTY発生率はSssよりHATCの方が高いが、これは別要因によるものと考えている(AQAD)</li> <li>・Sss製以外についての原因については、継続しての調査解析が必要と判断する。AQAOの協力をお願いする。</li> </ul> <ul style="list-style-type: none"> <li>・AQAOからの依頼事項: HATCの作業標準を提示ください</li> </ul>	ASH-AOTC 上野(Sr.Co.) 中森(Co.) 阿波(Co.)

### ■ SAQC result (Dec. 2, 2010)

#### AQAO's proposal

- Take positive market action for Sss-built 02-08M FIT/JAZZ lighting switch coupler terminal wear issue in South America.

Decision: SAQC agrees with the AQAO's proposal.

### 南米品質委員会(SAQC)議事録

↵

議題: Sss製 02-08M FIT/JAZZ ヘッドライトロービーム不灯

日時: 2010年 12月8日(水)

場所: HAB Sumare/Morumbi

↵

出席者: ↵

HAB-Quality Wakatsuki, Marcos

HAB-Service Harada, Cury

↵

【議題】

1. Sss製 02-08M FIT/JAZZへの積極的市場措置の提案について
2. HAB製同モデルへの対応について

↵

【SAQC議決事項】

1. SAQCはAQAOの提案(Sss製当該車両の積極的市場措置)に同意する
2. HAB製同モデルについて措置不要とするにはブラジル当局へ技術説明が必要となる場合があるため、日本側より技術説明資料を提供していただきたい

## 2. Results of quality committees in other regions

### ■ CQC result (Dec. 6, 2010)

#### AQAO's proposal

- Take positive market action for Sss-built 02-08M FIT/JAZZ lighting switch coupler terminal wear issue.

Decision: CQC agrees with the AQAO's proposal.

例外中国品質委員会議事録  
 2010年12月6日 於；GHAC会議室他  
 出席者  
 CQC議長 GHAC関根検主技  
 GHAC 張元科長  
 HMC I 加藤科長  
 AQAO 室長 尾崎室長 電装 Gr. 林GL、畑谷主任  
 CSO テック 馬場主任  
 CHAC 西村検主技  
 WDHAC・・・庭山検主技、岩本科長、池田科長  
 記 GHAC MQ 東浦  
**中国品質委員会**  
 ↓  
 1、FITロービーム不灯 (AQAO) ↓  
 別紙詳細資料参照  
 まとめ  
 ・ 提案を了承します。↓  
 ただし中国総局への技術説明ができるバック資料の準備をお願いします。

# 3. Overview

- 1. Claimed symptoms Headlight low beam not come on, Burnt smell, Smoke
- 2. Occ situation No. of Hinjoren and QIC: 164, Occ rate: 0.013%
- 3. Occ cause The electrical wiring connecting to the lighting switch has a small amount of slack. With the switch operation, the terminal connecting area moves and increases contact resistances. Heat is generated and coupler melts. In the worst case, the low beam will not turn on.

- 4. Countermeasure C/M will not be applied because a production of the affected model has finished. As a market action, replace low beam terminal with the one with longer-wire and fix the wires with tie-wrap on all vehicles. If connecting coupler is melted, replace lighting switch and wire-side coupler with new ones.

- 5. Action proposal Positive market action

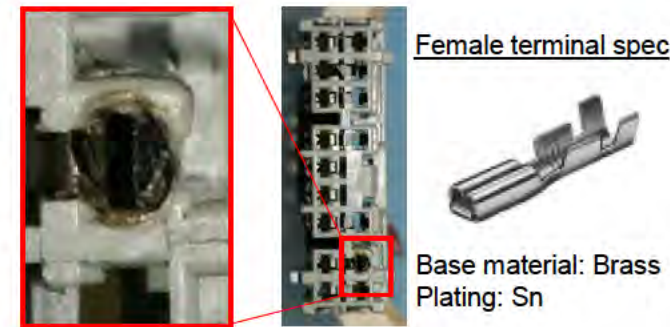
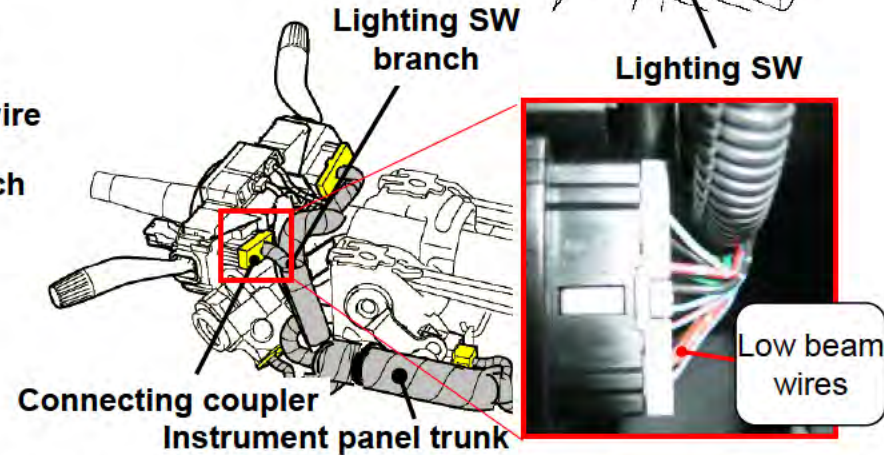
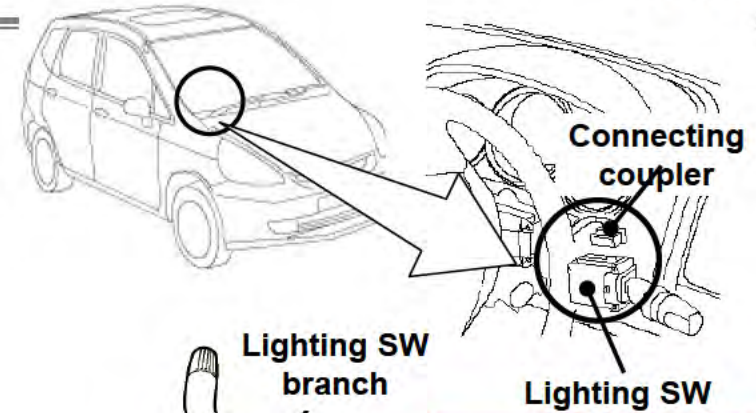
- 6. Reason Headlight low beam does not turn on, and further occurrences are predicted.

- 7. Actions Check Lo terminal whether it is melted,  
1) If melted, replace lighting switch and Lo terminal harness and fix the harness to the lighting switch with tie-wrap.  
2) If not melted, replace Lo terminal harness only and fix it to lighting switch with tie-wrap.

- 8. Affected range Halogen-spec 02M~08M FIT/JAZZ produced by Sss (Excluding models for Canada with daylight spec)  
Vehicles produced from on Oct. 22, 2001 to production finish

- 9. No. of affected units 1,355,217 units  
JPN: 734,392 USA: 141,084 units,  
EU: 386,952 Asia-Oceania: 51,642 Other regions: 41,147

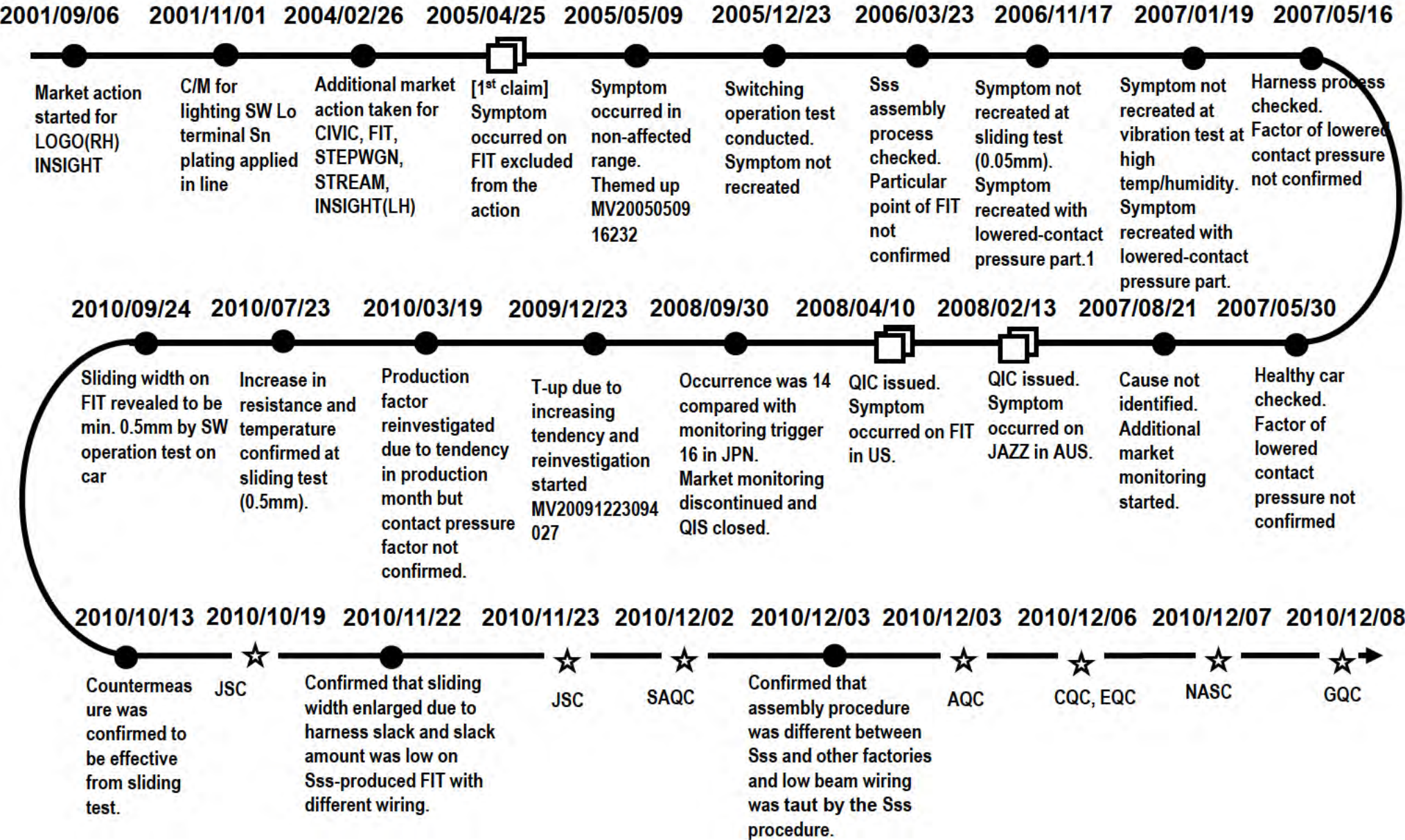
- 10. Cost for action Approx. ¥7,270,000,000



Head light terminal is melted



# 4. Timeline





# 5. Claimed symptoms

5-1 Hinjoren and QIC

10/40

## Japan (130 cases)

No.	Country	Type	VIN	Occurrence date	Registration date	Production date	Mileage (km)	Claimed symptom
1	Japan	GD1	GD1-1728129	2005/04/21	2003/08/26	2003/06/23	60651	Both headlights not turn on while driving suddenly
2	Japan	GD2	GD2-1020582	2005/06/18	2002/06/26	2002/06/17	39494	Headlights not turn on
3	Japan	GD1	GD1-1094570	2005/09/02	2001/12/25	2001/12/18	76599	Headlights not turn on
4	Japan	GD1	GD1-1072865	2005/09/05	2001/11/22	2001/11/09	166938	Headlights not turn on
5	Japan	GD1	GD1-1210960	2005/09/14	2002/07/19	2002/07/09	87855	Headlights not turn on
6	Japan	GD1	GD1-1141663	2005/10/27	2002/03/26	2002/03/20	58380	Both headlights not turn on
7	Japan	GD1	GD1-1145644	2006/05/15	2003/08/07	2002/03/26	53381	Headlight low beam not turn on (High beam turns on)
8	Japan	GD1	GD1-2113275	2006/06/24	2004/08/03	2004/07/08	105125	Headlight low beam not turn on
9	Japan	GD1	GD1-1119787	2006/11/22	2002/02/20	2002/02/11	57826	Headlights not turn on (Both lights)
10	Japan	GD2	GD2-1509358	2007/01/21	2003/04/24	2003/04/17	76755	Headlights not turn on suddenly
11	Japan	GD1	GD1-1563270	2007/02/11	2003/03/14	2003/03/07	131871	Smoke occurs around steering wheel
12	Japan	GD2	GD2-1702888	2007/06/24	2004/05/28	2004/03/12	59206	Headlights not turn on
13	Japan	GD1	GD1-1152646	2007/06/29	2002/04/15	2002/04/08	57356	Headlights not turn on
14	日本	GD2	GD2-1703160	2007/08/05	2003/03/31	2003/03/23	31771	ヘッドライトが点灯しない。
15	日本	GD1	GD1-1141663	2007/08/08	2002/04/24	2002/03/20	23754	ヘッドライトのロービームが点灯しなくなる。
115	Japan	GD1	GD1-2308348	2010/08/17	2006/01/10	2005/12/23	121207	Headlights not turn on
116	Japan	GD1	GD1-2155735	2010/08/20	2004/11/26	2004/11/12	84223	Burnt smell, Headlights not turn on
117	Japan	GD1	GD1-2363097	2010/08/31	2006/09/28	2006/09/22	52527	Low beam of both headlights not turn on
118	Japan	GD1	GD1-2032282	2010/09/02	2004/04/26	2004/03/30	83126	Headlight low beam not turn on (Wires are burnt)
119	Japan	GD1	GD1-2154158	2010/09/06	2004/12/17	2004/11/05	73296	Headlights not turn on
120	Japan	GD1	GD1-2367510	2010/08/28	2006/11/21	2006/10/14	64144	Both headlights not turn on
121	Japan	GD1	GD1-2397604	2010/09/06	2007/03/16	2007/03/06	82729	Low beam of both headlights not turn on
122	Japan	GD1	GD1-2421610	2010/09/13	2007/09/27	2007/06/26	69384	Low beam of both headlights not turn on
123	Japan	GD2	GD2-1912050	2010/09/14	2007/02/14	2007/02/05	86094	Headlight low beam not turn on
124	Japan	GD1	GD1-2008448	2010/10/03	2004/02/24	2004/01/28	124436	Smoke comes out from lighting switch
125	Japan	GD1	GD1-2387678	2010/10/06	2007/03/28	2007/01/30	83234	Low beam of both headlights not turn on
126	Japan	GD1	GD1-2146979	2010/10/18	2004/11/11	2004/10/18	51701	Headlights not turn on (LO)
127	Japan	GD1	GD1-2372739	2010/10/20	2006/12/08	2006/11/14	67310	Both headlights are lowered and not turn on
128	Japan	GD1	GD1-2116395	2010/10/22	2004/07/23	2004/07/15	82224	Headlights not turn on
129	Japan	GD1	GD1-1075680	2010/10/23	2001/11/28	2001/11/15	79810	Both headlights not turn on
130	Japan	GD1	GD2-1911890	2010/11/03	2007/02/20	2007/01/31	69097	Headlights not turn on (Low beam)

# 5. Claimed symptoms 5-1 Hinjoren and QIC

## USA (25 cases)

No.	Country	Type	VIN	Occurrence date	Registration date	Production date	Mileage (km)	Claimed symptom
1	USA	GD3	JHMGD38647S	2008/03/07	2007/04/30	2007/02/08	34,682	Headlight low beam not turn on
2	USA	GD3	JHMGD38637S	2008/10/04	2007/03/29	2007/02/06	56,456	Low beam not turn on
3	USA	GD3	JHMGD38647S	2008/10/04	2007/04/21	2007/02/05	21,854	Low beam not turn on
4	USA	GD3	JHMGD38617S	2008/10/15	2007/06/15	2007/05/18	44534	Low beam not turn on
5	USA	GD3	JHMGD38617S	2008/10/30	2007/03/22	2007/02/05	50,205	Low beam not turn on
6	USA	GD3	JHMGD37417S	2008/11/06	2007/03/31	2007/02/20	25453	Low beam not turn on
7	USA	GD3	JHMGD38607S	2009/01/12	2007/01/17	2006/12/04	96,893	Low beam not turn on
8	USA	GD3	JHMGD38667S	2009/03/07	2007/03/16	2007/02/02	26467	Headlight low beam not turn on
9	USA	GD3	JHMGD38417S	2009/03/14	2007/09/30	2007/06/19	54131	Headlights not turn on
10	USA	GD3	JHMGD38687S	2009/03/20	2007/05/22	2007/04/11	92083	Low beam not turn on
11	USA	GD3	JHMGD38687S	2009/03/24	2007/07/06	2007/06/09	52928	Low beam not turn on
12	USA	GD3	JHMGD38457S	2009/03/26	2007/04/16	2006/12/04	105200	Low beam not turn on
13	USA	GD3	JHMGD38647S	2009/05/04	2007/02/12	2006/12/11	64490	Low beam not turn on
14	USA	GD3	JHMGD37627S	2009/05/09	2007/03/15	2007/02/01	66595	Low beam not turn on
15	USA	GD3	JHMGD38667S	2009/05/11	2007/06/04	2007/04/20	86602	Low beam not turn on
16	USA	GD3	JHMGD38447S	2009/05/26	2006/12/12	2006/10/23	127730	Low beam not turn on
17	USA	GD3	JHMGD38697S	2009/06/09	2006/10/19	2006/09/06	52264	Low beam not turn on
18	USA	GD3	JHMGD38437S	2009/06/11	2006/11/13	2006/10/09	32701	Low beam not turn on
19	USA	GD3	JHMGD38647S	2009/12/30	2007/05/10	2007/03/29	74024	Headlights not turn on
20	USA	GD3	JHMGD38687S	2010/01/04	2007/06/20	2007/04/10	52755	Low beam not turn on
21	USA	GD3	JHMGD38677S	2010/07/15	2007/08/15	2007/05/21	100744	Low beam not turn on
22	USA	GD3	JHMGD37658S	2010/09/01	2008/07/26	2008/06/12	34318	Low beam not turn on
23	USA	GD3	JHMGD38407S	2010/09/14	2007/01/16	2006/11/02	126243	Headlights not turn on
24	USA	GD3	JHMGD38607S	2010/09/22	2007/06/27	2007/05/12	93557	Smoke comes out
25	USA	GD3	JHMGD38677S	2010/08/04	2007/07/07	2007/04/24	116659	Low beam not turn on

# 5. Claimed symptoms

5-1 Hinjoren and QIC

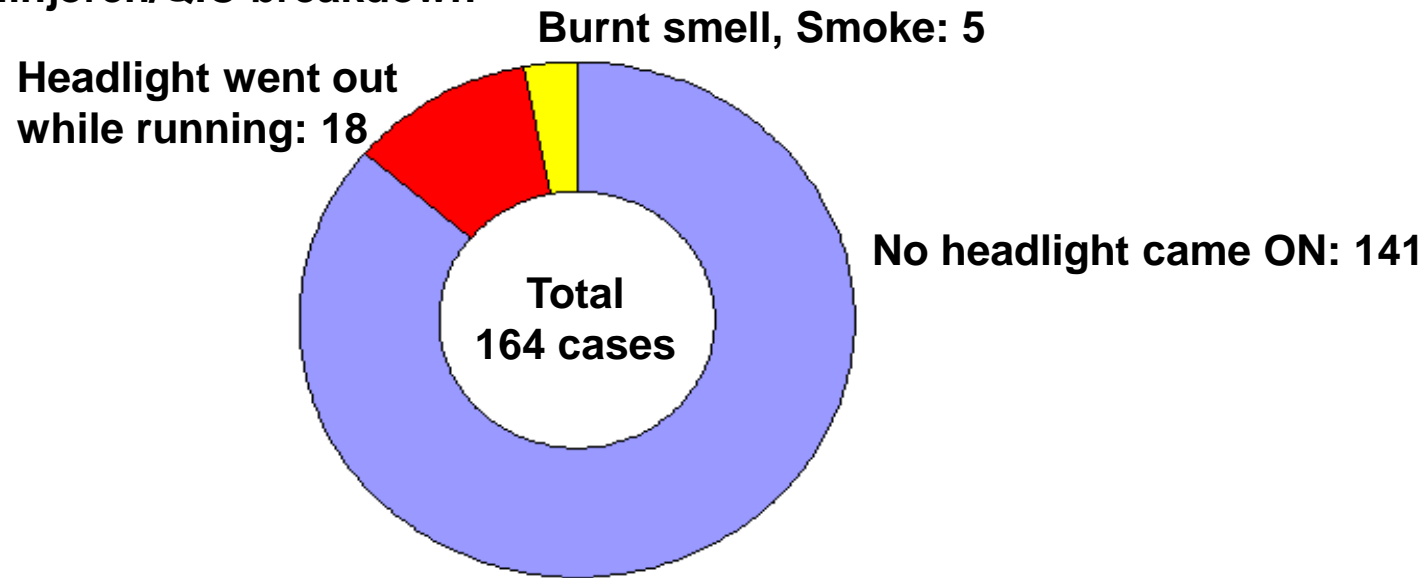
## Europe (6 cases)

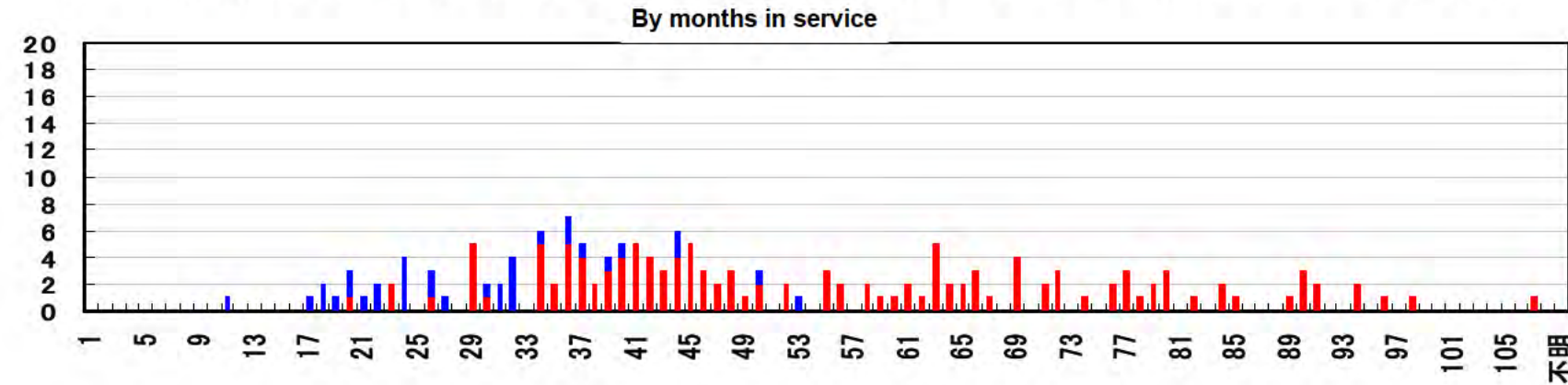
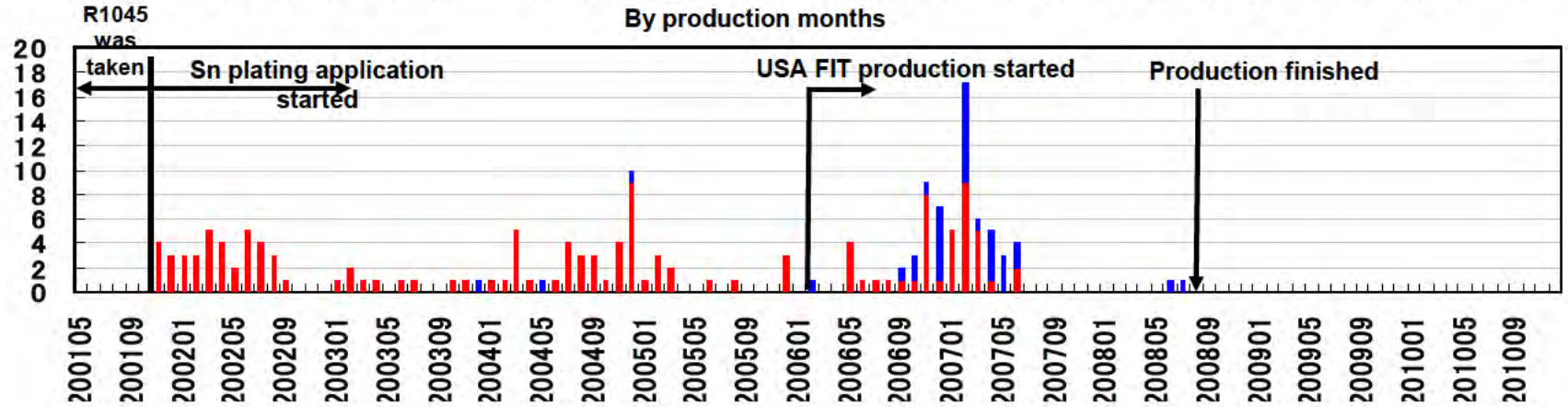
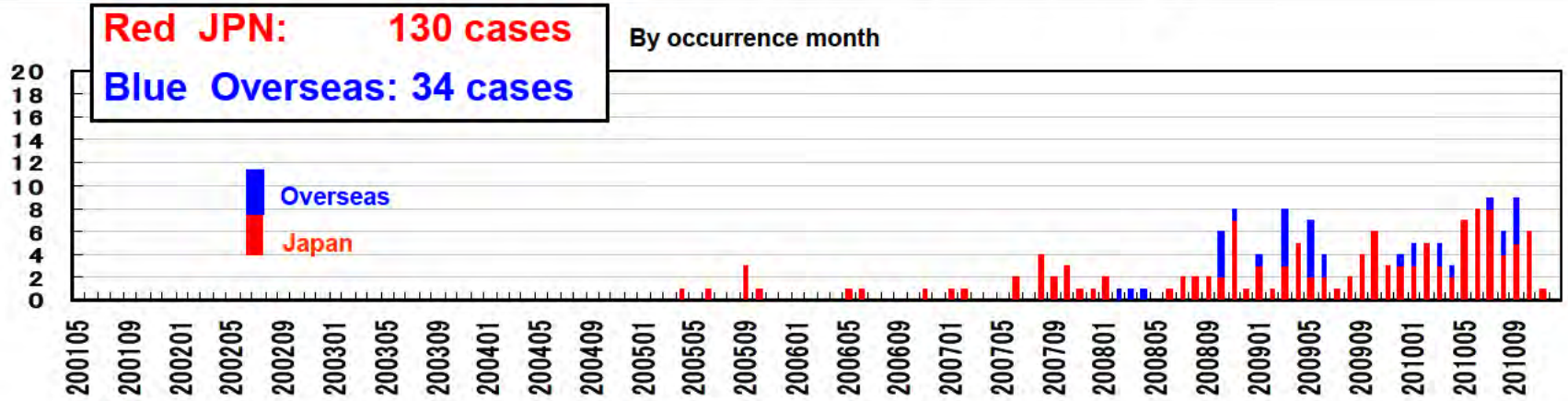
No.	Country	Type	VIN	Occurrence date	Registration date	Production date	Mileage (km)	Claimed symptom
1	Czech Republic	GD3	JHMGD57307S [REDACTED]	2010/01/11	2007/05/31	2006/12/13	39,161	Headlights not turn on
2	Hungary	GD3	JHMGD57307S [REDACTED]	2010/03/04	2007/07/17	2006/12/19	94,494	Smoke and smell of plastic
3	Italy	GD3	JHMGD18906S [REDACTED]	2010/03/17	2007/03/26	2006/02/06	45,000	Coupler of lighting switch is slightly melted
4	Italy	GD5	JHMGD57307S [REDACTED]	2010/04/26	2007/06/29	2006/12/19	42,447	Headlights not turn on
5	Israel	GD1	JHMGD18608S [REDACTED]	2010/08/22	2008/10/28	2008/07/15	58,825	Headlights not turn on
6	Rumania	GD1	JHMGD17507S [REDACTED]	2010/09/29	2007/06/08	2007/02/09	47,864	Smoke occurred after 15 min. drive

## Asia-Oceania (3 cases)

No.	Country	Type	VIN	Occurrence date	Registration date	Production date	Mileage (km)	Claimed symptom
1	Australia	GD3	JHMGD38504S [REDACTED]	2008/02/11	2004/07/09	2004/05/20	108,794	Headlights not turn on
2	Australia	GD3	JHMGD38504S [REDACTED]	2008/04/10	2004/02/19	2003/12/22	70,821	Headlights low beam not turn on
3	Australia	GD3	JHMGD37505S [REDACTED]	2009/05/28	2005/01/27	2004/12/09	85,693	Headlights (low beam) not turn on

## 3-2 Hinjoren/QIC breakdown





# 6. No. of occurrences

6-2 Occurrence situation analysis by model with same structure 14/40  
(Hinjoren and QIC)

Model	Model year												Sales volume	Hinjoren, QIC		Switch M/L	Harness M/L
	99	00	01	02	03	04	05	06	07	08	09	10		# of occ	Occ %		
FIT/JAZZ	Second action			Line application								2,002,870	164	0.008%	Toyo Denso	Yazaki	
FIT ARIA /CITY	Line application								709,489	9	0.001%	Yazaki					
CR-V	Line application								674,592	6	0.001%	Sumitomo					
LOGO	First action		Line application								80,016	17	0.021%	Sumitomo			
INSIGHT	First action			Line application								7,282	4	0.055%		Sumitomo	
STEPWGN	Second action			Line application								47,389	1	0.002%		Sumitomo	
CIVIC	Second action			Line application								830,266	0	0.000%		Sumitomo	
STREAM	Second action			Line application								39,264	0	0.000%		Sumitomo	
MOBILIO	Line application								85,739	0	0.000%	Sumitomo					
EDIX/FR-V	Line application								87,412	0	0.000%	Sumitomo					
ELEMENT	Line application								320,962	0	0.000%	Sumitomo					
PILOT	Line application								401,348	0	0.000%	Yazaki					
LIFE	Line application								55,753	0	0.000%	Sumitomo					
Line application of Sn plating for SW since Nov 2001												5,342,382	* Excluding 4-light type car with HID for KC				

First recall
Second recall
Line application

No occurrence on approx. 870,000 units
Line application has started of Sn plating for lighting SW since Nov. 2001.

Many occurrences are from FIT/JAZZ.

# 6. No. of occurrences

6-3 Occurrence situation analysis by factory (Hinjoren and QIC)

Model	Model year										Factory	Sales volume	Accumulated sales volume	Hinjoren, QIC		Switch	Harness		
	99	00	01	02	03	04	05	06	07	08				09	10			# of occ	Occ %
FIT/JAZZ	Second action												Sss	1,290,137	2,002,870	164	0.013%		Yazaki
													HAB	185,966		0	0.000%		
													HATC	118,060		0	0.000%		
													HPM	74,282		0	0.000%		
													GHAC	227,855		0	0.000%		
													CHAC	106,570		0	0.000%		
FIT ARIA /CITY												HATC	195,557	709,489	6	0.003%	Toyo Denso	Yazaki	
												HSCI	134,347		0	0.000%			
												HCPI	16,541		3	0.018%			
												HMSB	60,100		0	0.000%			
												HACPL	60,198		0	0.000%			
												HTR	20,458		0	0.000%			
CR-V												GHAC	222,288	674,592	0	0.000%		Sumitomo	
												Css	347,545		3	0.001%			
												HUM	255,207		0	0.000%			
												HATC	30,832		0	0.000%			
												HMSB	3,862		0	0.000%			
												HCPI	25,515		0	0.000%			
STEPWGN	Second action											WDHAC	14,051	47,389	0	0.000%		Sumitomo	
												HTW	23,095		3	0.013%			
												Sss	17,716		1	0.006%			
											Sss, Css	29,673	0	0.000%					
Line application of Sn plating for SW since Nov 2001												3,434,340	* Excluding 4-light type car with HID for KC						

First recall

Second recall

Line application

No occurrence on approx. 870,000 units





Line application has started of Sn plating for lighting SW since Nov. 2001.

Many occurrences on Sss-built FIT/JAZZ only (164 cases).  
 No occurrences on FIT/JAZZ produced by other factories.

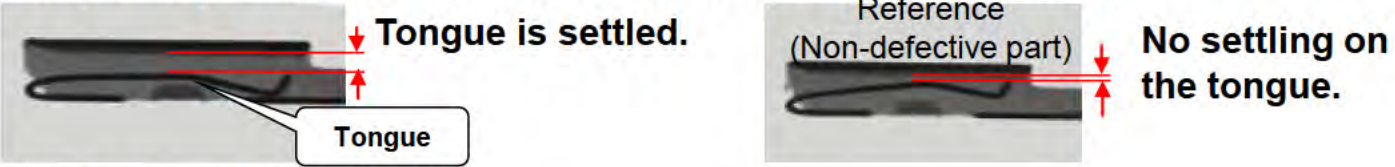
◇ Returned parts disassembly confirmation results (Melted)

No.4 Japan GD1-1072865 Claimed symptom: Headlight low beam does not come on

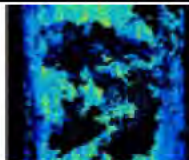
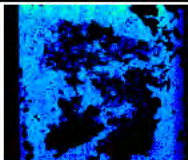
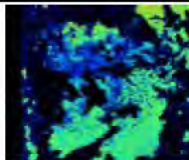

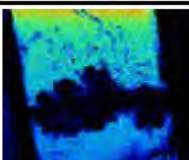
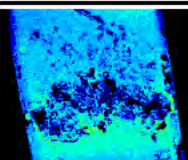
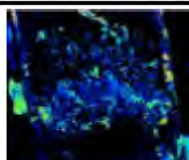
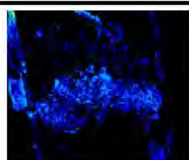
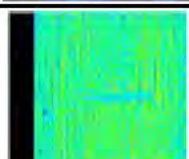
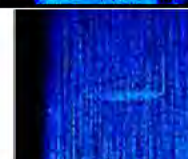


- Appearance confirmation

Male terminal at lighting switch side		Female terminal at harness side			
		Lo terminal is melted by heat.			Lo terminal is melted by heat.

- X-ray analysis results (Female terminal at harness side)





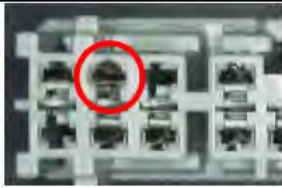

- Surface analysis results

	Sn	Cu	C	O	
Male terminal tongue					C and O (resin) adhered heavily in the vicinity of contact area that was heated over resin melting temperature.
Female terminal tongue					
Reference) Non-defective Male, tongue side					Sn plating remains sufficiently and wear particles are not found.

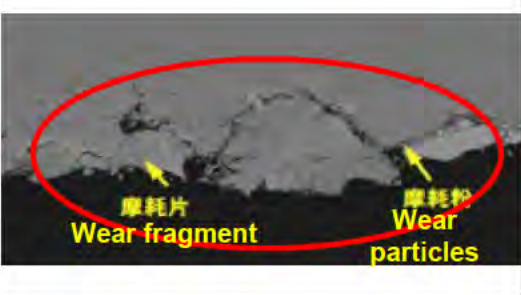
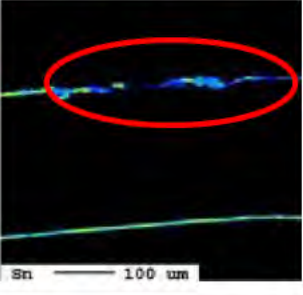
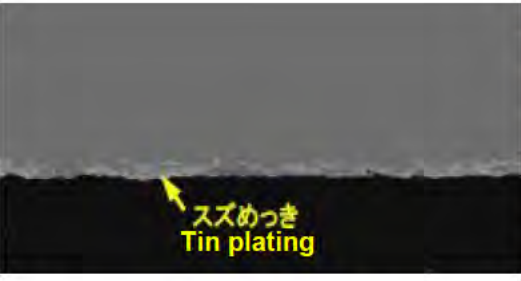
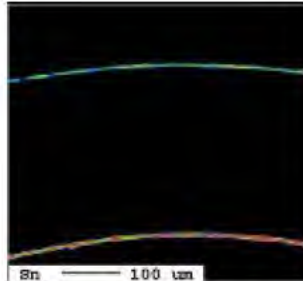
◇ Market return parts dismantle confirmation results (Melted)

No.12 U.S.A. JHMGD37627S [REDACTED] Claimed symptom: Low beam does not come on

- Appearance confirmation

Male terminal at lighting switch side		Female terminal at harness side	
		Lo terminal is melted by heat.	
			
			Lo terminal is melted by heat.

- Cross-sectional analysis

	Female terminal at harness side			
Returned part		There is no Sn plating any more and wear particles of base material have accumulated.		Sn plating is worn.
Non-defective part		Sn plating remains and no wear particles found.		Sn plating remains and no wear particles found.

Sn plating is worn and wear particles have accumulated. Repetitive sliding has occurred.

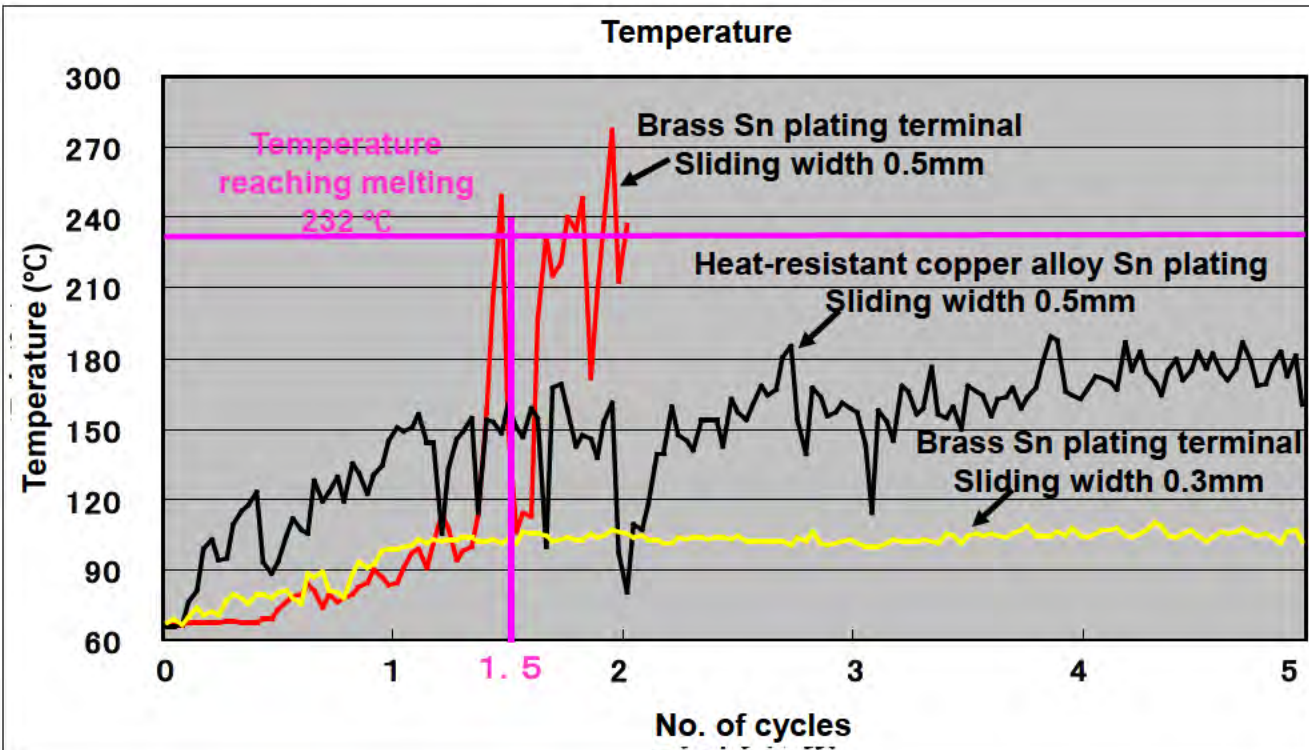
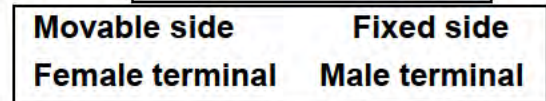
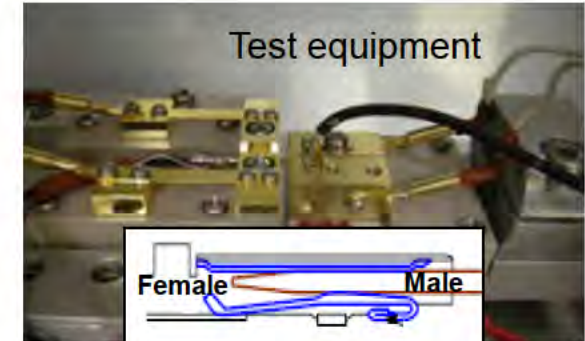


**[Purpose]**

Confirm conditions of an increase in temperature due to repetitive sliding at joint area of the terminal.

**[Test result]**

Brass terminal (Sn plating terminal) is confirmed to have achieved connector resin (PBT) melt temperature with sliding width 0.5mm/approx. 1.5 cycles.



**[Test conditions]**

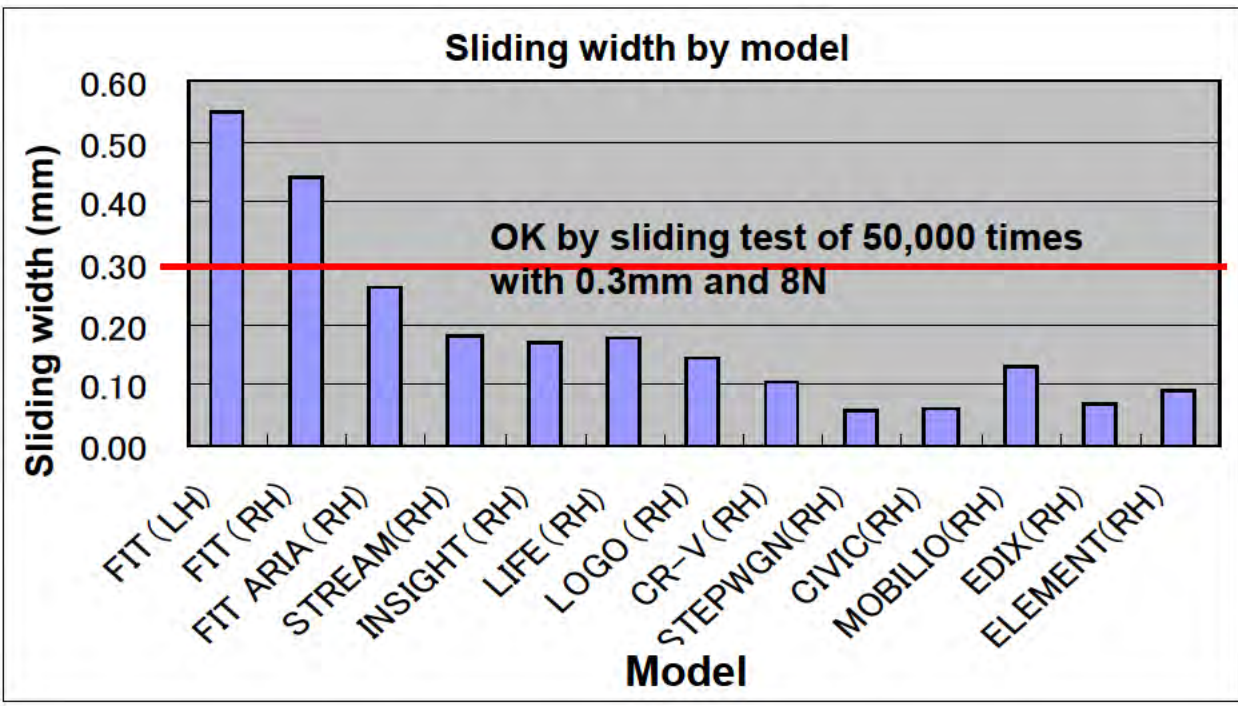
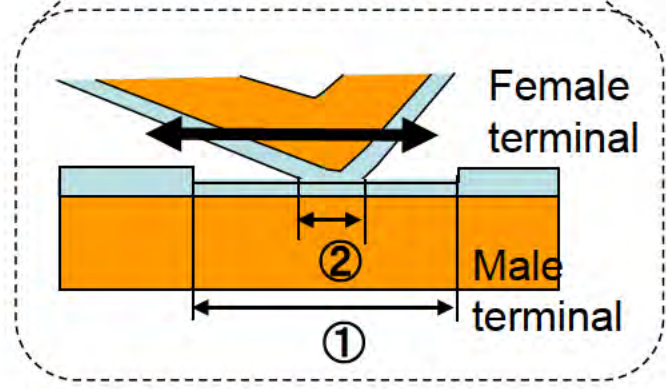
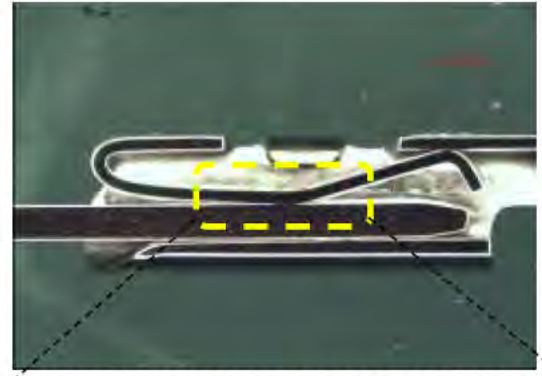
- Terminal: Brass + Sn plating
- Contact pressure: 8N (Lower limit of production control)
- Oxidation acceleration : Leave at 100 °C for 120hrs before testing
- Current: 10A
- Temperature & humidity: 60°C, 85%RH
- Sliding width: 0.5mm
- Sliding cycles: Stop for 24hrs after sliding of 10,000times (1 cycle)
- $\Delta T$  calculation formula:  

$$\Delta T = a \times [\text{Contact resistance}] \times [\text{Current}]^2$$

$$a = 17.91 \text{ (laser heat input test result)}$$

**[Purpose]**  
 Measure actual sliding width of the terminal on car and compare it by model.

**[Measurement result]**  
 FIT/JAZZ has larger sliding width than other models.



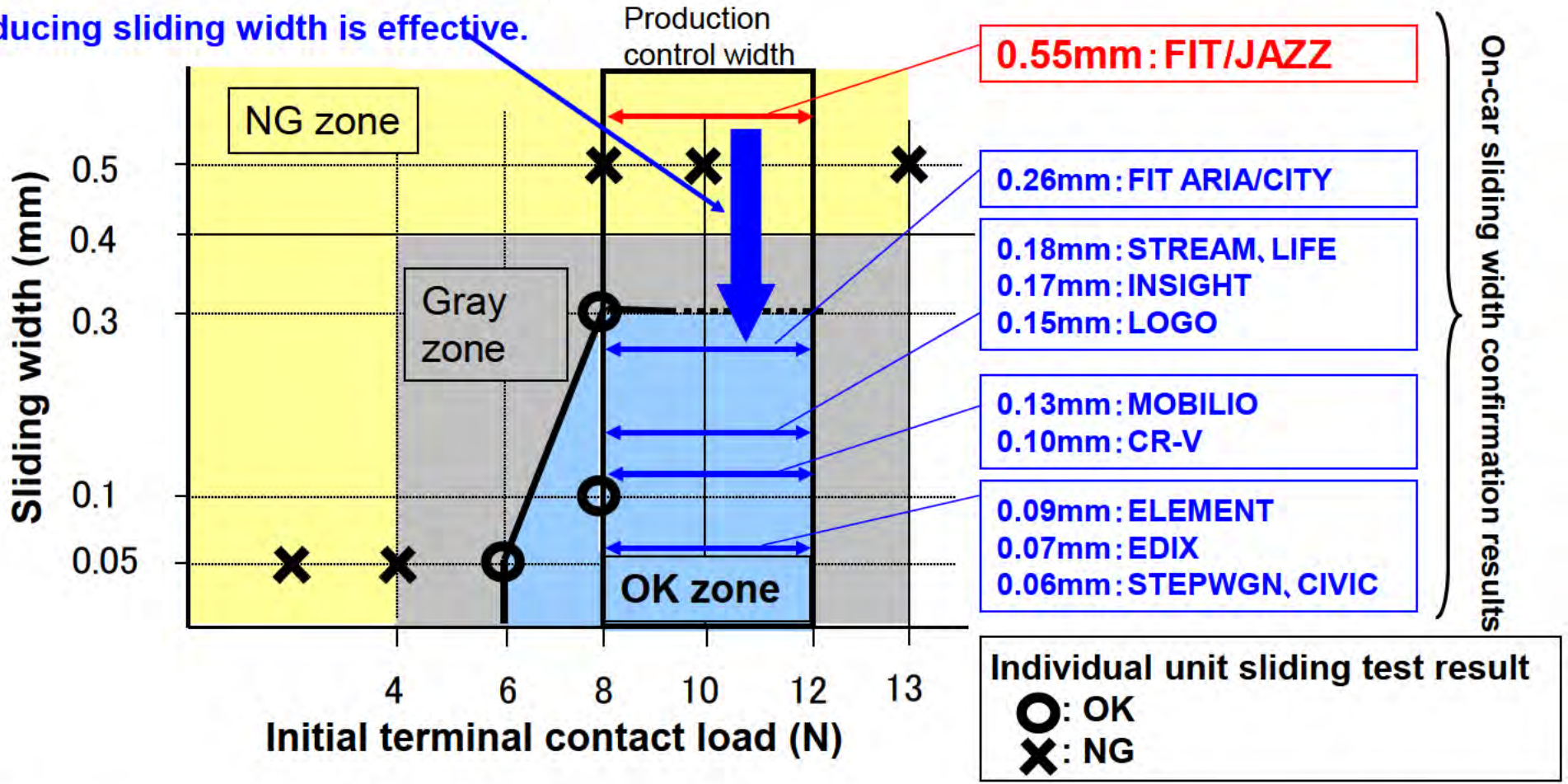
**Sliding width=**  
 (Male terminal sliding width ①)  
 - (Female terminal sliding width ②)

- [Test condition]**
- Install lighting switch of terminal contact pressure 8N (at the lower limit of production control) into a test car.
  - 1 cycle: Lighting switch operation from right turn -> center -> left turn -> center -> flashing -> center
  - No. of tests: 10,000 times manually

[Purpose]

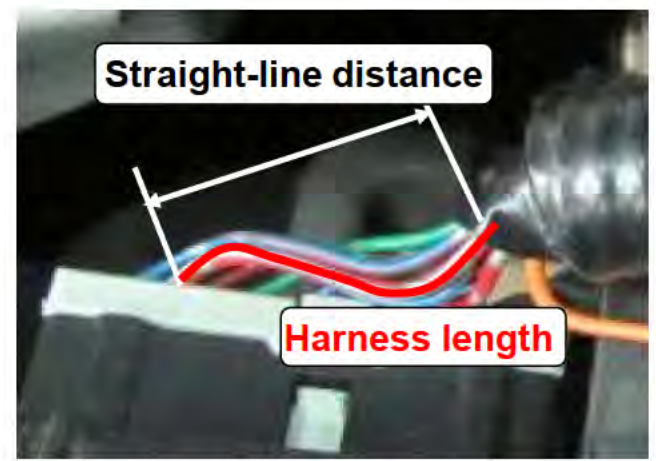
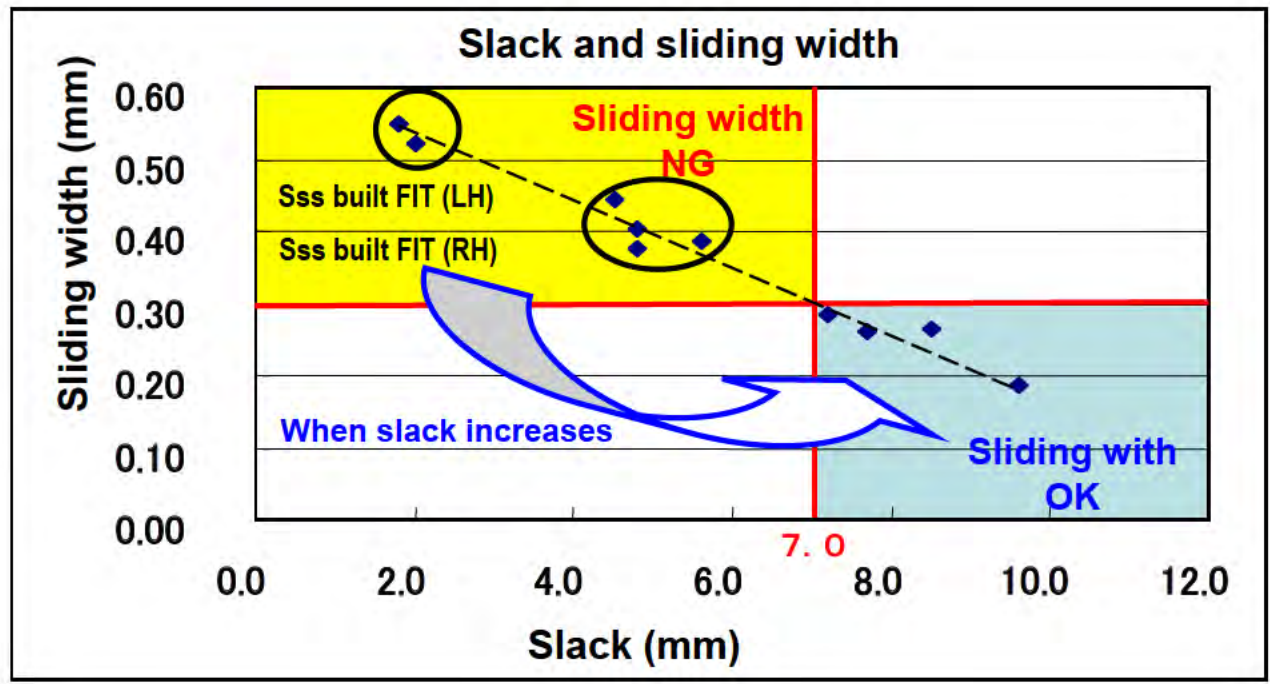
Judge if sliding width is OK or not based on the on-car terminal sliding width confirmation results and the individual unit sliding test results.

Reducing sliding width is effective.



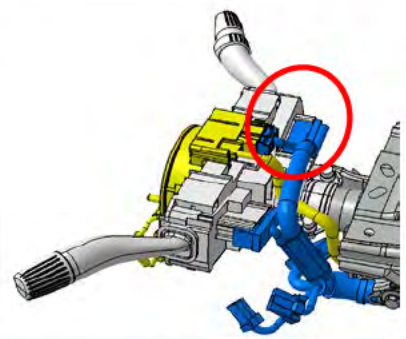
It is confirmed that only FIT/JAZZ is in NG zone where resistance increases. Reducing sliding width is the most effective countermeasure.

- Comparison between Sss built FIT and FIT built at other factories showed difference in slack, so correlation between slack and sliding width will be confirmed.



$$\text{Slack} = \text{Harness length} - \text{Straight-line distance}$$

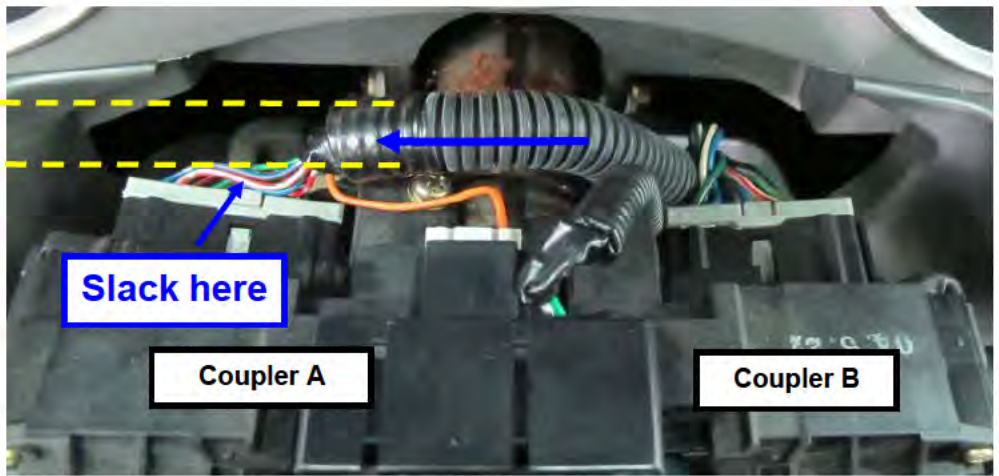
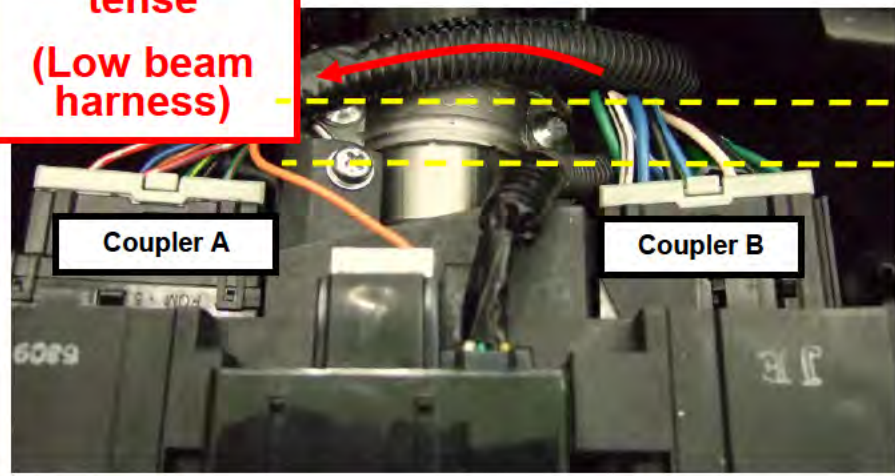
We found that sliding width decreases when slack increases.



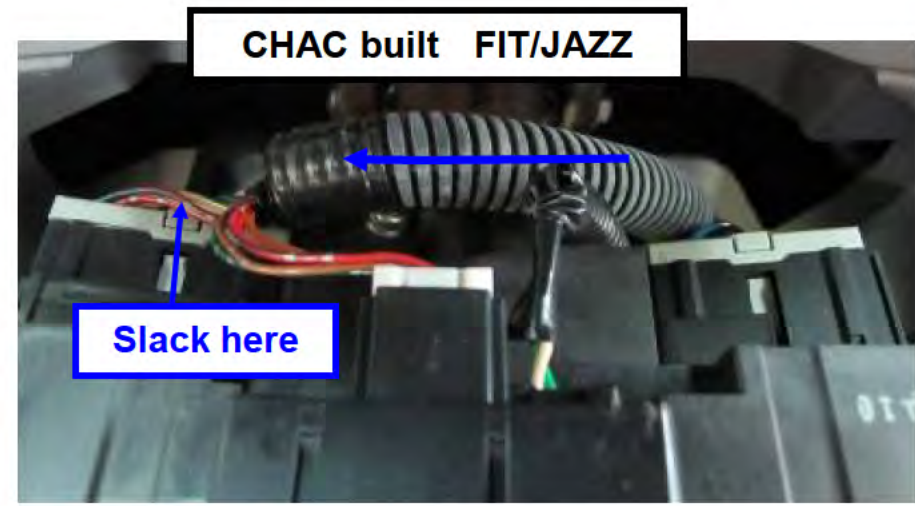
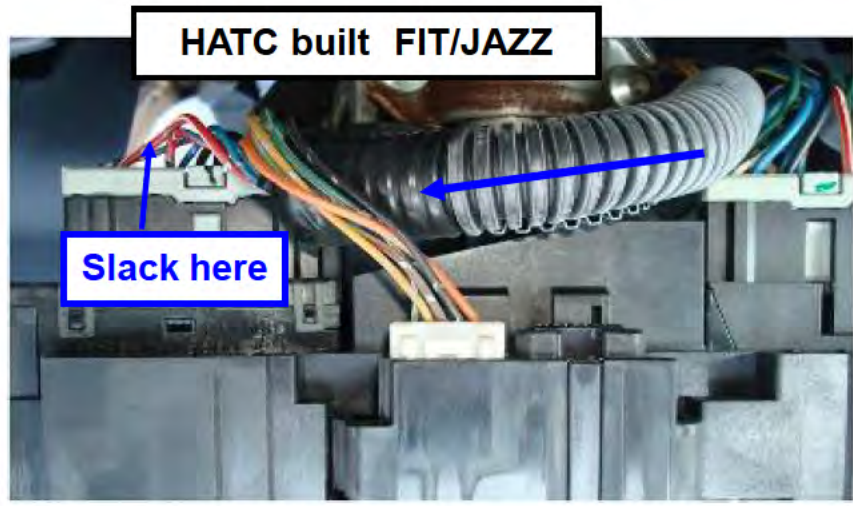
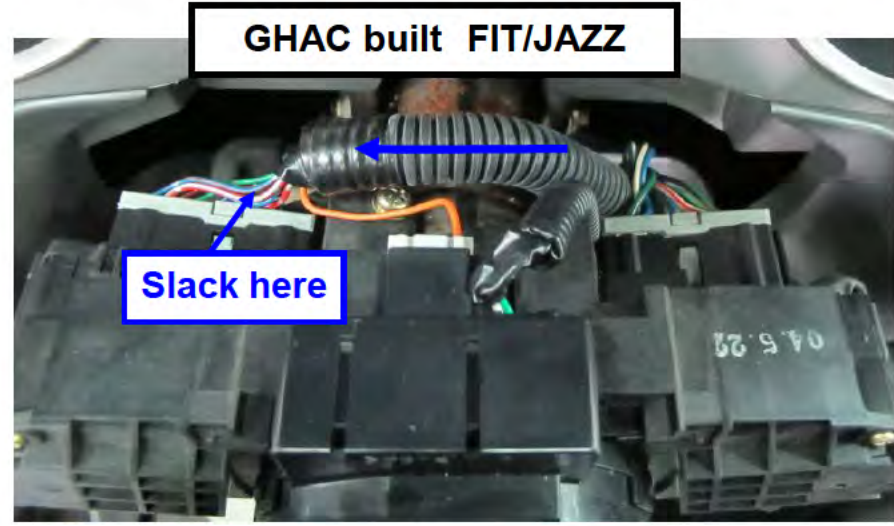
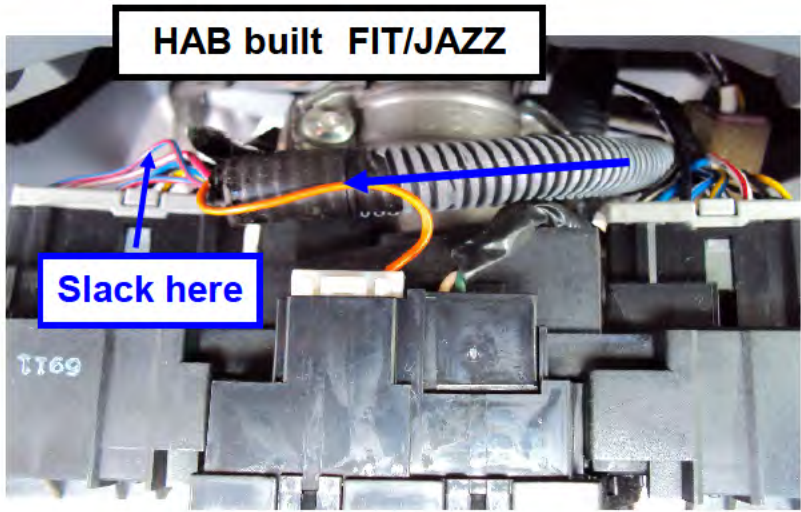
Sss built FIT/JAZZ

GHAC built FIT/JAZZ

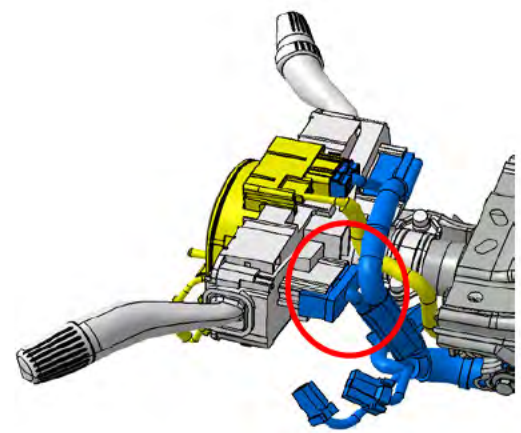
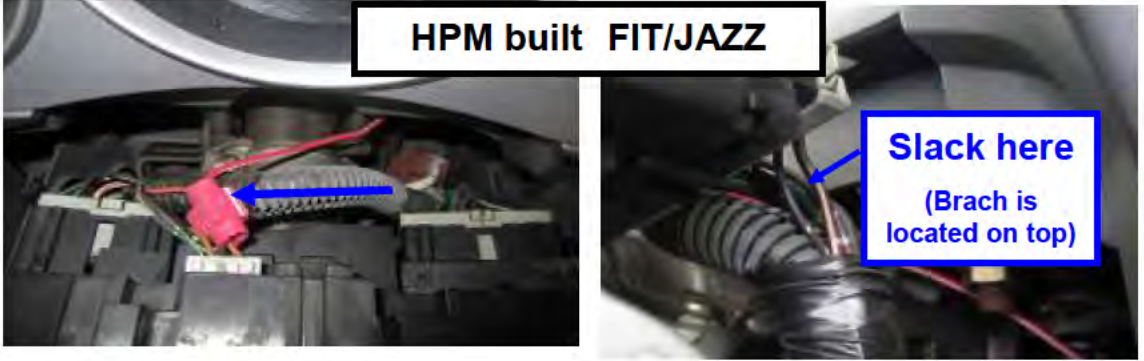
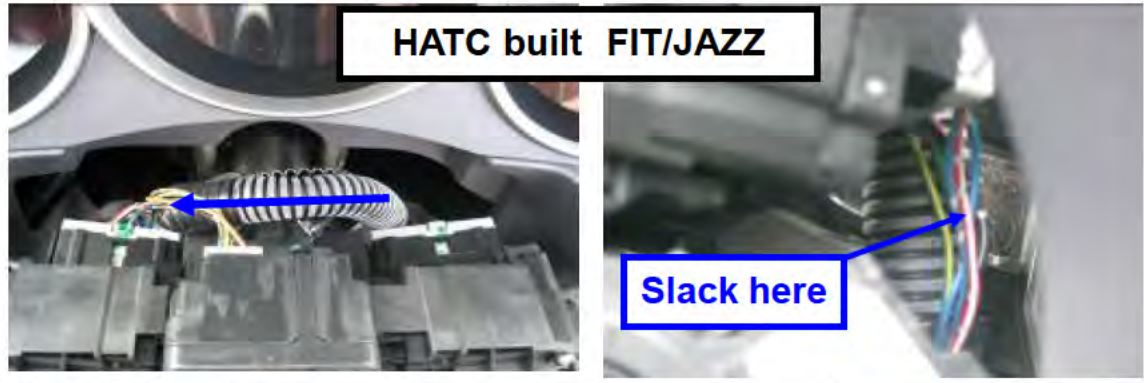
Harness is tense  
(Low beam harness)



When coupler B is set first, then coupler A is set on COMBI SW side, harness comes off from coupler, and low beam harness tends to be tense.



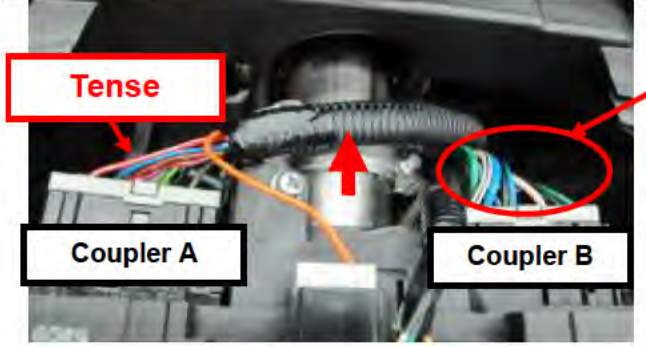
Low beam harness is tense for only Sss built FIT/JAZZ.



Low beam harness is tense for only Sss built FIT/JAZZ.

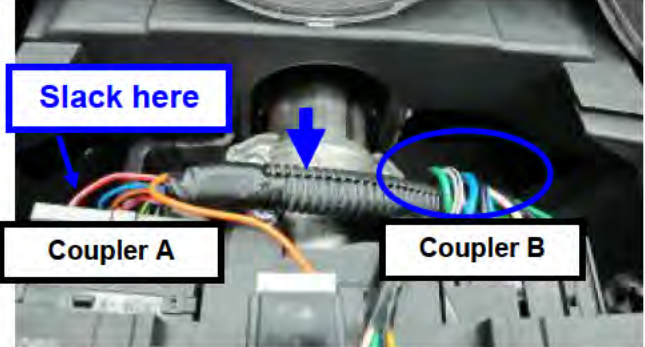
① When coupler B is set, then coupler A is set on COMBI SW side, harness comes off from coupler, and low beam harness tends to be tense.

When coupler B is set, then coupler A is set

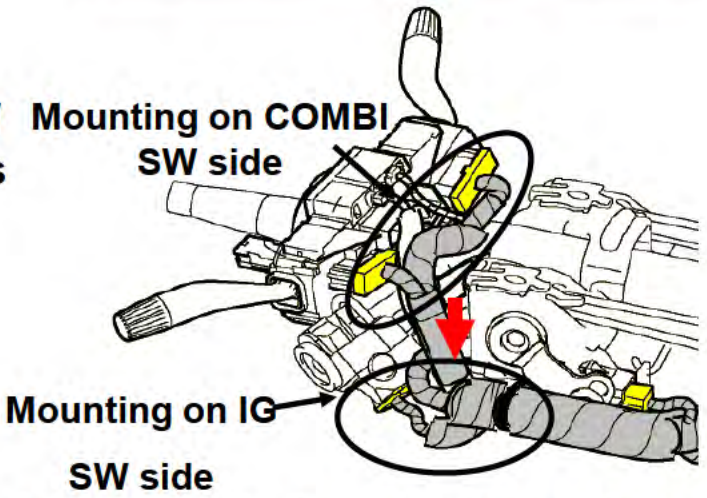


Harness routing causes harness to come off from coupler.

When coupler A is set, then coupler B is set



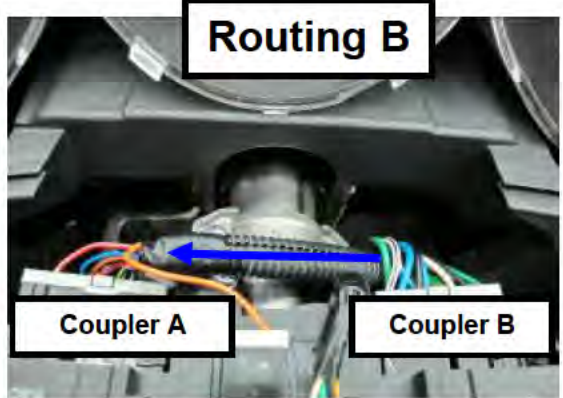
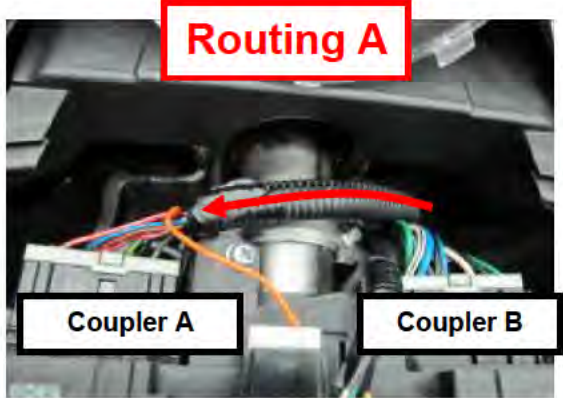
② When harness is mounted to COMBI SW, then mounted to IG SW, harness on COMBI SW side moves down, and low beam harness tends to be tense.



When coupler B is mounted, then coupler A is mounted on IG SW side per mounting order of Sss built FIT/JAZZ, low beam harness is tense.



Model	Factory	Routing	Slack (mm)	Sliding width (mm)	Mounting order			Judgment
					1	2	3	
FIT/JAZZ (LH)	Sss	A	1.8	0.55	※	※	IG SW	NG
FIT/JAZZ (RH)			Coupler A	Coupler B				
			4.5	0.44	Coupler B	Coupler A		
FIT/JAZZ (LH)	CHAC	B	13.9	0.24	Coupler A	Coupler B	IG SW	OK
FIT/JAZZ (LH)	HAB	B	8.9	—	Coupler A	Coupler B	IG SW	OK
FIT/JAZZ (RH)	HPM	B	14.0	—	IG SW	Coupler A	Coupler B	OK
FIT/JAZZ (LH)	GHAC	B	9.6	0.19	IG SW	Coupler B	Coupler A	OK
FIT/JAZZ (RH)	HATC	B	9.3	—	IG SW	Coupler B	Coupler A	OK
FIT/JAZZ (LH)			9.4	—				



\* For Sss built FIT/JAZZ, coupler mounting order is coupler A => coupler B, but video recording at the time of production showed that mounting order is coupler B => coupler A. So, we determine that both types (coupler A => coupler B / coupler B => coupler A) are mixed.

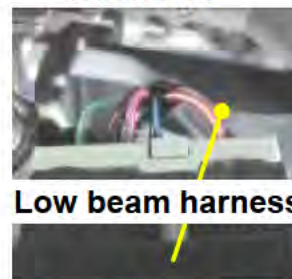
Judgment : Slack is more than 7mm.  
OK

Due to different mounting order, low beam harness is tense for only Sss built FIT/JAZZ.

Model	Factory	Slack (mm)	Sliding width (mm)	Judgment
FIT ARIA/CITY (RH)	HATC	10.3	0.26	OK
FIT ARIA/CITY (LH)	GHAC	7.2	0.28	OK
FIT ARIA/CITY (RH)	HSCI	18.3	—	OK
FIT ARIA/CITY (RH)	HCPI	10.5	—	OK
FIT ARIA/CITY (RH)	HMSB	13.8	—	OK
FIT ARIA/CITY (RH)	HACPL	9.6	—	OK
CR-V (RH, LH)	Css	23.4	0.10	OK
LOGO (RH)	Sss	15.4	0.15	OK
INSIGHT (RH)	Sss	22.8	0.17	OK
STEPWGN (RH)	Sss, Css	37.4	0.06	OK
CIVIC (RH)	Sss	48.3	0.06	OK
STREAM (RH)	Sss	26.5	0.18	OK
MOBILIO (RH)	Sss	32.9	0.13	OK
EDIX. (RH)	Sss	16.1	0.07	OK
ELEMENT (RH)	Sss	33.5	0.09	OK
LIFE (RH)	Sss	26.7	0.18	OK
PILOT (LH)	HMA	21.3	—	OK
FIT ARIA/CITY (LH)	HTR	11.6	—	OK

Slack is maintained for other models, with no problem.

**INSIGHT**



Low beam harness

**CIVIC**



Low beam harness

**STREAM**



Low beam harness

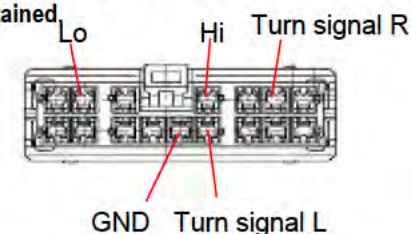
**STEPWGN**



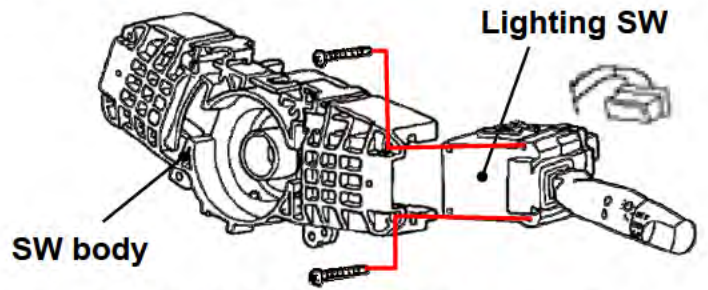
Low beam harness

The reason why other terminals show no problem

1. Current of terminals other than Lo / Hi / GND is 3.5A when turn signal is working, and less than 0.2A when turn signal is not working.
2. Hi / GND terminal is located on the center of the coupler, so slack is maintained.

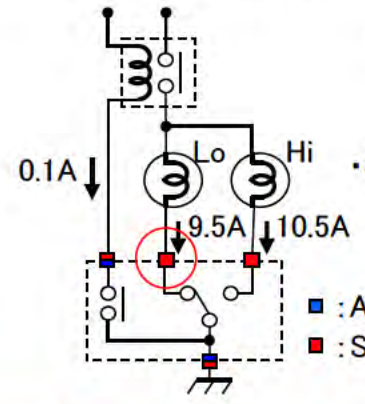


## Lighting SW structure



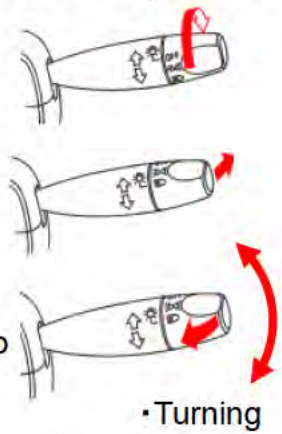
When lever is worked (Switching from Hi to Lo, turning lever while pulling the lever toward driver), with SW tightening screw as supporting point, the SW slightly moves.

## Explanation of circuit (2 lamp system)

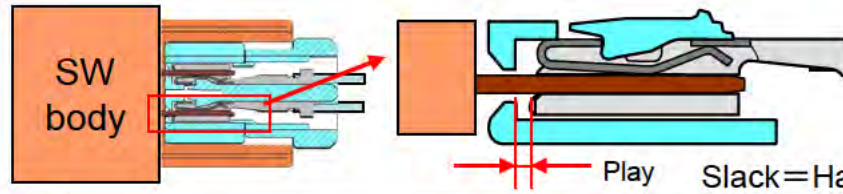


## Explanation of lever operation

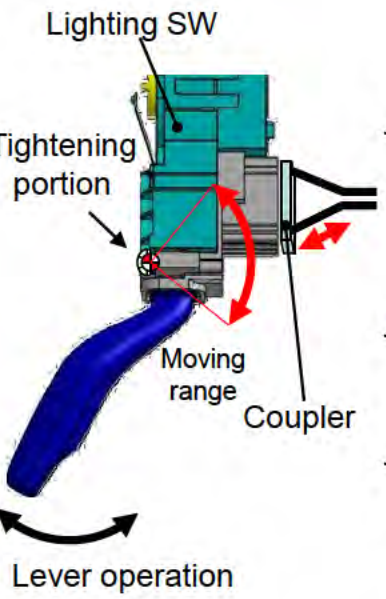
- Light illumination
- Switching to Hi beam
- Passing
- Switching to Lo beam



## Terminal sliding mechanism



Play found between coupler and female terminal because of assembly and part tolerance.



	When harness is tense	When harness shows slack
Switching from Hi => Lo Passing Turning lever while pulling Operating direction Force		
Before / after operation		
Switching from Lo => Hi Turning lever while pushing Operating direction Force		

Slack does not easily occur

Harness slack absorbs dislocation

# 7. Analysis results 7-13 Occurrence mechanism ②

Harness length, which is connected FIT lighting SW, was set to be less slack, so some low beam harness were too tense during routing operation.

When SW body moved by lighting SW lever operation, low beam terminal connection area can not move with the SW, so male / female terminals slide very much.  
(Sliding width : Approx 0.5mm)

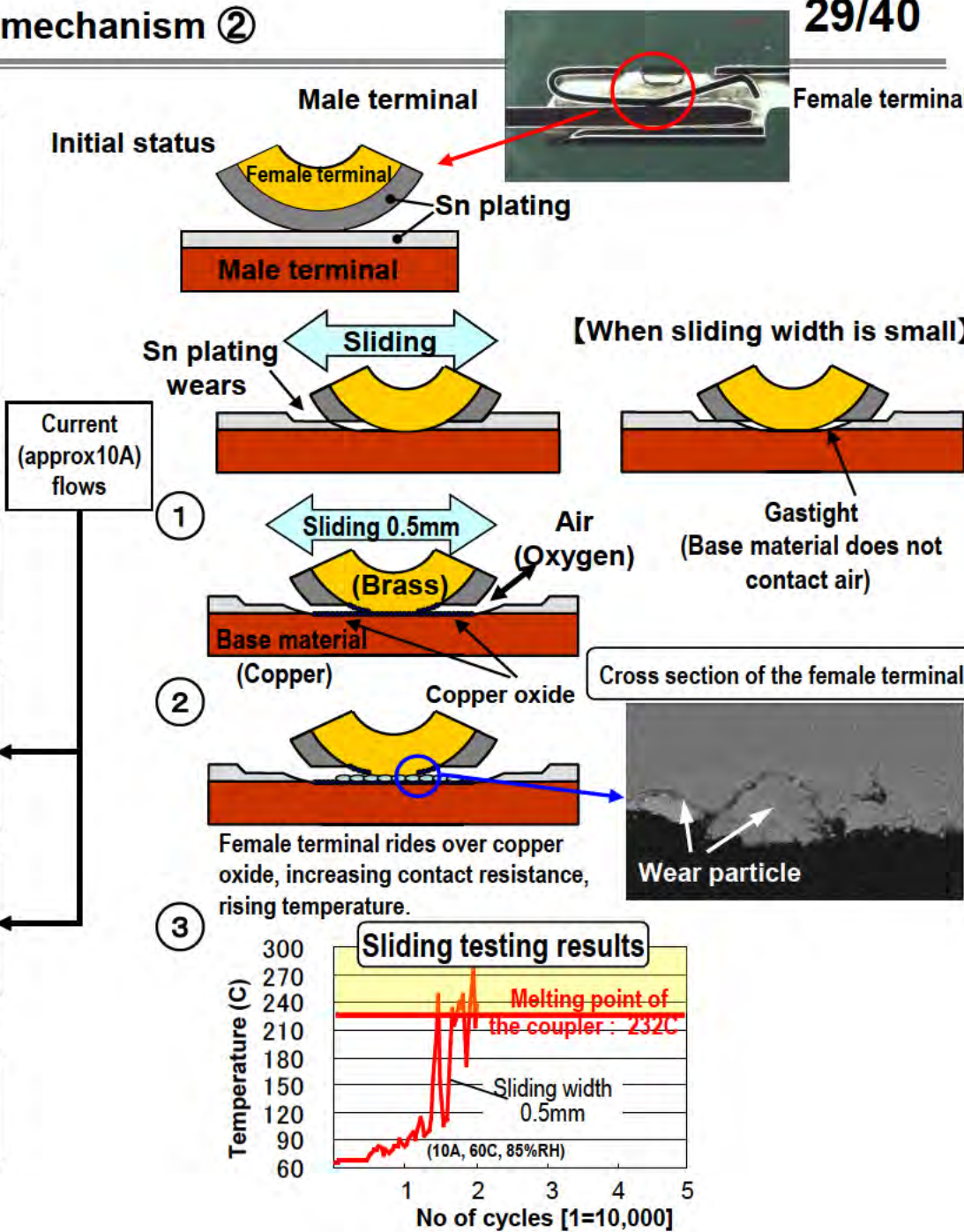
① Sn plating gradually wears from sliding of terminal connection area, base material is exposed, copper oxide generates on connection area between male and female terminal.  
When terminal repeatedly slides, copper oxide turns into wear particle, and wear particle builds up sliding portion.

② When terminal overrides wear particle from copper oxide, which built up when sliding, contact resistance increases, and connection area excessively heats up when headlight illuminates.

③ Less stress is applied to connection area of the terminal from heat, and contact pressure of the terminal drops.  
As a result, more wear particle enters between male and female terminal and the terminal further heats up.

If this condition continues, coupler plastic melts and flows into connection area, leading to no continuity, resulting in no illumination of the low beam.

\* No continuity occurs when coupler plastic melts and flows into connection area. Current does not flow, so fire does not spread.



Japan

Elapsed years	Current	In 10 years
Occurrences	130 cases	2424 cases
Occ rate	0.018%	0.33%

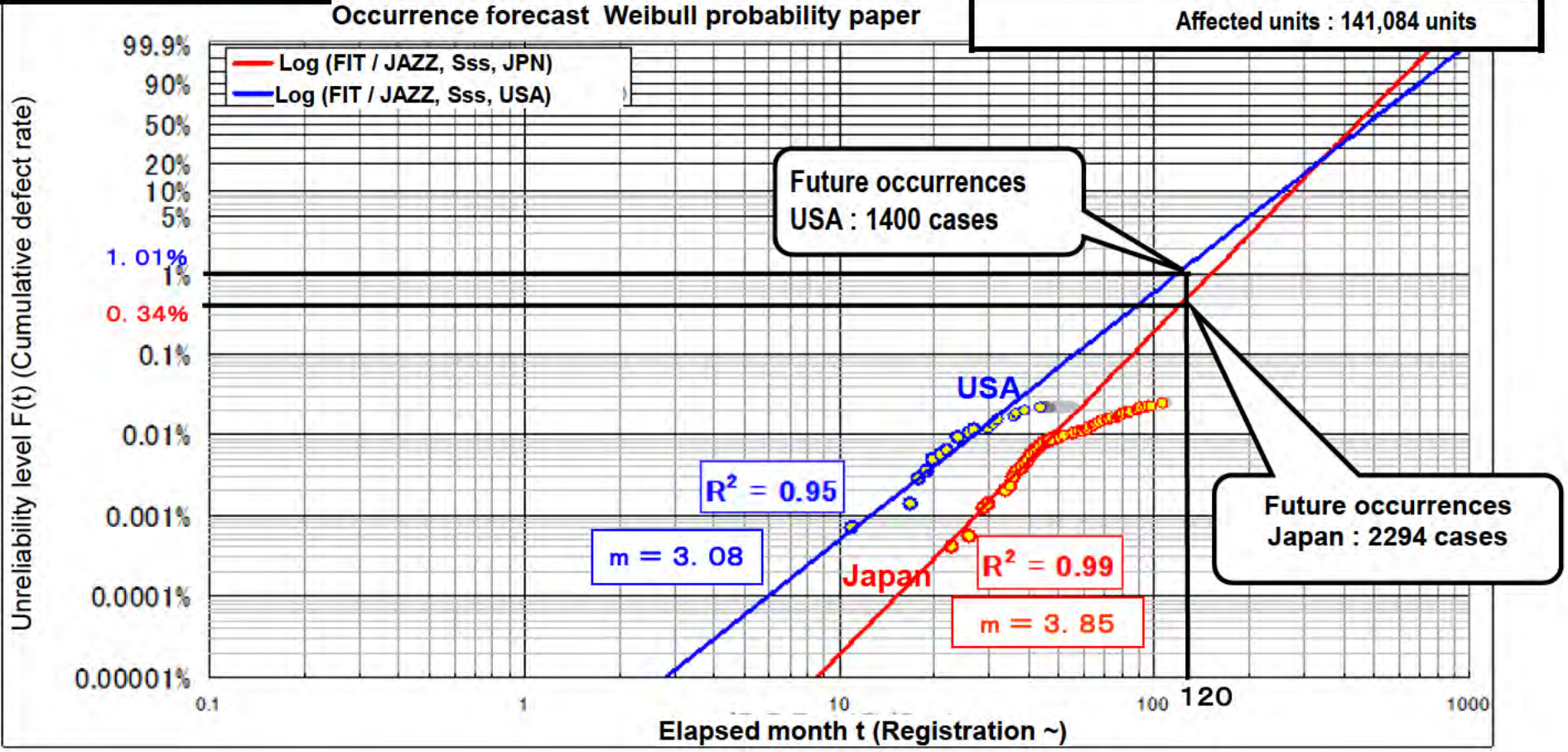
Affected units : 734,392 units

USA

Elapsed years	Current	In 10 years
Occurrences	25 cases	1425 cases
Occ rate	0.018%	1.01%

Affected units : 141,084 units

Occurrence forecast Weibull probability paper

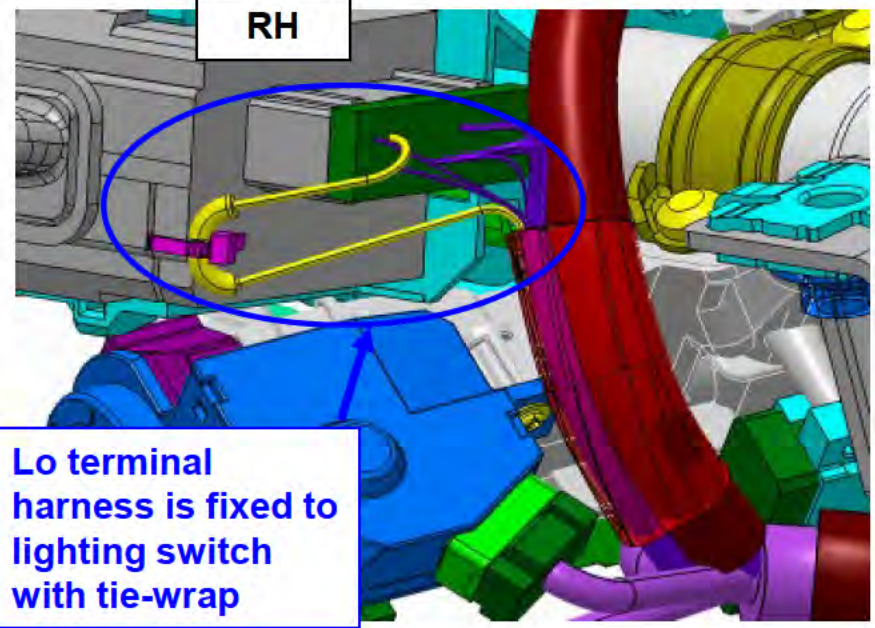


Countermeasure

- Sliding is prevented by tie-wrap  
By fixing female terminal harness (slack is maintained) to lighting switch with tie-wrap, the harness can move with the switch during operation, preventing sliding of the terminal connection area. (Harness has to be extended.)

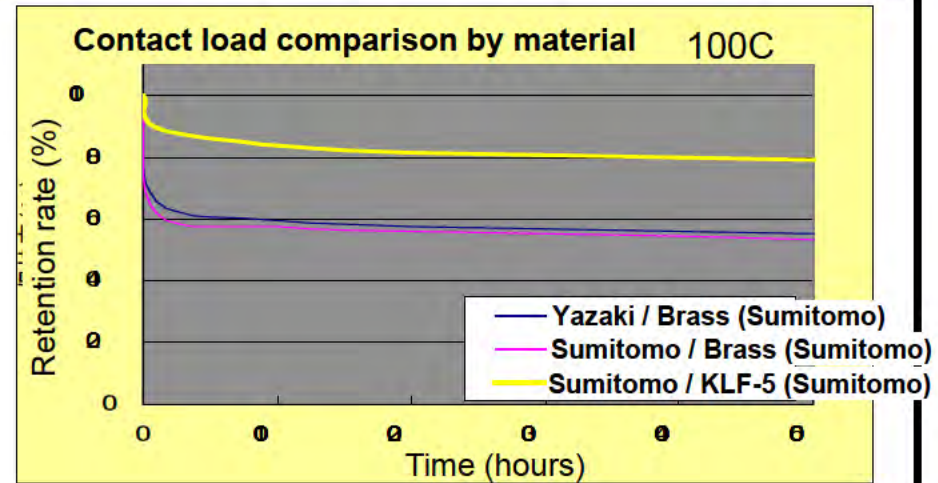


Remarks

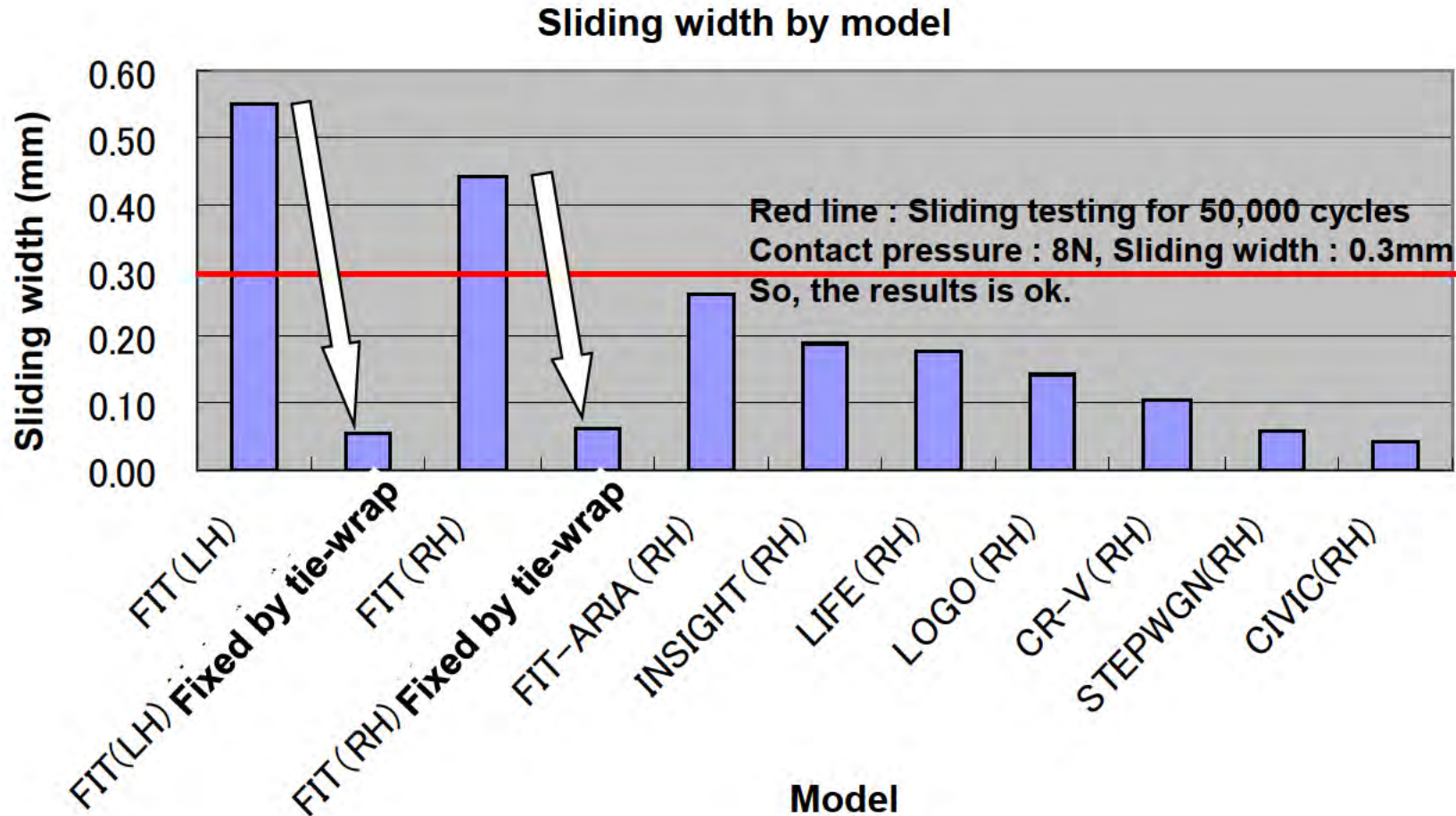


- Contact load reduction of female terminal will be less

Material will be changed to heat resistance copper alloy with smaller reduction of contact pressure load (Current : Brass)



- Confirm countermeasure effectiveness by operating lighting switch for 10,000 cycles on car.  
(1 cycle : Activate turn signal (Right) -> Neutral -> Activate turn signal (Left) -> Neutral -> Passing -> Neutral)



**Tie-wrap reduced sliding width to approx 1/10.**

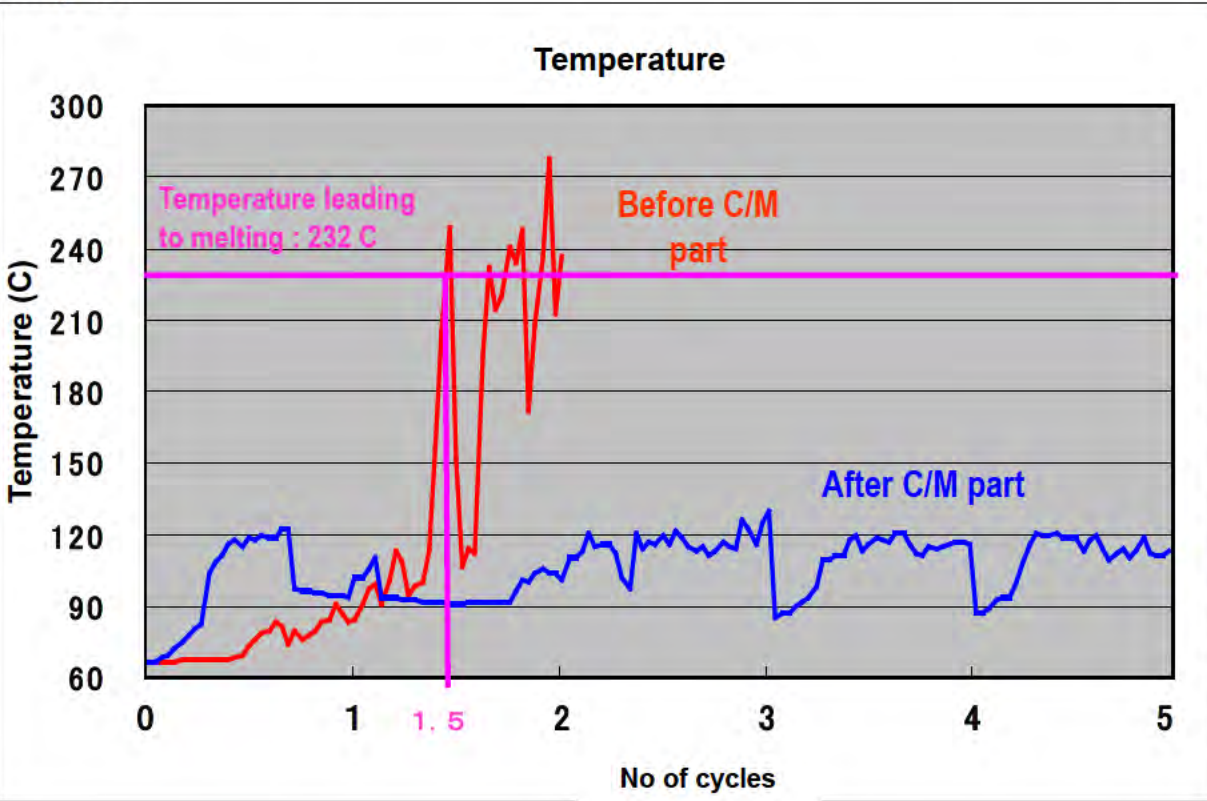
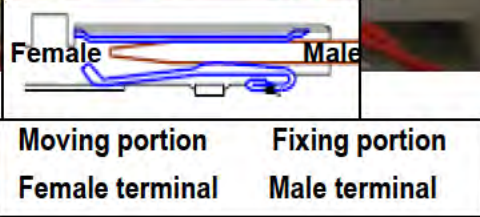
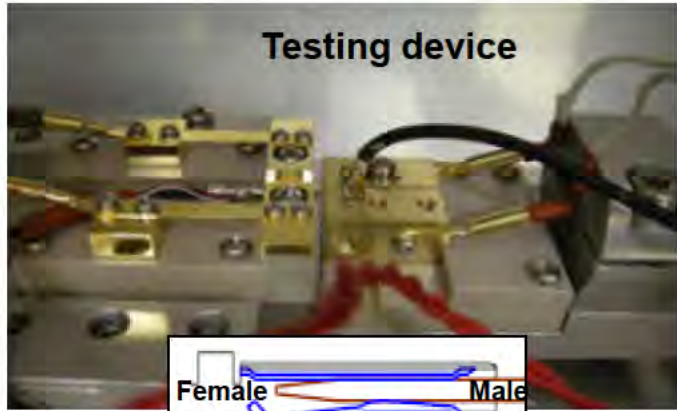
**8. Countermeasure 8-3 C/M effectiveness confirmation results by sliding testing using market action part 33/40**

We found that the failure will not occur by fixing the harness by tie-wrap and changing material of the female terminal to heat resistance copper alloy, even if Sn plating of the male terminal separates from wear.

Before C/M part : Melting damage occurs in approx 1.5 cycles.

After C/M part : Melting damage does not occur in 5 cycles.

After C/M part shows at least more than 3 fold toughness than before C/M part.



- <Testing condition>
- Female terminal : Heat resistance copper alloy (Reduction of contact pressure is small)
  - Male terminal : Copper (No plating : Equivalent to market parts)
  - Contact pressure load : 8N (Production control lower limit)
  - Oxide acceleration : The part was left at 100C for 120 hours before testing
  - Current : 10A
  - Temperature / humidity : +60C, 85%RH
  - Sliding width : 0.1mm (Equal to condition that the harness was fixed by tie-wrap)
  - Sliding cycle : 1 cycle (Sliding for 10,000 cycles ->Stop for 24 hours)



9-1. Action proposal

Propose positive market action

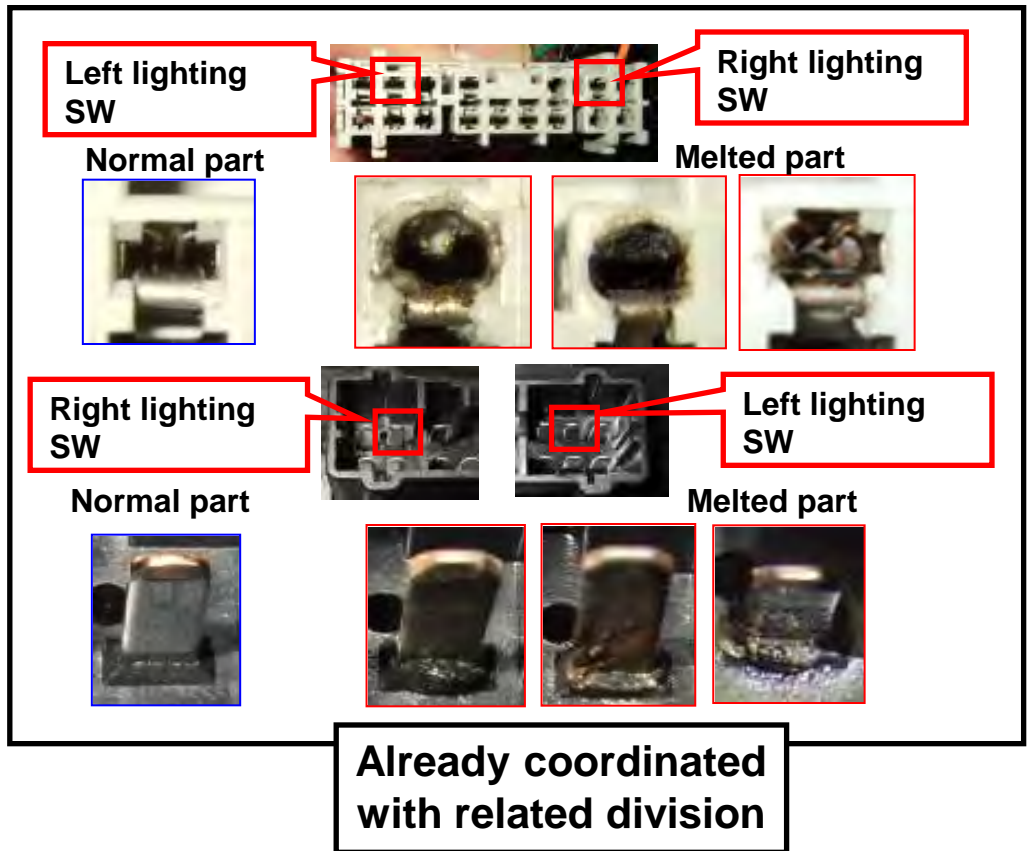
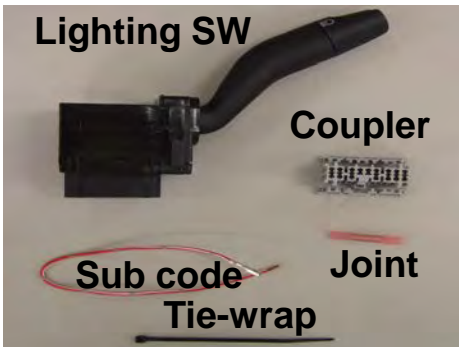
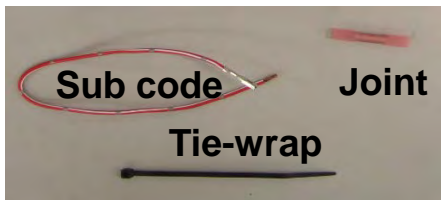
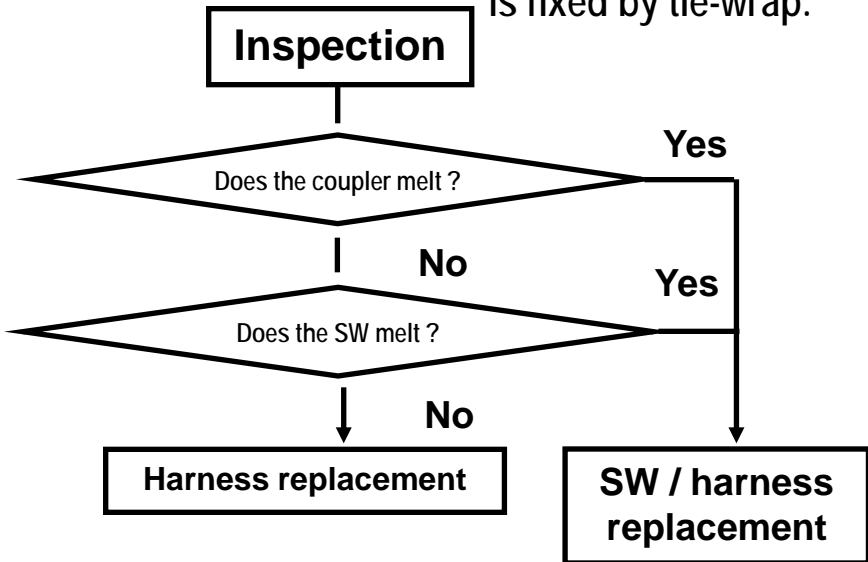
9-2. Reason for the proposal

Head light low beam does not illuminate, and future occurrences is expected.

9-3. Market action

Melting damage of the Lo terminal was checked.

- ① If the Lo terminal melts, lighting switch and Lo terminal harness are replaced, and the lighting switch is fixed by tie-wrap.
- ② If the Lo terminal does not melt, only Lo terminal harness is replaced, and the lighting switch is fixed by tie-wrap.



**9-4. Affected range** 02M~08M Sss built FIT / JAZZ (Halogen type)  
 (However, models for Canada will be excluded due to day light type)  
 Duration : From production on October 22, 2001 to end of production

**9-5. Affected units**

Factory	Market	02M	03M	04M	05M	06M	07M	08M	Total
Sss	Japan	238,193	147,751	59,564	162,984	125,900	—	—	734,392
	USA	—	—	—	—	—	67,091	73,993	141,084
	Europe	62,300	48,344	53,921	114,827	55,737	33,777	18,046	386,952
	A&O	1,629	16,200	7,059	16,177	2,469	5,185	2,923	51,642
	Others	3,976	3,042	3,333	8,831	6,704	9,780	5,481	41,147

**Grand total : 1,355,217 units**

## Action cost Approx 7.27 billion yen

Market	Action method	Man hour	Labor charge	Part cost	PLCA	Handling charge or H/C	DM	Cost per unit	Affected units	Break down of ①, ②	Cost	
Japan	①SW, harness replacement	0.7	¥4,200	¥914	-	¥1,200	¥432	¥6,746	5,000	0.7%	¥33,730,000	Approx 3.89 billion yen
	② Harness replacement	0.6	¥3,600	¥60	-	¥1,200	¥432	¥5,292	729,392	99.3%	¥3,859,942,464	
USA	①SW, harness replacement	0.8	¥6,659	¥1,590	-	¥636	¥93	¥8,978	2,000	1.4%	¥17,956,000	Approx 860 million yen
	② Harness replacement	0.7	¥5,827	¥113	-	¥45	¥93	¥6,078	139,084	98.6%	¥845,352,552	
Europe	①SW, harness replacement	0.8	¥5,507	¥1,556	¥725	-	¥500	¥8,288	2,600	0.7%	¥21,548,800	Approx 2.13 billion yen
	② Harness replacement	0.7	¥4,818	¥113	¥52	-	¥500	¥5,483	384,352	99.3%	¥2,107,402,016	
A&O	①SW, harness replacement	0.8	¥5,783	¥1,036	¥583	-	¥82	¥7,484	200	0.4%	¥1,496,800	Approx 270 million yen
	② Harness replacement	0.7	¥5,060	¥76	¥42	-	¥82	¥5,260	51,442	99.6%	¥270,584,920	
Others	①SW, harness replacement	0.8	¥2,726	¥1,635	¥968	-	¥113	¥5,442	200	0.5%	¥1,088,400	Approx 110 million yen
	② Harness replacement	0.7	¥2,385	¥113	¥67	-	¥113	¥2,678	40,947	99.5%	¥109,656,066	
	Other cost (Jig to remove terminal, tape etc)										¥9,535,000	Approx 10 million yen
											<b>Total : 7.27 billion yen</b>	

## \* Action method ① : Number of parts replaced

For kit with switch, we suspect that 0.1% of market parts have to be replaced from data of warranty claims in Japan and paid repair.

We will prepare 10,000 sets so that each dealer can have more than 1 part not to give inconvenience to customers.

For Japan and US where occurrences is high, each dealer will have 2 parts.

For other regions, each dealer will have 1 part.

Model	Factory	Market	Affected units	HINJOREN, QIC					Need for market action
				Current		Occ forecast in 10 years			
				Occ	Occ rate	Occ	Occ rate	Future occ	
FIT/JAZZ	Sss	Japan	734,392	130	0.018%	2,424	0.33%	2,294	Necessary
		USA	141,084	25	0.018%	1,425	1.01%	1,400	
		Others	479,741	9	0.002%	144	0.03%	135	
	HAB	SA	185,966	0	0%	1 ~ 2 more cases is suspected in the future			Not necessary
	HATC	A&O	118,060	0	0%				
	HPM	A&O	74,282	0	0%				
	GHAC	China	227,855	0	0%				
	CHAC	Europe	106,570	0	0.001%				
FIT ARIA	HATC	Japan	21,700	2	0.009%	—	0.02%	2	Not necessary
CR-V	Css		15,677	1	0.007%	—	0.01%	1	
STEPWGN	Sss, Css		47,119	1	0.002%	—	0.00%	1	

Slack is maintained and sliding width is small, so the cause of the symptom is determined to be different (Terminal contact pressure dropped etc)

The failure will continuously occur only for Sss built FIT / JAZZ.

	2010		2011			
	December		January		February	
Notification Market action	▽ Dec 16 (USA time Dec 15) Notification ▽ Dec 17 Market action start in Japan					
JSC GQC	▽ Dec 8 GQC					
			▼ : Market action start date (plan)			
Part arrangement	Japan 734,392	Dec 17 ▼	Dec 28 ▽	Jan 14 ▽	Jan 31 ▽	Feb 28 ▽
		147,000 (20%)	257,000 (35%)	368,000 (50%)	441,000 (60%)	662,000 (90%)
	USA 141,084			Jan 18 ▼	Feb 1 ▽	Feb 28 ▽
				35,000 (25%)	71,000 (50%)	113,000 (80%)
	Europe 386,952			Jan 18 ▼	Feb 1 ▽	Feb 28 ▽
				97,000 (25%)	193,000 (50%)	271,000 (70%)
	A&O 51,642			Jan 18 ▼	Feb 1 ▽	Feb 28 ▽
			13,000 (25%)	26,000 (50%)	36,000 (70%)	
Others 41,147			Jan 18 ▼	Feb 1 ▽	Feb 28 ▽	
			10,000 (25%)	21,000 (50%)	29,000 (70%)	

**Harness will extend so that the harness can absorb dislocation of the switch during operation, and harness routing will have no effect on terminal.**

**END**

02-08M Sss製 FIT/JAZZ 日本、USA、欧州、アジア大洋州、一般

## ライティングスイッチカプラー端子磨耗不具合

MV20091223094027(日本)

MV20100208102731(海外)

品質委員会

1. 前回指摘事項
2. 他地区検討会結果
3. 概要
4. 経緯
5. 訴え事象
6. 発生件数
7. 解析結果
8. 対策内容
9. 提案内容
10. 展開日程
11. 再発防止



2010. 12. 08

四輪品質改革部

大浦



## 1. 品質検討会（2010年11月23日）

### ■ 決定事項

品質委員会に提案してください。

### ■ NASC審議結果 (2010年12月7日)

#### AQAO提案内容

- ・USA市場における、Sss製 07~08M FIT/JAZZのライティングスイッチカプラー端子磨耗不具合に対し積極市場措置を提案する。

結論：NASCは提案を承認します。委員会へ提案してください

NASC		Date : 12 / 06 / 2010																																																															
NASC Decision Maker :	Present: S. Taguchi ( AH Service / NASC Chairman ) , Ken Dick (CH), C.Hale (AH-PRO), A Yasuoka (AH-PRO) Meeting Minutes by Y.Takatsuka ( AH-Service )																																																																
	Not Present K. Toshimitsu(HAM) ---- Delegated rights to NASC Chairman.																																																																
Title:	07-08YM FIT Headlight Low Beam																																																																
Symptom:	Headlight low beam not come ON, burnt smell, smoke.																																																																
Occurrence Rate:	QIC: 164cases / Occ. rate0.013%																																																																
Occurrence Cause:	From large sliding in terminal area from switch operation, Snplating on male terminal and female terminal is worn, base material is exposed and oxidized, wear particle is generated and contact resistance increases, leading to melting.																																																																
Countermeasure:	To reduce sliding in terminal area, fixed Lo terminal harness to lighting switch by TY-RAP. And changed base material of female terminal from brass to heat resistant copper alloy.																																																																
Affected Units	<table border="1"> <thead> <tr> <th>Market</th> <th>02M</th> <th>03M</th> <th>04M</th> <th>05M</th> <th>06M</th> <th>07M</th> <th>08M</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>USA</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>67,091</td> <td>73,993</td> <td>141,084</td> </tr> <tr> <td>Japam</td> <td>238,193</td> <td>147,751</td> <td>59,564</td> <td>162,984</td> <td>125,900</td> <td>---</td> <td>---</td> <td>734,392</td> </tr> <tr> <td>Europe</td> <td>62,300</td> <td>48,344</td> <td>53,921</td> <td>114,827</td> <td>55,737</td> <td>33,777</td> <td>18,046</td> <td>386,952</td> </tr> <tr> <td>Asia &amp; Oceania</td> <td>1,829</td> <td>16,200</td> <td>7,059</td> <td>16,177</td> <td>2,469</td> <td>5,185</td> <td>2,923</td> <td>51,642</td> </tr> <tr> <td>Other</td> <td>3,976</td> <td>3,042</td> <td>3,333</td> <td>8,831</td> <td>6,704</td> <td>9,790</td> <td>5,481</td> <td>41,147</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>G-Total</td> <td>1,355,217</td> </tr> </tbody> </table>	Market	02M	03M	04M	05M	06M	07M	08M	Total	USA	---	---	---	---	---	67,091	73,993	141,084	Japam	238,193	147,751	59,564	162,984	125,900	---	---	734,392	Europe	62,300	48,344	53,921	114,827	55,737	33,777	18,046	386,952	Asia & Oceania	1,829	16,200	7,059	16,177	2,469	5,185	2,923	51,642	Other	3,976	3,042	3,333	8,831	6,704	9,790	5,481	41,147								G-Total	1,355,217	
Market	02M	03M	04M	05M	06M	07M	08M	Total																																																									
USA	---	---	---	---	---	67,091	73,993	141,084																																																									
Japam	238,193	147,751	59,564	162,984	125,900	---	---	734,392																																																									
Europe	62,300	48,344	53,921	114,827	55,737	33,777	18,046	386,952																																																									
Asia & Oceania	1,829	16,200	7,059	16,177	2,469	5,185	2,923	51,642																																																									
Other	3,976	3,042	3,333	8,831	6,704	9,790	5,481	41,147																																																									
							G-Total	1,355,217																																																									
Last QIM Discussion : (Nov 03, 2010 )	As a result of investigation by AQAO, Road Trucking Vehicle Act in Japan specifies "Start to take action promptly." Quality Audit & Compliance Division and AQID take "promptly" as start action on the following day of notification but it is not law and regulations. NASC agreed AQAO's future schedule proposal that a proactive market treatment will be started from mid January 2011. Final NASC meeting will be held on December 6 or 7. AQAO will provide C/M parts before mid January 2011 to take action for stop sales vehicles quickly as well as affected vehicles in the market. AQAO also make clear which country have to conduct a proactive market treatment besides Japan, USA and Canada, and report at next NASC meeting with clear reason.																																																																
Today's NASC Discussion:	NASC propose Safety Recall Campaign should be conducted as a market action since this is considered a safety issue.																																																																

### ■EQC審議結果(2010年12月6日)

#### AQAO提案内容

- ・欧州市場における、Sss製 02~08M FIT/JAZZのライティングスイッチカプラー端子磨耗不具合に対し積極市場措置を提案する。

結論:EQCは日本の提案を承認する。

		EQC
Title	件名	02~08 Jazz/Fit ヘッドライトロービーム点灯しない
Problem Description	不具合内容	ヘッドライトロービームが点灯しない、焦げ臭い/発煙
Occurrence	発生状況	164 件 / 0.013%
Cause	原因	ヘッドライトスイッチカプラー内の端子が磨耗し酸化、コネクタの抵抗が高くなる
Countermeasure	対策	1. メス端子の材料を耐熱性のある銅合金に変更 2. 摺動接触を最小限に抑えるためハーネスをタイラップでライティングスイッチに固定
Affected Units	対象台数	全世界 = 135万台. EU = 381,798台.
Discussion	討議内容	AQAOはハーネスレイアウトからSss製車両のみが対象であることを確認。 他の製作所で製造した同じスイッチを使った他機種は組付け工程で端子部分の張力を緩和するハーネスの“たるみ”があり、接点の磨耗に至らない。  安全リコールを提案する  日本は2010年12月16日に届出し、2010年12月17日に措置を開始する。 EUでの措置開始日は2011年1月18日頃。  EQCは日本の提案を承認する

		EQC
Title		02~08 Jazz/Fit headlight low beam not coming on
Problem Description		The headlight low beam does not come on or burnt smell/smoke
Occurrence		164 cases / 0.013% Occ.
Cause		Terminal wear within the headlight switch coupler leading to oxidization and high resistance of the connector.
Countermeasure		1. Female terminal material changed to heat resistant copper alloy 2. Harness secured to lighting switch with ty-rap to minimise sliding contact.
Affected Units		Worldwide = 1.35million. EU = 381,798.
Discussion		AQAO confirmed that Sss built vehicles only are affected due to harness layout. Other factory built models using same switch have additional 'sag' in the harness due to assembly process which reduces the tension on the terminal and does not lead to wear of the contact.  Proposal is to carry out safety recall.  Japan will announce on 16th Dec 2010 and action will start on 17th December 2010. EU estimated start date is 18th Jan 2011.  EQC Committee agree with Japan proposal.

### ■AQC審議結果(2010年12月3日)

#### AQAO提案内容

- ・ア大市场における、Sss製 02~08M FIT/JAZZのライティングスイッチカプラー端子磨耗不具合に対し積極市場措置を提案する。

結論：Sss製FIT/JAZZの提案を承認する

レベル: <input checked="" type="checkbox"/> AQC <input type="checkbox"/> AQM <input type="checkbox"/> AQIM		【確認者】
件名	1. 02-08 Fit/Jazz (Sss生産) ロービーム不灯 (TV会議) 提案内容確認	ASH-CS 江口(GM) 田屋(BM)
AQC/CN バー 見解	<ul style="list-style-type: none"> <li>・Sss製FIT/JAZZの提案を了承する。JQ/CNに提案して下さい。</li> <li>・Sss製以外については継続して解析が必要と考えます。</li> </ul>	HATC-M 遠藤(CEQ) HRAP カニツト(QC MG)
討議内容	<ul style="list-style-type: none"> <li>・訴え事象：ヘッドライトロービーム不灯、焦げ臭い、煙が出た</li> <li>・発生件数：品情連とQC件数 164件 発生率 0.013%</li> <li>・発生原因：インパネ配線のライティングスイッチへの分岐配線長の設定が不適切なためライティングスイッチのLO端子配線が張られた状態にあり、ターン操作またはヘッドライト切り替え操作などで端子嵌合部が繰返し大きく揺動したため、オス端子とメス端子のSnメッキが剥がれ、母材が磨耗して堆積した酸化銅により接触抵抗値が増大し、溶損した樹脂カプラーが接触面に流れ込み炭化し導通不良となる</li> <li>・措置提案：積極市場措置を提案する</li> <li>・措置理由：ヘッドライトロービーム不灯の事象であり、今後も発生が予測されるため</li> <li>・市場措置内容：Lo端子部の溶損を点検し               <ul style="list-style-type: none"> <li>①溶損している場合は、ライティングスイッチ交換とLo端子ハーネスを交換し、ライティングスイッチにタイラップで固定</li> <li>②溶損していない場合は、Lo端子ハーネスのみを交換しライティングスイッチにタイラップで固定</li> </ul> </li> <li>・対象範囲：ハロゲン仕様の02M~08M Sss製FIT/JAZZ(但し、カナダ仕向けはデライト仕様のため除く) 2001年10月22日以降の生産から生産終了まで</li> <li>・対象台数：1,355,396台               <ul style="list-style-type: none"> <li>日本:734,392台、USA:141,070台、欧州:375,783台、ア大:59,147台、一般:45,004台</li> </ul> </li> </ul> <p>&lt;審議内容&gt;</p> <ul style="list-style-type: none"> <li>・各SSのレイアウトを確認した結果、Sssのみがレイアウトが異なり、たわみ量が小さい</li> <li>・作業手順の違いでもハーネスたわみ量に差が生じている</li> <li>・WTY発生率はSssよりHATCの方が高いが、これは別要因によるものと考えている(AQAO)</li> <li>・Sss製以外についての原因については、継続しての調査解析が必要と判断する。AQAOの協力をお願いする。</li> <li>・AQAOからの依頼事項：HATCの作業標準を提示ください</li> </ul>	ASH-AOTC 上野(Sr.Co.) 中森(Co.) 阿波(Co.)

### ■SAQC審議結果(2010年12月2日)

#### AQAO提案内容

- ・南米市場における、Sss製 02~08M FIT/JAZZのライティングスイッチカプラー端子磨耗不具合に対し積極市場措置を提案する。

結論:SAQCはAQAO提案内容に同意する。

### 南米品質委員会(SAQC)議事録

議題: Sss製 02-08M FIT/JAZZ ヘッドライトロービーム不灯

日時: 2010年 12月 8日(水)

場所: HAB Sumare/Morumbi

出席者:

HAB-Quality Wakatsuki, Marcos

HAB-Service Harada, Cury

#### 【議題】

1. Sss製 02-08M FIT/JAZZへの積極的市場措置の提案について
2. HAB製同モデルへの対応について

#### 【SAQC議決事項】

1. SAQCはAQAOの提案(Sss製当該車両の積極的市場措置)に同意する
2. HAB製同モデルについて措置不要とするにはブラジル当局へ技術説明が必要となる場合があるため、日本側より技術説明資料を提供していただきたい

### ■CQC審議結果(2010年12月6日)

#### AQAO提案内容

- ・Sss製 02~08M FIT/JAZZのライティングスイッチカプラー端子磨耗不具合に対し積極市場措置を提案する。
- 結論:提案を了承します。

例外中国品質委員会議事録

2010年12月6日 於:GHAC会議室他

出席者

CQC議長 GHAC関根検主技

GHAC 張元科長

HMCI 加藤科長

AQAO 室長 尾崎室長 電装 Gr. 林GL、畑谷主任

CSO テック 馬場主任

CHAC 西村検主技

WDHAC・・・庭山検主技、岩本科長、池田科長

記 GHAC MQ 東浦

**中国品質委員会**

←

1、FITロービーム不灯 (AQAO) ←

別紙詳細資料参照←

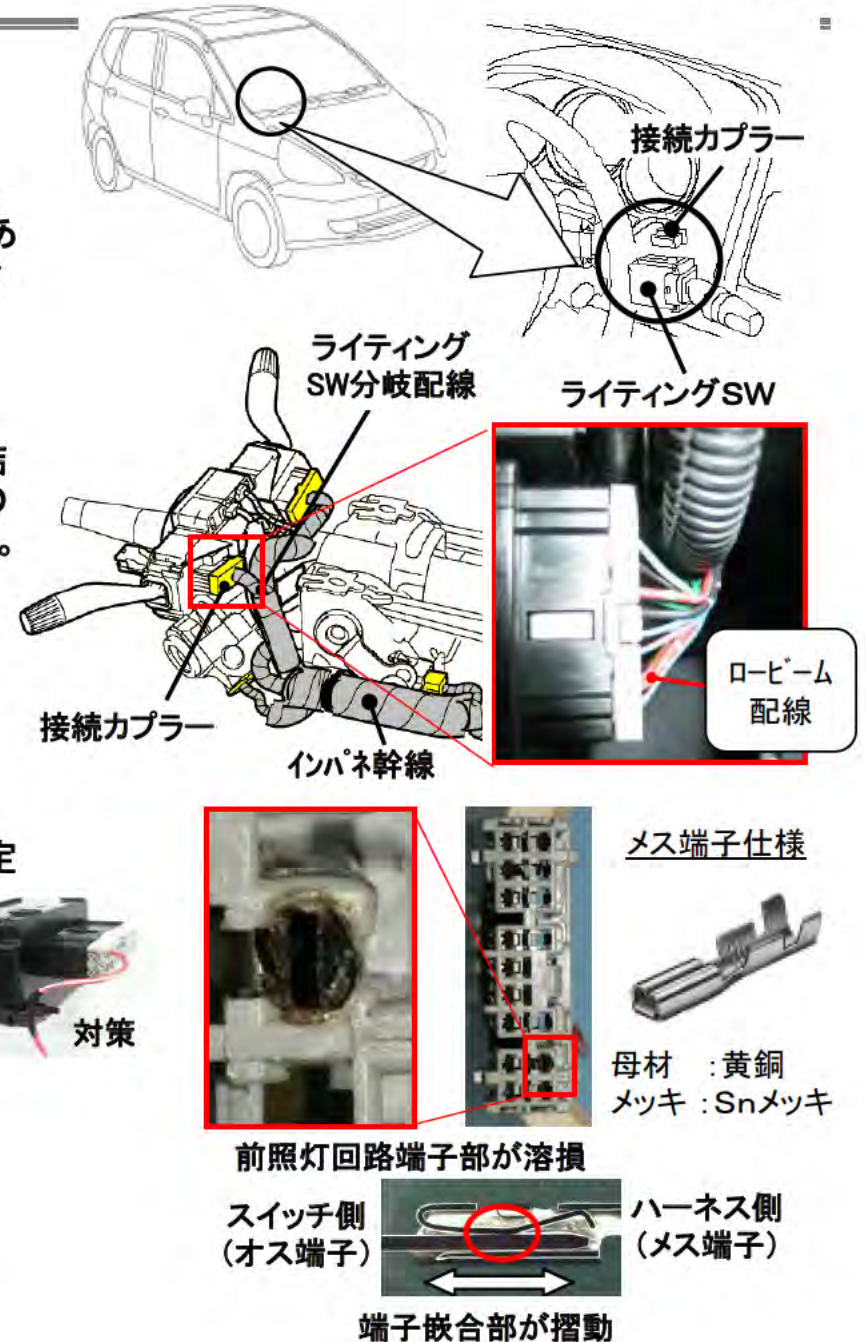
まとめ←

- ・提案を了承します。←

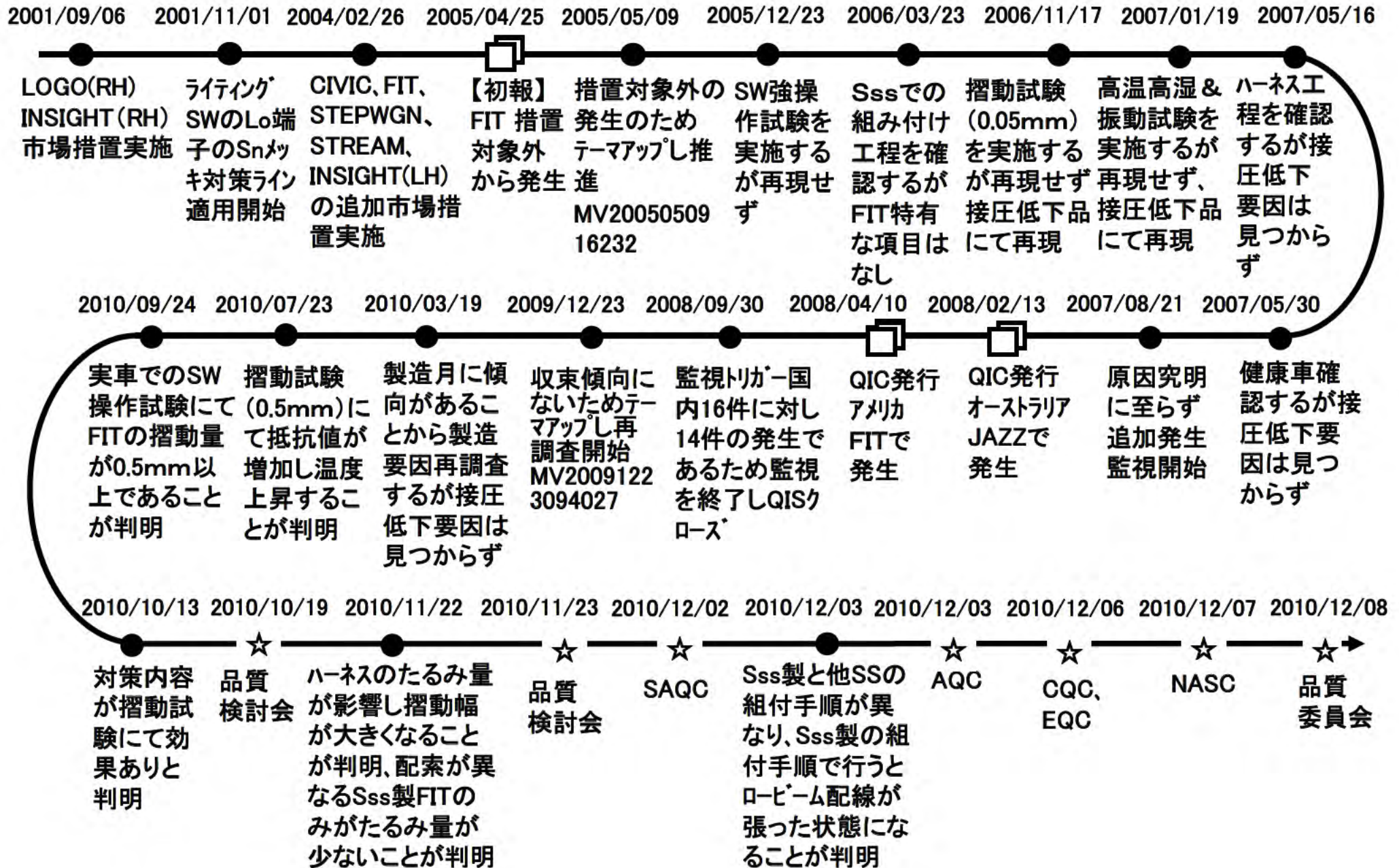
ただし中国総局への技術説明ができるバック資料の準備をお願いします。

# 3. 概要

- 1.不具合事象 ヘッドライトロービーム不灯、焦げ臭い、煙が出た
- 2.発生状況 品情連とQIC件数 164件 発生率 0.013%
- 3.発生原因 ライティングスイッチに接続する電気配線の配線長さに余裕が少ない設定のため、配線作業で配線を張り過ぎたものがある。そのため、ヘッドライトの切替えスイッチを操作すると、端子結合部が動いて接触抵抗が増え、端子が発熱してカプラーが溶け、最悪の場合、ロービームが不灯となる
- 4.対策内容 該当機種、生産終了のため対策せず。市場にて、全車両ロービーム端子を長い配線を用いた端子と交換し、配線を結束バンドで固定する。なお、接続カプラーが溶損しているものは、ライティングスイッチと配線側カプラーを新品に交換する。
- 5.措置提案 積極市場措置を提案する
- 6.提案理由 ヘッドライトロービーム不灯の事象であり、今後も発生が予測されるため
- 7.措置内容 Lo端子部の溶損を点検し  
①溶損している場合は、ライティングスイッチ交換とLo端子ハーネスを交換し、ライティングスイッチに結束バンドで固定  
②溶損していない場合は、Lo端子ハーネスのみを交換しライティングスイッチに結束バンドで固定
- 8.対象範囲 ハロゲン仕様の02M~08M Sss製FIT/JAZZ (但し、カナダ仕向けはデイトライト仕様のため除く)  
2001年10月22日以降の生産から生産終了まで
- 9.対象台数 1,355,217台  
日本:734,392台、USA:141,084台、  
欧州:386,952台、ア大:51,642台、一般:41,147台
- 10.措置費用 約72.7億円



# 4. 経緯





# 5. 訴え事象 5-1 品情連とQICの一覧

## 日本(130件)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	日本	GD1	GD1-1728129	2005/04/21	2003/08/26	2003/06/23	60651	走行中突然ヘッドライトが両方つかなくなった
2	日本	GD2	GD2-1020582	2005/06/18	2002/06/26	2002/06/17	39494	ヘッドライト点灯しない
3	日本	GD1	GD1-1094570	2005/09/02	2001/12/25	2001/12/18	76599	ヘッドライト点灯しない
4	日本	GD1	GD1-1072865	2005/09/05	2001/11/22	2001/11/09	166938	ヘッドライト点灯しない
5	日本	GD1	GD1-1210960	2005/09/14	2002/07/19	2002/07/09	87855	ヘッドライトが点かない
6	日本	GD1	GD1-1141663	2005/10/27	2002/03/26	2002/03/20	58380	ヘッドライト左右点灯しない
7	日本	GD1	GD1-1145644	2006/05/15	2003/08/07	2002/03/26	53381	ヘッドライトLOビーム点灯しない。(Hビームは点灯する)
8	日本	GD1	GD1-2113275	2006/06/24	2004/08/03	2004/07/08	105125	ヘッドライトLOビーム点灯しない
9	日本	GD1	GD1-1119787	2006/11/22	2002/02/20	2002/02/11	57826	ヘッドライト点灯せず(左右)
10	日本	GD2	GD2-1509358	2007/01/21	2003/04/24	2003/04/17	76755	ヘッドライト急に点灯しなくなった
11	日本	GD1	GD1-1563270	2007/02/11	2003/03/14	2003/03/07	131871	ハンドル付近より煙が出た
12	日本	GD2	GD2-1702888	2007/06/24	2004/05/28	2004/03/12	59206	ヘッドライト近目がつかない
13	日本	GD1	GD1-1152646	2007/06/29	2002/04/15	2002/04/08	57356	ヘッドライト点灯不良
14	日本	GD2	GD2-1703160	2007/08/05	2003/03/31	2003/03/23	31771	ヘッドライト点灯しない
15	日本	GD1	GD1-1141663	2007/08/18	2002/04/24	2002/03/20	23754	ヘッドライトHビームが点灯しなくなる。
115	日本	GD1	GD1-2308348	2010/08/17	2006/01/10	2005/12/23	121207	ヘッドライト不灯
116	日本	GD1	GD1-2155735	2010/08/20	2004/11/26	2004/11/12	84223	焦臭くなってヘッドライト点灯しない。
117	日本	GD1	GD1-2363097	2010/08/31	2006/09/28	2006/09/22	52527	左右ヘッドライトロービーム点灯しない
118	日本	GD1	GD1-2032282	2010/09/02	2004/04/26	2004/03/30	83126	ヘッドライトロービームつかない。[配線焼け]
119	日本	GD1	GD1-2154158	2010/09/06	2004/12/17	2004/11/05	73296	ヘッドライト点灯せず
120	日本	GD1	GD1-2367510	2010/08/28	2006/11/21	2006/10/14	64144	ヘッドライト両方ともつかない(点灯しない)
121	日本	GD1	GD1-2397604	2010/09/06	2007/03/16	2007/03/06	82729	ヘッドライトのロービームが左右不灯になった。
122	日本	GD1	GD1-2421610	2010/09/13	2007/09/27	2007/06/26	69384	左右ヘッドライトロービームが点灯しない
123	日本	GD2	GD2-1912050	2010/09/14	2007/02/14	2007/02/05	86094	ヘッドライト(LOWビーム)点灯しなくなった。
124	日本	GD1	GD1-2008448	2010/10/03	2004/02/24	2004/01/28	124436	ライティングスイッチから煙が出た
125	日本	GD1	GD1-2387678	2010/10/06	2007/03/28	2007/01/30	83234	左右ヘッドライトロービーム点灯しない
126	日本	GD1	GD1-2146979	2010/10/18	2004/11/11	2004/10/18	51701	ヘッドライト点かない(LO)
127	日本	GD1	GD1-2372739	2010/10/20	2006/12/08	2006/11/14	67310	左右ヘッドライト下向き点灯しない
128	日本	GD1	GD1-2116395	2010/10/22	2004/07/23	2004/07/15	82224	ヘッドライト点灯しない。
129	日本	GD1	GD1-1075680	2010/10/23	2001/11/28	2001/11/15	79810	左右ヘッドライト点灯しない。
130	日本	GD1	GD2-1911890	2010/11/03	2007/02/20	2007/01/31	69097	ヘッドライト点灯しない(ロービーム)

## 5. 訴え事象 5-1 品情連とQICの一覧

### USA(25件)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	アメリカ	GD3	JHMGD38647S	2008/03/07	2007/04/30	2007/02/08	34,682	ヘッドライトのロービームが作動しない
2	アメリカ	GD3	JHMGD38637S	2008/10/04	2007/03/29	2007/02/06	56,456	ロービームが作動しない
3	アメリカ	GD3	JHMGD38647S	2008/10/04	2007/04/21	2007/02/05	21,854	ロービームが作動しない
4	アメリカ	GD3	JHMGD38617S	2008/10/15	2007/06/15	2007/05/18	44,534	ロービームが作動しない
5	アメリカ	GD3	JHMGD38617S	2008/10/30	2007/03/22	2007/02/05	50,205	ロービームが作動しない
6	アメリカ	GD3	JHMGD37417S	2008/11/06	2007/03/31	2007/02/20	25,453	ロービームが作動しない
7	アメリカ	GD3	JHMGD38607S	2009/01/12	2007/01/17	2006/12/04	96,893	ロービームが作動しない
8	アメリカ	GD3	JHMGD38667S	2009/03/07	2007/03/16	2007/02/02	26,467	ヘッドライトのロービームが作動しない
9	アメリカ	GD3	JHMGD38417S	2009/03/14	2007/09/30	2007/06/19	54,131	ヘッドライトが作動しない
10	アメリカ	GD3	JHMGD38687S	2009/03/20	2007/05/22	2007/04/11	92,083	ロービームが作動しない
11	アメリカ	GD3	JHMGD38687S	2009/03/24	2007/07/06	2007/06/09	52,928	ロービームが作動しない
12	アメリカ	GD3	JHMGD38457S	2009/03/26	2007/04/16	2006/12/04	105,200	ロービームが作動しない
13	アメリカ	GD3	JHMGD38647S	2009/05/04	2007/02/12	2006/12/11	64,490	ロービームが作動しない
14	アメリカ	GD3	JHMGD37627S	2009/05/09	2007/03/15	2007/02/01	66,595	ロービームが作動しない
15	アメリカ	GD3	JHMGD38667S	2009/05/11	2007/06/04	2007/04/20	86,602	ロービームが作動しない
16	アメリカ	GD3	JHMGD38447S	2009/05/26	2006/12/12	2006/10/23	127,730	ロービームが作動しない
17	アメリカ	GD3	JHMGD38697S	2009/06/09	2006/10/19	2006/09/06	52,264	ロービームが作動しない
18	アメリカ	GD3	JHMGD38437S	2009/06/11	2006/11/13	2006/10/09	32,701	ロービームが作動しない
19	アメリカ	GD3	JHMGD38647S	2009/12/30	2007/05/10	2007/03/29	74,024	ヘッドライト不灯
20	アメリカ	GD3	JHMGD38687S	2010/01/04	2007/06/20	2007/04/10	52,755	ロービームが作動しない
21	アメリカ	GD3	JHMGD38677S	2010/07/15	2007/08/15	2007/05/21	100,744	ロービームが作動しない
22	アメリカ	GD3	JHMGD37658S	2010/09/01	2008/07/26	2008/06/12	34,318	ロービームが作動しない
23	アメリカ	GD3	JHMGD38407S	2010/09/14	2007/01/16	2006/11/02	126,243	ヘッドライト不灯
24	アメリカ	GD3	JHMGD38607S	2010/09/22	2007/06/27	2007/05/12	93,557	煙がでた
25	アメリカ	GD3	JHMGD38677S	2010/08/04	2007/07/07	2007/04/24	116,659	ロービームが作動しない

欧州(6件)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	チェコ	GD3	JHMGD57307S	2010/01/11	2007/05/31	2006/12/13	39,161	ヘッドライト点灯しない
2	ハンガリー	GD3	JHMGD57307S	2010/03/04	2007/07/17	2006/12/19	94,494	車内に煙と焦げたプラスチックの臭いがする
3	イタリア	GD3	JHMGD18906S	2010/03/17	2007/03/26	2006/02/06	45,000	ライティングスイッチのカプラ部に小さな溶損
4	イタリア	GD5	JHMGD57307S	2010/04/26	2007/06/29	2006/12/19	42,447	ヘッドライトが作動しない
5	イスラエル	GD1	JHMGD18608S	2010/08/22	2008/10/28	2008/07/15	58,825	お客様からヘッドライトに問題があるとの訴えを受けた
6	ルーマニア	GD1	JHMGD17507S	2010/09/29	2007/06/08	2007/02/09	47,864	運転して15分後、煙が出た

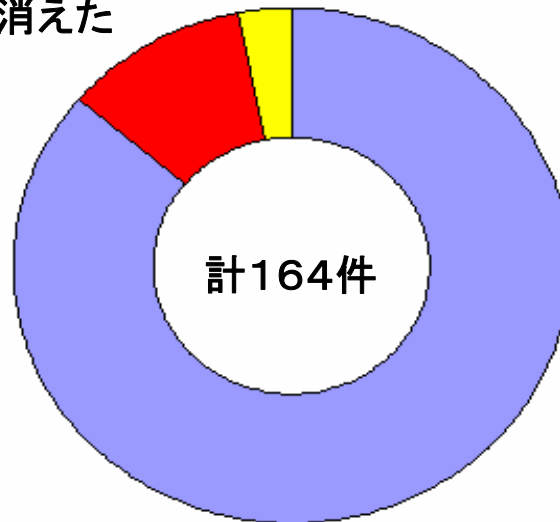
アジア大洋州(3件)

No.	発生地域	型式	車体番号	発生日	登録日	生産日	走行距離 (Km)	不具合状況
1	オーストラリア	GD3	JHMGD38504S	2008/02/11	2004/07/09	2004/05/20	108,794	ヘッドライトが点灯しない
2	オーストラリア	GD3	JHMGD38504S	2008/04/10	2004/02/19	2003/12/22	70,821	ヘッドライトのロービームが点かないと、お客様は訴えた。
3	オーストラリア	GD3	JHMGD37505S	2009/05/28	2005/01/27	2004/12/09	85,693	ヘッドライト(ロービーム)が作動しない。

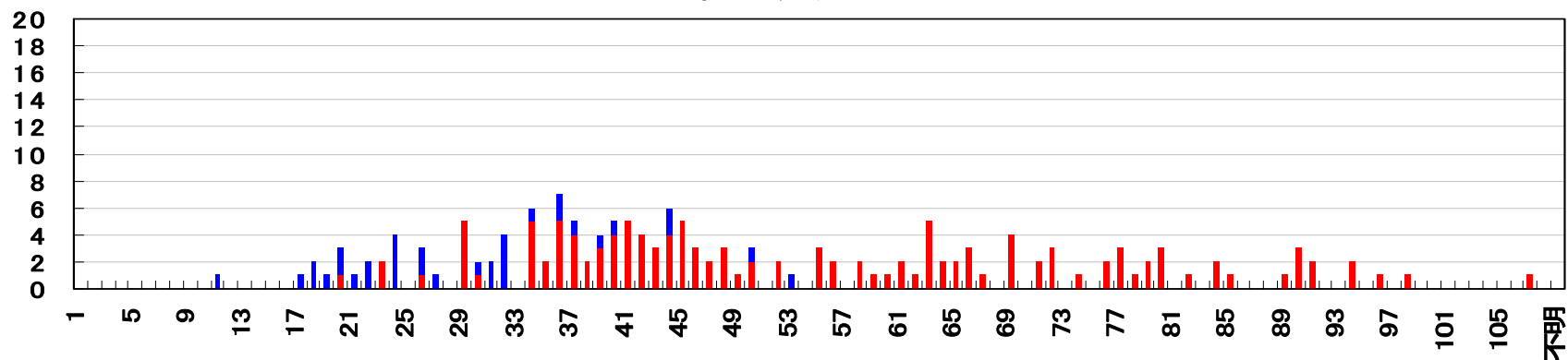
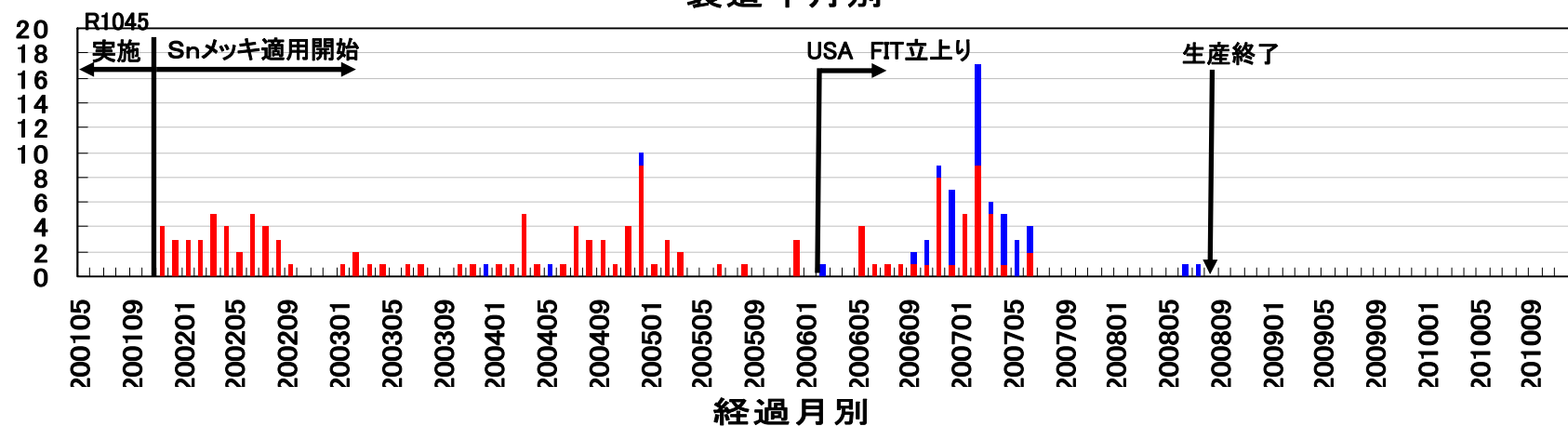
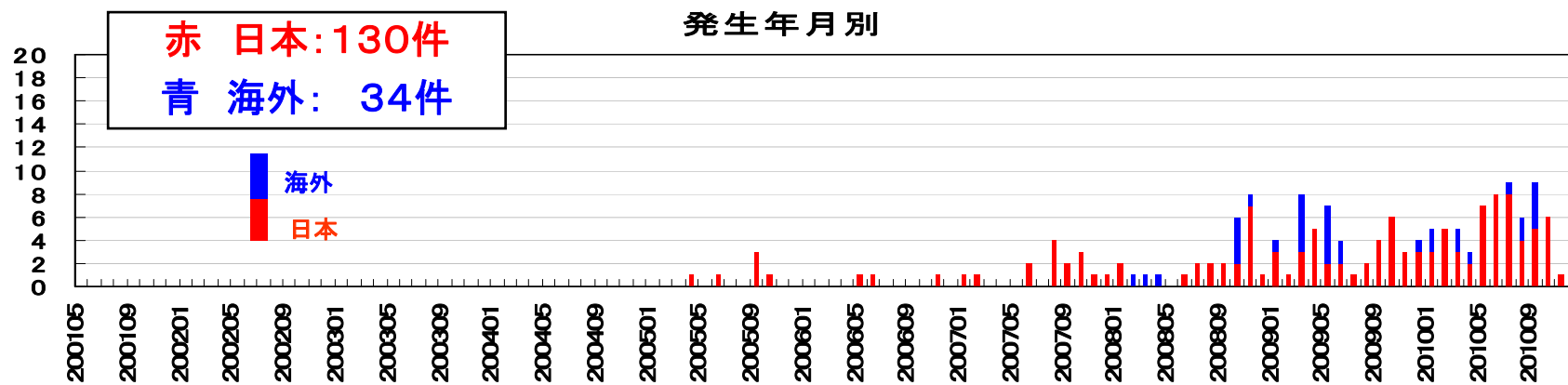
3-2 品情連とQICの分類

走行中ロービームが消えた  
18件

異臭、発煙 5件



ヘッドライトロービーム点灯せず  
141件



# 6. 発生件数 6-2 同じ構造の機種別の発生状況分析(品情連とQIC)

機種	年式												全世界 販売台数	品情連、QIC		スイッチ M/L	ハーネス M/L
	99	00	01	02	03	04	05	06	07	08	09	10		件数	発生率		
FIT/JAZZ		第2弾											2,002,870	164	0.008%	東洋電装	矢崎
FIT ARIA /CITY													709,489	9	0.001%		矢崎
CR-V													674,592	6	0.001%		住友
LOGO													80,016	17	0.021%		住友
INSIGHT													7,282	4	0.055%		住友
STEPWGN													47,389	1	0.002%		住友
CIVIC													830,266	0	0.000%		住友
STREAM													39,264	0	0.000%		住友
MOBILIO													85,739	0	0.000%		矢崎
EDIX/FR-V													87,412	0	0.000%		住友
ELEMENT													320,962	0	0.000%		住友
PILOT													401,348	0	0.000%		矢崎
LIFE													55,753	0	0.000%		住友
→ '01/11からSW Snメッキライン適用												5,342,382	※4灯式、HID車、KC仕向けは除く				

第1弾リコール

第2弾リコール

ライン適用

約87万台で発生なし

2001年11月からライティングSWにSnメッキ品をライン適用開始

FIT/JAZZの発生が多い。

## 6. 発生件数 6-3 発生機種別の各SS別の発生状況分析(品情連とQIC)

15/40

機種	年式											製作所	販売台数	販売累計	品情連、QIC		スイッチ オス端子	ハーネス メス端子	
	99	00	01	02	03	04	05	06	07	08	09				10	件数			発生率
FIT/JAZZ			第2弾										Sss	1,290,137	2,002,870	164	0.013%	東洋電装	矢崎
													HAB	185,966		0	0.000%		
													HATC	118,060		0	0.000%		
				ライン適用									HPM	74,282		0	0.000%		
													GHAC	227,855		0	0.000%		
													CHAC	106,570		0	0.000%		
FIT ARIA /CITY													HATC	195,557	709,489	6	0.003%	東洋電装	矢崎
													HSCI	134,347		0	0.000%		
													HCPI	16,541		3	0.018%		
													HMSB	60,100		0	0.000%		
													HACPL	60,198		0	0.000%		
													HTR	20,458		0	0.000%		
CR-V													GHAC	222,288	0	0.000%	住友		
													Css	347,545	3	0.001%			
													HUM	255,207	0	0.000%			
													HATC	30,832	0	0.000%			
													HMSB	3,862	0	0.000%			
													HCPI	25,515	0	0.000%			
STEPWGN													WDHAC	14,051	0	0.000%	住友		
													HTW	23,095	3	0.013%			
			第2弾										Sss	17,716	1	0.006%			
											Sss, Css	29,673	0	0.000%					
											'01/11からSW Snメッキライン適用		3,434,340	※4灯式、HID車、KC仕向けは除く					

第1弾リコール

第2弾リコール

ライン適用

約87万台で発生なし

2001年11月からライティングSWに  
Snメッキ品をライン適用開始

・Sss製のFIT/JAZZのみが多い(164件)、他のSSのFIT/JAZZの発生はなし。

◇返却現品分解確認結果(溶損)

No.4 日本 GD1-1072865 訴え事象:ヘッドライトロービーム点灯せず

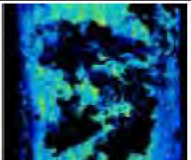
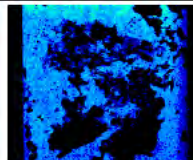
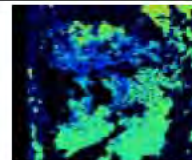

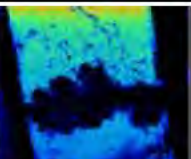
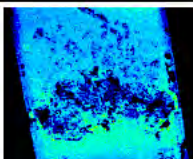
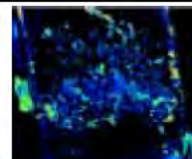
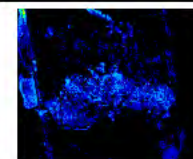
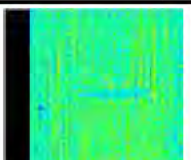
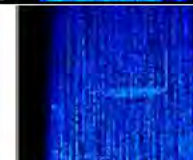


・外観確認

ライティングSW側のオス端子		ハーネス側のメス端子
		Lo端子が熱により、溶損している
		
		
		Lo端子が熱により、溶損している

・X線解析結果(ハーネス側のメス端子)



・表面解析結果

	Sn	Cu	C	O	
オス端子の舌片部					接触部近傍にC、O(樹脂)の付着が激しく樹脂溶融温度以上に発熱している
メス端子の舌片部					
参考)良品オス、舌片側					Snメッキは十分残っており、異常摩耗は発生していない。

# 7. 解析結果 7-1 現品確認結果②

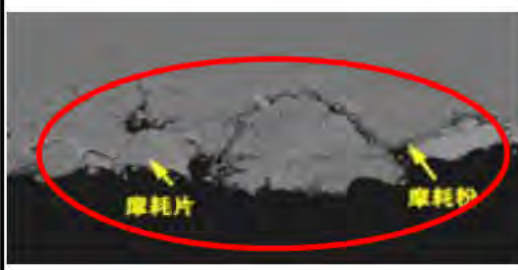
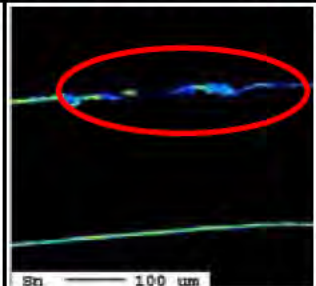

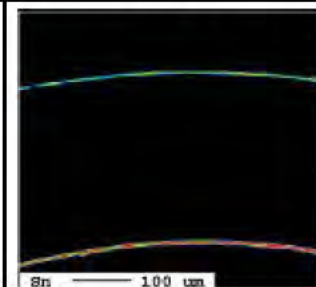
## ◇返却現品分解確認結果(溶損)

No.12 USA JHMGD37627S XXXXXXXXXX 訴え事象:ロービーム作動せず

### ・外観確認

ライティングスイッチ側のオス端子		ハーネス側のメス端子			
		Lo端子が熱により、溶損している			Lo端子が熱により、溶損している

### ・断面解析

ハーネス側のメス端子				
返却品		Snメッキがなくなり、母材の磨耗粉が堆積している		Snメッキが磨耗している
良品		Snメッキが残り、磨耗粉はなし		Snメッキが残り、磨耗粉はなし

Snメッキが摩耗し、磨耗粉が堆積していることから、摺動の繰返しが発生している。

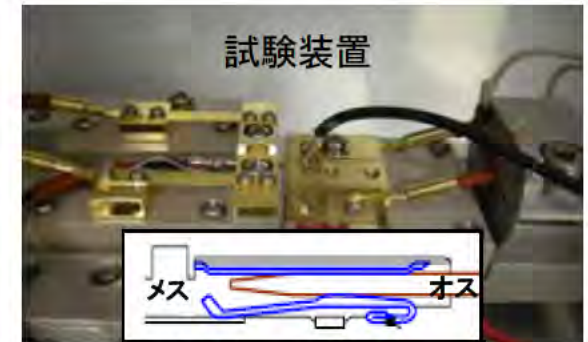


## 【目的】

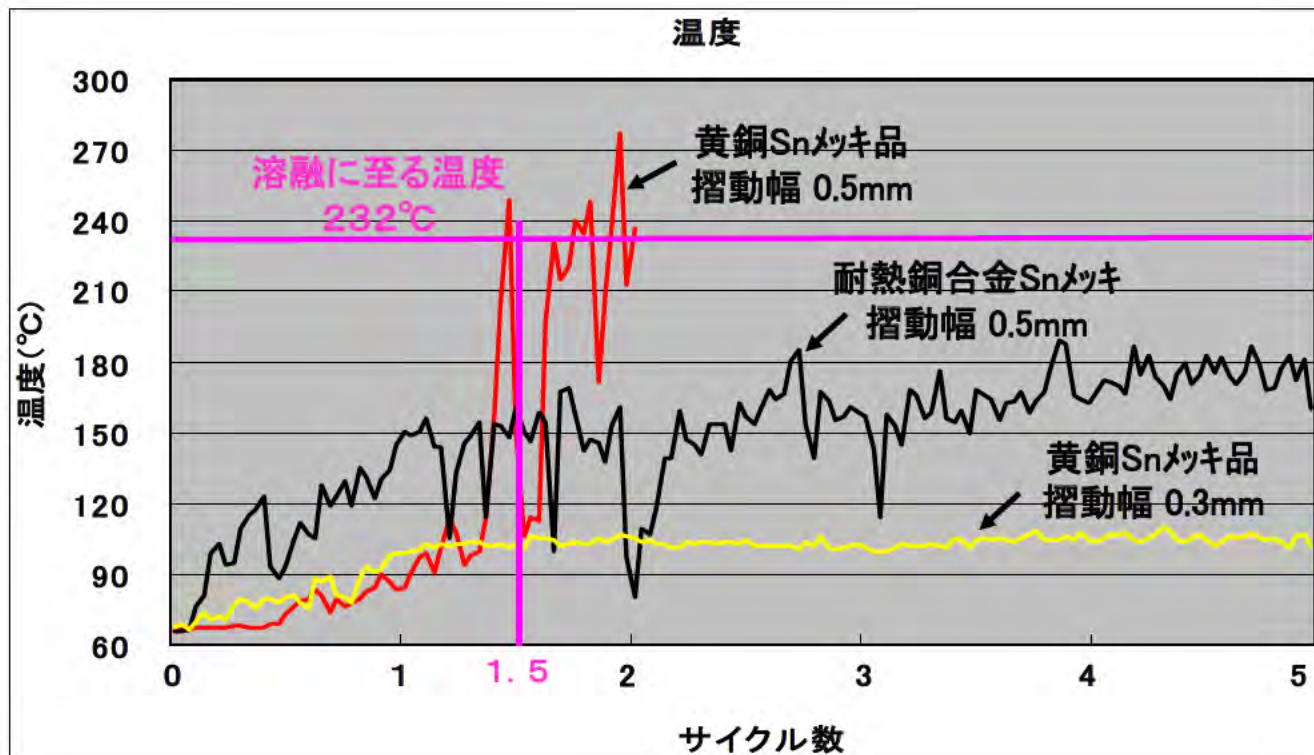
端子嵌合部の摺動繰返しにより、温度上昇が生じる条件を確認する

## 【試験結果】

黄銅端子(Snメッキ品)は、摺動幅 0.5mm/約1.5サイクルでコネクタ樹脂(PBT)の溶融温度に至ることが判明



可動側	固定側
メス端子	オス端子



## 【試験条件】

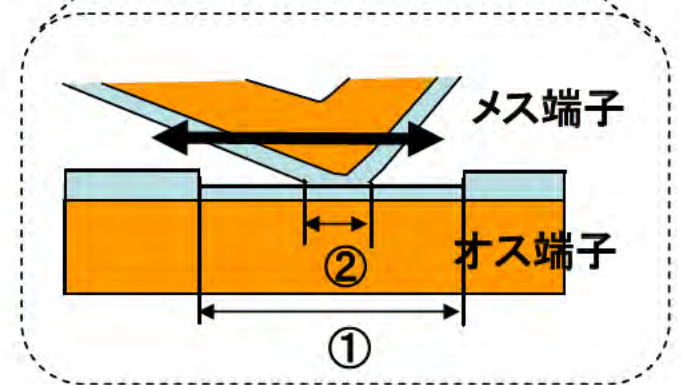
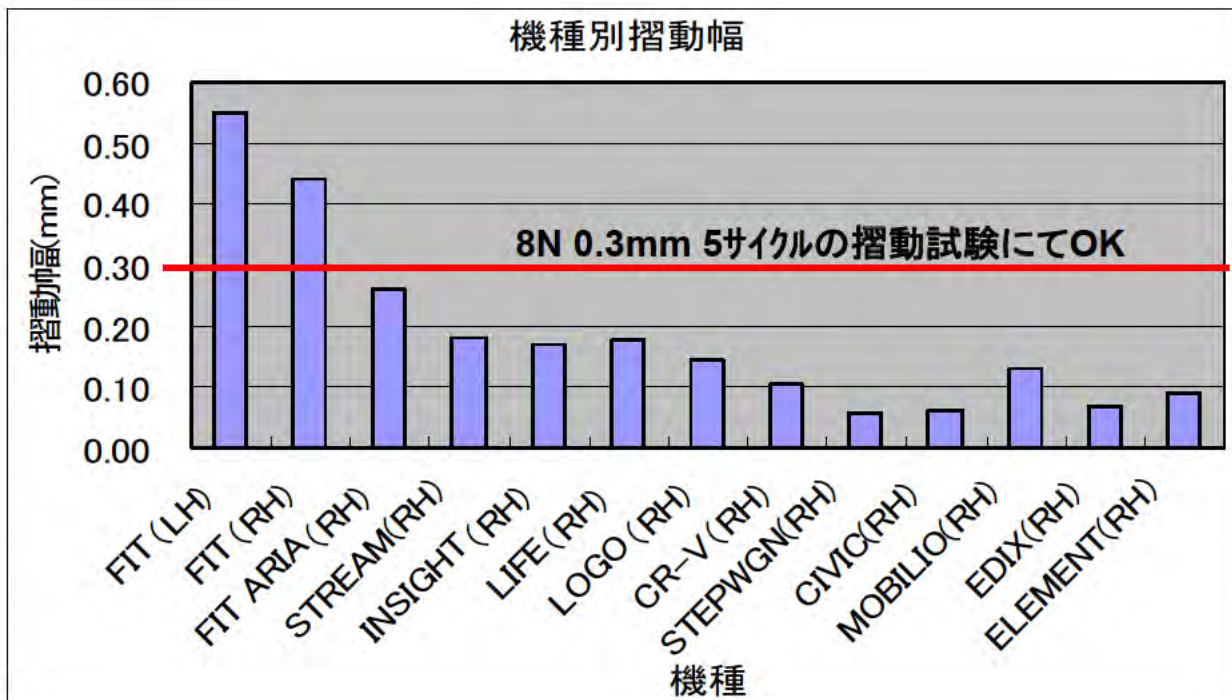
- ・供試端子 : 黄銅+Snメッキ
- ・接圧荷重 : 8N(製造管理の下限值)
- ・酸化促進 : 試験前に100°C×120h放置
- ・通電電流 : 10A
- ・温湿度 : 60°C、85%RH
- ・摺動幅 : 0.5mm
- ・摺動サイクル : 摺動1万回後に24h停止を1サイクル
- ・ΔT換算式 :  $\Delta T = a \times [\text{接触抵抗}] \times [\text{電流}]^2$   
a=17.91(レーザ入熱試験結果)

## 【目的】

実車に於ける実際の端子の摺動幅を測定し、機種毎に比較する

## 【測定結果】

FIT/JAZZが他機種に比べ、摺動幅が大きいことが判明



摺動幅 = オス端子摺動幅①  
 - メス端子摺動幅②

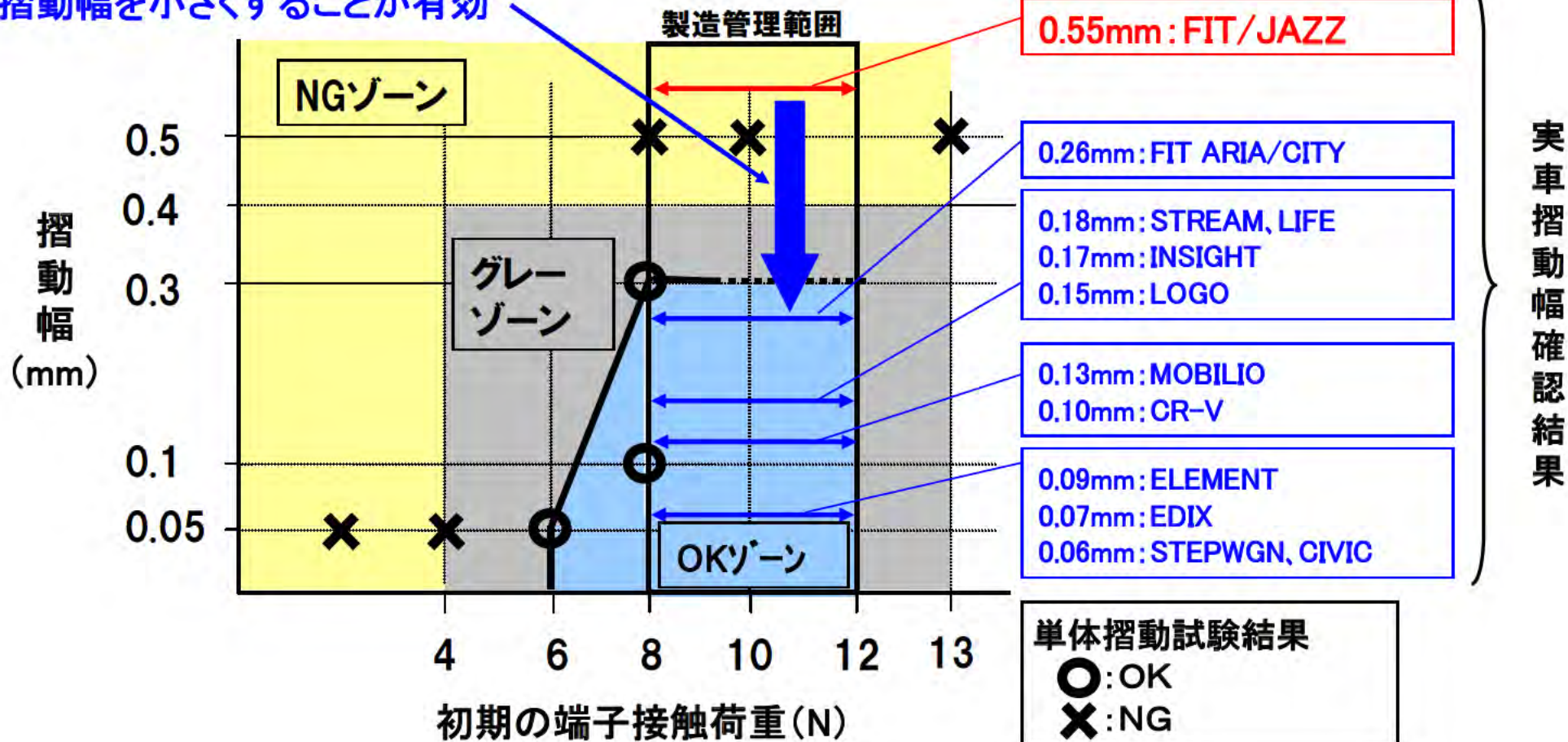
## 【試験条件】

- ・実車に端子接圧8N品(製造管理下限品)を取り付ける
- ・1サイクル : Rターン→中立→Lターン→中立  
 →パッシング→中立 のSW操作
- ・サイクル数 : 人操作による1万サイクル

**【目的】**

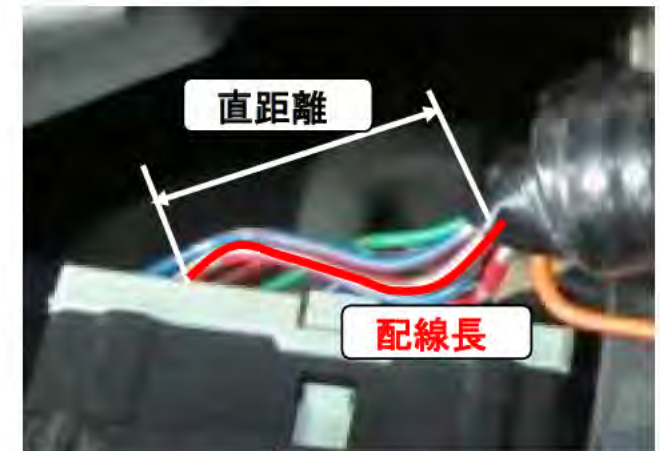
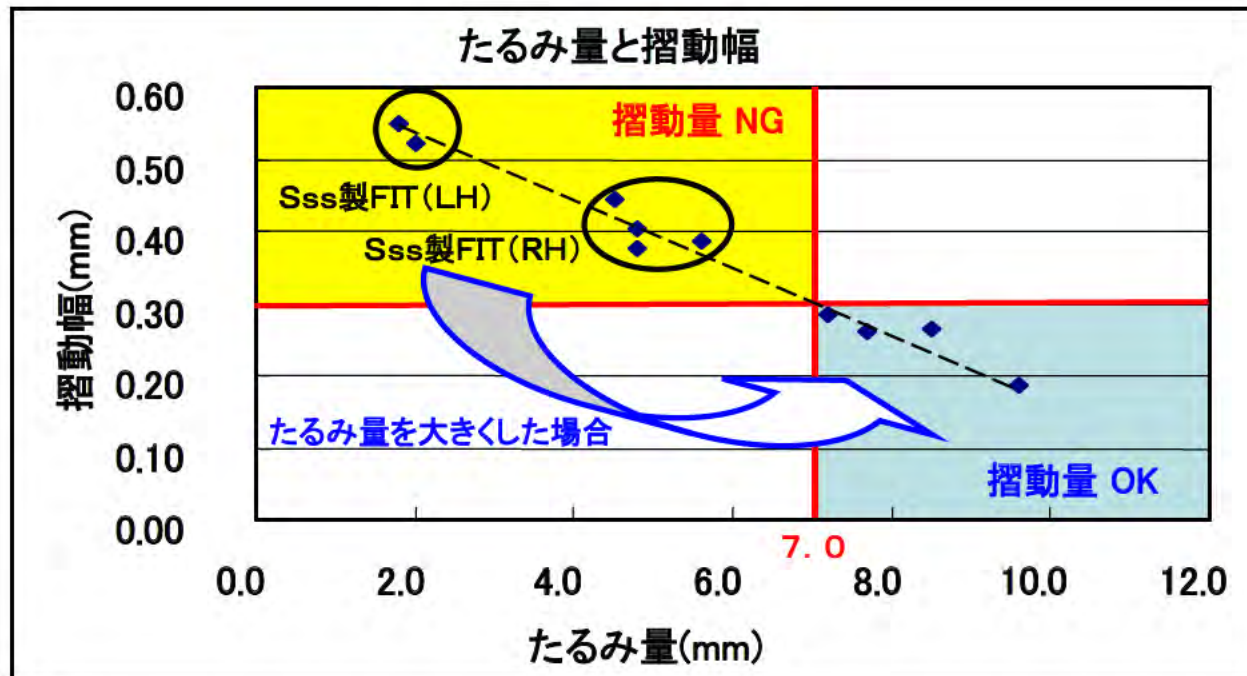
実車に於ける端子摺動幅と単体摺動試験結果を重ねて、摺動幅の良否を判定する

摺動幅を小さくすることが有効



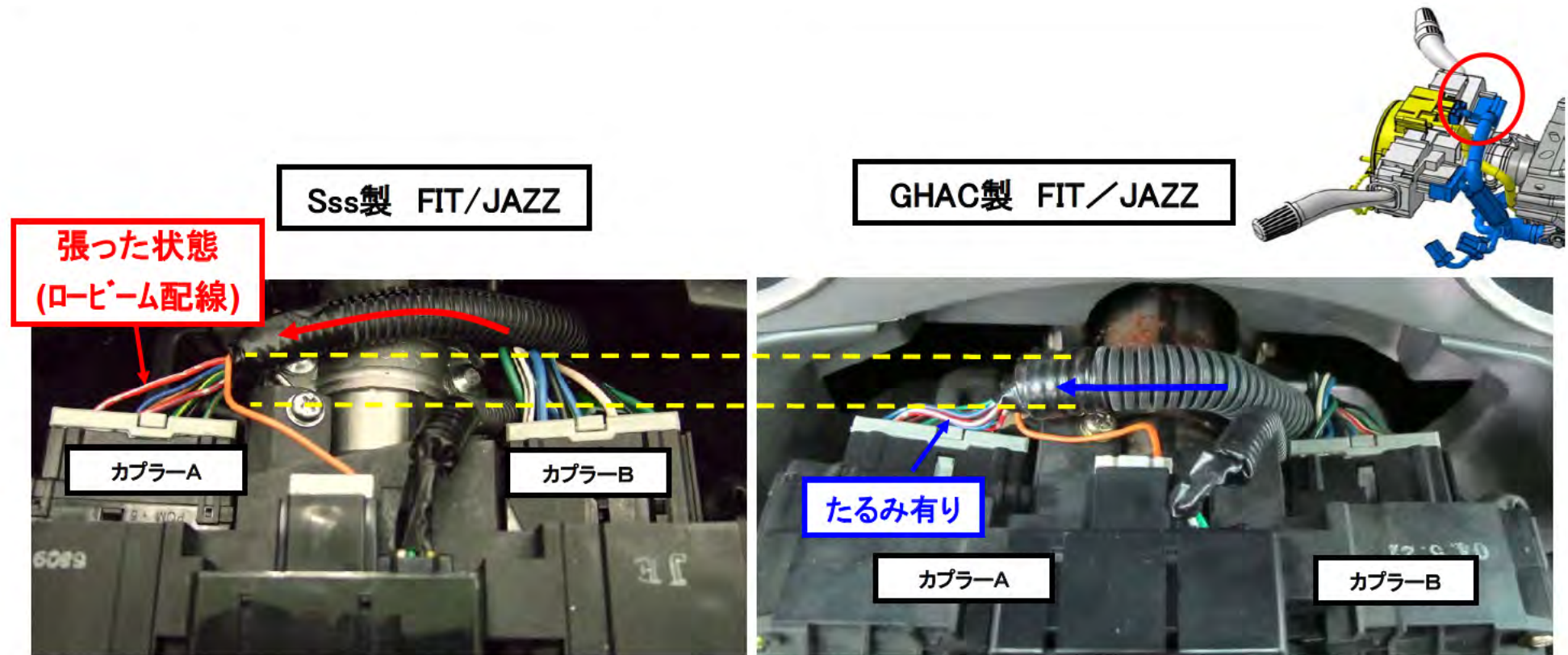
FIT/JAZZの実車摺動幅のみが、抵抗値増大が認められるNGゾーンにいたることが判明  
また、摺動幅を抑えることが最も有効な対策である

- ・Sss製のFITと他製造拠点のFITを比較し、たるみ量に違いがあることから、たるみ量と摺動幅の相関を確認する

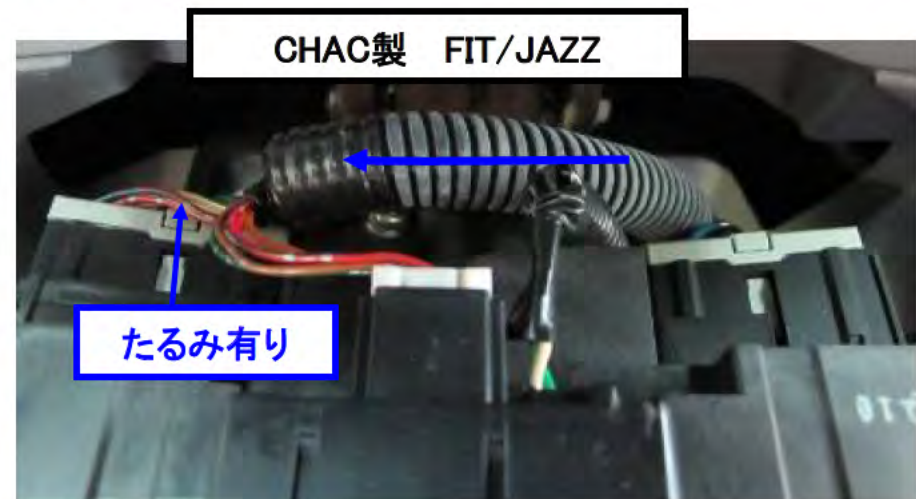
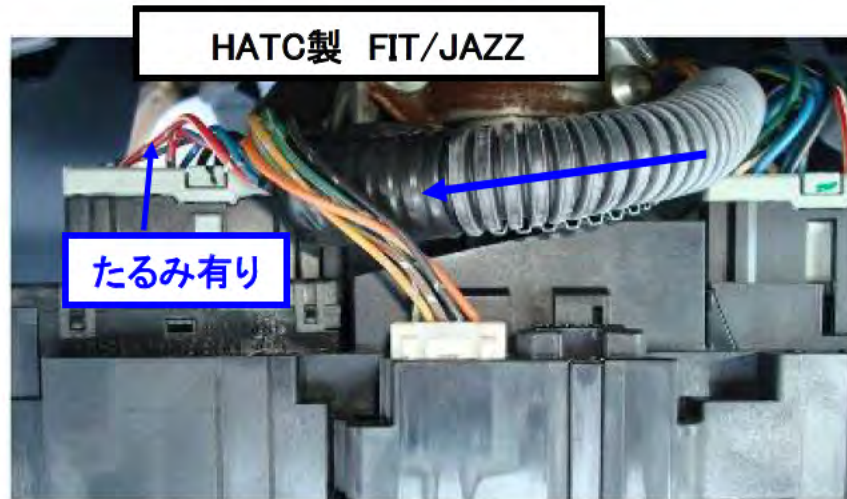
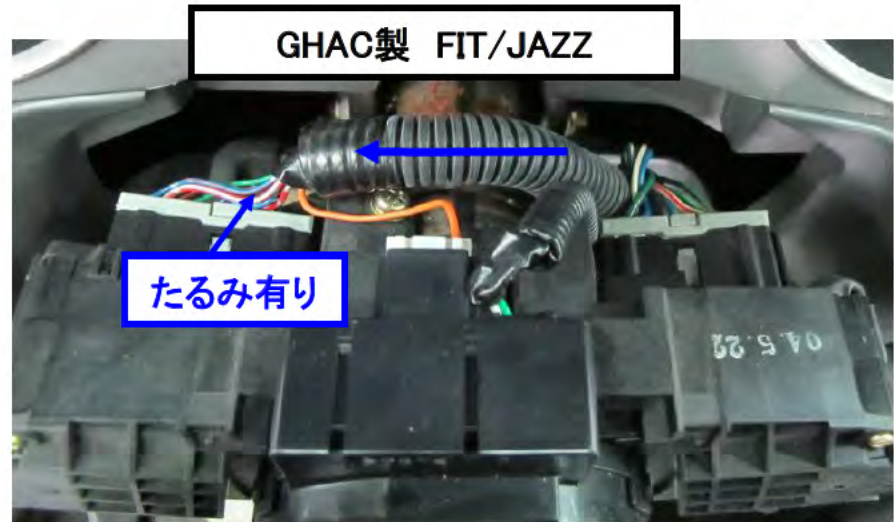
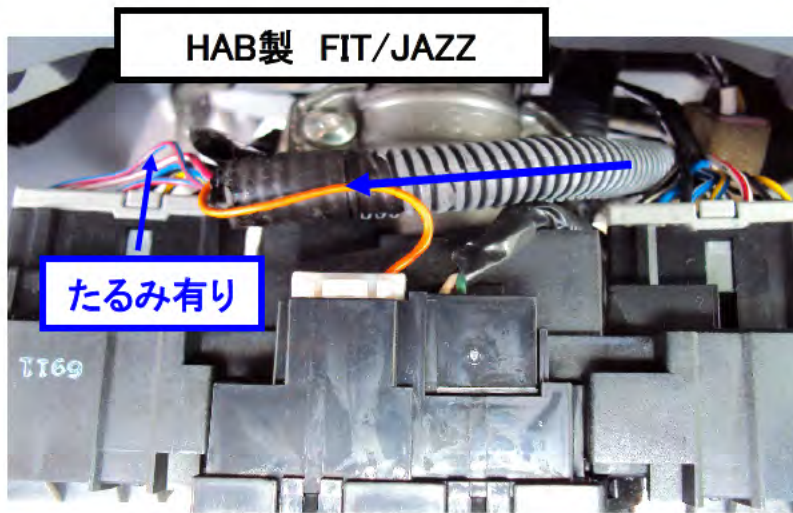


$$\text{たるみ量} = \text{配線長} - \text{直距離}$$

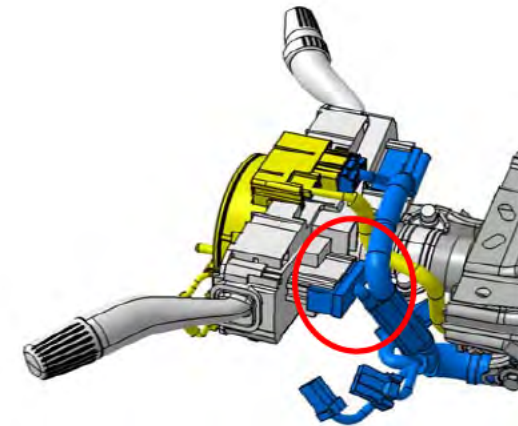
たるみ量が大きいと摺動幅も小さくなることを確認



コンビSW側組付でカプラーB ⇒ カプラーAの順で組付を行うとハーネスがカプラーから離れ、ロービーム配線が張る傾向になる

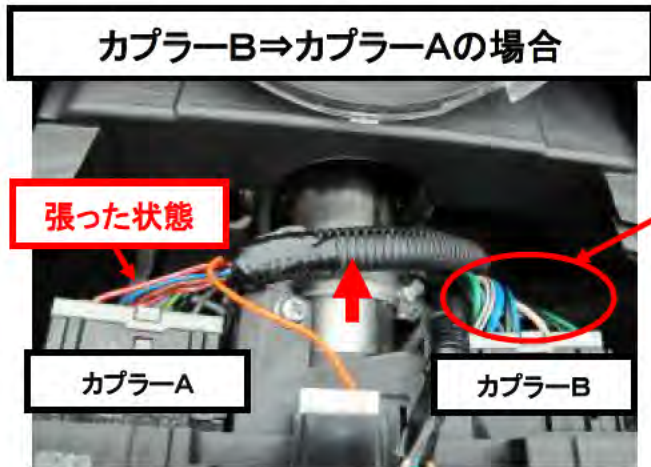


ロービーム配線が張った状態になる配索は、Sss製 FIT/JAZZのみである。

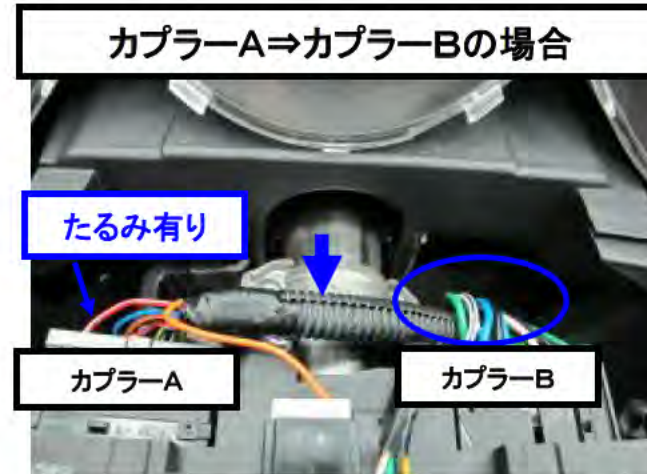


ロービーム配線が張った状態になる配索は、Sss製 FIT/JAZZのみである。

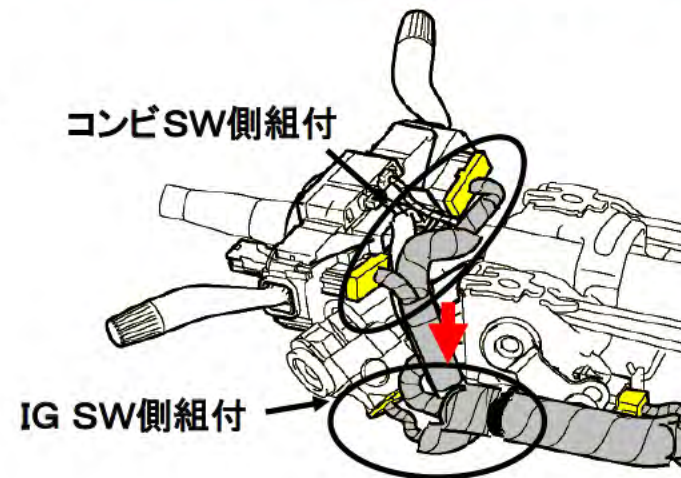
①コンビSW側組付でカプラーB ⇒ カプラーAの順で組付を行うとハーネスがカプラーから離れ、ロービーム配線が張る傾向になる



この部分の取り合いでカプラーから離れる



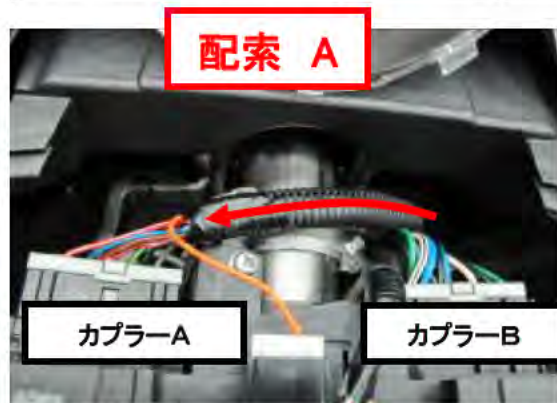
②コンビSW側組付 ⇒ IG SW側組付の順で行うとコンビSWの配線が引き下げられ、ロービーム配線が張る傾向になる



Sss製 FIT/JAZZの組付手順のカプラーB ⇒ カプラーA ⇒ IG SW側組付で行うとロービーム配線が張った状態になる。



機種	製造SS	配索	たるみ量 (mm)	摺動幅 (mm)	組付手順			判定
					1	2	3	
FIT/JAZZ(LH)	Sss	A	1.8	0.55	※	※	IG SW	NG
FIT/JAZZ(RH)			4.5	0.44	カプラーA カプラーB	カプラーB カプラーA		
FIT/JAZZ(LH)	CHAC	B	13.9	0.24	カプラーA	カプラーB	IG SW	OK
FIT/JAZZ(LH)	HAB	B	8.9	—	カプラーA	カプラーB	IG SW	OK
FIT/JAZZ(RH)	HPM	B	14.0	—	IG SW	カプラーA	カプラーB	OK
FIT/JAZZ(LH)	GHAC	B	9.6	0.19	IG SW	カプラーB	カプラーA	OK
FIT/JAZZ(RH)	HATC	B	9.3	—	IG SW	カプラーB	カプラーA	OK
FIT/JAZZ(LH)			9.4	—				



※Sss製FIT/JAZZのカプラー組付手順調査結果は、カプラーA⇒カプラーBの順であるが、製造当時のVTRにて確認するとカプラーB⇒カプラーAの順に取付ている。よって、カプラー取付手順は、両方の手順のものが混在していると判断する。

判定:たるみ量が7mm以上でOK

組付手順が異なることにより、Sss製FIT/JAZZのみが、ロービーム配線が張った状態となる。

機種	製造SS	たるみ量(mm)	摺動幅(mm)	判定
FIT ARIA/CITY(RH)	HATC	10.3	0.26	OK
FIT ARIA/CITY(LH)	GHAC	7.2	0.28	OK
FIT ARIA/CITY(RH)	HSCI	18.3	—	OK
FIT ARIA/CITY(RH)	HCPI	10.5	—	OK
FIT ARIA/CITY(RH)	HMSB	13.8	—	OK
FIT ARIA/CITY(RH)	HACPL	9.6	—	OK
CR-V(RH, LH)	Css	23.4	0.10	OK
LOGO(RH)	Sss	15.4	0.15	OK
INSIGHT(RH)	Sss	22.8	0.17	OK
STEPWGN(RH)	Sss, Css	37.4	0.06	OK
CIVIC(RH)	Sss	48.3	0.06	OK
STREAM(RH)	Sss	26.5	0.18	OK
MOBILIO(RH)	Sss	32.9	0.13	OK
EDIX.(RH)	Sss	16.1	0.07	OK
ELEMENT(RH)	Sss	33.5	0.09	OK
LIFE(RH)	Sss	26.7	0.18	OK
PILOT(LH)	HMA	21.3	—	OK
FIT ARIA/CITY(LH)	HTR	11.6	—	OK

他の機種については、たるみ量が確保されており問題はない。

INSIGHT



CIVIC



STREAM

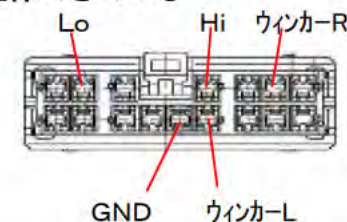


STEPWGN

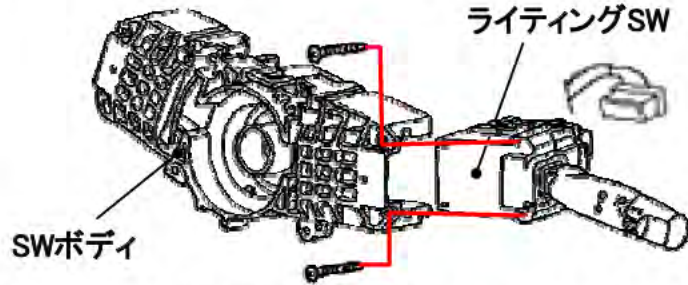


他の端子が問題ない理由

1. Lo/Hi/GND端子以外の電流値はウィンカー作動時3.5Aであり、その他は0.2A以下である
2. Hi/GND端子はカプラーの真ん中位置にあり、たるみを確保できている

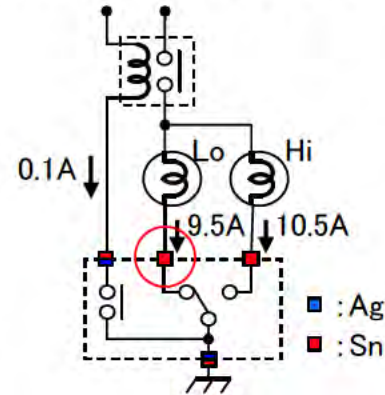


## ■ライティングSW構造

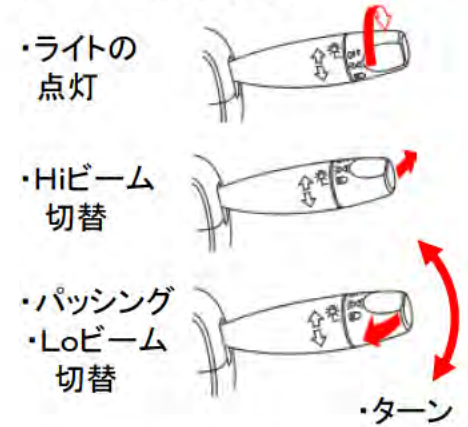


ライティングSWの締め付けネジを支点として、レバー操作(Hi-Lo切替や手前に引きながらのターン操作)を行うとSWが微かに動く

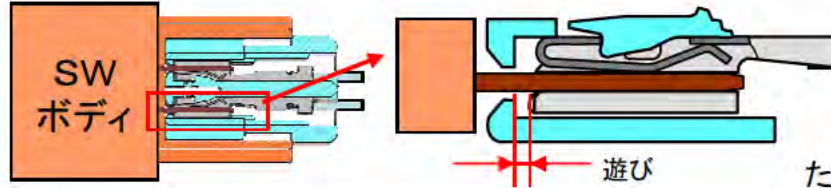
## ■回路説明(2灯式)



## ■レバー操作説明

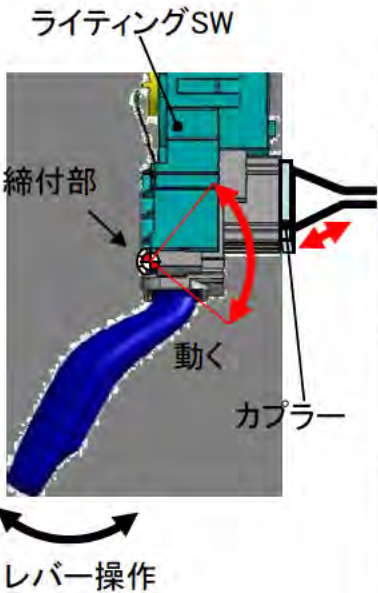


## ■端子が撓動するメカニズム



組立て性と部品の公差のためカプラーとメス端子に遊びがある

たるみ量 = 配線長(A) - レイアウト直距離(B)



	配線が張っている場合	配線にたるみがある場合
<ul style="list-style-type: none"> <li>Hi⇒Lo切替</li> <li>パッシング</li> <li>引きながらターン</li> </ul> 操作方向 力	カプラー、メス端子、オス端子、前照灯操作SW	ハーネスのたわみが変位を吸収する
操作前後		
<ul style="list-style-type: none"> <li>Lo⇒Hi切替</li> <li>押しながらターン</li> </ul> 操作方向 力	(反作用)	ハーネスのたわみが変位を吸収する

# 7. 解析結果 7-13 発生メカニズム②

フィットのライティングスイッチに接続する配線長は、たるみ量の少ない設定であったため、配線作業でロービームの配線が張りすぎたものがある

ライティングスイッチレバー操作でスイッチボディが動いた際にロービーム端子嵌合部が追従できず、オス端子とメス端子間で大きく摺動する(摺動幅:約0.5mm)

① 端子嵌合部の摺動でスズメッキが徐々に摩耗し、母材が露出して接触面に酸化銅が生成され、端子の摺動が繰返されると、酸化銅が磨耗粉となり摺動部に堆積する

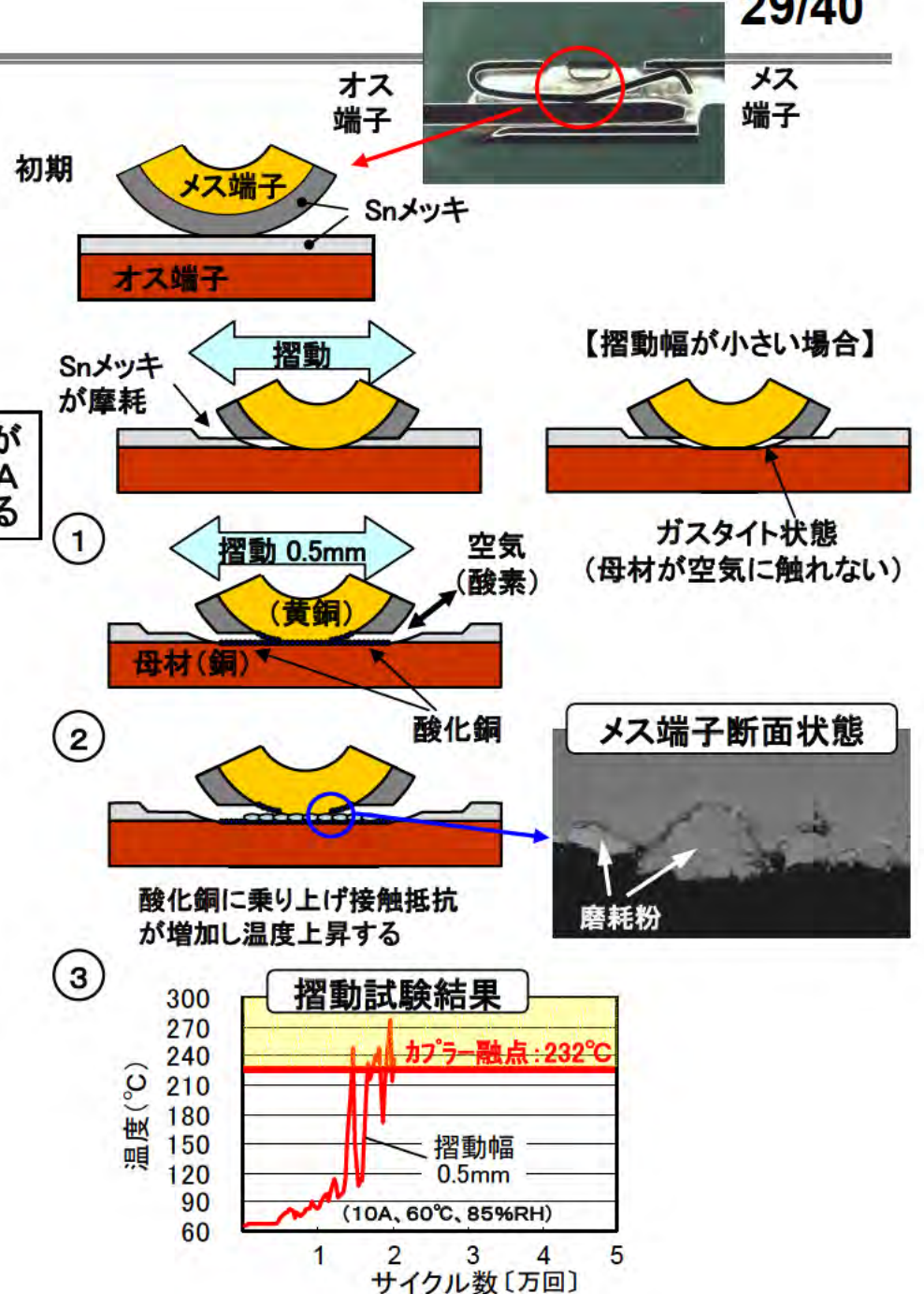
② 端子摺動時に堆積した酸化銅の磨耗粉に端子が乗上げると接触抵抗が増加して前照灯点灯時に嵌合部が過度に発熱する

③ 端子嵌合部の発熱で嵌合部に応力緩和が生じ、端子の接圧が低下すると磨耗粉の入込みが増え、端子がさらに発熱する

その状態を続けると、カプラーの樹脂が溶けて嵌合部に流込んで導通不良となり、ロービーム不灯となる

※カプラー樹脂が溶けて流れ込むと導通不良となり、電流が流れないため類焼はしない。

電流が約10A流れる



# 7. 解析結果 7-14 品情連とQICからの日本とUSAの発生予測

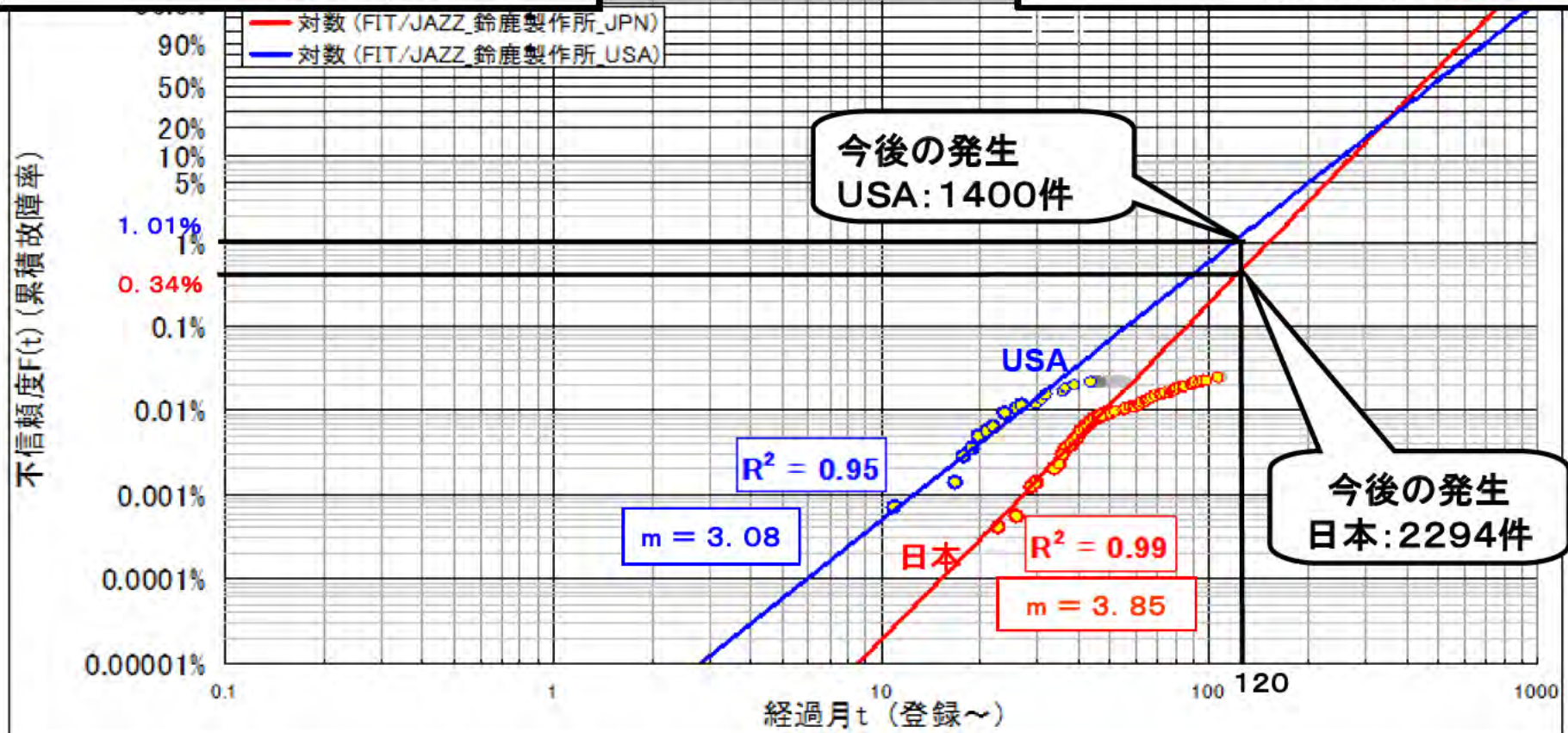
## 日本


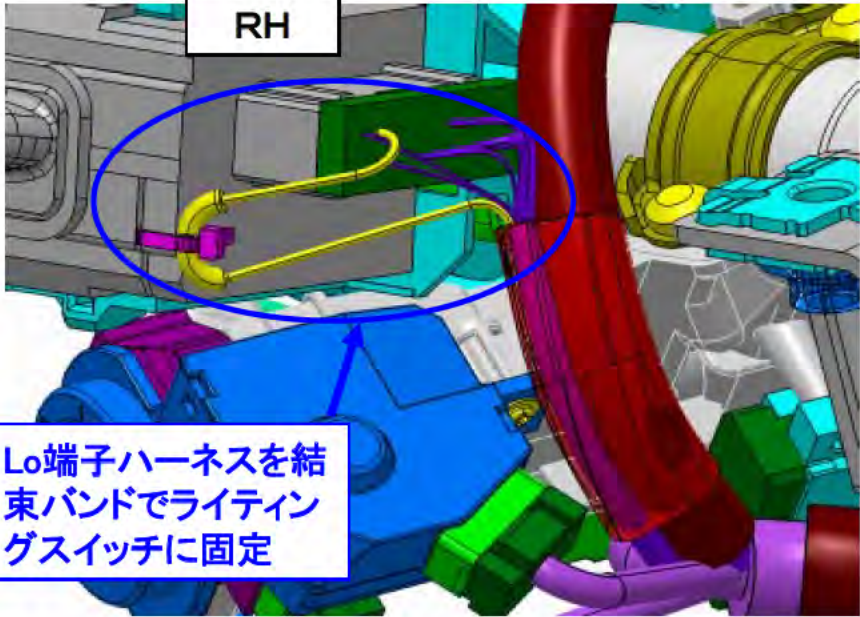
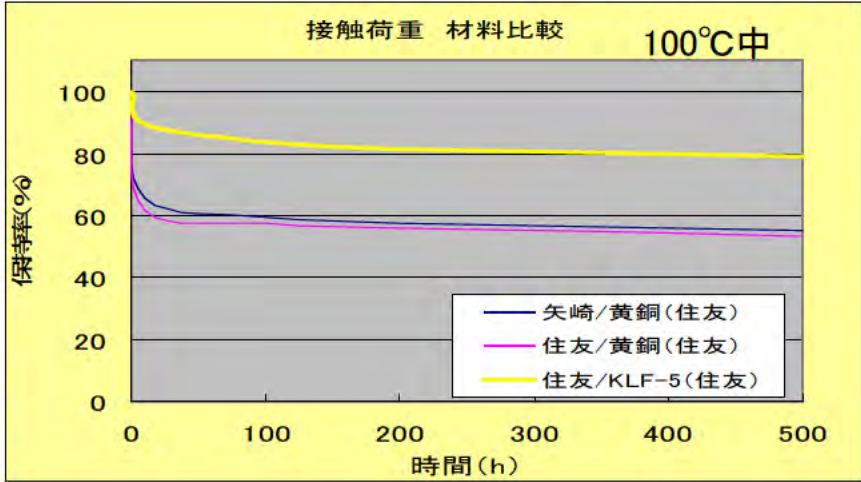
経過年数	現在	10年経過
発生件数	130件	2424件
発生率	0.018%	0.33%
対象734,392台		

## USA

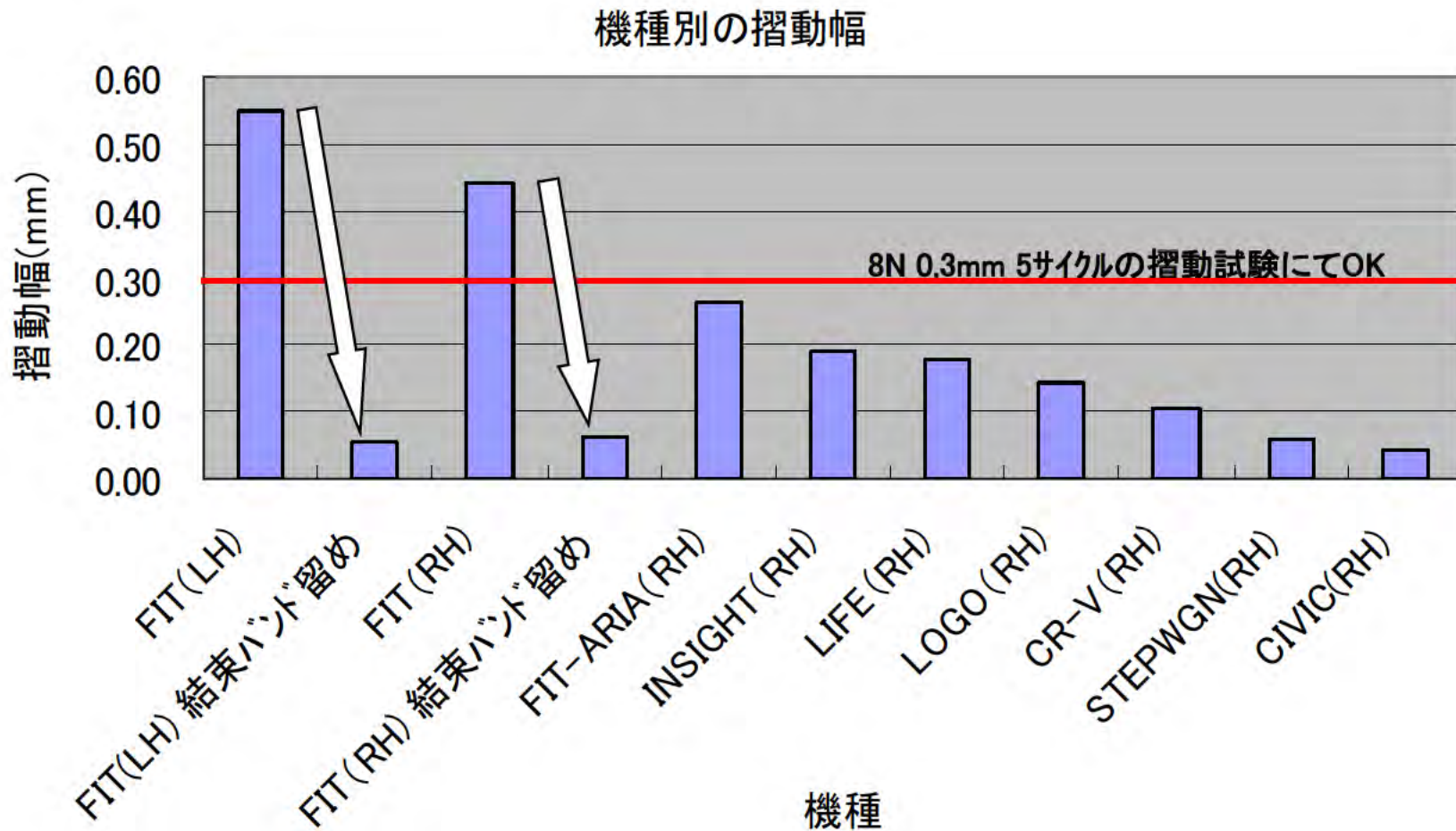
経過年数	現在	10年経過
発生件数	25件	1425件
発生率	0.018%	1.01%
対象141,084台		

発生予測 ワイブル確率紙



対策内容	備考
<p>・結束バンド留めによる摺動防止 たるみを確認した状態でメス端子ハーネスをライティンスイッチに結束バンドで固定することにより、スイッチ操作時の動きに追従させ、端子嵌合部の摺動を抑制する（ハーネスを長くする必要あり）</p> 	 <p>RH</p> <p>Lo端子ハーネスを結束バンドでライティングスイッチに固定</p>
<p>・メス端子の接触荷重低下を抑える 母材を接圧荷重低下が小さい耐熱銅合金に変更 （現状は、黄銅）</p>	 <p>接触荷重 材料比較 100°C中</p> <p>保持率(%)</p> <p>時間(h)</p> <ul style="list-style-type: none"> <li>矢崎/黄銅(住友)</li> <li>住友/黄銅(住友)</li> <li>住友/KLF-5(住友)</li> </ul>

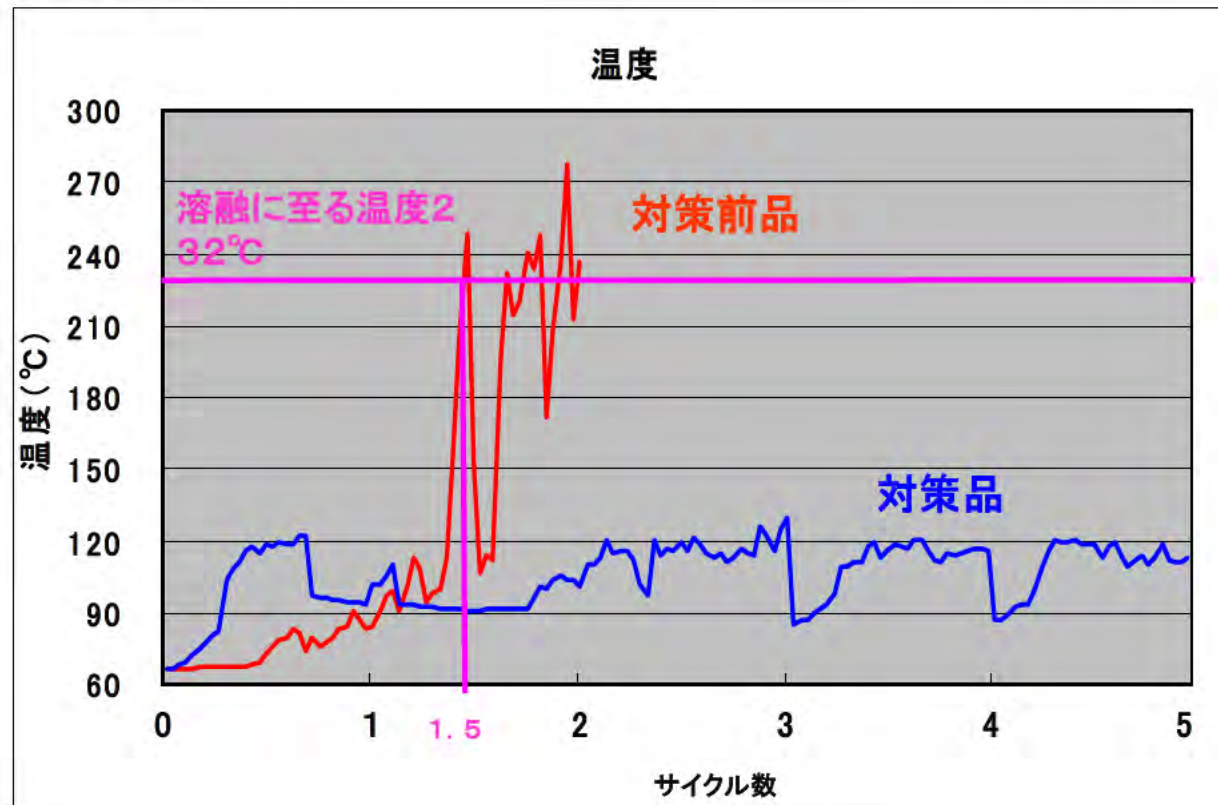
- ・実車にてライティングスイッチ操作1万サイクルによる対策効果を確認する  
(1サイクル:Rターン→中立→Lターン→中立→パッシング→中立 のSW操作)



結束バンド留めによりで摺動幅が約1/10に減少

オス端子のSnメッキが磨耗により剥離したとしても、結束バンドによるハーネス固定とメス端子耐熱銅合金に変更すれば、今後の使用過程において不具合が発生しないことを確認した。

従来品が約1.5サイクルで溶損に至っているのに対して、対策は5サイクルでも溶損に至らない。従来より、最低でも約3倍以上のタフネスあり。



<試験条件>

- ・メス端子：耐熱性銅合金(接圧低下が小さい)
- ・オス端子：銅無垢(メッキなし:市場想定品)
- ・接圧荷重：8N(製造管理の下限值)
- ・酸化促進：試験前に100°C×120h放置
- ・通電電流：10A
- ・温湿度：+60°C、85%RH
- ・摺動幅：0.1mm(結束バンド留め相当)
- ・摺動サイクル：摺動1万回後に24h時間停止を1サイクル



- 9-1. 措置提案
- 9-2. 提案理由
- 9-3. 措置内容

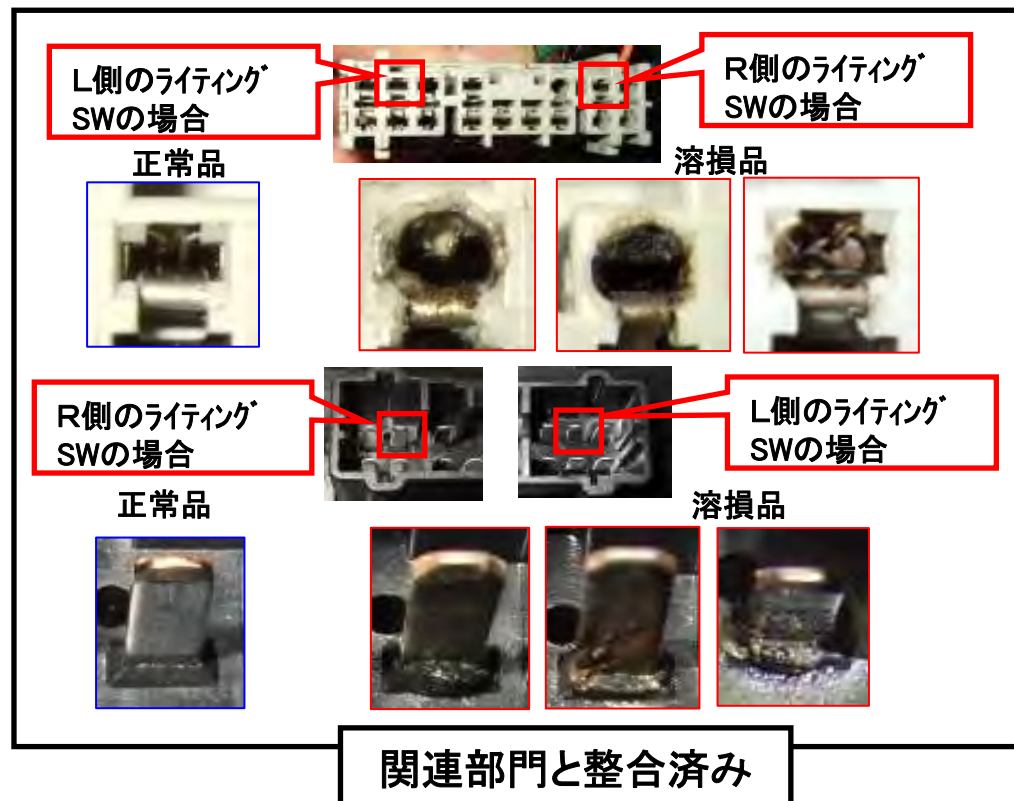
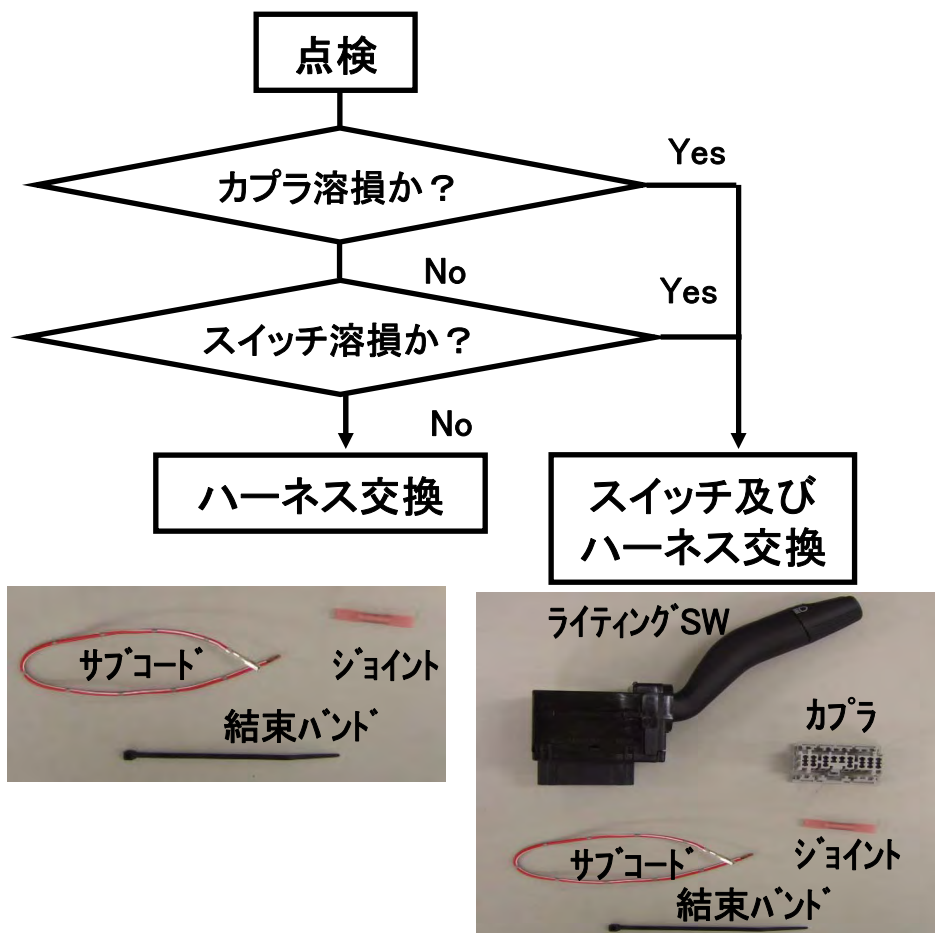
積極市場措置を提案する

ヘッドライトロービーム不灯の事象であり、今後も発生が予測されるため

Lo端子部の溶損を点検し、

①溶損している場合は、ライティングSW交換とLo端子ハーネスを交換し、  
ライティングスイッチに結束バンドで固定

②溶損していない場合は、Lo端子ハーネスのみを交換後、結束バンドで固定



9-4. 対象範囲 ハロゲン仕様の02M～08M Sss製FIT/JAZZ  
 (但し、カナダ仕向けはデイト仕様のため除く)  
 2001年10月22日以降の生産から生産終了まで

9-5. 対象台数

製造工場	市場	02M	03M	04M	05M	06M	07M	08M	計
Sss	日本	238,193	147,751	59,564	162,984	125,900	—	—	734,392
	USA	—	—	—	—	—	67,091	73,993	141,084
	欧州	62,300	48,344	53,921	114,827	55,737	33,777	18,046	386,952
	ア大	1,629	16,200	7,059	16,177	2,469	5,185	2,923	51,642
	一般	3,976	3,042	3,333	8,831	6,704	9,780	5,481	41,147

総計: 1,355,217台

### 措置費用 約 72.7億円

市場	措置方法	工数	工賃	部品代	PLCA	事務 手数料 or H/C	DM	台当たり 費用	対象台 数	①と② 割合	費用	
日本	①SW、ハーネス交換	0.7	¥4,200	¥914	-	¥1,200	¥432	¥6,746	5,000	0.7%	¥33,730,000	約38.9億円
	②ハーネス交換	0.6	¥3,600	¥60	-	¥1,200	¥432	¥5,292	729,392	99.3%	¥3,859,942,464	
USA	①SW、ハーネス交換	0.8	¥6,659	¥1,590	-	¥636	¥93	¥8,978	2,000	1.4%	¥17,956,000	約8.6億円
	②ハーネス交換	0.7	¥5,827	¥113	-	¥45	¥93	¥6,078	139,084	98.6%	¥845,352,552	
欧州	①SW、ハーネス交換	0.8	¥5,507	¥1,556	¥725	-	¥500	¥8,288	2,600	0.7%	¥21,548,800	約21.3億円
	②ハーネス交換	0.7	¥4,818	¥113	¥52	-	¥500	¥5,483	384,352	99.3%	¥2,107,402,016	
ア大	①SW、ハーネス交換	0.8	¥5,783	¥1,036	¥583	-	¥82	¥7,484	200	0.4%	¥1,496,800	約2.7億円
	②ハーネス交換	0.7	¥5,060	¥76	¥42	-	¥82	¥5,260	51,442	99.6%	¥270,584,920	
一般その他	①SW、ハーネス交換	0.8	¥2,726	¥1,635	¥968	-	¥113	¥5,442	200	0.5%	¥1,088,400	約1.1億円
	②ハーネス交換	0.7	¥2,385	¥113	¥67	-	¥113	¥2,678	40,947	99.5%	¥109,656,066	
その他費用(端子抜き治具、テープ等)											¥9,535,000	約0.1億円

合計 72.7億円

#### ※ 措置方法①の交換数について

スイッチ付キットについては、日本のワランティと有償データから0.1%が必要と推測するが、お客様にご迷惑を掛けないように販売店に1つ以上確保できる数とし1万セットを準備  
発生が多い日本、USAは、販売店に2個、他地域については、1個を準備

機種	製作所	市場	対象台数	品情連、QIC					措置要否
				現状		10年発生予測			
				件数	発生率	件数	発生率	今後の発生件数	
FIT/JAZZ	Sss	日本	734,392	130	0.018%	2,424	0.33%	2,294	要
		USA	141,084	25	0.018%	1,425	1.01%	1,400	
		他	479,741	9	0.002%	144	0.03%	135	
	HAB	南米	185,966	0	0%	今後1~2件の発生と推測			否
	HATC	ア大	118,060	0	0%				
	HPM	ア大	74,282	0	0%				
	GHAC	中国	227,855	0	0%				
	CHAC	欧州	106,570	0	0.001%				
FIT ARIA	HATC	日本	21,700	2	0.009%	—	0.02%	2	否
CR-V	Css		15,677	1	0.007%	—	0.01%	1	
STEPWGN	Sss, Css		47,119	1	0.002%	—	0.00%	1	

たるみ量も確保されており、摺動幅も小さいことから、本件と別原因(端子の接圧低下品等)と判断する。

Sss製のFIT/JAZZのみが、今後も継続的に発生する

# 10.展開計画

10-1 全体

38/40

	2010年		2011年		
	12月		1月		2月
届出措置	▽ 12/16(USA時間 12/15) 届出 ▽12/17日本措置開始				
検討会委員会	▽ 12/8 委員会				
			▼:措置開始予定日		
部品手配	日本 734,392	12/17 ▼ 12/28 ▽	1/14 ▼	1/31 ▼	2/28 ▼
		14.7万 (20%)	25.7万 (35%)	36.8万 (50%)	44.1万 (60%)
	USA 141,084		1/18 ▼	2/1 ▼	2/28 ▼
			3.5万 (25%)	7.1万 (50%)	11.3万 (80%)
	欧州 386,952		1/18 ▼	2/1 ▼	2/28 ▼
			9.7万 (25%)	19.3万 (50%)	27.1万 (70%)
ア大 51,642		1/18 ▼	2/1 ▼	2/28 ▼	
		1.3万 (25%)	2.6万 (50%)	3.6万 (70%)	
一般 41,147		1/18 ▼	2/1 ▼	2/28 ▼	
		1.0万 (25%)	2.1万 (50%)	2.9万 (70%)	

「ライティングスイッチを操作した際のスイッチ変位量と組付け作業による端子への影響を吸収できる配線長の設定とする」

**END**

EA11-012

HONDA

4/20/2012

Q16

LOGO lowbeam failure



## Recall Notification

September 6, 2001

Recall No.	769	Recall initiation date	September 7, 2001
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	Due to inappropriate surface treatment for a headlight SW terminal of the lighting system, the coupler joint moves and increases contact resistance when switching operation of the headlight is performed. As a top event, the coupler joint melts and leads to a continuity failure, possibly causing the headlight failure.		
Corrective action details	In all units, replace the combination SW to a C/M part and replace the headlight female terminal to a non-defective part. Also, replace the coupler with a non-defective part if damaged.		
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> <li>● Place a “769” sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.</li> </ul>		

Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles
Honda	GF-GA3	LOGO	GA3-1200007 - GA3-1206742, Oct. 27, 1998 - Mar. 30, 2000	6,736
			GA3-1300001 - GA3-1303173 Apr. 6, 2000 - May 30, 2001	3,173
			GA3-3200006 - GA3-3238218 Oct. 27, 1998 - Mar. 31, 2000	38,213
			GA3-3300002 - GA3-3322674 Apr. 5, 2000 - Jun11, 2001	22,673
			GA3-5200001 - GA3-5200101 Jan. 26, 1999 - Mar. 9, 2000	101
			GA3-5300001 - GA3-5300069 Apr. 27, 2000 - May 24, 2001	69
			GA5-1000001 - GA5-1000620 Nov. 16, 1998 - Mar. 24, 2000	620
	GF-GA5	LOGO	GA5-1100001 - GA5-1100271 Apr. 6, 2000 - May. 28, 2001	271
			GA5-3000008 - GA5-3003929 Oct.27, 1998 - Mar. 29, 2000	3,922
			GA5-3100002 - GA5-3101928 Apr. 14, 2000 - Jun.4, 2001	1,927
			GA5-5000001 - GA5-5000013 Feb. 1, 1999 - Mar.10, 2000	13
			GA5-5100001 - GA5-5100013 Jun. 2, 2000 - Apr. 23, 2001	13
			HN-ZE1	Insight
Honda	YA-ZE1	Insight	ZE1-1100001 - ZE1-1100276 May 10, 2000 - Oct. 31, 2000	276
			ZE1-1150001 - ZE1-1150198	198

Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles
			Nov. 8, 2000 - Jul. 31, 2001	
Total				79,605 units

## Recall Notification List

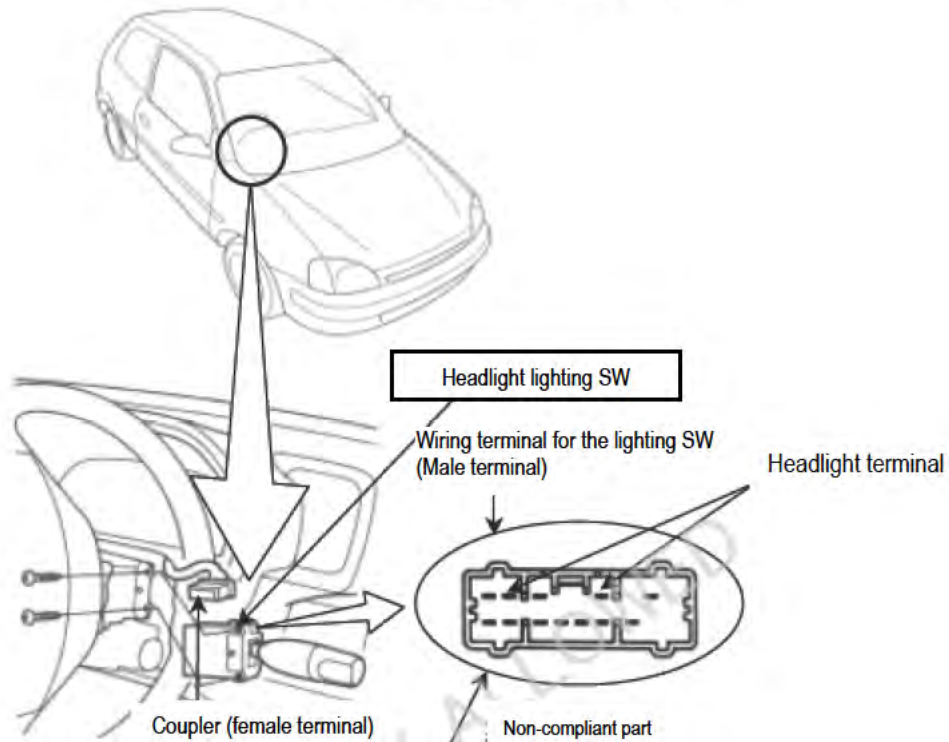
Recall notification date: September 6, 2001

Recall No.	769	Recall initiation date	September 7, 2001
Notifier	Honda Motor Co., Ltd. Representative Executive: Hiroyuki Yoshino		Contact: Customer Service Tel: 0120-112010
Defective part (Part name)	Lighting System (Electrical circuit of the headlight)		
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	Due to inappropriate surface treatment for a headlight SW terminal of the lighting system, the coupler joint moves and increases contact resistance when switching operation of the headlight is performed. As a top event, the coupler joint melts and leads to a continuity failure, possibly causing the headlight failure.		
Corrective action details	In all units, replace the combination SW to a C/M part and replace the headlight female terminal to a non-defective part. Also, replace the coupler with a non-defective part if damaged.		
Number of occurrences	36 cases	Number of accident	None
Manner of problem discovery	Reported from the dealer		
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> <li>● Place a "769" sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.</li> </ul>		

Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles
Honda	GF-GA3	LOGO	GA3-1200007 - GA3-1206742, Oct. 27, 1998 - Mar. 30, 2000	6,736
			GA3-1300001 - GA3-1303173 Apr. 6, 2000 - May 30, 2001	3,173
			GA3-3200006 - GA3-3238218 Oct. 27, 1998 - Mar. 31, 2000	38,213
			GA3-3300002 - GA3-3322674 Apr. 5, 2000 - Jun11, 2001	22,673
			GA3-5200001 - GA3-5200101 Jan. 26, 1999 - Mar. 9, 2000	101
			GA3-5300001 - GA3-5300069 Apr. 27, 2000 - May 24, 2001	69
	GF-GA5		GA5-1000001 - GA5-1000620 Nov. 16, 1998 - Mar. 24, 2000	620
			GA5-1100001 - GA5-1100271 Apr. 6, 2000 - May. 28, 2001	271
			GA5-3000008 - GA5-3003929 Oct.27, 1998 - Mar. 29, 2000	3,922
			GA5-3100002 - GA5-3101928 Apr. 14, 2000 - Jun.4, 2001	1,927
			GA5-5000001 - GA5-5000013 Feb. 1, 1999 - Mar.10, 2000	13

Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles
			GA5-5100001 - GA5-5100013 Jun. 2, 2000 - Apr. 23, 2001	13
	HN-ZE1	Insight	ZE1-1000001 - ZE1-1001427 Sep. 6, 1999 - May 9, 2000	1,400
Honda	YA-ZE1	Insight	ZE1-1100001 - ZE1-1100276 May 10, 2000 - Oct. 31, 2000	276
			ZE1-1150001 - ZE1-1150198 Nov. 8, 2000 - Jul. 31, 2001	198
	Total of 4 types	Total of 2 models	(Range of production period for all subject models) Oct. 27, 1998 - Jul. 31, 2001	Total of 79,605 units

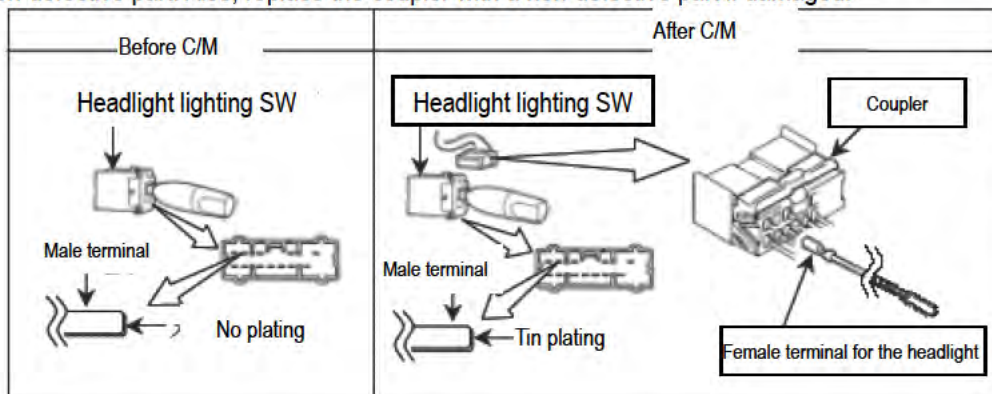
### Illustrative Drawing of Modified Part



Due to inappropriate surface treatment for a headlight SW terminal of the lighting system, the coupler joint moves and increases contact resistance when switching operation of the headlight is performed. As a top event, the coupler joint melts and leads to a continuity failure, possibly causing the headlight failure.

### Corrective action details

In all units, replace the combination SW to a C/M part and replace the headlight female terminal to a non-defective part. Also, replace the coupler with a non-defective part if damaged.



Note: Replacement parts are surrounded with a box.

Identifier: Apply yellow paint on the installation bolt head at the right front slide rail of the driver's seat

## Major specification of vehicles subjected to the recall

Manufacture	Type	Model	Type/ Use application	Vehicle shape	Engine type	Note
Honda	GF-GA3	LOGO	Compact car Passenger car	Box	D13B (1,343cc)	
	GF-GA5					
	HN-ZE1	Insight			ECA-MF2 (995cc)	
	YA-ZE1					

## 1. Background of the recall

On April 18, 2000, we received information from a dealer in Tokyo that “the headlight of both sides of low beam does not come on for GF-GA3 type (Model: LOGO), and from a mechanic check, the melted coupler joint was found”.

Based on this information, we observed a lighting/turn signal switch, a coupler joint, and one of low beam female terminals returned from the market, founding that the switch was normal and the female terminal with a fitting mark from the insertion. However, on the coupler, resin deformation was found around the female terminal for the low beam. Also, the resin was melted into the pressed bend area of the male terminal, causing the spring at the opposite side to become open.

Although heating of the terminal joint was considered as a cause of deformation of the coupler joint and female terminal spring, normal fitting mark was confirmed on the returned male terminal, allowing us to judge that the insertion procedure and fitting pressure applied to the terminals at the production was appropriate. As a result, the heating cause could not be identified.

On July 25, September 4, October 13 and 14 of the same year, we were informed of the same failure “the headlights not turning ON”, and checked a returned switch, a coupler joint, and a female terminal for the low beam for the respective cases, founding the deformed resin around the female terminal and wider spring opening as the previous investigation. Since five defective coupler joints were all manufactured in the same plant of the same supplier, we conducted the investigation on their production process. As a result, the materials and shape of the female terminals and the clearance of the male terminal insertion area were all within the spec, and items that lead to the failure could not be found from the production process.

On October 18, 2000 while under investigation of the coupler joint supplier, we received information from a dealer in Tokyo on a failure that “low beam does not light when turning the lighting switch on for GF-GA3 type (aka LOGO)”. Based on this information from the dealer, we conducted an investigation not only on the defective unit as usual, but also on the body of the actual vehicle.

When checking the headlight lighting of the subject vehicle, the position lamp which can be lighted with the first level of the switch did light without failure. However, on the headlight which can be lighted with the second level, only the high beam was functioning and the low beam was inoperative for both sides.

No problem was found on the switch when disassembled the switch and the coupler, but the resin around the female terminal was deformed and terminal ends were found with the opened condition as seen in the defective units before. Also, unusual scratch from rubbing was confirmed on the male terminal from checking all the terminals in details.

As a result, we assumed rubbing due to movement between the male and female terminals caused the heat.

Investigation on a cause of the movement between the male and female terminals and its causal relationship with the heating

1. No voltage change, rubbing mark, or heating was found as a result of vibrating the switch itself to simulate rough road-driving.
2. Secondly, assuming that the terminals move by stretched wiring, we directly moved female side terminal on the directions of inserting and removing and found that this causes heating.
3. Next, we checked if the terminal moves in the directions of inserting and removing on the actual vehicle, and found that the terminal only moves at the headlight switching operation.
4. The result of the heat generation test shows that the rubbing mark similar to ones we saw on the returned units and heat could be generated by repeated switching operation. The mechanism of the heat occurrence is as follows. The change of contact surface due to terminal movement causes a spark to occur and generates copper suboxide to increase the contact resistance. Depending on time of lighting the headlight as is, the contact resistance increases more and spring part of the female terminal become deformed by the heat. This reduces contact pressure of the bend area to the male terminal, causing contact resistance and heating temperature to increase even more.
5. If the heat reaches 232°C, the melting temperature of the coupler resin, from repeated switching operation of the headlight, melted coupler resin enters between the terminals and leads to a continuity failure.
6. The result of spreading fire growth test shows that the ignition temperature of parts around the terminal was above 410 °C. Since continuity failure occurs when the coupler starts to melt at 232°C, the symptom may not lead to a fire or a spreading fire.

From the above, the mechanism of the headlight failure was identified. The contact resistance increases and the heat generates when the male and female terminal joint of the headlight moves by repeated switching operation of the headlight, and melted coupler joint goes into terminals to cause the continuity failure. This leads to the headlight failure. Global Quality Committee has decided to take proactive market action since the symptom may occur from the combination of the frequent switching operation and the lighting time.



## 2. Number of occurrences of the problem

36 defects were reported from the market as listed below. No accident reported.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
1	Tokyo	GF-GA3 (Logo)	GA3-3208917	Apr. 17, 2000	Mar. 1, 1999	Feb. 10, 1999	48,163 km	Headlight does not come ON for both sides. Melted lighting SW coupler was confirmed at the inspection.
2	Tokyo	GF-GA3 (Logo)	GA3-3208637	Jul. 21, 2000	Mar. 3, 1999	Feb. 8, 1999	57,960 km	Headlight low beam does not come ON for both sides. High beam functions.
3	Tokyo	GF-GA3 (Logo)	GA3-3208802	Aug. 31, 2000	Feb. 19, 1999	Feb. 9, 1999	56,636 km	Low beam does not come ON with the lighting switch.
4	Tokyo	GF-GA3 (Logo)	GA3-3208913	Oct. 11, 2000	Feb. 25, 1999	Feb. 10, 1999	64,259 km	Headlight low beam went OFF while driving and did not come back ON.
5	Tokyo	GF-GA3 (Logo)	GA3-3218972	Oct. 13, 2000	Jul. 15, 1999	Jun. 28, 1999	59,126 km	Headlight low beam went OFF and did not come back ON.
6	Tokyo	GF-GA3 (Logo)	GA3-3224740	Oct. 16, 2000	Oct. 7, 1999	Sep. 21, 1999	58,769 km	Low beam does not come ON with the switch. High beam and passing light works.
7	Tokyo	GF-GA3 (Logo)	GA3-3215521	Oct. 27, 2000	Jun. 7, 1999	May. 18, 1999	75,542 km	Low beam does not come ON with the switch. High beam and passing light works.
8	Miyagi	GF-GA3 (Logo)	GA3-3207419	Oct. 22, 2000	Feb. 4, 1999	Jan. 25, 1999	43,197 km	Low beam was inoperative for both sides when turning on the light at night.
9	Saitama	GF-GA3 (Logo)	GA3-3207995	Oct. 30, 2000	Feb. 10, 1999	Feb. 3, 1999	61,584 km	Low beam became inoperative.
10	Tokyo	GF-GA3 (Logo)	GA3-3219270	Nov. 19, 2000	Jul. 8, 1999	Jun. 30, 1999	70,041 km	Low beam does not come ON with the switch for both sides.

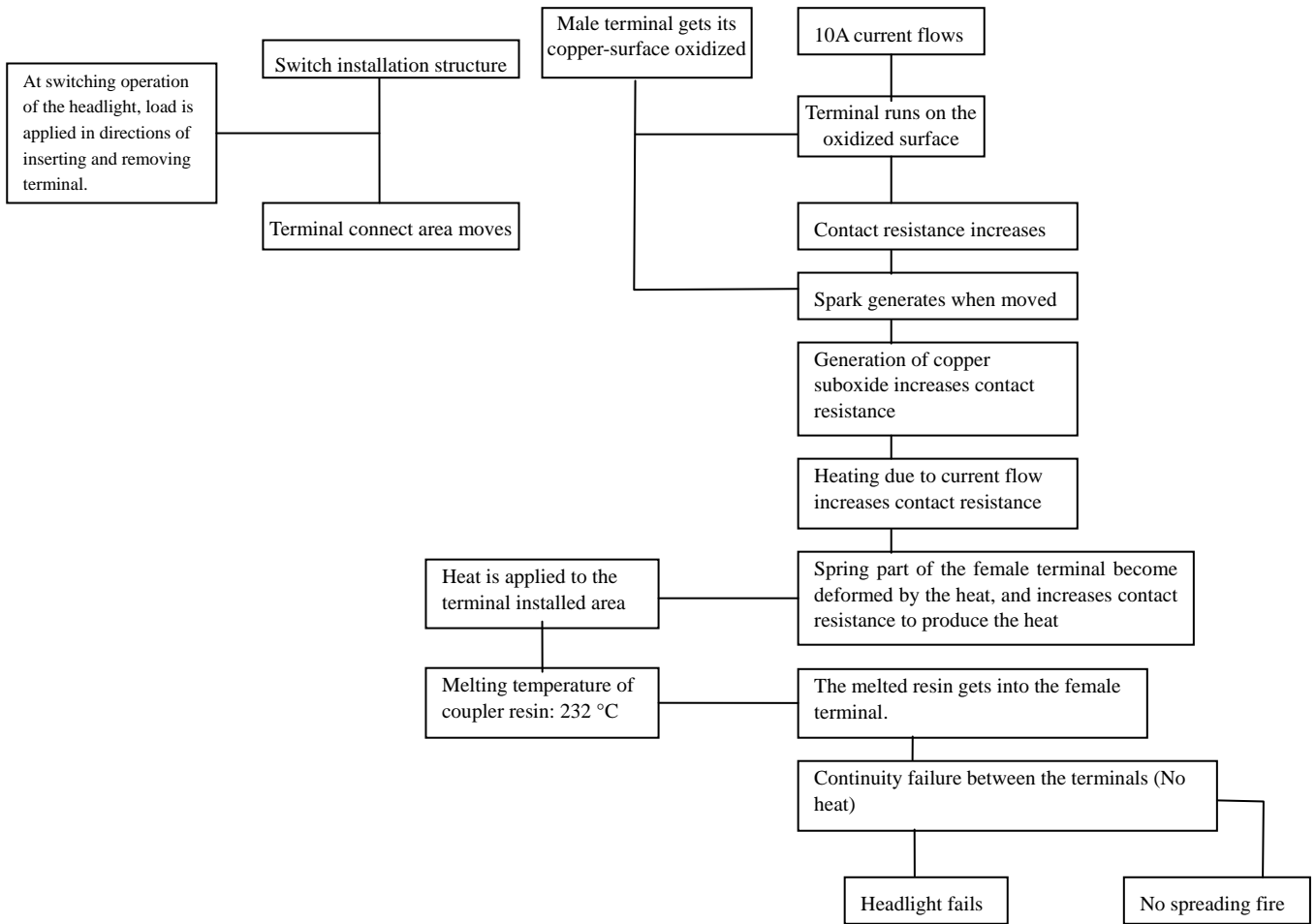
No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
11	Tokyo	GF-GA3 (Logo)	GA3-3208799	Dec. 6, 2000	Feb. 19, 1999	Feb. 9, 1999	94,215 km	Headlight low beam does not come ON for both sides.
12	Tokyo	GF-GA3 (Logo)	GA3-3210110	Dec. 11, 2000	Mar. 31, 1999	Feb. 23, 1999	68,993 km	Found Red/yellow terminal of the lighting switch became wide when checking the wire harness. Headlight is working.
13	Miyagi	GF-GA5 (Logo)	GA5-3001492	Dec. 24, 2000	May. 7, 1999	Feb. 5, 1999	75,649 km	Low beam did not come ON at the early evening. High beam functions.
14	Tokyo	GF-GA3 (Logo)	GA3-3215520	Dec. 25, 2000	Jun. 7, 1999	May. 18, 1999	86,181 km	Low beam does not come ON with the switch for both sides. High beam operates normally.
15	Tokyo	GF-GA3 (Logo)	GA3-3208783	Jan. 17, 2001	Mar. 1, 1999	Feb. 9, 1999	88,499 km	Headlight low beam does not come ON.
16	Kanagawa	GF-GA3 (Logo)	GA3-3209901	Jan. 21, 2001	Mar. 4, 1999	Feb. 20, 1999	48,973 km	Headlight low beam does not come ON for both sides. High beam works.
17	Mie	YA-ZE1 (insight)	ZE1-1100030	Feb. 6, 2001	May. 30, 2000	May. 11, 2000	26,444 km	Headlight low beam does not come ON for both sides.
18	Tokyo	GF-GA3 (Logo)	GA3-3220015	Feb. 9, 2001	Feb. 14, 2000	Jul. 12, 1999	49,893 km	Headlight low beam does not come ON for both sides. High beam works.
19	Tokyo	GF-GA3 (Logo)	GA3-3209457	Feb.13, 2001	Mar. 1, 1999	Feb. 16, 1999	83,881 km	Headlight low beam does not come ON for both sides. Information from Nippon Rent-A-Car
20	Kagawa	GF-GA3 (Logo)	GA3-3207759	Mar. 7, 2001	Feb. 5, 1999	Jan. 29, 1999	26,010 km	Headlight low beam does not come ON. High beam works.
21	Shiga	GF-GA3 (Logo)	GA3-3215343	Mar.15, 2001	May. 21, 1999	May. 17, 1999	22,360 km	Low beam did not come On when tried to turn on the low beam to drive at night.
22	Tokyo	GF-GA3 (Logo)	GA3-3215568	Apr. 12, 2001	Jun. 7, 1999	May. 18, 1999	94,574 km	Headlight low beam does not come ON for both sides. High beam works.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
23	Tokyo	GF-GA3 (Logo)	GA3-3216537	Apr. 27, 2001	Jul. 1, 1999	May. 27, 1999	92,512 km	While checking the lighting SW, melted SW coupler was confirmed. Headlight is operative.
24	Tokyo	GF-GA3 (Logo)	GA3-3225250	Apr. 25, 2001	Nov. 18, 1999	Sep. 28, 1999	63,934 km	The same as above
25	Tokyo	GF-GA3 (Logo)	GA3-3216536	Apr. 25, 2001	Jul. 1, 1999	May. 27, 1999	100,110 km	The same as above
26	Tokyo	GF-GA3 (Logo)	GA3-3219339	May.10, 2001	Jul. 14, 1999	Jul. 1, 1999	85,039 km	The same as above
27	Tokyo	GF-GA3 (Logo)	GA3-3225001	May.10, 2001	Oct. 21, 1999	Sep. 23, 1999	96,000 km	The same as above
28	Tokyo	GF-GA3 (Logo)	GA3-3216146	May.10, 2001	Jun. 17, 1999	May. 24, 1999	97,670 km	The same as above
29	Tokyo	GF-GA3 (Logo)	GA3-3216149	May.16, 2001	Jun. 21, 1999	May. 24, 1999	104,198 km	The same as above
30	Tokyo	GF-GA3 (Logo)	GA3-3216538	May.16, 2001	Jul. 1, 1999	May. 27, 1999	97,515 km	The same as above
31	Hyogo	GF-GA3 (Logo)	GA3-1205456	Jun. 11, 2001	Nov. 26, 1999	Oct. 27, 1999	57,676 km	Head light did not come ON when tried to turn it ON.
32	Tokyo	GF-GA3 (Logo)	GA3-3224736	Jun. 18, 2001	Oct. 7, 1999	Sep. 21, 1999	74,979 km	While driving at night, smoke was detected in the cabin, and the low beam became inoperative after that incident.
33	Nara	GF-GA3 (Logo)	GA3-3215752	Jun. 22, 2001	May. 25, 1999	May. 20, 1999	53,640 km	Light was checked because of the complaint from a customer. High beam passing light and small light worked but low beam did not work.
34	Tokyo	GF-GA3 (Logo)	GA3-3221778	Jul. 1, 2001	Sep. 20, 1999	Aug. 18, 1999	73,168 km	Light does not come ON all the time.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
35	Fukushima	GF-GA3 (Logo)	GA3-3214587	Jul. 3, 2001	Apr. 26, 1999	Apr. 16, 1999	55,707 km	Small light and High beam works but low beam become inoperative at times.
36	Gunma	GF-GA5 (Logo)	GA5-1000347	Aug. 10, 2001	May. 21 1999	May. 14, 1999	20,100 km	Headlight low beam does not come ON for both sides.

### 3. Cause investigation

Occurrence mechanism



### 4. Improvement action details

In all units, replace the combination SW to a C/M part and replace the headlight female terminal to a non-defective part. Also, replace the coupler with a non-defective part if damaged.

### 5. Recurrence prevention

As a general rule, plating will be applied for the terminals with the width below 0.09 inch which continuously used for high current flow. Reflect to the design guide that in case of discontinuing the plating, check is required before judging the application of a non-plating unit to see if the terminals are not sliding. Also, durability testing conditions regarding the terminal rubbing will be specified on the spec of each part.

## 6. Reason why affected range can be specified

For the subject model LOGO, 77, 731 units produced from October 27, 1998 (99M) to the end of production of GF-GA3 type and GF-GA5 type on June 11, 2001 were included in the affected range.

The units produced before October 27, 1998 was excluded from the affected range because of the different switch structure.

As for Insight, 1,874 units produced from the new model production on September 6, 1999 to July 31, 2001 are included in the affected range (HN-ZE1 type and YA-ZE1 type).

The total of 79,605 units is included in the range.

The other models are not included in the range because of the different installation structure of the switch.

## 7. Situation and Measurement for the units exported

This failure occurs to the models that are equipped with the lighting/turn signal switch on the right side of the steering.

(1) Export destination countries and number of units.

Model	Export destination	Number of units exported
ZE1 type (Model name: Insight) left-hand drive spec	Australia	45 units
	Singapore	3 units
	Total	48 units

(2) Countermeasure

Conduct action suitable for each country's situation.

## 8. Time required for remedial action

0.6 Hr is required for the remedial action.

## この PDF パッケージには複数のファイルが含まれています。

PDF パッケージに含まれる文書の閲覧、作業には、Adobe Reader または Adobe Acrobat のバージョン 8 以降のご使用をお勧めします。最新バージョンにアップデートいただくと、次のような利点があります。

- 効率的で、統合された PDF 表示
- 簡単に印刷
- クイック検索

最新バージョンの Adobe Reader をお持ちでない場合

[ここをクリックして最新バージョンの Adobe Reader をダウンロードできます](#)

既に Adobe Reader 8 をお持ちの場合

この PDF パッケージ内のファイルをクリックして表示できます。

EA11-012

HONDA

4/20/2012

Q16

020131 LIFE DUNK Lowbeam  
failure



## Recall Notification

January 31, 2002

Recall No.	806	Recall initiation date	February 1, 2002
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	<p>① Due to inappropriate manufacturing measures of a base inside the belt buckle, the tongue may not be inserted properly when fasten the seatbelt. Therefore, the locking mechanism does not operate properly, causing the belt to unbuckle if the load is applied at a time of accident, and the occupants may not be restrained as a result.</p> <p>② Due to inappropriate installation measures of a headlight SW terminal, contacting pressure for the dipped beam terminal became low. This caused the contacting area to wear when the current is occurred by the switching operation, and leads to continuity failure which results in the dipped beam headlamp not ON.</p>		
Corrective action details	<p>① In all units, replace the driver's belt buckle with a non-defective part.</p> <p>② In all units, replace the headlight SW with a non-defective part.</p>		
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> </ul> <p>Place a "769" sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.</p>		

Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles	Note		
Honda	GF-JB1	LIFE	JB1- 1038520 - JB1- 1192360 Feb. 11, 1999 - Nov. 30, 2000	153,841	①		
			JB1- 2000002 - JB1- 2007295 Dec. 5, 2000 - Jan. 15, 2001	7,294			
			JB1- 3009492 - JB1- 3127311 Feb. 11, 1999 - Dec. 5, 2000	117,820			
			JB1- 4000001 - JB1- 4004344 Dec. 5, 2000 - Jan. 15, 2001	4,344			
			JB1- 5000001 - JB1- 5000175 Feb. 23, 2000 - Dec. 4, 2000	175			
			JB1- 5100001 - JB1- 5100019 Dec. 11, 2000 - Jan. 10, 2001	19			
	GF-JB2			JB2- 1013985 - JB2- 1031719 Feb. 10, 1999 - Sep. 30, 1999		17,735	
				JB2- 3000001 - JB2- 3035558 Feb. 17, 1999 - Dec. 4, 2000		35,558	
				JB2- 5000001 - JB2- 5000057 Feb. 3, 2000 - Dec. 4, 2000		57	
				JB2-4000001 - JB2-4003351 Dec. 5, 2000 - Jan. 11, 2001		3,351	
				JB2-5100001 - JB2-5100008 Dec. 15, 2000 - Dec. 28, 2000		8	①

Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles	Note
	LA-JB3	LIFE DUNK	JB3-1000011 - JB3-1003243 Dec. 14, 2000 - Feb. 7, 2001	3,233	①②
			JB3-1003244 - JB3-1034175 Jan. 11, 2001 - Jan. 7, 2002	29,773	②
	LA-JB4		JB4-1000012 - JB4-1001042 Dec. 14, 2000 - Jan. 29, 2001	1,026	①②
			JB4-1001043 - JB4-1009203 Jan. 12, 2001 - Dec. 28, 2001	7,918	②
				382,152 units	

## Recall Notification List

Recall notification date: January 31, 2002

Recall No.	806	Recall initiation date	February 1, 2002
Notifier	Honda Motor Co., Ltd. Representative Executive: Hiroyuki Yoshino		Contact: Customer Service Tel: 0120-112010
Defective part (Part name)	① Seatbelt (Belt buckle) ② Lighting system (Headlight switch)		
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	① Due to inappropriate manufacturing measures of a base inside the belt buckle, the tongue may not be inserted properly when fasten the seatbelt. Therefore, the locking mechanism does not operate properly, causing the belt to unbuckle if the load is applied at a time of accident, and the occupants may not be restrained as a result. ② Due to inappropriate installation measures of a headlight SW terminal, contacting pressure for the dipped beam terminal became low. This caused the contacting area to wear when the current is occurred by the switching operation, and leads to continuity failure which results in the dipped beam headlamp not ON.		
Corrective action details	① In all units, replace the driver's belt buckle with a non-defective part. ② In all units, replace the headlight SW with a non-defective part.		
Number of occurrences	① 6 cases ② 26 cases	Number of accident	① None ② None
Manner of problem discovery	Reported from the dealer		
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> </ul> Place a "769" sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.		

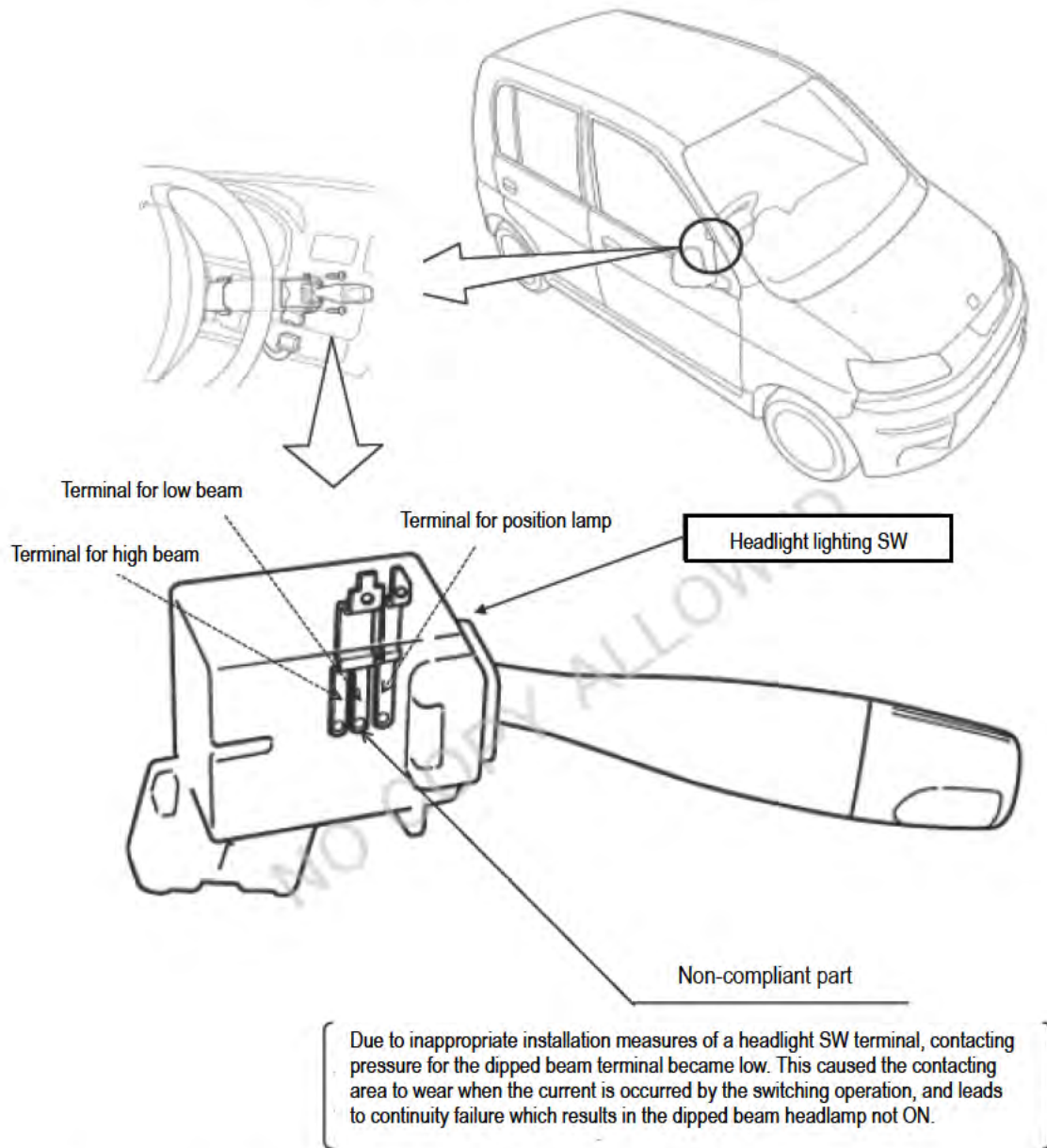
Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles	Note
Honda	GF-JB1	LIFE	JB1- 1038520 - JB1- 1192360 Feb. 11, 1999 - Nov. 30, 2000	153,841	①
			JB1- 2000002 - JB1- 2007295 Dec. 5, 2000 - Jan. 15, 2001	7,294	
			JB1- 3009492 - JB1- 3127311 Feb. 11, 1999 - Dec. 5, 2000	117,820	
			JB1- 4000001 - JB1- 4004344 Dec. 5, 2000 - Jan. 15, 2001	4,344	
			JB1- 5000001 - JB1- 5000175 Feb. 23, 2000 - Dec. 4, 2000	175	
			JB1- 5100001 - JB1- 5100019 Dec. 11, 2000 - Jan. 10, 2001	19	

Manufacture	Type	Model	Range of affected serial number and production period	Number of affected vehicles	Note
	GF-JB2		JB2- 1013985 - JB2- 1031719 Feb. 10, 1999 - Sep. 30, 1999	17,735	
			JB2- 3000001 - JB2- 3035558 Feb. 17, 1999 - Dec. 4, 2000	35,558	
			JB2- 5000001 - JB2- 5000057 Feb. 3, 2000 - Dec. 4, 2000	57	
			JB2-4000001 - JB2-4003351 Dec. 5, 2000 - Jan. 11, 2001	3,351	
			JB2-5100001 - JB2-5100008 Dec. 15, 2000 - Dec. 28, 2000	8	
	LA-JB3	LIFE DUNK	JB3-1000011 - JB3-1003243 Dec. 14, 2000 - Feb. 7, 2001	3,233	①②
			JB3-1003244 - JB3-1034175 Jan. 11, 2001 - Jan. 7, 2002	29,773	②
	LA-JB4		JB4-1000012 - JB4-1001042 Dec. 14, 2000 - Jan. 29, 2001	1,026	①②
			JB4-1001043 - JB4-1009203 Jan. 12, 2001 - Dec. 28, 2001	7,918	②
	Total of 4 types	Total of 2 models	(Range of production period for all subject models) Feb. 10, 1999 – Jan. 7, 2002	382,152 units	①Total of 344,461 units ②Total of 41,950 units

## Major specification of vehicles subjected to the recall

Manufacture	Type	Model	Type/ Use application	Vehicle shape	Engine type	Note
Honda	GF-JB1	Life	Light vehicle Passenger car	Box	E07Z (656)	
	GF-JB2					
	LA-JB3	Life Dunk				
	LA-JB4					

## Illustrative Drawing of Modified Part ②



Corrective action details: In all units, replace the headlight lighting SW with a non-defective part.

Note: Replacement parts are surrounded with a box.

Identifier: Apply yellow paint on the installation bolt head at the right front slide rail of the driver's seat

## 1. Background of the recall

On February 1, 2001, we received information from a dealer in Hokkaido that “the low beam does not come on but the high beam functions normally for LA-JB1 type (Model name: Life dunk)”. Upon checking the headlight by installing the returned lighting switch to the actual vehicle, both low beam and high beam came on. Since it was not possible to reproduce the low beam failure, we checked the current and found no abnormality in the voltage drop and insulation resistance. We also disassembled the part to check for attachment of foreign substances, but terminals and contact points were normal and foreign substance was not found. Because it was not possible to identify the cause, we decided to monitor the future occurrences.

On December 3, 2001 while under monitoring, we got information from a dealer in Tokyo of the case that “headlight go off when indicating the turn signal lamp while lighting the low beam for LA-JB3 type” and that “the symptom can be reproduced with the actual vehicle.” From this information, we checked the symptom with the actual vehicle on December 5, 2001, and confirmed only the low beam does not come on when turning the lighting switch on.

In addition, we found that the low beam turns on and off from applying slightly stronger load in operating switch knob to turn signal and light switch.

Since we could reproduce the symptom by applying more load to operation, we decided to check the current including vibration factor. As a result, we saw an abnormal current waveform occurs at the instant of turning the light switch. This waveform indicated the chattering which repeats electrical ON and OFF.

The result of detailed observation of the contact point of the low beam side shows that there was no wear or abnormality on the movable contact surface. However, 0.129mm-deep abnormal wear on the fixed contact surface, 0.163mm-height difference of the movable plate spring, and 5 to 8gf extremely low contact pressure were found.

To find out the reason for plate spring height difference and insufficient contact pressure, we investigated the operators, operating procedures, facilities, and parts from the production record of the plate spring assembling process. As a result of the investigation, we found out that the terminal installation procedure varied with operators, and thus we conducted reproducibility test for each installation procedure, founding certain procedure forced to bend the plate spring of the low beam side. In addition, we found that riveting process was performed in a way that presses and bend the plate spring, causing the plate spring height difference to occur. When the contact pressure of the product used for reproducibility test was measured, the lowest we could measure was 20gf compared to the design standard.

Due to the characteristics of the spring contact pressure, 0.2mm-wear may possibly cause 20gf reduction in the pressure. Therefore, initial pressures of the returned units were assumed from 10 to 20gf.

To investigate the effect of contact pressure on the service life, we conducted the unit life test of the switch, and found that the units with initial pressure of 5gf and 10gf failed after 500 cycles and 5000 cycles, respectively. However, units with 20gf did not fail until the target value of 50,000 cycles.

From the test results, we understood that the lower the contact pressure, the longer the time that chattering between the contacts occur, meaning the more ON and OFF occurrences. We also found that wear of the plate spring progresses by arc discharge from chattering.

Based on the findings of investigations, we installed a switch with 20gf which completed the test to the actual vehicle and operated its switch knob with load, and confirmed the low beam comes on and off. From the findings, we understood that when vibration is applied to abnormally worn unit while current is flowing, the vibration reaches to contact point and causes electrical ON and OFF occurrences, resulting in the contact failure.

We could not detect abnormality from a switch unit sooner because it takes long to recognize that even with the same operating manner, impact was bigger when the unit was installed and fixed on the vehicle.

Global Quality Committee has decided to take proactive market action because if the headlight switch which is insufficient in the contact pressure of low beam is continued to be used, wear of the contact point accelerates by switching operation and in the worst case, continuity failure occurs at the contact point to cause the low beam failure.

## 2. Number of occurrences of the problem

26 defects were reported from the market as listed below. No accident reported.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
1	Hokkaido	LA-JB4 ( LIFE DUNK )	JB4- 1000206	Jan. 25, 2001	Jan. 12, 2001	Dec. 18, 2000	322km	Low beam Head light does not come on. High beam works.
2	Shizuoka	LA-JB3 ( LIFE DUNK )	JB3- 1000767	Feb. 22, 2001	Dec. 27, 2000	Dec. 18, 2000	307km	Low beam went off upon indicating turn signal.
3	Mie	LA-JB 3 ( LIFE DUNK )	JB 3 - 1006864	Apr. 12, 2001	Jan. 31, 2001	Jan. 20, 2001	5165km	Low beam went off upon indicating turn signal. Low beam came back ON after several operation of the turn signal.
4	Hokkaido	LA-JB4 ( LIFE DUNK )	JB4- 1002326	Jun. 24, 2001	Mar. 28, 2001	Feb. 7, 2001	2189km	Low beam became inoperative by turning on the light switch. Small and High beam works.
5	Aomori	LA-JB4 ( LIFE DUNK )	JB4- 1002186	Aug. 17, 2001	Jan. 31, 2001	Jan. 22, 2001	2927km	Light suddenly goes off while driving. This often occurs upon operation of turn signal.
6	Okayama	LA-JB4 ( LIFE DUNK )	JB4- 1000701	Sep. 14, 2001	Jan. 11, 2001	Jan. 9, 2001	4755km	Light become dark while driving at night. Light recovers by switch operation.

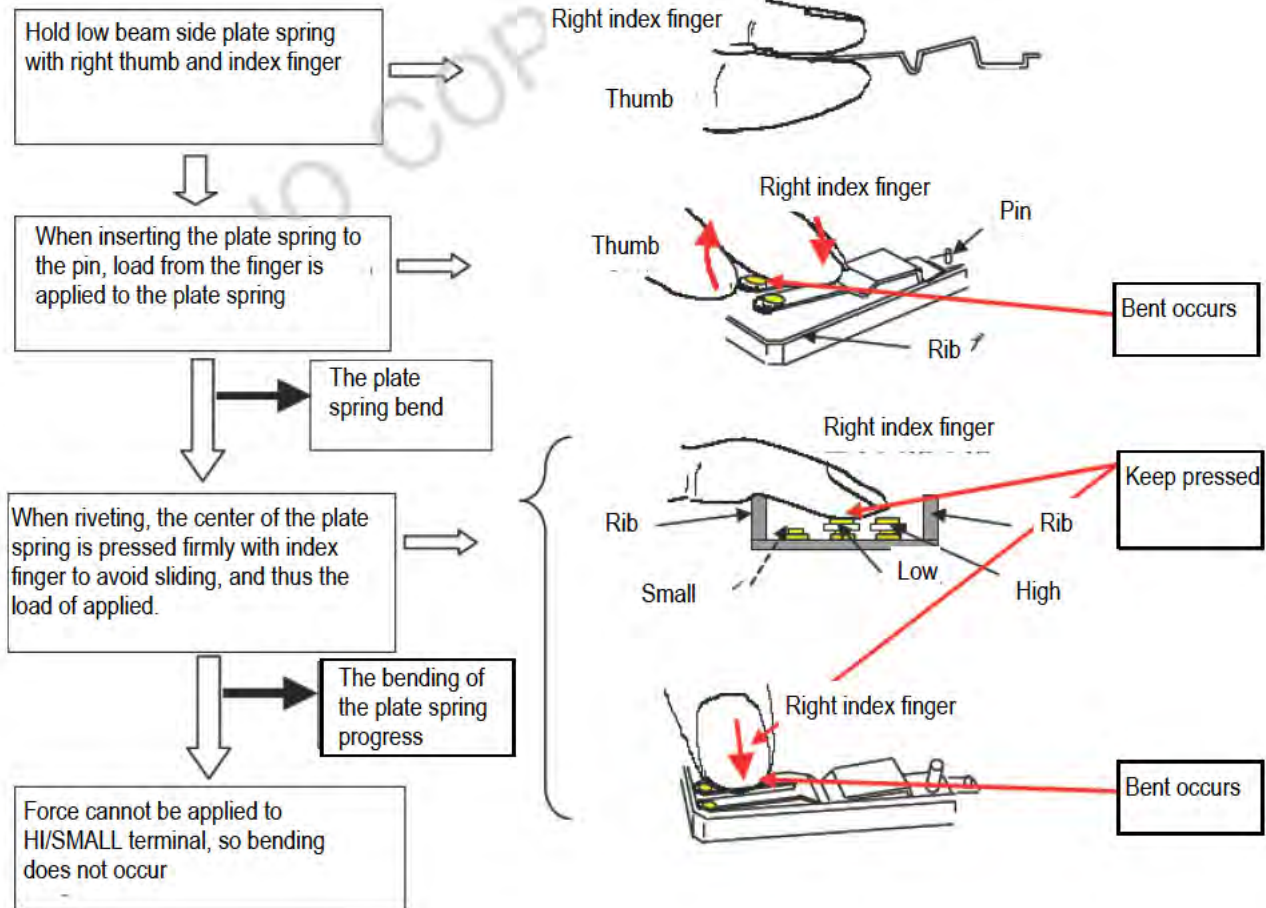


No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
7	Yamagata	LA-JB4 ( LIFE DUNK )	JB4-1000709	Sep. 15, 2001	Jan. 19, 2001	Jan. 8, 2001	9090km	Headlight suddenly becomes dark while driving at night. It happened when the turn signal was returning to its original position.
8	Shiga	LA-JB3 ( LIFE DUNK )	JB3-1006718	Sep. 15, 2001	Feb. 26, 2001	Jan. 22, 2001	5629km	Headlight is sometimes not coming on with the switch.
9	Hyogo	LA-JB3 ( LIFE DUNK )	JB3-1005764	Oct. 7, 2001	Jan. 26, 2001	Jan. 18, 2001	11386km	Headlight low beam sometimes not coming ON.
10	Miyagi	LA-JB3 ( LIFE DUNK )	JB3-1005106	Oct. 11, 2001	Jan. 31, 2001	Jan. 20, 2001	8803km	Headlight suddenly turned off while driving. It came back ON after turning the light switch several times.
11	Osaka	LA-JB3 ( LIFE DUNK )	JB3-1001068	Oct. 27, 2001	Dec. 22, 2000	Dec. 19, 2000	10727km	Headlight low beam is inoperative.
12	Kyoto	LA-JB3 ( LIFE DUNK )	JB3-1001338	Nov. 19, 2001	Jul. 16, 2001	Dec. 20, 2000	3435km	Headlight becomes off while driving. It recovers when a shock is applied.
13	Aichi	LA-JB3 ( LIFE DUNK )	JB3-1005107	Nov. 20, 2001	Jul. 4, 2001	Jan. 16, 2001	3612km	Headlight low beam turns off with vibration while driving.
14	Chiba	LA-JB3 ( LIFE DUNK )	JB3-1003452	Nov. 26, 2001	Mar. 22, 2001	Jan. 26, 2001	3814km	Headlight low beam failed. It came back on after moving the lighting switch several times.
15	Fukushima	LA-JB4 ( LIFE DUNK )	JB4-1001024	Nov. 27, 2001	Jan. 30, 2001	Jan. 19, 2001	9486km	Headlight sometimes does not come ON with the switch. By changing the dimmer switch from low and high repeatedly, it comes ON.
16	Tokyo	LA-JB3 ( LIFE DUNK )	JB3-1001404	Dec. 1, 2001	Jan. 26, 2001	Dec. 21, 2000	1837km	Headlight low beam goes OFF upon indicating the turn signal. It may come ON if the shock is applied.
17	Hokkaido	LA-JB4 ( LIFE DUNK )	JB4-1001696	Dec. 3, 2001	Feb. 27, 2001	Jan. 17, 2001	4576km	Headlight is sometimes inoperative. It sometimes recovers by moving the switch or vibration from the bump.
18	Fukushima	LA-JB4 ( LIFE DUNK )	JB4-1001362	Dec. 6, 2001	Feb. 2, 2001	Jan. 15, 2001	13211km	Low beam is inoperative.
19	Yamaguchi	LA-JB3 ( LIFE DUNK )	JB3-1008214	Dec. 11, 2001	Mar. 30, 2001	Jan. 23, 2001	6521km	Headlight goes OFF while driving. It comes back ON by switching the light from ON and OFF several times.
20	Tokyo	LA-JB3 ( LIFE DUNK )	JB3-1004657	Dec. 13, 2001	Mar. 21, 2001	Jan. 17, 2001	1946km	Headlight low beam sometimes becomes inoperative.
21	Hyogo	LA-JB3 ( LIFE DUNK )	JB3-1007470	Dec. 18, 2001	Feb. 8, 2001	Jan. 22, 2001	8929km	Light become OFF when the turn signal is used.
22	Kanagawa	LA-JB3 ( LIFE DUNK )	JB3-1001122	Dec. 25, 2001	Feb. 28, 2001	Jan. 31, 2001	4688km	Headlight is sometimes inoperative.
23	Saitama	LA-JB3 ( LIFE DUNK )	JB3-1001970	Dec. 13, 2001	Jan. 19, 2001	Dec. 28, 2000	10986km	Headlight become OFF when the turn signal was used.
24	Kyoto	LA-JB3 ( LIFE DUNK )	JB3-1004893	Dec. 23, 2001	Jan. 23, 2001	Jan. 16, 2001	18975km	Headlight is sometimes inoperative or goes OFF while driving.
25	Niigata	LA-JB4 ( LIFE DUNK )	JB4-1000227	Jan. 5, 2002	Feb. 1, 2001	Dec. 18, 2000	13018km	Both sides of headlight do not come ON with the headlight switch.
26	Kanagawa	LA-JB3 ( LIFE DUNK )	JB3-1000582	Jan. 9, 2002	Dec. 22, 2000	Dec. 16, 2000	18386km	Headlight is sometimes inoperative.



### 3. Cause investigation

A mechanism of the problem occurrence which is limited to low beam plate spring terminal  
(Installation procedure difference by operator)



### 4. Improvement action details

In all units, replace the lighting switch with a non-defective part.

### 5. Recurrence prevention

1. Introduce the contact-pressure inspecting device to conduct pressure inspection for all units.
2. Add description of prohibited operation on the work instruction and reeducate workers.
3. Implement semi-automatic equipment to eliminate the variation caused by manual operation for terminal installation process.

## **6. Reason why affected range can be specified**

All 41,950 units of LA-JB3 and LA-JB4 types (Model name: Life dunk) produced from the production start on December 14, 2000 to January 7, 2002.

Since the contact pressure inspection was introduced to the production line after January 8, 2002, vehicles produced after that date are not subjected to the recall.

Also, the low beams equipped on other types of models that apply subject lighting switch are not subjected because of the different circuit. The other types are equipped with the lighting switch by different manufacture, so they are also not included in the affected range.

## **7. Situation and Measurement for the units exported**

The vehicles are destined for Japan so no export was done.

## **8. Time required for remedial action**

0.3 hr is required for the remedial action.

## この PDF パッケージには複数のファイルが含まれています。

PDF パッケージに含まれる文書の閲覧、作業には、Adobe Reader または Adobe Acrobat のバージョン 8 以降のご使用をお勧めします。最新バージョンにアップデートいただくと、次のような利点があります。

- 効率的で、統合された PDF 表示
- 簡単に印刷
- クイック検索

最新バージョンの Adobe Reader をお持ちでない場合

[ここをクリックして最新バージョンの Adobe Reader をダウンロードできます](#)

既に Adobe Reader 8 をお持ちの場合

この PDF パッケージ内のファイルをクリックして表示できます。

EA11-012

HONDA

4/20/2012

Q16

2004 CIVIC

040224\_NHTSA Civic

headlamp 573

SUBMITTED(US)

February 24, 2004

Mr. Kenneth Weinstein,  
Associate Administrator  
Office of Safety Assurance  
NATIONAL HIGHWAY TRAFFIC SAFETY  
ADMINISTRATION  
400 Seventh St., S.W.  
Washington, DC 20590

Dear Mr. Weinstein:

On February 12, 2004, Honda Motor Co., Ltd. (HMC) determined that a safety-related problem exists in the headlamps of certain 2001-2002 model year Honda Civic and 2000-2002 Insight automobiles. The following information is submitted pursuant to the requirements of 49 CFR 573.5.

573.5(c)(1)

**Name of manufacturer:** Honda Motor Co., Ltd. (HMC)  
Honda of America Manufacturing, Inc. (HAM)  
Honda of Canada Manufacturing, Inc. (HCM)  
Honda of the UK Manufacturing, Ltd. (HUM)

**Manufacturer's Agent:** William R. Willen  
American Honda Motor Co., Inc. (AHM)  
1919 Torrance Blvd.  
Torrance, CA 90501-2746

573.5(c)(2)

**Identification of potentially affected vehicles:**

<u>Make/Model</u>	<u>Description</u>	<u>VIN/Dates of Manufacture</u>
Honda Civic Sedan	Certain 2001 model year Certain 2002 model year	To be submitted in the final notification
Honda Civic Coupe	Certain 2001 model year Certain 2002 model year	
Honda Civic Hatchback	Certain 2002 model year	
Honda Insight	Certain 2000 model year Certain 2001 model year Certain 2002 model year	

**Description of the basis for the determination of the recall population:**

The 2000 model year Insight is the introductory year of a new vehicle. The 2001 model year Civic is the first year of a full model change. Vehicles manufactured prior to the affected vehicles had different construction and design. Vehicles manufactured after the affected vehicles were equipped with tin-plated headlight switch connectors. Tin plating significantly reduces oxidation build-up.

573.5(c)(3)

**Total number of vehicles potentially affected:** Approx. 440,000

573.5(c)(4)

**Percentage of affected vehicles that contain the defect:** 100%

573.5(c)(5)

**Defect description:**

**Summary**

The low-beam terminal on the headlight wire harness can overheat and may cause the low beams to fail without warning. Although the high beam position remains operational, an unexpected loss of low beams could result in a crash.

**Detail**

Oxidation forms on a non-plated copper terminal, increasing resistance and heat. Over time, as oxidation increases, heat eventually melts the low-beam switch coupler. Although the high beam position remains operational, an unexpected loss of low beams could result in a crash. With more than 800,000 vehicles operating in the worldwide market with the affected switch, no accidents or injuries have occurred.

573.5(c)(6)

**Chronology:**

Sep. 6, 2001	HMC conducted a headlight switch safety recall in Japan for Logo and Insight models. The updated switch connector was tin-plated for increased durability. These models are configured for right-hand steering.
November 2001	HMC adopted the updated headlight switch to all similar models.
Dec. 3, 2001	AHM issued the first report about a low beam failure in a 2001 Civic.
Dec. 12, 2001	HMC received the report and initiated an investigation.



573.5(c)(6)

**Chronology:**

Dec. 2001 to May 2002	HMC investigated actual parts from the market. AHM continued to watch the market.
Jun. 2002 to Jun. 2003	HMC conducted reoccurrence tests and reconfirmed the performance of the switch with and without the tin plating. HMC continued to investigate actual parts from the market.
Jul. 2003 to Jan. 2004	HMC investigated the cause of the different occurrence rates between factories and the future occurrence rate for all models. HMC also investigated the reasons why there were no occurrences in the Canadian market and whether or not accessory fog lamps in Japan were a contributing factor.
Feb. 12, 2004	HMC ended the investigation and conducted a review of all materials. HMC determined that a safety-related defect exists.
Feb. 19, 2004	AHM notified NHTSA by telephone.

573.5(c)(8)(i)

**Program for remedying the defect:**

The owners of all affected vehicles will be notified by mail and asked to take their vehicle to an authorized Honda dealer. The dealer will inspect the headlight switch and coupler for signs of heat damage. If heat damage is present, the dealer will replace the switch and coupler. If no heat damage is present, the dealer will replace the headlight switch and one mating pin in the coupler. This work will be done free of charge.

573.5(c)(8)(ii)

<b>The estimated date to begin sending notifications to owners:</b>	Mar. 29, 2004
<b>The estimated date to notify dealers via e-mail:</b>	Feb. 24, 2004
<b>The estimated date to begin sending notifications to dealers:</b>	Mar. 19, 2004
<b>The estimated date of completion of the notification:</b>	Apr. 15, 2004

573.5(c)(9)

**Representative copies of all notices, bulletins and other communications:**

A copy of the dealer service bulletin will be submitted to your office as soon as possible.

573.5(c)(10)

**Proposed owner notification letter submission:**

A draft of the owner notification letter will be submitted to your office as soon as possible.

Sincerely,

AMERICAN HONDA MOTOR CO., INC.



William R. Willen  
Managing Counsel  
Product Regulatory Office

WRW:ke

EA11-012

HONDA

4/20/2012

Q16

2004 CIVIC

040226 CIVIC Lowbeam  
failure(MLIT)

## Recall Notification

February 26, 2004

Recall No.	1045	Recall initiation date	February 27, 2003
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	Due to inappropriate surface treatment for a headlight SW terminal of the lighting system, the coupler joint moves and increases contact resistance when switching operation of the headlight is performed. As a top event, the coupler joint melts and leads to a continuity failure, possibly causing the headlight failure.		
Corrective action details	In all units, replace the combination SW to a C/M part and replace the headlight female terminal to a non-defective part. Also, replace the coupler with a non-defective part if damaged.		
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> </ul> Place a "1045" sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.		

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
Honda	LA-ES1	Civic Ferio	ES1-1000008 - ES1-1011756 Aug. 7, 2000 - Sept. 18, 2001	10,088	
			ES1-1100001 - ES1-1100518 Sep. 25, 2001 - Nov. 8, 2001	445	
	UA-ES1		ES1-1200003 - ES1-1200628 Sep. 25, 2001 - Nov. 5, 2001	616	
	LA-ES2		ES2-1000013 - ES2-1001884 Aug. 31, 2000 - Aug. 9, 2001	1,597	
			ES2-1100001 - ES2-1100239 Oct. 4, 2001 - Nov. 7, 2001	215	
	LA-ES3		ES3-1000012 - ES3-1001859 Aug. 29, 2000 - Sep. 14, 2001	822	
			ES3-1100001 - ES3-1100091 Sep. 27, 2001 - Oct. 31, 2001	50	
			ES3-8000001 - ES3-8000331 Mar. 9, 2001 - Aug. 8, 2001	331	
			ES3-8100001 - ES3-8100020 Oct. 24, 2001	20	
			ZA-ES9	Civic Hybrid	ES9-1000016 - ES9-1000029 Nov. 9, 2001 - Dec. 5, 2001
	LA-EU1	Civic	EU1-1000011 - EU1-1038120 Sep. 4, 2000 - Sep. 18, 2001	22,966	
			EU1-1100003 - EU1-1101036 Oct. 5, 2001 - Nov. 5, 2001	619	
	UA-EU1		EU1-1200007 - EU1-1200521 Sep. 28, 2001 - Nov. 5, 2001	456	
	LA-EU2		EU2-1000009 - EU2-1002672 Sep. 12, 2000 - Sep. 17, 2001	1,753	

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
		Civic	EU2-1100001 - EU2-1100175 Oct. 5, 2001 - Nov. 8, 2001	148	
	LA-EU3		EU3-1000013 - EU3-1005776 Sep. 4, 2000 - Sep. 14, 2001	2,144	
			EU3-1100001 - EU3-1100305 Oct.10, 2001 - Nov. 5, 2001	149	
	LA-EU4		EU4-1000008 - EU4-1001376 Sep. 4, 2000 - Sep. 17, 2001	479	
			EU4-1100002 - EU4-1100053 Oct. 17, 2001 - Oct. 31, 2001	21	
	LA-GD1	Fit	GD1-1000020 - GD1-1067555 Jun. 5, 2001 - Nov. 8, 2001	67,536	
			GD1-8000001 - GD1-8000160 Sep. 5, 2001 - Oct. 26, 2001	160	
	LA-GD2		GD2-1000014 - GD2-1005639 Jun. 6, 2001 - Nov. 7, 2001	5,626	
			GD2-8000001 - GD2-8000025 Sep. 5, 2001 - Oct. 23, 2001	25	
	LA-RF3	Step WGN	RF3-1000002 - RF3-1065091 Mar. 13, 2001- Nov. 22, 2001	28,605	
			RF3-8000001 - RF3-8000248 May 21, 2001 - Oct. 29, 2001	96	
	LA-RF4		RF4-1000016 - RF4-1016352 Mar. 13, 2001 - Nov. 9, 2001	5,873	
			RF4-8000001 - RF4-8000104 May 21, 2001 - Nov. 1, 2001	32	
	LA-RN1	Stream	RN1-1000014 - RN1-1055241 Oct. 12, 2000 - Sep. 27, 2001	26,509	
			RN1-1101217 - RN1-1102044 Oct. 9, 2001 - Oct. 16, 2001	139	
	LA-RN2		RN2-1000016 - RN2-1008439 Oct. 12, 2000 - Sep. 28, 2001	3,269	
			RN2-1100161 - RN2-1100286 Oct. 9, 2001 - Oct. 15, 2001	10	
	LA-RN3		RN3-1000051 - RN3-1057855 Oct. 23, 2000 - Sep. 26, 2001	8,377	
	LA-RN4		RN4-1000064 - RN4-1009640 Jan. 10, 2001 – Sep. 26, 2001	1,239	
TOTAL				190,424 units	

(Notes)

This notification is issued to add the subject vehicles to “recall number 769” submitted on September 6, 2001.

## Recall Notification List

Recall notification date: February 26, 2004

Recall No.	1045	Recall initiation date	February 27, 2003
Notifier	Honda Motor Co., Ltd. Representative Executive: Takeo Fukui		Contact: Customer Service Tel: 0120-112010
Defective part (Part name)	Lighting System (Electrical circuit of the headlight)		
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	Due to inappropriate surface treatment for a headlight SW terminal of the lighting system, the coupler joint moves and increases contact resistance when switching operation of the headlight is performed. As a top event, the coupler joint melts and leads to a continuity failure, possibly causing the headlight failure.		
Corrective action details	In all units, replace the combination SW to a C/M part and replace the headlight female terminal to a non-defective part. Also, replace the coupler with a non-defective part if damaged.		
Number of occurrences	50 cases	Number of accident	None
Manner of problem discovery	Reported from the dealer		
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> </ul> Place a "1045" sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.		

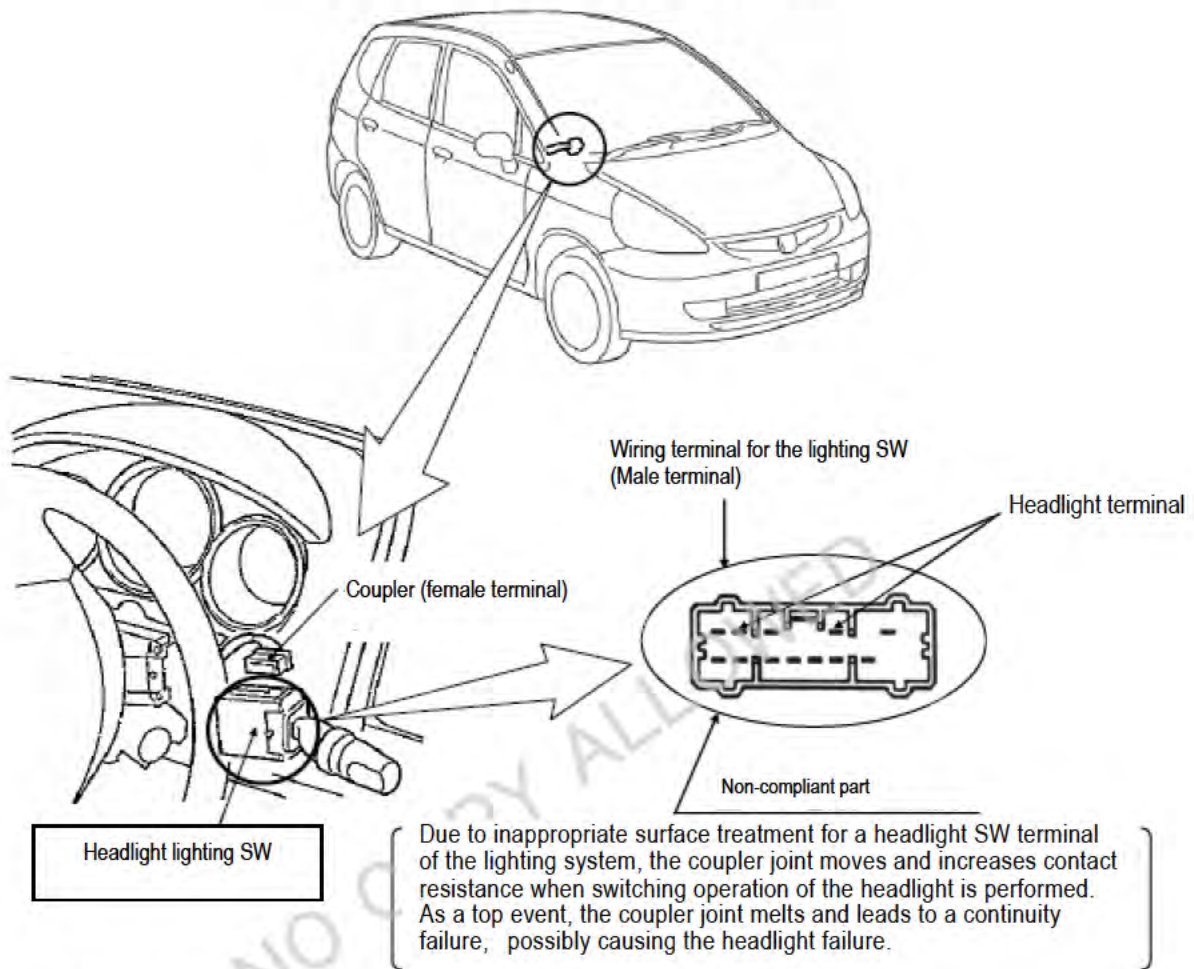
Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
Honda	LA-ES1	Civic Ferio	ES1-1000008 - ES1-1011756 Aug. 7, 2000 - Sept. 18, 2001	10,088	
			ES1-1100001 - ES1-1100518 Sep. 25, 2001 - Nov. 8, 2001	445	
	UA-ES1		ES1-1200003 - ES1-1200628 Sep. 25, 2001 - Nov. 5, 2001	616	
	LA-ES2		ES2-1000013 - ES2-1001884 Aug. 31, 2000 - Aug. 9, 2001	1,597	
			ES2-1100001 - ES2-1100239 Oct. 4, 2001 - Nov. 7, 2001	215	
	LA-ES3		ES3-1000012 - ES3-1001859 Aug. 29, 2000 - Sep. 14, 2001	822	
			ES3-1100001 - ES3-1100091 Sep. 27, 2001 - Oct. 31, 2001	50	
			ES3-8000001 - ES3-8000331 Mar. 9, 2001 - Aug. 8, 2001	331	
			ES3-8100001 - ES3-8100020 Oct. 24, 2001	20	
			ZA-ES9	Civic Hybrid	ES9-1000016 - ES9-1000029 Nov. 9, 2001 - Dec. 5, 2001
	LA-EU1	Civic	EU1-1000011 - EU1-1038120 Sep. 4, 2000 - Sep. 18, 2001	22,966	

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
		Civic	EU1-1100003 - EU1-1101036 Oct. 5, 2001 - Nov. 5, 2001	619	
	UA-EU1		EU1-1200007 - EU1-1200521 Sep. 28, 2001 - Nov. 5, 2001	456	
	LA-EU2		EU2-1000009 - EU2-1002672 Sep 12, 2000 - Sep. 17, 2001	1,753	
			EU2-1100001 - EU2-1100175 Oct. 5, 2001 - Nov. 8, 2001	148	
	LA-EU3		EU3-1000013 - EU3-1005776 Sep. 4, 2000 - Sep. 14, 2001	2,144	
			EU3-1100001 - EU3-1100305 Oct.10, 2001 - Nov. 5, 2001	149	
	LA-EU4		EU4-1000008 - EU4-1001376 Sep. 4, 2000 - Sep. 17, 2001	479	
			EU4-1100002 - EU4-1100053 Oct. 17, 2001 - Oct. 31, 2001	21	
	LA-GD1	Fit	GD1-1000020 - GD1-1067555 Jun. 5, 2001 - Nov. 8, 2001	67,536	
			GD1-8000001 - GD1-8000160 Sep. 5, 2001 - Oct. 26, 2001	160	
	LA-GD2		GD2-1000014 - GD2-1005639 Jun. 6, 2001 - Nov. 7, 2001	5,626	
			GD2-8000001 - GD2-8000025 Sep. 5, 2001 - Oct. 23, 2001	25	
	LA-RF3	Step WGN	RF3-1000002 - RF3-1065091 Mar. 13, 2001- Nov. 22, 2001	28,605	
			RF3-8000001 - RF3-8000248 May 21, 2001 - Oct. 29, 2001	96	
	LA-RF4		RF4-1000016 - RF4-1016352 Mar. 13, 2001 - Nov. 9, 2001	5,873	
			RF4-8000001 - RF4-8000104 May 21, 2001 - Nov. 1, 2001	32	
	LA-RN1	Stream	RN1-1000014 - RN1-1055241 Oct. 12, 2000 - Sep. 27, 2001	26,509	
			RN1-1101217 - RN1-1102044 Oct. 9, 2001 - Oct. 16, 2001	139	
	LA-RN2		RN2-1000016 - RN2-1008439 Oct. 12, 2000 - Sep. 28, 2001	3,269	
			RN2-1100161 - RN2-1100286 Oct. 9, 2001 - Oct. 15, 2001	10	
	LA-RN3		RN3-1000051 - RN3-1057855 Oct. 23, 2000 - Sep. 26, 2001	8,377	
	LA-RN4		RN4-1000064 - RN4-1009640 Jan. 10, 2001 – Sep. 26, 2001	1,239	
TOTAL				190,424 units	

(Notes)

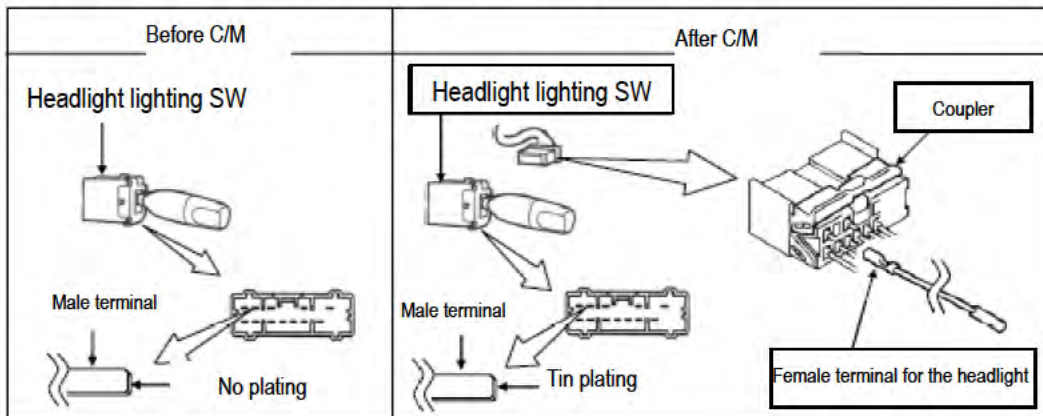
This notification is issued to add the subject vehicles to “recall number 769” submitted on September 6, 2001.

### Illustrative Drawing of Modified Part



#### Corrective action details

In all units, replace the combination SW to a C/M part and replace the headlight female terminal to a non-defective part. Also, replace the coupler with a non-defective part if damaged.



Note: Replacement parts are surrounded with a box.

Identifier: Apply yellow paint on the installation bolt head at the right front slide rail of the driver's seat



## Major specification of vehicles subjected to the recall

Manufacture	Type	Model	Type/ Use application	Vehicle shape	Engine type (Total engine displacement)	Note
Honda	LA-ES1	Civic Ferio	Compact car Passenger car	Box	D15B (1,493)	
	UA-ES1				D17A (1,668)	
	LA-ES2				LDA-MF3 (1,339)	
	LA-ES3	Civic Hybrid		Station WGN	D15B (1,493)	
	ZA-ES9				D17A (1,668)	
	LA-EU1	Civic		Station WGN	L13A (1,339)	
	UA-EU1				K20A (1,998)	
	LA-EU2				D17A (1,668)	
	LA-EU3				L13A (1,339)	
	LA-EU4	Fit		Station WGN	D17A (1,668)	
	LA-GD1				K20A (1,998)	
	LA-GD2	Step Wagon		Station WGN	D17A (1,668)	
	LA-RF3				K20A (1,998)	
	LA-RF4	Stream		Station WGN	D17A (1,668)	
	LA-RN1				K20A (1,998)	
	LA-RN2					
LA-RN3						
LA-RN4						

## 1. Background of the recall

On December 4, 2001, we received information from a dealer in the US that “The headlight low beam does not come on for Civic. The high beam functions and melted coupler of the headlight lighting switch was found.” Also on January 7, 2002, we received the same information in Japan.

Since the subject vehicle was not included in the range of the recall No. 769, we checked returned headlight lighting switch and the coupler to find the terminal that is discolored by the heat and melted at the root which is made with resin.

We started to receive the similar information after that incident, therefore conducted a reproducibility test. From the result, we found that due to terminal sliding movement, contact surface became oxidized and resistance value increased. If large voltage continuously flows by lighting the headlight, terminal melting occurs. This was the same occurrence cause as the recall No. 769.

Also, we found that there are some vehicles that supposed to be included in the recall range were left out because the effect of headlight switch and harness routing had not been considered.

From the above reason, Global Quality Committee has decided to add the target vehicles to the “Recall No. 769.”

## 2. Number of occurrences of the problem

50 defects were reported from the market as listed below. No accident reported.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
1	Hlroshima	LA-EU2 (Civic)	EU2-1000521	Dec. 27, 2001	Nov. 13, 2000	Nov. 7, 2000	16,417km	Low beam Head light does not come on.

Failure information other than the above are listed on a different sheet.

## 3. Cause investigation

Reason of omission of target vehicles from “Recall No. 769”

- Although the degree of vibration and voltage fluctuation at the switching operation of the headlight were both checked for the terminal joint of the headlight switch, vibration at the switching operation was rather small and no voltage fluctuation was found in the voltage waveform because the vehicles differ in installation structure. Therefore we judged there is no sliding of the terminal joint and excluded them from the recall target.
- Since the failure was occurred to the vehicles not included in the recall range, we investigated the problem cause and found that pushing or pulling of the switch applies load to the harness joint of the headlight switch if the harness is in contact with the instrument panel due to harness routing variation,

causing the terminals to slide to develop the voltage fluctuation.

#### 4. Conformity assessment result of the corrective action

Since a male terminal of the C/M headlight lighting switch applies tin plating, contact resistance of the terminal coupler does not increase to cause the heat. Therefore, it will not lead to melting of the coupler or a continuity failure.

#### 5. Affected range and its reason

Affected range is limited to 190,424 units of LA-ES1, UA-ES1, LA-ES2, LA-ES3, ZA-ES9, LA-EU1, UA-EU1, LA-EU2, LA-EU3, LA-EU4, LA-GD1, LA-GD2, LA-RF3, LA-RF4, LA-RN1, LA-RN2, LA-RN3, LA-RN4 that are produced from the production start on August 7, 2000 to the timing that tin plating was applied to the male terminal on December 5, 2001.

#### 6. Situation and Measurement for the units exported

(1) Export destination countries and number of units

Model Country	Civic	Fit	Step Wagon	Logo	Insight	Stream	Total
USA	26,216	-	-	-	8,775	1	34,992
Canada	-	-	-	-	-	-	-
UK	7,218	7	-	2,440	178	2,856	12,699
Australia	7,675	-	-	-	-	-	7,675
Other	37,895	171	221	573	194	11,991	51,045
Total	79,004	178	221	3,013	9,147	14,848	106,411

(2) Countermeasure

Conduct action suitable for each country's situation.

#### 7. Recurrence prevention

- From 03M, conduct the quality overhaul and apply tin plating to terminals with width below 2.3mm (090 terminals) which is used for continuous current flow.
- From 04M, reflect on the design guide that terminal with width below 2.3mm shall be tin plated as a general rule.

## 8. Time required for remedial action

Time required for remedial action is 0.7hr for Civic, Civic Ferio, Civic Hybrid, Step Wagon, and Stream, and 0.8hr for Fit.

### Defect information (Cont'd)

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
2	Tokyo	LA-EU1 (CIVIC)	EU1- [REDACTED]	Mar. 20, 2002	Dec. 27, 2000	Dec. 19, 2000	40,059km	Headlight went off and does not come ON since then.
3	Tokyo	LA-RN1 (Stream)	RN1- [REDACTED]	Apr. 10, 2002	Dec. 20, 2000	Dec. 8, 2000	44,119km	Headlight low beam does not come ON.
4	Tokyo	LA-EU1 (CIVIC)	EU1- [REDACTED]	Apr. 11, 2002	Oct. 5, 2000	Sep. 28, 2000	66,266km	Headlight low beam does not come ON.
5	Tokyo	LA-RN1 (Stream)	RN1- [REDACTED]	Sep. 12, 2002	Dec. 19, 2000	Dec. 7, 2000	74,456km	Headlight low beam does not come ON.
6	Kanagawa	LA-ES3 (CIVIC FERIO)	ES3- [REDACTED]	Sep. 17, 2002	Feb. 21, 2001	Feb. 16, 2001	50,538km	Headlight low beam does not come ON for both sides.
7	Saga	LA-GD1 (Fit)	GD1- [REDACTED]	Oct. 18, 2002	Jul. 10, 2001	Jun. 27, 2001	75,236km	Headlight suddenly went off Only low beam is inoperative.
8	Kanagawa	LA-EU1 (CIVIC)	EU1- [REDACTED]	Dec. 4, 2002	Jan. 15, 2001	Jan. 8, 2001	41,183km	Headlight low beam does not come ON.
9	Hyogo	LA-ES2 (CIVIC FERIO)	ES2- [REDACTED]	Dec. 13, 2002	Feb. 1, 2001	Jan. 27, 2001	80,000km	Headlight low beam sometimes does not come ON.
10	Hokkaido	LA-EU1 (CIVIC)	EU1- [REDACTED]	Dec. 15, 2002	Oct. 27, 2000	Oct. 18, 2000	29,329km	Low beam is inoperative for both sides.
11	Shizuoka	LA-GD1 (Fit)	GD1- [REDACTED]	Jan. 23, 2003	Oct. 22, 2001	Oct. 17, 2001	19,792km	Headlight low beam does not come ON for both sides.
12	Kanagawa	LA-GD1 (Fit)	GD1- [REDACTED]	Feb. 5, 2003	Sep. 19, 2001	Sep. 12, 2001	33,015km	Headlight low beam does not come ON for both sides.
13	Kanagawa	LA-EU1 (CIVIC)	EU1- [REDACTED]	Mar. 2, 2003	Feb. 7, 2001	Jan. 17, 2001	90,760km	Headlight low beam does not come ON.
14	Saitama	LA-GD1 (Fit)	GD1- [REDACTED]	Mar. 16, 2003	Sep. 4, 2001	Aug. 30, 2001	33,000km	Headlight low beam does not come ON for both sides.
15	Nara	LA-GD1 (Fit)	GD1- [REDACTED]	Apr. 6, 2003	Sep. 7, 2001	Sep. 3, 2001	43,806km	Headlight low beam does not come ON for both sides.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
16	Tokyo	LA-EU1 (CIVIC)	EU1- 1 [REDACTED]	Apr. 24, 2003	Feb. 9, 2001	Jan. 29, 2001	48,611km	Headlight low beam does not come ON.
17	Hokkaido	LA-RN2 (Stream)	RN2- 1 [REDACTED]	Jun. 2, 2003	Nov. 16, 2000	OCT. 17, 2000	78,763km	Headlight low beam does not come ON for both sides.
18	Nagano	LA-EU2 (CIVIC)	EU2- 1 [REDACTED]	Jun. 12, 2003	Dec. 20, 2000	Dec. 13, 2000	50,622km	Headlight low beam does not come ON for both sides.
19	Kagoshima	LA-GD1 (Fit)	GD1- 1 [REDACTED]	Jun. 12, 2003	Sep. 20, 2001	Sep. 10, 2001	45,803km	Headlight low beam does not come ON.
20	Okayama	LA-RN1 (Stream)	RN1- 1 [REDACTED]	Jun. 13, 2003	Oct. 31, 2000	Oct. 25, 2000	46,271km	Headlight low beam does not come ON.
21	Kanagawa	LA-ES1 (CIVIC)	ES1- 1 [REDACTED]	Jul. 6, 2003	Dec. 21, 2000	Dec. 8, 2000	35,803km	Headlight low beam does not come ON.
22	Okayama	LA-GD1 (Fit)	GD1- 1 [REDACTED]	Jul. 6, 2003	Aug. 3, 2001	Jul. 13, 2001	21,905km	Headlight low beam does not come ON for both sides.
23	Aichi	LA-EU1 (CIVIC)	EU1- 1 [REDACTED]	Jul. 10, 2003	Dec. 25, 2000	Dec. 20, 2000	75,115km	Headlight does not come ON.
24	Tokushima	LA-ES1 (CIVIC)	ES1- 1 [REDACTED]	Jul. 20, 2003	Nov. 10, 2000	Sep. 25, 2000	37,053km	Headlight low beam does not come ON.
25	Hyogo	LA-EU1 (CIVIC)	EU1- 1 [REDACTED]	Jul. 25, 2003	Dec. 15, 2000	Nov. 30, 2000	49,350km	Headlight does not come ON.
26	Osaka	LA-RN1 (Stream)	RN1- 1 [REDACTED]	Aug. 2, 2003	Dec. 13, 2000	Nov. 7, 2000	58,598km	Headlight low beam does not come ON for both sides.
27	Aichi	LA-RF4 (STEP WGN)	RF4- 1 [REDACTED]	Aug. 6, 2003	Apr. 13, 2001	Apr. 6, 2001	52,329km	Headlight low beam does not come ON.
28	Chiba	LA-EU3 (CIVIC)	EU3- 1 [REDACTED]	Aug. 17, 2003	Sep. 26, 2000	Sep. 20, 2000	52,630km	Only low beam does not come ON for both sides.
29	Chiba	LA-ES3 (CIVIC FERIO)	ES3- 1 [REDACTED]	Aug. 23, 2003	Dec. 26, 2000	Dec. 20, 2000	51,079km	Headlight low beam does not come ON for both sides.
30	Mie	LA-ES3 (CIVIC FERIO)	ES3- 1 [REDACTED]	Sep. 1, 2003	Jan. 18, 2001	Jan. 12, 2001	58,741km	Headlight suddenly went OFF.
31	Fukuoka	LA-GD1 (Fit)	GD1- 1 [REDACTED]	Sep. 24, 2003	Aug. 27, 2001	Jul. 5, 2001	44,352km	Headlight low beam does not come ON.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
32	Fukuoka	LA-ES1 (CIVIC FERIO)	ES1- 1 [REDACTED]	Sep. 26, 2003	Nov. 27, 2000	Oct. 27, 2000	56,569km	Headlight low beam does not come ON.
33	Chiba	LA-EU1 (CIVIC)	EU1- 1 [REDACTED]	Sep. 28, 2003	Mar. 29, 2001	Mar. 7, 2001	51,466km	Headlight low beam does not come ON for both sides.
34	Miyazaki	LA-RN3 (Stream)	RN3- 1 [REDACTED]	Oct. 5, 2003	Sep. 11, 2001	Oct. 25, 2000	28,670km	Headlight suddenly went off while driving.
35	Mie	LA-RF3 (STEP WGN)	RF3- 1 [REDACTED]	Oct. 7, 2003	Jun. 29, 2001	Mar. 28, 2001	44,722km	Headlight low beam does not come ON.
36	Ibaraki	LA-ES1 (CIVIC FERIO)	ES1- 1 [REDACTED]	Oct. 9, 2003	Oct. 25, 2000	Sep. 27, 2000	98,974km	Headlight low beam does not come ON for both sides.
37	Hokkaido	LA-GD2 (Fit)	GD2- 1 [REDACTED]	Oct. 12, 2003	Sep. 20, 2001	Sep. 13, 2001	59,827km	Headlight low beam does not come ON for both sides.
38	Yamagata	LA-ES1 (CIVIC)	ES1- 1 [REDACTED]	Oct. 17, 2003	Dec. 15, 2000	Dec. 8, 2000	64,643km	Headlight low beam does not come ON for both sides.
39	Saitama	LA-ES1 (CIVIC FERIO)	ES1- 1 [REDACTED]	Oct. 17, 2003	Mar. 16, 2001	Mar. 8, 2001	51,278km	Headlight low beam does not come ON for both sides.
40	Tokyo	LA-RN3 (Stream)	RN3- 1 [REDACTED]	Oct. 20, 2003	Nov. 30, 2000	Nov. 24, 2000	50,169km	Headlight low beam does not come ON.
41	Aichi	LA-EU1 (CIVIC)	EU1- 1 [REDACTED]	Oct. 24, 2003	Oct. 16, 2000	Oct. 4, 2000	51,265km	Headlight low beam does not come ON.
42	Aichi	LA-GD1 (Fit)	GD1- 1 [REDACTED]	Oct. 29, 2003	Jul. 23, 2001	Jul. 11, 2001	46,423km	Headlight low beam does not come ON.
43	Nara	LA-RN3 (Stream)	RN3- 1 [REDACTED]	Dec. 4, 2003	Dec. 20, 2000	Nov. 22, 2000	47,267km	Headlight low beam does not come ON for both sides.
44	Tokyo	LA-RN1 (Stream)	RN1- 1 [REDACTED]	Dec. 4, 2003	Feb. 23, 2001	Nov. 9, 2000	41,820km	Headlight low beam does not come ON.
45	Kanagawa	LA-EA1 (CIVIC FERIO)	ES1- 1 [REDACTED]	Dec. 6, 2003	Dec. 11, 2000	Oct. 31, 2000	49,650km	Light sometimes does not come on when tried to turn it on at night.
46	Kanagawa	LA-GD1 (Fit)	GD1- 1 [REDACTED]	Dec. 11, 2003	Aug. 23, 2001	Aug. 8, 2001	34,615km	Headlight does not come ON.
47	Osaka	LA-GD1 (Fit)	GD1- 1 [REDACTED]	Dec. 15, 2003	Jul. 25, 2001	Jul. 18, 2001	42,970km	Headlight low beam does not come ON.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
48	Shizuoka	LA-EU1 (CIVIC)	EU1- 1 [REDACTED]	Dec. 25, 2003	Jul. 30, 2001	Jul. 23, 2001	69,850km	Headlight low beam does not come ON.
49	Tochigi	LA-EU3 (CIVIC)	EU3- 1 [REDACTED]	Jan. 10, 2004	Oct. 24, 2000	Oct. 17, 2000	60,041km	Headlight low beam does not come ON.
50	Kanagawa	LA-GD1 (Fit)	GD1- 1 [REDACTED]	Jan. 14, 2004	Sep. 21, 2001	Sep. 15, 2001	62,708km	Headlight does not come ON.

# リコール届出書

平成 16 年 2 月 26 日

国土交通大臣 殿

届出者の氏名 本田技研工業株式会社  
 又は 名称 代表取締役 福井 威夫  
 住 所 東京都港区南青山 2 丁目 1 番 1 号

リコール届出番号	1045	リコール開始日	平成 15 年 2 月 27 日
基準不適合状態にあると認める構造、装置又は性能の状況及びその原因	灯火装置において、前照灯操作スイッチ部の配線用端子の表面処理が不適切なため、前照灯の切り替え操作を行うと当該端子の嵌合部が動くことにより接触抵抗が増大するものがあり、最悪の場合、接続カプラーが溶けて導通不良となり、前照灯が不灯となるおそれがある。		
改善措置の内容	全車両、操作スイッチを対策品と交換するとともに前照灯用配線のメス端子を良品と交換する。 なお、カプラーに損傷がある場合はカプラーを良品と交換する。		
自動車使用者及び自動車分解整備事業者に周知させるための措置	<ul style="list-style-type: none"> <li>・使用者:ダイレクトメールで通知する。</li> <li>・自動車分解整備事業者:日整連発行の機関誌に掲載する。</li> <li>・改善実施済車には、後面ガラス左下隅にNo.1045 のステッカーを貼付する。</li> </ul>		

車名	型式	通称名	リコール対象車の車台番号の範囲及び製作期間	リコール対象車の台数	備考	
ホンダ	LA-ES1	シビックフェリオ	ES1-1000008 ~ ES1-1011756 平成 12 年 8 月 7 日 ~ 平成 13 年 9 月 18 日	10,088		
			ES1-1100001 ~ ES1-1100518 平成 13 年 9 月 25 日 ~ 平成 13 年 11 月 8 日	445		
	UA-ES1		ES1-1200003 ~ ES1-1200628 平成 13 年 9 月 25 日 ~ 平成 13 年 11 月 5 日	616		
	LA-ES2		ES2-1000013 ~ ES2-1001884 平成 12 年 8 月 31 日 ~ 平成 13 年 8 月 9 日	1,597		
			ES2-1100001 ~ ES2-1100239 平成 13 年 10 月 4 日 ~ 平成 13 年 11 月 7 日	215		
	LA-ES3		ES3-1000012 ~ ES3-1001859 平成 12 年 8 月 29 日 ~ 平成 13 年 9 月 14 日	822		
			ES3-1100001 ~ ES3-1100091 平成 13 年 9 月 27 日 ~ 平成 13 年 10 月 31 日	50		
			ES3-8000001 ~ ES3-8000331 平成 13 年 3 月 9 日 ~ 平成 13 年 8 月 8 日	331		
				ES3-8100001 ~ ES3-8100020 平成 13 年 10 月 24 日	20	
	ZA-ES9		シビックハイブリッド	ES9-1000016 ~ ES9-1000029 平成 13 年 11 月 9 日 ~ 平成 13 年 12 月 5 日	9	
LA-EU1	シビック	EU1-1000011 ~ EU1-1038120 平成 12 年 9 月 4 日 ~ 平成 13 年 9 月 18 日	22,966			
		EU1-1100003 ~ EU1-1101036 平成 13 年 10 月 5 日 ~ 平成 13 年 11 月 5 日	619			



車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対 象車の台数	備 考
ホンダ	UA-EU1		EU1-1200007 ~ EU1-1200521 平成 13 年 9 月 28 日 ~ 平成 13 年 11 月 5 日	456	
	LA-EU2		EU2-1000009 ~ EU2-1002672 平成 12 年 9 月 12 日 ~ 平成 13 年 9 月 17 日	1,753	
	LA-EU3		EU2-1100001 ~ EU2-1100175 平成 13 年 10 月 5 日 ~ 平成 13 年 11 月 8 日	148	
			EU3-1000013 ~ EU3-1005776 平成 12 年 9 月 4 日 ~ 平成 13 年 9 月 14 日	2,144	
	LA-EU4		EU3-1100001 ~ EU3-1100305 平成 13 年 10 月 10 日 ~ 平成 13 年 11 月 5 日	149	
			EU4-1000008 ~ EU4-1001376 平成 12 年 9 月 4 日 ~ 平成 13 年 9 月 17 日	479	
	LA-GD1		フィット	EU4-1100002 ~ EU4-1100053 平成 13 年 10 月 17 日 ~ 平成 13 年 10 月 31 日	
		GD1-1000020 ~ GD1-1067555 平成 13 年 6 月 5 日 ~ 平成 13 年 11 月 8 日		67,536	
	GD1-8000001 ~ GD1-8000160 平成 13 年 9 月 5 日 ~ 平成 13 年 10 月 26 日	160			
	LA-GD2	GD2-1000014 ~ GD2-1005639 平成 13 年 6 月 6 日 ~ 平成 13 年 11 月 7 日		5,626	
		GD2-8000001 ~ GD2-8000025 平成 13 年 9 月 5 日 ~ 平成 13 年 10 月 23 日	25		
	LA-RF3	ステップワゴン	RF3-1000002 ~ RF3-1065091 平成 13 年 3 月 13 日 ~ 平成 13 年 11 月 22 日	28,605	
			RF3-8000001 ~ RF3-8000248 平成 13 年 5 月 21 日 ~ 平成 13 年 10 月 29 日	96	
	LA-RF4		RF4-1000016 ~ RF4-1016352 平成 13 年 3 月 13 日 ~ 平成 13 年 11 月 9 日	5,873	
			RF4-8000001 ~ RF4-8000104 平成 13 年 5 月 21 日 ~ 平成 13 年 11 月 1 日	32	
	LA-RN1	ストリーム	RN1-1000014 ~ RN1-1055241 平成 12 年 10 月 12 日 ~ 平成 13 年 9 月 27 日	26,509	
			RN1-1101217 ~ RN1-1102044 平成 13 年 10 月 9 日 ~ 平成 13 年 10 月 16 日	139	
	LA-RN2		RN2-1000016 ~ RN2-1008439 平成 12 年 10 月 12 日 ~ 平成 13 年 9 月 28 日	3,269	
			RN2-1100161 ~ RN2-1100286 平成 13 年 10 月 9 日 ~ 平成 13 年 10 月 15 日	10	
	LA-RN3		RN3-1000051 ~ RN3-1057855 平成 12 年 10 月 23 日 ~ 平成 13 年 9 月 26 日	8,377	
	LA-RN4		RN4-1000064 ~ RN4-1009640 平成 13 年 1 月 10 日 ~ 平成 13 年 9 月 26 日	1,239	
合 計				190,424 台	

(備考)

本届出は、平成 13 年 9 月 6 日「届出番号 769」のリコール届出にあらたに対象車を追加するものである。

連絡先:自動車交通局技術安全部審査課リコール対策室  
 TEL:03-5253-8111 内線 42353  
 アドレス:http://www.mlit.go.jp

## リコール届出一覧表

リコール届出日：平成16年2月26日

リコール届出番号	1045	リコール開始日	平成16年2月27日	
届出者の氏名又は名称	本田技研工業株式会社 代表取締役 福井 威夫		問い合わせ先：お客様相談室 TEL 0120-112010	
不具合の部位（部品名）	灯火装置(前照灯の電気回路)			
基準不適合状態にあると認める構造、装置又は性能の状況及びその原因	灯火装置において、前照灯操作スイッチ部の配線用端子の表面処理が不適切なため、前照灯の切り替え操作を行うと当該端子の嵌合部が動くことにより接触抵抗が増大するものがあり、最悪の場合、接続カプラーが溶けて導通不良となり、前照灯が不灯となるおそれがある。			
改善措置の内容	全車両、操作スイッチを対策品と交換するとともに前照灯用配線のメス端子を良品と交換する。 なお、カプラーに損傷がある場合はカプラーを良品と交換する。			
不具合件数	50件	事故の有無	なし	
発見の動機	販売店からの情報による。			
自動車使用者及び自動車分解整備事業者に周知させるための措置	<ul style="list-style-type: none"> <li>・使用者:ダイレクトメールで通知する。</li> <li>・自動車分解整備事業者:日整連発行の機関誌に掲載する。</li> <li>・改善実施済車には、後面ガラス左下隅にNo.1045のステッカーを貼付する。</li> </ul>			

車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象車の台数	備考
ホンダ	LA-ES1	シビックフェリオ	ES1-1000008 ～ ES1-1011756 平成12年8月7日～平成13年9月18日	10,088	
			ES1-1100001 ～ ES1-1100518 平成13年9月25日～平成13年11月8日	445	
	UA-ES1		ES1-1200003 ～ ES1-1200628 平成13年9月25日～平成13年11月5日	616	
	LA-ES2		ES2-1000013 ～ ES2-1001884 平成12年8月31日～平成13年8月9日	1,597	
			ES2-1100001 ～ ES2-1100239 平成13年10月4日～平成13年11月7日	215	
	LA-ES3		ES3-1000012 ～ ES3-1001859 平成12年8月29日～平成13年9月14日	822	
			ES3-1100001 ～ ES3-1100091 平成13年9月27日～平成13年10月31日	50	
			ES3-8000001 ～ ES3-8000331 平成13年3月9日～平成13年8月8日	331	
			ES3-8100001 ～ ES3-8100020 平成13年10月24日	20	

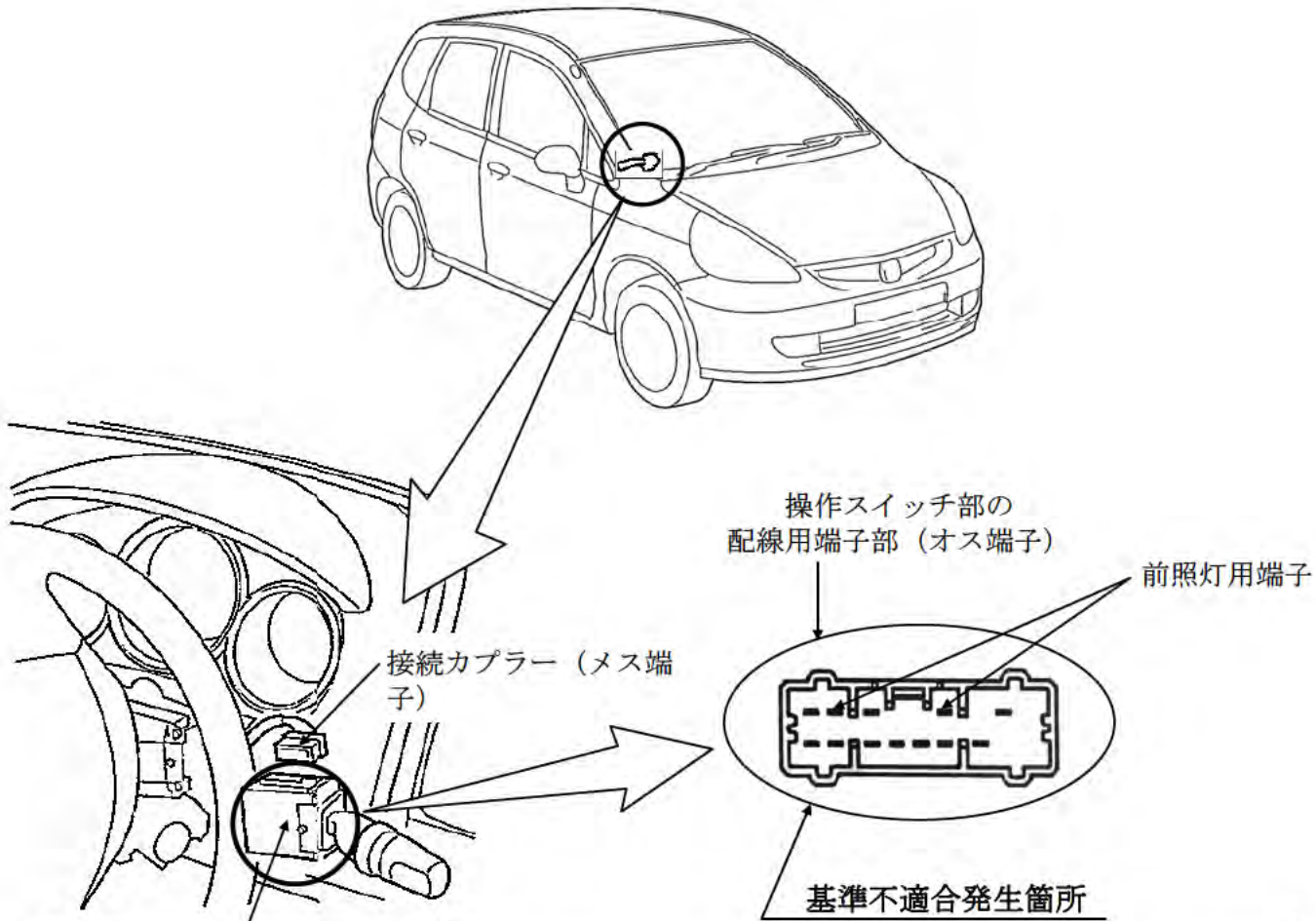
車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対 象車の台数	備 考
ホンダ	ZA-ES9	シビック ハイブリッド	ES9-1000016 ~ ES9-1000029 平成 13 年 11 月 9 日～平成 13 年 12 月 5 日	9	
	LA-EU1	シビック	EU1-1000011 ~ EU1-1038120 平成 12 年 9 月 4 日～平成 13 年 9 月 18 日	22,966	
			EU1-1100003 ~ EU1-1101036 平成 13 年 10 月 5 日～平成 13 年 11 月 5 日	619	
	UA-EU1	シビック	EU1-1200007 ~ EU1-1200521 平成 13 年 9 月 28 日～平成 13 年 11 月 5 日	456	
	LA-EU2		EU2-1000009 ~ EU2-1002672 平成 12 年 9 月 12 日～平成 13 年 9 月 17 日	1,753	
		EU2-1100001 ~ EU2-1100175 平成 13 年 10 月 5 日～平成 13 年 11 月 8 日	148		
	LA-EU3	シビック	EU3-1000013 ~ EU3-1005776 平成 12 年 9 月 4 日～平成 13 年 9 月 14 日	2,144	
			EU3-1100001 ~ EU3-1100305 平成 13 年 10 月 10 日～平成 13 年 11 月 5 日	149	
	LA-EU4	シビック	EU4-1000008 ~ EU4-1001376 平成 12 年 9 月 4 日～平成 13 年 9 月 17 日	479	
			EU4-1100002 ~ EU4-1100053 平成 13 年 10 月 17 日～平成 13 年 10 月 31 日	21	
	LA-GD1	フィット	GD1-1000020 ~ GD1-1067555 平成 13 年 6 月 5 日～平成 13 年 11 月 8 日	67,536	
			GD1-8000001 ~ GD1-8000160 平成 13 年 9 月 5 日～平成 13 年 10 月 26 日	160	
	LA-GD2	フィット	GD2-1000014 ~ GD2-1005639 平成 13 年 6 月 6 日～平成 13 年 11 月 7 日	5,626	
			GD2-8000001 ~ GD2-8000025 平成 13 年 9 月 5 日～平成 13 年 10 月 23 日	25	
	LA-RF3	ステップワゴン	RF3-1000002 ~ RF3-1065091 平成 13 年 3 月 13 日～平成 13 年 11 月 22 日	28,605	
			RF3-8000001 ~ RF3-8000248 平成 13 年 5 月 21 日～平成 13 年 10 月 29 日	96	
	LA-RF4	ステップワゴン	RF4-1000016 ~ RF4-1016352 平成 13 年 3 月 13 日～平成 13 年 11 月 9 日	5,873	
			RF4-8000001 ~ RF4-8000104 平成 13 年 5 月 21 日～平成 13 年 11 月 1 日	32	
	LA-RN1	ストリーム	RN1-1000014 ~ RN1-1055241 平成 12 年 10 月 12 日～平成 13 年 9 月 27 日	26,509	
			RN1-1101217 ~ RN1-1102044 平成 13 年 10 月 9 日～平成 13 年 10 月 16 日	139	
	LA-RN2	ストリーム	RN2-1000016 ~ RN2-1008439 平成 12 年 10 月 12 日～平成 13 年 9 月 28 日	3,269	
			RN2-1100161 ~ RN2-1100286 平成 13 年 10 月 9 日～平成 13 年 10 月 15 日	10	
	LA-RN3	ストリーム	RN3-1000051 ~ RN3-1057855 平成 12 年 10 月 23 日～平成 13 年 9 月 26 日	8,377	
	LA-RN4	ストリーム	RN4-1000064 ~ RN4-1009640 平成 13 年 1 月 10 日～平成 13 年 9 月 26 日	1,239	

車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象車の台数	備考
	(計 18 型式)	(計 6 車種)	(製作期間の全体の範囲) 平成 12 年 8 月 7 日～平成 13 年 12 月 5 日	(計 190,424 台)	

(備考)

本届出は、平成 13 年 9 月 6 日「届出番号 769」のリコール届出にあらたに対象車を追加するものである。

# 改善箇所説明図




灯火装置において、前照灯操作スイッチ部の配線用端子の表面処理が不適切なため、前照灯の切り替え操作を行うと当該端子の嵌合部が動くことにより接触抵抗が増大するものがあり、最悪の場合、接続カプラーが溶けて導通不良となり、前照灯が不灯となるおそれがある。

## 改善の内容

全車両、操作スイッチを対策品と交換するとともに前照灯用配線のメス端子を良品と交換する。  
 なお、カプラーに損傷がある場合はカプラーを良品と交換する。

改善前	改善後
<p>前照灯操作スイッチ</p> <p>オス端子</p> <p>メッキ処理なし</p>	<p>前照灯操作スイッチ</p> <p>カプラー</p> <p>オス端子</p> <p>スズメッキ処理</p> <p>前照灯用メス端子</p>

注：  は交換部品を示す。

識別：助手席側ドアチェッカーの取付ボルト頭部に黄ペイントを塗布する。

## リコール対象車の主要諸元

車名	型式	通称名	種別・用途	車体の形状	原動機の型式 (総排気量 (CC))	備考	
ホンダ	LA-ES1	シビック フェリオ	小型・乗用	箱型	D15B (1,493)		
	UA-ES1						
	LA-ES2						
	LA-ES3						D17A (1,668)
	ZA-ES9	シビック ハイブリッド			LDA-MF3 (1,339)		
	LA-EU1	シビック			ステーション ワゴン		D15B (1,493)
	UA-EU1						
	LA-EU2						
	LA-EU3						
	LA-EU4						
	LA-GD1	フィット		L13A (1,339)			
	LA-GD2						
	LA-RF3	ステップ ワゴン		K20A (1,998)			
	LA-RF4						
	LA-RN1	ストリーム		D17A (1,668)			
	LA-RN2						
	LA-RN3			K20A (1,998)			
	LA-RN4						

## 1. リコールに至るまでの経緯

平成13年12月4日、アメリカの販売店より、「通称名シビックでヘッドライトロービームが点灯しない。ハイビームは点灯し、前照灯操作スイッチの接続カプラー端子部が溶けている」との情報を入手した。また、平成14年1月7日以降、日本からの情報も入手した。

当該車両は、平成13年9月6日、「届出番号769」のリコール届出の対象外であったため、返却された前照灯操作スイッチと接続カプラーを確認した結果、端子の発熱による変色と根元樹脂部が溶損していることが判った。

その後、同様の不具合情報を入手したため再現試験を行なった結果、端子部の摺動により接触面が酸化すると抵抗値が上昇し、ヘッドライト点灯により大電流が流れ続けると端子部の溶損に至ることが確認され、「届出番号769」と発生原因は同一であることが判った。

また、「届出番号769」で対象車両を特定した際に、前照灯操作スイッチ及びハーネスの取り廻し等による影響を考慮に入れていなかったため、対象車両に洩れがあることも判った。

以上のことから、そのまま使用を続けると、接続カプラーが溶けて導通不良となり、前照灯が不灯となるおそれがあるため、「届出番号769」に対象車を追加した市場措置を実施することとした。

## 2. 不具合発生状況

市場からの不具合情報は50件である。 事故件数：0件。

No.	発生地区	型式 (通称名)	不具合車 車台番号	発生 年.月.日	登録 年.月.日	生産 年.月.日	走行 距離	不具合状況
1	広島県	LA-EU2 (シビック)	EU2- 1[REDACTED]	H13.12.27	H12.11.13	H12.11.7	16,417km	ヘッドライトロービームが点灯しない。

上記以外の不具合情報は別紙による。

## 3. 起因調査結果

「届出番号769」で対象車両が洩れた理由

- 前照灯操作スイッチ端子嵌合部の摺動確認は、前照灯の切替操作時に発生する振動の大きさと電圧変動を確認していたが、当該車両は前照灯操作スイッチの取付け構造（ステアリングシャフトに直接取付ける）が異なっており、切替操作を行なっても振動の値は小さく、電圧波形を見ても電圧変動はなく、端子嵌合部の摺動はないものと判断したことから対象外としていた。
- 今回、対象外の車両から不具合が発生しているため、原因を調査した結果、ハーネス取り廻しのバラツキで、ハーネスがインストルメントパネル等と接触していた場合に前照灯操作スイッチを強めに押す又は、引っ張る操作を行なうと、前照灯操作スイッチのハーネス結合部に力が加わり、端子部が摺動して電圧変動を起すことが判った。

## 4. 改善措置の基準適合確認結果

対策品の前照灯操作スイッチは、オス端子にスズメッキ処理が施されており、端子勘合部の接触抵抗が増加しないため端子は発熱しないことから、カプラーの溶損はなく、導通不良にはならない。

## 5. 対象の範囲及びその理由

対象車両は、生産開始から前照灯操作スイッチのオス端子にスズメッキ処理が適用されるまでの期間（平成12年8月7日から平成13年12月5日）に生産された、LA-ES1、UA-ES1、LA-ES2、LA-ES3、ZA-ES9、LA-EU1、UA-EU1、LA-EU2、LA-EU3、LA-EU4、LA-GD1、LA-GD2、LA-RF3、LA-RF4、LA-RN1、LA-RN2、LA-RN3、LA-RN4 型式の計 190,424 台に限定される。

## 6. 対象車の輸出状況及び措置方法

### (1) 輸出国と台数

通称名 輸出国	シビック	フィット	ステップ ワゴン	ロゴ	インサイト	ストリーム	合計
アメリカ	26,216	—	—	—	8,775	1	34,992
カナダ	—	—	—	—	—	—	—
イギリス	7,218	7	—	2,440	178	2,856	12,699
オーストラリア	7,675	—	—	—	—	—	7,675
その他	37,895	171	221	573	194	11,991	51,045
合計	79,004	178	221	3,013	9,147	14,848	106,411

### (2) 措置方法

各国の法規及び実状に沿った措置を講ずる。

## 7. 再発防止

- ・品質総点検を実施し、連続通電される端子幅 2.3mm（090 端子）以下の端子はメッキ処理実施。（03M～）
- ・端子幅 2.3mm 以下の端子は、メッキ処理を原則とすることを設計ガイドへ反映。（04M 以降の機種にて適用）

## 8. 改善措置に要する作業時間

改善措置に要する時間は、シビック、シビックフェリオ、シビックハイブリッド、ステップワゴン、ストリームで 0.7 時間。フィットで 0.8 時間。



## (不具合発生状況) 別紙不具合情報

No.	発生地区	型式 (通称名)	不具合車 車台番号	発生 年.月.日	登録 年.月.日	生産 年.月.日	走行 距離	不具合状況
2	東京都	LA-EU1 (シビック)	EU1- 1■■■■	H14. 3. 20	H12. 12. 27	H12. 12. 19	40,059km	ヘッドライトが消えて、その後点灯しない。
3	東京都	LA-RN1 (ストリーム)	RN1- 1■■■■	H14. 4. 10	H12. 12. 20	H12. 12. 8	44,119km	ヘッドライトロービームが点灯しない。
4	東京都	LA-EU1 (シビック)	EU1- 1■■■■	H14. 4. 11	H12. 10. 5	H12. 9. 28	66,266km	ヘッドライトロービーム点灯しない。
5	東京都	LA-RN1 (ストリーム)	RN1- 1■■■■	H14. 9. 12	H12. 12. 19	H12. 12. 7	74,456km	ヘッドライトロービームが点灯しない。
6	神奈川県	LA-ES3 (シビックフェリオ)	ES3- 1■■■■	H14. 9. 17	H13. 2. 21	H13. 2. 16	50,538km	ロービームヘッドライト左右点灯しない。
7	佐賀県	LA-GD1 (フィット)	GD1- 1■■■■	H14. 10. 18	H13. 7. 10	H13. 6. 27	75,236km	突然ヘッドライトが消灯した。ロービームだけ点灯しない。
8	神奈川県	LA-EU1 (シビック)	EU1- 1■■■■	H14. 12. 4	H13. 1. 15	H13. 1. 8	41,183km	ヘッドライトのロービームがつかなかった。
9	兵庫県	LA-ES2 (シビックフェリオ)	ES2- 1■■■■	H14. 12. 13	H13. 2. 1	H13. 1. 27	80,000km	ヘッドライト不灯の時がある(ロー側)。
10	北海道	LA-EU1 (シビック)	EU1- 1■■■■	H14. 12. 15	H12. 10. 27	H12. 10. 18	29,329km	ロービーム左右共不灯。
11	静岡県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 1. 23	H13. 10. 22	H13. 10. 17	19,792km	ヘッドライトロービームが、左右共に点灯しない。
12	神奈川県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 2. 5	H13. 9. 19	H13. 9. 12	33,015km	左右ヘッドライトロービームが点灯しない。
13	神奈川県	LA-EU1 (シビック)	EU1- 1■■■■	H15. 3. 2	H13. 2. 7	H13. 1. 17	90,760km	ヘッドライトロービームが点灯しない。
14	埼玉県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 3. 16	H13. 9. 4	H13. 8. 30	33,000km	ヘッドライトロービームが左右共に点灯しない。
15	奈良県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 4. 6	H13. 9. 7	H13. 9. 3	43,806km	ヘッドライトロービームが、左右共に点灯しない。
16	東京都	LA-EU1 (シビック)	EU1- 1■■■■	H15. 4. 24	H13. 2. 9	H13. 1. 29	48,611km	ヘッドライトロービームが点灯しない。
17	北海道	LA-RN2 (ストリーム)	RN2- 1■■■■	H15. 6. 2	H12. 11. 16	H12. 10. 17	78,763km	ヘッドライト左右ロービーム点灯しない。
18	長野県	LA-EU2 (シビック)	EU2- 1■■■■	H15. 6. 12	H12. 12. 20	H12. 12. 13	50,622km	ヘッドライトロービームが、左右不灯。
19	鹿児島県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 6. 12	H13. 9. 20	H13. 9. 10	45,803km	ヘッドライトロービーム点灯しない。
20	岡山県	LA-RN1 (ストリーム)	RN1- 1■■■■	H15. 6. 13	H12. 10. 31	H12. 10. 25	46,271km	ヘッドライトロービーム不灯。
21	神奈川県	LA-ES1 (シビックフェリオ)	ES1- 1■■■■	H15. 7. 6	H12. 12. 21	H12. 12. 8	35,803km	ヘッドライトロービームが点灯しない。
22	岡山県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 7. 6	H13. 8. 3	H13. 7. 13	21,905km	ヘッドライトロービームが、左右共に点灯しない。

No.	発生地区	型式 (通称名)	不具合車 車台番号	発 生 年. 月. 日	登 録 年. 月. 日	生 産 年. 月. 日	走 行 距 離	不具合状況
23	愛知県	LA-EU1 (シビック)	EU1- 1■■■■	H15. 7. 10	H12. 12. 25	H12. 12. 20	75, 115km	ヘッドライトが点灯しない。
24	徳島県	LA-ES1 (シビックフェリオ)	ES1- 1■■■■	H15. 7. 20	H12. 11. 10	H12. 9. 25	37, 053km	ヘッドライトロービームが点灯しない。
25	兵庫県	LA-EU1 (シビック)	EU1- 1■■■■	H15. 7. 25	H12. 12. 15	H12. 11. 30	49, 350km	ヘッドライトがつかない。
26	大阪府	LA-RN1 (ストリーム)	RN1- 1■■■■	H15. 8. 2	H12. 12. 13	H12. 11. 7	58, 598km	左右ヘッドライトロービーム不灯。
27	愛知県	LA-RF4 (ステップワゴン)	RF4- 1■■■■	H15. 8. 6	H13. 4. 13	H13. 4. 6	52, 329km	ヘッドライトロービーム点灯しない。
28	千葉県	LA-EU3 (シビック)	EU3- 1■■■■	H15. 8. 17	H12. 9. 26	H12. 9. 20	52, 630km	ヘッドライトロービームのみ左右共点灯しない。
29	千葉県	LA-ES3 (シビックフェリオ)	ES3- 1■■■■	H15. 8. 23	H12. 12. 26	H12. 12. 20	51, 079km	ヘッドライトロービーム左右点灯しない。
30	三重県	LA-ES3 (シビックフェリオ)	ES3- 1■■■■	H15. 9. 1	H13. 1. 18	H13. 1. 12	58, 741km	突然ヘッドライトが消えた。
31	福岡県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 9. 24	H13. 8. 27	H13. 7. 5	44, 352km	ヘッドライトロービームがつかない。
32	福岡県	LA-ES1 (シビックフェリオ)	ES1- 1■■■■	H15. 9. 26	H12. 11. 27	H12. 10. 27	56, 569km	ヘッドライトロービームが点灯しなくなった。
33	千葉県	LA-EU1 (シビック)	EU1- 1■■■■	H15. 9. 28	H13. 3. 29	H13. 3. 7	51, 466km	ヘッドライトロービームが左右共点灯しない。
34	宮崎県	LA-RN3 (ストリーム)	RN3- 1■■■■	H15. 10. 5	H13. 9. 11	H12. 10. 25	28, 670km	走行中急にヘッドライトが消えた。
35	三重県	LA-RF3 (ステップワゴン)	RF3- 1■■■■	H15. 10. 7	H13. 6. 29	H13. 3. 28	44, 722km	ヘッドライトロービームがつかない。
36	茨城県	LA-ES1 (シビックフェリオ)	ES1- 1■■■■	H15. 10. 9	H12. 10. 25	H12. 9. 27	98, 974km	ヘッドライトロービームが両方つかない。
37	北海道	LA-GD2 (フィット)	GD2- 1■■■■	H15. 10. 12	H13. 9. 20	H13. 9. 13	59, 827km	ヘッドライトロービームが左右点灯しない。
38	山形県	LA-ES1 (シビックフェリオ)	ES1- 1■■■■	H15. 10. 17	H12. 12. 15	H12. 12. 8	64, 643km	ヘッドライトロービームが両方つかない。
39	埼玉県	LA-ES1 (シビックフェリオ)	ES1- 1■■■■	H15. 10. 17	H13. 3. 16	H13. 3. 8	51, 278km	ヘッドライトロービーム左右点灯しない。
40	東京都	LA-RN3 (ストリーム)	RN3- 1■■■■	H15. 10. 20	H12. 11. 30	H12. 11. 24	50, 169km	ヘッドライトロービーム不灯。
41	愛知県	LA-EU1 (シビック)	EU1- 1■■■■	H15. 10. 24	H12. 10. 16	H12. 10. 4	51, 265km	ヘッドライトのロービームが点灯しなくなった。
42	愛知県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 10. 29	H13. 7. 23	H13. 7. 11	46, 423km	ヘッドライトロービームがつかない。
43	奈良県	LA-RN3 (ストリーム)	RN3- 1■■■■	H15. 12. 4	H12. 12. 20	H12. 11. 22	47, 267km	ヘッドライトロービームが左右共点灯しない。

No.	発生 地区	型式 (通称名)	不具合車 車台番号	発 生 年.月.日	登 録 年.月.日	生 産 年.月.日	走 行 距 離	不具合状況
44	東京都	LA-RN1 (ストリーム)	RN1- 1■■■■	H15. 12. 4	H13. 2. 23	H12. 11. 9	41,820km	ヘッドライトロービームが 点灯しない。
45	神奈川 県	LA-ES1 (シビックフェリ オ)	ES1- 1■■■■	H15. 12. 6	H12. 12. 11	H12. 10. 31	49,650km	夜間ライト点灯時、時々点 灯しない。
46	神奈川 県	LA-GD1 (フィット)	GD1- 1■■■■	H15. 12. 11	H13. 8. 23	H13. 8. 8	34,615km	ヘッドライトが点灯しな い。
47	大阪府	LA-GD1 (フィット)	GD1- 1■■■■	H15. 12. 15	H13. 7. 25	H13. 7. 18	42,970km	ヘッドライトロービームが 点灯しなかった。
48	静岡県	LA-EU1 (シビック)	EU1- 1■■■■	H15. 12. 25	H13. 1. 30	H13. 1. 23	69,850km	ヘッドライトのロービーム が点灯しない。
49	栃木県	LA-EU3 (シビック)	EU3- 1■■■■	H16. 1. 10	H12. 10. 24	H12. 10. 17	60,041km	ヘッドライトロービーム不 灯。
50	神奈川 県	LA-GD1 (フィット)	GD1- 1■■■■	H16. 1. 14	H13. 9. 21	H13. 9. 15	62,708km	ヘッドライトが点灯しな い。

EA11-012

HONDA

4/20/2012

Q16

2004 CIVIC

040226\_KBA start letter

5CN\_5BY(Germany)

Kraftfahrt-Bundesamt  
Attn. Mr. Marwitz

24932 Flensburg

Ihr Zeichen

Ihre Nachricht vom

Unser Zeichen  
Q&S/TC/TR

( 069 )  
83006-1

Datum  
31.03.2004

## Recall for Honda automobiles

Dear Mr. Marwitz,

In addition to our letter dated 26.02.2004, where we informed you that Honda Motor Co. Ltd. had started a recall for below mentioned Honda automobiles, we would like to inform you today in detail about the recall referring to KBA codex 01/2003:

Manuf.		Model	Type	YM	EGBE-No.	Affected VINs	
						from	to
Honda	2131	Civic 3-Türer	EP1	'01	e11*98/14*0173*0	SHHEP1**01U000101	- SHHEP1**01U009770
Honda	2131	Civic 3-Türer	EP2	'01	e11*98/14*0174*0	SHHEP2**01U000101	- SHHEP2**01U010263
Honda	2131	Civic 3-Türer	EP3	'01	e11*98/14*0175*0	SHHEP3**01U000101	- SHHEP3**01U002566
Honda	7100	Civic 4-Türer	ES4	'01	e6*98/14*0072*01	JHMES4**01S200004	- JHMES4**01S205055
Honda	7100	Civic 4-Türer	ES4	'02	e6*98/14*0072*01	JHMES4**02S200001	- JHMES4**02S200220
Honda	7100	Civic 4-Türer	ES5	'01	e6*98/14*0073*00	JHMES5**01S200127	- JHMES5**01S207758
Honda	7100	Civic 4-Türer	ES5	'02	e6*98/14*0073*00	JHMES5**02S200001	- JHMES5**02S201724
Honda	2131	Civic 5-Türer	EU7	'01	e11*98/14*0160*0	SHHEU7**01U000101	- SHHEU7**01U027233
Honda	2131	Civic 5-Türer	EU8	'01	e11*98/14*0161*0	SHHEU8**01U000101	- SHHEU8**01U027841
Honda	1153	Civic Coupe	EM2	'01	e6*98/14*0080*00	1HGEM2**01L600001	- 1HGEM2**01L603711
Honda	1153	Civic Coupe	EM2	'02	e6*98/14*0080*00	1HGEM2**02L600001	- 1HGEM2**02L601234
Honda	7100	Insight	ZE1	'00	e1*98/14*0140*00	JHMZE1**0YT000014	- JHMZE1**0YT200091
Honda	7100	Insight	ZE1	'01	e1*98/14*0140*00	JHMZE1**01T200003	- JHMZE1**01T200144
Honda	7100	Stream	RN1	'01	e6*98/14*0081*00	JHMRN1**01C200001	- JHMRN1**01C205967
Honda	7100	Stream	RN3	'01	e6*98/14*0082*00	JHMRN3**01C200001	- JHMRN3**01C208856
Honda	7100	Jazz	GD1	'02	e6*98/14*0088*00	JHMGD1**02S200005	- JHMGD1**02S200192

In addition to the above mentioned vehicles some Honda Jazz with later installed accessory kits are also affected. These accessory kits have also the maybe faulty parts like vehicles with factory installed parts.

To integrate these vehicles also to the recall, we checked our accessory shipment lists and already contacted the corresponding dealers to give us the vehicle and owner data.

We will contact these owners with a modified customer letter together with the others.

Please find attached a customer sample letter.

The number of vehicles need to be checked in Germany is approx. 16.900.

The number of sold front fog light accessory kits in Germany is approx. 1.100.

Reason: While driving or by operating the light switch it can happen, that the corresponding wire harness contact the near assemblies and result in "movement" of the couplers of the connector to the light switch. This "movement" caused copper scuff, which changes to copper oxide and settle. This settling increases the electrical resistance at the coupler in such a way, that it comes to a development of heat, which at the end will melted the isolation material at the coupler. The melted plastic enters into the terminal contact area and interrupting continuity between the terminals. Headlight maybe not works.

Spare parts will be available from week 19 onwards, so will start to contact the dealers and customers than immediately.

Please send us the corresponding figures by KBA file transfer and inform our IT department by e-mail.

In addition please find attached some more information referring to KBA note 01/2003:

- Draft bulletin
- Draft customer letter 1
- Draft customer letter 2
- Manufacturer declaration for recalls
- Timing for the recall
- Notification of responsible person
- Copy of recall post card

If you have any questions concerning this recall, please contact us, telephone no. 069/830061.

Yours truly,

Honda Motor Europe (North) GmbH  
Quality & Service

EA11-012

HONDA

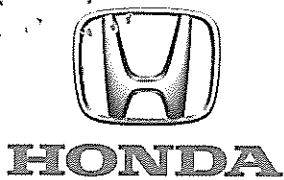
4/20/2012

Q16

2004 CIVIC

040226\_LTA(Singapore) 5CN

report to LTA



Date: 26 February 2004  
To  
Land Transport Authority  
Vehicle Engineering Department  
10, Sin Ming Drive,  
Singapore 575701

Attn. Mr. Eng You Leng  
(Principal Technical Officer)

Dear Mr.Eng,

Subject : 01& 02 YM Civic & Stream( Recall Campaign for headlight Low Beam switch malfunction.

We wish to inform you that Honda Motor Co. Ltd. has determined to carry out Recall campaign of the above-mentioned models.

We would officially write to all affected customers as soon as we received the countermeasure parts from Honda Motor Parts Department.

This service will be performed Free Of Charge for parts and Labour.

We herewith enclose 3 copies of self-explanatory letters from Honda Motor related to this recall for your reference.

If you have any queries please do not hesitate to contact me at 8406748.

We sincerely apologized for inconvenience caused to you.

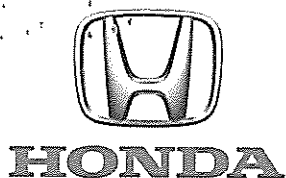
Thank you for your kind attention and co-operation in this matter

Yours sincerely,

A handwritten signature in black ink, appearing to read 'David Wong', with a long horizontal flourish extending to the right.

David Wong  
Senior Service Manager





26 February 2004

To  
Mr. Eng You Leng  
(Principal Technical Officer)  
Vehicle Engineering Department  
Vehicle and Transit Licensing Division  
Land Transport Authority  
10 Sin Ming Drive  
Singapore 575701

Dear Mr.Eng

**REPORT ON VEHICLE RECALL**

This is to notify LTA that a vehicle recall campaign has been initiated.

**Brief description of the recall**

- a) Name of vehicle manufacturer : Honda Motor Japan
- b) Name of motor dealer : Kah Motor Co.,SDN.Bhd
- c) Make(s) and model(s) of the affected vehicles : Honda Civic & Stream
- d) Period of production of the affected vehicles : 2001-2002 Year Model
- e) Number of vehicles affected worldwide :Not applicable
- f) Range of chassis numbers for the affected vehicles worldwide : Pls refer to the attachments
- g) Number of vehicles affected in Singapore : 3350 units
- h) Range of chassis numbers for the affected vehicles in Singapore :Pls refer to the attached list
- i) This recall is safety related : NO\* Environmental issue

Details of the defect(s), corrective actions and schedule for the rectification of defect(s) are shown at **Annex 1**. We will keep LTA informed of the progress of the recall by using the form enclosed at **Annex 2**. Any additional information from the vehicle manufacturer describing the defect(s), if available, will be attached to this report



**Publicity program to inform both the public and affected vehicle owners**

- a) A press release will be issued : NO\*  
If yes, the expected date of release will be :
- b) Date of letters issued to the affected owners  
informing them about the recall : After C/M parts receive
- c) Customer service contact number for the recall : 68406745

Yours sincerely

David Wong, Svc Manager

\_\_\_\_\_  
Signature, name and designation  
(Director or General Manager or Authorised person)

*\* Delete if not applicable*

REPORT ON VEHICLE RECALL

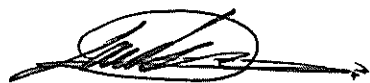
Make(s) and model(s) of the affected vehicles	Number of vehicles affected	Chassis numbers of affected vehicles	Cause of defect(s)	Description of defect(s)	Safety issues arising from the defect(s)	Corrective actions to rectify defect(s)	Scheduled dates for the commencement and completion of the corrective actions
01 Civic ES1	151	From 0200173 To 0205242	When headlight switch is operation, overtime oxidation occurred at the switch terminal joint, as resulted Headlight switch failure and cause sudden loss of headlight low beam malfunction.	The Low beam of headlight fails to come "ON"	No	Replaced Headlight switch with metal coated male terminal	Commencing expected as early as April 2004 but for completion estimate end of Dec 2005
02 Civic ES1	29	From 0200006 To 0200107					
01 Civic ES8	2060	From 0200008 To 025677					
02 Civic ES8	688	From 0200033 To 0201411					
01 Civic ES8	84	From 0200503 To 0203662					
01 RN3 Stream	338	From 0200217 To 0209023					

**PROGRESS REPORT ON VEHICLE RECALL**

Name of motor dealer	Make(s) and model(s) of affected vehicles	Defect summary and corrective actions to rectify the defect(s)	Number of vehicles affected	Number of affected vehicles with defect(s) rectified	Remaining number of affected vehicles awaiting corrective actions
Kah Motor Co., Sdn.Bhd	01&02 Honda Civic 1.5 & 1.7 and 2 litres Honda Stream	Replaced C/M headlight switches	3350	0	0

I certify that this report is correct and accurate as at: \_ 26-02-2004

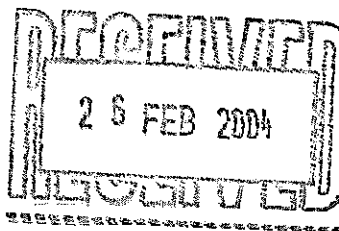
Yours sincerely



Signature, name and designation  
(Director or General Manager or Authorised Person)

# HONDA

Page 1/3



HONDA MOTOR CO., LTD.

1-1, Minami-Aoyama 2-chome, Minato-ku, Tokyo 107-8556, Japan  
Tel. +81-3-3423-1111 Fax. +81-3-3423-0511

Attention:

Singapore D/C 355

KAH MOTOR CO. SDN. BHD.

Mr. B. H. Khoo, General Manager

Mr. David Wong, Manager

February 26, 2004

**Recall Information : HEADLIGHT LOW BEAM MALFUNCTION**

Dear Sirs,

On February 26, 2004, Honda Motor Co., Ltd. determined to inform that a safety-related problem exists in the headlight in the vehicle listed page 2/3.

Thus, remedy action of object vehicles in your market is requested.

**Recall Announcement Date: February 26, 2004**

**<Contents of this information>**

- 2/3 Affected Models, Number of Unit, and the VIN Ranges
- 3/3 Defect Description
- 3/3 Market Action

HTI and replacement repair part/tool now being arranged.

For your market, the part is to be provided from around the end of March.

We will inform again as soon as they get prepared.

If you have any questions, please let us know.

Sincerely,

**Manabu Kuwahara, Manager**

Service Engineering, Overseas Service Operations

Honda Motor Co., Ltd.

TEL: +81-28-687-2127 FAX: +81-28-687-2157

E-mail: manabu\_kuwahara@hmn.honda.co.jp

**HONDA**

Page 2/3

## &lt; Affected Models, Number of Unit, and the VIN Ranges &gt; Singapore

Plant	Spec.	Model	2001MY			2002MY			Total # of Affected
			From	To	#Affected	From	To	#Affected	
Sss Civic	KU	ES1	0200173	0205242	151	0200006	0200107	29	180
		ES8	0200008	0205677	2060	0200033	0201411	688	2748
			0200503	0203662	84				84
Css Stream	KU	RN3	0200217	0209023	338				338
Total					2633			717	3350

# HONDA

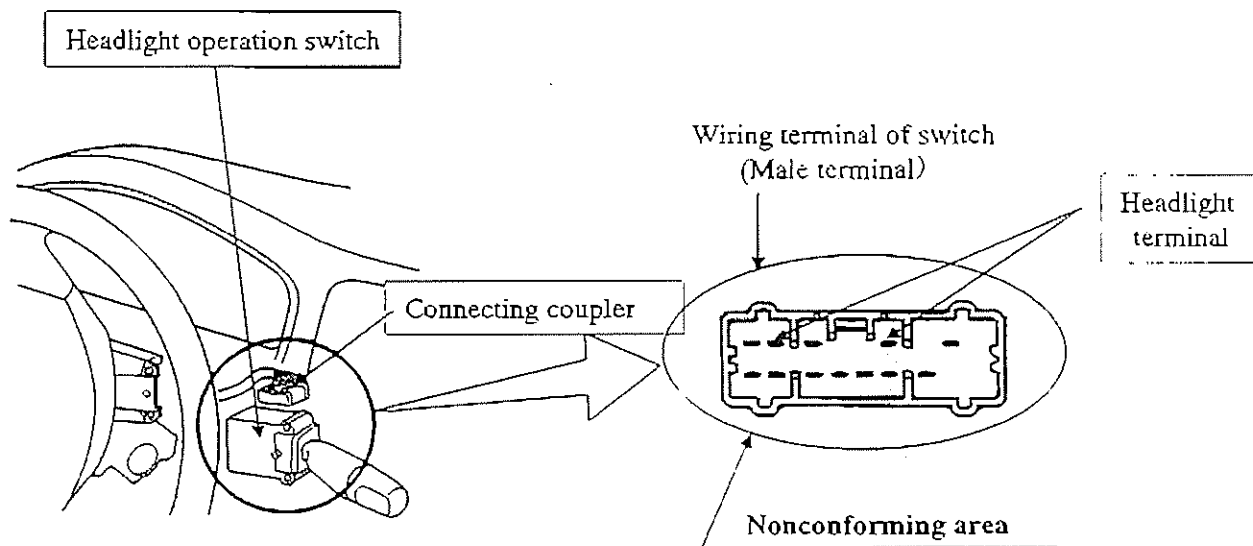
## <Defect Description>

### Summary

The headlight low-beam terminal on the lighting switch harness can overheat and may cause the headlight low beam to fail without warning.

### Detail

During headlight switch operation, the terminal contact point shifts or slides. If the non-plated copper terminal is oxidized, the sliding movement increases resistance and generates heat. Over time, oxidation builds up and resistance increases at the terminal joint, eventually melting the switch coupler. Switch failure results in a loss of headlight low beam function.



## <Market Action>

Call in affected vehicles and operation switch is replaced with a countermeasure part and female terminal of headlamp wirings is with a non-defective part. In addition, if damaged, the coupler is replaced with a non-defective.

35.	Were wrong parts exported?↵	The switch has been exported and is involved in the coverage.↵
36.	Was there an accident caused by the headlight's not having lit?↵	No information of accident occurrence↵
37.	Manufacturer of the Lighting S/W↵	TOYO Denso↵
38.	Is there a possibility that the headlights (both high and low) are turned off while driving?↵	Market report was "Low beam fails to light up". However, due to the problem mechanism, if the high beam continued to be used because of low beam malfunction, both may fail to come on.↵
39.	Use period of which extent does this problem occur in the market?↵	It depends on usage frequency. In the earliest case in the market, the problem appeared at 16,000km.↵
40.	At first, was not this problem able to forecast development?↵	The terminals did not move in the specification test because the wires were free. Relative movement with wiring owing to lever operation did not developed, causing no terminal friction.↵
41.	Is this problem an initial problem or an endurance problem?↵	Endurance problem↵
42.	Why did you assume OK when this model was developed?↵	The switch unit passed the specification test.↵
43.	When mass production shifted, how about the result of the examination as for a part concerned?↵	The switch unit of mass production passed the specification test.↵
44.	When were those object vehicles manufactured?↵	Japan manufactured: Aug 7,2000 ~ Dec 5,2001↵ HAM manufactured: Feb 14,2001 ~ Aug 15,2001↵
45.	Why are neither the range of the chassis number nor the number corresponding concerning the object vehicles?↵	There are some vehicles of discharge headlights, which are not included in the involved range, so that the quantity does not match.↵
46.	What one is Discharge Head-light?↵	High-intensity discharge lamp↵
47.	When did you begin the production of the measures application vehicles? And, what measures is it?↵	Metal coated male terminals, Countermeasure for "Notification No. 769", have been applied from 2001 Act production in sequence.↵
48.	Do you take market remedy in overseas markets?↵	Market remedy to be carried out throughout the world.↵
49.	What are contents of countermeasure for marketed vehicles?↵	On all vehicles, headlight operation switch is replaced with a C/M part female terminal of the headlight wiring is with a new part.↵ In addition, if damaged, joint coupler is replaced with a new one.↵
50.	What are parts prepared for the remedy?↵	Writing switch Assy. Sub cord with terminal, coupler, terminal joint (joint clamp)↵
51.	How long does it take to apply the remedy operation?↵	0.7H for CIVIC, CIVIC FERIO, CIVIC HYBRID, STEP-WGN, STREAM↵ 0.8H for FIT↵
52.	How will recurrence be prevented?↵	Not terminal sliding limit value, all terminals of less than 2.3mm width, in which large current can flows continuously shall be basically metal-coated. However, if discontinuing the metal coating, the terminal should be checked for no movement and judgment of discontinuing be reflected to design guide.↵



## <Q & A >

Please use the Q & A below to understand the problem and for a queries from dealer and customers.

No.	Q	A
1.	Why do you report an additional notification?	Though we reported recall with "Notification No.769" on Sep 6 2001, the involved vehicle range was found to have been missing.
2.	What characterizes the final symptom?	The headlight fails to light up.
3.	What is the phenomenon, which occurs in the market?	Low beam of Headlight fails to come on, low beam not light up
4.	Is there any prediction?	No.
5.	How does the failure occur?	Same as "Notification No.769" When the high beams are switched to the low beams or the other way around, the terminals in the connectors that were snapped in move against each other. The receptors in the female connector run over the dioxide film that has developed around the pins in the male connector, increasing contact resistance that further increases as the operation is repeated. This leads to an increase in the temperature that eventually reaches the point where the connector begins to melt. The plastic of the melted connector enters into the space between the terminals, interrupting continuity between the terminals.
6.	How did you notice the oversight of the object vehicle range?	Dec 4,2001 from USA dealer informed that CIVIC headlight low beam did not turn on. And the returned part was analyzed and found that it had a cause similar to the case of "Notification NO. 769" and the involved range was missing.
7.	Why was the object vehicles range overlooked about "Notification No.769"?	Though the involved range of this defect was determined with sliding trace on terminal fitting area, the border of it was misjudged, resulted in involved range missing
8.	What do you usually specify the object vehicle based on?	The object vehicle was determined according to whether it matched to the occurrence mechanism and manufacturing period.
9.	When did you acquire market information?	The first case was informed on Dec 4,2001.
10.	When did the oversight of the object vehicle confirm?	Nov 10,2003
11.	When did you determine the cause?	Feb 12,2004
12.	When did you arrange the market measure parts?	We started arranging from Nov 10,2003
13.	Why wasn't the range missing immediately understood after market information had been acquired?	It took a long time to examine the claim part investigation, switch body fitting area inspection, switch terminal shape variety classification, metal reliance verification by reproduction test, and warranty check.
14.	Why did it take so long to decide to apply an additional market remedy after confirming the coverage missing?	Identifying the serial NO. of object vehicles, part arrangement as well as defining the missing range on specification took a great time.
15.	Why can you specify the production period of affected vehicles?	As occurrence mechanism and C/M for recall of "Notification No.769" was applied to all models, the object vehicle range and affected period can be defined.
16.	Why could not the mistake be avoided by recurrence prevention for previous add'l notification?	Up to date, during involved range defining operation concerning part delivery control or part No. change, "verification with several sections including the form management department" could prevent these mistakes. However, in this case, the vehicle range was involved with specification judged by occurrence mechanism, which failed to prevent.

17.	Does this defect lead to flame or fire? ↵	After the temperature reaches the point where the connector begins to melt, continuity is interrupted and electric current stops running between the terminals. Thus the maximum temperature is 232°C that same as the connector begins to melt. ↵ Fire does not break out because the surrounding parts such as the connector and the wire sheaths begin to burn at 410°C and at 454°C respectively. ↵
18.	To what extent does the temperature of the terminal increase? ↵	After the temperature reaches the point where the connector begins to melt, continuity is interrupted and electric current stops running between the terminals. Thus the maximum temperature is expected below 232°C that same as the connector melt. ↵
19.	At what temperature, does the connector begin to burn? ↵	410°C ↵
20.	What material is the connector? ↵	Polybutylene Terephthalate (PBT) ↵
21.	At what temperature, does the wire sheath begin to burn? ↵	454°C ↵
22.	What material is the wire sheath? ↵	PVC (Polyvinyl Chloride) ↵
23.	Why was this not noticed before the completion of the development stage? ↵	The terminals did not move in the specification test because the wires were free. Relative movement with wiring owing to lever operation did not developed, causing no terminal friction. ↵
24.	Why did you use a non-coated male terminal? ↵	For male terminals, the sliding contact area and the male terminal of the wiring are in an integral construction. ↵ The sliding contact area was processed, so we judged a coating is not necessary. ↵
25.	Why were other male terminals coated? ↵	The points of contact are necessary to coat in other terminals. ↵ Terminal made together as one body with point of contact. ↵
26.	Why does the connected terminal move? ↵	Terminal movement was occurred cause from lack stiffness of the plastic bracket and the layout of the mounting screws. ↵
27.	Why does contact resistance increase as the terminals move? ↵	Because the receptors in the female connector run over the dioxide film that has developed around the pins in the male connector. ↵
28.	Why don't the high-beam headlights fail? ↵	The market information indicates that the symptom occurs while the low beam is used. As the high beam is used not so frequency, no problem occurred. ↵
29.	What causes this failure, a design problem or a production problem? Whereabouts of responsibility? ↵	Specification, Honda ↵
30.	If the terminals that are coated move, the coating will be scraped off. Won't this cause the same problem? ↵	As long as the terminals that caused the problem move as confirmed during the endurance test, the coating will not be scraped off. ↵
31.	Why don't you replace the receptors or the female connector that could be damaged/degraded as the part is used for a long time? ↵	Replace the terminals of the headlight. ↵ Replace the connector if it is deformed or melted. ↵
32.	Are the wire-side female terminals for the high beams and low beams replaced? ↵	Replace the terminal only for the low beam. ↵
33.	When replacing the wire-side female terminals, why don't you replace the ones for the high beams? ↵ Don't you think that the female terminals for the high beams are damaged too as their contact resistance increases too? ↵	From the result of the failure inspection, any heat damages could not be found on the high beam terminal. The high beam terminal does not have damage because of low frequency usage. ↵ Replacing the male side never leads to damage. ↵
34.	Information from market, which is that high beam, does not light caused by this problem. ↵	No ↵



< Affected Models, Number of Unit, and the VIN Ranges > Singapore

Plant	Spec.	Model	2001MY			2002MY			Total # of Affected
			From	To	#Affected	From	To	#Affected	
Sss Civic	KU	ES1	0200173	0205242	151	0200006	0200107	29	180
		ES8	0200008	0205677	2060	0200033	0201411	688	2748
			0200503	0203662	84				84
Css Stream	KU	RN3	0200217	0209023	338				338
Total					2633			717	3350

Parts Information

			Parts Kit #
Sss Civic	KU	ES1	35012-S5A-305
		ES8	35012-S5A-305
			35012-S5A-306
Css Stream	KU	RN3	35012-S5A-305


FRT: 0.6H for Civic, Stream

**PROGRESS REPORT ON VEHICLE RECALL**

Name of motor dealer	Make(s) and model(s) of affected vehicles	Defect summary and corrective actions to rectify the defect(s)	Number of vehicles affected	Number of affected vehicles with defect(s) rectified	Remaining number of affected vehicles awaiting corrective actions
Kah Motor Co., Sdn.Bhd	2003 YM Honda Accord JDM 2001 to 2002 YM Stream JDM	Low beam headlight may not illuminated due water entry	1 unit Accord has been exported on [5/6/2004] 1 unit Stream has been exported on [9-11-2004]	0	0

I certify that this report is correct and accurate as at: 3-07-2004

Yours sincerely



Signature, name and designation  
(Director or General Manager or Authorised Person)

**PROGRESS REPORT ON VEHICLE RECALL**

Name of motor dealer	Make(s) and model(s) of affected vehicles	Defect summary and corrective actions to rectify the defect(s)	Number of vehicles affected	Number of affected vehicles with defect(s) rectified	Remaining number of affected vehicles awaiting corrective actions
Kah Motor Co., Sdn.Bhd	2003 YM Honda Accord JDM 2001 to 2002 YM Stream JDM	Low beam headlight may not illuminated due water entry	1 unit Accord has been exported on [5/6/2004] 1 unit Stream has been exported on [9-11-2004] informed by ricky on 14 of Jan 2005	0	0

I certify that this report is correct and accurate as at: \_ 3-07-2004

Yours sincerely



Signature, name and designation  
(Director or General Manager or Authorised Person)

EA11-012

HONDA

4/20/2012

Q16

2004 CIVIC

040226\_UK VOSA Light  
switch recall 01-02YM

NOTIFICATION TO THE VEHICLE INSPECTORATE

APPENDIX 3

Accidents, Defects and Recalls Branch  
 Vehicle Inspectorate Executive Agency  
 Berkeley House  
 Croydon Street, Bristol BS5 0DA  
 Tel 0117 9543300

Notification To The Vehicle Inspectorate as soon as the vehicle manufacturer/importer has concluded that evidence exists of a safety-related defect which requires remedial action in vehicles that have been sold in the United Kingdom.

1. Manufacturer's name HONDA OF THE UK MANUFACTURING LTD - UK / HONDA AS - TURKEY  
HONDA / HONDA MOTOR COMPANY LTD - JAPAN / HONDA OF AMERICA MANUFACTURING INC. - USA
2. Address HONDA (UK) CALLS  
UK CONTACT - 670 LONDON ROAD, SLOUGH - BERKSHIRE, SL3 8QY
3. Name of Co-ordinator CLIVE SUMMERS Tel No: 01753 590106
4. Make HONDA 5. Year 1999 - 2000 6. Model/Type CIVIL - CIVIL COUPE  
2001 - 2002 INSIGHT - LOGO - JAZZ  
STREAM.
7. Vehicle Classification (e.g. Car, GV, PSV, M/CYC) LAD 8. Estimated number of vehicles affected 44, D61
9. VIN/Chassis Nos of affected vehicles plus DVLA or MIVRIS Codes. 10. Build dates (if known)  
SEE ENCLOSED INFORMATION " " "
11. Description of defect, how it came to light, possible consequences if ignored and details of remedy.  
THE LOW BEAM HEADLIGHTS CAN MALFUNCTION. THIS MAY HAPPEN WHEN TURNING ON THE HEADLIGHTS OR DURING DRIVING. THE HIGH BEAM FUNCTION OF THE HEADLIGHTS IS UNAFFECTED.
12. Method of locating owners of affected vehicles (e.g. DVLA/Company records)  
COMPANY DATABASE - DVLA RECORDS.
13. Method of notifying owners (e.g. direct mail/via dealer network)  
INDIVIDUAL CUSTOMER LETTER - BULLETIN VIA DEALER NETWORK
14. Name and address of the component manufacturer concerned if applicable  
TOYOTA - DENSO OF JAPAN.
15. Launch Date (if known)  
TO BE CONFIRMED AT A LATER DATE.
16. Any other relevant information  
CHRONOLOGY AND BUILD DATES ENCLOSED.

Co-ordinator's signature:

*Clive Summers*

26TH FEBRUARY 2004



Vehicle & Operator Services Agency

Vehicle Inspectorate Division  
Vehicle Safety Branch  
Berkeley House  
Croydon Street  
Bristol  
BS5 0DA  
Tel: 0117 954 3300  
Fax: 0117 954 3328

Mr C Summers  
HONDA (UK) - CARS  
470 London Road  
SLOUGH  
Berkshire  
SL3 8QY

Our ref: R/2004/034

05 March 2004

Dear Mr Summers

### **Possibility of low beam headlights failing when turning on the headlights or during driving**

Thank you for your recent notification regarding the above recall.

This campaign will now be monitored under the relevant Code of Practice, and our reference number is as above which should be quoted on all future letters and on the safety recall request form (V316) to the Driver Vehicle Licensing Agency (DVLA).

The following is our proposed wording for entry in the Recalls Bulletin. It would be appreciated if you could now either approve this wording or suggest suitable alternatives if preferred and also supply additional information where requested.

Manufacturer/Importer:	HONDA
Models:	Civic, Civic Coupe, Insight, Logo, Jazz and Steam
VIN numbers:	Please supply VIN numbers
Classification:	Car
Defect:	Dipped beam headlights may malfunction either when switched on, or during driving.
Remedy:	Recall likely to be affected vehicles, and replace the headlight switch with a modified part. Additionally, the terminal for dipped beam operation within the wiring harness will also be changed, in order to rectify any heat damage that may have occurred.
Launch date:	Please confirm via email to Alison.Martin@vosa.gsi.gov.uk



INVESTOR IN PEOPLE





Number of vehicles: 44061  
Means of locating keeper: DVLA and Company Records  
Method of contacting owners: Individual Customer Letter

It would be appreciated if you could let us have details of the response to the recall at 3-monthly intervals (or more frequently if preferable to you) and also supply sample copies of any recall notification letters/notices to owners, etc, for our file, if available.

Thank you for your assistance and co-operation in this matter. I look forward to hearing from you in due course.

Yours sincerely



**Alison C Martin**  
**Office Manager - Vehicle Safety Branch**

EA11-012

HONDA

4/20/2012

Q16

2004 CIVIC

040227\_Australia 5CN\_VSSB

Advice Letter 27 02 04

REF : TE007L04

27 February 2004

Research Audit and Vehicle Recall  
Vehicle Safety Standards  
Department of Transport and Regional Services  
GPO Box 594  
Canberra ACT 2601

Dear Sir,

Honda Australia Pty. Ltd wish to advise that they have initiated action to conduct a "Vehicle Safety Recall" on the 01 Civic sedan and 5 Door variant and certain 02 YM Civic Sedan.

Honda Motor Co. Ltd has determined that a defect relating to vehicle safety exists due to the possibility of the headlamps low beam, may fail to operate.

This condition will occur due to an increase in contact resistance caused by oxidation between the male terminal of the head lamp combination switch and the adjoining terminal coupler. Due to movement between the male and female terminals a build up of dioxide film is created, increasing resistance and causing heat build up to a point where the terminal connector begins to melt.

Due to this reaction, plastic material from the terminal connector merges with the male and female terminals interrupting continuity, causing the headlamps to become inoperative.

Vehicles manufactured after the affected vehicles have the headlamp combination switch with counter measured terminals replaced, to prevent this condition from occurring.

Owners of the affected vehicles will be contacted by mail in accordance with the Federal Chamber of Automotive Industries Code of Practice, to have the combination switch, sub cord and terminal replaced and the terminal coupler if damaged.

The total number of vehicles involved in this recall is 7979. The vehicles can be identified by the vehicle identification number (VIN), and are within the listed VIN ranges.

**CAMPAIGN 5CN HEADLAMP LOW BEAM MALFUNCTION**

01YM Civic 4DR Sedan and 5DR

Model	VIN Prefix	From	To
Civic 4DR	JHMES16501	S [REDACTED]	S [REDACTED]
Civic 4DR	JHMES15501	S [REDACTED]	S [REDACTED]
Civic 5DR	JHMEU38301	S [REDACTED]	S [REDACTED]
Civic 5DR	JHMEU38501	S [REDACTED]	S [REDACTED]
Civic 5DR	JHMEU37501	S [REDACTED]	S [REDACTED]
Civic 5DR	JHMEU37301	S [REDACTED]	S [REDACTED]

02YM Civic 4 DR Sedan

Model	VIN Prefix	From	To
Civic 4DR	MRHES15502	P [REDACTED]	P [REDACTED]
Civic 4DR	MRHES16502	P [REDACTED]	P [REDACTED]

Yours Sincerely  
**HONDA AUSTRALIA PTY LTD**



Paul Sayers  
General Manager  
**Customer Services**

EA11-012

HONDA

4/20/2012

Q16

101215 Fit lowbeam  
failure(MLIT)

## Recall Notification

December 16, 2010

Recall No.	2678	Recall initiation date	December 17, 2010
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	Since the wire harness connected to the lighting switch does not have sufficient reserve length, it gets stretched by coupler connecting operation. This causes the terminal joint to slide when switch lever is operated repeatedly, increasing the contact resistance and generating heat to melt the coupler. Consequently, the headlight low beam does not come on.		
Corrective action details	In all units, replace the terminal with a longer one for low beam and fix it with a binding band. Also, replace the lighting switch and the coupler with new ones if the connecting coupler is damaged.		
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> </ul> Place a "2678" sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.		

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
Honda	LA-GD1	Fit	GD1-1067556 - D1-1279828 Nov. 2, 2001 - Nov. 1, 2002	212,273	
			GD1-1500002- D1-1568296 Nov. 4, 2002 - Mar. 27, 2003	56,274	
			GD1-8000161- D1-8001320 Nov. 3, 2001 - Oct. 28, 2002	1,160	
			GD1-8100001- D1-8100398 Nov. 12, 2002 - Mar. 26, 2003	366	
	LA-GD2		GD2-1005640- D2-1030182 Nov. 3, 2001 - Nov. 4, 2002	24,543	
			GD2-1500001- D2-1514403 Nov. 4, 2002 - Sep. 30, 2003	11,299	
			GD2-8000026- D2-8000242 Nov. 13, 2001 - Oct. 23, 2002	217	
			GD2-8100001- D2-8100100 Nov. 14, 2002 - Sep. 25, 2003	73	
	LA-GD3		GD3-1500024 - D3-1555278 Sep. 2, 2002 - Sep. 30, 2003	25,358	
			GD3-8000001- D3-8000231 Oct. 18, 2002 - Sep. 26, 2003	135	
	LA-GD4		GD4-1500001- D4-1508102 May 9, 2002 - Sep. 30, 2003	3,310	
			GD4-8000001- D4-8000054 Oct. 24, 2002 - Sep. 24, 2003	31	
	UA-GD1		GD1-1700001- D1-1761659 April 3, 2003 - Sep. 30, 2003	50,658	
			GD1-1900004- D1-1917533 Oct. 7, 2003 - Dec. 22, 2003	13,997	

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
	UA-GD1		GD1-8200001- D1-8200291 April 15, 2003 - Sep. 25, 2003	247	
			GD1-8300001- D1-8300114 Nov. 4, 2003 - Dec. 18, 2003	96	
	UA-GD2		GD2-1600002- D2-1602355 Oct. 8, 2003 - Dec. 22, 2003	1,733	
			GD2-8200002 - D2-8200017 Nov. 7, 2003 - Dec. 24, 2003	11	
	UA-GD3		GD3-1700008 - D3-1705796 Oct. 8, 2003 - Dec. 23, 2003	2,725	
			GD3-8100001 - D3-8100018 Nov. 7, 2003 - Dec. 19, 2003	9	
	UA-GD4		GD4-1600002- D4-1600927 Oct. 7, 2003 - Dec. 22, 2003	440	
			GD4-8100002- D4-8100009 Nov. 7, 2003 - Dec. 11, 2003	7	
	DBA-GD1		GD1-2000001- D1-2039492 Jan. 7, 2004 - May 26, 2004	32,401	
			GD1-2100003- D1-2261088 Jun. 1, 2004 - Nov. 25, 2005	132,894	
			GD1-2300004- D1-2444370 Nov. 29, 2005 - Sep. 28, 2007	101,384	
			GD1-8400001- D1-8400268 Jan. 27, 2004 - May 21, 2004	241	
			GD1-8500001- D1-8500573 Jun. 18, 2004 - Nov. 22, 2005	499	
			GD1-8600001- D1-8600449 Jan. 10, 2006- Sep. 25, 2007	326	
	DBA-GD2		GD2-1700002- D2-1705006 Jan. 7, 2004 - May 21, 2004	3,886	
			GD2-1800002- D2-1819417 Jun. 2, 2004 - Nov. 23, 2005	15,544	
			GD2-1900001- D2-1918428 Nov. 29, 2005 - Sep. 26, 2007	13,436	
			GD2-8300001- D2-8300042 Jan. 28, 2004- May 18, 2004	36	
			GD2-8400001- D2-8400080 Jun. 22, 2004 - Nov. 7, 2005	72	
			GD2-8500001- D2-8500092 Jan. 12, 2006 - Sep. 20, 2007	70	
	DBA-GD3		GD3-2000007- D3-2019495 Dec. 6, 2005- Oct. 5, 2007	9,307	
			GD3-8400002- D3-8400116 Jan. 17, 2006-Sep. 20, 2007	63	
	DBA-GD4		GD4-1900001- D4-1903035 Dec. 6, 2005 - Sep. 26, 2007	1,305	
			GD4-8400001- D4-8400022 Jan. 17, 2006 -Jul. 19, 2007	9	

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
	CBA-GD3		GD3-1800001- D3-1807079 Jan. 7, 2004 - May 21, 2004	3,236	
			GD3-1900006- D3-1929353 Jun. 4, 2004 - Nov. 24, 2005	12,199	
			GD3-8200005- D3-8200051 Feb. 9, 2004 - May 21, 2004	30	
			GD3-8300002- D3-8300158 Jun. 21, 2004-Nov. 22, 2005	101	
	CBA-GD4		GD4-1700002- D4-1701520 Jan. 7, 2004- May 21, 2004	707	
			GD4-1800004- D4-1804065 Jun. 11, 2004 - Nov. 23, 2005	1,661	
			GD4-8200004- D4-8200014 Feb. 23, 2004 - May 13, 2004	9	
			GD4-8300003- D4-8300042 Jun. 25, 2004 - Nov. 8, 2005	14	
TOTAL				734,392 units	



## Recall Notification

Recall Notification date: December 16,

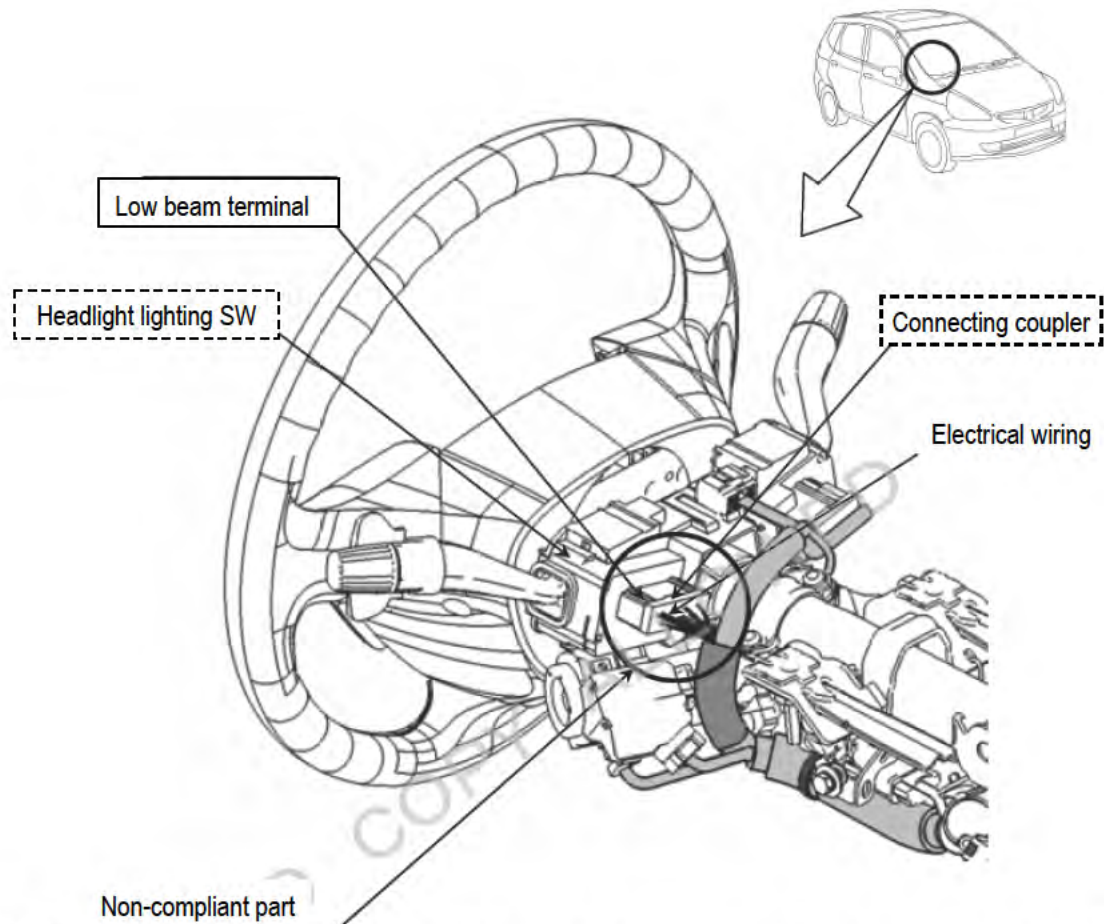
Recall No.	2678	Recall initiation date	December 17, 2010
Notifier	Honda Motor Co., Ltd. <span style="float: right;">Contact: Customer Service</span> Representative Executive: Takanobu Ito <span style="float: right;">Tel: 0120-112010</span>		
Condition and its cause of the structure, system or performance that Honda accept of its nonconformity to the standards	Since the wire harness connected to the lighting switch does not have sufficient reserve length, it gets stretched by coupler connecting operation. This causes the terminal joint to slide when switch lever is operated repeatedly, increasing the contact resistance and generating heat to melt the coupler. Consequently, the headlight low beam does not come on.		
Corrective action details	In all units, replace the terminal with a longer one for low beam and fix it with a binding band. Also, replace the lighting switch and the coupler with new ones if the connecting coupler is damaged.		
Number of occurrences	130 cases	Number of accident	None
Action to notify the users and dealers	<ul style="list-style-type: none"> <li>● User: Notify by the direct mail.</li> <li>● Dealer: Post the article of the recall on the publication issued by Japan Automobile Service Promotion Association.</li> </ul> Place a "2678" sticker on the left bottom corner of the rear glass for the vehicle complied with the corrective action.		

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
Honda	LA-GD1	Fit	GD1-1067556 - D1-1279828 Nov. 2, 2001 - Nov. 1, 2002	212,273	
			GD1-1500002- D1-1568296 Nov. 4, 2002 - Mar. 27, 2003	56,274	
			GD1-8000161- D1-8001320 Nov. 3, 2001 - Oct. 28, 2002	1,160	
			GD1-8100001- D1-8100398 Nov. 12, 2002 - Mar. 26, 2003	366	
	LA-GD2		GD2-1005640- D2-1030182 Nov. 3, 2001 - Nov. 4, 2002	24,543	
			GD2-1500001- D2-1514403 Nov. 4, 2002 - Sep. 30, 2003	11,299	
			GD2-8000026- D2-8000242 Nov. 13, 2001 - Oct. 23, 2002	217	
			GD2-8100001- D2-8100100 Nov. 14, 2002 - Sep. 25, 2003	73	
	LA-GD3		GD3-1500024 - D3-1555278 Sep. 2, 2002 - Sep. 30, 2003	25,358	
			GD3-8000001- D3-8000231 Oct. 18, 2002 - Sep. 26, 2003	135	
	LA-GD4		GD4-1500001- D4-1508102 May 9, 2002 - Sep. 30, 2003	3,310	
			GD4-8000001- D4-8000054 Oct. 24, 2002 - Sep. 24, 2003	31	
	UA-GD1		GD1-1700001- D1-1761659 April 3, 2003 - Sep. 30, 2003	50,658	

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
	UA-GD1		GD1-1900004- D1-1917533 Oct. 7, 2003 - Dec. 22, 2003	13,997	
			GD1-8200001- D1-8200291 April 15, 2003 - Sep. 25, 2003	247	
			GD1-8300001- D1-8300114 Nov. 4, 2003 - Dec. 18, 2003	96	
	UA-GD2		GD2-1600002- D2-1602355 Oct. 8, 2003 - Dec. 22, 2003	1,733	
			GD2-8200002 - D2-8200017 Nov. 7, 2003 - Dec. 24, 2003	11	
	UA-GD3		GD3-1700008 - D3-1705796 Oct. 8, 2003 - Dec. 23, 2003	2,725	
			GD3-8100001 - D3-8100018 Nov. 7, 2003 - Dec. 19, 2003	9	
	UA-GD4		GD4-1600002- D4-1600927 Oct. 7, 2003 - Dec. 22, 2003	440	
			GD4-8100002- D4-8100009 Nov. 7, 2003 - Dec. 11, 2003	7	
	DBA-GD1		GD1-2000001- D1-2039492 Jan. 7, 2004 - May 26, 2004	32,401	
			GD1-2100003- D1-2261088 Jun. 1, 2004 - Nov. 25, 2005	132,894	
			GD1-2300004- D1-2444370 Nov. 29, 2005 - Sep. 28, 2007	101,384	
			GD1-8400001- D1-8400268 Jan. 27, 2004 - May 21, 2004	241	
			GD1-8500001- D1-8500573 Jun. 18, 2004 - Nov. 22, 2005	499	
			GD1-8600001- D1-8600449 Jan. 10, 2006- Sep. 25, 2007	326	
			GD1-8600001- D1-8600449 Jan. 10, 2006- Sep. 25, 2007	326	
	DBA-GD2		GD2-1700002- D2-1705006 Jan. 7, 2004 - May 21, 2004	3,886	
			GD2-1800002- D2-1819417 Jun. 2, 2004 - Nov. 23, 2005	15,544	
			GD2-1900001- D2-1918428 Nov. 29, 2005 - Sep. 26, 2007	13,436	
			GD2-8300001- D2-8300042 Jan. 28, 2004- May 18, 2004	36	
			GD2-8400001- D2-8400080 Jun. 22, 2004 - Nov. 7, 2005	72	
			GD2-8500001- D2-8500092 Jan. 12, 2006 - Sep. 20, 2007	70	
			GD2-8500001- D2-8500092 Jan. 12, 2006 - Sep. 20, 2007	70	
	DBA-GD3		GD3-2000007- D3-2019495 Dec. 6, 2005- Oct. 5, 2007	9,307	
			GD3-8400002- D3-8400116 Jan. 17, 2006-Sep. 20, 2007	63	
	DBA-GD4		GD4-1900001- D4-1903035 Dec. 6, 2005 - Sep. 26, 2007	1,305	

Manufacture	Type	Commercial Name	Range of affected serial number and production period	Number of affected vehicles	Note
	DBA-GD4		GD4-8400001- D4-8400022 Jan. 17, 2006 -Jul. 19, 2007	9	
	CBA-GD3		GD3-1800001- D3-1807079 Jan. 7, 2004 - May 21, 2004	3,236	
			GD3-1900006- D3-1929353 Jun. 4, 2004 - Nov. 24, 2005	12,199	
			GD3-8200005- D3-8200051 Feb. 9, 2004 - May 21, 2004	30	
			GD3-8300002- D3-8300158 Jun. 21, 2004-Nov. 22, 2005	101	
	CBA-GD4		GD4-1700002- D4-1701520 Jan. 7, 2004- May 21, 2004	707	
			GD4-1800004- D4-1804065 Jun. 11, 2004 - Nov. 23, 2005	1,661	
			GD4-8200004- D4-8200014 Feb. 23, 2004 - May 13, 2004	9	
			GD4-8300003- D4-8300042 Jun. 25, 2004 - Nov. 8, 2005	14	
	(Total of 14 types)		(Total of 1 model)	(Whole range of production period) Nov. 2, 2001 – Oct. 5, 2007	734,392 units

### Illustrative Drawing of Modified Part



Since the wire harness connected to the lighting switch does not have sufficient reserve length, it gets stretched by coupler connecting operation. This causes the terminal joint to slide when switch lever is operated repeatedly, increasing the contact resistance and generating heat to melt the coupler. Consequently, the headlight low beam does not come on.

#### Corrective action details

In all units, replace the terminal with a longer one for low beam and fix it with a binding band.  
Also, replace the lighting switch and the coupler with new ones if the connecting coupler is damaged.

#### Note:

: indicates a replacement part.

: indicates a part to be replaced as required.

Identifier: Apply yellow paint on the lower bolt head of the hinge above right rear side door.

### Major specification of vehicles subjected to the recall

Manufacture	Type	Model	Type/ Use application	Vehicle shape	Engine type (Total engine displacement)	Note
Honda	LA-GD1	Fit	Compact car	Station Wagon	L13A (1339)	
	LA-GD2					
	LA-GD3		L15A (1496)			
	LA-GD4					
	UA-GD1		L13A (1339)			
	UA-GD2					
	UA-GD3		L15A (1496)			
	UA-GD4					
	DBA-GD1		L13A (1339)			
	DBA-GD2					
	DBA-GD3		L15A (1496)			
	DBA-GD4					
	CBA-GD3					
	CBA-GD4					

## 1. Background of the recall

On April 24, 2005, we received information from a dealer in Miyagi prefecture that they receive a customer complaint “while driving Fit (UA-GD1-type), the headlight low beam suddenly went off.” Upon checking the vehicle, they found a melted connecting coupler terminal of the headlight lighting switch.

From the investigation and analysis, we found when the low beam male terminal and female terminal joints at the connection coupler repeatedly moves by headlight switching operation, contact resistance increases and causes heat to generate. This leads to melting of the connecting coupler into between the terminals and possibly causes a continuity failure which results in the low beam failure.

Global Quality Committee of Honda has decided to take proactive market action because the future occurrence of the problem can be predicted from the above reason.

## 2. Number of occurrences of the problem

130 defects were reported from the market as listed below. No accident reported.

No	Prefecture	Type (Model)	Occurrence date	Registration date	Production date	Mileage	Failure
1	Miyagi	UA-GD1 (Fit)	Apr. 21, 2005	Aug. 26, 2003	Jun. 23, 2003	60,651 km	Headlight suddenly went off while driving..

Failure information other than the above are listed on a different sheet.

## 3. Cause investigation

1. Since the wire harness connected to the lighting switch does not have sufficient reserve length, it gets stretched by coupler connecting operation.
2. When the switch body is moved by the switch lever operation, the low beam terminal joint cannot follow the movement, causing it to slide largely.
3. Due to sliding, Sn plating on the terminal is gradually worn and the base metal is exposed to form copper oxide on the contact surface. With repeated sliding, wear particles of copper oxide are produced and deposit on the slide area.
4. If the terminal runs on the deposited particles, contact resistance is increased to generate excessive heat at the joint when the light is turned on.
5. The excessive heat at the joint causes the reduction in terminal contact pressure to increase the wear particle inclusion and further heat generation.
6. If the condition stays the same, the coupler melts into the joint area and causes the continuity failure which possibly leads to the low beam failure.

#### **4. Conformity assessment result of the corrective action**

In all units, replace the terminal with a longer one for low beam and fix it with a binding band. Also, replace the lighting switch and the coupler with new ones if the connecting coupler is damaged.

#### **5. Affected range and its reason**

Total of 734,392 vehicles of 14 types (LA-GD1, LA-GD2, LA-GD3, LA-GD4, UA-GD1, UA-GD2, UA-GD3, UA-GD4, DBA-GD1, DBA-GD2, DBA-GD3, DBA-GD4, CBA-GD3, and CBA-GD4) produced from the first VIN which applied tin plating for the male terminal of the headlight switch until the change of headlight lighting circuit is applied (November 2, 2001 to October 5, 2007).

#### **6. Situation and Measurement for the units exported**

(1) Export destination county: North America, Europe, Middle East, and Asia & Oceania

Total of 621, 000 units

(2) Countermeasure: Action suitable for each country's situation.

#### **7. Recurrence prevention**

Additionally include the description "Set the wiring length which absorbs the switch displacement at the lighting switch operation and the impact on terminals by assembly operation" on the design guide.

#### **8. Time required for remedial action**

Connecting coupler inspection and low beam terminal replacement: 0.6 hr

Connecting coupler inspection and low beam terminal, lighting switch, and coupler replacement: 0.7 hr

Defect information (Cont'd)

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
2	Hokkaido	LA-GD2 (Fit)	Jun. 22, 2005	Jun. 18, 2005	Jun. 26, 2002	Jun. 17, 2002	39,494km	Headlight does not come ON.
3	Gunma	LA-GD1 (Fit)	Sep. 5, 2005	Sep. 2, 2005	Dec. 25, 2001	Dec. 18, 2001	76,599km	Headlight does not come ON.
4	Fukuoka	LA-GD1 (Fit)	Sep. 8, 2005	Sep. 5, 2005	Nov. 22, 2001	Nov. 9, 2001	166,938km	Headlight does not come ON.
5	Kagawa	LA-GD1 (Fit)	Sep. 20, 2005	Sep. 14, 2005	Jul. 19, 2002	Jul. 9, 2002	87,855km	Headlight does not come ON.
6	Gifu	LA-GD1 (Fit)	Oct. 31, 2005	Oct. 27, 2005	Mar. 26, 2002	Mar. 20, 2002	58,380km	Headlight suddenly went OFF while driving.
7	Aichi	LA-GD1 (Fit)	May. 15, 2006	May. 15, 2006	Aug. 7, 2003	Mar. 26, 2002	53,381km	Headlight suddenly went OFF while driving.
8	Tokyo	DBA-GD1 (Fit)	Jun. 27, 2006	Jun. 24, 2006	Aug. 3, 2004	Jul. 8, 2004	105,125km	Headlight does not come ON.
9	Saitama	LA-GD1 (Fit)	Nov. 24, 2006	Nov. 22, 2006	Feb. 20, 2002	Feb. 11, 2002	57,826km	Headlight does not come ON.
10	Hiroshima	LA-GD2 (Fit)	Jan. 25, 2007	Jan. 21, 2007	Apr. 24, 2003	Apr. 17, 2003	76,755km	Headlight suddenly went OFF while driving.
11	Yamaguchi	LA-GD1 (Fit)	Feb. 15, 2007	Feb. 11, 2007	Mar. 14, 2003	Mar. 7, 2003	131,871km	Abnormal smell and smoke occurred around the steering
12	Hokkaido	DBA-GD2 (Fit)	Jun. 25, 2007	Jun. 24, 2007	May. 28, 2004	Mar. 12, 2004	59,206km	Headlight does not come ON.
13	Tochigi	LA-GD1 (Fit)	Jul. 10, 2007	Jun. 29, 2007	Apr. 15, 2002	Apr. 8, 2002	57,356km	Headlight does not come ON.
14	Yamagata	DBA-GD2 (Fit)	Aug. 6, 2007	Aug. 5, 2007	Mar. 31, 2004	Mar. 23, 2004	31,771km	Headlight does not come ON.
15	Kanagawa	LA-GD1 (Fit)	Aug. 20, 2007	Aug. 18, 2007	Apr. 24, 2002	Mar. 21, 2002	23,754km	Headlight does not come ON.
16	Shizuoka	LA-GD1 (Fit)	Aug. 20, 2007	Aug. 18, 2007	Aug. 8, 2002	Jul. 29, 2002	101,446km	Headlight does not come ON.
17	Hiroshima	DBA-GD1 (Fit)	Aug. 22, 2007	Aug. 18, 2007	Aug. 20, 2004	Aug. 3, 2004	60,100km	Headlight does not come ON.
18	Yamanashi	DBA-GD1 (Fit)	Sep. 25, 2007	Sep. 24, 2007	Dec. 17, 2004	Sep. 18, 2004	48,024km	Headlight does not come ON.
19	Tokushima	LA-GD1 (Fit)	Oct. 2, 2007	Sep. 28, 2007	Mar. 18, 2002	Mar. 13, 2002	97,122km	Headlight does not come ON.
20	Osaka	DBA-GD1 (Fit)	Oct. 12, 2007	Oct. 11, 2007	Jun. 30, 2004	Jun. 28, 2004	64,500km	Headlight does not come ON.



No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
21	Kyoto	LA-GD1 (Fit)	Oct. 22, 2007	Oct. 19, 2007	Mar. 28, 2003	Feb. 11, 2003	89,968km	Headlight does not come ON.
22	Yamaguchi	LA-GD1 (Fit)	Oct. 23, 2007	Oct. 21, 2007	Feb. 1, 2002	Jan. 22, 2002	86,329km	Abnormal smell and smoke occurred around the steering
23	Osaka	LA-GD1 (Fit)	Nov. 9, 2007	Nov. 8, 2007	Jun. 28, 2002	Jun. 25, 2002	74,962km	Headlight does not come ON.
24	Chiba	DBA-GD1 (Fit)	Dec. 13, 2007	Dec. 11, 2007	Mar. 11, 2005	Jan. 8, 2005	81,264km	Headlight does not come ON.
25	Yamaguchi	DBA-GD1 (Fit)	Jan. 8, 2008	Jan. 5, 2008	Jul. 16, 2004	Jul. 8, 2004	61,178km	Headlight does not come ON.
26	Ibaraki	LA-GD1 (Fit)	Jan. 8, 2008	Jan. 6, 2008	Sep. 3, 2002	Aug. 29, 2002	32,447km	Headlight does not come ON.
27	Shizuoka	LA-GD1 (Fit)	Jun. 10, 2008	Jun. 8, 2008	Jan. 17, 2002	Jan. 9, 2002	62,618km	Headlight does not come ON.
28	Chiba	DBA-GD1 (Fit)	Jul. 3, 2008	Jul. 2, 2008	Sep. 22, 2004	Sep. 14, 2004	48,203km	Headlight does not come ON.
29	Shimane	LA-GD1 (Fit)	Jul. 14, 2008	Jul. 7, 2008	May. 16, 2002	May. 9, 2002	60,107km	Headlight does not come ON.
30	Kochi	LA-GD1 (Fit)	Aug. 5, 2008	Aug. 1, 2008	Sep. 27, 2002	Aug. 31, 2002	47,015km	Headlight does not come ON.
31	Shimane	LA-GD1 (Fit)	Sep. 1, 2008	Aug. 22, 2008	Apr. 4, 2002	Mar. 28, 2002	109,197km	Headlight does not come ON.
32	Tochigi	LA-GD1 (Fit)	Sep. 9, 2008	Sep. 6, 2008	Mar. 26, 2003	Feb. 7, 2003	101,642km	Headlight does not come ON.
33	Iwate	LA-GD2 (Fit)	Sep. 25, 2008	Sep. 20, 2008	Feb. 8, 2002	Jan. 30, 2002	175,368km	Headlight does not come ON.
34	Tokyo	DBA-GD1 (Fit)	Oct. 9, 2008	Oct. 9, 2008	Mar. 27, 2004	Mar. 11, 2004	44,727km	Headlight does not come ON.
35	Chiba	CBA-GD3 (Fit)	Oct. 17, 2008	Oct. 10, 2008	Feb. 18, 2005	Feb. 14, 2005	71,697km	Headlight does not come ON.
36	Tokyo	DBA-GD1 (Fit)	Nov. 3, 2008	Nov. 2, 2008	Dec. 14, 2006	Nov. 30, 2006	89,406km	Headlight does not come ON.
37	Fukushima	DBA-GD2 (Fit)	Nov. 6, 2008	Nov. 5, 2008	May. 26, 2006	May. 16, 2006	98,279km	Headlight does not come ON.
38	Kochi	DBA-GD1 (Fit)	Nov. 10, 2008	Nov. 9, 2008	Jul. 25, 2005	Apr. 11, 2005	99,065km	Headlight suddenly went OFF while driving.
39	Wakayama	DBA-GD1 (Fit)	Nov. 12, 2008	Nov. 11, 2008	Feb. 24, 2005	Dec. 7, 2004	51,948km	Headlight does not come ON.
40	Kagawa	LA-GD1 (Fit)	Nov. 17, 2008	Nov. 14, 2008	Feb. 1, 2002	Jan. 28, 2002	82,090km	Headlight does not come ON.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
41	Osaka	UA-GD1 (Fit)	Nov. 19, 2008	Nov. 15, 2008	Sep. 22, 2003	Jul. 22, 2003	71,393km	Headlight does not come ON.
42	Ibaraki	LA-GD1 (Fit)	Nov. 27, 2008	Nov. 22, 2008	Jul. 26, 2002	Jul. 20, 2002	101,662km	Headlight does not come ON.
43	Ishikawa	LA-GD1 (Fit)	Dec. 4, 2008	Dec. 1, 2008	Jun. 28, 2002	Jun. 26, 2002	181,983km	Headlight does not come ON.
44	Saitama	LA-GD1 (Fit)	Jan. 19, 2009	Jan. 13, 2009	Dec. 26, 2001	Dec. 20, 2001	53,512km	Headlight does not come ON.
45	Ibaraki	DBA-GD1 (Fit)	Jan. 20, 2009	Jan. 17, 2009	Dec. 24, 2004	Dec. 16, 2004	109,598km	Headlight does not come ON.
46	Gifu	DBA-GD1 (Fit)	Feb. 2, 2009	Jan. 31, 2009	Sep. 8, 2006	Aug. 9, 2006	53,557km	Headlight does not come ON.
47	Fukushima	LA-GD1 (Fit)	Feb. 20, 2009	Feb. 9, 2009	Feb. 28, 2002	Feb. 22, 2002	96,978km	Headlight does not come ON.
48	Mie	DBA-GD1 (Fit)	Mar. 25, 2009	Mar. 23, 2009	Mar. 29, 2005	Mar. 18, 2005	77,211km	Headlight does not come ON.
49	Kumamoto	DBA-GD1 (Fit)	Apr. 3, 2009	Mar. 30, 2009	Nov. 28, 2006	Nov. 14, 2006	30,738km	Headlight suddenly went OFF while driving.
50	Iwate	LA-GD1 (Fit)	Apr. 6, 2009	Mar. 31, 2009	Sep. 20, 2002	Sep. 10, 2002	56,809km	Headlight does not come ON.
51	Fukui	LA-GD2 (Fit)	Apr. 7, 2009	Apr. 3, 2009	Apr. 26, 2002	Apr. 20, 2002	73,880km	Headlight does not come ON.
52	Ibaraki	DBA-GD1 (Fit)	Apr. 10, 2009	Apr. 5, 2009	Jul. 29, 2005	Dec. 14, 2004	37,468km	Headlight does not come ON.
53	Osaka	CBA-GD3 (Fit)	Apr. 13, 2009	Apr. 11, 2009	Dec. 27, 2004	Dec. 15, 2004	65,042km	Headlight does not come ON.
54	Aichi	DBA-GD1 (Fit)	Apr. 17, 2009	Apr. 16, 2009	Mar. 2, 2005	Feb. 4, 2005	61,774km	Headlight does not come ON.
55	Ibaraki	DBA-GD1 (Fit)	May. 19, 2009	Apr. 27, 2009	Dec. 1, 2006	Nov. 14, 2006	86,433km	Headlight does not come ON.
56	Nara	DBA-GD1 (Fit)	May. 11, 2009	May. 2, 2009	Mar. 9, 2007	Feb. 13, 2007	56,010km	Headlight does not come ON.
57	Hokkaido	DBA-GD2 (Fit)	Jun. 5, 2009	May. 26, 2009	Jan. 27, 2005	Dec. 9, 2004	187,085km	Headlight does not come ON.
58	Wakayama	DBA-GD1 (Fit)	Jun. 24, 2009	Jun. 23, 2009	Jul. 20, 2006	Jun. 30, 2006	59,068km	Headlight does not come ON.
59	Okayama	DBA-GD1 (Fit)	Aug. 20, 2009	Jun. 24, 2009	Apr. 16, 2004	Mar. 23, 2004	57,747km	Headlight does not come ON.
60	Aichi	DBA-GD3 (Fit)	Jul. 10, 2009	Jul. 7, 2009	Jul. 27, 2006	Jul. 20, 2006	45,301km	Headlight does not come ON.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
61	Hokkaido	DBA-GD2 (Fit)	Aug. 21, 2009	Aug. 18, 2009	Mar. 29, 2007	Feb. 6, 2007	27,597km	Headlight does not come ON.
62	Tokyo	CBA-GD3 (Fit)	Aug. 24, 2009	Aug. 21, 2009	Feb. 27, 2004	Feb. 20, 2004	75,967km	Headlight does not come ON.
63	Kumamoto	LA-GD1 (Fit)	Sep. 14, 2009	Sep. 11, 2009	Nov. 22, 2001	Nov. 16, 2001	146,232km	Headlight does not come ON.
64	Yamagata	DBA-GD1 (Fit)	Sep. 25, 2009	Sep. 24, 2009	Feb. 28, 2005	Feb. 10, 2005	77,833km	Headlight does not come ON.
65	Hiroshima	DBA-GD1 (Fit)	Oct. 1, 2009	Sep. 28, 2009	Jun. 19, 2006	May. 15, 2006	65,260km	Headlight does not come ON.
66	Nagano	DBA-GD2 (Fit)	Oct. 1, 2009	Sep. 28, 2009	Sep. 30, 2004	Sep. 18, 2004	53,828km	Headlight does not come ON.
67	Nagano	LA-GD2 (Fit)	Oct. 7, 2009	Oct. 1, 2009	Apr. 11, 2002	Apr. 2, 2002	116,821km	Headlight does not come ON.
68	Osaka	LA-GD1 (Fit)	Oct. 22, 2009	Oct. 6, 2009	Mar. 20, 2003	Jan. 22, 2003	69,266km	Headlight suddenly went OFF while driving.
69	Aichi	DBA-GD1 (Fit)	Oct. 28, 2009	Oct. 15, 2009	Jun. 6, 2007	Jun. 1, 2007	55,555km	Headlight does not come ON.
70	Gunma	DBA-GD1 (Fit)	Oct. 27, 2009	Oct. 17, 2009	Dec. 14, 2006	Nov. 7, 2006	58,356km	Headlight does not come ON.
71	Saitama	DBA-GD1 (Fit)	Oct. 23, 2009	Oct. 22, 2009	Dec. 13, 2006	Nov. 21, 2006	67,207km	Headlight does not come ON.
72	Hokkaido	LA-GD2 (Fit)	Dec. 1, 2009	Oct. 29, 2009	May. 15, 2002	May. 6, 2002	57,193km	Headlight does not come ON.
73	Oita	LA-GD1 (Fit)	Dec. 22, 2009	Nov. 8, 2009	May. 15, 2002	Apr. 25, 2002	115,999km	Headlight suddenly went OFF while driving.
74	Fukushima	LA-GD1 (Fit)	Jan. 27, 2010	Nov. 8, 2009	Jun. 27, 2002	Jun. 21, 2002	102,832km	Headlight suddenly went OFF while driving.
75	Kanagawa	DBA-GD1 (Fit)	Nov. 13, 2009	Nov. 12, 2009	Mar. 31, 2005	Dec. 18, 2004	42,656km	Headlight does not come ON.
76	Hyogo	DBA-GD1 (Fit)	Dec. 14, 2009	Dec. 11, 2009	May. 31, 2006	May. 29, 2006	113,050km	Headlight does not come ON.
77	Kyoto	LA-GD1 (Fit)	Dec. 14, 2009	Dec. 12, 2009	Dec. 25, 2001	Dec. 20, 2001	119,615km	Headlight suddenly went OFF while driving.
78	Niigata	DBA-GD2 (Fit)	Dec. 23, 2009	Dec. 21, 2009	Aug. 31, 2004	Aug. 26, 2004	78,788km	Headlight does not come ON.
79	Miyazaki	DBA-GD1 (Fit)	Feb. 1, 2010	Jan. 4, 2010	May. 31, 2006	May. 18, 2006	127,320km	Headlight does not come ON.
80	Akita	DBA-GD1 (Fit)	Jan. 8, 2010	Jan. 7, 2010	Apr. 3, 2007	Mar. 27, 2007	85,711km	Headlight does not come ON.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
81	Gifu	LA-GD1 (Fit)	Jan. 14, 2010	Jan. 12, 2010	Nov. 16, 2001	Nov. 9, 2001	101,173km	Headlight does not come ON.
82	Gifu	LA-GD1 (Fit)	Feb. 8, 2010	Feb. 5, 2010	Jul. 12, 2002	Jul. 8, 2002	61,058km	Headlight does not come ON.
83	Saitama	DBA-GD1 (Fit)	Feb. 18, 2010	Feb. 6, 2010	Apr. 17, 2007	Mar. 10, 2007	54,409km	Headlight does not come ON.
84	Aichi	CBA-GD3 (Fit)	Mar. 4, 2010	Feb. 14, 2010	Nov. 19, 2004	Nov. 10, 2004	86,292km	Headlight does not come ON.
85	Fukushima	DBA-GD1 (Fit)	Mar. 1, 2010	Feb. 26, 2010	Dec. 9, 2004	Dec. 4, 2004	88,952km	Headlight suddenly went OFF while driving.
86	Miyazaki	DBA-GD1 (Fit)	Mar. 1, 2010	Feb. 28, 2010	Dec. 21, 2006	Dec. 1, 2006	47,539km	Headlight suddenly went OFF while driving.
87	Chiba	LA-GD1 (Fit)	Mar. 9, 2010	Mar. 8, 2010	Aug. 21, 2002	Aug. 6, 2002	171,980km	Headlight does not come ON.
88	Niigata	DBA-GD4 (Fit)	Mar. 12, 2010	Mar. 11, 2010	Feb. 16, 2007	Feb. 12, 2007	99,014km	Headlight does not come ON.
89	Ibaraki	DBA-GD1 (Fit)	Mar. 15, 2010	Mar. 14, 2010	Apr. 30, 2004	Apr. 22, 2004	114,637km	Headlight does not come ON.
90	Chiba	DBA-GD1 (Fit)	Apr. 12, 2010	Apr. 10, 2010	Feb. 27, 2007	Feb. 21, 2007	48,140km	Headlight does not come ON.
91	Hyogo	LA-GD1 (Fit)	Apr. 22, 2010	Apr. 18, 2010	Jun. 27, 2002	Jun. 20, 2002	142,905km	Headlight does not come ON.
92	Tochigi	CBA-GD3 (Fit)	May. 11, 2010	May. 8, 2010	Aug. 24, 2004	Aug. 4, 2004	61,331km	Headlight does not come ON.
93	Niigata	DBA-GD1 (Fit)	Jun. 1, 2010	May. 10, 2010	Jun. 28, 2006	Dec. 1, 2005	78,422km	Headlight does not come ON.
94	Fukushima	DBA-GD1 (Fit)	May. 19, 2010	May. 14, 2010	Feb. 9, 2007	Jan. 15, 2007	70,483km	Headlight does not come ON.
95	Yamagata	DBA-GD2 (Fit)	May. 19, 2010	May. 17, 2010	Mar. 6, 2007	Feb. 23, 2007	54,744km	Headlight does not come ON.
96	Aichi	DBA-GD1 (Fit)	May. 24, 2010	May. 21, 2010	Feb. 25, 2005	Dec. 14, 2004	60,321km	Headlight does not come ON.
97	Ibaraki	DBA-GD1 (Fit)	May. 25, 2010	May. 24, 2010	Mar. 31, 2006	Dec. 16, 2005	91,568km	Headlight does not come ON.
98	Fukuoka	DBA-GD1 (Fit)	Jun. 14, 2010	May. 29, 2010	Aug. 29, 2005	Aug. 22, 2005	99,761km	Headlight does not come ON.
99	Wakayama	DBA-GD1 (Fit)	Jul. 12, 2010	Jun. 1, 2010	Mar. 30, 2007	Feb. 24, 2007	84,880km	Headlight does not come ON.
100	Tokyo	DBA-GD1 (Fit)	Jun. 14, 2010	Jun. 10, 2010	Dec. 25, 2006	Nov. 10, 2006	134,330km	Headlight does not come ON.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
101	Hiroshima	DBA-GD1 (Fit)	Jun. 16, 2010	Jun. 13, 2010	May. 25, 2007	Mar. 5, 2007	53,047km	Headlight does not come ON.
102	Fukushima	DBA-GD1 (Fit)	Jun. 17, 2010	Jun. 15, 2010	Nov. 29, 2006	Nov. 11, 2006	54,966km	Headlight does not come ON.
103	Osaka	DBA-GD1 (Fit)	Jun. 18, 2010	Jun. 16, 2010	Aug. 9, 2005	Dec. 13, 2004	87,128km	Headlight does not come ON.
104	Ibaraki	DBA-GD1 (Fit)	Jun. 24, 2010	Jun. 23, 2010	Jan. 21, 2005	Nov. 16, 2004	85,517km	Headlight does not come ON.
105	Nara	DBA-GD3 (Fit)	Jun. 28, 2010	Jun. 26, 2010	Feb. 23, 2007	Feb. 2, 2007	37,428km	Headlight does not come ON.
106	Gifu	UA-GD1 (Fit)	Jun. 28, 2010	Jun. 27, 2010	Nov. 28, 2003	Nov. 20, 2003	33,525km	Headlight does not come ON.
107	Hiroshima	DBA-GD1 (Fit)	Jul. 27, 2010	Jul. 5, 2010	Mar. 13, 2007	Jan. 30, 2007	90,343km	Headlight does not come ON.
108	Oita	CBA-GD3 (Fit)	Jul. 20, 2010	Jul. 12, 2010	Jul. 28, 2004	Jul. 20, 2004	110,836km	Headlight does not come ON.
109	Ibaraki	DBA-GD1 (Fit)	Jul. 21, 2010	Jul. 15, 2010	Aug. 6, 2004	Jul. 27, 2004	85,490km	Headlight does not come ON.
110	Saitama	DBA-GD1 (Fit)	Jul. 19, 2010	Jul. 15, 2010	Jun. 22, 2007	Apr. 21, 2007	84,507km	Headlight does not come ON.
111	Hyogo	DBA-GD1 (Fit)	Jul. 21, 2010	Jul. 17, 2010	Mar. 16, 2007	Feb. 5, 2007	81,309km	Headlight suddenly went OFF while driving.
112	Aichi	DBA-GD1 (Fit)	Jul. 28, 2010	Jul. 23, 2010	Mar. 23, 2007	Mar. 1, 2007	57,218km	Headlight does not come ON.
113	Saitama	DBA-GD1 (Fit)	Aug. 17, 2010	Jul. 26, 2010	Feb. 26, 2007	Jan. 31, 2007	83,193km	Headlight does not come ON.
114	Hokkaido	DBA-GD2 (Fit)	Jul. 29, 2010	Jul. 28, 2010	Jun. 29, 2005	Jun. 13, 2005	84,793km	Headlight does not come ON.
115	Kochi	DBA-GD1 (Fit)	Aug. 18, 2010	Aug. 17, 2010	Jan. 10, 2006	Dec. 23, 2005	127,207km	Headlight does not come ON.
116	Saga	DBA-GD1 (Fit)	Aug. 23, 2010	Aug. 20, 2010	Nov. 26, 2004	Nov. 12, 2004	84,223km	Headlight suddenly went OFF while driving.
117	Aichi	DBA-GD1 (Fit)	Sep. 9, 2010	Aug. 28, 2010	Nov. 21, 2006	Oct. 14, 2006	64,144km	Headlight does not come ON.
118	Niigata	DBA-GD1 (Fit)	Sep. 1, 2010	Aug. 31, 2010	Sep. 28, 2006	Sep. 22, 2006	52,527km	Headlight suddenly went OFF while driving.
119	Aichi	DBA-GD1 (Fit)	Sep. 3, 2010	Sep. 2, 2010	Apr. 26, 2004	Mar. 30, 2004	83,126km	Headlight does not come ON.
120	Mie	DBA-GD1 (Fit)	Sep. 10, 2010	Sep. 6, 2010	Mar. 16, 2007	Mar. 6, 2007	82,729km	Headlight does not come ON.

No	Prefecture	Type (Model)	VIN	Occurrence date	Registration date	Production date	Mileage	Failure
121	Aichi	DBA-GD1 (Fit)	Sep. 7, 2010	Sep. 6, 2010	Dec. 17, 2004	Nov. 5, 2004	73,296km	Headlight does not come ON.
122	Chiba	DBA-GD1 (Fit)	Sep. 21, 2010	Sep. 13, 2010	Sep. 27, 2007	Jun. 26, 2007	69,384km	Headlight does not come ON.
123	Yamagata	DBA-GD2 (Fit)	Sep. 21, 2010	Sep. 14, 2010	Feb. 14, 2007	Feb. 5, 2007	86,094km	Headlight does not come ON.
124	Shiga	DBA-GD1 (Fit)	Oct. 4, 2010	Oct. 3, 2010	Feb. 24, 2004	Jan. 28, 2004	82,214km	Headlight suddenly went OFF while driving.
125	Ibaraki	DBA-GD1 (Fit)	Oct. 8, 2010	Oct. 6, 2010	Mar. 28, 2007	Jan. 30, 2007	83,234km	Headlight suddenly went OFF while driving.
126	Okayama	DBA-GD1 (Fit)	Oct. 19, 2010	Oct. 18, 2010	Nov. 11, 2004	Oct. 18, 2004	51,701km	Headlight does not come ON.
127	Ibaraki	DBA-GD1 (Fit)	Oct. 21, 2010	Oct. 20, 2010	Dec. 8, 2006	Nov. 14, 2006	67,310km	Headlight does not come ON.
128	Shizuoka	DBA-GD1 (Fit)	Oct. 25, 2010	Oct. 22, 2010	Jul. 23, 2004	Jul. 15, 2004	82,224km	Headlight does not come ON.
129	Oita	DBA-GD1 (Fit)	Nov. 12, 2010	Oct. 23, 2010	Nov. 28, 2001	Nov. 15, 2001	79,810km	Headlight suddenly went OFF while driving.
130	Hokkaido	DBA-GD2 (Fit)	Nov. 5, 2010	Nov. 3, 2010	Feb. 20, 2007	Jan. 31, 2007	69,097km	Headlight does not come ON.

# リコール届出書

平成22年12月16日

国土交通大臣 殿

届出者の氏名 本田技研工業株式会社  
又は名称代表取締役 伊東孝紳  
住 所 東京都港区南青山2丁目1番1号

リコール届出番号	2678	リコール開始日	平成22年12月17日
基準不適合状態にあると認める構造、装置又は性能の状況及びその原因	前照灯操作スイッチに接続する電気配線の配索長さに余裕が少ない設定のため、配索作業で配線を張り過ぎたものがある。そのため、前照灯の切替えスイッチを操作した際に、端子結合部が追従できずに動いて接触抵抗が増え、端子が発熱してカプラーが溶け、最悪の場合、ロービームが不灯となるおそれがある。		
改善措置の内容	全車両、ロービーム端子のみ長い配線に交換し、結束バンドで固定する。なお、接続カプラーが溶損しているものは、前照灯操作スイッチとカプラーを新品に交換する。		
自動車使用者及び自動車分解整備事業者 に周知させるための措置	<ul style="list-style-type: none"> <li>・使用者：ダイレクトメールで通知する。</li> <li>・自動車分解整備事業者：日整連発行の機関誌に掲載する。</li> <li>・改善実施済車には、運転者席側ドア開口部のドアストライカー付近にNo.2678のステッカーを貼付する。</li> </ul>		

車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象車の台数	備考
ホンダ	LA-GD1	フィット	GD1-1067556～GD1-1279828 平成13年11月2日～平成14年11月1日	212,273	
			GD1-1500002～GD1-1568296 平成14年11月4日～平成15年3月27日	56,274	
			GD1-8000161～GD1-8001320 平成13年11月3日～平成14年10月28日	1,160	
			GD1-8100001～GD1-8100398 平成14年11月12日～平成15年3月26日	366	
	LA-GD2		GD2-1005640～GD2-1030182 平成13年11月3日～平成14年11月4日	24,543	
			GD2-1500001～GD2-1514403 平成14年11月4日～平成15年9月30日	11,299	
			GD2-8000026～GD2-8000242 平成13年11月13日～平成14年10月23日	217	
			GD2-8100001～GD2-8100100 平成14年11月14日～平成15年9月25日	73	
	LA-GD3		GD3-1500024～GD3-1555278 平成14年9月2日～平成15年9月30日	25,358	
			GD3-8000001～GD3-8000231 平成14年10月18日～平成15年9月26日	135	
	LA-GD4		GD4-1500001～GD4-1508102 平成14年5月9日～平成15年9月30日	3,310	
			GD4-8000001～GD4-8000054 平成14年10月24日～平成15年9月24日	31	

車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象 車の台数	備考
ホンダ	UA-GD1	フィット	GD1-1700001～GD1-1761659 平成15年4月3日～平成15年9月30日	50,658	
			GD1-1900004～GD1-1917533 平成15年10月7日～平成15年12月22日	13,997	
			GD1-8200001～GD1-8200291 平成15年4月15日～平成15年9月25日	247	
			GD1-8300001～GD1-8300114 平成15年11月4日～平成15年12月18日	96	
	UA-GD2		GD2-1600002～GD2-1602355 平成15年10月8日～平成15年12月22日	1,733	
			GD2-8200002～GD2-8200017 平成15年11月7日～平成15年12月24日	11	
	UA-GD3		GD3-1700008～GD3-1705796 平成15年10月8日～平成15年12月23日	2,725	
			GD3-8100001～GD3-8100018 平成15年11月7日～平成15年12月19日	9	
	UA-GD4		GD4-1600002～GD4-1600927 平成15年10月7日～平成15年12月22日	440	
			GD4-8100002～GD4-8100009 平成15年11月7日～平成15年12月11日	7	
	DBA-GD1		GD1-2000001～GD1-2039492 平成16年1月7日～平成16年5月26日	32,401	
			GD1-2100003～GD1-2261088 平成16年6月1日～平成17年11月25日	132,894	
			GD1-2300004～GD1-2444370 平成17年11月29日～平成19年9月28日	101,384	
			GD1-8400001～GD1-8400268 平成16年1月27日～平成16年5月21日	241	
			GD1-8500001～GD1-8500573 平成16年6月18日～平成17年11月22日	499	
			GD1-8600001～GD1-8600449 平成18年1月10日～平成19年9月25日	326	
			GD1-8600001～GD1-8600449 平成18年1月10日～平成19年9月25日	326	
	DBA-GD2		GD2-1700002～GD2-1705006 平成16年1月7日～平成16年5月21日	3,886	
			GD2-1800002～GD2-1819417 平成16年6月2日～平成17年11月23日	15,544	
			GD2-1900001～GD2-1918428 平成17年11月29日～平成19年9月26日	13,436	
			GD2-8300001～GD2-8300042 平成16年1月28日～平成16年5月18日	36	
			GD2-8400001～GD2-8400080 平成16年6月22日～平成17年11月7日	72	
			GD2-8500001～GD2-8500092 平成18年1月12日～平成19年9月20日	70	
GD2-8500001～GD2-8500092 平成18年1月12日～平成19年9月20日		70			
DBA-GD3	GD3-2000007～GD3-2019495 平成17年12月6日～平成19年10月5日	9,307			
	GD3-8400002～GD3-8400116 平成18年1月17日～平成19年9月20日	63			



車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象 車の台数	備考		
ホンダ	DBA-GD4	フィット	GD4-1900001～GD4-1903035 平成 17 年 12 月 6 日～平成 19 年 9 月 26 日	1,305			
			GD4-8400001～GD4-8400022 平成 18 年 1 月 17 日～平成 19 年 7 月 19 日	9			
	CBA-GD3		GD3-1800001～GD3-1807079 平成 16 年 1 月 7 日～平成 16 年 5 月 21 日	3,236			
			GD3-1900006～GD3-1929353 平成 16 年 6 月 4 日～平成 17 年 11 月 24 日	12,199			
			GD3-8200005～GD3-8200051 平成 16 年 2 月 9 日～平成 16 年 5 月 21 日	30			
			GD3-8300002～GD3-8300158 平成 16 年 6 月 21 日～平成 17 年 11 月 22 日	101			
			GD4-1700002～GD4-1701520 平成 16 年 1 月 7 日～平成 16 年 5 月 21 日	707			
	CBA-GD4		GD4-1800004～GD4-1804065 平成 16 年 6 月 11 日～平成 17 年 11 月 23 日	1,661			
			GD4-8200004～GD4-8200014 平成 16 年 2 月 23 日～平成 16 年 5 月 13 日	9			
			GD4-8300003～GD4-8300042 平成 16 年 6 月 25 日～平成 17 年 11 月 8 日	14			
					合計	計 734,392 台	

連絡先：自動車交通局技術安全部審査課リコール対策室  
 TEL：03-5253-8111 内線 42353  
 アドレス：http://www.mlit.go.jp

## リコール届出一覧表

リコール届出日：平成22年12月16日

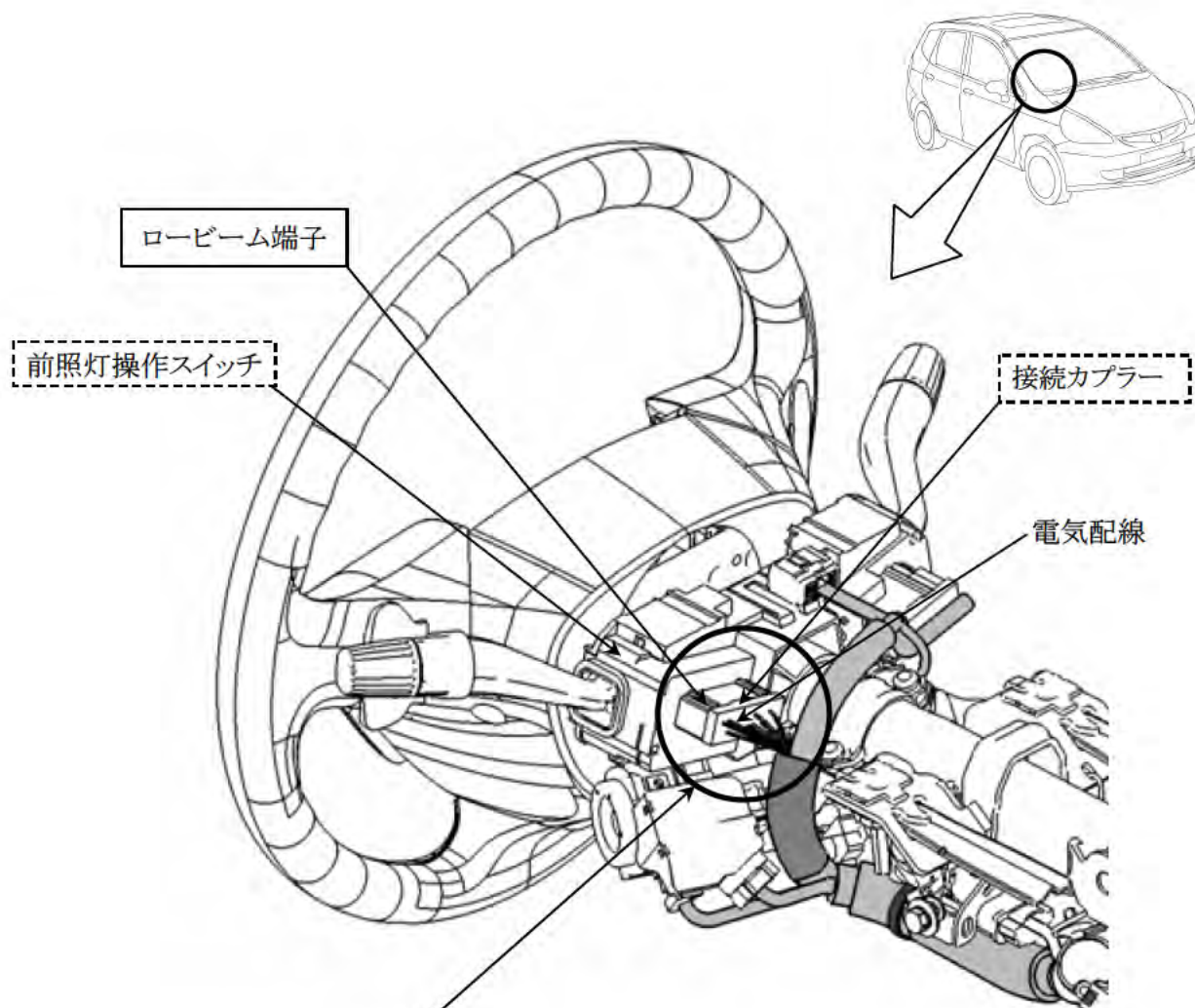
リコール届出番号	2678	リコール開始日	平成22年12月17日	
届出者の氏名又は名称	本田技研工業株式会社 代表取締役 伊東 孝紳		問い合わせ先：お客様相談センター TEL 0120-112010	
不具合の部位（部品名）	灯火装置（前照灯の電気配線）			
基準不適合状態にあると認める構造、装置又は性能の状況及びその原因	前照灯操作スイッチに接続する電気配線の配索長さに余裕が少ない設定のため、配索作業で配線を張り過ぎたものがある。そのため、前照灯の切替えスイッチを操作した際に、端子結合部が追従できずに動いて接触抵抗が増え、端子が発熱してカプラーが溶け、最悪の場合、ロービームが不灯となるおそれがある。			
改善措置の内容	全車両、ロービーム端子のみ長い配線に交換し、結束バンドで固定する。なお、接続カプラーが溶損しているものは、前照灯操作スイッチとカプラーを新品に交換する。			
不具合件数	130件	事故の有無	なし	
発見の動機	市場からの情報による。			
自動車使用者及び自動車分解整備事業者に周知させるための措置	<ul style="list-style-type: none"> <li>・使用者：ダイレクトメールで通知する。</li> <li>・自動車分解整備事業者：日整連発行の機関誌に掲載する。</li> <li>・改善実施済車には、運転者席側ドア開口部のドアストライカー付近にNo.2678のステッカーを貼付する。</li> </ul>			

車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象車の台数	備考
ホンダ	LA-GD1	フィット	GD1-1067556～GD1-1279828 平成13年11月2日～平成14年11月1日	212,273	
			GD1-1500002～GD1-1568296 平成14年11月4日～平成15年3月27日	56,274	
			GD1-8000161～GD1-8001320 平成13年11月3日～平成14年10月28日	1,160	
			GD1-8100001～GD1-8100398 平成14年11月12日～平成15年3月26日	366	
	LA-GD2		GD2-1005640～GD2-1030182 平成13年11月3日～平成14年11月4日	24,543	
			GD2-1500001～GD2-1514403 平成14年11月4日～平成15年9月30日	11,299	
			GD2-8000026～GD2-8000242 平成13年11月13日～平成14年10月23日	217	
			GD2-8100001～GD2-8100100 平成14年11月14日～平成15年9月25日	73	
	LA-GD3		GD3-1500024～GD3-1555278 平成14年9月2日～平成15年9月30日	25,358	
			GD3-8000001～GD3-8000231 平成14年10月18日～平成15年9月26日	135	

車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象 車の台数	備考
ホンダ	LA-GD4	フィット	GD4-1500001～GD4-1508102 平成14年5月9日～平成15年9月30日	3,310	
			GD4-8000001～GD4-8000054 平成14年10月24日～平成15年9月24日	31	
	UA-GD1	フィット	GD1-1700001～GD1-1761659 平成15年4月3日～平成15年9月30日	50,658	
			GD1-1900004～GD1-1917533 平成15年10月7日～平成15年12月22日	13,997	
			GD1-8200001～GD1-8200291 平成15年4月15日～平成15年9月25日	247	
			GD1-8300001～GD1-8300114 平成15年11月4日～平成15年12月18日	96	
			GD2-1600002～GD2-1602355 平成15年10月8日～平成15年12月22日	1,733	
			GD2-8200002～GD2-8200017 平成15年11月7日～平成15年12月24日	11	
	UA-GD2	フィット	GD3-1700008～GD3-1705796 平成15年10月8日～平成15年12月23日	2,725	
			GD3-8100001～GD3-8100018 平成15年11月7日～平成15年12月19日	9	
	UA-GD3	フィット	GD4-1600002～GD4-1600927 平成15年10月7日～平成15年12月22日	440	
			GD4-8100002～GD4-8100009 平成15年11月7日～平成15年12月11日	7	
	UA-GD4	フィット	GD1-2000001～GD1-2039492 平成16年1月7日～平成16年5月26日	32,401	
			GD1-2100003～GD1-2261088 平成16年6月1日～平成17年11月25日	132,894	
	DBA-GD1	フィット	GD1-2300004～GD1-2444370 平成17年11月29日～平成19年9月28日	101,384	
			GD1-8400001～GD1-8400268 平成16年1月27日～平成16年5月21日	241	
			GD1-8500001～GD1-8500573 平成16年6月18日～平成17年11月22日	499	
			GD1-8600001～GD1-8600449 平成18年1月10日～平成19年9月25日	326	
			GD2-1700002～GD2-1705006 平成16年1月7日～平成16年5月21日	3,886	
			GD2-1800002～GD2-1819417 平成16年6月2日～平成17年11月23日	15,544	
	DBA-GD2	フィット	GD2-1900001～GD2-1918428 平成17年11月29日～平成19年9月26日	13,436	
			GD2-8300001～GD2-8300042 平成16年1月28日～平成16年5月18日	36	
			GD2-8400001～GD2-8400080 平成16年6月22日～平成17年11月7日	72	
			GD2-8500001～GD2-8500092 平成18年1月12日～平成19年9月20日	70	

車名	型式	通称名	リコール対象車の車台番号の範囲 及び製作期間	リコール対象 車の台数	備考
ホンダ	DBA-GD3	フィット	GD3-2000007～GD3-2019495 平成17年12月6日～平成19年10月5日	9,307	
			GD3-8400002～GD3-8400116 平成18年1月17日～平成19年9月20日	63	
	DBA-GD4		GD4-1900001～GD4-1903035 平成17年12月6日～平成19年9月26日	1,305	
			GD4-8400001～GD4-8400022 平成18年1月17日～平成19年7月19日	9	
	CBA-GD3		GD3-1800001～GD3-1807079 平成16年1月7日～平成16年5月21日	3,236	
			GD3-1900006～GD3-1929353 平成16年6月4日～平成17年11月24日	12,199	
			GD3-8200005～GD3-8200051 平成16年2月9日～平成16年5月21日	30	
			GD3-8300002～GD3-8300158 平成16年6月21日～平成17年11月22日	101	
			GD4-1700002～GD4-1701520 平成16年1月7日～平成16年5月21日	707	
	CBA-GD4		GD4-1800004～GD4-1804065 平成16年6月11日～平成17年11月23日	1,661	
			GD4-8200004～GD4-8200014 平成16年2月23日～平成16年5月13日	9	
			GD4-8300003～GD4-8300042 平成16年6月25日～平成17年11月8日	14	
			(計14型式) (計1車種)	(製作期間の全体の範囲) 平成13年11月2日～平成19年10月5日	

## 改善箇所説明図



### 基準不適合発生箇所

前照灯操作スイッチに接続する電気配線の配線長さに余裕が少ない設定のため、配線作業で配線を張り過ぎたものがある。そのため、前照灯の切替えスイッチを操作した際に、端子結合部が追従できずに動いて接触抵抗が増え、端子が発熱してカプラーが溶け、最悪の場合、ロービームが不灯となるおそれがある。

### 改善の内容

全車両、ロービーム端子のみ長い配線に交換し、結束バンドで固定する。

なお、接続カプラーが溶損しているものは、前照灯操作スイッチとカプラーを新品に交換する。

注:  は交換部品を示す。  は必要に応じて交換する部品を示す。

識別: 右後席ドア上ヒンジの下側ボルト頭部に黄色ペイントを塗布する。

## リコール対象車の主要諸元

車名	型式	通称名	種別・用途	車体の形状	原動機の型式 (総排気量 (CC))	備考
ホンダ	LA-GD1	フィット	小型・乗用	ステーション ワゴン	L13A (1339)	
	LA-GD2				L15A (1496)	
	LA-GD3					
	LA-GD4				L13A (1339)	
	UA-GD1					
	UA-GD2				L15A (1496)	
	UA-GD3					
	UA-GD4				L13A (1339)	
	DBA-GD1					
	DBA-GD2				L15A (1496)	
	DBA-GD3					
	DBA-GD4				CBA-GD3	
	CBA-GD3					
	CBA-GD4				CBA-GD4	

### 1. リコールに至るまでの経緯

平成17年4月25日、宮城県の販売会社より「UA-GD1型式(通称名：フィット)で、走行中、突然ヘッドライトが両方つかなくなった、とのユーザーからの訴えがあり、車両を確認したところ、前照灯操作スイッチの接続カプラー端子部が溶けていた」との情報を入手した。

調査解析結果、前照灯のスイッチレバー操作で接続カプラー部のロービーム用オス端子とメス端子の嵌合部が動き、繰返し操作によって接触抵抗が増大して発熱し、接続カプラーが溶けて端子の間に樹脂が入込んで導通不良となるため、ロービームが不灯となることが判明した。

以上のことより既販売車において、今後も不具合の発生が予測されることから、市場措置を実施することとした。

### 2. 不具合発生状況

市場からの不具合情報：130件 事故件数：0件

No.	発生地区	型式(通称名)	発生年.月.日	登録年.月.日	生産年.月.日	走行距離	不具合状況
1	宮城県	UA-GD1(フィット)	H17. 4. 21	H15. 8. 26	H15. 6. 23	60,651km	走行中突然前照灯が消えた。

### 3. 起因調査結果

- ①フィットのライティングスイッチに接続する配線はたるみ量の少ない設定であったため、配線の配索作業で配線が張りすぎたものがある。
- ②ライティングスイッチレバー操作でスイッチボディが動いた際にロービーム端子嵌合部が追従できず、オス端子とメス端子間で大きく摺動する。
- ③端子嵌合部の摺動でスズメッキが徐々に摩耗し、母材が露出して接触面に酸化銅が生成され、端子の摺動が繰返されると、酸化銅が磨耗粉となり摺動部に堆積する。
- ④端子摺動時に堆積した酸化銅の磨耗粉に端子が乗上げると接触抵抗が増加して前照灯点灯時に嵌合部が過度に発熱する。
- ⑤端子嵌合部の発熱で嵌合部に応力緩和が生じ、端子の接圧が低下すると磨耗粉の入込みが増え、端子がさらに発熱する。
- ⑥その状態を続けると、カプラーの樹脂が溶けて嵌合部に流込んで導通不良となり、ロービーム不灯となる。

### 4. 改善措置の基準適合確認結果

全車両、ロービーム端子のみ長い配線と交換し、結束バンドで固定する。なお、接続カプラーが溶損しているものは、前照灯操作スイッチとカプラーを新品に交換するため、不具合は起きない。

### 5. 対象の範囲及びその理由

対象車両は、前照灯操作スイッチのオス端子にスズメッキ処理を適用した初号機から、前照灯点灯回路を変更するまでの期間(平成13年11月2日～平成19年10月5日)に生産された、14型式(LA-GD1、LA-GD2、LA-GD3、LA-GD4、UA-GD1、UA-GD2、UA-GD3、UA-GD4、DBA-GD1、DBA-GD2、DBA-GD3、DBA-GD4、CBA-GD3、CBA-GD4)の計734,392台に限定される。

### 6. 対象車の輸出状況及び措置方法

- (1) 輸出状況 北米、欧州、中東、ア大 : 約62.1万台
- (2) 措置方法 各国の法規及び実情に沿った措置を講ずる。

### 7. 再発防止

「ライティングスイッチを操作した際のスイッチ変位量と組付け作業による端子への影響を吸収できる配線長の設定とすること」を設計ガイドに追記する。

### 8. 改善措置に要する作業時間

接続カプラーの点検とロービーム端子交換 : 0.6時間

接続カプラーの点検とロービーム端子、ライティングスイッチ及びカプラーの交換 : 0.7時間

## 2. 不具合発生状況

No.	発生 地区	型式 (通称名)	情報入手 年.月.日	発生 年.月.日	登録 年.月.日	生産 年.月.日	走行 距離	不具合状況
2	北海道	LA-GD2 (フィット)	H17. 6.22	H17. 6.18	H14. 6.26	H14. 6.17	39,494km	前照灯が点灯しない。
3	群馬県	LA-GD1 (フィット)	H17. 9. 5	H17. 9. 2	H13.12.25	H13.12.18	76,599km	前照灯が点灯しない。
4	福岡県	LA-GD1 (フィット)	H17. 9. 8	H17. 9. 5	H13.11.22	H13.11. 9	166,938km	前照灯が点灯しない。
5	香川県	LA-GD1 (フィット)	H17. 9.20	H17. 9.14	H14. 7.19	H14. 7. 9	87,855km	前照灯が点灯しない。
6	岐阜県	LA-GD1 (フィット)	H17.10.31	H17.10.27	H14. 3.26	H14. 3.20	58,380km	走行中突然前照灯が消えた。
7	愛知県	LA-GD1 (フィット)	H18. 5.15	H18. 5.15	H15. 8. 7	H14. 3.26	53,381km	走行中突然前照灯が消えた。
8	東京都	DBA-GD1 (フィット)	H18. 6.27	H18. 6.24	H16. 8. 3	H16. 7. 8	105,125km	前照灯が点灯しない。
9	埼玉県	LA-GD1 (フィット)	H18.11.24	H18.11.22	H14. 2.20	H14. 2.11	57,826km	前照灯が点灯しない。
10	広島県	LA-GD2 (フィット)	H19. 1.25	H19. 1.21	H15. 4.24	H15. 4.17	76,755km	走行中突然前照灯が消えた。
11	山口県	LA-GD1 (フィット)	H19. 2.15	H19. 2.11	H15. 3.14	H15. 3. 7	131,871km	ハンドル付近から異臭・発煙。
12	北海道	DBA-GD2 (フィット)	H19. 6.25	H19. 6.24	H16. 5.28	H16. 3.12	59,206km	前照灯が点灯しない。
13	栃木県	LA-GD1 (フィット)	H19. 7.10	H19. 6.29	H14. 4.15	H14. 4. 8	57,356km	前照灯が点灯しない。
14	山形県	DBA-GD2 (フィット)	H19. 8. 6	H19. 8. 5	H16. 3.31	H16. 3.23	31,771km	前照灯が点灯しない。
15	神奈川県	LA-GD1 (フィット)	H19. 8.20	H19. 8.18	H14. 4.24	H14. 3.21	23,754km	前照灯が点灯しない。
16	静岡県	LA-GD1 (フィット)	H19. 8.20	H19. 8.18	H14. 8. 8	H14. 7.29	101,446km	前照灯が点灯しない。
17	広島県	DBA-GD1 (フィット)	H19. 8.22	H19. 8.18	H16. 8.20	H16. 8. 3	60,100km	前照灯が点灯しない。
18	山梨県	DBA-GD1 (フィット)	H19. 9.25	H19. 9.24	H16.12.17	H16. 9.18	48,024km	前照灯が点灯しない。
19	徳島県	LA-GD1 (フィット)	H19.10. 2	H19. 9.28	H14. 3.18	H14. 3.13	97,122km	前照灯が点灯しない。
20	大阪府	DBA-GD1 (フィット)	H19.10.12	H19.10.11	H16. 6.30	H16. 6.28	64,500km	前照灯が点灯しない。
21	京都府	LA-GD1 (フィット)	H19.10.22	H19.10.19	H15. 3.28	H15. 2.11	89,968km	前照灯が点灯しない。
22	山口県	LA-GD1 (フィット)	H19.10.23	H19.10.21	H14. 2. 1	H14. 1.22	86,329km	ハンドル付近から異臭・発煙。
23	大阪府	LA-GD1 (フィット)	H19.11. 9	H19.11. 8	H14. 6.28	H14. 6.25	74,962km	前照灯が点灯しない。



No.	発生 地区	型式 (通称名)	情報入手 年.月.日	発 生 年.月.日	登 録 年.月.日	生 産 年.月.日	走 行 距 離	不 具 合 状 況
24	千葉県	DBA-GD1 (フィット)	H19.12.13	H19.12.11	H17. 3.11	H17. 1. 8	81,264km	前照灯が点灯しない。
25	山口県	DBA-GD1 (フィット)	H20. 1. 8	H20. 1. 5	H16. 7.16	H16. 7. 8	61,178km	前照灯が点灯しない。
26	茨城県	LA-GD1 (フィット)	H20. 1. 8	H20. 1. 6	H14. 9. 3	H14. 8.29	32,447km	前照灯が点灯しない。
27	静岡県	LA-GD1 (フィット)	H20. 6.10	H20. 6. 8	H14. 1.17	H14. 1. 9	62,618km	前照灯が点灯しない。
28	千葉県	DBA-GD1 (フィット)	H20. 7. 3	H20. 7. 2	H16. 9.22	H16. 9.14	48,203km	前照灯が点灯しない。
29	島根県	LA-GD1 (フィット)	H20. 7.14	H20. 7. 7	H14. 5.16	H14. 5. 9	60,107km	前照灯が点灯しない。
30	高知県	LA-GD1 (フィット)	H20. 8. 5	H20. 8. 1	H14. 9.27	H14. 8.31	47,015km	前照灯が点灯しない。
31	島根県	LA-GD1 (フィット)	H20. 9. 1	H20. 8.22	H14. 4. 4	H14. 3.28	109,197km	前照灯が点灯しない。
32	栃木県	LA-GD1 (フィット)	H20. 9. 9	H20. 9. 6	H15. 3.26	H15. 2. 7	101,642km	前照灯が点灯しない。
33	岩手県	LA-GD2 (フィット)	H20. 9.25	H20. 9.20	H14. 2. 8	H14. 1.30	175,368km	前照灯が点灯しない。
34	東京都	DBA-GD1 (フィット)	H20.10. 9	H20.10. 9	H16. 3.27	H16. 3.11	44,727km	前照灯が点灯しない。
35	千葉県	CBA-GD3 (フィット)	H20.10.17	H20.10.10	H17. 2.18	H17. 2.14	71,697km	前照灯が点灯しない。
36	東京都	DBA-GD1 (フィット)	H20.11. 3	H20.11. 2	H18.12.14	H18.11.30	89,406km	前照灯が点灯しない。
37	福島県	DBA-GD2 (フィット)	H20.11. 6	H20.11. 5	H18. 5.26	H18. 5.16	98,279km	前照灯が点灯しない。
38	高知県	DBA-GD1 (フィット)	H20.11.10	H20.11. 9	H17. 7.25	H17. 4.11	99,065km	走行中突然前照灯が消えた。
39	和歌山県	DBA-GD1 (フィット)	H20.11.12	H20.11.11	H17. 2.24	H16.12. 7	51,948km	前照灯が点灯しない。
40	香川県	LA-GD1 (フィット)	H20.11.17	H20.11.14	H14. 2. 1	H14. 1.28	82,090km	前照灯が点灯しない。
41	大阪府	UA-GD1 (フィット)	H20.11.19	H20.11.15	H15. 9.22	H15. 7.22	71,393km	前照灯が点灯しない。
42	茨城県	LA-GD1 (フィット)	H20.11.27	H20.11.22	H14. 7.26	H14. 7.20	101,662km	前照灯が点灯しない。
43	石川県	LA-GD1 (フィット)	H20.12. 4	H20.12. 1	H14. 6.28	H14. 6.26	181,983km	前照灯が点灯しない。
44	埼玉県	LA-GD1 (フィット)	H21. 1.19	H21. 1.13	H13.12.26	H13.12.20	53,512km	前照灯が点灯しない。
45	茨城県	DBA-GD1 (フィット)	H21. 1.20	H21. 1.17	H16.12.24	H16.12.16	109,598km	前照灯が点灯しない。

No.	発生 地区	型式 (通称名)	情報入手 年.月.日	発 生 年.月.日	登 録 年.月.日	生 産 年.月.日	走 行 距 離	不具合状況
46	岐阜県	DBA-GD1 (フィット)	H21. 2. 2	H21. 1.31	H18. 9. 8	H18. 8. 9	53,557km	前照灯が点灯しない。
47	福島県	LA-GD1 (フィット)	H21. 2.20	H21. 2. 9	H14. 2.28	H14. 2.22	96,978km	前照灯が点灯しない。
48	三重県	DBA-GD1 (フィット)	H21. 3.25	H21. 3.23	H17. 3.29	H17. 3.18	77,211km	前照灯が点灯しない。
49	熊本県	DBA-GD1 (フィット)	H21. 4. 3	H21. 3.30	H18.11.28	H18.11.14	30,738km	走行中突然前照灯が消えた。
50	岩手県	LA-GD1 (フィット)	H21. 4. 6	H21. 3.31	H14. 9.20	H14. 9.10	56,809km	前照灯が点灯しない。
51	福井県	LA-GD2 (フィット)	H21. 4. 7	H21. 4. 3	H14. 4.26	H14. 4.20	73,880km	前照灯が点灯しない。
52	茨城県	DBA-GD1 (フィット)	H21. 4.10	H21. 4. 5	H17. 7.29	H16.12.14	37,468km	前照灯が点灯しない。
53	大阪府	CBA-GD3 (フィット)	H21. 4.13	H21. 4.11	H16.12.27	H16.12.15	65,042km	前照灯が点灯しない。
54	愛知県	DBA-GD1 (フィット)	H21. 4.17	H21. 4.16	H17. 3. 2	H17. 2. 4	61,774km	前照灯が点灯しない。
55	茨城県	DBA-GD1 (フィット)	H21. 5.19	H21. 4.27	H18.12. 1	H18.11.14	86,433km	前照灯が点灯しない。
56	奈良県	DBA-GD1 (フィット)	H21. 5.11	H21. 5. 2	H19. 3. 9	H19. 2.13	56,010km	前照灯が点灯しない。
57	北海道	DBA-GD2 (フィット)	H21. 6. 5	H21. 5.26	H17. 1.27	H16.12. 9	187,085km	前照灯が点灯しない。
58	和歌山県	DBA-GD1 (フィット)	H21. 6.24	H21. 6.23	H18. 7.20	H18. 6.30	59,068km	前照灯が点灯しない。
59	岡山県	DBA-GD1 (フィット)	H21. 8.20	H21. 6.24	H16. 4.16	H16. 3.23	57,747km	前照灯が点灯しない。
60	愛知県	DBA-GD3 (フィット)	H21. 7.10	H21. 7. 7	H18. 7.27	H18. 7.20	45,301km	前照灯が点灯しない。
61	北海道	DBA-GD2 (フィット)	H21. 8.21	H21. 8.18	H19. 3.29	H19. 2. 6	27,597km	前照灯が点灯しない。
62	東京都	CBA-GD3 (フィット)	H21. 8.24	H21. 8.21	H16. 2.27	H16. 2.20	75,967km	前照灯が点灯しない。
63	熊本県	LA-GD1 (フィット)	H21. 9.14	H21. 9.11	H13.11.22	H13.11.16	146,232km	前照灯が点灯しない。
64	山形県	DBA-GD1 (フィット)	H21. 9.25	H21. 9.24	H17. 2.28	H17. 2.10	77,833km	前照灯が点灯しない。
65	広島県	DBA-GD1 (フィット)	H21.10. 1	H21. 9.28	H18. 6.19	H18. 5.15	65,260km	前照灯が点灯しない。
66	長野県	DBA-GD2 (フィット)	H21.10. 1	H21. 9.28	H16. 9.30	H16. 9.18	53,828km	前照灯が点灯しない。
67	長野県	LA-GD2 (フィット)	H21.10. 7	H21.10. 1	H14. 4.11	H14. 4. 2	116,821km	前照灯が点灯しない。

No.	発生 地区	型式 (通称名)	情報入手 年.月.日	発 生 年.月.日	登 録 年.月.日	生 産 年.月.日	走 行 距 離	不具合状況
68	大阪府	LA-GD1 (フィット)	H21.10.22	H21.10.6	H15.3.20	H15.1.22	69,266km	走行中突然前照灯が消えた。
69	愛知県	DBA-GD1 (フィット)	H21.10.28	H21.10.15	H19.6.6	H19.6.1	55,555km	前照灯が点灯しない。
70	群馬県	DBA-GD1 (フィット)	H21.10.27	H21.10.17	H18.12.14	H18.11.7	58,356km	前照灯が点灯しない。
71	埼玉県	DBA-GD1 (フィット)	H21.10.23	H21.10.22	H18.12.13	H18.11.21	67,207km	前照灯が点灯しない。
72	北海道	LA-GD2 (フィット)	H21.12.1	H21.10.29	H14.5.15	H14.5.6	57,193km	前照灯が点灯しない。
73	大分県	LA-GD1 (フィット)	H21.12.22	H21.11.8	H14.5.15	H14.4.25	115,999km	走行中突然前照灯が消えた。
74	福岡県	LA-GD1 (フィット)	H22.1.27	H21.11.8	H14.6.27	H14.6.21	102,832km	走行中突然前照灯が消えた。
75	神奈川県	DBA-GD1 (フィット)	H21.11.13	H21.11.12	H17.3.31	H16.12.18	42,656km	前照灯が点灯しない。
76	兵庫県	DBA-GD1 (フィット)	H21.12.14	H21.12.11	H18.5.31	H18.5.29	113,050km	前照灯が点灯しない。
77	京都府	LA-GD1 (フィット)	H21.12.14	H21.12.12	H13.12.25	H13.12.20	119,615km	走行中突然前照灯が消えた。
78	新潟県	DBA-GD2 (フィット)	H21.12.23	H21.12.21	H16.8.31	H16.8.26	78,788km	前照灯が点灯しない。
79	宮崎県	DBA-GD1 (フィット)	H22.2.1	H22.1.4	H18.5.31	H18.5.18	127,320km	前照灯が点灯しない。
80	秋田県	DBA-GD1 (フィット)	H22.1.8	H22.1.7	H19.4.3	H19.3.27	85,711km	前照灯が点灯しない。
81	岐阜県	LA-GD1 (フィット)	H22.1.14	H22.1.12	H13.11.16	H13.11.9	101,173km	前照灯が点灯しない。
82	岐阜県	LA-GD1 (フィット)	H22.2.8	H22.2.5	H14.7.12	H14.7.8	61,058km	前照灯が点灯しない。
83	埼玉県	DBA-GD1 (フィット)	H22.2.18	H22.2.6	H19.4.17	H19.3.10	54,409km	前照灯が点灯しない。
84	愛知県	CBA-GD3 (フィット)	H22.3.4	H22.2.14	H16.11.19	H16.11.10	86,292km	前照灯が点灯しない。
85	福島県	DBA-GD1 (フィット)	H22.3.1	H22.2.26	H16.12.9	H16.12.4	88,952km	走行中突然前照灯が消えた。
86	宮崎県	DBA-GD1 (フィット)	H22.3.1	H22.2.28	H18.12.21	H18.12.1	47,539km	走行中突然前照灯が消えた。
87	千葉県	LA-GD1 (フィット)	H22.3.9	H22.3.8	H14.8.21	H14.8.6	171,980km	前照灯が点灯しない。
88	新潟県	DBA-GD4 (フィット)	H22.3.12	H22.3.11	H19.2.16	H19.2.12	99,014km	前照灯が点灯しない。
89	茨城県	DBA-GD1 (フィット)	H22.3.15	H22.3.14	H16.4.30	H16.4.22	114,637km	前照灯が点灯しない。

No.	発生 地区	型式 (通称名)	情報入手 年.月.日	発 生 年.月.日	登 録 年.月.日	生 産 年.月.日	走 行 距 離	不 具 合 状 況
90	千葉県	DBA-GD1 (フィット)	H22. 4.12	H22. 4.10	H19. 2.27	H19. 2.21	48,140km	前照灯が点灯しない。
91	兵庫県	LA-GD1 (フィット)	H22. 4.22	H22. 4.18	H14. 6.27	H14. 6.20	142,905km	前照灯が点灯しない。
92	栃木県	CBA-GD3 (フィット)	H22. 5.11	H22. 5. 8	H16. 8.24	H16. 8. 4	61,331km	前照灯が点灯しない。
93	新潟県	DBA-GD1 (フィット)	H22. 6. 1	H22. 5.10	H18. 6.28	H17.12. 1	78,422km	前照灯が点灯しない。
94	福井県	DBA-GD1 (フィット)	H22. 5.19	H22. 5.14	H19. 2. 9	H19. 1.15	70,483km	前照灯が点灯しない。
95	山形県	DBA-GD2 (フィット)	H22. 5.19	H22. 5.17	H19. 3. 6	H19. 2.23	54,744km	前照灯が点灯しない。
96	愛知県	DBA-GD1 (フィット)	H22. 5.24	H22. 5.21	H17. 2.25	H16.12.14	60,321km	前照灯が点灯しない。
97	茨城県	DBA-GD1 (フィット)	H22. 5.25	H22. 5.24	H18. 3.31	H17.12.16	91,568km	前照灯が点灯しない。
98	福岡県	DBA-GD1 (フィット)	H22. 6.14	H22. 5.29	H17. 8.29	H17. 8.22	99,761km	前照灯が点灯しない。
99	和歌山県	DBA-GD1 (フィット)	H22. 7.12	H22. 6. 1	H19. 3.30	H19. 2.24	84,880km	前照灯が点灯しない。
100	東京都	DBA-GD1 (フィット)	H22. 6.14	H22. 6.10	H18.12.25	H18.11.10	134,330km	前照灯が点灯しない。
101	広島県	DBA-GD1 (フィット)	H22. 6.16	H22. 6.13	H19. 5.25	H19. 3. 5	53,047km	前照灯が点灯しない。
102	福島県	DBA-GD1 (フィット)	H22. 6.17	H22. 6.15	H18.11.29	H18.11.11	54,966km	前照灯が点灯しない。
103	大阪府	DBA-GD1 (フィット)	H22. 6.18	H22. 6.16	H17. 8. 9	H16.12.13	87,128km	前照灯が点灯しない。
104	茨城県	DBA-GD1 (フィット)	H22. 6.24	H22. 6.23	H17. 1.21	H16.11.16	85,517km	前照灯が点灯しない。
105	奈良県	DBA-GD3 (フィット)	H22. 6.28	H22. 6.26	H19. 2.23	H19. 2. 2	37,428km	前照灯が点灯しない。
106	岐阜県	UA-GD1 (フィット)	H22. 6.28	H22. 6.27	H15.11.28	H15.11.20	33,525km	前照灯が点灯しない。
107	広島県	DBA-GD1 (フィット)	H22. 7.27	H22. 7. 5	H19. 3.13	H19. 1.30	90,343km	前照灯が点灯しない。
108	大分県	CBA-GD3 (フィット)	H22. 7.20	H22. 7.12	H16. 7.28	H16. 7.20	110,836km	前照灯が点灯しない。
109	茨城県	DBA-GD1 (フィット)	H22. 7.21	H22. 7.15	H16. 8. 6	H16. 7.27	85,490km	前照灯が点灯しない。
110	埼玉県	DBA-GD1 (フィット)	H22. 7.19	H22. 7.15	H19. 6.22	H19. 4.21	84,507km	前照灯が点灯しない。
111	兵庫県	DBA-GD1 (フィット)	H22. 7.21	H22. 7.17	H19. 3.16	H19. 2. 5	81,309km	走行中突然前照灯が消えた。

No.	発生 地区	型式 (通称名)	情報入手 年.月.日	発 生 年.月.日	登 録 年.月.日	生 産 年.月.日	走 行 距 離	不具合状況
112	愛知県	DBA-GD1 (フィット)	H22. 7.28	H22. 7.23	H19. 3.23	H19. 3. 1	57,218km	前照灯が点灯しない。
113	埼玉県	DBA-GD1 (フィット)	H22. 8.17	H22. 7.26	H19. 2.26	H19. 1.31	83,193km	前照灯が点灯しない。
114	北海道	DBA-GD2 (フィット)	H22. 7.29	H22. 7.28	H17. 6.29	H17. 6.13	84,793km	前照灯が点灯しない。
115	高知県	DBA-GD1 (フィット)	H22. 8.18	H22. 8.17	H18. 1.10	H17.12.23	127,207km	前照灯が点灯しない。
116	佐賀県	DBA-GD1 (フィット)	H22. 8.23	H22. 8.20	H16.11.26	H16.11.12	84,223km	走行中突然前照灯が消えた。
117	愛知県	DBA-GD1 (フィット)	H22. 9. 9	H22. 8.28	H18.11.21	H18.10.14	64,144km	前照灯が点灯しない。
118	新潟県	DBA-GD1 (フィット)	H22. 9. 1	H22. 8.31	H18. 9.28	H18. 9.22	52,527km	走行中突然前照灯が消えた。
119	愛知県	DBA-GD1 (フィット)	H22. 9. 3	H22. 9. 2	H16. 4.26	H16. 3.30	83,126km	前照灯が点灯しない。
120	三重県	DBA-GD1 (フィット)	H22. 9.10	H22. 9. 6	H19. 3.16	H19. 3. 6	82,729km	前照灯が点灯しない。
121	愛知県	DBA-GD1 (フィット)	H22. 9. 7	H22. 9. 6	H16.12.17	H16.11. 5	73,296km	前照灯が点灯しない。
122	千葉県	DBA-GD1 (フィット)	H22. 9.21	H22. 9.13	H19. 9.27	H19. 6.26	69,384km	前照灯が点灯しない。
123	山形県	DBA-GD2 (フィット)	H22. 9.21	H22. 9.14	H19. 2.14	H19. 2. 5	86,094km	前照灯が点灯しない。
124	滋賀県	DBA-GD1 (フィット)	H22.10. 4	H22.10. 3	H16. 2.24	H16. 1.28	82,214km	走行中突然前照灯が消えた。
125	茨城県	DBA-GD1 (フィット)	H22.10. 8	H22.10. 6	H19. 3.28	H19. 1.30	83,234km	走行中突然前照灯が消えた。
126	岡山県	DBA-GD1 (フィット)	H22.10.19	H22.10. 18	H16.11.11	H16.10.18	51,701km	前照灯が点灯しない。
127	茨城県	DBA-GD1 (フィット)	H22.10.21	H22.10. 20	H18.12. 8	H18.11.14	67,310km	前照灯が点灯しない。
128	静岡県	DBA-GD1 (フィット)	H22.10.25	H22.10. 22	H16. 7.23	H16. 7.15	82,224km	前照灯が点灯しない。
129	大分県	DBA-GD1 (フィット)	H22.11.12	H22.10. 23	H13.11.28	H13.11.15	79,810km	走行中突然前照灯が消えた。
130	北海道	DBA-GD2 (フィット)	H22.11. 5	H22.11. 3	H19. 2.20	H19. 1.31	69,097km	前照灯が点灯しない。

EA11-012

HONDA

4/20/2012

Q16

101215\_NHTSA 2007-08 Fit

low beam 573

RESUBMITTED(US)

December 15, 2010

Mr. Daniel C. Smith  
Associate Administrator for Enforcement  
NATIONAL HIGHWAY TRAFFIC SAFETY  
ADMINISTRATION  
Attn: Recall Management Division (NVS-215)  
1200 New Jersey Avenue, SE  
Washington, DC 20590

**Re: Recall Notification  
2007-08 Model Year Honda Fit  
Low beam headlight**

Dear Mr. Smith:

On December 8, 2010, Honda Motor Co., Ltd. (HMC) determined that a potential defect relating to motor vehicle safety exists in the low beam headlight of certain 2007-08 model year Honda Fit automobiles and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports.

573.6(c)(1)

**Name of manufacturer:** Honda Motor Co., Ltd. (HMC)  
**Manufacturer's agent:** Jay Joseph  
American Honda Motor Co., Inc. (AHM)  
1919 Torrance Blvd.  
Torrance, CA 90501-2746

573.6(c)(2)

**Identification of potentially affected vehicles:**

<u>Make/Model</u>	<u>Description</u>	<u>VIN Range/Dates of Manufacture</u>
Honda Fit	2007 model year	JHMGD37607S [REDACTED] - JHMGD38477S [REDACTED] Feb. 3, 2006 to July 20, 2007
Honda Fit	2008 model year	JHMGD37688S [REDACTED] - JHMGD38418S [REDACTED] July 31, 2007 to July 1, 2008

**Description of the basis for the determination of the recall population:**

The recall population was based on manufacturing records. The VIN range reflects all possible vehicles that could potentially experience the problem.

573.6(c)(3)

**Total number of potentially affected vehicles:** 143,083

573.6(c)(4)

**Percentage of affected vehicles that contain the defect:** Unknown

573.6(c)(5)

**Defect description:**

Due to a variation in the assembly sequence when installing the wiring harness for the combination switch that controls the headlights, the wires for the low beam headlight circuit can be pulled tighter than the wiring for the other functions controlled by the combination switch. After repeated use of the headlight switch, the electrical connector terminal for the low beam headlight circuit can become worn as a result of this tension, which can result in low conductivity and cause an accumulation of copper oxide in the area of the contacts. In some cases the poor conductivity may cause the terminal ends to melt within the wiring harness connector. If this occurs, the low beam headlights can become inoperative, increasing the risk of a crash.

573.6(c)(6)

**Chronology:**

Apr. 10, 2008	Quality Information Communiqué issued on first U.S. occurrence of low beam headlight failure in U.S.
Dec. 23, 2009	Investigation opened due to increasing trend of low beam headlight failures on Fit vehicles, cause was not identified
Sept. 27, 2010	AHM received a Preliminary Evaluation letter from NHTSA (PE10-037)
Nov. 9, 2010	AHM responded to PE10-037 Q1-11 (partial response to Q10)
Nov. 10, 2010	AHM responded to PE10-037 Q10 (remaining response to Q10)
Nov. 11, 2010	Investigation reveals that wiring harness slack resulting from installation sequence influences electrical contact durability
Dec. 8, 2010	HMC determined that a safety-related defect exists.

573.6(c)(8)(i)

**Program for remedying the defect:**

The owners of all affected vehicles will be contacted by mail and asked to take their vehicle to a Honda automobile dealer. The dealer will inspect the low beam terminal; if the terminal is melted, the lighting switch will be replaced and the low beam terminal harness will be repaired; if the terminal is not melted, the low beam terminal harness will be repaired, free of charge.



573.6(c)(8)(ii)

**The estimated date to e-mail preliminary notification to dealers:** December 15, 2010

**The estimated date to provide service bulletin to dealers:** December 23, 2010

**The estimated date to begin sending notifications to owners:** January 21, 2011

**The estimated date of completion of the notification:** January 28, 2011

573.6(c)(9)

**Representative copies of all notices, bulletins and other communications:**

A copy of the dealer service bulletin and text of the final customer notification letter will be submitted to your office as soon as possible.

573.6(c)(10)

**Proposed owner notification letter submission:**

A draft of the owner notification letter will be submitted to your office as soon as possible.

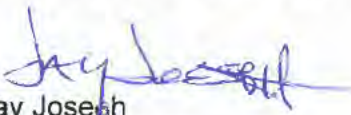
573.6(c)(11)

**Manufacturer's campaign number:**

R58

Sincerely,

AMERICAN HONDA MOTOR CO., INC.



Jay Joseph  
Senior Manager  
Product Regulatory Office

JWJ:nis

EA11-012

HONDA

4/20/2012

Q16

101220\_VOSA Notification  
confirmation letter(UK)

Mr David Peters  
HONDA (UK) - CARS  
470 London Road  
SLOUGH  
Berkshire  
SL3 8QY

Vehicle Safety Branch  
Berkeley House  
Croydon Street  
Bristol  
BS5 0DA  
Tel: 0117 954 3300  
Fax: 0117 954 3328

Our ref: R/2010/228  
20 December 2010

Dear Mr Peters

## HEADLIGHTS MAY NOT ILLUMINATE CORRECTLY

Thank you for your recent notification regarding the above recall.

This campaign will now be monitored under the relevant Code of Practice, and our reference number is as above which should be quoted on all future letters and on the safety recall request form (V316) to the Driver Vehicle Licensing Agency (DVLA).

The following is our proposed wording for entry in the Recalls Bulletin. It would be appreciated if you could now either approve this wording or suggest suitable alternatives if preferred and also supply additional information where requested.

Manufacturer/Importer:	HONDA
Models:	Jazz
Chassis Numbers:	JHMGD5***2S2 JHMGD5***2S2 JHMGD1***2S2 JHMGD1***2S2 JHMGD5***3S2 JHMGD5***3S2 JHMGD1***3S2 JHMGD1***3S2
Build Dates:	22/10/2001-24/07/2008
Classification:	Car
Defect:	Due to the layout of the lighting switch wiring harness, the low beam headlight



INVESTOR IN PEOPLE



circuit can be pulled tighter than other wires. After repeated use of the headlight switch, the low beam terminal can become worn and poor electrical continuity may result from an accumulation of copper oxide. In some cases the poor continuity the poor continuity or melted terminal ends will cause the wiring harness terminal ends to melt. Poor continuity or melted terminal ends will cause the low beam head lights to become inoperative, increasing the risk of accident.

Remedy:

The dealer will inspect the low beam terminal, if the terminal shows signs of melting the lighting switch and low beam terminal harness will be replaced. If the terminal is not melted the low beam terminal harness will be replaced.

Launch date:

Please E-mail launch date to  
Alison.Martin@vosa.gsi.gov.uk

Number of vehicles:

136329

Means of locating keeper:

DVLA

Method of contacting owners:

Direct Mail

It would be appreciated if you could let us have details of the response to the recall at 3-monthly intervals (or more frequently if preferable to you) and also supply sample copies of any recall notification letters/notices to owners, etc, for our file, if available.

Thank you for your assistance and co-operation in this matter. I look forward to hearing from you in due course.

Yours sincerely



Alison Martin  
Safety Recalls Manager  
Vehicle Safety Branch

EA11-012

HONDA

4/20/2012

Q16

101221\_LTA(Singapore) EVRS  
submission for 5LS

10 Sin Ming Drive Singapore 575701  
Hotline: 1800 – CALL LTA (1800 – 2255 582)  
Fax: (65) 6553 5329

Date: 21 DEC 2010

Submission No.: S2010120168

Mr/Ms/Messrs  
KOH CHOR SENG  
KAH MOTOR CO SDN BHD  
370 UBI ROAD 3  
Singapore 408651

Dear Sir/Madam

**NOTIFICATION OF VEHICLE RECALL**

Please refer to your submission on 21 Dec 2010

We are now processing your submission. All future correspondence for this submission will be mailed to the above address.

Thank you for using VITAS.

Yours sincerely,

for DEPUTY DIRECTOR  
VEHICLE ENGINEERING DIVISION

*(This is a computer generated letter. No signature is required.)*

S2010120168

**VEHICLE RECALL SUBMISSION**[Details](#)[Submitter Details](#)[Audit Log](#)[Payment](#)[Attachment](#)[Vehicle Details](#)[Close](#)

Is this an extension to a previously initiated recall? No

**Section A. Details of Vehicle Manufacturer Initiating Recall**

1) Manufacturer's recall notification number H-TI420110001  
 2) Date recall initiated by vehicle manufacturer 16 DEC 2010

**Section B. Details of Vehicle Affected by Recall**

1) Make of affected vehicles HONDA  
 2) Model and period of production of the affected vehicles  

Model	Period of Production (date format: mmm yyyy)
JAZZ	Jan 2002 to Dec 2008

 3) Number of vehicles affected world-wide 1355217  
 4) World-wide affected chassis / engine range  
 5) Chassis / engine range  

Chassis number	Engine number

**Section C. Description of Defect on Non-compliance**

1) Description of defect or non-compliance Because insufficient margin is set for the length of a certain electric wire connected to a headlight lighting switch, some vehicles have the wire stretched excessively during a wiring process.  
 2) Is this recall safety related? Yes  
 3) Technical issues arising from defect or non-compliance As a result, the terminal joint portion moves, contact resistance increases, the terminal generates heat, and the coupler melts, leading to a risk of low beam not coming on.

**Section D. Corrective Actions and Recovery Measures**

1) Corrective actions and steps to be taken to rectify defect Replace the lighting switch coupler terminal with new countermeasure kit.  
 2) Estimated commencement date of recall 11 JAN 2011  
 Estimated completion date of recall 01 DEC 2017  
 3) Name and contact details of workshop(s) performing corrective action  

Name	Contact Details
KAH MOTOR CO.SDN.BHD.	68413838

 4) Will a press release be issued? No  
 If yes, the expected date of release?

**Section E. Customer Service Contact Numbers**

1) Hotline number  

Name	Contact number
KAH MOTOR CO.SDN BHD	68413838

 2) Recall personnel  

Name	Phone number	Fax	Email
ANNE LIM	68406745	67415933	annelim@honda.com.sg
HO CHEE KHEONG	68406723	67415933	ckho@honda.com.sg
STEVEN KOH	68406728	67415933	stevenkoh@honda.com.sg

S2010120168

## ATTACHMENT

[Details](#)

[Submitter Details](#)

[Audit Log](#)

[Payment](#)

[Attachment](#)

[Vehicle Details](#)

[Close](#)

### Item

#### 1.0 Chassis and Engine Numbers

1.1 Chassis Numbers

1.2 Engine Numbers

#### 2.0 Other Documents

2.1 Vehicle Manufacturer's Letters

2.2 Recall Technical Details

### Documents

[download Chassis Numbers](#)

[download Engine Numbers](#)

[RecallInfo](#)

[Others](#)



EA11-012

HONDA

4/20/2012

Q16

101222\_Australia

5LS\_MQ01022\_VSSB

REF: MQ01022

December 22<sup>ND</sup> 2010

Research, Audit and Vehicle Recall  
Vehicle Safety Standards  
Department of Infrastructure, Transport and Regional Development and  
Local Government  
G P O Box 594  
CANBERRA ACT 2601

Dear Sir / Madam,

Honda Motor Co., Ltd has determined that a defect relating to vehicle safety exists with the lighting switch coupler due to insufficient margin set for the length of a certain electric wire connected to the headlight lighting switch. As a result, the terminal joint portion moves, contact resistance increases, the terminal generates heat, and the coupler melts, leading to a risk of low beam not coming on in a worst case scenario.

Owners of the effected vehicles will be contacted by mail in accordance with the Federal Chamber of Automotive Industries Code of Practice, to have the low beam terminal replaced, accompanied by a long wire. If the coupler is melted, the headlight lighting switch and the wire side coupler will be replaced.

The total number of vehicles involved in this recall is 27,156. The vehicles can be identified by the Vehicle Identification Number (VIN), and are within the provided VIN ranges. The recall identification code is 5LS

**Recall Jazz Lighting SW Coupler Terminal**

<b>Model</b>	<b>From</b>	<b>To</b>
2002-2005 Jazz	JHMGD17303S2	JHMGD18303S
	JHMGD17304S2	JHMGD18304S
	JHMGD17305S2	JHMGD18305S
	JHMGD38602S2	JHMGD38602S
	JHMGD38503S2	JHMGD38703S
	JHMGD37504S2	JHMGD38704S
	JHMGD38505S2	JHMGD38705S

Sincerely,

**HONDA AUSTRALIA PTY LTD**



Steve Beach  
Technical Support Manager  
**Customer Services**

EA11-012

HONDA

4/20/2012

Q16

101225\_Jazz letter to GSO

الرقم: 800/01/671  
الموافق: 2010/12/25م

السادة/هيئة التقييس لدول مجلس التعاون

عناية المهندس/وليد الصقر الموقر

السلام عليكم ورحمة الله وبركاته...وبعد

نرجو ان نفيد سعادتكم انه وبناءاً على لائحة استدعاء المركبات وملحقاتها وقطع  
الغيار الصادر بالقرار الوزاري رقم: 2397 وتاريخ 1422/11/07هـ إنه سوف يتم  
الاعلان لإستدعاء عدد سيارة هوندا جاز من موديل 2002م الى 2004م.  
عدد 175 سياره حسب ارقام هياكل السيارات المحددة وذلك بسبب وجود عيباً  
مصنعياً في الأضائة الأمامية حيث تصدر حرارة عاليه يخشى أن تسبب  
مضار أخرى حسب إشعارهم وذلك للقيام باستبدال الأضواء الامامية في السيارات  
المدرجه أرقام شاسياتها مجاناً وذلك بناءً على ما وردنا من الشركة الصانعه حرصاً  
على مستوى الجودة في منتجاتها وسلامة عملائنا  
هذا وتجدون سعادتكم برفقته صور للبيانات اللازمه.

وتفضلو بقبول أطيب تمنياتنا،،،،،



شركة عبدالله هاشم المحدودة

عابد اصيل



عبدالله النوير  
02.01.11

**English Translation:**

**Date: 25/12/2010**

**To: Gulf Standard Organization**

**Attention: Engr. Waleed Al-Sagar**

**Peace be upon you ,,,**

This is to inform your Excellency, according to vehicle, accessories and spare parts recall regulation issued by the minister No. 2397, dated 07/11/1422H. That there will be announcement for recalling Honda Jazz Model year: 2002 to 2004 qty: 175 vehicle. According to the specific Vin list. the vehicles are recalled for rectifying a factory defect in the headlight. As we will replace headlight controller switch free of charge for all affected Vins as per what we have received from the manufacturer and that is to assure high level of quality in our products and customer safety.

Attached is copy of the related documents

(HTI and affected VIN List)

Please accept our Best Wishes,,,,,

**Abdullah Hashim Company Limited**

**Abid Asel**

EA11-012

HONDA

4/20/2012

Q16

KBA start

letter\_5LS\_GB(Germany)

EA11-012

HONDA

4/20/2012

Q16

KBA start

letter\_5LS\_GB(Germany)