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Collins General Aviation Division

Collins 332C-10 Radio Magnetic Indicator

RECORD OF TEMPORARY REVISIONS

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Addendum 3	4-8	Dec 20/94	Rockwell Collins		
Addendum 3	4-9	Dec 20/94	Rockwell Collins		
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instruction book

Collins 332C-10 Radio Magnetic Indicator

This instruction book includes:

Description	*523-0764707*
Maintenance	*523-0764708*
Diagrams	*523-0764709*
Parts List	*523-0764710*
Bulletins	*523-0768254*

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Caution

The material in this manual is subject to change. Before attempting any maintenance operation on the equipment covered in this manual, verify that you have complete and up-to-date publications by referring to the applicable Publications and Service Bulletin Indexes.

We welcome your comments concerning this instruction book. Although every effort has been made to keep it free of errors, some may occur. When reporting a specific problem, please describe it briefly and include the instruction book part number, the paragraph or figure number, and the page number.

Send your comments to: Publications Department
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Rockwell International Corporation
Cedar Rapids, Iowa 52498

Collins 332C-10 Radio Magnetic Indicator

Rockwell International

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table of contents

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section I
description

1.1 EQUIPMENT COVERED

This section covers the 332C-10 Radio Magnetic Indicator, Collins part number 622-0555-001, -002, -003, -004, -005, -006, -007, -008, -010, -011. Refer to figure 1-1 or 1-1A for a view of the equipment and to table 1-1 for a description of the equipment. The 332C-10 normally is used with the VIR-30( ) Navigation Receiver, ADF-60( ) System, MC-102 Compass System, and MC-103 System.

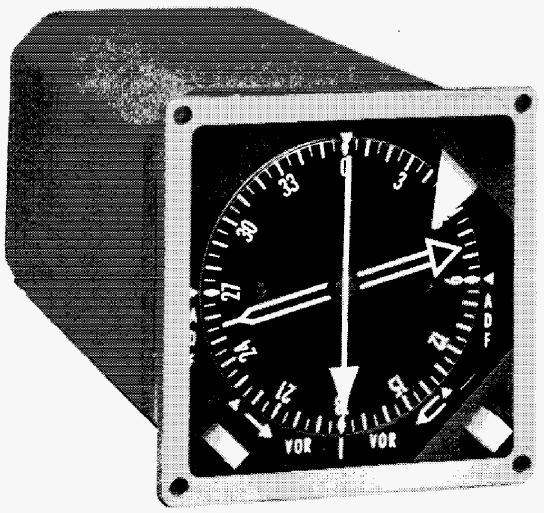
1.2 PURPOSE OF EQUIPMENT

The 332C-10 Radio Magnetic Indicator provides aircraft heading information on a calibrated, servo-driven compass card read against a fixed lubber line. An HDG flag monitors servo error, compass valid, and instrument power.

Bearing to either ADF or VOR stations is provided by two pointers, each of which is read against the compass card. Each pointer can be switched independently to a separate ADF or VOR receiver by an annunciated pushbutton switch.

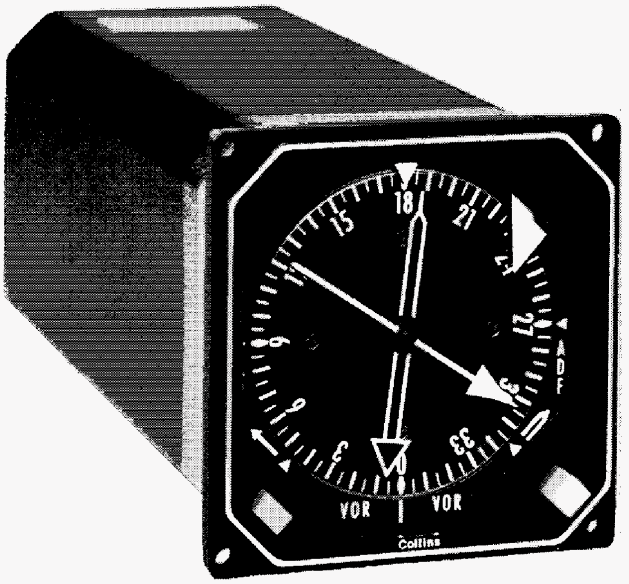
1.3 EQUIPMENT SPECIFICATIONS

Table 1-2 lists the specifications for the 332C-10 RMI.



TP3-4982-017

332C-10 Radio Magnetic Indicator
CPN 622-0555-001, -002
Figure 1-1



TP4-1334-017

332C-10 Radio Magnetic Indicator,
CPN 622-0555-003, -004, -005,
-006, -007, -008, -010, -011
Figure 1-1A

Table 1-1. Equipment Description.

622-0555-XXX	LIGHTING VOLTAGE	LIGHTING COLOR	BEZEL STYLE	BEZEL COLOR
-001	28 Vdc (or 26 Vac)	Blue-white	Standard	Gray
-002	5 Vdc (or 5 Vac)	Blue-white	Standard	Gray
-003	28 Vdc (or 26 Vac)	Blue-white	Low profile	Black
-004	5 Vdc (or 5 Vac)	Blue-white	Low profile	Black
-005	28 Vdc (or 26 Vac)	Blue-white	Low profile	Gray
-006	5 Vdc (or 5 Vac)	Blue-white	Low profile	Gray
-007	5 Vdc (or 5 Vac)	Unfiltered white	Low profile	Black
-008	5 Vdc (or 5 Vac)	Blue-white	Low profile (special)	Gray
-010	28 V dc (or 26 V ac)	Blue-white	Low profile	Gray
-011	5 V dc (or 5 V ac)	Blue-white	Low profile (special)	Black

Note

28 Vdc (or 26 Vac) applied at pin J1-n. 5 Vdc (or 5 Vac) applied at pin J1-J.

Table 1-2. Equipment Specifications.

CHARACTERISTIC	SPECIFICATIONS
Related documents	
FAA TSO	C6c.
Environmental	RTCA-DO-138.
Physical specifications	
Dimensions	
Case	ATI-3 case per ARINC 408.
Height	81.5 mm (3.21 in).
Width	85.7 mm (3.38 in).
Length	203.2 mm (8.0 in).
Weight	1.18 kg (2.6 lb) max.
Color	
Pushbuttons	Gray.
Pointer No 1	Day-Glo yellow.
Pointer No 2	Day-Glo green.
HDG flag	Rocket red.
Lubber line	Arc yellow.
Numerals	White.
Backgrounds	Black.
Case	Gray/black.
Bezel	Gray/black.

Table 1-2. Equipment Specifications (Cont).

CHARACTERISTIC	SPECIFICATION
Connectors	PT02A-20-41 mates with PT06A-20-41 (SR) Collins part no 371-6200-00.
Environmental specifications	
Temperature range	
Operation	-15 to 55 °C (5 to 131 °F).
Exposure	-54 to +71 °C (-66 to +160 °F).
Altitude	4572 m (15 000 ft) max.
Cooling	Convection.
Relative humidity	95% at +50 °C (+122 °F).
Shock	
Operation	6 g.
Impact	15 g.
Vibration	0.1 in da, 5 to 55 Hz; 1.5 g max. 55 to 2000 Hz, 0.25 g max.
Power requirements	
Primary	27.5 V dc, 600 mA maximum. 26 V ac, 400 Hz, 180 mA maximum (VOR, ADF).
Reference	26 V ac, 400 Hz, 5 mA maximum (Heading).
Lighting	
For 622-0555-001, -003, -005, -010	27.5 V dc/26 V ac, 80 mA maximum.
For 622-0555-002, -004, -006, -007, -008, -011	5 V dc/5 V ac, 460 mA maximum.
Bearing pointers	
ADF 1 and ADF 2 or ADF and DF (622-0555-010 only)	
Interface	Signal: 3-wire synchro. Excitation: 2 wire.
Voltage	Signal: 11.8 V rms maximum line-to-line, 400 Hz. Excitation: 26 V rms, 400 Hz.
Phase	180° index, positive rotation reference. Excitation same phase as ADF.
Input impedance	Input is switched directly to a torque receiver with impedances: Zro = 27.5 + j174, Zso = 7.7 + j30.5, Zrss = 47 + j16.
Power	Rotor -- 0.6 W nominal.

Table 1-2. Equipment Specifications (Cont).

CHARACTERISTIC	SPECIFICATION
Positioning accuracy	Within 2.0°.
Sensitivity	Better than 0.5°.
Dead zone	Less than 1.0°.
Response	Greater than 180°/s undamped.
VOR 1 and VOR 2	
Interface	Signal: 2-wire sine and 2-wire cosine square wave. Excitation: 2-wire sine wave.
Voltage	Signal: 7.9 V zero to peak maximum sine or cosine 400 Hz square wave.
Phase	0° index with cosine maximum in-phase and sine null. Positive rotation reference with cosine decreasing and sine increasing in-phase for increasing degrees.
Input impedance	Differential resolver with impedances: Zso = 250 + j830, Zro = 38 + j122, Zrss = 52 + j12.5.
Power	0.23 W nominal.
Position accuracy	Within 2.0°.
Sensitivity	Better than 0.5°.
Dead zone	Less than 1°.
Response	Greater than 180°/s undamped.
Heading display	
Interface	Signal: 3-wire synchro. Reference: 2 wire.
Voltage	Signal: 11.8 V rms maximum line to line 400 Hz. Reference: 26 V rms, 400 Hz.
Phase	0° index, positive rotation reference. Reference: same phase as compass.
Input impedance	Control transformer with impedance: Zso = 81 + j330, Zro = 470 + j1770, Zrss = 590 + j190.
Power	0.1 W nominal.
Positioning accuracy	Within 1.0°.
Sensitivity	Better than 0.1°.
Dead zone	Less than 0.2°.
Response	Greater than 20°/s with no overshoots.

1.4 EQUIPMENT DESCRIPTION

1.4.1 Mechanical Description

A removable aluminum case protects the mechanism from dust and damage. The bezel is cast aluminum and contains a glass lighting wedge. The lighting wedge serves as the cover glass and is coated with an antireflective coating.

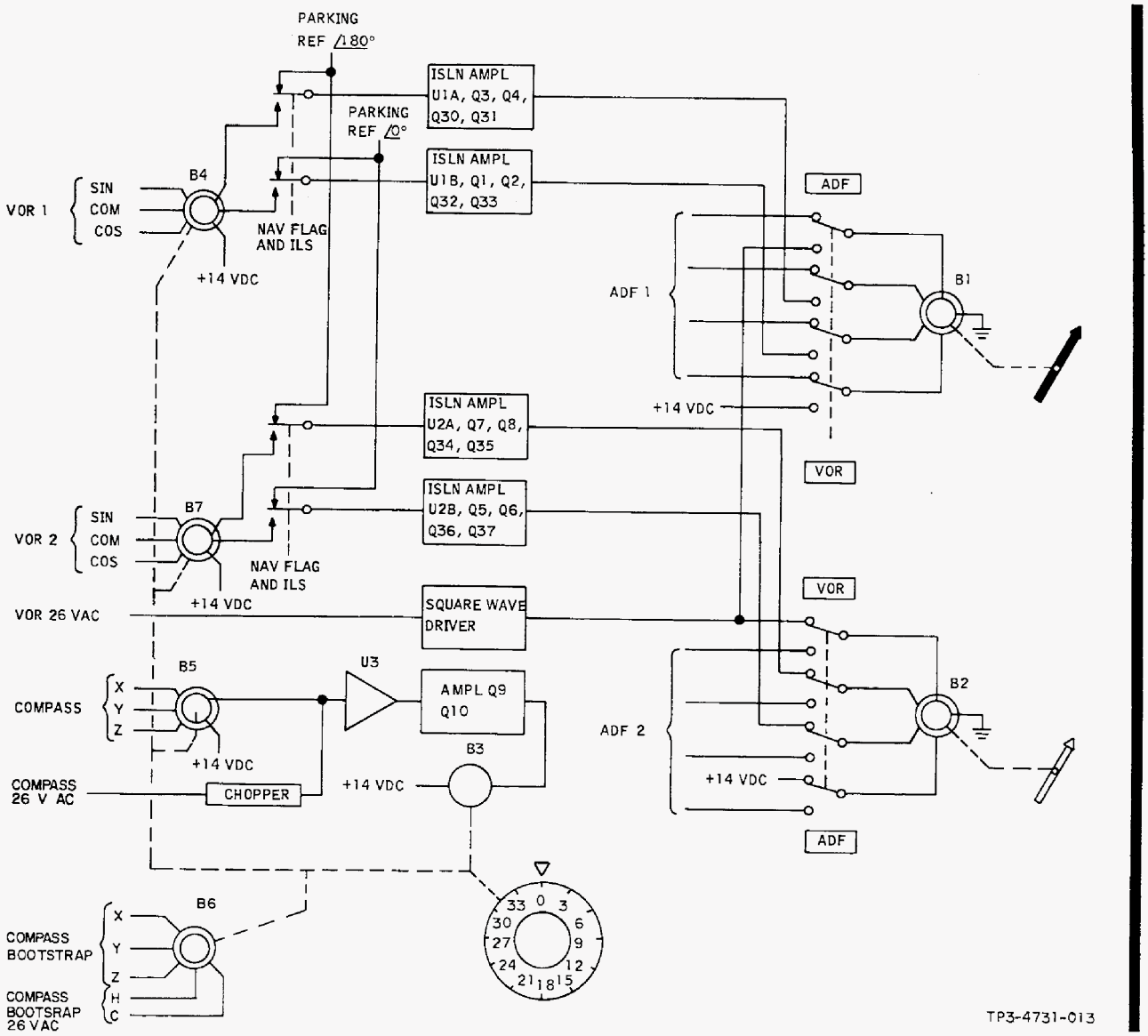
Internal construction consists of post-mounted gearplates, circuit boards, and a rear connector plate suspended from the bezel. The equipment mounts to the instrument panel with screws through four mounting holes in the corners of the bezel.

1.4.2 Electrical Description

The 332C-10 contains, in addition to the mechanical indicator, solid-state circuits that convert sin/cosθ VOR bearing information as received from the VIR-30( ) Navigation Receiver to relative bearing in 3-wire synchro form. This conversion is accomplished by algebraic addition of magnetic heading and VOR bearing.

1.5 332C-10 RMI PRINCIPLES OF OPERATION

Although the 332C-10 provides for two VOR inputs, this discussion will be limited to only one of the two identical channels. Refer to figure 2.



332C-10 RMI, Simplified Schematic Diagram
Figure 1-2

The equipment consists of a transmitter, which includes bootstrap operation, two differential resolvers B4 and B7, control transformers B5, a motor, the necessary gears, and related mechanical linkages.

The compass information is applied to control transformer B5 and mechanically linked to differential resolvers B4, B6 and B7. The result of this link is the summation of VOR bearing and compass heading information to produce relative bearing.

The relative bearing is coupled through an isolation amplifier to the pointer synchro. Bearing information from either a VOR or an adf station is provided by a pointer read against the compass card. There are two identical channels and two pointers to provide bearing information. Each pointer can be switched independently to a separate adf or VOR receiver.

The ILS mode or the VOR flag activates relays that switch a park reference into the inverter amplifiers and the isolation amplifiers. This causes the pointers to park in a horizontal position pointing right (the conventional park position).

The square-wave driver shapes the VOR excitation to the pointer synchros to provide matching for the square wave signal. This limiting action prevents overdriving and excessive heat dissipation.

1.5.1 Detail Principles of Operation

Refer to figure 1 of the 332C-10 diagrams section of this book. The 332C-10 is compatible with a standard ADF and the VIR-30( ) Navigation Receiver. The signals from the VIR-30( ) Navigation Receiver are in sine-cosine form and are 7.9 V zero-to-peak maximum square wave. These signals drive differential resolvers B4 and B7. Compass information is applied to control transformer B5 which is mechanically linked to differential resolvers B4 and B7. The result of this link is a summation of VOR bearing and compass heading information. The summation results in relative bearing. The bootstrap synchro transmitter B6 is mechanically linked to B3, B4, B5, and B7. B6 may be used for isolated compass information to other systems which require a compass input.

1.5.2 Compass

The 11.8-V rms, maximum line-to-line, 400-Hz 3-wire compass information is applied to control transformer B5. The 22.5-V rms maximum output is phase detected in the detector circuit consisting of Q11, Q12, and Q13 and their associated components. The output is then applied to operational amplifier U3 for gain and servo compensation and then to two complementary servo-drive transistors Q9 and Q10. The servo motor drives control transformer B5 to null differential resolvers B4 and B7. The servo will be zeroed with an index reference of 0° and a positive rotation reference.

1.5.3 VOR

The VOR bearing information from the VIR-30( ) Navigation Receiver is the analog of sine-cosine functions. The signals are 7.9-V zero-to-peak maximum square wave. The signals are applied to differential resolver B4, which is geared to the heading servo. The 3-wire output of the differential resolver represents relative bearing. This output is coupled through relays K1 and K2 to the buffer amplifiers. The relays are activated when the NAV flag is out of view or in the absence of ILS signals. When the NAV flag is in view or when the aircraft is in the ILS mode, the relays are deenergized. This switches the 90-degree parking reference signal into the circuits.

Buffer amplifiers U1 and U2 and associated components provide a gain of 3.6. The buffer amplifiers transform the 7.9 V zero-to-peak maximum square wave input signal from the VIR-30( ) to the required 11.8 V rms maximum input to the torque receiver. The buffer amplifiers consist of an operational amplifier with a 10-kΩ input impedance and two complementary output transistors.

1.5.4 Power Supply

The primary electronic power is derived from aircraft +27.5-Vdc power. Diode CR36, resistor, and capacitor provide transient limiting and filtering. All circuits operate from +27.5 Vdc, 13.75 Vdc, and ground. The 13.75 Vdc is derived from a voltage divider consisting of a complementary emitter follower current limited to 300 mA. The 13.75-Vdc signal contains a large ac ripple component. Consequently, capacitor filtering is used on this output to minimize transients and power dissipation.

Square-wave excitation for the torque receivers is generated from the 26-Vac VOR power signal. This sinusoid is clipped during both the positive and the negative half cycle, resulting in a square-wave approximation.

1.5.5 Compass Flag and Monitor

The monitor system consists of a compass flag that has 27.5 Vdc applied to the high side. Compass valid and servo error is applied to a monitor circuit consisting of two transistors, four diodes, two capacitors, and five resistors. Loss of compass valid, loss of RMI 27.5 Vdc power, or the presence of excessive servo error will cause the flag to come into view.

Caution

The 332C-10 has been designed to exhibit a very high degree of functional integrity. Nevertheless, the user must recognize that it is not practical to provide monitoring for all conceivable system failures and that, however unlikely, it is possible that erroneous operation could occur without a fault indication. It is the responsibility of the pilot to detect such an occurrence by means of cross-checks with redundant or correlated information available in the cockpit.

Collins 332C-10 Radio Magnetic Indicator

Rockwell International

maintenance

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ROCKWELL COLLINS
INSTRUCTION BOOK
332C-10, PART NO 622-0555

332C-10 Radio Magnetic Indicator

INSTRUCTION BOOK (523-0767591, 4TH EDITION, DATED MAY 15/85)

TEMPORARY REVISION NO. 11

Insert facing page 2-1

Subject: Update Maintenance Section

Add the following NOTE to 2.2.1 Test Equipment Required, under 978F-2S Synchro Simulator.

NOTE

Test procedures refer to the use of 978F-2S Synchro Simulator. The 978F-2S is directly replaced by the CSS-10. However, synchro simulators on the 978F-2S are labeled SIMULATOR A and SIMULATOR B and on the CSS-10 are lateled TRANSMITTER 1 and TRANSMITTER 2 respectively.

section II
maintenance

2.1 GENERAL

Maintenance for the 332C-10 Radio Magnetic Indicator includes a complete performance test to ensure proper operation of the equipment. It may be performed before installation to limit most failures during the postinstallation test of associated equipment and interconnects (refer to VIR-30 Radio Navigation System installation section of this book). Instructions for alignment, troubleshooting, disassembly, cleaning, inspection, repair, and assembly of the RMI are contained in this section.

2.2 TEST EQUIPMENT AND POWER REQUIREMENTS

2.2.1 Test Equipment Required

The 332C-10 performance test is accomplished with the following test equipment:

970E-1 RMI Test Set	Collins part number 622-2914-001.
978F-2S Synchro Simulator	Collins part number 522-3498-000.
Digital multimeter (two required)	Ac volts: 0 to 50 V ac at 400 Hz. Dc volts: 0 to 30 V dc. Fluke 8000A.
Test cable	Fabricate as shown in figure 2-1.
Synchro cable	Fabricate as shown in figure 2-2.

2.2.2 Power Requirements

The 970E-1 RMI Test Set requires 28 V dc ±5%, 1.5 A maximum; and 115 V, 400 Hz (±2%) 2 A maximum. The 978F-2S receives excitation power from the 970E-1, and external meters may require 115 V, 60 Hz (refer to specifications of meters used for power requirements).

2.3 TEST PROCEDURES

2.3.1 Preliminary Procedure

2.3.1.1 Equipment Setup

Set the 970E-1 RMI Test Set POWER switch to OFF and perform the following preliminary steps:

a. Connect the 970E-1 to 115-V, 400-Hz, and 28-V dc sources.
b. Connect the 332C-10 RMI to the front connectors of the 970E-1 using cable fabricated from wiring diagram of figure 2-1.
c. Connect the 978F-2S to the rear of the 970E-1 using cable fabricated from wiring diagram of figure 2-2.
d. Set 332C-10 switches to ADF or DF.

While performing test or alignment procedures refer to figure 2-3 for 970E-1 switch functions.

2.3.2 Performance Test Procedure

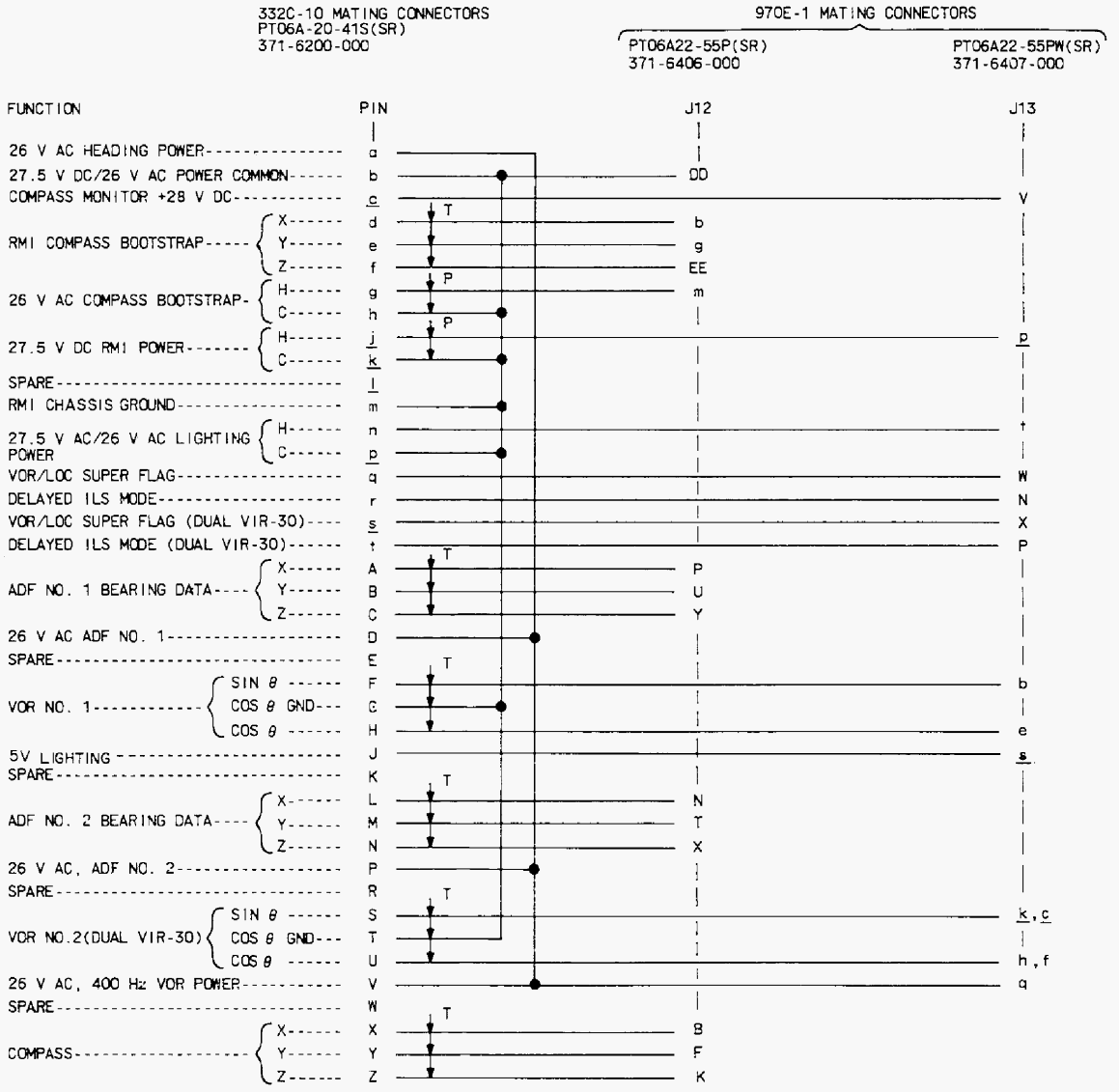
Test procedures for the 332C-10 are presented in table 2-1. Complete step 1.0 before proceeding with other tests.

Note

While performing the procedures of tables 2-1 and 2-2, monitor 26 VAC INPUT current. Ensure that it does not exceed 190 mA for more than 2 seconds.

2.3.3 Alignment Procedure

Alignment procedures for the 332C-10 are provided in table 2-2. This procedure is performed after completing a performance test and if a synchro or switch assembly has been removed or replaced and is in need of alignment. Complete the test setup and power checks presented in table 2-1 step 1.0 before beginning the alignment procedures.

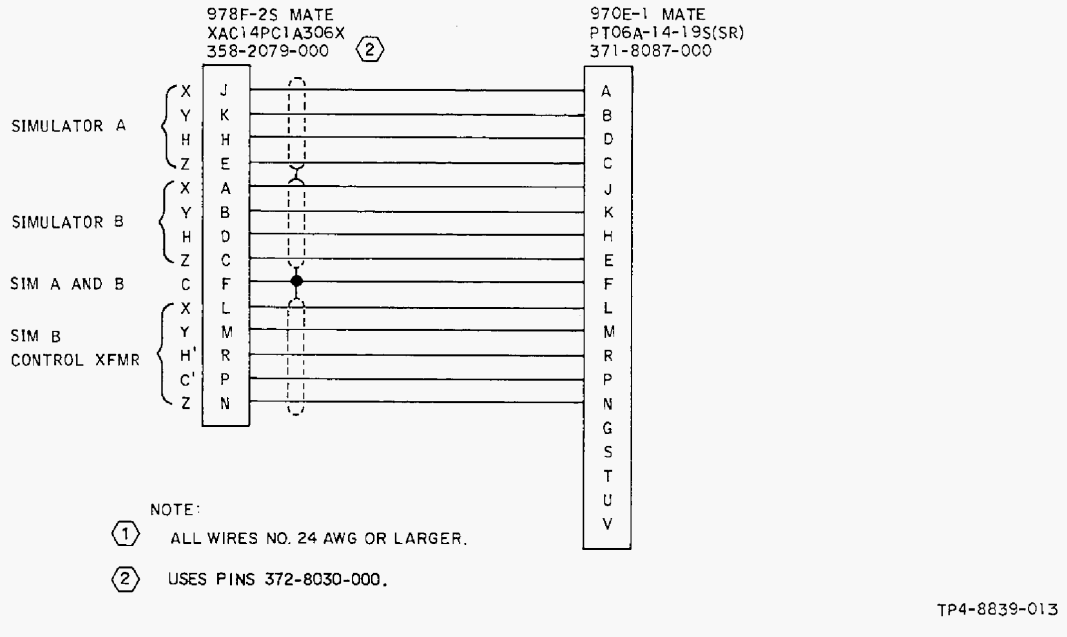


NOTE:

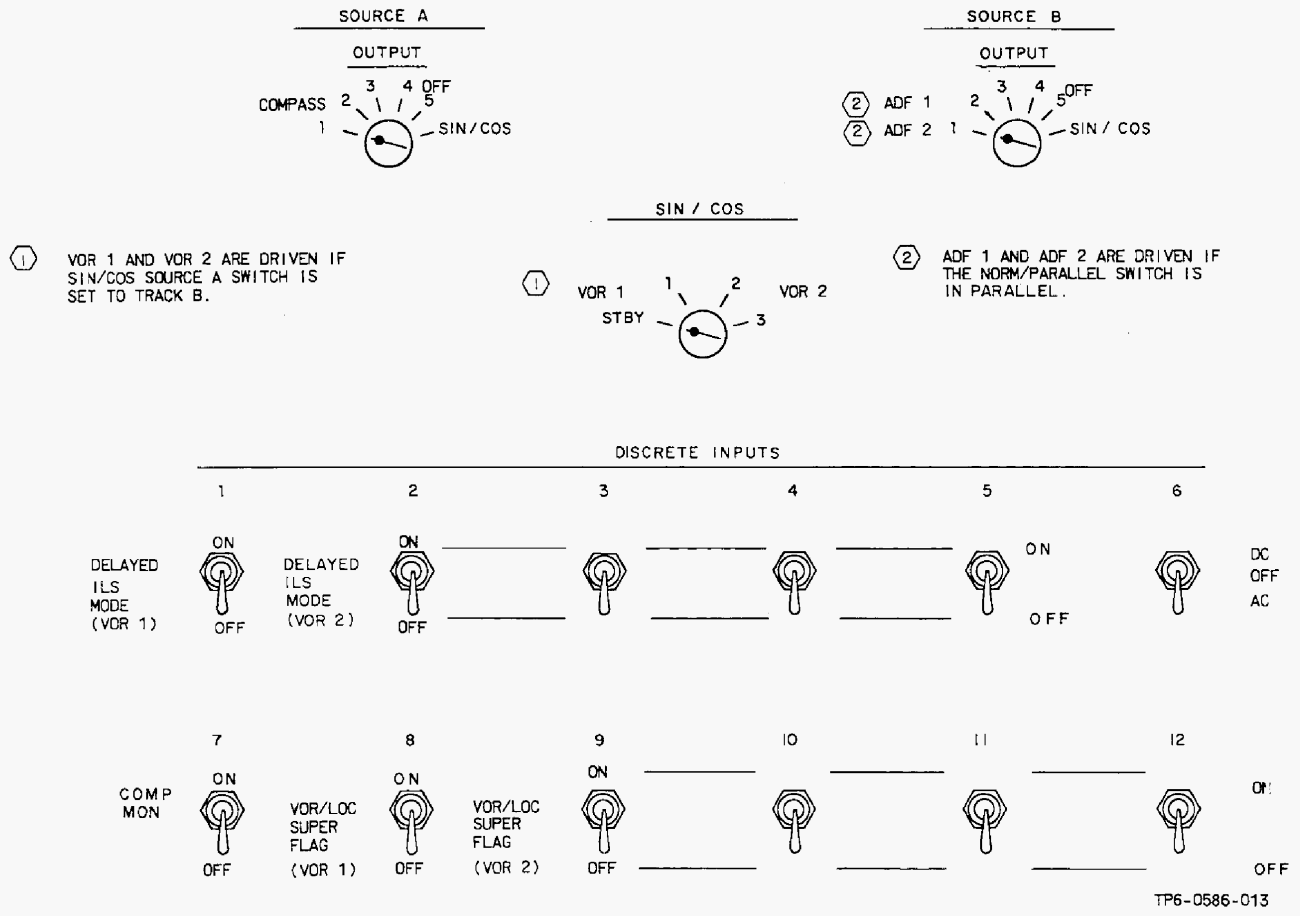
ALL WIRES CARRYING 26 V AC/28 V DC MUST BE NO. 22 AWG OR LARGER.
ALL OTHERS MUST BE NO. 24 AWG OR LARGER.

TP5-0063-014

332C-10 to 970E-1, Cable Wiring Diagram
Figure 2-1



978F-2S to 970E-1, Cable Wiring Diagram
Figure 2-2



970E-1 Switching Matrix Diagram
Figure 2-3

Table 2-1. 332C-10 RMI Performance Test.

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
1.0	Test setup				
1.1	Switch check	Select VOR on the RMI pushbutton for the yellow pointer. Slowly depress pushbutton.			Toggle switch is switched to ADF mode before latch mechanism is activated.
		Select ADF on the RMI pushbutton for the green pointer. Slowly depress pushbutton.			Toggle switch is switched to VOR mode before latch mechanism is activated.
The RMI pushbutton for the green pointer is labeled DF on the 622-0555-010.					
1.2	Equipment connection	Connect UUT and test equipment according to paragraph 3.1.1.	UUT LIGHTING POWER POWER	 All to OFF All to OFF	
1.3	Power and ADF current check	Select ADF on the RMI pushbuttons.	DISCRETE INPUTS 7	 ON, all others to OFF	The yellow and green pointer annunciators point to ADF.
		Connect a dmm (set for dc) between the UUT POWER 28 VDC CURRENT red (high) and black (low) jacks. 100 mV dc is equal to 1 A. **Note** Observe a dmm at UUT POWER 28 VDC CURRENT for 450 mA (45 mV dc) maximum sustained current.	BOOTSTRAP H-C SELECT SIN/COS SOURCE A SOURCE B SELECT SOURCE A MODE OUTPUT NORM/PARALLEL SOURCE B MODE OUTPUT POWER UUT POWER 28 V DC	 ON 1 TRACK B SQ WAVE 1 VAR 2 NORM 0° REF SIN/COS ON ON	
(Cont)					Less than 45 mV (25 mV typical).

ADDENDUM 1
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591-00411A

Insert this addendum facing page 2-4
in the Maintenance section of the 332C-10 instruction book.

This addendum is being issued to correct two of the 970E-1 Test Set initial switch positions in STEP 1.3 of Table 2-1. The new switch positions are underlined to aid in identifying the changes. The next revision to the 332C-10 instruction book will include these changes.

The SELECT entry under the SIN/COS switch is shown in POSITION 1. This should be changed to read as follows:

SELECT (SWITCH) to STBY (POSITION)

The OUTPUT entry under the SOURCE B switch is shown in POSITION SIN/COS. This should be changed to read as follows:

OUTPUT (SWITCH) to 1 (POSITION)

ADDENDUM 5
FOR
COLLINS 332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 2-5
in the Maintenance section of the 332C-10 instruction book.

This addendum changes the information to the 332C-10 RMI Performance Tests in Table 2-1. Changes are shown in **BOLD TYPE.**

In STEP 1.3, the note in the PROCEDURE column should read:

Note

Observe the dmm at UUT POWER 26 VAC CURRENT for **180 to 220 mA (18 to 22 mV ac)** sustained current.

Also in STEP 1.3, the RESULTS column should read:

18 to 22 mV ac
(20 mV ac typical)

In STEP 1.4, the Caution in the PROCEDURE column should read:

Caution

In the following step, current must not exceed 600 mA (60 mV dc) at UUT POWER 28 VDC CURRENT or **220 mA (22 mV ac)** at ...(rest of Caution is okay)

Also in STEP 1.4, the RESULTS column should read:

28 VDC CURRENT less than 60 mV dc on dmm (38 mV typical). 26 VAC CURRENT less than **22 mV ac** on dmm.

The next revision to the instruction book will include these changes.

ADDENDUM 6

TO

COLLINS 332C-10 RADIO MAGNETIC INDIATOR INSTRUCTION BOOK

PART NUMBER 523-0767591-00411A, 4TH EDITION, DATED 15 MAY 1985

Insert this addendum sheet facing page 2-5
of the Maintenance Section (523-0764708-005118)

This addendum corrects the test limits given in Addendum 5, sheet 1, to the 332C-10 RMI Performance Tests in Table 2-1, step 1.3. Changes are shown in **bold type**.

In STEP 1.3, the note in the PROCEDURE column should read:

Note

Observe the dmm at UUT POWER 26 VAC CURRENT **for less than 220 mA (less than 22 mV ac)** sustained current.

Also in STEP 1.3, the RESULTS column should read:

Less than 22 mV ac (20 mV ac typical)

The remainder of 332C-10 Addendum 5 is correct.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
1.3 (Cont)		Connect a dmm (set for ac) between the UUT POWER 26 VAC CURRENT red (high) and black (low) jacks. 100 mV ac is equal to 1 A. ***Note*** Observe the dmm at UUT POWER 26 VAC CURRENT for 180 mA (18 mV ac) maximum sustained current.	UUT POWER 26 VAC	 ON	Less than 18 mV ac (16 mV typical)
1.4	VOR current check	***Caution*** In the following step, current must not exceed 600 mA (60 mV dc) at UUT POWER 28 VDC CURRENT or 180 mA (18 mV ac) at UUT POWER 26 VAC CURRENT. If maximum sustained current is too high, select ADF 1 AND 2 immediately.	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT SIN/COS SOURCE A SOURCE B SELECT DISCRETE INPUTS 8 9	 0° REF 2 VAR SIN/COS TRACK B SQ WAVE 1 ON ON	
(Cont)		***Note*** Observe dmm's at UUT POWER 28 V DC AND 26 VAC CURRENT for maximum sustained current. Select VOR on the RMI pushbuttons for the yellow (VOR 1) and green (VOR 2) pointers. Rotate SIMULATOR B slowly cw while observing currents and pointers movement.			28 VDC CURRENT less than 60 mV dc on dmm (38 mV typical) 26 VAC CURRENT less than 18 mV ac on dmm. The currents must not exceed 600 mA dc for 28 VDC CURRENT or

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
1.4 (Cont)					180 mA ac for 26 VAC CURRENT. The pointer follows the source smoothly.
		Select ADF on the RMI pushbuttons for the yellow and green pointers. ***Note*** During the remainder of the tests, monitor 26 VAC CURRENT. Ensure that it does not exceed 190 mA ac (19 mV ac) for more than 2 seconds.	DISCRETE INPUTS 8 9	 OFF OFF	
2.0	Compass servo				
2.1	Preliminary	Select ADF on the RMI pushbuttons.	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT DISCRETE INPUTS 7	 0° REF 2 0° REF 4 ON	
2.2	Slew rate	Set SIMULATOR A to slightly greater than 180°. Set source A mode to VAR. Observe the operation of the compass card.			The compass card rotates smoothly cw and stops with little or no overshoot, and should take no longer than 4 seconds.
		Set SIMULATOR A mode to 0° REF. Observe the movement of the compass card.			The compass card rotates smoothly ccw and stops with little or no overshoot, and should take no longer than 4 seconds.
		Return source A mode to VAR. Rotate SIMULATOR A slowly cw 360 degrees (at approximately 3 degrees per second), and observe the compass card.			The compass card follows smoothly with no dead spots or jitter.

ADDENDUM 5
FOR
COLLINS 332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 2-6
in the Maintenance section of the 332C-10 instruction book.

This addendum changes the information to the 332C-10 RMI Performance Tests in Table 2-1. Changes are shown in **BOLD TYPE.**

In STEP 1.4, the RESULTS column (at top of page) should read:

> **220 mA** for 26 VAC CURRENT. The pointer follows the source smoothly.

Also in STEP 1.4, the Note in the PROCEDURE column should read:

> ***Note***
>
> During the remainder of the tests, monitor 26 VAC CURRENT. Ensure that it does not exceed **220 mA ac (22 mV ac)** for more than 2 seconds.

The next revision to the instruction book will include these changes.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
2.3	Accuracy	Rotate SIMULATOR A to precisely align the compass card at 0 degree, and note the reading of SIMULATOR A.			0 ±0.7 degree
		Repeat cw at 30-degree intervals.			SIMULATOR A agrees with the compass card within ±1.0 degree.
		Starting at 0 degree, repeat ccw at 90-degree intervals, noting the reading of SIMULATOR A.			SIMULATOR A agrees with the compass card within ±1.0 degree.
2.4	Compass flag test		UUT POWER 26 VAC	OFF	HDG flag in view.
			UUT POWER 26 VAC	ON	HDG flag out-of-view.
			UUT POWER 28 VDC	OFF	HDG flag in view.
			UUT POWER 28 VDC	ON	HDG flag out-of-view.
3.0	Compass bootstrap				
3.1	Preliminary	Connect a dmm (set for ac volts) to BOOTSTRAP test set jacks X (high) and Y (low).	SOURCE A		
			MODE	VAR	
			OUTPUT	2	
			SOURCE B		
			MODE	0° REF	
			OUTPUT	4	
			BOOTSTRAP		
			H-C	ON	
			SELECT	1	
3.2	Accuracy	Rotate SIMULATOR A to near 0 degree to obtain best null (70 mV max).			The pointers are not affected by compass card movement. 0 ±1.5 degrees.
		Repeat for the following test points and SIMULATOR A angles:			
		Y-Z 60°			60 ±2.0 degrees
		X-Z 120°			120 ±2.0 degrees
		X-Y 180°			180 ±2.0 degrees
		Y-Z 240°			240 ±2.0 degrees
		X-Z 300°			300 ±2.0 degrees
3.3 (Cont)	Phasing	Connect oscilloscope X input to 978F-2S SIMULATOR B transmitter H (high) and C	SOURCE A		
			MODE	VAR	
			OUTPUT	2	

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
3.3 (Cont)		(low). Connect oscilloscope Y input to 970E-1 BOOTSTRAP H (high) and C (low). Connect 978F-2S SIMULATOR B transmitter X, Y, Z to 970E-1 BOOTSTRAP X, Y, Z respectively.	SOURCE B MODE OUTPUT **Note** OUTPUT to 4 isolates SIMULATOR B from the 332C-10 BOOTSTRAP H-C SELECT	 VAR 4 OFF 1	
		Set SIMULATOR A and SIMULATOR B to the same bearing.			An in-phase waveform is displayed. If an out-of-phase waveform is displayed, compass bootstrap transmitter B6 is set 180° out of phase.
4.0	ADF 1 pointer				
4.1	Preliminary	Select ADF on the RMI pushbuttons for the yellow (ADF 1) and green (ADF 2) pointers.	SOURCE A MODE OUTPUT SOURCE B MODE NORM/ PARALLEL OUTPUT DISCRETE INPUTS 7	 VAR 2 0° REF NORM 2 ON	
4.2	Compass interaction	Rotate SIMULATOR A cw 360 degrees.			The pointers are not affected by compass card movement.
		Rotate SIMULATOR B cw 360 degrees.	SOURCE A MODE SOURCE B MODE	 0° REF VAR	Compass card and green pointer are not affected by yellow pointer movement.
4.3	Accuracy	Rotate SIMULATOR B to align the yellow pointer precisely at 0 degree, and note the reading of SIMULATOR B.			180 ±1.5 degrees
(Cont)		Repeat at 30-degree intervals cw, ending at 330 degrees.			The reading of SIMULATOR B differs from the yellow pointer 180 ±2.0 degrees.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
4.3 (Cont)		Repeat at 90-degree intervals ccw, ending at 90 degrees.			The reading of SIMULATOR B differs from the yellow pointer 180 ±2.0 degrees.
5.0	ADF 2 pointer				
5.1	Preliminary	Select ADF on the RMI pushbuttons for the yellow (ADF 1) and green (ADF 2) pointers.	SOURCE A MODE OUTPUT SOURCE B MODE NORM/ PARALLEL OUTPUT DISCRETE INPUTS 7	 0° REF 2 VAR NORM 1 ON	
5.2	Compass interaction	Rotate SIMULATOR B cw 360 degrees.			Compass card and yellow pointer are not affected by green pointer movement.
5.3	Accuracy	Rotate SIMULATOR B to align the green pointer precisely at 0 degree, and note the reading of SIMULATOR B.			180 ±1.5 degrees
		Repeat at 30-degree intervals cw, ending at 330 degrees.			The reading of SIMULATOR B differs from green pointer 180 ±2.0 degrees.
		Repeat at 90-degree intervals ccw, ending at 90 degrees.			The reading of SIMULATOR B differs from the green pointer 180 ±2.0 degrees.
6.0	ADF interaction				
6.1	Preliminary	Select ADF on the RMI pushbuttons for the yellow (ADF 1) and green (ADF 2) pointers.	SOURCE A MODE OUTPUT SOURCE B MODE NORM/ PARALLEL OUTPUT DISCRETE INPUTS 7	 0° REF 2 VAR PARAL-LEL 1 ON	
6.2 (Cont)	Pointer track	Slowly rotate SIMULATOR B cw 360 degrees.			The reading of the yellow pointer is equal to the

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
6.2 (Cont)					green pointer within ±2.0 degrees during rotation.
6.3	Accuracy	Rotate SIMULATOR B to align the yellow and green pointers precisely at 0 degree, and note the reading of SIMULATOR B.			180 ±1.5 degrees
		Repeat at 30-degree intervals cw, ending at 330 degrees.			The reading of SIMULATOR B differs from the yellow and green pointers 180 ±2.0 degrees.
		Repeat at 90-degree intervals ccw, ending at 90 degrees.			The reading of SIMULATOR B differs from the yellow and green pointers 180 ±2.0 degrees.
7.0	VOR 1 pointer				
7.1	Preliminary	Select VOR on the RMI pushbutton for the yellow pointer (VOR 1).	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT SIN/COS SOURCE B SELECT DISCRETE INPUTS 7 8	 0° REF 2 VAR SIN/COS SQ WAVE 1 ON ON	The yellow pointer annunciator points to VOR.
7.2	Accuracy	Rotate SIMULATOR B to align the yellow pointer precisely at 0 degree, and note the reading of SIMULATOR B.			0 ±1.5 degree
		Repeat at 30-degree intervals cw, ending at 330 degrees.			The reading of SIMULATOR B is equal to the yellow pointer within ±2.0 degrees.
7.3	Compass track	Set switches as described at the right, then rotate SIMULATOR A cw 360 degrees, noting the position of the yellow VOR pointer relative to compass card rotation.	SOURCE A MODE SOURCE B MODE	 VAR 0° REF	The yellow pointer remains fixed, ±2.0 degrees.
7.4 (Cont)	Parking accuracy (ILS mode)	Set switches as described at the right, then rotate SIMULATOR A to 180 degrees, SIMULATOR B to 90 degrees.	SOURCE B MODE	 VAR	The yellow VOR pointer points to the left (90-degree position on the compass card).

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
7.4 (Cont)		Set DISCRETE INPUTS 1 to ON, and observe the VOR pointer.	DISCRETE INPUTS 1	ON	The yellow pointer rotates quickly to right (270-degree position on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 1 to OFF, and observe the VOR pointer.	DISCRETE INPUTS 1	OFF	The yellow pointer rotates left (90 degrees on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
7.5	Parking accuracy (NAV flag)	Set DISCRETE INPUTS 8 to OFF, and observe the yellow VOR pointer.	DISCRETE INPUTS 8	OFF	The yellow pointer rotates to 270 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 8 to ON, and observe the yellow VOR pointer.	DISCRETE INPUTS 8	ON	The yellow pointer rotates to 90 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set SIMULATOR A at 0 degree. Select ADF on the RMI pushbutton for the yellow pointer.	DISCRETE INPUTS 8	OFF	The yellow pointer annunciator points to ADF.
8.0	VOR 2 pointer				
8.1 (Cont)	Preliminary	Select VOR on the RMI pushbutton for the green pointer (VOR 2).	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT SIN/COS SOURCE B SELECT	 0° REF 2 VAR SIN/COS SQ WAVE 2	The green pointer annunciator points to VOR.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
8.1 (Cont)			DISCRETE INPUTS 7 9	 ON ON	
8.2	Accuracy	Rotate SIMULATOR B to align the green pointer precisely at 0 degree, and note the reading of SIMULATOR B.			0 ±1.5 degree
		Repeat at 30-degree intervals cw, ending at 330 degrees.			The reading of SIMULATOR B is equal to the green pointer within ±2.0 degrees.
8.3	Compass track	Set switches as described at the right, then rotate SIMULATOR A cw 360 degrees, noting the position of the green VOR pointer relative to compass card rotation.	SOURCE A MODE SOURCE B MODE	 VAR 0° REF	The green pointer remains fixed, ±2.0 degrees.
8.4	Parking accuracy (ILS mode)	Set switches as described at the right, then rotate SIMULATOR A to 180 degrees and SIMULATOR B to 90 degrees.	SOURCE B MODE	 VAR	The green VOR pointer points to the left (90-degree position on the compass card).
		Set DISCRETE INPUTS 2 to ON, and observe the VOR pointer.	DISCRETE INPUTS 2	 ON	The green pointer rotates quickly to the right (270-degree position on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 2 to OFF, and observe the VOR pointer.	DISCRETE INPUTS 2	 OFF	The green pointer rotates left (90 degrees on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
8.5	Parking accuracy (NAV flag)	Set DISCRETE INPUTS 9 to OFF, and observe the green VOR pointer.	DISCRETE INPUTS 9	 OFF	The green pointer rotates to 270 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
(Cont)		Set DISCRETE INPUTS 9 to ON, and observe the green VOR pointer.	DISCRETE INPUTS 9	 ON	The green pointer rotates to 90 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
8.5 (Cont)		Set SIMULATOR A at 0 degree. Select ADF on the RMI push-button for the green pointer.	DISCRETE INPUTS 9	 OFF	 The green pointer annunciator points to ADF.
9.0	VOR interaction				
9.1	Preliminary	Select VOR on the RMI push-buttons for the yellow (VOR 1) and green (VOR 2) pointers.	SOURCE A MODE NORM/ PARALLEL OUTPUT SOURCE B MODE NORM/ PARALLEL OUTPUT SIN/COS SOURCE A SOURCE B SELECT DISCRETE INPUTS 7 8 9	 0° REF NORM 2 VAR NORM SIN/COS TRACK B SQ WAVE 1 ON ON ON	
9.2	Pointer track	Rotate SIMULATOR B cw 360 degrees.			The reading of the yellow pointer is equal to the green pointer within ±2.0 degrees during rotation.
9.3	Accuracy	Rotate SIMULATOR B to align the yellow and green pointers precisely at 0 degree, and note the reading of SIMULATOR B.			0 ±1.5 degrees
		Repeat at 30-degree intervals cw, ending at 330 degrees.			The reading of SIMULATOR B is equal to the yellow and green pointer within ±2.0 degrees.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
9.4	Compass track	Set switches as described at the right, then rotate SIMULATOR A cw 360 degrees, noting the position of the yellow and green pointers relative to compass card rotation.	SOURCE A MODE SOURCE B MODE	 VAR 0° REF	The yellow and green pointers remain fixed, ±2.0 degrees.
9.5	Parking accuracy (ILS mode)	Set switches as described at the right, then rotate SIMULATOR A to 180 degrees and SIMULATOR B to 90 degrees. **Note** 970E-1 28-V dc source must be capable of delivering at least 1.5 A.	SOURCE B MODE	 VAR	The yellow and green pointers point to the left (90-degree position on the compass card).
		Set DISCRETE INPUTS 1 to ON, and observe the VOR pointer.	DISCRETE INPUTS 1	 ON	The yellow pointer rotates quickly to right (270-degree position on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 1 to OFF, and observe the VOR pointer.	DISCRETE INPUTS 1	 OFF	The yellow pointer rotates left (90 degrees on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 2 to ON, and observe the VOR pointer.	DISCRETE INPUTS 2	 ON	The green pointer rotates quickly to the right (270-degrees position on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 2 to OFF, and observe the VOR pointer.	DISCRETE INPUTS 2	 OFF	The green pointer rotates left (90 degrees on the compass card). Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	K 970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
9.6	Parking accuracy (NAV flag)	Set DISCRETE INPUTS 8 to OFF, and observe the yellow VOR pointer.	DISCRETE INPUTS 8	OFF	The yellow pointer rotates to 270 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 8 to ON, and observe the yellow VOR pointer.	DISCRETE INPUTS 8	ON	The yellow pointer rotates to 90 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 9 to OFF, and observe the green VOR pointer.	DISCRETE INPUTS 9	OFF	The green pointer rotates to 270 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set DISCRETE INPUTS 9 to ON, and observe the green VOR pointer.	DISCRETE INPUTS 9	ON	The green pointer rotates to 90 ±4 degrees on the compass card. Pointer oscillations must stay within ±70 degrees and damp out within 1.5 s.
		Set SIMULATOR A at 0 degree. Select ADF on the RMI push-buttons for the yellow and green pointers.	DISCRETE INPUTS 8 9	OFF OFF	
10.0	Flag Tests				
10.1	Preliminary		SOURCE A MODE SOURCE B MODE	0° REF 0° REF	
10.2	In view	Set DISCRETE INPUTS 7 to OFF, and observe the RMI flag.	DISCRETE INPUTS 7	OFF	Flag in view.

Table 2-1. 332C-10 RMI Performance Tests (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
10.3	Out of view	Set DISCRETE INPUTS 7 to ON, and observe the RMI flag.	DISCRETE INPUTS 7	 ON	Flag out of view.
11.0	Lighting				
	-001, -003, -005, -010 status	Tilt the RMI up, and observe lamps at top of lighting wedge.	UUT LIGHTING POWER +28 VDC	 ON	Four lamps are lit.
	-002, -004, -006, -008, -011 status	Tilt the RMI up, and observe the lamps above the lighting wedge.	UUT LIGHTING POWER 5VDC	 ON	Four lamps are lit.

Table 2-2. 332C-10 RMI Alignment.

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
1.0	Compass servo alignment				
1.1	Preliminary	Slowly rotate SIMULATOR A and observe the compass card. Stop SIMULATOR A at exactly 0 degree.	SOURCE A MODE OUTPUT	 VAR 2	The compass card should follow the SIMULATOR A with a fixed error. Heading flag in view.
1.2	Alignment	Loosen the synchro clamps on B5 and adjust until the compass card is centered exactly under the index mark. Tighten the locking screws.	SOURCE A MODE	 0° REF	
1.3	Checkout	Rotate SIMULATOR A to 0, 90, 180, and 270 degrees.	SOURCE A MODE	 VAR	SIMULATOR A agrees with compass card within ±1.0 degree.
		Note Select A1R23 from the list of resistors in the parts list to produce the smoothest operation of the compass card. Refer to SB 7 and SIL 1-77.			

ADDENDUM 4
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 2-15
in the Maintenance section of the 332C-10 instruction book.

This addendum sheet is issued to include 332C-10 CPN 622-0555-007 in Table 2-1, step 11.0, the lighting performance test. Add -007 to step 11.0 in the DESCRIPTION column, along with -002, -004, -006, -008, and -011 status units.

Table 2-2. 332C-10 RMI Alignment (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
2.0	Compass bootstrap alignment				
2.1	Preliminary	Connect the dmm (set for ac volts) to bootstrap test set jacks X (high) and H (low). Voltmeter must be floating.	SOURCE A MODE OUTPUT SOURCE B OUTPUT BOOTSTRAP H-C SELECT	 0° REF 2 4 ON 1	Heading flag in view.
2.2	Coarse adjustment	Loosen compass bootstrap (B6) synchro clamps and rotate until the voltage reads 37 V ac maximum. Tighten clamps.			
2.3	Fine adjustment	Disconnect the dmm (set for ac volts) and connect it to test set jacks X (high) and Y (low). Voltmeter must be floating.			
		Loosen the synchro clamps securing B6 and rotate (not more than 35 degrees) until a null is achieved on dmm.			Null is 70 mV ac maximum.
2.4	Checkout	Perform test 3.0 of table 2-1 to check the performance of the compass bootstrap.			
3.0	ADF 1 pointer alignment				
3.1	Preliminary	Select ADF on RMI pushbutton for the yellow pointer. Slowly rotate SIMULATOR B 180 degrees cw, and observe the yellow pointer.	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT	 0° REF 4 VAR 2	The pointer rotates smoothly in the same direction as the source, and there is no interaction between the yellow and green pointers. Heading flag in view.

Table 2-2. 332C-10 RMI Alignment (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
3.2	Alignment	Set SIMULATOR B to 0 degree. Loosen the set-screws on the yellow pointer shaft. Point the yellow pointer exactly to 180 degrees. Tighten the set-screws.	SOURCE A MODE OUTPUT	 0° REF 2	The yellow pointer should point at 180 ±0.5 degrees. The damping washer on the yellow pointer shaft is free to rotate with approximately 0.020-inch side-play.
3.3	Checkout	Perform tests 4.0 and 6.0 of table 2-1 to check the performance of ADF pointer 1.			
4.0	ADF 2 pointer alignment				
4.1	Preliminary	Select ADF on RMI pushbutton for the green pointer. Slowly rotate SIMULATOR B 180 degrees cw, and observe the green pointer.	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT	 0° REF 4 VAR 1	The pointer rotates smoothly in the same direction as the source and there is no interaction between the yellow and green pointers. Heading flag in view.
4.2	Alignment	Set SIMULATOR B to 0 degree. Loosen the set-screws on the green pointer shaft. Point the green pointer exactly to 180 degrees. Tighten the setscrews.	SOURCE A MODE OUTPUT	 0° REF 2	The green pointer should point at 180 ±0.5 degrees. The damping washer on the green pointer shaft is free to rotate with approximately 0.020-inch side-play.
4.3	Checkout	Perform tests 5.0 and 6.0 of table 2-1 to check the performance of ADF pointer 2.			
5.0	VOR 1 pointer alignment				
5.1 (Cont)	Preliminary	Connect the dmm (set for dc) between the 28VDC CURRENT red (high) and black (low) jacks. 100 mV dc is equal to 1 A.	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT	 0° REF 4 VAR SIN/COS	Heading flag in view.

Table 2-2. 332C-10 RMI Alignment (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
5.1 (Cont)			SIN/COS SOURCE B SELECT DISCRETE INPUTS 8	 SQ WAVE 1 ON	
5.2	Current check	***Caution*** In the following step, current must not exceed 600 mA or 60 mV dc as read on the dmm. If current is too high, select ADF 1 immediately. Select VOR on the RMI pushbutton for the yellow pointer (VOR 1). Rotate SIMULATOR B slowly cw while observing current and yellow pointer movement.			Current is less than 600 mA within 2 seconds. If not, select ADF 1 and check for a circuit problem. The current must not exceed 600 mA dc, and the pointer follows the source smoothly.
5.3	Alignment	Set SIMULATOR B for precisely 0 degree. Loosen the synchro clamps holding B4 and adjust B4 until the yellow pointer points exactly at 0 degree. Tighten the synchro clamps.	SOURCE B MODE	 0° REF	The yellow pointer should point at 0 ±0.5 degree.
5.4	Checkout	Perform tests 7.0 and 9.0 of table 2-1 to check the performance of VOR pointer 1.			
6.0	VOR 2 pointer alignment				
6.1 (Cont)	Preliminary	Connect the dmm (set for dc) between the 28VDC CURRENT red (high) and black (low) jacks. 100 mV dc is equal to 1 A.	SOURCE A MODE OUTPUT SOURCE B MODE OUTPUT	 0° REF 4 VAR SIN/COS	Heading flag in view.

Table 2-2. 332C-10 RMI Alignment (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
6.1 (Cont)			SIN/COS SOURCE B SELECT DISCRETE INPUTS 8 9	 SQ WAVE 2 OFF ON	
6.2	Current check	***Caution*** In the following step current must not exceed 600 mA or 60 mV dc as read on the dmm. If current is too high, select ADF 2 immediately. Select VOR on the RMI push-button for the green pointer (VOR 2). Rotate SIMULATOR B slowly cw while observing current and green pointer movement.			Current is less than 600 mA within 2 seconds. If not, select ADF 2 and check for a circuit problem. The current must not exceed 600 mA dc, and the pointer follows the source smoothly.
6.3	Alignment	Set SIMULATOR B for precisely 0 degree. Loosen the synchro clamps holding B7, and adjust B7 until the green pointer points exactly at 0 degree. Tighten the synchro clamps.	SOURCE B MODE	 0° REF	The green pointer should point at 0 ±0.5 degree.
6.4	Checkout	Perform tests 8.0 and 9.0 of table 2-1 to check the performance of VOR pointer 2.			

Table 2-2. 332C-10 RMI Alignment (Cont).

STEP	DESCRIPTION	PROCEDURE	970E-1 TEST SET		RESULTS
			SWITCH	POSITION	
7.0	Yellow pointer switch alignment (Required on units with SB 4.)				
7.1	Preliminary	Disconnect 332C-10 from 970E-1. Select VOR on the RMI pushbutton for the yellow pointer.	UUT POWER 26 VAC 28 VDC	 OFF OFF	
7.2	Checkout	Slowly press the pushbutton while observing toggle switch S1 (49A), and the latch mechanism (63).			S1 is activated to ADF mode before the latch mechanism activates. If not, perform step 7.3.
7.3	Adjustment	Loosen the two adjustment securing screws (67). Slide the toggle switch pusher (66) slightly to the rear. Tighten the adjustment securing screws.			Repeat step 7.2.
8.0	Green pointer switch alignment (Required on units with SB 4.)				
8.1	Preliminary	Disconnect 332C-10 from 970E-1. Select ADF on the RMI pushbutton for the green pointer.	UUT POWER 26 VAC 28 VDC	 OFF OFF	
8.2	Checkout	Slowly press the pushbutton while observing toggle switch S2 (50A), and the latch mechanism (63).			S2 is activated to VOR mode before the latch mechanism activates. If not, perform step 8.3.
8.3	Adjustment	Loosen the two adjustment securing screws (67). Slide the toggle switch pusher (66) slightly to the rear. Tighten the adjustment securing screws.			Repeat step 8.2.

2.4 TROUBLESHOOTING

Troubleshooting should be performed after careful observation of 332C-10 performance. Record pointer readings and response times observed during testing for reference during troubleshooting. Based on observed and recorded data, attempt to isolate the malfunction to a particular area.

Refer to table 2-3 for 332C-10 pin functions. Certain general procedures may be followed in isolating an indicator malfunction. First, check for mechanical problems. This can be done by removing the dust cover and inspecting for loose gears on shafts, binding gears, defective bearings, foreign matter in moving parts, loose pointer, broken or damaged gear teeth, solder splatter, etc.

If the malfunction is determined to be electrical, trace the circuit to isolate the malfunction to the component level. To make contact with test points on circuit boards, penetrate the urethane coating with the test probe.

Caution

Ensure that the test probe contacts only the point under test. The shorting of adjacent contacts could cause damage to the unit.

2.5 DISASSEMBLY

Do not disassemble unless absolutely necessary and then only to the extent required for repair or testing. Procedures are in order of disassembly from the highest assembly to the next lower assemblies to the major parts. Refer to Collins Electromechanical Overhaul Manual (Collins part number 523-0757895) for disassembly of motors, synchros, and meters.

Note

All numbers in parentheses refer to item numbers on the exploded views in the illustrated parts section of this instruction book.

2.5.1 Precautions and General Techniques

Caution

Do not remove the dust cover of the equipment unless it is in a dust-free area.

Carefully note the order of disassembly to ensure correct reassembly, and to ensure proper replacement, mark all electrical leads before they are disconnected.

Use Glyptal thinner (Collins part number 005-0165-000) to loosen Glyptal.

Table 2-3. 332C-10 RMI Pin Function Chart.

PIN	FUNCTION	PIN	FUNCTION
J1-a	26-V ac heading power	J1-D	26 V ac, ADF no 1
b	27.5-V dc/26-V ac power common	E	(Spare)
c	Compass monitor +28 V dc	F	Sine θ
$\overline{d}$	X	G	Cos θ gnd } VOR no 1
e	Y } RMI compass bootstrap	H	Cosine θ
f	Z	J	H 5-V dc/5-V ac lighting power
g	H } 26-V ac compass bootstrap	K	(Spare)
h	C	L	X
j	H } 27.5-V dc RMI power	M	Y } bearing data, ADF no 2
$\overline{k}$	C	N	Z
l	(Spare)	P	26 V ac, ADF no 2
$\overline{m}$	RMI chassis ground	R	(Spare)
n	H 27.5-V dc/26-V ac lighting power	S	Sine θ
p	C lighting power common	T	Cos θ gnd } VOR no 2 (dual VIR-30)
$\overline{q}$	VOR/LOC super flag	U	Cosine θ
$\overline{r}$	Delayed ILS mode	V	26-V ac, 400-Hz VOR power
s	VOR/LOC super flag (dual VIR-30)	W	(Spare)
$\overline{t}$	Delayed ILS mode (dual VIR-30)	X	X
A	X	Y	Y } compass
B	Y } bearing data, ADF no 1	Z	Z
C	Z		

2.5.2 *Procedure*

Use the following procedure and refer to exploded views in the illustrated parts list when disassembling the 332C-10.

Caution

Use extreme care when removing dust cover and when handling the equipment with the cover removed, to ensure that none of the delicate mechanisms are damaged.

a. Removal of Dust Cover
   1. Remove sealing tape from around unit.
   2. Loosen two Dzus fasteners (13) and remove dust cover (12).

b. Removal of Circuit Boards
   1. Remove sixteen screws (20, 21), eight washers (22), and four posts (23) which will enable the A1 board (18) and A2 board (19) to be removed.
   2. A3 board (23) is removed by removing eight screws (25, 26), four washers (27), and four posts (28).

Note

Effective SB 6, step 2 of paragraph b becomes:

   2. A3 board (23) and A5 board (27B) are removed by removing eight screws (25, 26, 26A), four washers (27), four posts (28, 27C), and two spacers (27A).
   3. J1 (33) is removed by removing four nuts (34), four washers (35), and four screws (36).
   4. Remove plate A7 (43).

c. Removal of Lighting Assembly and Bezel

Caution

Lighting wedge (57) has a highly efficient antireflective coating on the surface. Careless handling can cause unrepairable damage to the surface. Do not handle the wedge with the fingers or hands; handle lighting wedges by the edges and only when necessary. Do not place the wedge on anything except a soft, lintless cloth.

   1. Remove access cover (6) and lamp assembly (7) by removing two screws (8).
   2. Remove switches S1 (49), S2 (50), S3 (51), and S4 (52) by removing eight screws (53).
   3. Remove bezel (54) by removing four screws (53).
   4. Remove mask (56), lighting wedge (57), pad (58), and mask switch (60).
   5. Remove indicator no 1 (61) and indicator no 2 (62).

d. Removal of Actuator Assembly (63)
   1. Remove torsion spring (65).
   2. Remove eight screws (64).

Note

Effective for REV LTR R and above, step 2 of paragraph d becomes:

   2. Remove eight screws (64, 64A), four washers (64B), and two retainers (63A).
   3. Remove bracket (66).

Note

All of the following steps of paragraph d are effective for CI-73273 and above.

   4. Remove two screws (67), two lockwashers (68), two flat washers (69), ground lug (73), nut (74), and lockwasher (75).
   5. Remove switch actuator (76) by removing two nuts (77), lockwasher (78), two flat washers (79), two spacers (80), and two screws (81, 82).
   6. Remove shaft (83), spring (84), cam (85), lockwasher (86), flat washer (87), and plate (88).

e. Removal of Pointers and Gears

Note

Effective on part numbers and corresponding Rev Ltr's

618-4001-001	AG
002	W
003-006	M
007	P
008	M
010	K
011	F

and above, paragraph e., step 1 becomes:

1. Remove dial pointer (89). Tag and unsolder wires connected to heading flag (91). Remove two screws (91A) and two lockwashers (91B) that secure bracket (91C) to display plate (112). Use care when sliding shaft from slot of display plate. Remove bracket (91C) from heading flag (91) by removing screw (91A), lockwasher (91B) and flatwasher (91D).

1. Remove dial pointer (89) and heading flag (91) by removing two screws (90), collar (92), and lockring (93); loosen setscrew (94).

Note

Effective on part numbers and corresponding Rev Ltr's

618-4001-001	AF
002	V
003-006	L
007	M
008	L
010	J
011	E

and above, step 2 of paragraph e becomes:

2. Remove pointer no. 1 (97) by removing screw (97B) and shaft (97A). Bearing (98) not used.

2. Remove pointer no 1 (97) by removing bearing (98).
3. Remove pointer no 2 (99) and scale dial (100) by removing four screws (101).
4. Remove bearing (102) and bracket (103) by removing two screws (104).
5. Remove bearing (105), gear (106), name mask (107), and four screws (108).
6. Remove collar (109) and gear (110) by loosening two setscrews (111).
7. Remove display plate (112) by removing three screws (113) and three posts (114, 115).

Note

Effective newer style plate (171), add step 7A.

7A. Remove gear (118A), shim (118C), and two bearings (118B).
8. Remove three gears (119, 120, 121) by removing six bearings (122).
9. Remove four lockrings (124) and four gears (123).
10. Loosen eight setscrews (128) and remove four collars (126) and four gears (127).
11. Loosen two setscrews (131) and remove collar (129) and gear (130).

Note

Effective on part numbers and corresponding Rev Ltr's

618-4001-001	AF
002	V
003-006	L
007	M
008	L
010	J
011	E

and above, step 12 coupling (133) not used.

12. Loosen four setscrews (134) and remove two collars (132), a coupling (133), and a washer (135).
13. Loosen two setscrews (138) and remove three washers (140, 141), a lockring (139), a gear (137), and a collar (136).

f. Removal of Electronic Components Assembly A6 (142)

Remove three screws (144, 145), three posts (146), and three lockwashers (147).

g. Removal of Synchro Assemblies
1. Remove synchro assembly (148) that consists of synchro B3 (149, 150) by removing two screws (151) and two washers (152).
2. Remove synchros B4 (159, 160), B5 (156, 157, 158), B6 (163, 164), and B7 (161, 162) by removing nine screws (154) and nine clamps (153).
3. Remove five screws (166), five lockwashers (167), and five clamps (165).
4. Remove synchros B1 (168) and B2 (169).

2.6 CLEANING

Refer to table 2-4 for recommended cleaning materials.

Refer to table 2-5 for general cleaning procedures.

Table 2-4. Cleaning Materials.

MATERIAL	RECOMMENDED TYPE
Solvent	Turcosol or Stoddard solvent (P-D-680)
Cloth	Lintless cotton
Air jet	Air nozzle supplied with clean, dry, compressed air (28 lb/in^2 maximum)
Brush	Soft bristled

Unsealed ball bearings can be cleaned for inspection in a bearing-cleaning machine, using cleaning agents and procedures recommended by the manufacturer. Otherwise, clean bearings according to the following hand-washing procedures.

a. Clean bearings in an air-conditioned or air-filtered area. All tools, equipment, fixtures, and the area in general must be kept very clean. For air jets used in this area, compressed air from a source outside the area should be filtered and dehydrated. All cloths used in these procedures must be clean and free of lint. Solvent must be filtered through clean chamois skin or filter paper before use and periodically thereafter.

Caution

Permanent damage may result from forcibly spinning a bearing before it is thoroughly clean. Bearings must not be handled with bare hands during and after cleaning and preservation. Operators must wear rubber gloves or fingerstalls to avoid contaminating bearings with fingerprints. Keep handling to a minimum.

b. Insert a bearing holder securely into bore, and immerse bearing in a bath of cleaning solvent. Move bearing up and down several times to circulate solvent.
c. Remove bearing from bath, and direct air jet at side of bearing opposite from holder until dry; do not permit airflow to spin bearing.

Table 2-5. Cleaning Guide.

	PROCEDURE						
ITEM	REMOVE GREASE WITH RAGS	REMOVE FOREIGN MATTER WITH AIR JET AND SOFT-BRISTLED BRUSH	WIPE WITH LINTLESS CLOTH MOISTENED IN SOLVENT	APPLY SOLVENT SPARINGLY WITH SOFT-BRISTLED BRUSH	IMMERSE IN SOLVENT, SCRUB, AND RINSE IN CLEAN SOLVENT	DRY AND POLISH WITH DRY LINTLESS CLOTH	DRY WITH AIR JET
Cables			X				
Chassis and terminal boards		X					
Connectors	X	X					
Covers and shields			X			X	
Insulators and plastic parts	X	X					
Switches		X		X			X
Metal parts	X	X			X		X

d. Wash and dry bearing again as directed in steps b and c.
e. Repeat wash as prescribed in step b and, while washing, gently turn outer race with gloved finger to remove any foreign particles from balls, retainer, and races; then dry as directed in step c.
f. Demagnetize bearing by passing bearing through throat of a suitable demagnetizer once forward, then back and, while doing so, turn bearing slightly to rotate balls one or two revolutions.
g. Using a second bath of freshly filtered solvent, repeat washing and drying as in step e until bearing is completely free of all foreign matter (as ascertained by following step).
h. Gently turn outer race with gloved finger and see whether action is smooth all the way around, without resistance or grinding. Smooth action of dry bearing is an indication that bearing is clean.
i. Bake bearing for approximately one-half hour in suitable electric or infrared ventilated oven at approximately +43 °C (+110 °F) until all remaining solvent has evaporated.
j. Remove bearing from oven and place in clean, dry container for protection from dust, moisture, and handling while in transit to inspector. Attach a content identification slip to container, and forward immediately to inspection department.

Caution

Some inspection procedures require the cleaned bearing to be dry, that is, without lubrication. Because dry bearings are unprotected from corrosion caused by moisture, it is necessary that they be inspected immediately after cleaning.

Normally, sealed bearings require no cleaning or lubrication, since they are lubricated by the manufacturer for lifetime operation. It is recommended that these bearings be replaced if faulty; however, under certain circumstances, lubrication may be necessary. If lubrication is necessary, bearings must be thoroughly cleaned as follows:

a. Sealed ball bearings must be cleaned in a suitable bearing-cleaning machine, such as a spray cleaner or an ultrasonic installation. Follow the manufacturer's instructions for proper use of these machines.
b. If bearings are not to be lubricated, protect bearings from dust and moisture before inspection.

Caution

Permanent damage may result from forcibly spinning a bearing before it is thoroughly clean. Bearings must not be handled with bare hands during and after cleaning and preservation. Operators must wear rubber gloves or fingerstalls to avoid contaminating bearings with fingerprints. Keep handling to a minimum.

It is recommended that porous bronze bearings not be lubricated. However, under certain circumstances, lubrication may be desired. If bearings are not to be lubricated, wipe dust from items that contain porous bronze bearings with a clean, dry, lintless cloth. Protect from dust and moisture pending inspection.

2.7 INSPECTION

Examine the dust cover, chassis, and electrical components for damage or deterioration. Items to be checked and possible defects are listed in table 2-6.

Examine the equipment for mechanical damage or deterioration. Items to be checked and possible defects are listed in table 2-7.

The following inspection procedures apply to all bearings in this equipment. After the bearing has been cleaned, it is inspected to determine whether it is serviceable or is to be rejected because of a defect. It is recommended that defective bearings in this equipment be rejected and replaced with new bearings instead of reconditioning or replacing defective parts. If determined serviceable, the bearing is cleaned again. After final cleaning, it is properly lubricated for installation or treated with preservative for storage, as required. Depending upon its destination, it is then suitably wrapped and packaged. Whether the bearing is to be used immediately or stored, its packaging must be marked clearly on the outside with proper nomenclature to fully identify the contained bearing and its lubrication or preservative material.

Inspect porous bronze bearings for pitted, scarred, or scuffed load-bearing surfaces. Inspect for burns, corrosion, and any abnormal conditions occurring on load-bearing surfaces.

Table 2-6. Dust Cover, Chassis, and Electrical Components Inspection Guide.

ITEM	POSSIBLE DEFECT							
	MISCEL-LANEOUS	DEFOR-MATION	CORROSION, DIRT, OR FILM	LOOSE OR MISSING HARDWARE	CHARRING OR BLIS-TERING	FOREIGN MATTER	POOR SOLDER JOINTS	BROKEN LEADS
Circuit boards		X	X	X		X	X	X
Circuit compon-ents	Leakage		X		X		X	X
Controls	Freedom of move-ment			X				
Dust cover		X	X					
Electrical connectors/ test jacks		X	X	X		X	X	X
Indicators	Broken lens			X				
Insulators			X	X				
Main chas-sis		X	X	X		X		
Wiring	Insula-tion, lacing dress			X	X	X	X	X

Table 2-7. Hardware and Mechanical Parts Inspection Guide.

ITEM	POSSIBLE DEFECT								
	MISCEL-LANEOUS	PHYSICAL DAMAGE	DAMAGED HOLES OR THREADS	DEFOR-MATION/ DENTS	CORR-OSION	CHARRED/ BLIS-TERED	FOREIGN MATTER	LOOSE OR MISSING HARDWARE	FREEDOM OF MOVE-MENT
Bearings	Refer to inspection procedures listed in paragraph 7.				X		X		X
Castings and mach-ined parts		X	X		X		X	X	

Table 2-7. Hardware and Mechanical Parts Inspection Guide (Cont).

ITEM	POSSIBLE DEFECT								
	MISCEL-LANEOUS	PHYSICAL DAMAGE	DAMAGED HOLES OR THREADS	DEFOR-MATION/ DENTS	CORR-OSION	CHARRED/ BLIS-TERED	FOREIGN MATTER	LOOSE OR MISSING HARDWARE	FREEDOM OF MOVE-MENT
Gaskets, seals, and sealing tape	Tears, creases		X	X			X		
Gears	Damaged teeth, burrs caused by wear	X	X		X		X		X
Relays, solenoids, wafer switches	Contact operation or weak spring tension			X	X	X	X	X	X
Springs	Nicks causing stress concentra-tion				X				X
Synchros	Excessive play						X	X	X

The following inspection procedures apply to all ball bearings of the shielded type found in this equipment. After the bearing has been cleaned, it is inspected to determine whether it is serviceable, and the bearing is cleaned again. After final cleaning, lubricate for installation. Inspect bearings as outlined below:

Caution

All inspection requires the utmost cleanliness. Operators handling bearings must wear rubber gloves or fingerstalls to prevent corrosion from fingerprints.

a. Check for blue or purple discoloration (from overheating) of any part of bearing.
b. Check for tarnished outer surfaces (indicated by a light discoloration of highly finished surfaces).
c. Check for rust.
d. Check for pitted, scarred, scuffed, or balled surfaces of bearings, balls, and races.
e. Check for flat bearing balls, broken ball separators, flaking or spalling of load-carrying surfaces, and all other abnormal conditions.
f. Check for undersize od of bearing caused by creepage of the bearing in its housing.

In addition, check for undersized od (outside diameter) caused by creepage of outer race in its housing. This applies to all ball bearings with races that do not separate when the bearing is removed from companion parts. Also, check with a plug gage for oversize or defective bore caused by the inner race having turned on its shaft, and for excessive radial play. Use a suitable radial gage equipped with a dial indicator calibrated in ten-thousandths of an inch when checking radial play of each bearing. A noise inspection of this type of bearing can be made by mechanical rotation. If motor driven, the bearing should be lubricated lightly with recommended lubricant (see lubricant chart, table 2-8) and rotated at 500 to

ADDENDUM 4
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 2-29
in the Maintenance section of the 332C-10 instruction book.

This addendum sheet is issued to add a note to paragraph ***2.9.2 Procedures***, between subparagraphs ***a.*** and ***b.*** Note should read as follows:

Note

When installing B6 (163, 164), set spring tension by loading anti-backlash gear (123) from 4 to 8 teeth.

1000 r/min. A dental lathe can be used to drive the inner race while the outer race is held in gloved fingers. A used but serviceable bearing will develop a certain amount of noise. A light, uniform noise is to be expected, but loud noise, nonuniform noises such as clicks or buzzes, and vibration originating in the bearing indicate that it is unfit for service. If manually rotated, the bearing must be clean and dry (unlubricated), and the outer race should be spun with the gloved finger while the bearing is held by a bearing holder inserted in its bore. Hold the bearing in several positions while making the check, and listen for any vibration or intermittent resistance.

Table 2-8. Recommended Lubricants, Sealants.

LUBRICANT/ SEALANT/CLEANER	PART NUMBER
Alcoa thread lubricant	Collins 005-0318-000
Versilube G300 grease	Collins 005-0564-000
Green Glyptal	General Electric 2142
Loctite	Collins 005-0547-000
Locquic	Collins 005-0552-000
Freon TF	Collins 005-1185-000

2.8 REPAIR

Do not disassemble the unit unless absolutely necessary and then only to the extent required for repair or testing. If repair of subassemblies (circuit cards) is to be attempted, refer to Repair Instructions for Planar Assemblies (Collins part number 523-0763406). For disassembly and repair of motors, synchros, and meters, refer to Collins Electromechanical Components Overhaul Manual (Collins part number 523-0757895).

Faulty parts usually are detected by inspection or by testing. When a faulty part is repaired or replaced, the new part should be inspected and tested before installation.

The repair or replacement of worn, damaged, or defective parts involves standard repair techniques.

A wiring diagram should be sketched before removal of any part requiring unsoldering of several lead wires. This diagram should show any color coding or marking of wires and the approximate location and identity of the terminals to which the wires are connected. Instances where lacing is to be removed or where dress lead is important should also be shown on the sketch.

Whenever maintenance is performed upon the chassis cabling of this equipment, a check should be made to be certain that the cable is still wired correctly. This may be done by continuity checks throughout the cable.

2.9 ASSEMBLY

The order of assemblies starts with lower subassemblies and proceeds to the completed equipment. All necessary repairs or replacements should be made before beginning assembly procedures.

2.9.1 Precautions and General Techniques

Before soldering any part, refer to the notes on color coding, placement of leads, and wiring insulation made during disassembly. If not available, determine by examining a unit known to be correct.

Caution

Do not allow Glyptal to come into contact with any bearing.

Use green Glyptal (refer to table 2-8) to secure hardware when lockwashers or other means are not provided.

Install retaining rings and washers with the burr side away from bearing surface.

2.9.2 Procedures

a. Install synchro B1 (168) and B2 (169) into assembly (148) and secure with five clamps (165), with five lockwashers (167), and five screws (166).
b. Install synchros B4 (168, 160), B5 (156, 157, 158), B6 (163, 164), and B7 (161, 162) into assembly (148) and secure with nine clamps (153), with nine screws (154) and nine lockwashers (155).
c. Install synchro B3 (149, 150) into assembly (148) and secure with two screws (151) and two washers (152).
d. Install electronic components assembly A6 (142), assembly (148), and secure into place with three posts (146), one stud insert (143), three screws (144, 155), and three lockwashers (147).

e. Install a collar (136), a lockring (139), three washers (140, 141) and a gear (137) and tighten two setscrews (138).

Note

Effective on part numbers and corresponding Rev Ltr's

618-4001-001	AF
002	V
003-006	L
007	M
008	L
010	J
011	E

and above, paragraph f coupling (133) not used.

f. Install two collars (132), a coupling (133), a washer (135), and tighten four setscrews (134).
g. Install collar (129), gear (130), and tighten two setscrews (131).
h. Install four collars (126) and four gears (130). Tighten eight setscrews (128).
i. Install four gears (123) and four lockrings (124).

Note

Effective with newer style plate (171), install gear (118A), shim (118C), and two bearings (118B).

j. Install three gears (119, 120, 121) and six bearings (122).
k. Install display plate (112) and three posts (114, 115), and secure with three screws (113).
l. Install collar (109), gear (110), and secure by tightening two setscrews (111).
m. Install bearing (105), gear (106), and name mask (107). Secure with four screws (108).
n. Install bearing (102) and bracket (103). Secure with two screws (104).
o. Install pointer no 2 (99) and scale dial (100). Secure with four screws (101).

Note

Effective on part numbers and corresponding Rev Ltr's

618-4001-001	AF
002	V
003-006	L
007	M
008	L
010	J
011	E

and above, paragraph p becomes:

p. Install pointer no. 1 (97) by installing shaft (97A) and secure with screw (97B).

p. Install pointer no 1 and bearing (98).

Note

Effective on part numbers and corresponding Rev Ltr's

618-4001-001	AG
002	W
003-006	M
007	P
008	M
010	K
011	F

and above, paragraph 2.9.2, step q. becomes:

q. Install dial pointer (89). Mount bracket (91C) to heading flag (91) using screw (91A), lockwasher (91B) and flatwasher (91D). Mount bracket (91C) to display plate (112) using two screws (91A) and two lockwashers (91B). Use care when sliding shaft into slot of display plate. Solder wires to heading flag (91).

q. Install dial pointer (89), heading flag, collar (92), lockring (93), and secure with two screws (90). Tighten setscrew (94).
r. Assemble actuator assembly (63) as follows:

Note

Steps 1, 2, and 3 are effective CI-73273. Effective REV LTR R, step 5 is replaced by 5A.

1. Assemble plate (88), shaft (83), spring (84), cam (85), lockwasher (86) and flat washer (87).
2. Install switch actuator (76) and two spacers (80). Secure with two screws (81, 82), two

flat washers (79), a lockwasher (78), and two nuts (77).

3. Install two screws (67), two lockwashers (68), two flat washers (69), ground lug (73), nut (74), and lockwasher (75).
4. Install bracket (66) and torsion spring (65).
5. Secure assembled actuator assembly (63) to display plate and synchro assembly (148) with eight screws (64).

5A. Secure assembled actuator assembly (63) to display plate and synchro assembly (148) with eight screws (64, 64A), four washers (64B) and two retainers (63A).

s. Install indicator no 1 (61) and indicator no 2 (62). Four screws (64) may have to be loosened to accommodate installation of indicators. Retighten them after the indicators have been installed.
t. Install mask (56), lighting wedge (57), pad (58), mask switch (60), and bezel (54). Secure with four screws (53).
u. Install switches S1 (49), S2 (50), S3 (51), and S4 (52) and secure with eight screws (53).
v. Install lamp assembly (7), access cover (6), and secure with two screws (8).
w. Install plate A7 (43).
x. Install J1 (33) and secure with four screws (36), four washers (35), and four nuts (34).
y. Install A3 board (23) and secure with eight screws (25, 26), four washers (27), and four posts (28).

Note

Effective SB 6, step y is replaced by:

Install A3 board (23) and A5 board (27A) and secure with eight screws (25, 26, 26A), four washers (27), four posts (28, 27C), and two spacers (27A).

z. Install A1 board (18) and secure with eight screws (20, 21), eight washers (22), and four posts (23).
aa. Replace dust cover (12) and tighten two Dzus fasteners (13).
ab. Replace sealing tape around the unit to seal between the dust cover (12) and the bezel (54).

Collins 332C-10 Radio Magnetic Indicator

Rockwell International

diagrams

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list of illustrations

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List of Effective Pages

*The asterisk indicates pages changed, added, or deleted by the current change.

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*3-1 thru 3-2	15 May 85
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3-8 Blank	1 Jul 73
*3-9	15 May 85
3-10 Blank	1 Jul 73
*3-11	15 May 85
3-12 Blank	20 Feb 79

Record of Revisions

RETAIN THIS RECORD IN THE FRONT OF MANUAL.
ON RECEIPT OF REVISIONS, INSERT REVISED PAGES IN THE MANUAL, AND ENTER DATE INSERTED AND INITIALS.

REV NO	REVISION DATE	INSERTION DATE/BY	SB NUMBER INCLUDED	REV NO	REVISION DATE	INSERTION DATE/BY	SB NUMBER INCLUDED
1st Ed	1 Jul 73						
2nd Ed	15 Oct 74						
3rd Ed	1 Dec 77		1, 2, 3, 4, 5, 6				
4th Ed	20 Feb 79		SB5, Rev 1; SB 7, 8; SIL 1-76, 1-77, 1-78				
5th Ed	15 May 85		9				

section III
diagrams

3.1 CONFIGURATION CONTROL

Collins Avionics Group of Rockwell International has two methods for identifying the configuration status of a unit or subassembly. One method uses a 5-digit number that is referred to as the configuration identifier (CI). A typical 5-digit CI is as follows:

Whenever a change (process, mechanical, or electrical) occurs, the CI changes. For example, if a subassembly configuration status identified by CI-73125 has an electrical component change on the 5th day of the 14th fiscal week of fiscal year 1973, then the new CI appearing on the subassembly would be CI-73145.

Whenever possible, the identifier number is marked on the unit or subassembly approximately two spaces following the 10-digit part number. When this is not practicable, it is marked as close as possible to, but not immediately following, the part number. As an example, in a subassembly with high parts density, the 10-digit part number may appear on one side of the subassembly, the identifier number on the other.

Note

If two identifier numbers appear on the same subassembly, the numerically larger identifier would be used for configuration.

A 2-character maximum alphabetic identifier will be preceded by the letters REV (revision) and will start with — (dash) if no changes have been processed. The first change will be identified as A, the second as B, continuing through Y to AA, AB, and ultimately to YY (letters I, O, Q, S, X, and Z are not used).

Incorporation of design changes in a unit or subassembly that has been returned to Collins General Aviation Division for repair by a customer or that has been removed from the company's finished goods inventory is defined as rework. At the time of rework, the unit or subassembly will be marked again to reflect the design level to which it is being upgraded. This is done by leaving the original marking on the unit or subassembly and adding the letters RWK (rework) followed by the alphabetic identifier of the latest change incorporated in the rework. For example, unit one is marked REV B — RWK F, and unit two is marked REV F. This indicates that both units are at the design level of revision F, but unit one is reworked and they may not look exactly the same.

Note

A reworked unit may not contain all design changes made to the reworked identifier but does contain all changes required to make unit operation identical to a newly manufactured unit with the same identifier. Therefore, a unit reworked to a specific identifier may appear physically different from a newly manufactured unit with the same alphabetic identifier.

Only alphabetic identifiers that result in schematic changes are covered in this section. If a unit or subassembly has an identifier that alphabetically falls between identifiers on the schematic changes page up to and including the latest effectivity listed in paragraph 6.3, the electrical configuration is represented by the earlier identifier listed on the schematic changes page.

3.2 CONFIGURATION EFFECTIVITY

Refer to the schematic changes page preceding each subassembly schematic for any subassembly changes that may have occurred and the corresponding identifier covering each change.

Listed below are the units or subassemblies with the latest identifier (change) covered by this document.

UNIT/ SUBASSEMBLY	COLLINS PART NUMBER	LATEST EFFECTIVITY
332C-10 RMI	622-0555-001	AD
Indicator Subassembly	622-0555-002	U
	622-0555-003	M
	622-0555-004	M
	622-0555-005	K
	622-0555-006	K
	622-0555-007	H
	622-0555-008	H
	622-0555-010	J
	622-0555-011	D
Compass and 14-V dc Supply A1	609-4999-001	AD
Monitor and VOR 2 A2	609-4960-001	V
Square-Wave Driver and VOR 1 A3	609-4961-001	N
Square-Wave Driver and VOR 1 A3	618-1135-001	F
Lighting Module A4	618-4088-001	F
Lighting Module A4	618-4088-002	F
Switch Plate A6	618-4290-001	J
Monitor Card A5	601-4498-001	D

SCHEMATIC CHANGES

REVISION IDENTIFICATION	DESCRIPTION OF REVISION AND REASON FOR CHANGE	SERVICE BULLETIN	EFFECTIVITY
A1 (Sheet 3)	R200 and R201, 1Ω, added to A3 (609-4961-001) for transistor protection if a VOR signal is not received when in VOR mode.	SB 2	CI 72443 serno 97 and above
A2 (Sheet 2)	Added C8 for increased stability of compass servo amplifier.	SB 1	622-0555-001: serno 123 and above (CI 72516) 622-0555-002: serno 361 and above (CI 72516)
A3 (Sheets 1 and 2)	Deleted C5 from terminal 52 to E1 on A1, added C8 and C9 to A7, changed L1 from 10 mH to 100 μH and L2 from 82 to 100 μH on A7, replaced old A3 (609-4961-001) with new A3 (618-1135-001), changed intercard wiring from new A3 to associated cards A1, A6, and A7, and added sheet 3 to show old A3 (609-4961-001) circuit. This change prevents possibility of false lockup when driving both pointers from park position to a bearing about 180 degrees away.	SB 3	622-0555-001: serno 423 and above (CI 73414) 622-0555-002: serno 644 and above (CI 73414)
B1 (Sheets 2 and 3)	Replaced four leaf-spring switches, A6S1, A6S2, A6S3, A6S4, with two toggle switches to update 332C-10.	SB 4	622-0555-001: serno 677 and above 622-0555-002: serno 957 and above 622-0555-003, -004, -005, -006: all models

332C-10 RMI, Schematic Diagram
Figure 3-1 (Sheet A)

SCHEMATIC CHANGES

REVISION IDENTIFICATION	DESCRIPTION OF REVISION AND REASON FOR CHANGE	SERVICE BULLETIN	EFFECTIVITY
B2 (Sheet 2)	Changed A1R23 from 1.5 MΩ to 1.2 MΩ to adjust gain of new synchro B3 (CPN 230-0562-010), installed to eliminate step movements in the 332C-10.	SB 5	622-0555-001: serno 729 and above 622-0555-002: serno 963 and above 622-0555-003: serno 1518 thru 1578, 1598 and above 622-0555-004: serno 1863 thru 1933, 1948 thru 1961, 2030 and above 622-0555-005: serno 2114 and above 622-0555-006: serno 2084 and above
C1 (Sheet 1) (Cont)	Added circuit card A5 to prevent NAV sin/cos bearing signals from feeding through to the 26-V ac VOR bearing reference line when loss of 26-V ac VOR bearing reference power occurs.	SB 6	622-0555-001: serno 730 and above 622-0555-002: serno 964 and above 622-0555-003: serno 3594, 3601, 3612, 3629 and above 622-0555-004: serno 3694, 3707 and above

332C-10 RMI, Schematic Diagram
Figure 3-1 (Sheet B)

SCHEMATIC CHANGES

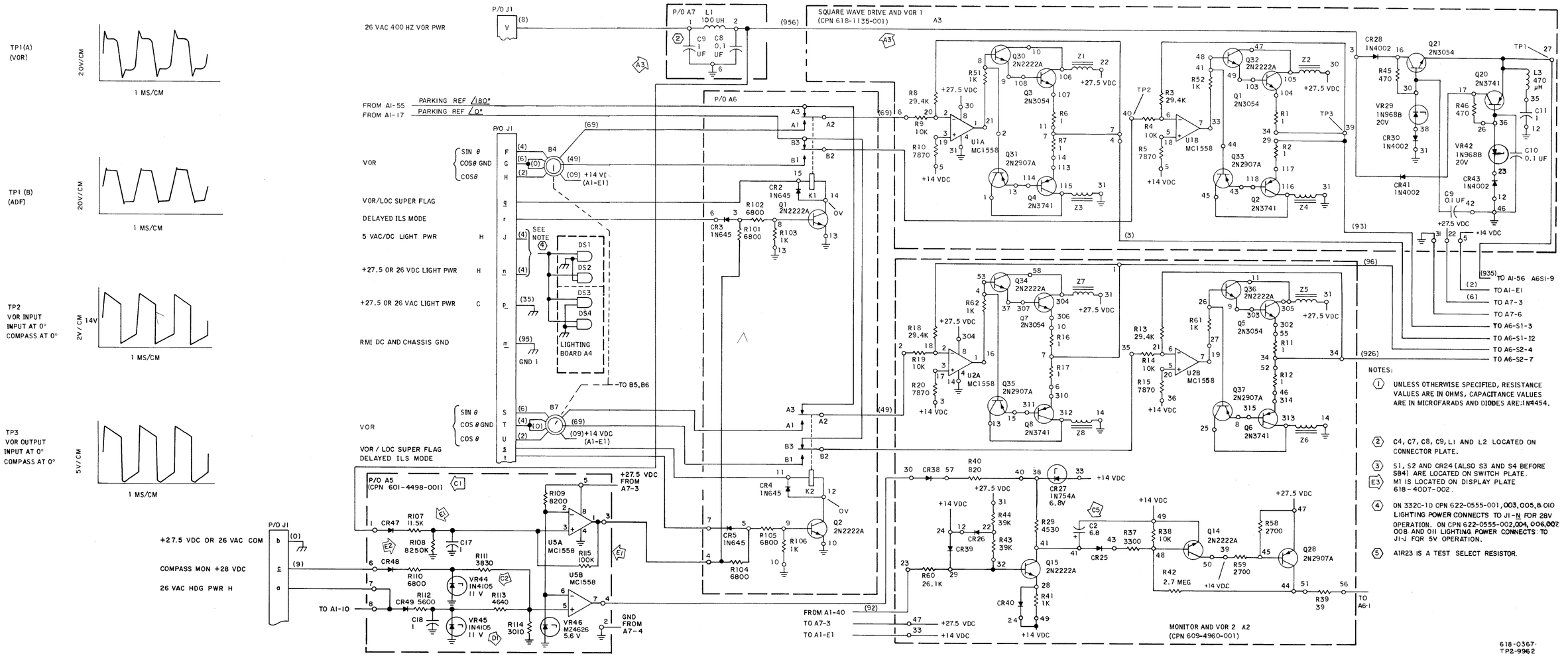
REVISION IDENTIFICATION	DESCRIPTION OF REVISION AND REASON FOR CHANGE	SERVICE BULLETIN	EFFECTIVITY
C1 (Cont)			622-0555-005: serno 3253 and above 622-0555-006: serno 4157 and above 622-0555-007: serno 3209, 3232, 3240 and above 622-0555-008: serno 2806 and above
C2 (Sheet 1)	Changed A5VR44 and A5VR45 from 1N758A to 1N4104 and A5VR46 from 1N752A to MZ4626 to eliminate the need for hand-picking diodes and to promote more reliable heading flag operation.	None	REV LTR P
C3 (Sheet 2)	A1R23 is a test select. Choose a value from the following list to provide the smoothest compass card action. 1.5 MΩ 745-0863-000 1.2 MΩ 745-0860-000 1.0 MΩ 745-0857-000 820 kΩ 745-0854-000	SIL-1-77	All
C4 (Sheet 2)	Added resistor A1R74, 8.66 kΩ, CPN 724-0639-850. Added resistor A1R75, 1.21 kΩ, CPN 724-0639-030. Added capacitor A1C21, 1800 pF, CPN 913-5019-110. Deleted capacitors A1C8 and A1C1, and changed A1R23 from 1.2 MΩ to 680 kΩ, CPN 745-0851-000. Changes were made to reduce wasted power.	None	Later production

332C-10 RMI, Schematic Diagram
Figure 3-1 (Sheet C)

SCHEMATIC CHANGES

REVISION IDENTIFICATION	DESCRIPTION OF REVISION AND REASON FOR CHANGE	SERVICE BULLETIN	EFFECTIVITY
C5 (Sheet 1)	Capacitor C2 changed from 3.3 to 6.8 μF to eliminate test selection of C2 and to improve compass flag operation.	None	Later production
D1 (Sheet 1)	Changed A5VR44 and A5VR45 from 1N4104 to 1N4105. A5R113 changed from 3830 to 4640. Changes improve heading flag operation and reliability.	8	
E1 (Sheet 1)	Changed A5R107 from 10 kΩ to 11.5 kΩ. Added resistor A5R115, 100 kΩ, CPN 705-1092-000, to improve 26 V ac monitor operation and reliability.	9	622-0555-003 Serno 10313 and above. 622-0555-007 Serno 11210 and above. All others Serno 12149 and above.
E2 (Sheet 1)	Changed A5R108 from 8200 Ω to 8.25 kΩ, to improve 26 V ac monitor operation.	9	Same as Rev Ident E1.
E3 (Sheet 2 and 3)	Changed M1 from A6 card to display plate. Changed CR24 from 1N645 to 1N4002 (CPN 353-6442-020). Changes made as part of product improvement.		Effective Rev Ltr's: 618- 4001-001 AG -002 W -003-006 M -007 P -008 M -010 K -011 F

332C-10 RMI, Schematic Diagram
Figure 3-1 (Sheet D)

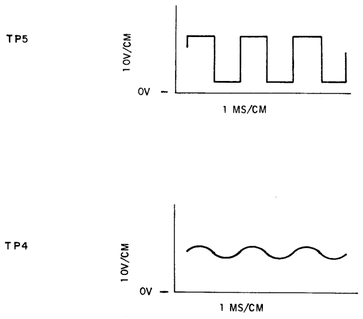


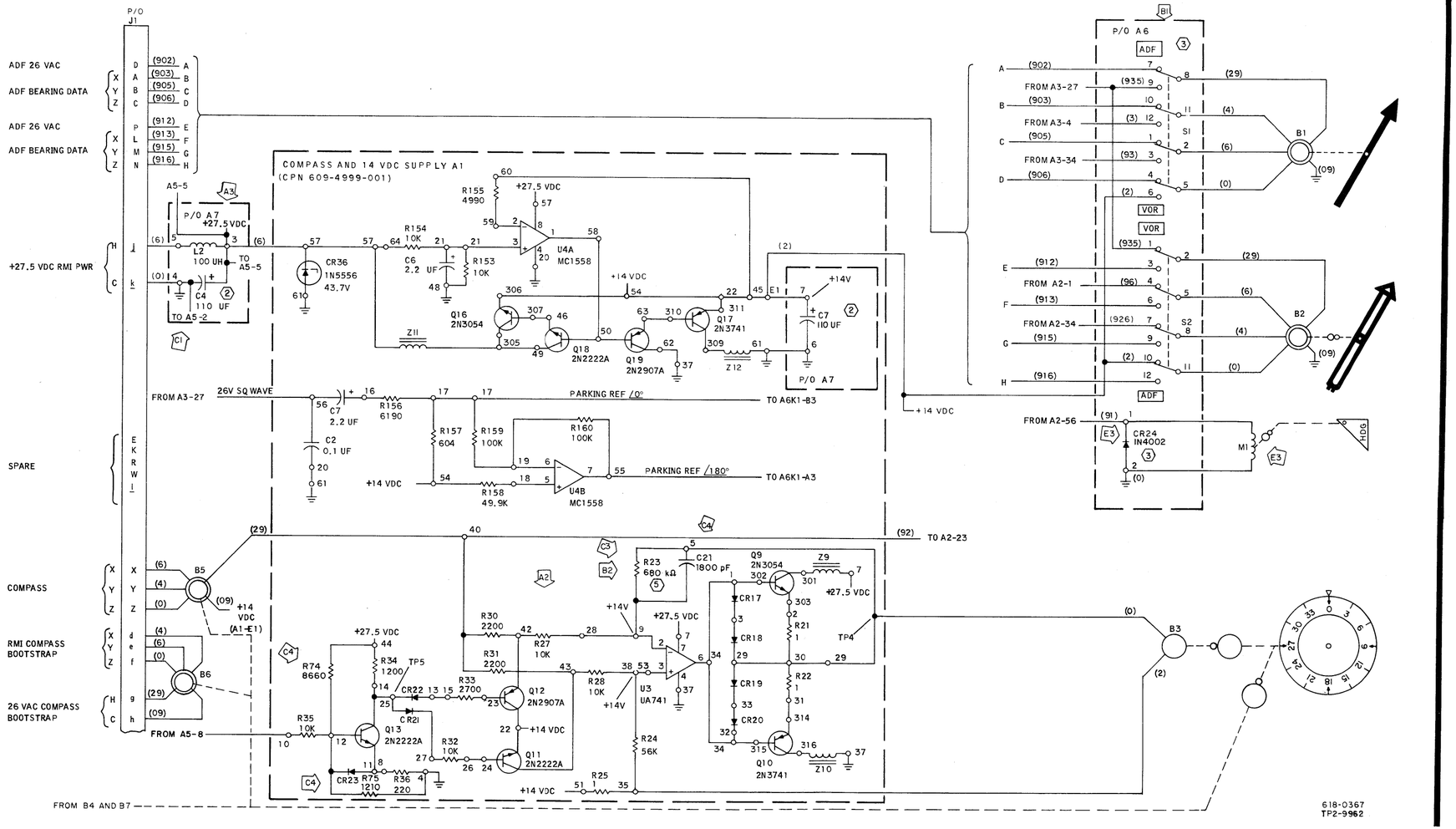
NOTES:

1. UNLESS OTHERWISE SPECIFIED, RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS AND DIODES ARE:1N4454.
2. C4, C7, C8, C9, L1 AND L2 LOCATED ON CONNECTOR PLATE.
3. S1, S2 AND CR24 (ALSO S3 AND S4 BEFORE S84) ARE LOCATED ON SWITCH PLATE.
E3. M1 IS LOCATED ON DISPLAY PLATE 618-4007-002.
4. ON 332C-10 CPN 622-0555-001,003,005,& 010 LIGHTING POWER CONNECTS TO J1-N FOR 28V OPERATION. ON CPN 622-0555-002,004,006,007 008 AND 011 LIGHTING POWER CONNECTS TO J1-J FOR 5V OPERATION.
5. A1R23 IS A TEST SELECT RESISTOR.

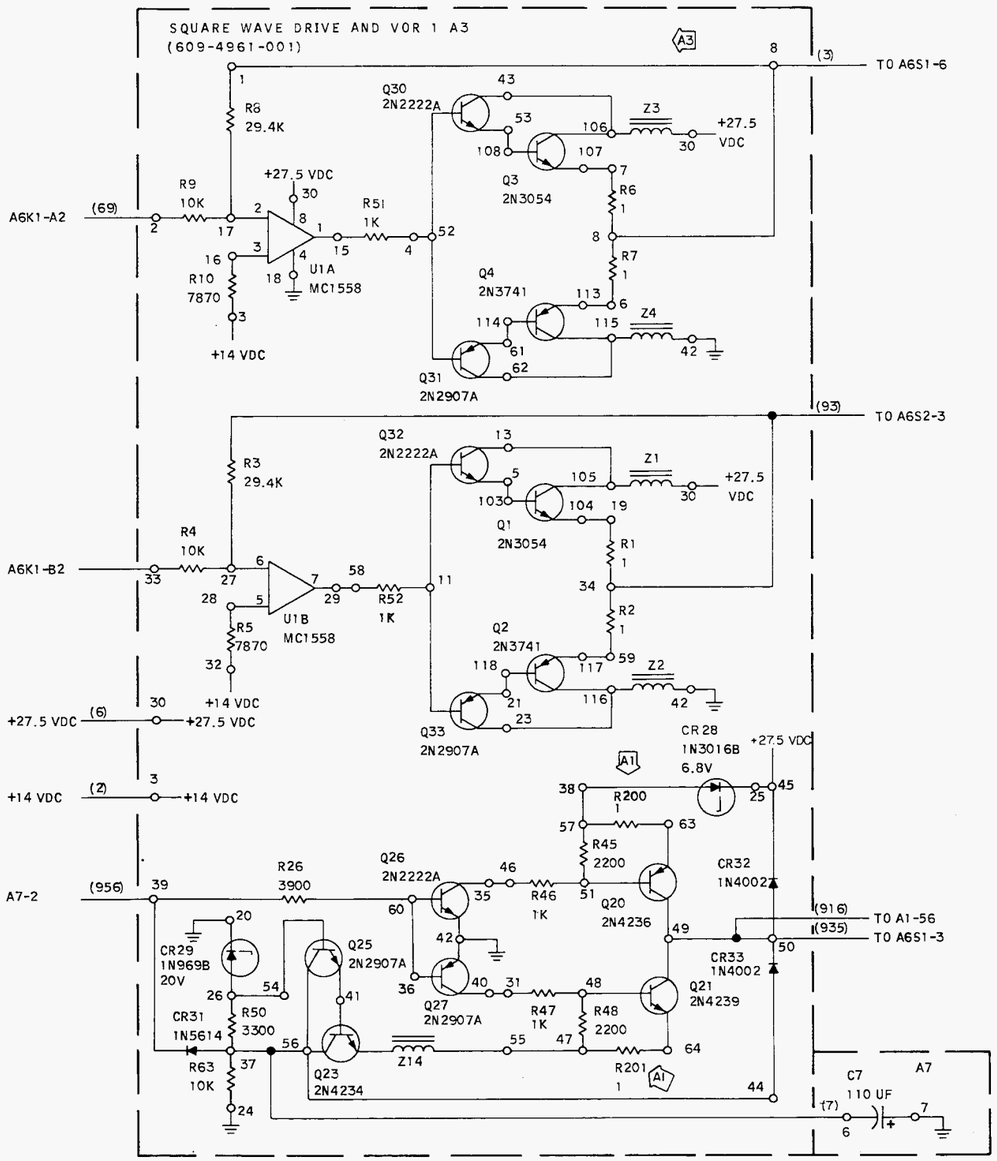
618-0367-TP2-9962

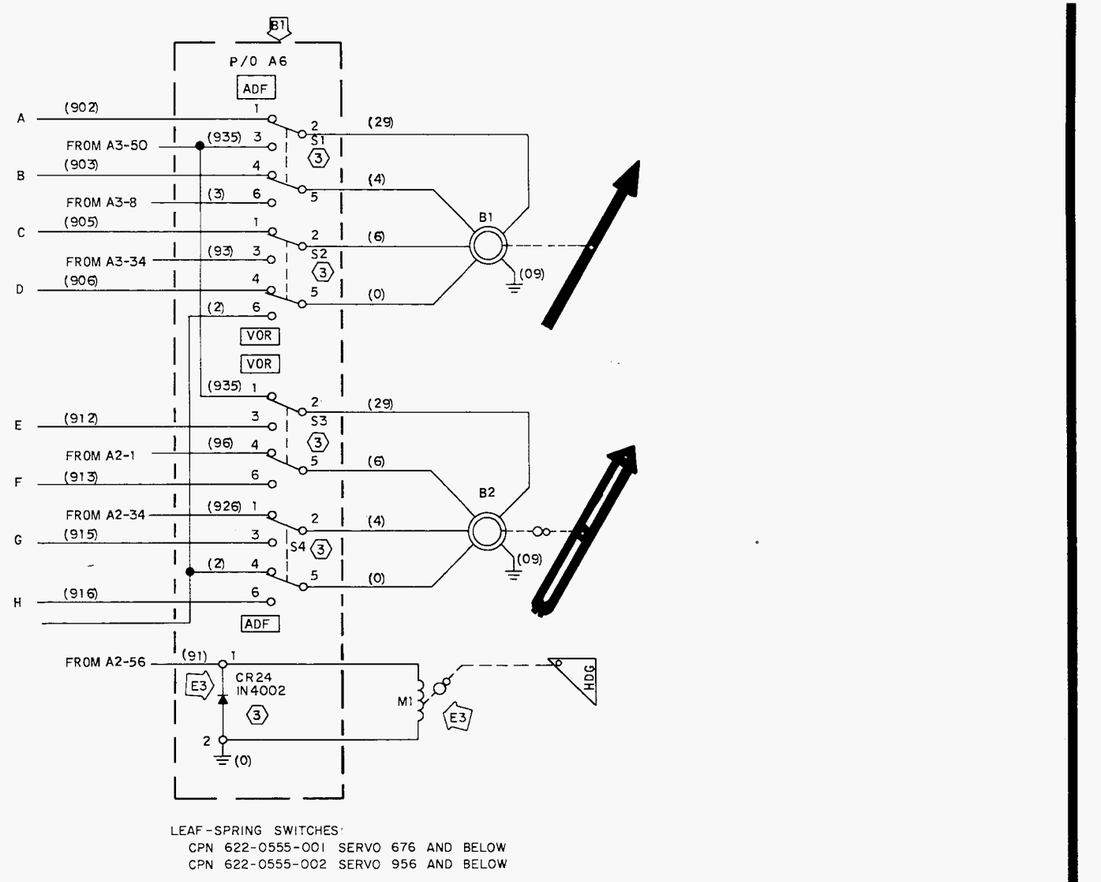
332C-10 RMI, Schematic Diagram
Figure 3-1 (Sheet 1 of 3)





332C-10 RMI, Schematic Diagram
Figure 3-1 (Sheet 2)





618-0367
TP2-9962

332C-10 RMI, Schematic Diagram
Figure 3-1 (Sheet 3)

Collins 332C-10 Radio Magnetic Indicator

Rockwell International

parts list

Collins General Aviation Division

Printed in USA

523-0764710-006118
6th Edition, 15 May 1985

list of illustrations

NOTICE: This section replaces fifth edition dated 20 February 1979.

List of Effective Pages

*The asterisk indicates pages changed, added, or deleted by the current change.

Page No	Issue
*Title	15 May 85
*List of Effective Pages	15 May 85
4-1 thru 4-3	20 Feb 79
*4-4 thru 4-5	15 May 85
4-6 Blank	1 Jul 73
*4-7 thru 4-44	15 May 85
*4-45 thru 4-46 Deleted	15 May 85

Record of Revisions

RETAIN THIS RECORD IN THE FRONT OF MANUAL.
ON RECEIPT OF REVISIONS, INSERT REVISED PAGES IN THE MANUAL, AND ENTER DATE INSERTED AND INITIALS.

REV NO	REVISION DATE	INSERTION DATE/BY	SB NUMBER INCLUDED	REV NO	REVISION DATE	INSERTION DATE/BY	SB NUMBER INCLUDED
1st Ed	1 Jul 73		None				
2nd Ed	15 Oct 74		None				
3rd Ed	1 Apr 75		None				
4th Ed	1 Sep 77		SB 6				
5th Ed	20 Feb 79		SB 5 REV 1, 7, 8; SIL 1-76, 1-77, 1-78				
6th Ed	15 May 85		9				

section IV
parts list

4.1 INTRODUCTION

4.1.1 General

The purpose of this parts list, prepared by Collins General Aviation Division of Rockwell International, is for identification, requisition, and issuance of parts.

Parts listed meet critical equipment design specification requirements. Use only part numbers specified in this parts list for replacement of parts.

4.1.2 Group Assembly Parts List

FIG - ITEM Column — Digits preceding the dash refer to figure numbers. Digits following the dash are item numbers assigned in sequence to correspond with item numbers on the illustrations.

PART NO Column — Listed are MIL standard, vendor, or Collins part numbers. Collins part numbering system consists of 10 digits as follows: a 3-digit family number, a 4-digit serial number, and a 3-digit dash number.

INDENT Column — Items are coded 1, 2, 3, etc, to indicate the relationship to the next higher assembly.

DESCRIPTION Column — Lists the noun name, modifier, descriptive information, federal manufacturer's code, reference designation, attaching part (AP), reference to other figures, and effectivities.

Attaching parts are identified by (AP) following the part or parts they attach.

Effectivities are identified by the following methods: MCN (Manufacturer Control Number) 101 and up; CI (Configuration Identifier) 5-digit number; REV (Revision Identifier) dash (-) denotes original, letter A first change, letter B second change, etc. One of the above identifiers is listed on each chassis and/or replaceable assembly. Service Bulletins are identified by SB 1, SB 2, etc.

USABLE ON CODE Column — Part variations within a group of equipment are indicated by a letter code (A, B, C, etc). Absence of a code indicates part applies to all models.

UNITS PER ASSY Column — Quantities specified are per item number. Letters AR denote the selection of parts as required. Letters RF refer to an assembly completely assembled on a preceding figure and illustration.

4.1.3 Numerical Index

PART NUMBER Column — Part numbers are listed in alphanumeric sequence.

FIG - ITEM Column — Digits preceding the dash refer to figure numbers. Digits following the dash are item numbers.

TTL REQ Column — Listed is the total quantity of parts or assemblies covered in the Group Assembly Parts List.

4.1.4 Reference Designation Index

REFERENCE DESIGNATION Column — Reference designations are listed in alphanumeric sequence.

FIG - ITEM Column — Digits preceding the dash refer to figure numbers. Digits following the dash are item numbers.

PART NUMBER Column — Part numbers listed are for items that have reference designations assigned.

4.1.5 How To Use This Parts List

To locate a part number if the assembly in which the part is used is known, turn to the List of Illustrations and find the page number for the assembly in which the part is used. Locate the part and its index number on the illustration and find the index number on the Group Assembly Parts List page to determine its description and part number.

To locate the illustration for a part if the part number is known, refer to the Numerical Index and find the part number. Turn to the Group Assembly Parts List and find the first figure and index number indicated in the Numerical Index for that part. If this figure shows the part in a section or system of the equipment other than the one desired, refer to the other figure numbers listed in the Numerical Index.

To locate the illustration for a part if the reference designation is known, refer to the Reference Designation Index and find the symbol; turn to the Group Assembly Parts List and find the figure and index number indicated in the index.

4.1.6 Manufacturer's Code, Name, and Address

CODE	MANUFACTURER'S NAME AND ADDRESS
A0473	Avery Label Co., Inc. Div. of Avery Adhesive Products, Inc. Peoria, IL 61600
01884	Sprague Electric Co. North Adams, MA 01247
02987	Bendix Corp. The Flight and Engine Instruments Div. South Montrose, PA 18843
03508	General Electric Co. Semi-Conductor Products Dept. Electronics Park Syracuse, NY 13201
04213	Caddell-Burns Mfg. Co., Inc. 40 E. 2nd St. Mineola, NY 11501
04713	Motorola, Inc. Semiconductor Products Div. 5005 E. McDowell Rd. Phoenix, AZ 85008
05088	Singer Company, The Kearfott Div. 1378 Main Ave. Clifton, NJ 07015
06989	Harowe Servo Controls, Inc. Westtown Rd. at Westchester Pk. West Chester, PA 19380
07263	Fairchild Semiconductor A Div. of Fairchild Camera and Instrument Corp. 464 Ellis St. Mountain View, CA 94042
07688	Joint Electron Device Engineering Council
07896	Jadaro Machine Products Garland, TX 75040
08289	Blinn, Delbert, Co., Inc., The 1678 E. Mission Blvd. Pomona, CA 91766
08664	Bristol Co. Div. of American Chain and Cable Co., Inc. 40 Bristol St. Waterbury, CT 06720
08719	Jay-El Products, Inc. 1859 W. 169th Gardena, CA 90247
08795	Rayclad Tubes, Inc. 300 Constitution Dr. Menlo Park, CA 94025
09353	C and K Components, Inc. 103 Morse St. Watertown, MA 02172
09922	Burndy Corp. Richards Ave. Norwalk, CT 06852
11502	TRW Electronic Components IRC Boone Div. Greenway Rd. Boone, NC 28607
12615	U.S. Terminals, Inc. 7504 Camargo Rd. Cincinnati, OH 45243
12639	Northfield Precision Instrument Corp. 4400 Austin Blvd. Island Park, NY 11558
13103	Thermalloy Co. P.O. Box 34829 2021 W. Valley ViewLane Dallas, TX 75234
14099	Semtech Corp. 652 Mitchell Rd. Newbury Park, CA 91320
16636	Indiana General Corp. Electro Mechanical Div. 517 W. Walnut St. Oglesby, IL 61348

CODE	MANUFACTURER'S NAME AND ADDRESS
17117	Electronic Molding Corp. 96 Mill St. Woonsocket, RI 02895
19054	Sunbeam Electronics, Inc. 1400 Commercial Blvd. Fort Lauderdale, FL 33310
21441	SR Engineering/Solenoid Research 834 Production Place Newport Beach, CA 92660
22921	Master Dynamics 916-22 E. California Ave. Sunnyvale, CA 94086
25140	Globe Industries Div. of TRW, Inc. 2275 Stanley Ave. Dayton, OH 45404
40920	Miniature Bearing Div. MPB Corp. Optical Ave. Precision Park Keene, NH 03431
43334	New Departure-Hyatt Bearings Div. General Motors Corp. Hayes Ave. Sandusky, OH 44870
49956	Raytheon Co. 141 Spring St. Lexington, MA 02173
56289	Sprague Electric Co. North Adams, MA 01247
70318	Allmetal Screw Products Co., Inc. 821 Steward Ave. Garden City, NY 11530
71279	Cambridge Thermionic Corp. 445 Concord Ave. Cambridge, MA 02138
71744	Chicago Miniature Lamp Works 4433 Ravenswood Ave. Chicago, IL 60640
72656	Indiana General Corp. Electronics Div. Crows Mill Rd. Keasby, NY 08832
72794	Dzus Fastener Co., Inc. 425 Union Blvd. West Islip, NY 11795
72962	Esna Div. of Amerace Corp. 2330 Vauxhall Rd. Union, NJ 07083
74545	Hubbell, Harvey, Inc. 584 Derby Milford Rd. Orange, CT 06477
76381	Minnesota Mining and Mfg. Co. 3M Center St. Paul, MN 55101
76665	National Lock Washer Div. Charter Wire 40 Haynes Somerville, NJ 08876
77045	Edison, Thomas A., Instrument Div. McGraw-Edison Co. of Fort Lauderdale, Fla. 1400 Commercial Blvd. Fort Lauderdale, FL 33310
77147	Patton-MacGuyer Co. Div. of Avid Corp. 17 Virginia Ave. Providence, RI 02905
77250	Pheoll Mfg. Co. Div. of Allied Products Corp. 5700 W. Roosevelt Rd. Chicago, IL 60650
79807	Wrought Washer Mfg. Co. 2100 S. Bay St. Milwaukee, WI 53207
80411	Robertshaw Controls Co. Arco Div. Route 71 at Stringham Rd. Columbus, OH 43216
81349	Military Specifications
81350	Joint Army-Navy Specifications
83086	New Hampshire Ball Bearings, Inc. Rt. 202 Peterborough, NH 03458

CODE	MANUFACTURER'S NAME AND ADDRESS
86197	Clifton Precision Div. Litton Systems, Inc. Marple at Broadway Clifton Heights, PA 19018
87034	Marco-Oak Industries, Inc. 207 S. Helena Anaheim, CA 92803
88818	Singer Co., The Kearfott Div. 1150 McBride Ave. Little Falls, NJ 07424
91314	Lewis Spring and Mfg. Co. 2652 W. North Ave. Chicago, IL 60647
91652	Donnelly Mirrors, Inc. 49 W. 3rd St. Holland, MI 49423
96906	Military Standards
98291	Sealectro Corp. 225 Hoyt Mamaroneck, NY 10544
98978	International Electronic Research Corp. 135 W. Magnolia Ave. Burbank, CA 91502
99378	Atlee Corp. 8 Gill St. Woburn, MA 01801

4.1.7 Usable on Codes

The following usable on codes have been assigned in this manual:

USABLE ON CODE	UNIT PART NUMBER	FIG-ITEM
A	622-0555-001	4-1-1
B	622-0555-002	4-1-1
C	622-0555-003	4-1-1
D	622-0555-004	4-1-1
E	622-0555-005	4-1-1
F	622-0555-006	4-1-1
G	622-0555-008	4-1-1
H	778-0975-001	4-1-63
J	618-4457-001	4-1-63
K	618-4457-002	4-1-63
L	622-0555-007	4-1-1
M	622-0555-010	4-1-1
N	622-0555-011	4-1-1

4.1.8 Reference Designation Prefixes

The following prefixes have been assigned in this manual:

PREFIX	UNIT PART NUMBER	FIG-ITEM
A1	609-4999-001	4-2-1
A2	609-4960-001	4-3-1
A3	609-4961-001	4-4-1
A3	618-1135-001	4-5-1
A4	618-4088-001	4-1-7
A4	618-4088-002	4-1-7
A5	601-4498-001	4-7-1
A6	618-4290-001	4-6-1
A7	618-4006-001	4-1-43

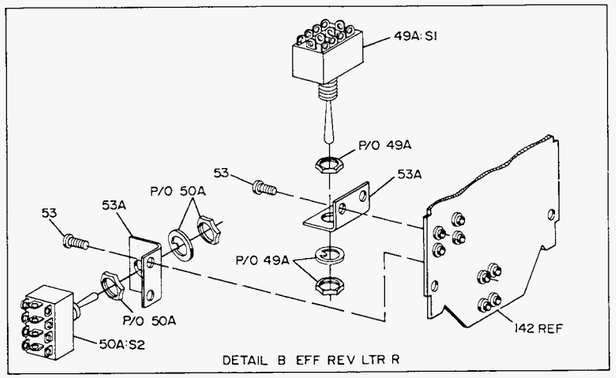
4.1.9 Configuration Identifiers

The following CI's/REV LTR's were used in compiling data for this manual:

CI/ REV LTR	UNIT PART NUMBER	FIG-ITEM
AD	622-0555-001	4-1-1
U	622-0555-002	4-1-1
M	622-0555-003	4-1-1
M	622-0555-004	4-1-1
K	622-0555-005	4-1-1
K	622-0555-006	4-1-1
H	622-0555-007	4-1-1
H	622-0555-008	4-1-1
J	622-0555-010	4-1-1
D	622-0555-011	4-1-1
F	618-4088-001	4-1-7
F	618-4088-002	4-1-7
F	618-4088-003	4-1-7
C	618-4027-001	4-1-12
A	618-4027-002	4-1-12
A	618-4027-003	4-1-12
AG	618-4001-001	4-1-17
W	618-4001-002	4-1-17
M	618-4001-003	4-1-17
M	618-4001-004	4-1-17
M	618-4001-005	4-1-17
M	618-4001-006	4-1-17

CI/ REV LTR	UNIT PART NUMBER	FIG-ITEM
P	618-4001-007	4-1-17
M	618-4001-008	4-1-17
K	618-4001-010	4-1-17
F	618-4001-011	4-1-17
J	618-4005-001	4-1-54
C	618-4005-002	4-1-54
C	618-4005-003	4-1-54
B	618-4005-004	4-1-54
A	618-4457-002	4-1-63
G	618-4004-001	4-1-148
A	618-4004-001	4-1-78
AD	609-4999-001	4-2-1
V	609-4960-001	4-3-1
N	609-4961-001	4-4-1
F	618-1135-001	4-5-1
J	618-4290-001	4-6-1
D	601-4498-001	4-7-1

GROUP ASSEMBLY PARTS LIST

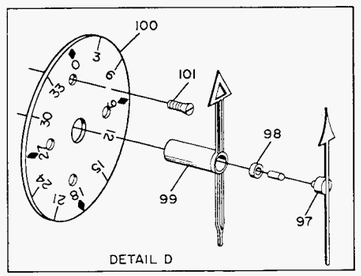


332C-10 Radio Magnetic Indicator
Figure 4-1 (Sheet 1 of 3)

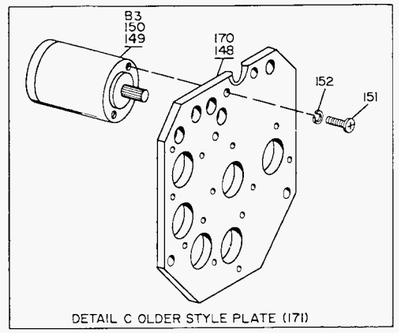
GROUP ASSEMBLY PARTS LIST

DETAIL D AND DETAIL E EFF ON PART NUMBERS AND CORRESPONDING REV LTR'S :

618-4001-001	AF
-002	V
003-006	L
007	M
008	L
010	J
011	E



P/O 17



332C-10 Radio Magnetic Indicator
Figure 4-1 (Sheet 2)

ADDENDUM 3
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

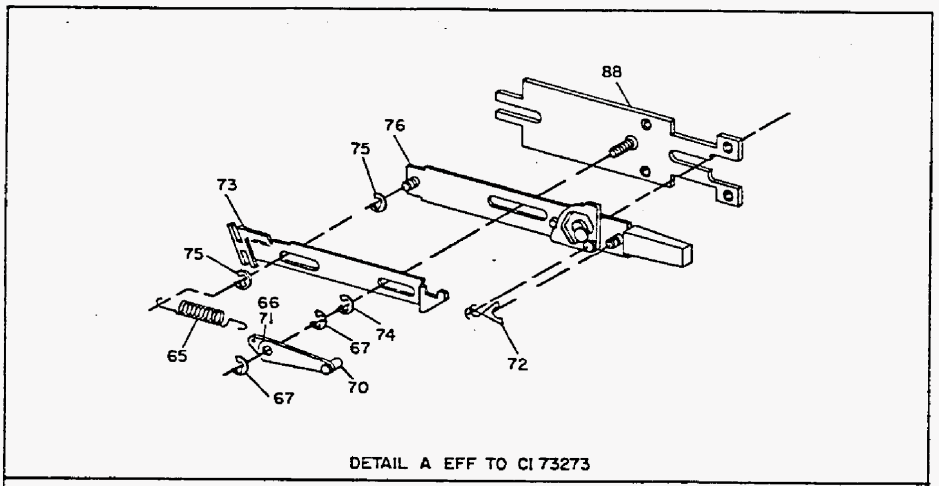
PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-8 of the
Parts List Section of the manual.

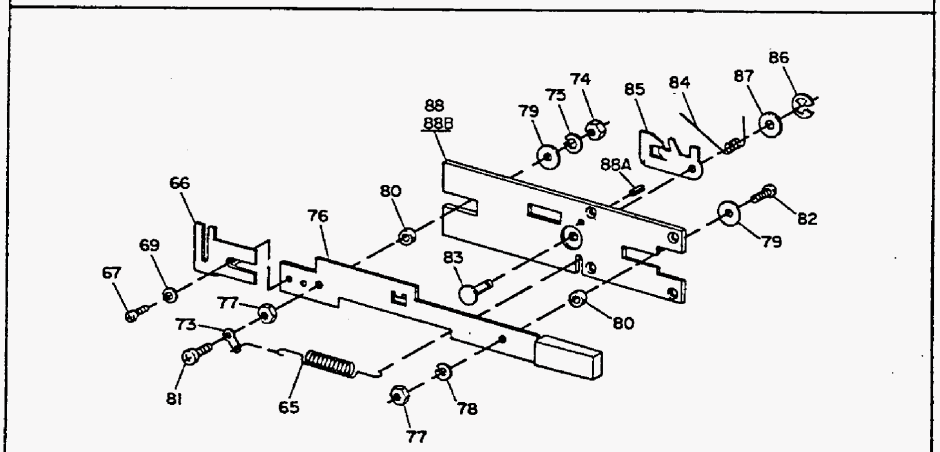
This addendum sheet is issued to show the revised Figure 4-1 (Sheet 3); items 88A and 88B have been added. The revised figure is located on sheet 2 of this addendum.

ADDENDUM 3
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

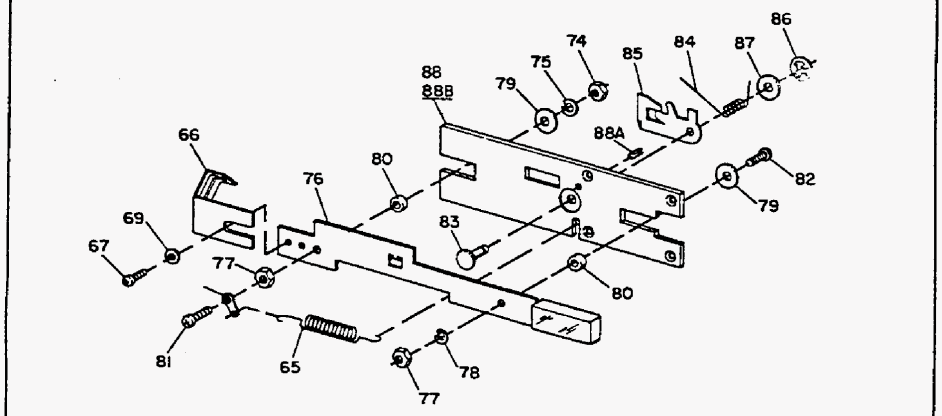
PART NUMBER 523-0767591, DATED 15 MAY 1985



DETAIL A EFF TO CI 73273



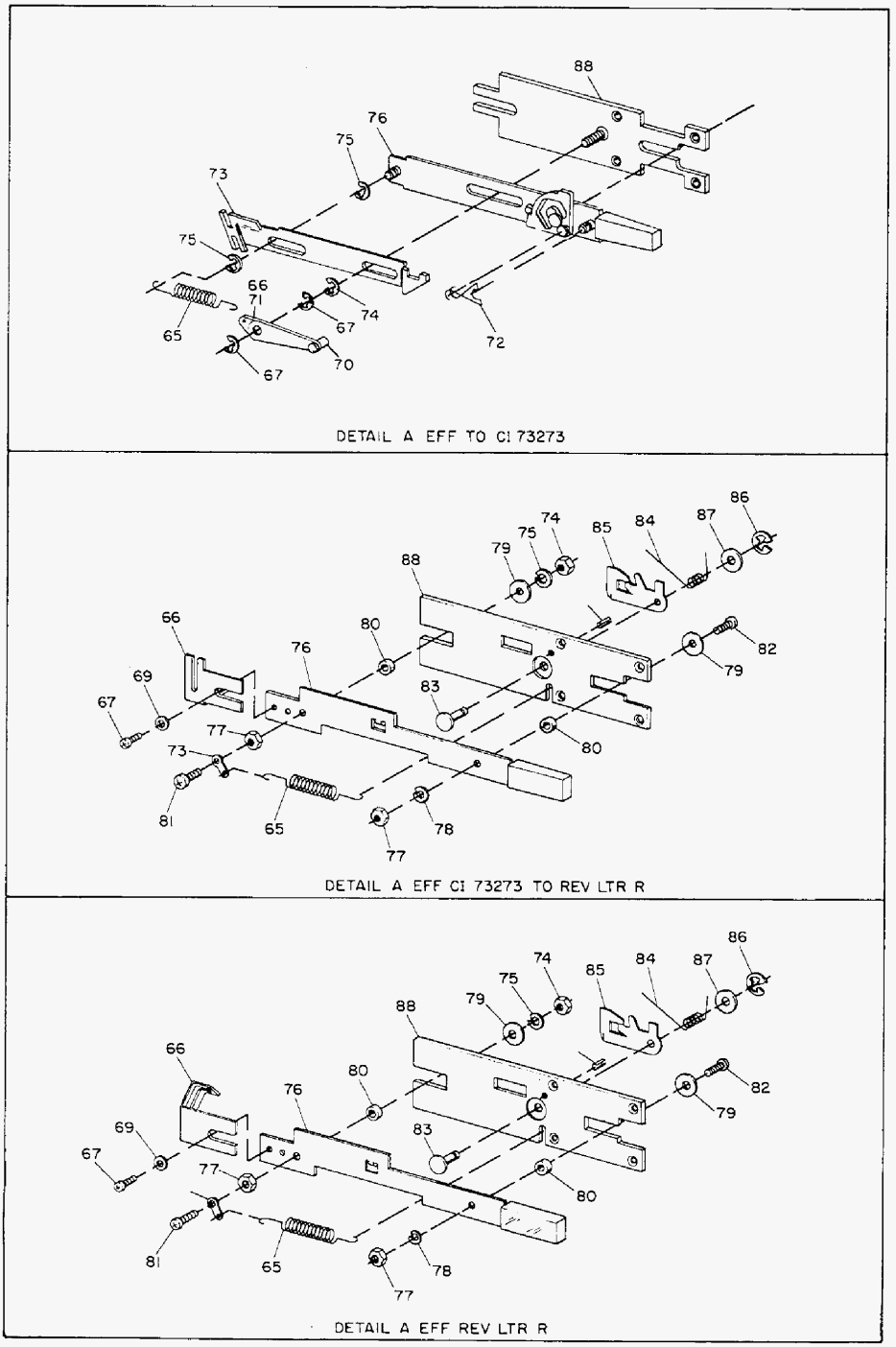
DETAIL A EFF CI 73273 TO REV LTR R



DETAIL A EFF REV LTR R

332C-10 Radio Magnetic Indicator
Figure 4-1 (Sheet 3)

GROUP ASSEMBLY PARTS LIST



TP3-5104-034

332C-10 Radio Magnetic Indicator
Figure 4-1 (Sheet 3)

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 - 1	622-0555-001	1	INDICATOR, RADIO MAGNETIC 332C-10	A	RF
- 1	622-0555-002	1	INDICATOR, RADIO MAGNETIC 332C-10	B	RF
- 1	622-0555-003	1	INDICATOR, RADIO MAGNETIC 332C-10	C	RF
- 1	622-0555-004	1	INDICATOR, RADIO MAGNETIC 332C-10	D	RF
- 1	622-0555-005	1	INDICATOR, RADIO MAGNETIC 332C-10	E	RF
- 1	622-0555-006	1	INDICATOR, RADIO MAGNETIC 332C-10	F	RF
- 1	622-0555-008	1	INDICATOR, RADIO MAGNETIC 332C-10	G	RF
- 1	622-0555-007	1	INDICATOR, RADIO MAGNETIC 332C-10	L	RF
-1	622-0555-010	1	INDICATOR, RADIO MAGNETIC 332C-10	M	1
-1	622-0555-011	1	INDICATOR, RADIO MAGNETIC 332C-10	N	RF
2	280-3441-000	2	PLATE, INSTR (VA0473) 280-3441-000		1
3	609-7132-001	2	PLATE, IDENT		1
4	791-8387-001	2	PLATE, MOD INFO		1
5	P347-1270-000	2	SCREW, MACH, SST, 2-56 X 1/4 (V77250) 347-1270-000 (AP FOR 3-4)		4
6	618-4084-001	2	COVER, ACCESS	A,B,E,F,G	1
6	618-4084-003	2	COVER, ACCESS	C,D,L,N	1
6	618-4084-001	2	COVER, ACCESS (EFF TO REV LTR B)	M	1
6	618-4084-003	2	COVER, ACCESS (EFF REV LTR B)	M	1
7	618-4088-001	2	LAMP ASSY A4	A,C,E	1
7	618-4088-002	2	LAMP ASSY A4	B,D,F,G	1
7	618-4088-003	2	LAMP ASSY A4	L	1
7	618-4088-005	2	LAMP ASSY A4	F,G	1
7	618-4088-001	2	LAMP ASSY A4 (EFF TO REV LTR A)	N	1
7	618-4088-004	2	LAMP ASSY A4 (EFF REV LTR A TO REV LTR C)	N	1
7	618-4088-001	2	LAMP ASSY A4 (EFF REV LTR C)	N	1
8	618-4089-001	2	SCREW, MODIFIED (AP FOR 6-7)	A,B,E,F,G,M	2
8	P322-0155-000	2	SCREW, MACH, BRS, 0-80 X 1/8 (V77250) 322-0155-000	C,D,L,N	2
8A	CM39-03-2	3	FILTER, LAMP (V71744) 62-1296-090 (EFF REV LTR D)	A,C,E	4
8A	CM39-03-2	3	FILTER, LAMP (V71744) 262-1296-090 (EFF REV LTR B)	B,D,F,G	4
8A	D150-100-32	3	FILTER, LAMP (V22921) 262-1296-780	L	4
8A	CM39-03-2	3	FILTER, LAMP (V71744) 262-1296-090 (EFF REV LTR-)	M,N	1
9	262-1101-010	3	LAMP, INCAND (V08719) 262-1101-010 A4DS1-A4DS4 (EFF TO REV LTR D)	A,C,E	4
9	62	3	LAMP, INCAND (V87034) 262-2732-000 A4DS1-A4DS4 (EFF REV LTR D)	A,C,E	4
9	262-1101-000	3	LAMP, INCAND (V08719) 262-1101-000 A4DS1-A4DS4 (EFF TO REV LTR B)	B,D,F,G	4
9	CM8-715AS PORM15PCT	3	LAMP, INCAND (V71744) 262-1095-000 A4DS1-A4DS4 (EFF REV LTR B)	B,D,E,G	4
9	CM8-715AS PORM15PCT	3	LAMP, INCAND (V71744) 262-1095-000 A4DS1-A4DS4	L,M,N	4
10	618-3522-001	3	BOARD		1
11	850 3-4IN	2	TAPE, PRESS SENS (V76381) 014-1198-000		AR
12	618-4027-001	2	COVER ASSEMBLY	A,B,E,F,G	1
12	618-4027-002	2	COVER ASSEMBLY	C,D,N	1
12	618-4027-003	2	COVER ASSEMBLY	L	1
12	618-4027-001	2	COVER ASSEMBLY (EFF TO REV LTR B)	M	1
12	618-4027-002	2	COVER ASSEMBLY (EFF REV LTR B)	M	1
13	AJ3-35	3	STUD, TURNLOCK FSTNR, CD PL STL, 5/16 DIA X 0.360 (V72794) 012-1004-000		2
14	3	3	RING, RETAINING (V72794) 340-1884-010 (AP)		2
15	R22NCFMA1-26	3	NUT, SLFLKG, CD PL STL, 2-56 (V72962) 333-0837-000		4
16	609-4772-002	3	COVER	A,B,E,F,G	1
16	609-4772-004	3	COVER	C,D,N	1
16	609-4772-005	3	COVER	L	1
16	609-4772-002	3	COVER (EFF TO REV LTR B)	M	1
16	609-4772-002	3	COVER (EFF REV LTR B)	M	1
17	618-4001-001	2	INDICATOR SUBASSEMBLY (EFF REV LTR AG)	A	1
17	618-4001-002	2	INDICATOR SUBASSEMBLY (EFF REV LTR W)	B	1
17	618-4001-003	2	INDICATOR SUBASSEMBLY (EFF REV LTR M)	C	1
17	618-4001-004	2	INDICATOR SUBASSEMBLY (EFF REV LTR M)	D	1
17	618-4001-005	2	INDICATOR SUBASSEMBLY (EFF REV LTR M)	E	1
17	618-4001-006	2	INDICATOR SUBASSEMBLY (EFF REV LTR M)	F	1

ADDENDUM 7

TO

COLLINS 332C-10 RADIO MAGNETIC INDIATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591-00411A, 4TH EDITION, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-10
of the Parts List Section (523-0764710-006118)

This addendum corrects the DESCRIPTION and USABLE ON CODES for item 7 on page 4-10.

ITEM	PART NUMBER	DESCRIPTION	USABLE ON CODES	UNITS PER ASSY
7	618-4088-001	LAMP ASSY A4 (28 V DC B/W)	A, C, E, M	1
7	618-4088-002	LAMP ASSY A4 (5 V DC B/W)	B, D, F, G, N	1
7	618-4088-003	LAMP ASSY A4 (WHITE)	L	1

ADDENDUM 2
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-10 of the Parts List Section of the manual.

This addendum page provides correct parts list information for figure 4-1, item 9. The new/corrected information is shown in **bold type.**

4-1	9	**496**	3	LAMP, INCAND **(V51702)** 262-1101-010 **28V,** A4DS1-A4DS4 (EFF TO REV LTR D)	**A, C, E, M**	4
	9	**LTX6838AS15**	3	LAMP, INCAND **(V61342)** 262-2732-000 **28V,** A4DS1-A4DS4 (EFF REV LTR D)	**A, C, E, M**	4
	9	**495**	3	LAMP, INCAND **(V51702)** 262-1101-000 **5V,** A4DS1-A4DS4 (EFF TO REV LTR B)	B, D, F, G	4
	9	**LTX715AS15**	3	LAMP, INCAND **(V61342)** 262-1095-000 **5V,** A4DS1-A4DS4 (EFF REV LTR B)	**B, D, F, G**	4
	9	**LTX715AS15**	3	LAMP, INCAND **(V61342)** 262-1095-000 **5V,** A4DS1-A4DS4	**L, N**	4

New Vendor addresses for item 9:

51702 **LUMITRON CORP**
326 BROAD ST
P O BOX 12
SUMMIT, NJ 07901

61342 **LAMPTRONIX CO LTD**
85 N. WILLIAMS ST, SUITE B
CRYSTAL LAKE, IL 60014

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 17	618-4001-007	2	INDICATOR SUBASSEMBLY (EFF REV LTR P)	G	1
17	618-4001-008	2	INDICATOR SUBASSEMBLY (EFF REV LTR L)	L	1
17	618-4001-010	2	INDICATOR SUBASSEMBLY (EFF REV LTR K)	M	1
17	618-4001-011	2	INDICATOR SUBASSEMBLY (EFF REV LTR F)	N	1
18	609-4999-001	3	ELECTRONIC COMPONENTS ASSEMBLY A1 (SEE FIG 2)		1
19	609-4960-001	3	ELECTRONIC COMPONENTS ASSEMBLY A2 (SEE FIG 3)		1
20	P330-2290-000	3	SCREW, MACH, SST, 4-40 X 1/4 (V77250) 330-2290-000 (AP FOR 18-19)		8
21	MS51957-13	3	SCREW, MACH, STL, 4-40 X 1/4 (V96906) 343-0133-000 (AP FOR 18-19)		8
22	MS35338-135	3	WASHER, LOCK SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP FOR 18-19)		8
23	540-9045-003	3	POST (AP FOR 18-19)		4
24	609-4961-001	3	ELECTRONIC COMPONENTS ASSEMBLY A3 (SEE FIG 4) (EFF TO CI 73414)	A,B,D,C E,F,G	1
24	618-1135-001	3	ELECTRONIC COMPONENTS ASSEMBLY A3 (SEE FIG 5) (EFF CI 73414)	A,B,D,C, E,F,G	1
24	618-1135-001	3	ELECTRONIC COMPONENTS ASSEMBLY A3 (SEE FIG 5)	L,M,N	1
25	P330-2290-000	3	SCREW, MACH, SST, 4-40 X 1/4 (V77250) 330-2290-000 (AP)		4
26	MS51957-13	3	SCREW MACH, STL, 4-40 X 1/4 (V96906) 343-0133-000 (AP)		2
26A	MS51957-19	3	SCREW, MACH, STL, 4-40 X 3/4 (V96906) 343-0139-000 (AP)		2
27	MS35338-135	3	WASHER, LOCK SST, 0.115 X 0.209 OD (V96906) 310-0279-000 (AP)		4
27A	541-5985-002	3	SPACER, SLEEVE (EFF REV LTR U) SB 6	A	2
27A	541-5985-002	3	SPACER, SLEEVE (EFF REV LTR J) SB 6	B	2
27A	541-5985-002	3	SPACER, SLEEVE (EFF REV LTR B) SB 6	C,D,E F,L	2
27A	541-5985-002	3	SPACER, SLEEVE (EFF REV LTR C) SB 6	G	2
27A	541-5985-002	3	SPACER, SLEEVE (EFF REV LTR D)	M,N	1
27B	601-4498-001	3	CIRCUIT CARD ASSEMBLY A5 (SEE FIG 7) (EFF REV LTR U) SB 6	A	1
27B	601-4498-001	3	CIRCUIT CARD ASSEMBLY A5 (SEE FIG 7) (EFF REV LTR J) SB 6	B	1
27B	601-4498-001	3	CIRCUIT CARD ASSEMBLY A5 (SEE FIG 7) (EFF REV LTR B) SB 6	C,D,E F,L	1
27B	601-4498-001	3	CIRCUIT CARD ASSEMBLY A5 (SEE FIG 7) (EFF REV LTR C)	G	1
27B	601-4498-001	3	CIRCUIT CARD ASSEMBLY A5 (SEE FIG 7) (EFF REV LTR -)	M,N	1
27C	540-9049-003	3	POST, HEX (EFF REV LTR U) SB 6	A	2
27C	540-9049-003	3	POST, HEX (EFF REV LTR J) SB 6	B	2
27C	540-9049-003	3	POST, HEX (EFF REV LTR B) SB 6	C,D,E F,L	2
27C	540-9049-003	3	POST, HEX (EFF REV LTR C) SB 6	G	2
27C	540-9049-003	3	POST, HEX (EFF REV LTR D)	M,N	1
28	540-9057-003	3	POST (AP) (EFF TO REV LTR U) SB 6	A	4
28	540-9057-003	3	POST, HEX (EFF REV LTR U) SB 6	A	2
28	540-9057-003	3	POST, HEX (EFF REV LTR J) SB 6	B	2
28	540-9057-003	3	POST, HEX (EFF REV LTR B) SB 6	C,D,E,F,L	2
28	540-9057-003	3	POST, HEX (EFF REV LTR C) SB 6	G	2
28	540-9057-003	3	POST, HEX (EFF REV LTR D)	M,N	1
28A	LP88A1A105K	3	CAPACITOR, FXD, PLSTC DIEL, 1UF, 10%, 50V (V01884) 933-1081-200 C9 (EFF CI 73414)		1
28B	CK05BX104K	3	CAPACITOR, FXD, CER DIEL, 0.1UF, 10%, 50V (V81349) 913-5019-320 C8 (EFF CI 73414)		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 29	MS90539-08	3	COIL, RF, 510UH (V96906) 240-2533-000 L1 (EFF TO CI 72333)	A	1
29	MS90541-11	3	COIL, RF, 10000UH (V96906) 240-2564-000 L1 (EFF CI 72333 TO CI 73414)	A	1
29	MS90541-11	3	COIL, RF, 10000UH (V96906) 240-2564-000 L1 (EFF TO CI 73414)	B	1
29	MS91189-37	3	COIL, RF, 100UH (V96906) 240-1626-000 L1 (EFF CI 73414)	A,B,C,D, E,F,G	1
29	MS91189-37	3	COIL, RF, 100UH (V96906) 240-1626-000 L1	L,M,N	1
29	MS75103-9	3	COIL, RF, 100UH (V96906) 240-1626-000 L1 (EFF REV LTR E)	M	1
29	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L1 (EFF REV LTR F)		
30	MS91189-37	3	COIL, RF, 100UH (V96960) 240-1626-000 L2 (EFF CI 72333 TO CI 72463)	A	1
30	MS91189-36	3	COIL, RF, 82UH (V96906) 240-1625-000 L2 (EFF CI 72463 TO CI 73414)	A	1
30	MS91189-36	3	COIL, RF, 82UH (V96906) 240-1625-000 L2 (EFF TO CI 73414)	B	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L2 (EFF CI 73414 TO REV LTR Y)	A	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L2 (EFF REV LTR Y)	A	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L2 (EFF CI 73414 TO REV LTR N)	B	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L2 (EFF REV LTR N)	B	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-1626-000 L2 (EFF CI 73414 TO REV LTR E)	C,D,E,F	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L2 (EFF REV LTR E)	C,D,E,F	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-1626-000 L2 (EFF CI 73414 TO REV LTR F)	G	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L2 (EFF REV LTR F)	G	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-1626-000 L2 (EFF TO REV LTR E)	L	1
30	6150-7	3	CHOKE, RF, 100UH (V04213) 240-0871-070 L2 (EFF REV LTR E)	L	1
30	MS75103-9	3	COIL, RF, 100UH (V96906) 240-1626-000 L2 (EFF TO REV LTR C)	M	1
30	6150-7	3	COIL, RF, 100UH (V04213) 240-0871-070 L2 (EFF REV LTR C)	M	1
30	6150-7	3	COIL, RF, 100UH (V04213) 240-0871-070 L2 (EFF REV LTR D)	N	1
31	601D117G050FE6	3	CAPACITOR,FXD, ELCTLT, 110UF, M10%P75%, 50V (V56289) 183-1282-130 C4		1
32	601D117G050FE6	3	CAPACITOR,FXD, ELCTLT, 110UF, M10%P75%, 50V (V56289) 183-1282-130 C7		1
33	BT02A20-41P	3	CONNECTOR,RCPT, ELEC (V09922) 371-2126-000 J1		1
34	P313-0132-000	3	NUT,PLAIN,HEX, SST, 4-40 (V77250) 313-0132-000 (AP)		4
35	MS35338-135	3	WASHER,LOCK, SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP)		4
36	MS51959-14	3	SCREW,MACH, SST, 4-40 X 5/16 (V96906) 342-0045-000 (AP)		4
37	3340	3	TERMINAL,STUD (V17117) 306-2519-030		2
38	MS51959-25	3	SCREW,MACH, SST, 6-32 X 3/16 (V96906) 342-0059-000 (AP)		2
39	4878-1-0516	3	TERMINAL,STDF (V71279) 306-2293-000		5
40	MS51959-1	3	SCREW,MACH, SST, 2-56 X 1/2 (V96906) 342-0131-000 (AP)		5
41	AB396-1	3	TERMINAL,STUD, (V12615) 306-1281-000		1
42	MS51959-2	3	SCREW,MACH, SST, 2-56 X 3/16 (V96906) 342-0132-000 (AP)		1
43	618-4006-001	3	CONNECTOR PLATE A7		1
44	100-200-11-1	4	CLIP,SPR TNSN (V99378) 139-2239-000		2

ROCKWELL COLLINS
INSTRUCTION BOOK
332C-10, PART NO 622-0555

332C-10 Radio Magnetic Indicator

INSTRUCTION BOOK (523-0767591, 4TH EDITION, DATED MAY 15/85)

TEMPORARY REVISION NO. 10

Insert facing page 4-13.

Subject: Parts List Update.

Changes shown in **bold text.**

DETAILED PARTS LIST

FIG-ITEM	PART NUMBER	AIRLINE PART NO	INDENT	NOMENCLATURE	EFFECT CODE	UNITS PER ASSY
4-1						
49A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S1 (EFF REV T **THRU AD)**	A	1
49A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S1 (EFF REV AE)**	**A**	**1**
49A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S1 (EFF REV H **THRU T)**	B	1
49A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S1 (EFF REV U)**	**B**	**1**
49A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S1 (EFF REV A **THRU J)**	**C,D,E,F**	1
49A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S1 (EFF REV K)**	**C,D,E,F**	**1**
49A	**7409L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-020 S1 (EFF REV A THRU K)**	**G**	**1**
49A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S1 (EFF REV L)**	**G**	**1**
49A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S1 (EFF **THRU REV J**)	**L**	1
49A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S1 (EFF REV K)**	**L**	**1**
49A	**7409L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-020 S1 (EFF THRU REV G)**	**M**	**1**
49A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S1 (EFF REV H)**	**M**	**1**
49A	**7409L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-020 S1 (EFF THRU REV C)**	**N**	**1**
49A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S1 (EFF REV D)**	**N**	**1**
50A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S2 (EFF REV T **THRU AD)**	A	1
50A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S2 (EFF REV AE)**	**A**	**1**
50A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S2 (EFF REV H **THRU T)**	B	1
50A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S2 (EFF REV U)**	**B**	**1**
50A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S2 (EFF REV A **THRU J)**	**C,D,E,F**	1
50A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S2 (EFF REV K)**	**C,D,E,F**	**1**
50A	**7409L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-020 S2 (EFF REV A THRU K)**	**G**	**1**
50A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S2 (EFF REV L)**	**G**	**1**
50A	7409L2YZQE		3	SWITCH, TGL, (VO9353) 266-5415-020 S2 (EFF **THRU REV J**)	**L**	1
50A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S2 (EFF REV K)**	**L**	**1**
50A	**7409L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-020 S2 (EFF THRU REV G)**	**M**	**1**
50A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S2 (EFF REV H)**	**M**	**1**
50A	**7409L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-020 S2 (EFF THRU REV C)**	**N**	**1**
50A	**7408L2YZQE**		**3**	**SWITCH, TGL, (VO9353) 266-5415-590 S2 (EFF REV D)**	**N**	**1**

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 45	MS16535-152	4	RIVET,TUBULAR, AL, 0.123 DIA X 0.125 (V96906) 305-1807-000 (AP)		4
46	S3-175CADPL	4	LOCKSPRING,TURN (V72794) 012-1003-000		2
47	MS16535-76	4	RIVET,TUBULAR, AL, 0.089 DIA X 0.125 (V96906) 305-1755-000 (AP)		4
48	609-4908-001	4	PLATE		1
49	MES2P0BDS0106	3	SWITCH, LEVER (V80411) 266-0221-010 S1 (EFF TO REV LTR R)	A,B,C,D,E,F,G	1
49A	7409SYZQE	3	SWITCH, TGL (V09353) 266-5321-340 S1 (EFF REV LTR R TO REV LTR T)	A	1
49A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S1 (EFF REV LTR T)	A	1
49A	7409SYZQE	3	SWITCH, TGL (V09353) 266-5321-340 S1 (EFF TO REV LTR H)	B	1
49A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S1 (EFF REV LTR H)	B	1
49A	7409SYZQE	3	SWITCH, TGL (V09353) 266-5321-340 S1 (EFF TO REV LTR A)	C,D,E,F	1
49A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S1 (EFF REV LTR A)	C,D,E,F,G	1
49A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S1	L,M,N	1
50	MES2P0BDS0106	3	SWITCH, LEVER (V80411) 266-0221-010 S2 (EFF TO REV LTR R)	A,B,C,D,E,F,G	1
50A	7409SYZQE	3	SWITCH, TGL (V09353) 266-5321-340 S2 (EFF REV LTR R TO REV LTR T)	A	1
50A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S2 (EFF REV LTR T)	A	1
50A	7409SYZQE	3	SWITCH, TGL (V09353) 266-5321-340 S2 (EFF TO REV LTR H)	B	1
50A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S2 (EFF REV LTR H)	B	1
50A	7409SYZQE	3	SWITCH, TGL (V09353) 266-5321-340 S2 (EFF TO REV LTR A)	C,D,E,F	1
50A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S2 (EFF REV LTR A)	C,D,E,F	1
50A	7409L2YZQE	3	SWITCH, TGL (V09353) 266-5415-020 S2	L,M,N	1
51	MES2P0BDS0106	3	SWITCH, LEVER (V80411) 266-0221-010 S3 (EFF TO REV LTR R)		1
52	MES2P0BDS0106	3	SWITCH, LEVER (V80411) 266-0221-010 S4 (EFF TO REV LTR R)		1
53	MS51957-10	3	SCREW, MACH, SST, 2-56 X 7/8 (V96906) 343-0130-000 (AP FOR 51-54) (EFF TO REV LTR R) SB 4	A,B,C,D, E,F,G	8
53	MS51957-4	3	SCREW, MACH, CD PL STL, 2-56 X 5/16 (V96906) 343-0125-000 (AP FOR 49-50) (EFF REV LTR R)	A,B,C,D, E,F,G	4
53	MS51957-4	3	SCREW, MACH, CD PL STL, 2-56 X 5/16 (V96906) 343-0125-000 (AP FOR 49-50)	L,M,N	4
53A	621-1880-001	3	BRACKET (EFF REV LTR R)	A,B,C,D, E,F,G	2
53A	621-1880-001	3	BRACKET	L,M,N	2
54	618-4005-001	3	BEZEL ASSEMBLY	A,B	1
54	618-4005-002	3	BEZEL ASSEMBLY	C,D,L	1
54	618-4005-003	3	BEZEL ASSEMBLY	E,F	1
54	618-4005-004	3	BEZEL ASSEMBLY	G	1
54	618-4005-003	3	BEZEL ASSEMBLY (EFF TO REV LTR B)	M	1
54	618-4005-002	3	BEZEL ASSEMBLY (EFF REV LTR B)	M	1
54	618-4005-007	3	BEZEL ASSEMBLY (EFF REV LTR D)	N	1
55	P330-2290-000	3	SCREW, MACH, SST, 4-40 X 1/4 (V77250) 330-2290-000 (AP)		4
56	618-4071-001	4	MASK		1
57	192-2071-010	4	WEDGE, LIGHTING (V91652) 192-2071-010		1
58	618-4157-001	4	PAD		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 59	609-4859-001	4	BEZEL	A,B	1
59	618-5804-002	4	BEZEL	C,D,L	1
59	618-5804-003	4	BEZEL	E,F	1
59	623-8138-003	4	BEZEL	G	1
59	618-5804-003	4	BEZEL (EFF TO REV LTR B)	M	1
59	618-5804-002	4	BEZEL (EFF REV LTR B)	M	1
59	618-5804-008	4	BEZEL (EFF REV LTR D)	N	1
59A	621-1520-001	4	MASK (EFF REV LTR F)		1
60	618-4065-001	3	MASK, SWITCH		2
61	778-0992-002	3	INDICATOR, LEFT (EFF TO CI 73273)	A,B,C,D, E,F,G	1
61	618-4449-002	3	INDICATOR, LEFT (EFF CI 73273)	A,B,C,D, E,F	1
61	618-4449-002	3	INDICATOR, LEFT (EFF CI 73273 TO REV LTR B)	G	1
61	618-4449-003	3	INDICATOR, LEFT (EFF REV LTR B)	G	1
61	618-4449-002	3	INDICATOR, LEFT	L,M,N	1
62	778-0992-001	3	INDICATOR, RIGHT (EFF TO CI 73273)	A,B,C,D, E,F,G	1
62	618-4449-001	3	INDICATOR, RIGHT (EFF CI 73273)	A,B,C,D, E,F	1
62	618-4449-001	3	INDICATOR, RIGHT (EFF CI 73273 TO REV LTR B)	G	1
62	618-4449-004	3	INDICATOR, RIGHT (EFF REV LTR B)	G	1
62	618-4449-001	3	INDICATOR, RIGHT	L,M,N	1
63	778-0975-001	3	ACTUATOR ASSY (EFF TO CI 73273)	H	2
63	618-4457-001	3	ACTUATOR ASSY (EFF CI 73273 TO REV LTR R)	J	2
63	618-4457-002	3	ACTUATOR ASSY (EFF REV LTR R)	K	2
63A	621-1881-001	3	RETAINER, SWITCH (EFF REV LTR R)	K	2
64	P322-0156-000	3	SCREW, MACH, SST, 0-80 X 1/8 (V77250) 322-0156-000 (AP FOR 60-63)		4
64A	323-0255-000	3	SCREW, MACH, SST, 0-80 X 3/16 (V74545) 323-0255-000 (AP FOR 60-63)		4
64A	323-0255-000	3	SCREW, MACH, SST, 0-80 X 3/16 (V74545) 323-0255-000 (AP FOR 60-63) (EFF TO REV LTR F)	M	4
64A	323-9255-000	3	SCREW, MACH, SST, 0-80 X 1/4 (V74545) 323-0256-000 (AP FOR 60-63) (EFF REV LTR F)	M	4
64A	323-0255-000	3	SCREW, MACH, SST, 0-80 X 3/16 (V74545) 323-0255-000 (AP FOR 60-63) (EFF TO REV LTR B)	N	4
64A	323-0256-000	3	SCREW, MACH, SST, 0-80 X 1/4 (V74545) 323-0256-000 (AP OR 60-63) (EFF REV LTR B)	N	4
64B	0-022X0-022	3	WASHER, LOCK, SPRING, SST, 0.073 ID X 0.117 OD (V76665) 310-0501-000 (AP FOR 60-63)		4
65	340-2090-000	4	SPRING, HELICAL (V91314) 340-2090-000		1
66	618-4009-001	4	LEVER, ROCKER	H	1
66	618-5101-001	4	BRACKET	J	1
66	621-1879-001	4	PUSHER, TOGGLE SWITCH	K	1
67	MS16633-1009	4	RING, RTNG (V96906) 340-0086-000 (AP)	H	2
67	323-0254-000	4	SCREW, MACH, SST, 0-80 X 1/8 (V74545) 323-0254-000 (AP)	J,K	2
68	0-022X0-022	4	WASHER, LOCK, SPR SST, 0.073 ID X 0.117 OD (V76665) 310-0501-000 (AP)	J,K	2
69	**310-0550-000**	**4**	**WASHER,FLAT, SST, 0.062 ID X 5/32 OD (V79807) 310-0550-000 (AP)**	J,K	**2**
70	**778-0982-001**	**5**	**PIN**	H	**1**
71	**778-0978-001**	**5**	**LEVER**	H	**1**
72	**778-0991-001**	**5**	**SPRING**	H	**1**
73	**778-0990-001**	**4**	**SWITCH,ACTUATOR**	H	**1**
73	**4040-2HT**	**4**	**TERMINAL,LUG (V77147) 304-0014-000**	J,K	**1**
74	**MS16633-1009**	**4**	**RING,RTNG (V96906) 340-0086-000 (AP)**	H	**1**
74	**MS35649-224**	**4**	**NUT,PLAIN,HEX, SST, 2-56 (V96906) 313-0037-000 (AP)**	J,K	**1**
75	**MS16633-1012**	**4**	**RING,RTNG (V96906) 340-0087-000 (AP)**	H	**2**
75	**MS35338-134**	**4**	**WASHER,LOCK, SST, 0.088 ID X 0.172 OD (V96906) 310-0275-000 (AP)**	J,K	**1**

BUSINESS AND REGIONAL SYSTEMS
INSTRUCTION BOOK
332C-10, PART NO 622-0555

332C-10 Radio Magnetic Indicator

INSTRUCTION BOOK (523-0767591, 4TH EDITION, DATED MAY 15/85)

TEMPORARY REVISION NO. 09

Insert facing page 4-15

This temporary revision supersedes Addendum 3, Sheet 3.

Subject: Update Parts List

The parts list is updated to show the correct nomenclature for item 96 and to add information for items 88A and 88B.

GROUP ASSEMBLY PARTS LIST

FIG-ITEM	PART NUMBER	AIRLINE PART NO	INDENT	NOMENCLATURE	EFFECT CODE	UNITS PER ASSY
4 88A	MS51923-139		5	PIN, SPRING, SST (V96906) 311-0445-000	J, K	1
88B	618-4452-001		5	PLATE, MOUNTING	J, K	1
96	609-4882-001		4	PIN (NOT USED EFFECTIVE REV J)		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
76	618-4026-001	4	PLATE,ROCKER	H	1
76	618-4456-001	4	SWITCH,ACTUATOR	J,K	1
77	MS35649-224	4	NUT,PLAIN,HEX, SST, 2-56 (V96906) 313-0037-000 (AP)	J,K	2
78	MS35338-134	4	WASHER,LOCK, SST, 0.088 ID X 0.172 OD (V96906) 310-0275-000 (AP)	J,K	1
79	310-0044-000	4	WASHER,FLAT, SST, 0.093 ID X 1/4 OD (V79807) 310-0044-000 (AP)	J,K	2
80	618-4454-001	4	SPACER (AP)	J,K	2
81	MS51957-4	4	SCREW,MACH, CD PL STL, 2-56 X 5/16 (V96906) 343-0125-000 (AP)	J,K	1
82	MS51957-3	4	SCREW,MACH, CD PL STL, 2-56 X 1/4 (V96906) 343-0124-000 (AP)	J,K	1
83	618-4453-001	4	SHAFT	J,K	1
84	618-5100-001	4	SPRING	J,K	1
85	618-4451-001	4	CAM	J,K	1
86	MS16633-1012	4	RING,RTNG (V96906) 340-0087-000 (AP FOR 83-85)	J,K	1
87	310-6340-000	4	WASHER,FLAT, SST, 0.125 ID X 0.281 OD (V79807) 310-6340-000 (AP FOR 83-85)	J,K	1
88	618-4025-001	4	PLATE	H	1
88	618-5102-001	4	PLATE	J,K	1
89	609-4889-001	3	POINTER,DIAL		1
90	323-0254-000	3	SCREW,MACH, SST, 0-80 X 1/8 (V74545) 323-0254-000 (AP)		2
91	609-4956-001	3	FLAG,HEADING (EFF THRU REV G)	A,B,C,D,E,F,B,M,N	1
91	609-4956-002	3	FLAG, HEADING (EFF THRU REV H)	L	1
91	629-7082-001	3	FLAG,HEADING, M1 (EFF REV J)		1
91A	343-0123-000	3	SCREW, .086-56 X .19 (EFF REV J)		3
91B	310-0275-000	3	WASHER,LOCK, .088 X .172 (EFF REV J)		3
91C	629-4745-001	3	BRACKET (EFF REV J)		1
91D	310-6320-000	3	WASHER,FLAT (EFF REV J)		1
92	618-4008-001	3	COLLAR (NOT USED EFF REV J)		1
93	MS16633-1006	3	RING,RTNG (V96906) 340-0098-000 (AP FOR 91-92) (NOT USED EFF REV J)		
94	328-0373-000	3	SETSCREW, CD PL STL, 0-80 X 1/8 (V08664) 328-0373-000 (AP FOR 91-92) (NOT USED EFF REV J)		1
95	609-4880-001	4	PIN (NOT USED EFF REV J)		1
96	609-4882-001	4	COLLAR (NOT USED EFF REV J)		1
97	609-4957-001	3	POINTER,DIAL NO 1 (NOT USED EFF REV J)	A,B,C,D,E,F,G,M,N	1
97	609-4957-002	3	POINTER,DIAL NO 1	L	1
97	609-4860-001		POINTER,DIAL NO 1 (V81349)	A,B,C,D,E,F,G,L,M,N	1
97A	634-0192-001		SHAFT,POINTER (V81349)	A,B,C,D,E,F,G,L,M,N	1
97B	634-0193-001		SCREW,SPECIAL (V81349)	A,B,C,D,E,F,G,L,M,N	1
98	77M0412AZJ5FM1	3	BEARING, BALL, AN (V43334) 309-1568-000	A,B,C,D,E,F,N,G, M,L	1
99	609-4958-001	3	POINTER, DIAL NO 2	A,B,C,D,E,F,G,M,N	1
99	609-4958-002	3	POINTER, DIAL NO 2	L	1
100	609-4855-001	3	DIAL, SCALE	A,B,C,D,E,F,G,M,N	1
100	609-4855-002	3	DIAL, SCALE	L	1
101	P322-0155-000	3	SCREW,MACH, BRS, 0-80 X 1/8 (V77250) 322-0155-000 (AP)		4
102	77M1624ZJ5FM1	3	BEARING,BALL,AN (V43334) 309-1576-000		1
102	77M1624ZJ5FM1	3	BEARING, BALL, AN (V43334) 309-1576-000		1
102	77M1624ZJ5FM1	3	BEARING, BALL, AN (V43334) 309-1576-000 (EFF TO REV LTR E)	M	1
102	SR1685PPK25-54	3	BEARING, BALL, AN (V83086) 309-1325-010 (EFF REV LTR E)	M	1
102	77M1624ZJ5FM1	3	BEARING, BALL, AN (V43334) 309-1576-000 (EFF TO REV LTR A)	N	1
102	SR1685PPK25-54	3	BEARING, BALL, AN (V83086) 309-1325-010 (EFF REV LTR A)	N	1
103	609-4890-001	3	BRACKER		1
104	MS51959-3	3	SCREW, MACH, SST, 2-56 X 1/4 (V96906) 342-0133-000 (AP)		2
105	77M1624ZJ5FM1	3	BEARING, BALL, AN (V43334) 309-1576-000		1
105	77M1624ZJ5FM1	3	BEARING, BALL, AN (V43334) 309-1576-000 (EFF TO REV LTR E)		1
105	SR1685PPK25-54	3	BEARING, BALL, AN (V83086) 309-1325-010 (EFF REV LTR E)	M	1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 105	77M1624ZJ5FM1	3	BEARING, BALL, AN (V43334) 309-1576-000 (EFF TO REV LTR A)	N	1
105	SR1685PPK25-54	3	BEARING, BALL, AN (V83086) 309-1325-010 (EFF REV LTR A)	N	1
106	**609-4893-001**	**3**	**GEAR**		**1**
107	**609-4971-001**	**3**	**MASK,MAIN (EFF TO CI 73273)**		**1**
107	**609-4971-002**	**3**	**MASK,MAIN (EFF CI 73273)**	A,B,C,D,E,F	**1**
107	609-4971-002	3	MASK, MAIN (EFF CI 73273 TO REV LTR B)	G	1
107	623-9362-001	3	MASK, MAIN (EFF REV LTR B)	G	1
107	609-4971-003	3	MASK, MAIN	L	1
108	P330-5003-010	3	SCREW, MACH, STL, 0-80 X 1/8 (V77250) 330-5003-010 (AP)		4
109	544-3521-002	3	COLLAR		1
110	609-4654-001	3	GEAR		1
111	328-0368-000	3	SETSCREW, CD PL STL, 2-56 X 3/32 (V08664) 328-0368-000 (AP FOR 109-110)		2
112	**618-4007-001**	**3**	**PLATE,DISPLAY**		**1**
113	**MS51959-17**	**3**	**SCREW,MACH, SST, 4-40 X 1/2 (V96906) 342-0048-000 (AP)**		**3**
114	**609-4953-001**	**3**	**POST (AP)**		**1**
115	**609-4787-001**	**3**	**POST (AP)**		**2**
116	**609-4888-001**	**4**	**POST**		**4**
117	**MS16562-190**	**4**	**PIN,SPR, SST, 0.062 DIA X 1/4 (V96906) 311-0417-000 (AP)**		**4**
118	**609-4757-001**	**4**	**PLATE**		**1**
118A	629-8852-001	3	GEAR CLUSTER, SPUR NO 1 (EFF REV LTR W)	A	1
118A	629-8852-001	3	GEAR CLUSTER, SPUR NO 1 (EFF REV LTR M)	B	1
118A	629-8852-001	3	GEAR CLUSTER, SPUR NO 1 (EFF REV LTR G)	C,D	1
118A	629-8852-001	3	GEAR CLUSTER, SPUR NO 1 (EFF REV LTR E)	E,F	1
118A	629-8852-001	3	GEAR CLUSTER, SPUR NO 1 (EFF REV LTR C)	L	1
118A	629-8852-001	3	GEAR CLUSTER, SPUR NO 1 (EFF REV LTR D)	G,M	1
118A	629-8852-001	3	GEAR CLUSTER, SPUR NO 1 (EFF REV LTR -)	N	1
118B	S2-1-2FC3P15LY5	3	BEARING, BALL, AN (V40920) 309-1561-000 (AP FOR 118A) (EFF REV LTR W)	A	2
118B	S2-1-2FC3P15LY5		BEARING, BALL, AN (V40920) 309-1561-000 (AP FOR 118A) (EFF REV LTR M)	B	2
118B	S2-1-2FC3P15LY5	3	BEARING, BALL, AN (V40920) 309-1561-000 (AP FOR 118A) (EFF REV LTR G)	C,D	2
118B	S2-1-2FC3P15LY5	3	BEARING, BALL, AN (V40920) 309-1561-000 (AP FOR 118A) (EFF REV LTR E)	E,F	2
118B	S2-1-2FC3P15LY5	3	BEARING, BALL, AN (V40920) 309-1561-000 (AP FOR 118A) (EFF REV LTR C)	L	2
118B	S2-1-2FC3P15LY5	3	BEARING, BALL, AN (V40920) 309-1561-000 (AP FOR 118A) (EFF REV LTR D)	G,M	2
118B	S2-1-2FC3P15LY5	3	BEARING, BALL, AN (V40920) 309-1561-000 (AP FOR 118A) (EFF REV LTR -)	N	2
118C	629-8856-001	3	SHIM (AP FOR 118A) (EFF REV LTR W)	A	1
118C	629-8856-001	3	SHIM (AP FOR 118A) (EFF REV LTR M)	B	1
118C	629-8856-001	3	SHIM (AP FOR 118A) (EFF REV LTR G)	C,D	1
118C	629-8856-001	3	SHIM (AP FOR 118A) (EFF REV LTR E)	E,F	1
118C	629-8856-001	3	SHIM (AP FOR 118A) (EFF REV LTR C)	L	1
118C	629-8856-001	3	SHIM (AP FOR 118A) (EFF REV LTR D)	G,M	1
118C	629-8856-001	3	SHIM (AP FOR 118A) (EFF REV LTR D)	N	1
119	609-3047-001	3	GEAR (EFF TO REV LTR W)	A	1
119	629-8853-001	3	GEAR CLUSTER, SPUR NO 2 (EFF REV LTR W)	A	1
119	609-3047-001	3	GEAR (EFF TO REV LTR M)	B	1
119	629-8853-001	3	GEAR CLUSTER, SPUR NO 2 (EFF REV LTR M)	B	1
119	609-3047-001	3	GEAR (EFF TO REV LTR G)	C,D	1
119	629-8853-001	3	GEAR CLUSTER, SPUR NO 2 (EFF REV LTR G)	C,D	1
119	609-3047-001	3	GEAR (EFF TO REV LTR E)	E,F	1
119	629-8853-001	3	GEAR CLUSTER, SPUR NO 2 (EFF REV LTR G)	E,F	1
119	609-3047-001	3	GEAR (EFF TO REV LTR C)	L	1
119	629-8853-001	3	GEAR CLUSTER, SPUR NO 2 (EFF REV LTR C)	L	1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 119	609-3047-001	3	GEAR (EFF TO REV LTR D)	G,M	1
119	629-8853-001	3	GEAR CLUSTER, SPUR NO 2 (EFF REV LTR D)	G,M	1
119	629-8853-001	3	GEAR CLUSTER, SPUR NO 2 (EFF REV LTR D)	N	1
120	609-3048-001	3	GEAR		1
121	609-3664-001	3	GEAR		1
122	127-55	3	BEARING, SLV (V12639) 309-1283-010 (AP FOR 119-121) (EFF TO REV LTR W)	A	6
122	S418FCHH3P15LY5	3	BEARING, BALL, AN (V40920) 309-1977-050 (AP FOR 119-121) (EFF REV LTR W)	A	6
122	127-55	3	BEARING, SLV (V12639) 309-1283-010 (AP FOR 119-121) (EFF TO REV LTR M)	B	6
122	S418FCHH3P15LY5	3	BEARING, BALL, AN (V40920) 309-1977-050 (AP FOR 119-121) (EFF REV LTR M)	B	6
122	127-55	3	BEARING, SLV (V12639) 309-1283-010 (AP FOR 119-121) (EFF TO REV LTR G)	C,D	6
122	S418FCHH3P15LY5	3	BEARING, BALL, AN (V40920) 309-1977-050 (AP FOR 119-121) (EFF REV LTR G)	C,D	6
122	127-55	3	BEARING, SLV (V12639) 309-1283-010 (AP FOR 119-121) (EFF TO REV LTR E)	E,F	6
122	S418FCHH3P15LY5	3	BEARING, BALL, AN (V40920) 309-1977-050 (AP FOR 119-121) (EFF REV LTR E)	E,F	6
122	127-55	3	BEARING, SLV (V12639) 309-1283-010 (AP FOR 119-121) (EFF TO REV LTR C)	L	6
122	S418FCHH3P15LY5	3	BEARING, BALL, AN (V40920) 309-1977-050 (AP FOR 119-121) (EFF EV LTR C)	L	6
122	127-55	3	BEARING, SLV (V12639) 309-1283-010 (AP FOR 119-121) (EFF TO REV LTR D)	G,M	6
122	S418FCHH3P15LY5	3	BEARING, BALL, AN (V40920) 309-1977-050 (AP FOR 119-121) (EFF REV LTR D)	G,M	6
122	S418FCHH3P15LY5	3	BEARING, BALL, AN (V40920) 309-1977-050 (AP FOR 119-121) (EFF REV LTR D)	N	6
123	**609-4963-001**	**3**	**GEAR**		**4**
124	**MS16624-5021**	**3**	**RING,RTNG (V96906) 340-0504-000 (AP)**		**4**
125	**609-4967-001**	**3**	**SPRING,TORSION**		**1**
126	**544-3521-002**	**3**	**COLLAR**		**4**
127	**609-4962-001**	**3**	**GEAR**		**4**
128	328-0368-000	3	SETSCREW, CD PL STL, 2-56 X 3/32 (V08664) 328-0368-000 (AP FOR 126-127)		2
129	609-4756-001	3	COLLAR		1
130	609-3927-002	3	GEAR		1
131	328-0368-000	3	SETSCREW, CD PL STL, 2-56 X 3/32 (V08664) 328-0368-000 (AP FOR 129-130)		2
132	544-3521-002	3	COLLAR		2
133	609-4891-001	3	COUPLING (NOT USED REV LTR AF)		1
134	328-0368-000	3	SETSCREW, CD PL STL, 2-56 X 3/32 (V08664) 328-0368-000 (AP FOR 132-133)		2
135	618-4357-001	3	WASHER (AP FOR 132-133)		1
136	544-3521-002	3	COLLAR		1
137	609-4390-001	3	GEAR		1
138	328-0368-000	3	SETSCREW, CD PL STL, 2-56 X 3/32 (V08664) 328-0368-000 (AP FOR 136-137)		2
139	**MS16633-1025**	**3**	**RING,RTNG (V96906) 340-0091-000 (AP FOR 136-137)**		**1**
140	**310-0061-000**	**3**	**WASHER,FLAT, BRS, 0.265 ID X 0.625 OD (V79807) 310-0061-000 (AP FOR 136-137)**		**2**
141	**618-4357-002**	**3**	**WASHER (AP FOR 136-137)**		**1**
142	**618-4290-001**	**3**	ELECTRONIC COMPONENTS ASSEMBLY A6 (SEE FIG 6)		**1**
143	**P312-0009-000**	**3**	**STUD,CONT THD, STL, 4-40 X 1/2 (V77250) 312-0009-000 (AP)**		**3**
144	**P330-2290-000**	**3**	**SCREW,MACH, SST, 4-40 X 1/4 (V77250) 330-2290-000 (AP)**		**1**
145	**MS51957-13**	**3**	**SCREW,MACH, STL, 4-40 X 1/4 (V96906) 343-0133-000 (AP)**		**2**

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 146	609-4953-002	3	POST (AP)		3
147	MS35338-135	3	WASHER, LOCK, SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP)		3
148	618-4004-001	3	SYNCRO ASSY (EFF TO REV LTR W)	A	1
148	618-4004-003	3	SYNCRO ASSY (EFF REV LTR W)	A	1
148	618-4004-001	3	SYNCRO ASSY (EFF TO REV LTR M)	B	1
148	618-4004-003	3	SYNCRO ASSY (EFF REV LTR M)	B	1
148	618-4004-001	3	SYNCRO ASSY (EFF TO REV LTR G)	C,D	1
148	618-4004-003	3	SYNCRO ASSY (EFF REV LTR G)	C,D	1
148	618-4004-001	3	SYNCRO ASSY (EFF TO REV LTR E)	E,F	1
148	618-4004-003	3	SYNCRO ASSY (EFF REV LTR E)	E,F	1
148	618-4004-001	3	SYNCRO ASSY (EFF TO REV LTR C)	L	1
148	618-4004-003	3	SYNCRO ASSY (EFF REV LTR C)	L	1
148	618-4004-001	3	SYNCRO ASSY (EFF TO REV LTR D)	G,M	1
148	618-4004-003	3	SYNCRO ASSY (EFF REV LTR D)	G,M	1
148	618-4004-003	3	SYNCRO ASSY (EFF REV LTR G)	N	1
149	41A205	4	MOTOR, DC (V25140) 230-0303-000 B3 (EFF TO REV LTR E) OR	A,B,C,D, E,F,G	1
150	0905-27	4	MOTOR, DC (V16636) B3 (EFF TO REV LTR E) SB 5	A,B,C,D, E,F,G	1
150	41A711	4	MOTOR, DC (V25140) 230-0562-010 B3 (EFF REV LTR E TO SB 7)	C,D,E, F,G	1
150	41A711	4	MOTOR, DC (V25140) 230-0562-010 B3 (EFF REV LTR E TO REV LTR G)	A,B	1
150	41A967	4	MOTOR, DC (V25140) 230-0303-040 B3 (EFF REV LTR G TO SB 7)	A,B	1
150	41A711	4	MOTOR, DC (V25140) 230-0562-010 B3 (EFF TO SB 7)	L	1
150	41A1012	4	MOTOR, DC (V25140) 230-0657-010 B3 (EFF SB 7 TO REV LTR W)	A	1
150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (EFF REV LTR W)	A	1
150	41A1012	4	MOTOR, DC (V25140) 230-0657-010 B3 (EFF SB 7 TO REV LTR M)	B	1
150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (EFF REV LTR M)	B	1
150	41A1012	4	MOTOR, DC (V25140) 230-0657-010 B3 (EFF SB 7 TO REV LTR G)	C,D	1
150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (EFF REV LTR G)	C,D	1
150	41A1012	4	MOTOR, DC (V25140) 230-0657-010 B3 (EFF SB 7 TO REV LTR E)	E,F	1
150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (EFF REV LTR E)	E,F	1
150	41A1012	4	MOTOR, DC (V25140) 230-0626-010 B3 (EFF SB 7 TO REV LTR C)	L	1
150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (EFF REV LTR C)	L	1
150	41A1012	4	MOTOR, DC (V25140) 230-0657-010 B3 (EFF SB 7 TO REV LTR D)	G,M	1
150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (EFF REV LTR D)	G,M	1
150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (EFF REV LTR D)	N	1
150A	4040-2HT	4	TERMINAL, LUG (V77147) 304-0014-000 (AP FOR 150) (EFF REV LTR W)	A	2
150A	4040-2HT	4	TERMINAL, LUG (V77147) 304-0014-000 (AP FOR 150) (EFF REV LTR M)	B	2
150A	4040-2HT	4	TERMINAL, LUG (V77147) 304-0014-000 (AP FOR 150) (EFF REV LTR G)	C,D	2
150A	4040-2HT	4	TERMINAL, LUG (V77147) 304-0014-000 (AP FOR 150) (EFF REV LTR E)	E,F	2
150A	4040-2HT	4	TERMINAL, LUG (V77147) 304-0014-000 (AP FOR 150) (EFF REV LTR C)	L	2

ADDENDUM 2
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-18 of the Parts List Section of the manual.

This addendum page provides updated parts list information for figure 4-1, item 150. DC motor B3 (CPN 230-0626-010) is obsolete. Use new B3 motor (CPN 851-7000-020) in all 332C-10 repairs that currently call for CPN 230-0626-010.

4-1	150	38627HDD05D207	4	MOTOR, DC (V86197) 230-0626-010 B3 (OBSOLETE, USE 851-7000-020)	A-G, L, M, N	1
4-1	150	851-7000-020	4	MOTOR, DC (V4V792) 851-7000-020 B3	A-G, L, M, N	1

New Vendor address for item 150:

4V792 **ROCKWELL INTERNATIONAL CORP**
COLLINS AIR TRANSPORT DIV
400 COLLINS RD NE
CEDAR RAPIDS, IA 52498

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1	150A 4040-2HT	4	TERMINAL, LUG (V77147) 304-0014-000 (AP FOR 150) (EFF REV LTR D)	G,M	2
	150A 4040-2HT	4	TERMINAL, LUG (V77147) 304-0014-000 (AP FOR 150) (EFF REV LTR D)	N	2
	150B MS35333-69	4	WASHER, LOCK, SST, 0.095ID X 0.185OD (V96906) 373-8500-000 (AP FOR 150) (EFF REV LTR W)	A	2
	150B MS35333-69	4	WASHER, LOCK, SST, 0.095ID X 0.185OD (V96906) 373-8500-000 (AP FOR 150) (EFF REV LTR M)	B	2
	150B MS35333-69	4	WASHER, LOCK, SST, 0.095ID X 0.185OD (V96906) 373-8500-000 (AP FOR 150) (EFF REV LTR G)	C,D	2
	150B MS35333-69	4	WASHER, LOCK, SST, 0.095ID X 0.185OD (V96906) 373-8500-000 (AP FOR 150) (EFF REV LTR E)	E,F	2
	150B MS35333-69	4	WASHER, LOCK, SST, 0.095ID X 0.185OD (V96906) 373-8500-000 (AP FOR 150) (EFF REV LTR C)	L	2
	150B MS35333-69	4	WASHER, LOCK, SST, 0.095ID X 0.185OD (V96906) 373-8500-000 (AP FOR 150) (EFF REV LTR D)	G,M	2
	150B MS35333-69	4	WASHER, LOCK, SST, 0.095ID X 0.185OD (V96906) 373-8500-000 (AP FOR 150) (EFF REV LTR -)	N	2
	151 P347-0023-000	4	SCREW, MACH, SST, 2-56 X 5/16 (V77250) 347-0023-000 (AP FOR 149-150) (EFF TO SB 7)		2
	152 MS35338-134	4	WASHER, LOCK, SST, 0.088 ID X 0.172 OD (V96906) 310-0275-000 (AP FOR 149-150)		2
	153 546-1628-002	4	CLAMP (EFF TO REV LTR W)	A	9
	153 546-1628-002	4	CLAMP (EFF REV LTR W)	A	11
	153 546-1628-002	4	CLAMP (EFF TO REV LTR M)	B	9
	153 546-1628-002	4	CLAMP (EFF REV LTR M)	B	11
	153 546-1628-002	4	CLAMP (EFF TO REV LTR G)	C,D	9
	153 546-1628-002	4	CLAMP (EFF REV LTR G)	C,D	11
	153 546-1628-002	4	CLAMP (EFF TO REV LTR E)	E,F	9
	153 546-1628-002	4	CLAMP (EFF REV LTR E)	E,F	11
	153 546-1628-002	4	CLAMP (EFF TO REV LTR C)	L	9
	153 546-1628-002	4	CLAMP (EFF REV LTR C)	L	11
	153 546-1628-002	4	CLAMP (EFF TO REV LTR D)	G,M	9
	153 546-1628-002	4	CLAMP (EFF REV LTR D)	G,M	11
	153 546-1628-002	4	CLAMP (EFF TO REV LTR D)	N	11
	154 P347-0023-000	4	SCREW, MACH, SST, 2-56 X 5/16 (V77250) 347-0023-000 (AP)		9
	155 MS35338-134	4	WASHER, LOCK, SST, 0.088 ID X 0.172 OD (V96906) 310-0275-000 (AP)		9
	156 4277-01-05	4	SYNCHRO (V77045) 229-0194-000 B5 OR		1
	157 CTH-8-A-4/L906	4	SYNCHRO (V86197) 229-0194-000 B5 OR		1
	158 CM41004167	4	SYNCHRO (V05088) 229-0194-000 B5		1
	159 CM41004035	4	SYNCHRO (V88818) 229-6009-000 B4 OR		1
	160 CDSH-8-A-4/L927	4	SYNCHRO (V86197) 229-6009-000 B4		1
	161 CM41004035	4	SYNCHRO (V88818) 229-6009-000 B7 OR		1
	162 CDSH-8-A-4/L927	4	SYNCHRO (V86197) 229-6009-000 B7		1
	163 CM41014037	4	SYNCHRO (V88818) 229-3044-010 B6 OR		1
	164 CGH-8-A-1/L943	4	SYNCHRO (V86197) 229-3044-010 B6		1
	165 546-1029-002	4	CLAMP		5
	166 P347-0024-000	4	SCREW, MACH, SST, 2-56 X 3/8 (V77250) 347-0024-000 (AP)		7
	167 MS35338-134	4	WASHER, LOCK, SST, 0.088 ID X 0.172 OD (V96906) 310-0275-000 (AP)		5
	168 CRH10AS4	4	SYNCHRO, RCVR (V81697) 229-4022-010 B1		1
	169 CRH10AS4	4	SYNCHRO, RCVR (V81697) 229-4022-010 B2		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-1 170	609-3237-001	4	PLATE (EFF TO REV LTR W)	A	1
170	609-3237-002	4	PLATE (EFF REV LTR W)	A	1
170	609-3237-001	4	PLATE (EFF TO REV LTR M)	B	1
170	609-3237-002	4	PLATE (EFF REV LTR M)	B	1
170	609-3237-001	4	PLATE (EFF TO REV LTR G)	C,D	1
170	609-3237-002	4	PLATE (EFF REV LTR G)	C,D	1
170	609-3237-001	4	PLATE (EFF TO REV LTR E)	E,F	1
170	609-3237-002	4	PLATE (EFF REV LTR E)	E,F	1
170	609-3237-001	4	PLATE (EFF TO REV LTR C)	L	1
170	609-3237-002	4	PLATE (EFF REV LTR C)	L	1
170	609-3237-001	4	PLATE (EFF TO REV LTR D)	G,M	1
170	609-3237-002	4	PLATE (EFF REV LTR D)	G,M	1
170	609-3237-002	4	PLATE (EFF REV LTR D)	N	1

ADDENDUM 3
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

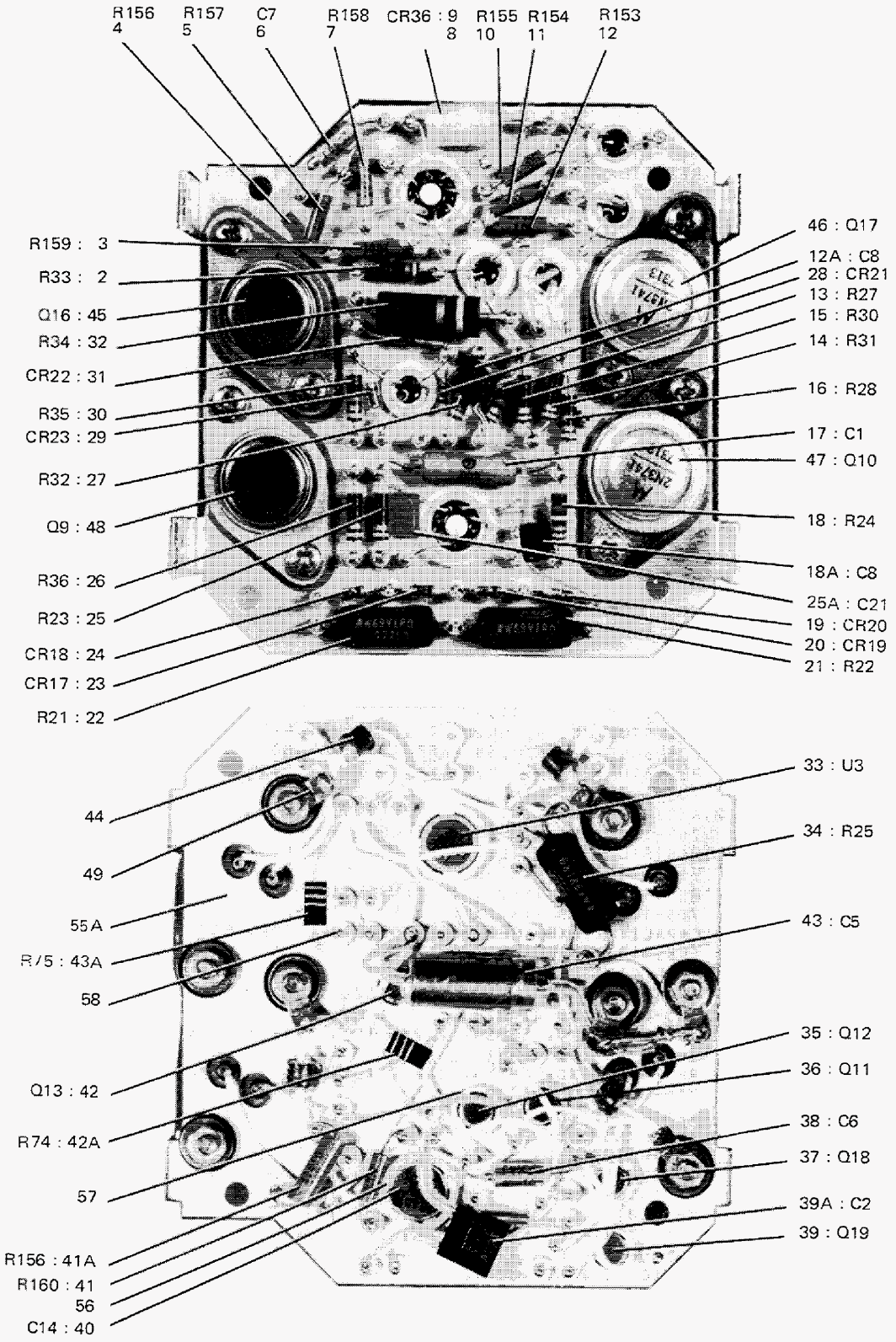
PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-21 of the Parts List Section of the manual.

This addendum sheet is issued to add identify incorrect information in figure 4-2. The corrected information is shown in **bold type**.

Item C14: 40 (located in lower left corner of figure) is not correct. Designation should be **U4: 40**.

GROUP ASSEMBLY PARTS LIST



TP3-6335-017

Electronic Components Assembly A1
Figure 4-2

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-2 - 1	609-4999-001	1	ELECTRONIC COMPONENTS ASSEMBLY A1 (SEE FIG 1-18 FOR NHA)		RF
2	RCR07G103KS	2	RESISTOR,FXD, CMPSN, 10K, 10%, 1/4W (V81349) 745-0785-000 A1R33 (EFF TO CI 72296)		1
2	RCR07G272KS	2	RESISTOR,FXD, CMPSN, 2.7K, 10%, 1/4W (V81349) 745-0764-000 A1R33 (EFF CI 72296)		1
3	T055-100K1F	2	RESISTOR,FXD, FILM, 100K, 1%, 1/8W (V11502) 705-1454-870 A1R159 (EFF TO REV LTR AB)		1
3	RN55D100DF	2	RESISTOR,MF, 100K, 1%, 1/8W (V81349) 705-1092-000 A1R159 (EFF REV LTR AB)		1
4	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A1R156 (EFF TO CI 72296)		1
4	RN60D6191F	2	RESISTOR,FXD, FILM, 6.19K, 1%, 1/4W (V81349) 705-6634-000 A1R156 (EFF CI 72296 TO CI 72335)		1
5	T055-7150-1F	2	RESISTOR,FXD, FILM, 715 OHMS, 1%, 1/8W (V11502) 705-1470-580 A1R157 (EFF TO CI 72296)		1
5	T055-6040F	2	RESISTOR,FXD, FILM, 604 OHMS, 1%, 1/8W (V11502) 705-1469-830 A1R157 (EFF TO REV LTR AB)		1
5	RN55D6040F	2	RESISTOR,MF, 604 OHMS, 1%, 1/8W (V81349) 705-3600-860 A1R157 (EFF REV LTR AB)		1
6	M39003-01-2044	2	CAPACITOR,FXD, ELC-LT, 2.2UF, 20T, 20V (V81349) 184-9083-440 A1C7		1
7	T055-4990-1F	2	RESISTOR,FXD, FILM, 4.99K, 1%, 1/8W (V11502) 705-1468-270 A1R158 (EFF TO CI 72263)		1
7	T055-49900-1F	2	RESISTOR,FXD, FILM, 49.9K, 1%, 1/8W (V11502) 705-1468-720 A1R158 (EFF CI 72263)		1
7	RN55D4992F	2	RESISTOR,MF, 49.9K, 1%, 1/8W (V81349) 705-3605-810 A1R158 (EFF REV LTR AB)		1
8	D306-03	2	INSULATOR,PREFD (V08795) 352-0524-000		1
9	1N5556	2	SEMICOND DEVICE (V07688) 353-0216-020 A1CR36		1
10	T055-4990-1F	2	RESISTOR,FXD, FILM, 4.99K, 1%, 1/8W (V11502) 705-1468-270 A1R155		1
10	RN55D4991F	2	RESISTOR,MF, 4.99K, 1%, 1/8W (V81349) 705-3605-330 A1R155 (EFF REV LTR AB)		1
11	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A1R54		1
11	RN55D1002F	2	RESISTOR,MF, 10K, 1%, 1/8W (V81349) 705-1044-000 A1R154 (EFF LEV LTR AB)		1
12	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A1R153		1
12	RN55D1002F	2	RESISTOR,MF, 10K, 1%, 1/8W (V81349) 705-1044-000 A1R153 (EFF REV LTR AB)		1
12A	CK05BX393K	2	CAPACITOR,FXD, CER DIEL, 0.039UF, 10%, 50V (V81349) 913-5019-270 A1C8 (EFF CI 73016 TO REV LTR Y)		1
13	RCR07G103KS	2	RESISTOR,FXD, CMPSN, 10K, 10%, 1/4W (V81349) 745-0785-000 A1R27		1
14	RCR07G222KS	2	RESISTOR,FXD, CMPSN, 2.2K, 10%, 1/4W (V81349) 745-0761-000 A1R31		1
15	RCR07G222KS	2	RESISTOR,FXD, CMPSN, 2.2K, 10%, 1/4W (V81349) 745-0761-000 A1R30		1
16	RCR07G103KS	2	RESISTOR,FXD, CMPSN, 10K, 10%, 1/4W (V81349) 745-0785-000 A1R28		1
17	292P2239R8	2	CAPACITOR,FXD, PLSTC DIEL, 0.022UF, 10%, 80V (V56289) 933-1039-190 A1C1 (EFF TO REV LTR Y)		1
18	RCR07G395KS	2	RESISTOR,FXD, CMPSN, 3.9MEGO, 10%, 1/4W (V81349) 745-0878-000 A1R24 (EFF TO CI 72296)		1
18	RCR07G563KS	2	RESISTOR,FXD, CMPSN, 56K, 10%, 1/4W (V81349) 745-0812-000 A1R24 (EFF CI 72296)		1
18A	CK05BX393K	2	CAPACITOR,FXD, CER DIEL, 0.039UF, 10%, 50V (V81349) 913-5019-270 A1C8 (EFF CI 72516 TO CI 73016)		1
19	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A1CR20		1
20	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A1CR19		1

- ITEM NOT ILLUSTRATED

ADDENDUM 3
FOR
332C-10 RADIO MAGNETIC INDICATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-22 of the Parts List Section of the manual.

This addendum sheet provides new parts list information for figure 4-2. Parts variances in Q12 required changing the bias circuit. The new information is shown in **bold type.**

4-2	2	RCR07G272KS	2	RESISTOR, FXD, CMPSN, 2.7K, 10%, 1/4W (V81349) 745-0764-000 A1R33 (EFF CI 722296 **THRU REV AD**)	1
	2	**RCR07G152KS**	**2**	**RESISTOR, FXD, CMPSN, 1.5K, 10%, 1/4W (V81349) 745-0755-000 A1R33 (EFF REV AE)**	1

GROUP ASSEMBLY PARTS LIST

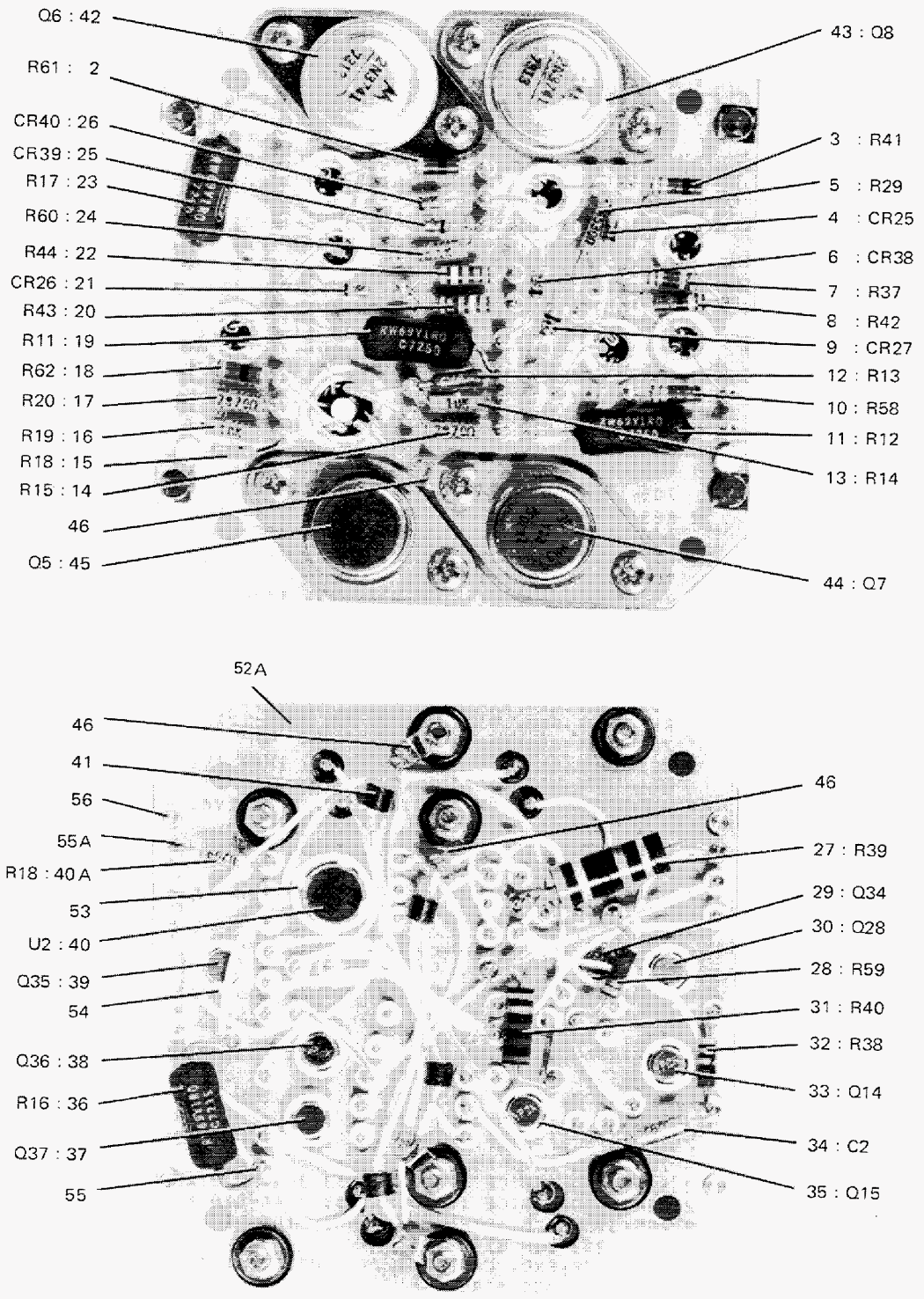
FIG - ITEM		PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-2	21	RW69V1R0	2	RESISTOR, FXD, WW 1 OHM, 5%, 3W (V81349) 747-5300-000 A1R22 (EFF TO REV LTR S)		1
	21	RW70V1R00F	2	RESISTOR, FXD, WW, 1 OHM, 1%, 1.25W A1R22 (EFF REV LTR S) (V81349) 747-4230-010		1
	22	RW69V1R0	2	RESISTOR, FXD, WW 1 OHM, 5%, 3W (V81349) 747-5300-000 A1R21 (EFF TO REV LTR S)		1
	22	RW70V1R00F	2	RESISTOR, FXD, WW, 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A1R21 (EFF REV LTR S)		1
	23	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A1CR17		1
	24	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A1CR18		1
	25	RCR07G475KS	2	RESISTOR, FXD, CMPSN, 4.7MEGO, 10%, 1/4W (V81349) 745-0881-000 A2R23 (EFF TO CI 72296)		1
	25	RCR07G155KS	2	RESISTOR, FXD, CMPSN, 1.5MEGO, 10%, 1/4W (V81349) 745-0863-000 A1R23 (EFF CI 72296 TO REV LTR T) SB-5		1
	25	RCR07G125KS	2	RESISTOR, FXD, CMPSN, 1.2MEGO, 10%, 1/4W (V81349) 745-0860-000 A1R23 (EFF REV LTR T TO REV LTR Y)		1
	25	RCR07G125KS	2	RESISTOR, FXD, CMPSN, 1.2MEGO, 10%, 1/4W (V81349) 745-0860-000 A1R23 (EFF REV LTR Y) OR		1
	25	629-7050-001	2	RESISTOR KIT (NON-PROCURABLE ITEM) (EFF REV LTR V TO REV LTR Y)		1
	25	RCR07G824KS	3	RESISTOR, FXD, CMPSN, 0.82MEGO, 10%, 1/4W (V81349) 745-0854-000 A1R23		AR
	25	RCR07G105KS	3	RESISTOR, FXD, CMPSN, 1MEGO, 10%, 1/4W (V81349) 745-0857-000 A1R23		AR
	25	629-8553-001	2	RESISTOR KIT (NON-PROCURABLE ITEM) (EFF REV LTR Y)		1
	25	RCR07G564KS	3	RESISTOR, FXD, CMPSN, 0.56MEGO, 10%, 1/4W (V81349) 745-0848-000 A1R23		AR
	25	RCR07G824KS	3	RESISTOR, FXD, CMPSN, 0.82MEGO, 10%, 1/4W (V81349) 745-0854-000 A1R23		AR
	25		2	RESISTOR KIT (NON-PROCURABLE ITEM) (EFF SB 7)		1
	25	RCR07G155KS	3	RESISTOR, FXD, CMPSN, 1.5 MEGO, 10%, 1/4W (V81349) 745-0863-000 A1R23		AR
	25	RCR07G125KS	3	RESISTOR, FXD, CMPSN, 1.2 MEGO, 10%, 1/4W (V81349) 735-0860-000 A1R23		AR
	25	RCR07G105KS	3	RESISTOR, FXD, CMPSN, 1.0 MEGO, 10%, 1/4W (V81349) 745-0857-000 A1R23		AR
	25	RCR07G824KS	3	RESISTOR, FXD, CMPSN, 0.82 MEGO, 10%, 1/4W (V81349) 745-0854-000 A1R23		AR
	25A	CK05BX182K	2	CAPACITOR, FXD, CER DIEL, 1800PF, 10%, 100V (V81349) 913-5019-110 A1C21 (EFF REV LTR Y)		1
	26	**RCR07G221KS**	**2**	**RESISTOR,FXD, CMPSN, 220 OHMS, 10%, 1/4W (V81349) 745-0725-000 A1R36**		**1**
	27	**RCR07G103KS**	**2**	**RESISTOR,FXD, CMPSN, 10K, 10%, 1/4W (V81349) 745-0785-000 A1R32**		**1**
	28	**1N4454**	**2**	**SEMICOND DEVICE (V03508) 353-3644-010 A1CR21**		**1**
	29	**1N4454**	**2**	**SEMICOND DEVICE (V03508) 353-3644-010 A1CR23**		**1**
	30	**RCR07G103KS**	**2**	**RESISTOR,FXD, CMPSN, 10K, 10%, 1/4W (V81349) 745-0785-000 A1R35**		**1**
	31	**1N4454**	**2**	**SEMICOND DEVICE (V03508) 353-3644-010 A1CR22**		**1**
	32	**RCR32G122KS**	**2**	**RESISTOR,FXD, CMPSN, 1.2K, 10%, 1W (V81349) 745-3356-000 A1R34**		**1**
	33	**RM741T**	**2**	**INTEGRATED CKT (V49956) 351-1029-010 A1U3**		**1**
	34	**RW69V1R0**	**2**	**RESISTOR,FXD,WW 1 OHM, 5%, 3W (V81349) 747-5300-000 A1R25**		**1**
	35	**2N2907A**	**2**	**TRANSISTOR (V07688) 352-0551-010 A1Q12**		**1**
	36	**2N2222A**	**2**	**TRANSISTOR (V07263) 352-0661-020 A1Q11**		**1**
	37	**2N2907A**	**2**	**TRANSISTOR (V07688) 352-0551-010 A1Q18 (EFF TO CI 72296)**		**1**
	37	**2N2222A**	**2**	**TRANSISTOR (V07263) 352-0661-020 A1Q18 (EFF CI 72296)**		**1**
	38	M39003-01-2044	2	CAPACITOR, FXD, ELCTLT, 2.2UF, 20%, 20V (V81349) 184-9083-440 A1C6		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
39	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A1Q19 (EFF TO CI 72296)		1
39	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A1Q19 (EFF CI 72296)		1
39A	CK06BX104M	2	CAPACITOR, FXD, CER DIEL, 0.1UF, 20%, 100V (V81349) 913-5019-780 A1C2 (EFF CI 72316)		1
40	MC1558G	2	INTEGRATED CKT (V04713) 351-1071-020 A1U4		1
41	T055-100K1F	2	RESISTOR, FXD, FILM, 100K, 1%, 1/8W (V11502) 705-1454-870 A1R160		1
41	RN55D1003F	2	RESISTOR,MF, 100K, 1%, 1/4W (V81349) 705-1092-000 A1R160 (EFF REV LTR AB)		1
41A	RN60D6191F	2	RESISTOR, FXD, FILM, 6.19K, 1%, 1/4W (V81349) 705-6634-000 A1R156 (EFF CI 72335)		1
42	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A1Q13		1
42A	RNC55H8661FS	2	RESISTOR, FXD FILM, 8.66K, 1%, 1/10W (V81349) 724-0639-850 A1R74 (EFF REV LTR Y)		1
43	M39003-01-2056	2	CAPACITOR, FXD, ELCTLT, 47UF, 20%, 20V (V81349) 184-9083-560 A1C5 (EFF TO CI 73406)		1
43A	RN005H1211FS	2	RESISTOR, FXD, FILM, 1.21K, 1%, 1/10W (V81349) 724-0639-030 A1R75 (EFF REV LTR Y)		1
44	F1913-1-01	2	SUPPRESSOR, PARA (V72656) 288-2154-000 A1Z9-A1Z12		4
45	2N3054	2	TRANSISTOR (V07688) 352-0581-010 A1Q16		1
46	2N3741	2	TRANSISTOR (V07263) 352-0695-020 A1Q17		1
47	2N3741	2	TRANSISTOR (V07263) 352-0695-020 A1Q10		1
48	2N3054	2	TRANSISTOR (V07688) 352-0581-010 A1Q9		1
49	**4040-5HDSPL**	**2**	**TERMINAL,LUG (V77147) 304-0332-000 (EFF TO CI 72296)**		**4**
49	**4040-5HDSPL**	**2**	**TERMINAL,LUG (V77147) 304-0332-000 (EFF CI 72296)**		**6**
- 50	**P313-0132-000**	**2**	**NUT,PLAIN,HEX, SST, 4-40 (V77250) 313-0132-000 (AP FOR 45-49)**		**8**
- 51	**MS35338-135**	**2**	**WASHER,LOCK, SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP FOR 45-49)**		**8**
- 52	**310-6340-000**	**2**	**WASHER,FLAT, SST, 0.125 ID X 0.281 OD (V79807) 310-6340-000 (AP FOR 45-49)(EFF TO CI 72296)**		**8**
- 52	**310-6340-000**	**2**	**WASHER,FLAT, SST, 0.125 ID X 0.281 OD (V79807) 310-6340-000 (AP FOR 45-49)(EFF CI 72296)**		**4**
- 52A	**310-0046-000**	**2**	**WASHER,FLAT, SST, 0.147 ID X 0.312 OD (V79807) 310-0046-000 (AP FOR 45-49)(EFF CI 72296)**		**4**
- 53	**302-0646-050**	**2**	**WASHER,NM,SHLDR PLSTC, 0.115 ID X 0.290 OD (V07896) 302-0646-050 (AP FOR 45-49)(EFF TO CI 72296)**		**8**
- 53	**547-8177-003**	**2**	**WASHER (AP FOR 45-49)(EFF CI 72296)**		**4**
- 53A	**547-8177-012**	**2**	**WASHER (AP FOR 45-49)(EFF CI 72296)**		**6**
- 54	**43-66-1**	**2**	**INSULATOR,PL (V13103) 352-9605-190 (AP FOR 45-49)**		**4**
- 55	**MS51957-15**	**2**	**SCREW,MACH, STL, 4-40 X 3/8 (V96906) 343-0135-000 (AP FOR 45-49)**		**8**
55A	628-1097-001	2	TERMINAL BOARD		1
56	T1532	3	HOLDER, XSTR (V98291) 352-9508-000		2
56	T1533	3	HOLDER, XSTR (V98291) 352-9509-000		5
58	SL444-435WHT	3	TERMINAL, FEEDTH (V12615) 306-2474-110		59

- ITEM NOT ILLUSTRATED

GROUP ASSEMBLY PARTS LIST



TP3-6336-017

Electronic Components Assembly A2
Figure 4-3

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-3 - 1	609-4960-001	1	ELECTRONIC COMPONENTS ASSEMBLY A2 (SEE FIG 1-19 FOR NHA)		RF
2	RCR07G102KS	2	RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A2R61		1
3	RCR07G102KS	2	RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A2R41		1
4	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A2CR25		1
5	T055-4530-1F	2	RESISTOR,FXD, FILM, 4.53K, 1%, 1/8W (V11502) 705-1468-250 A2R29		1
6	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A2CR38		1
7	RCR07G332KS	2	RESISTOR,FXD, CMPSN, 3.3K, 10%, 1/4W (V81349) 745-0767-000 A2R37		1
8	RCR07G275KS	2	RESISTOR,FXD, CMPSN, 2.7MEGO, 10%, 1/4W (V81349) 745-0872-000 A2R42		1
9	1N754A	2	SEMICOND DEVICE (V07688) 353-2716-000 A2CR27		1
10	RCR07G272KS	2	RESISTOR,FXD, CMPSN, 2.7K, 10%, 1/4W (V81349) 745-0764-000 A2R58		1
11	RW69V1R0	2	RESISTOR, FXD, WW 1 OHM, 5%, 3W (V81349) 747-5300-000 A2R12 (EFF TO REV LTR L)		1
11	RW70V1R00F	2	RESISTOR, FXD, WW, 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A2R12 (EFF REV LTR L)		1
12	T055-36500-1F	2	RESISTOR, FXD, FILM, 36.5K, 1%, 1/8W (V11502) 705-1471-040 A2R13 (EFF TO CI 72296)		1
12	T055-29400-1F	2	RESISTOR,FXD, FILM, 29.4K, 1%, 1/8W (V11502) 705-1468-610 A2R13 (EFF CI 72296)		1
13	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A2R14		1
14	T055-7871-1F	2	RESISTOR,FXD, FILM, 7.87K, 1%, 1/8W (V11502) 705-1470-840 A2R15		1
15	T055-36500-1F	2	RESISTOR,FXD, FILM, 36.5K, 1%, 1/8W (V11502) 705-1471-040 A2R18 (EFF TO CI 72296)		1
15	T055-29400-1F	2	RESISTOR,FXD, FILM, 29.4K, 1%, 1/8W (V11502) 705-1468-610 A2R18 (EFF CI 72296 TO CI 72353)		1
16	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A2R19		1
17	T055-7871-1F	2	RESISTOR,FXD, FILM, 7.87K, 1%, 1/8W (V11502) 705-1470-840 A2R20		1
18	RCR07G102KS	2	RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A2R62		1
19	RW69V1R0	2	RESISTOR, FXD, WW,1 OHM, 5%, 3W (V81349) 747-5300-000 A2R11 (EFF TO REV LTR L)		1
19	RW70V1R00F	2	RESISTOR, FXD, WW, 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A2R11 (EFF REV LTR L)		1
20	RCR07G393KS	2	RESISTOR, FXD, CMPSN, 39K, 10%, 1/4W (V81349) 745-0806-000 A2R43		1
21	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A2CR26		1
22	RCR07G393KS	2	RESISTOR, FXD, CMPSN, 39K, 10%, 1/4W (V81349) 745-0806-000 A2R44		1
23	RW69V1R0	2	RESISTOR, FXD, WW,1 OHM, 5%, 3W (V81349) 747-5300-000 A2R17 (EFF TO REV LTR L)		1
23	RW70V1R00F	2	RESISTOR, FXD, WW, 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A2R17 (EFF REV LTR L)		1
24	T055-26-1K1F	2	RESISTOR,FXD, FILM, 26.1K, 1%, 1/8W (V11502) 705-1454-730 A2R60		1
25	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A2CR39		1
26	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A2CR40		1
27	RCR32G390KS	2	RESISTOR,FXD, CMPSN, 39 OHMS, 10%, 1W (V81349) 745-3293-000 A2R39		1
28	RCR07G272KS	2	RESISTOR,FXD, CMPSN, 2.7K, 10%, 1/4W (V81349) 745-0764-000 A2R59		1
29	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A2Q34		1
30	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A2Q28		1
31	RCR20G821KS	2	RESISTOR,FXD, CMPSN, 820 OHMS, 10%, 1/2W (V81349) 745-1349-000 A2R40		1

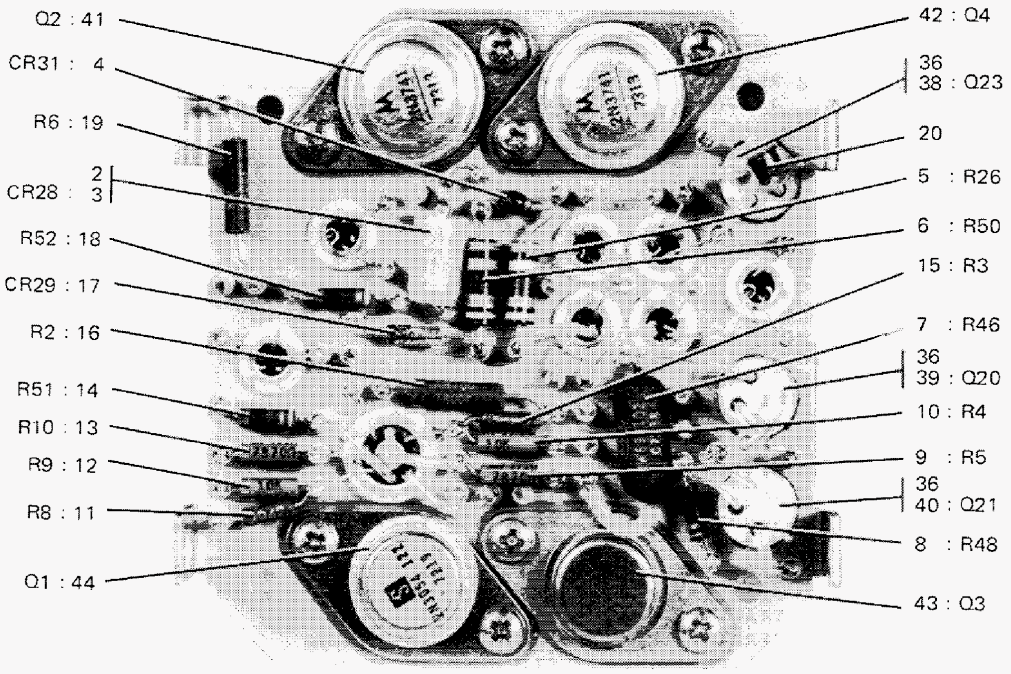
- ITEM NOT ILLUSTRATED

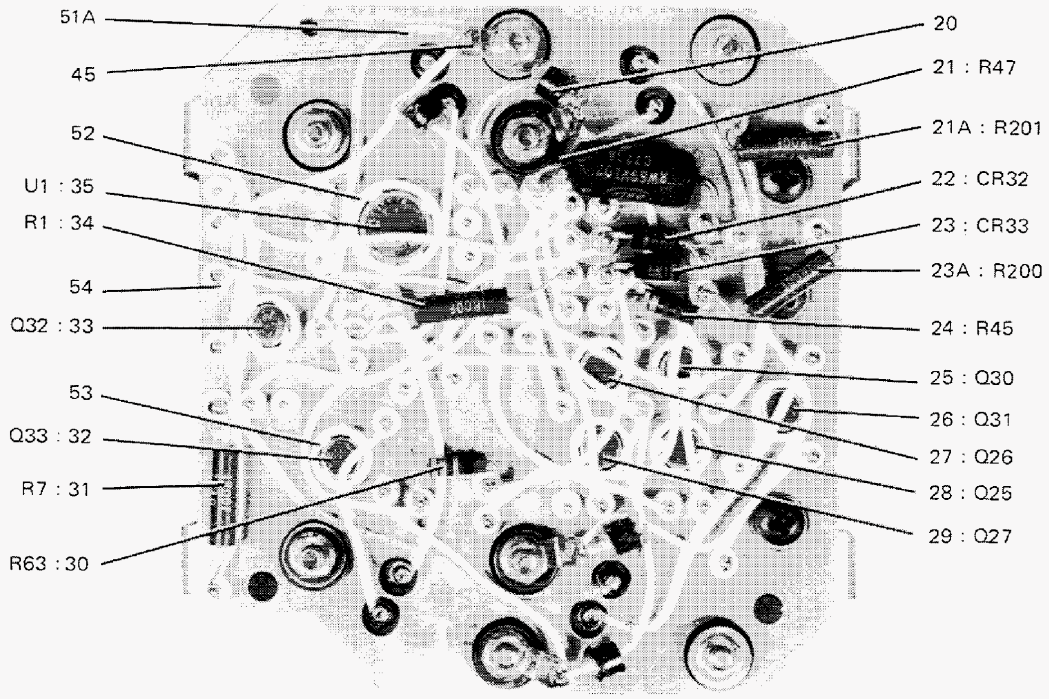
GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-3 32	RCR07G103KS	2	RESISTOR,FXD, CMPSN, 10K, 10%, 1/4W (V81349) 745-0785-000 A2R38		1
33	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A2Q14		1
34	M39003-01-2029	2	CAPACITOR, FXD, ELCTLT, 3.3UF, 20%, 15V (V81349) 184-9083-290 A2C2 (EFF TO REV LTR T)		1
34	M39003-01-2305	2	CAPACITOR, FXD, ELCTLT, 6.8UF, 20%, 20V (V81349) 184-9086-650 A2C2 (EFF REV LTR T)		1
35	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A2Q15		1
36	RW69V1R0	2	RESISTOR, FXD, WW,1 OHM, 5%, 3W (V81349) 747-5300-000 A2R16 (EFF TO REV LTR L)		1
36	RW70V1R00F	2	RESISTOR, FXD, WW, 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A2R16 (EFF REV LTR L)		1
37	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A2Q37		1
38	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A2Q36		1
39	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A2Q35		1
40	MC1558G	2	INTEGRATED CKT (V04713) 351-1071-020 A2U2		1
40A	T055-29400-1F	2	RESISTOR,FXD, FILM, 29.4K, 1%, 1/8W (V11502) 705-1468-610 A2R18 (EFF CI 72353)		1
41	F1913-1-01	2	SUPPRESSOR,PARA (V72656) 288-2154-000 A2Z5-A2Z8		4
42	2N3741	2	TRANSISTOR (V07263) 352-0695-020 A2Q6		1
43	2N3741	2	TRANSISTOR (V07263) 352-0695-020 A2Q8		1
44	2N3054	2	TRANSISTOR (V07688) 352-0581-010 A2Q7		1
45	2N3054	2	TRANSISTOR (V07688) 352-0581-010 A2Q5		1
46	4040-5HDSPL	2	TERMINAL,LUG (V77147) 304-0332-000		5
- 47	P313-0132-000	2	NUT,PLAIN,HEX, SST, 4-40 (V77250) 313-0132-000 (AP FOR 42-46)		8
- 48	MS35338-135	2	WASHER,LOCK, SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP FOR 42-46)		8
- 49	310-6340-000	2	WASHER,FLAT, SST, 0.125 ID X 0.281 OD (V79807) 310-6340-000 (AP FOR 42-46)		8
- 50	302-0646-050	2	WASHER,NM,SHLDR PLSTC, 0.115 ID X 0.290 OD (V07896) 302-0646-050 (AP FOR 42-46)(EFF TO CI 72296)		8
50	547-8177-003	2	WASHER (AP FOR 42-46)(EFF CI 72296)		8
- 51	43-66-1	2	INSULATOR,PL (V13103) 352-9605-190 (AP FOR 42-46)		4
- 52	MS51957-15	2	SCREW,MACH, STL, 4-40 X 3/8 (V96906) 343-0135-000 (AP FOR 42-46)		8
52A	628-1055-001	2	TERMINAL BOARD		1
53	T1532	3	HOLDER, XSTR (V98291) 352-9508-000		1
54	T1533	3	HOLDER, XSTR (V98291) 352-9509-000		7
55	SL444-435WHT	3	TERMINAL, FEEDTH (V12615) 306-2474-110		54
55A	SL441-434WHT	3	TERMINAL, STUD (V12615) 306-2222-100 (EFF CI 72353)		2
56	565-7241-003	3	NUT, ANGLE		4

- ITEM NOT ILLUSTRATED

GROUP ASSEMBLY PARTS LIST





TP3-6334-017

Electronic Components Assembly A3
Figure 4-4

GROUP ASSEMBLY PARTS LIST

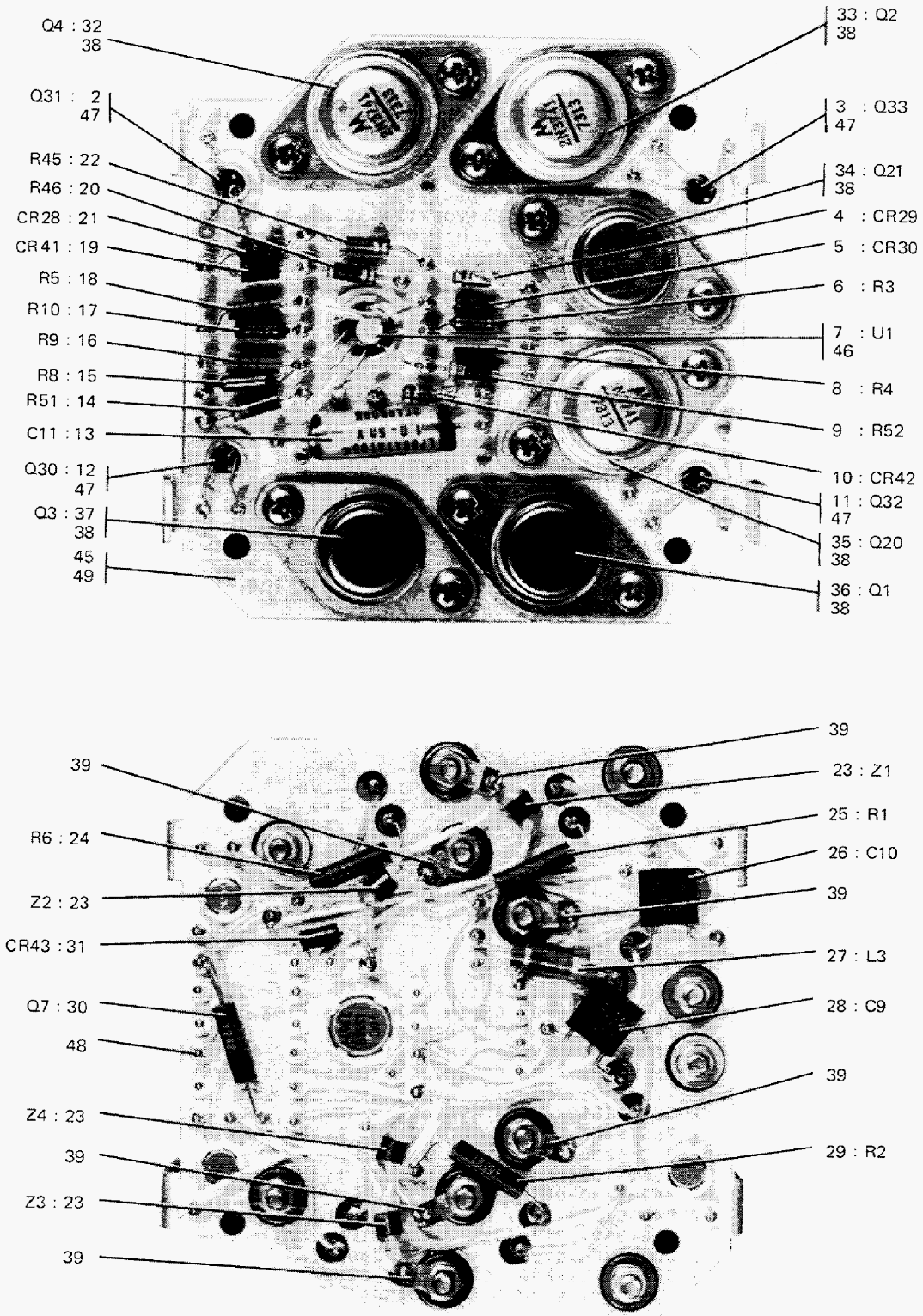
FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-4 - 1	609-4961-001	1	ELECTRONIC COMPONENTS ASSEMBLY A3 (SEE FIG 1-24 FOR NHA)		RF
2	D306-03	2	INSULATOR,PREFD (V08795) 352-9524-000		1
3	1N30168	2	SEMICOND DEVICE (V81350) 353-3046-000 A3CR28		1
4	SC5614	2	SEMICOND DEVICE (V14099) 353-6556-010 A3CR31		1
5	RCR20G392KS	2	RESISTOR,FXD, CMPSN, 3.9K, 10%, 1/2W (V81349) 745-1377-000 A3R26		1
6	RCR20G332KS	2	RESISTOR,FXD, CMPSN, 3.3K, 10%, 1/2W (V81349) 745-1373-000 A3R50		1
7	RW69V102	2	RESISTOR,FXD,WW 1K, 5%, 2.5W (V81349) 747-7600-250 A3R46		1
8	RCR07G222KS	2	RESISTOR,FXD, CMPSN, 2.2K, 10%, 1/4W (V81349) 745-0761-000 A3R48		1
9	T055-7871-1F	2	RESISTOR,FXD, FILM, 7.87K, 1%, 1/8W (V11502) 705-1470-840 A3R5		1
10	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A3R4		1
11	T055-36500-1F	2	RESISTOR,FXD, FILM, 36.5K, 1%, 1/8W (V11502) 705-1471-040 A3R8 (EFF TO CI 72296)		1
11	T055-29400-1F	2	RESISTOR,FXD, FILM, 29.4K, 1%, 1/8W (V11502) 705-1468-610 A3R8 (EFF CI 72296)		1
12	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A3R9		1
13	T055-7871-1F	2	RESISTOR,FXD, FILM, 7.87K, 1%, 1/8W (V11502) 705-1470-840 A3R10		1
14	RCR07G102KS	2	RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A3R51		1
15	T055-36500-1F	2	RESISTOR,FXD, FILM, 36.5K, 1%, 1/8W (V11502) 705-1471-040 A3R3 (EFF TO CI 72296)		1
15	T055-29400-1F	2	RESISTOR,FXD, FILM, 29.4K, 1%, 1/8W (V11502) 705-1468-610 A3R3 (EFF CI 72296)		1
16	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R2		1
17	1N9698	2	SEMICOND DEVICE (V07688) 353-3180-000 A3CR29		1
18	RCR07G102KS	2	RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A3R52		1
19	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R6		1
20	F1913-1-01	2	SUPPRESSOR,PARA (V72656) 288-2154-000 A3Z1-A3Z4,A3Z14		5
21	RW69V102	2	RESISTOR,FXD,WW 1K, 5%, 2.5W (V81349) 747-7600-250 A3R47		1
21A	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R201 (EFF CI 72443)		1
22	1N4002	2	SEMICOND DEVICE (V04713) 353-6442-020 A3CR32		1
23	1N4002	2	SEMICOND DEVICE (V04713) 353-6442-020 A3CR33		1
23A	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R200 (EFF CI 72443)		1
24	RCR07G222KS	2	RESISTOR,FXD, CMPSN, 2.2K, 10%, 1/4W (V81349) 745-0761-000 A3R45		1
25	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A3Q30		1
26	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A3Q31		1
27	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A3Q26		1
28	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A3Q25		1
29	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A3Q27		1
30	RCR07G222KS	2	RESISTOR,FXD, CMPSN, 2.2K, 10%, 1/4W (V81349) 745-0761-000 A3R63 (EFF TO CI 72316)		1
30	RCR07G103KS	2	RESISTOR,FXD, CMPSN, 10K, 10%, 1/4W (V81349) 745-0785-000 A3R63 (EFF CI 72316)		1
31	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R7		1
32	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A3Q33		1
33	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A3Q32		1
34	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R1		1
35	MC1558G	2	INTEGRATED CKT (V04713) 351-1071-020 A3U1		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-4 36	TX82P032-037-3B	2	HOLDER,SEMICOND (V98978) 352-9884-000		3
- 37	MW375-118	2	INSULATOR,WSHR, (V08289) 302-0640-080 (AP)		3
38	2N4234	2	TRANSISTOR (V07263) 352-0695-030 A3Q23		1
39	2N4236	2	TRANSISTOR (V07263) 352-0695-050 A3Q20		1
40	2N4239	2	TRANSISTOR (V04713) 352-0800-030 A3Q21		1
41	2N3741	2	TRANSISTOR (V07263) 352-0695-020 A3Q2		1
42	2N3741	2	TRANSISTOR (V07263) 352-0695-020 A3Q4		1
43	2N3054	2	TRANSISTOR (V07688) 352-0581-010 A3Q3		1
44	2N3054	2	TRANSISTOR (V07688) 352-0581-010 A3Q1		1
45	4040-5HDSPL	2	TERMINAL,LUG (V77147) 304-0332-000		4
- 46	P313-0132-000	2	NUT,PLAIN,HEX, SST, 4-40 (V77250) 313-0132-000 (AP FOR 41-45)		8
- 47	MS35338-135	2	WASHER,LOCK, SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP FOR 41-45)		8
- 48	310-6340-000	2	WASHER,FLAT, SST, 0.125 ID X 0.281 OD (V79807) 310-6340-000 (AP FOR 41-45)		8
- 49	302-0646-050	2	WASHER,NM,SHLDR PLSTC, 0.115 ID X 0.290 OD (V07896) 302-0646-050 (AP FOR 41-45)(EFF TO CI 72296)		8
- 49	547-8177-003	2	WASHER (AP FOR 41-45)(EFF CI 72296)		8
- 50	43-66-1	2	INSULATOR,PL (V13103) 352-9605-190 (AP FOR 41-45)		4
- 51	MS51957-15	2	SCREW,MACH, STL, 4-40 X 3/8 (V96906) 343-0135-000 (AP FOR 41-45)		8
51A	628-1078-001	2	TERMINAL BOARD		1
52	T1532	3	HOLDER, XSTR (V98291) 352-9508-000		1
53	T1533	3	HOLDER, XSTR (V98291) 352-9509-000		7
54	SL444-435WHT	3	TERMINAL, FEEDTH (V12615) 306-2474-110		59

- ITEM NOT ILLUSTRATED

GROUP ASSEMBLY PARTS LIST



TP3-6333-017

Electronic Components Assembly A3
Figure 4-5

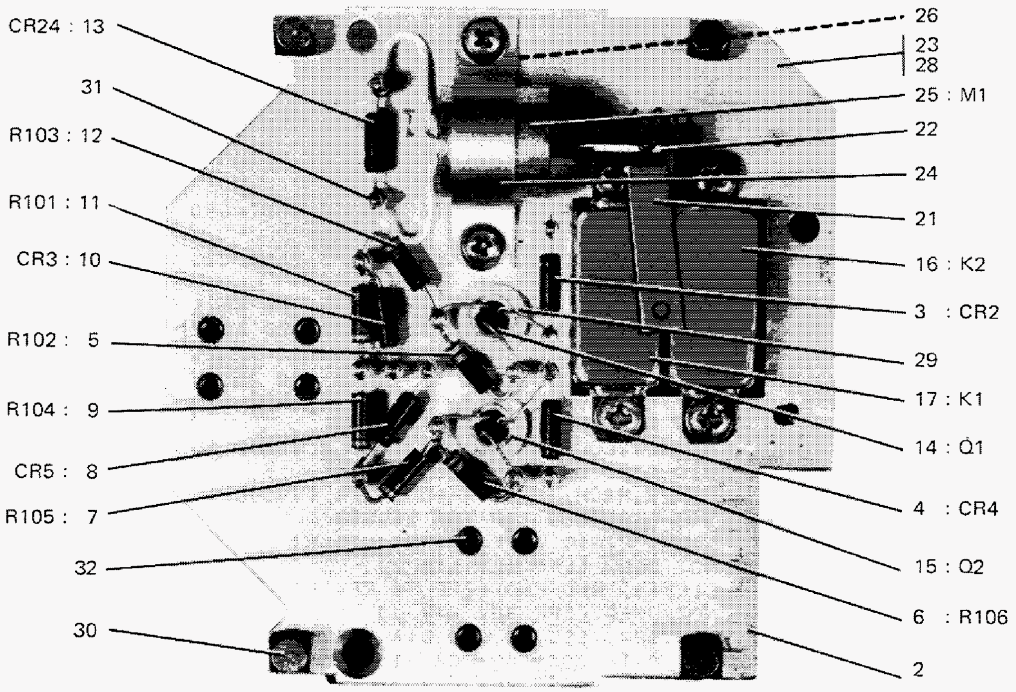
GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-5 - 1	618-1135-001	1	ELECTRONIC COMPONENTS ASSEMBLY A3 (SEE FIG 1-24 FOR NHA)		RF
2	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A3Q31		1
3	2N2907A	2	TRANSISTOR (V07688) 352-0551-010 A3Q33		1
4	1N968A	2	SEMICOND DEVICE (V07688) 353-3225-000 (EFF TO REV LTR B) A3CR29		1
4	1N968B	2	SEMICOND DEVICE (V04713) 353-3179-000 (EFF REV LTR B) A3CR29		1
5	1N4002	2	SEMICOND DEVICE (V04713) 353-6442-020 A3CR30		1
6	T055-29400-1F	2	RESISTOR,FXD, FILM, 29.4K, 1%, 1/8W (V11502) 705-1468-610 A3R3 (EFF TO REV LTR D)		1
6	RN55D3092F	2	RESISTOR,FXD, 30.9K 1%, 1/8W (V81349) A3R3 705-3605-700 (EFF REV LTR E)		
7	MC1558G	2	INTEGRATED CKT (V04713) 351-1071-020 A3U1		1
8	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A3R4 (EFF TO REV LTR D)		1
8	RN55D1002F	2	RESISTER,FXD, 10K, 1%, 1/8W (V81349) 705-1044-000 A3R4 (EFF REV LTR E)		
9	RCR07G102KS	2	RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A3R52		1
10	1N968A	2	SEMICOND DEVICE (V07688) 353-3225-000 A3CR42 (EFF TO REV LTR B) A3CR42		1
10	1N968B	2	SEMICOND DEVICE (V04713) 353-3179-000 (EFF REV LTR B) A3CR42		1
11	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A3Q32		1
12	2N2222A	2	TRANSISTOR (V07263) 352-0661-020 A3Q30		1
13	LP88A1A105K	2	CAPACITOR,FXD, PLSTC DIEL, 1UF, 10%, 50V (V01884) 933-1081-200 A3C11		1
14	RCR07G102KS	2	RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A3R51		1
15	T055-29400-1F	2	RESISTOR,FXD, FILM, 29.4K, 1%, 1/8W (V11502) 705-1468-610 A3R8 (EFF TO REV LTR E)		1
15	RN55D3092F	2	RESISTOR,FXD, 30.9K, 1%, 1/8W (V81349) 705-3605-700 A3R8 (EFF REV LTR E)		
16	T055-10K1F	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 705-1454-630 A3R9 (EFF TO REV LTR E)		1
16	RN55D1002F	2	RESISTOR,FXD, 10K, 1%, 1/8W (V81349) 705-1044-000 A3R9 (EFF REV LTR E)		
17	T055-7871-1F	2	RESISTOR,FXD, FILM, 7.87K, 1%, 1/8W (V11502) 705-1470-840 A3R10 (EFF TO REV LTR E)		1
17	RN55D7871F	2	RESISTOR,FXD, 7.87K, 1%, 1/8W (V81349) 705-1039-000 A3R10 (EFF REV LTR E)		
18	T055-7871-1F	2	RESISTOR,FXD, FILM, 7.87K, 1%, 1/8W (V11502) 705-1470-840 A3R5 (EFF TO REV LTR E)		1
18	RN55D7871F	2	RESISTOR,FXD, 7.87K, 1%, 1/8W (V81349) 705-1039-000 A3R5 (EFF REV LTR E)		
19	1N4002	2	SEMICOND DEVICE (V04713) 353-6442-020 A3CR41		1
20	RCR07G471KS	2	RESISTOR,FXD, CMPSN, 470 OHMS, 10%, 1/4W (V81349) 745-0737-000 A3R46		1
21	1N4002	2	SEMICOND DEVICE (V04713) 353-6442-020 A3CR28		1
22	RCR07G471KS	2	RESISTOR,FXD, CMPSN, 470 OHMS, 10%, 1/4W (V81349) 745-0737-000 A3R45		1
23	F1913-1-01	2	SUPPRESSOR,PARA (V72656) 288-2154-000 A3Z1-A3Z4		4
24	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R6		1
25	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R1		1
26	CK06BX104M	2	CAPACITOR,FXD, CER DIEL, 0.1UF, 20%, 100V (V81349) 913-5019-780 A3C10		1
27	MS75089-19	2	COIL,RF, 470UH (V96906) 240-2715-450 A3L3		1
28	CK06BX104M	2	CAPACITOR,FXD, CER DIEL, 0.1UF, 20%, 100V (V81349) 913-5019-780 A3C9		1
29	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R2		1
30	RW70U1R00F	2	RESISTOR,FXD,WW 1 OHM, 1%, 1.25W (V81349) 747-4230-010 A3R7		1
31	1N4002	2	SEMICOND DEVICE (V04713) 353-6442-020 A3CR43		1
32	2N3741	2	TRANSISTOR (V07263) 352-0695-020 A3Q4		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-5 33	2N3741	2	**TRANSISTOR (V07263) 352-0695-020 A3Q2**		1
34	2N3054	2	**TRANSISTOR (V07688) 352-0581-010 A3Q21**		1
35	2N3741	2	**TRANSISTOR (V07263) 352-0695-020 A3Q20**		1
36	2N3054	2	**TRANSISTOR (V07688) 352-0581-010 A3Q1**		1
37	2N3054	2	**TRANSISTOR (V07688) 352-0581-010 A3Q3**		1
38	43-66-1	2	**INSULATOR,PL (V13103) 352-9605-190**		12
39	4040-5HDSPL	2	**TERMINAL,LUG (V77147) 304-0332-000**		6
- 40	P313-0132-000	2	NUT, PLAIN, HEX, SST, 4-40 (V77250) 313-0132-000 (AP FOR 32-39)		11
- 40	334-0043-000	2	NUT, PLAIN, CAP NP BRS, 4-40 (V21537) (334-0043-000) (AP FOR 32-39)		1
- 41	MS35338-135	2	WASHER, LOCK, SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP FOR 32-39)		12
- 42	310-6340-000	2	WASHER, FLAT, SST, 0.125 ID X 0.281 OD (V79807) 310-6340-000 (AP FOR 32-39)		12
- 43	547-8177-003	2	WASHER (AP FOR 32-39)		12
- 44	MS51957-15	2	SCREW, MACH, STL, 4-40 X 3/8 (V96906) 343-0135-000 (AP FOR 32-39)		12
45	618-1134-001	2	TERMINAL BOARD		1
46	T1532	3	HOLDER, XSTR (V98291) 352-9508-000		1
47	T1533	3	HOLDER, XSTR (V98291) 352-9509-000		4
48	SL444-435WHT	3	TERMINAL, FEEDTH (V12615) 306-2474-110		44
49	618-1134-002	3	BOARD		1

- ITEM NOT ILLUSTRATED



Electronic Components Assembly A6
Figure 4-6

GROUP ASSEMBLY PARTS LIST

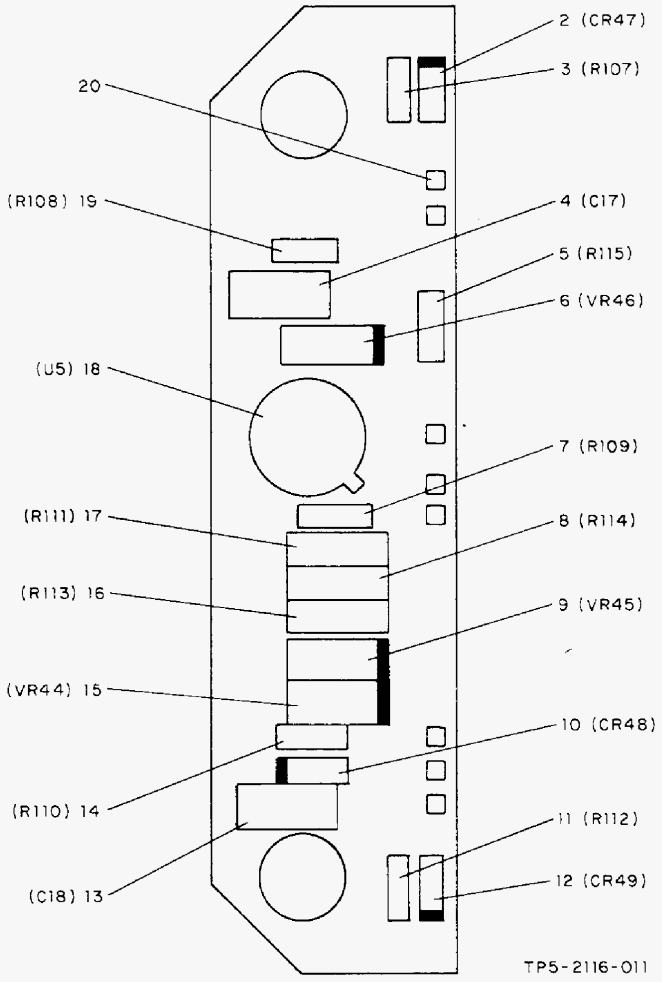
FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-6 - 1	618-4290-001	1	**ELECTRONIC COMPONENTS ASSEMBLY A6 (SEE FIG 1-142 FOR NHA)**		**RF**
2	**MS21266-1N**	**2**	**PLASTIC CHANNEL (V96906) 150-0173-000**		**AR**
3	**1N645**	**2**	**SEMICOND DEVICE (V07688) 353-2607-000 A6CR2**		**1**
4	**1N645**	**2**	**SEMICOND DEVICE (V07688) 353-2607-000 A6CR4**		**1**
5	RCR07G752JS	2	RESISTOR, FXD, CMPSN, 7.5K, 5%, 1/4W (V81349) 745-0780-000 A6R102 (EFF TO REV LTR F)		1
5	RCR07G273JS	2	RESISTOR, FXD, CMPSN, 27K, 5%, 1/4W (V81349) 745-0799-000 A6R102 (EFF REV LTR F TO REV LTR G)		1
5	RCR07G682KS	2	RESISTOR, FXD, CMPSN, 6.8K, 10%, 1/4W (V81349) 745-0779-000 A6R102 (EFF REV LTR G)		1
6	RCR07G102KS	2	RESISTOR, FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A6R106		1
7	RCR07G752JS	2	RESISTOR, FXD, CMPSN, 7.5K, 5%, 1/4W (V81349) 745-0780-000 A6R105 (EFF TO REV LTR F)		1
7	RCR07G273JS	2	RESISTOR, FXD, CMPSN, 27K, 5%, 1/4W (V81349) 745-0799-000 A6R105 (EFF REV LTR F TO REV LTR G)		1
7	RCR07G682KS	2	RESISTOR, FXD, CMPSN, 6.8K, 10%, 1/4W (V81349) 745-0779-000 A6R105 (EFF REV LTR G)		1
8	1N645	2	SEMICOND DEVICE (V07688) 353-2607-000 A6CR5		1
9	RCR07G752JS	2	RESISTOR, RXD, CMPSN, 7.5K, 5%, 1/4W (V81349) 745-0780-000 A6R104 (EFF TO REV LTR F)		1
9	RCR07G273JS	2	RESISTOR, FXD, CMPSN, 27K, 5%, 1/4W (V81349) 745-0799-000 A6R104 (EFF REV LTR F TO REV LTR G) SB-4		1 1
9	RCR07G682KS	2	RESISTOR, FXD, CMPSN, 6.8K, 10%, 1/4W (V81349) 745-0779-000 A6R104 (EFF REV LTR G) SB-4		1
10	1N645	2	SEMICOND DEVICE (V07688) 353-2607-000 A6CR3		1
11	RCR07G752JS	2	RESISTOR, FXD, CMPSN, 7.5K, 5%, 1/4W (V81349) 745-0780-000 A6R101 (EFF TO REV LTR F)		1
11	RCR07G273JS	2	RESISTOR, FXD, CMPSN, 27K, 5%, 1/4W (V81349) 745-0799-000 A6R101 (EFF REV LTR F TO REV LTR G) SB-4		1
11	RCR07G682KS	2	RESISTOR, FXD, CMPSN, 6.8K, 10%, 1/4W, (V81349) 745-0779-000 A6R101 (EFF REV LTR G) SB-4		1
12	**RCR07G102KS**	**2**	**RESISTOR,FXD, CMPSN, 1K, 10%, 1/4W (V81349) 745-0749-000 A6R103**		**1**
13	1N645	2	SEMICOND DEVICE (V07688) 353-2607-000 A6CR24 (EFF TO REV LTR AC)		1
13	1N4002	2	SEMICOND DEVICE (V14433) 353-6442-020 A6CR24 (EFF REV LTR AC)		1
14	**2N2222A**	**2**	**TRANSISTOR (V07263) 352-0661-020 A6Q1**		**1**
15	**2N2222A**	**2**	**TRANSISTOR (V07263) 352-0661-020 A6Q2**		**1**
16	**M5757-9-005**	**2**	**RELAY,ARM (V81349) 974-1076-060 A6K2**		**1**
17	**M5757-9-005**	**2**	**RELAY,ARM (V81349) 974-1076-060 A6K1**		**1**
- 18	**P313-0132-000**	**2**	**NUT,PLAIN,HEX, SST, 4-40 (V77250) 313-0132-000 (AP FOR 16,17)**		**4**
- 19	**310-0278-000**	**2**	**WASHER,LOCK, SST, 0.115 ID X 0.202 OD (V70318) 310-0278-000 (AP FOR 16,17)**		**4**
- 20	**MS51957-13**	**2**	**SCREW,MACH, STL, 4-40 X 1/4 (V96906) 343-0133-000 (AP FOR 16,17)**		**4**
21	609-4885-001	2	LINK, RIGID (EFF TO REV LTR H)		1
21			NOT USED (EFF REV LTR J)		
22	609-4886-001	2	CLEVIS, ROD END (EFF TO REV LTR H)		1
22			NOT USED (EFF REV LTR J)		
- 23	MS16562-189	2	PIN,SPR, SST, 0.062 DIA X 3/16 (V96906) 311-0416-000 (AP FOR 21,22) (EFF TO REV LTR H)		1
- 23			NOT USED (EFF REV LTR J)		
24	609-4884-001	2	CLAMP (EFF TO REV LTR H)		1
24			NOT USED (EFF REV LTR J)		
25	SR2000	2	SOLENOID, ELEC (V21441) 411-0020-000 A6M1 (EFF TO REV LTR H)		1
25			NOT USED (EFF REV LTR J)		
26		2	SPACER, PLATE (EFF TO CI 73063)		1
26			NOT USED (EFF REV LTR J)		

- ITEM NOT ILLUSTRATED

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-6 - 27	MS51957-5	2	SCREW,MACH, SST, 2-56 X 3/8 (V96906) 343-0126-000 (AP FOR 24-26)(EFF TO CI 73254)		2
- 27	MS51957-3	2	SCREW,MACH, CD PL STL, 2-56 X 1/4 (V96906) 343-0124-000 (AP FOR 24-26)(EFF CI 73254)		2
28	618-4003-001	2	PLATE,RIVITED		1
29	T1533	3	HOLDER,XSTR (V98291) 352-9509-000		2
30	565-7241-004	3	NUT,ANGLE		4
31	SL444-435WHT	3	TERMINAL,FEEDTH (V12615) 306-2474-110		15
32	F22NCFMA2-26	3	NUT,SLFLKG, CD PL STL, 2-56 (V72962) 333-0838-000		10
33	609-4968-001	3	PLATE		1

- ITEM NOT ILLUSTRATED



Circuit Card Assembly A5
Figure 4-7

GROUP ASSEMBLY PARTS LIST

FIG - ITEM		PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
4-7	1	601-4496-001	1	CIRCUIT CARD ASSEMBLY (SEE FIG 1-27B FOR NHA)		RF
	2	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A5CR47		1
	3	RCR05G822KS	2	RESISTOR,FXD, CMPSN, 8.2K, 10%, 1/8W (V81349) 745-2374-000 A5R107 (EFF TO REV LTR B)		1
	3	RCR05G103KS	2	RESISTOR,FXD, FILM, 10K, 1%, 1/8W (V11502) 745-2377-000 A5R107 (EFF TO REV LTR C)		1
	3	RN55D1152F	2	RESISTOR,MF, 11.5K, 1%, 1/8W (V81349) 705-1047-000 A5R107 (EFF SB 9)		1
	4	CY30C105M	2	CAPACITOR,FXD, CER DEIL 1UF, 20%, 50V (V16546) 913-3279-270 A5C17 (EFF TO SB 9)		1
	4	CK06BX105K	2	CAPACITOR,FXD, CER, NPLR, 10%, 50V (V81349) 913-5019-560 A5C17 (EFF SB 9)		1
	5	RN55D1003F	2	RESISTOR,MF, 100K, 1%, 1/8W (V81349) 705-1092-000 A5R115 (EFF SB 9)		1
	6	MZ4626	2	SEMICOND DEVICE (V04713) 353-3591-500 A5VR46		1
	7	RCR05G822KS	2	RESISTOR,FXD, CMPSN, 8.2K, 10%, 1/8W (V81349) 745-2374-000 A5R109		1
	8	RN55D3011F	2	RESISTOR,FXD, FILM, 3.01K, 1%, 1/8W (V81349) 705-1019-000 A5R114		1
	9	1N4104	2	SEMICOND DEVICE (V04713) 353-3591-062 A5VR45 (EFF TO SB 8)		1
	9	1N4105	2	SEMICOND DEVICE (V04713) 353-3591-070 A5VR45 (EFF SB 8)		1
	10	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A5CR48		1
	11	RCR05G562KS	2	RESISTOR,FXD, CMPSN, 5.6K, 10%, 1/8W (V81349) 745-2368-000 A5R112		1
	12	1N4454	2	SEMICOND DEVICE (V03508) 353-3644-010 A5CR49		1
	13	CY30C105M	2	CAPACITOR,FXD, CER DEIL, 1UF, 20%, 50V (V16546) 913-3279-270 A5C18 (EFF TO SB 8)		1
	13	CK06BX105K	2	CAPACITOR,FXD, CER, NPLR, 1UF, 10%, 50V (V81349) 913-5019-560 A5C18 (EFF SB 9)		1
	14	RCR056682KS	2	RESISTOR,FXD, CMPSN, 6.8K, 10%, 1/8W (V81349) 745-2371-000 A5R110		1
	15	1N4104	2	SEMICOND DEVICE (V04713) 353-3591-062 A5VR44 (EFF TO SB 8)		1
	15	1N4105	2	SEMICOND DEVICE (V04713) 353-3591-070 A5VR44 (EFF SB 8)		1
	16	RN55D3831F	2	RESISTOR,FXD, FILM, 3.83K, 1%, 1/8W (V81349) 705-1024-000 A5R113 (EFF TO SB 8)		1
	16	RN55D4641F	2	RESISTOR,FXD, FILM, 4.64K, 1%, 1/8W (V81349) 705-1028-000 A5R113 (EFF SB 8)		1
	17	RN55D3831F	2	RESISTOR,FXD, FILM, 3.83K, 1%, 1/8W (V81349) 705-1024-000 A5R111		1
	18	MC1558G	2	INTEGRATED CKT (V07263) 351-1071-020 A5U5		1
	19	RCR05G822KS	2	RESISTOR,FXD, CMPSN 8.2K, 10%, 1/8W (V81349) 745-2374-000 A5R108 (EFF TO SB 9)		1
	19	RN55D8251F	2	RESISTOR,MF, 8.25K, 1%, 1/8W (V81349) 705-1040-000 A5R108 (EFF SB 9)		1
	20	372-2601-010	2	CONTACT, ELEC		8

ADDENDUM 8

TO

COLLINS 332C-10 RADIO MAGNETIC INDIATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591-00411A, 4TH EDITION, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-36
of the Parts List Section (523-0764710-006118)

On page 4-36, the part number for Figure 4-7, item 1, should be **601-4498-001**.

3. NUMERICAL INDEX

PART NUMBER	FIG - ITEM	TTL REQ
AB396-1	1-41	1
AJ3-35	1-13	2
BT02A20-41P	1-33	1
CDSH8A4L927	1-160	1
	1-162	1
CGH-8-A-1/L943	1-164	1
CK05BX104K	1-28B	1
CK05BX182K	2-25A	1
CK05BX393K	2-12A	1
	2-18A	1
CK06BX104M	2-39A	1
	5-26	1
	5-28	1
CK05BX182K	2-25A	1
CK06BX105K	7-4	1
	7-13	1
CM01004908	1-158	1
CM39-03-2	1-8A	4
	1-8A	4
CM41004035	1-159	1
	1-161	1
CM41004037	1-163	1
CM41004167	1-158	1
CM8-715ASPORM15PCT	1-9	4
	1-9	4
CRH10AS4	1-168	1
	1-169	1
CTH8A4/L906	1-157	1
CY30C105M	7-5	1
	7-13	1
D150-100-22	1-8A	4
D306-03	**2-8**	**1**
	4-2	**1**
F1913-1-01	**2-44**	**4**
	3-41	**4**
	4-20	**5**
	5-23	**4**
F22NCFMA2-26	**6-32**	**10**
LP88A1A105K	**1-28A**	**1**
	5-13	**1**
MC1558G	**2-40**	**1**
	3-40	**1**
	4-35	**1**
	5-7	**1**
	7-18	1
MES2POBDS0106	**1-49**	**1**
	1-50	**1**
	1-51	**1**
	1-52	**1**
MS16535-152	**1-45**	**4**
MS16535-76	**1-47**	**4**
MS16562-189	**6-23**	**1**
MS16562-190	**1-117**	**4**
MS16624-5021	**1-124**	**4**
MS16633-1006	**1-93**	**1**
MS16633-1009	**1-67**	**2**
	1-74	**1**
MS16633-1012	**1-75**	**2**
	1-86	**1**
MS16633-1025	**1-139**	**1**
MS21266-1N	**6-2**	**AR**
MS35333-69	1-150B	2
MS35338-134	**1-75**	**1**
	1-78	**1**
	1-152	**2**
	1-155	**9**
	1-167	5
MS35338-135	**1-22**	**8**
	1-27	**4**
	1-35	**4**
	1-147	**3**
	2-51	**8**
	3-48	**8**
	4-47	**8**
	5-41	**12**
MS35649-224	**1-74**	**1**
	1-77	**2**
MS51957-10	**1-53**	**8**
MS51957-13	**1-21**	**8**
	1-26	**4**
	1-145	**2**
	6-20	**4**
MS51957-15	**2-55**	**8**
	3-52	**8**
	4-51	**8**
	5-44	**12**
MS51957-3	**1-82**	**1**
	6-27	**2**
MS51957-4	1-53	4
	1-81	**1**
MS51957-5	**6-27**	**2**
MS51959-1	**1-40**	**5**
MS51959-14	**1-36**	**4**
MS51959-17	**1-113**	**3**
MS51959-2	**1-42**	**1**
MS51959-25	**1-38**	**2**
MS51959-3	**1-104**	**2**
MS75089-19	**5-27**	**1**
MS75103-9	1-29	1
	1-30	1
MS90539-08	**1-29**	**1**
MS90541-11	**1-29**	**1**
	1-29	**1**
MS91189-36	**1-30**	**1**
	1-30	**1**
MS91189-37	**1-29**	**1**
	1-29	1
	1-30	1
MW375-118	4-37	3
MZ4626	7-6	1
	7-9	1
	7-15	1
M39003-01-2044	2-6	1
	2-38	1
M39003-01-2056	2-43	1
M39003-01-2305	3-34	1
M5757-9-005	6-16	1
	6-17	1
P312-0009-000	1-143	3
P313-0132-000	1-34	4
	2-50	8
	3-47	8
	4-46	8
	5-40	12
P322-0155-000	1-8	2
	1-101	4
P322-0156-000	1-64	4
P330-2290-000	1-20	8
	1-25	4
	1-55	4
	1-144	1
P330-5003-010	1-108	4
P347-0023-000	1-151	2
	1-154	9
P347-0024-000	1-167	5

NUMERICAL INDEX

PART NUMBER	FIG - ITEM	TTL REQ
P347-1270-000	1-5	4
RCR05G103KS	7-3	1
RCR05G562KS	7-11	1
RCR05G682KS	7-14	1
RCR05G822KS	7-3	1
	7-7	1
	7-19	1
RCR07G102KS	3-2	1
	3-3	1
	3-18	1
	4-14	1
	4-18	1
	5-9	1
	5-14	1
	6-6	1
	6-12	1
RCR07G103KS	2-2	1
	2-13	1
	2-16	1
	2-27	1
	2-30	1
	3-32	1
	4-30	1
RCR07G105KS	2-25	AR
RCR07G125KS	2-25	1
	2-25	1
RCR07G155KS	2-25	1
RCR07G221KS	2-26	1
RCR07G222KS	2-14	1
	2-15	1
	4-8	1
	4-24	1
	4-30	1
RCR07G272KS	2-2	1
	3-10	1
	3-28	1
RCR07G273JS	6-5	1
	6-7	1
	6-9	1
	6-11	1
RCR07G275KS	3-8	1
RCR07G332KS	3-7	1
RCR07G393KS	3-20	1
	3-22	1
RCR07G395KS	2-18	1
RCR07G471KS	5-20	1
	5-22	1
RCR07G475KS	2-25	1
RCR07G563KS	2-18	1
RCR07G564KS	2-25	AR
RCR07G682KS	6-5	1
	6-7	1
	6-9	1
	6-11	1
RCR07G752JS	6-5	1
	6-7	1
	6-9	1
	6-11	1
RCR07G824KS	2-25	AR
	2-25	AR
RCR20G332KS	4-6	1
RCR20G392KS	4-5	1
RCR20G821KS	3-31	1
RCR32G122KS	2-32	1
RCR32G390KS	3-27	1
RM741T	2-33	1
RNC55H1211FS	2-43A	1
RNC55H8661FS	2-42A	1

PART NUMBER	FIG - ITEM	TTL REQ
RN55D1002F	2-11	1
	2-12	1
	5-8	1
	5-16	1
RN55D1003F	2-3	1
	2-41	1
	7-5	1
RN55D1152F	7-3	1
RN55D3011F	7-8	1
RN55D3092F	5-6	1
	5-15	1
RN55D3831F	7-16	1
	7-17	1
RN55D4641F (OPTIONAL SB 8)	7-16	1
RN55D4991F	2-10	1
RN55D4992F	2-7	1
RN55D6040F	2-5	1
RN60D6191F	2-4	1
	2-41A	1
RN55D7871F	5-17	1
	5-18	1
RN55D8251F	7-19	1
RW69V1R0	2-21	1
	2-22	1
	2-34	1
	3-11	1
	3-19	1
	3-23	1
	3-36	1
RW69V102	4-7	1
	4-21	1
RW70V1R00F	2-21	1
	2-22	1
	3-11	1
	3-19	1
	3-23	1
	3-36	1
RW70U1R00F	4-16	1
	4-19	1
	4-21A	1
	4-23A	1
	4-31	1
	4-34	1
	5-24	1
	5-25	1
	5-29	1
	5-30	1
R22NCFMA1-26	**1-15**	**4**
SC5614	**4-4**	**1**
SL441-434WHT	**3-55A**	**2**
SL444-435WHT	**2-58**	**59**
	3-55	**54**
	4-54	**59**
	5-48	**44**
	6-31	**15**
SR1685PPK25-54	1-102	1
	1-105	1
SR2000	6-25	1
S2-1-2FC3P15LY5	1-118B	2
S3-175CADPL	1-46	2
S418FCHH3P15LY5	1-122	6
TXB2P032-037-3B	**4-36**	**3**
T055-10K1F	**2-4**	**1**
	2-11	**1**
	2-12	**1**
	3-13	**1**
	3-16	**1**

NUMERICAL INDEX

PART NUMBER	FIG - ITEM	TTL REQ
	4-10	1
	4-12	1
	5-8	1
	5-16	1
T055-100K1F	2-3	1
	2-41	1
T055-26-1K1F	3-24	1
T055-29400-1F	3-12	1
	3-15	1
	3-40A	1
	4-11	1
	4-15	1
	5-6	1
	5-15	1
T055-36500-1F	3-12	1
	3-15	1
	4-11	1
	4-15	1
T055-4530-1F	3-5	1
T055-4990-1F	2-7	1
	2-10	1
T055-49900-1F	2-7	1
T055-6040F	2-5	1
T055-7150-1F	2-5	1
T055-7871-1F	3-14	1
	3-17	1
	4-9	1
	4-13	1
	5-17	1
	5-18	1
T1532	2-56	2
	3-53	1
	4-52	1
	5-46	1
T1533	2-57	5
	3-54	7
	4-53	7
	5-47	4
	6-29	2
0-022X0-022	1-64B	4
0-022X0-022	1-68	2
0905-27	1-150	1
1N3016B	4-3	1
1N4002	4-22	1
	4-23	1
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	5-19	1
	5-21	1
	5-31	1
	6-13	1
1N4104	7-9	1
	7-15	1
1N4105	7-9	1
(OPTIONAL SB 8)	7-15	1
1N4454	2-19	1
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	2-28	1
	2-29	1
	2-31	1
	3-4	1
	3-6	1
1N4454	3-21	1
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	7-10	1
	7-12	1
1N5556	2-9	1
1N645	6-3	1
	6-4	1
	6-8	1
	6-10	1
	6-13	1
1N754A	3-9	1
1N968A	5-4	1
	5-10	1
1N968B	5-4	1
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1N969B	4-17	1
100-200-11-1	1-44	2
127-55	1-122	6
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	5-35	1
192-2071-010	1-57	1
2N2222A	2-36	1
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	2-39	1
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	6-15	1
2N2907A	2-35	1
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	3-37	1
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	4-28	1
	4-29	1
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2N3054	2-45	1
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2N3741	2-46	1
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	5-32	1
2N4234	4-38	1
2N4236	4-39	1
2N4239	4-40	1
229-6009-000	1-159	1
	1-161	1
230-0626-010	1-150	1
262-1101-000	1-9	4

NUMERICAL INDEX

PART NUMBER	FIG - ITEM	TTL REQ
	4-10	1
	4-12	1
	5-8	1
	5-16	1
T055-100K1F	2-3	1
	2-41	1
T055-26-1K1F	3-24	1
T055-29400-1F	3-12	1
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	3-40A	1
	4-11	1
	4-15	1
	5-6	1
	5-15	1
T055-36500-1F	3-12	1
	3-15	1
	4-11	1
	4-15	1
T055-4530-1F	3-5	1
T055-4990-1F	2-7	1
	2-10	1
T055-49900-1F	2-7	1
T055-6040F	2-5	1
T055-7150-1F	2-5	1
T055-7871-1F	3-14	1
	3-17	1
	4-9	1
	4-13	1
	5-17	1
	5-18	1
T1532	2-56	2
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	4-52	1
	5-46	1
T1533	2-57	5
	3-54	7
	4-53	7
	5-47	4
	6-29	2
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0-022X0-022	1-68	2
0905-27	1-150	1
1N3016B	4-3	1
1N4002	4-22	1
	4-23	1
	5-5	1
	5-19	1
	5-21	1
	5-31	1
	6-13	1
1N4104	7-9	1
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1N4105	7-9	1
(OPTIONAL SB 8)	7-15	1
1N4454	2-19	1
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1N4454	3-21	1
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	7-10	1
	7-12	1
1N5556	2-9	1
1N645	6-3	1
	6-4	1
	6-8	1
	6-10	1
	6-13	1
1N754A	3-9	1
1N968A	5-4	1
	5-10	1
1N968B	5-4	1
	5-10	
1N969B	4-17	1
100-200-11-1	1-44	2
127-55	1-122	6
	5-33	1
	5-35	1
192-2071-010	1-57	1
2N2222A	2-36	1
	2-37	1
	2-39	1
	2-42	1
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	6-14	1
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2N2907A	2-35	1
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	3-37	1
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	4-28	1
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2N3054	2-45	1
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	4-43	1
	4-44	1
	5-34	1
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	5-37	1
2N3741	2-46	1
	2-47	1
	3-42	1
	3-43	1
	4-41	1
	4-42	1
	5-32	1
2N4234	4-38	1
2N4236	4-39	1
2N4239	4-40	1
229-6009-000	1-159	1
	1-161	1
230-0626-010	1-150	1
262-1101-000	1-9	4

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PART NUMBER	FIG - ITEM	TTL REQ
262-1101-010	**1-9**	**4**
280-3441-000	**1-2**	**1**
292P2239R8	**2-17**	**1**
3	**1-14**	**2**
302-0646-050	**2-53**	**8**
	3-50	**8**
	4-49	**8**
304-0014-000	1-150A	2
309-1561-000	1-118B	2
309-1977-050	1-122	6
310-0044-000	1-79	2
310-0046-000	2-52A	4
310-0061-000	1-140	2
310-0278-000	6-19	4
310-0550-000	1-69	2
310-6340-000	1-87	1
	2-52	8
	2-52	4
310-	3-49	8
	4-48	8
	5-42	12
323-0254-000	1-67	2
	1-90	2
323-0255-000	1-64A	4
323-0256-000	1-64A	4
328-0368-000	1-111	2
	1-128	2
	1-131	2
	1-134	2
	1-138	2
328-0373-000	1-94	1
334-0043-000	5-40	1
3340	1-37	2
340-1884-010	1-14	2
340-2090-000	1-65	1
372-2601-010	7-20	8
373-8500-000	1-150B	2
38627HDD05D207	1-150	1
4040-2HT	1-73	1
	1-150A	2
4040-5HDSPL	2-49	4
	2-49	6
	3-46	5
	4-45	4
	5-39	6
41A205	1-149	1
41A711	1-150	1
	1-150	1
	1-150	1
41A967	1-150	1
4277-01-05	1-156	1
43-66-1	2-54	4
	3-51	4
	4-50	4
	5-38	6
4878-1-0516	1-39	5
540-9045-003	1-23	4
540-9049-003	1-27C	2
	1-27C	2
	1-27C	2
	1-27C	2
540-9057-003	1-28	4
	1-28	2
	1-28	2
	1-28	2
	1-28	2
541-5985-002	1-27A	2
	1-27A	2

PART NUMBER	FIG - ITEM	TTL REQ
	1-27A	2
	1-27A	2
544-3521-002	1-109	1
	1-126	4
	1-132	2
	1-136	1
546-1029-002	1-165	5
546-1628-002	1-153	11
547-8177-003	2-53	4
	3-50	8
	4-49	8
	5-43	12
547-8177-012	2-53A	6
565-7241-003	3-56	4
565-7241-004	6-30	4
601D117G050FE6	1-31	1
	1-32	1
601-4496-001	7-1	RF
601-4498-001	1-27B	1
609-3047-001	1-119	1
609-3048-001	1-120	1
609-3237-001	1-171	1
609-3237-002	1-171	1
609-3664-001	1-121	1
609-3927-002	1-130	1
609-4390-001	1-137	1
609-4654-001	1-110	1
609-4756-001	1-129	1
609-4757-001	1-118	1
609-4772-002	1-16	1
609-4772-004	1-16	1
609-4772-005	1-16	1
609-4787-001	1-115	2
609-4855-001	1-100	1
609-4855-002	1-100	1
609-4859-001	1-59	1
609-4860-001	1-97	1
609-4880-001	1-95	1
609-4881-001	6-26	1
609-4882-001	1-96	1
609-4884-001	6-24	1
609-4885-001	6-21	1
609-4886-001	6-22	1
609-4888-001	1-116	4
609-4889-001	1-89	1
609-4890-001	1-103	1
609-4891-001	1-133	1
609-4893-001	1-106	1
609-4908-001	1-48	1
609-4953-001	1-114	1
609-4953-002	1-146	3
609-4956-001	1-91	1
609-4956-002	1-91	1
609-4957-001	1-97	1
609-4957-002	1-97	1
609-4958-001	1-99	1
609-4958-002	1-99	1
609-4960-001	1-19	1
	3-1	RF
609-4961-001	1-24	1
	4-1	RF
609-4962-001	1-127	4
609-4963-001	1-123	4
609-4967-001	1-125	1
609-4968-001	6-33	1
609-4971-001	1-107	1
609-4971-002	1-107	1
	1-107	1

ADDENDUM 8

TO

COLLINS 332C-10 RADIO MAGNETIC INDIATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591-00411A, 4TH EDITION, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-40
of the Parts List Section (523-0764710-006118)

In the Numerical Index on page 4-40, second column, the part number for FIG-ITEM 7-1 should be **601-4498-001**.

ADDENDUM 8

TO

COLLINS 332C-10 RADIO MAGNETIC INDIATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591-00411A, 4TH EDITION, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-41
of the Parts List Section (523-0764710-006118)

In the NUMERICAL INDEX, second column, the following line is added just below the 3rd entry in the column.

NUMERICAL INDEX

PART NUMBER	FIG-ITEM	TTL REQ
618-4452-001	**1-88B**	**1**

NUMERICAL INDEX

PART NUMBER	FIG - ITEM	TTL REQ
609-4971-003	1-107	1
609-4999-001	1-18	1
	2-1	RF
609-7132-001	1-3	1
	1-29	1
6150-7	1-30	1
	1-30	1
	1-30	1
	1-30	1
	1-30	1
	1-30	1
	1-30	1
	1-30	1
6150-7	1-30	1
	1-30	1
618-1134-001	5-45	1
618-1134-002	5-49	1
618-1135-001	1-24	1
	1-24	1
	5-1	RF
618-3522-001	1-10	1
618-4001-001	1-17	1
618-4001-002	1-17	1
618-4001-003	1-17	1
618-4001-004	1-17	1
618-4001-005	1-17	1
618-4001-006	1-17	1
618-4001-007	1-17	1
618-4001-008	1-17	1
618-4001-011	1-17	1
618-4003-001	6-28	1
618-4004-001	1-148	1
618-4004-003	1-148	1
618-4005-001	1-54	1
618-4005-002	1-54	1
618-4005-003	1-54	1
618-4005-004	1-54	1
618-4005-007	1-54	1
618-4006-001	1-43	1
618-4007-001	1-112	1
618-4008-001	1-92	1
618-4009-001	1-66	1
618-4025-001	1-88	1
618-4026-001	1-76	1
618-4027-001	1-12	1
618-4027-002	1-12	1
618-4027-003	1-12	1
618-4065-001	1-60	2
618-4071-001	1-56	1
618-4084-001	1-6	1
618-4084-002	1-6	1
618-4084-003	1-6	1
618-4088-001	1-7	1
618-4088-002	1-7	1
618-4088-003	1-7	1
618-4088-005	1-7	1
618-4089-001	1-8	2
618-4157-001	1-58	1
618-4290-001	1-142	1
	6-1	RF
618-4357-001	1-135	1
618-4357-002	1-141	1
618-4449-001	1-62	1
	1-62	1
	1-62	1
618-4449-002	1-61	1
	1-61	1
	1-61	1

PART NUMBER	FIG - ITEM	TTL REQ
618-4449-003	1-61	1
618-4449-004	1-62	1
618-4451-001	1-85	1
618-4453-001	1-83	1
618-4454-001	1-80	2
618-4456-001	1-76	1
618-4457-001	1-63	2
618-4457-002	1-63	2
618-5100-001	1-84	1
618-5101-001	1-66	1
618-5102-001	1-88	1
618-5804-002	1-59	1
618-5804-003	1-59	1
618-5804-008	1-59	1
621-1520-001	1-59A	1
621-1879-001	1-66	1
621-1880-001	1-53A	2
	1-53A	2
621-1881-001	1-63A	2
622-0555-001	1-1	RF
622-0555-002	1-1	RF
622-0555-003	1-	RF
622-0555-004	1-	RF
622-0555-005	1-	RF
622-0555-006	1-	RF
622-0555-007	1-	RF
622-0555-008	1-	RF
622-0555-011	1-	RF
623-8138-003	1-59	1
623-9362-001	1-107	1
628-1055-001	3-52A	1
628-1078-001	4-51A	1
628-1097-001	2-55A	1
629-7050-001	2-25	1
	2-25	1
629-8852-001	1-118A	1
629-8553-001	2-25	1
	1-119	1
629-8856-001	1-118C	1
634-0192-001	1-97A	1
634-0193-001	1-97B	1
7409L2YZQE	1-49A	1
	1-49A	1
	1-49A	1
	1-50A	1
	1-50A	1
	1-50A	1
	1-50A	1
7409SYZQE	1-49A	1
	1-49A	1
	1-49A	1
	1-49A	1
	1-50A	1
	1-50A	1
	1-50A	1
77M0412AZJ5FM1	1-98	1
77M1624ZJ5FM1	1-102	1
	1-105	1
778-0975-001	1-63	2
778-0978-001	1-71	1
778-0982-001	1-70	1
778-0990-001	1-73	1
778-0991-001	1-72	1
778-0992-001	1-62	1
778-0992-002	1-61	1
791-8387-001	1-4	1
850 3-4IN	1-11	AR

4. REFERENCE DESIGNATION INDEX

REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER
A1	2-1	609-4999-001
A1	1-18	609-4999-001
A1CR17	2-23	1N4454
A1CR18	2-24	1N4454
A1CR19	2-20	1N4454
A1CR20	2-19	1N4454
A1CR21	2-28	1N4454
A1CR22	2-31	1N4454
A1CR23	2-29	1N4454
A1CR36	2-9	1N5556
A1C1	2-17	292P2239R8
A1C2	2-39A	CK06BX104M
A1C21	2-25A	CK05BX182K
A1C5	2-43	M39003-01-2056
A1C6	2-38	M39003-01-2044
A1C7	2-6	M39003-01-2044
A1C8	2-12A	CK05BX393K
A1C8	2-18A	CK05BX393K
A1Q10	2-47	2N3741
A1Q11	2-36	2N2222A
A1Q12	2-35	2N2907A
A1Q13	2-42	2N2222A
A1Q16	2-45	2N3054
A1Q17	2-46	2N3741
A1Q18	2-37	2N2222A
A1Q18	2-37	2N2907A
A1Q19	2-39	2N2222A
A1Q19	2-39	2N2907A
A1Q9	2-48	2N3054
A1R153	2-12	RN55D1002F
A1R153	2-12	T055-10K1F
A1R154	2-11	RN55D1002F
A1R154	2-11	T055-10K1F
A1R155	2-10	RN55D4991F
A1R155	2-10	T055-4990-1F
A1R156	2-4	T055-10K1F
A1R156	2-41A	RN60D6191F
A1R156	2-4	RN60D6191F
A1R157	2-5	RN55D6040F
A1R157	2-5	T055-7150-1F
A1R157	2-5	T055-6040F
A1R158	2-7	RN55D4992F
A1R158	2-7	T055-4990-1F
A1R158	2-7	TO55-49900-1F
A1R159	2-3	RN55D1003F
A1R159	2-3	T055-100K1F
A1R160	2-41	RN55D1003F
A1R160	2-41	T055-100K1F
A1R21	2-22	RW69V1R0
A1R21	2-22	RW70V1R00F
A1R22	2-21	RW69V1R0
A1R22	2-21	RW69V1R0
A1R23	2-25	RCR07G475KS
A1R23	2-25	RCR07G155KS
A1R23	2-25	RCR07G824KS
A1R23	2-25	RCR07G105KS
A1R23	2-25	RCR07G564KS
A1R23	2-25	RCR07G824KS
A1R23	2-25	RCR07G125KS
A1R24	2-18	RCR07G395KS
A1R24	2-18	RCR07G563KS
A1R25	2-34	RW69V1R0
A1R27	2-13	RCR07G103KS
A1R28	2-16	RCR07G103KS
A1R30	2-15	RCR07G222KS
A1R31	2-14	RCR07G222KS
A1R32	2-27	RCR07G103KS

REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER
A1R33	2-2	RCR07G272KS
A1R33	2-2	RCR07G103KS
A1R34	2-32	RCR32G122KS
A1R35	2-30	RCR07G103KS
A1R36	2-26	RCR07G221KS
A1R74	2-42A	RNC55H8661FS
A1R75	2-43A	RN055H1211FS
A1U3	2-33	RM741T
A1U4	2-40	MC1558G
A1Z9-A1Z12	2-44	288-2154-000
A2	3-1	609-4960-001
A2	1-19	609-4960-001
A2CR25	3-4	1N4454
A2CR26	3-21	1N4454
A2CR27	3-9	1N754A
A2CR38	3-6	1N4454
A2CR39	3-25	1N4454
A2CR40	3-26	1N4454
A2C2	3-34	M39003-01-2305
A2Q14	3-33	2N2222A
A2Q15	3-35	2N2222A
A2Q28	3-30	2N2907A
A2Q34	3-29	2N2222A
A2Q35	3-39	2N2907A
A2Q36	3-38	2N2222A
A2Q37	3-37	2N2907A
A2Q5	3-45	2N3054
A2Q6	3-42	2N3741
A2Q7	3-44	2N3054
A2Q8	3-43	2N3741
A2R11	3-19	RW69V1R0
A2R11	3-19	RW70V1R00F
A2R12	3-11	RW69V1R0
A2R12	3-11	RW70V1R00F
A2R13	3-12	T055-36500-1F
A2R13	3-12	T055-29400-1F
A2R14	3-13	T055-10K1F
A2R15	3-14	T055-7871-1F
A2R16	3-36	RW69V1R0
A2R16	3-36	RW70V1R00F
A2R17	3-23	RW69V1R0
A2R17	3-23	RW70V1R00F
A2R18	3-40A	T055-29400-1F
A2R18	3-15	T055-36500-1F
A2R18	3-15	T055-29400-1F
A2R19	3-16	T055-10K1F
A2R20	3-17	T055-7871-1F
A2R29	3-5	T055-4530-1F
A2R37	3-7	RCR07G332KS
A2R38	3-32	RCR07G103KS
A2R39	3-27	RCR32G390KS
A2R40	3-31	RCR20G821KS
A2R41	3-3	RCR07G102KS
A2R42	3-8	RCR07G275KS
A2R43	3-20	RCR07G393KS
A2R44	3-22	RCR07G393KS
A2R58	3-10	RCR07G272KS
A2R59	3-28	RCR07G272KS
A2R60	3-24	T055-26-1K1F
A2R61	3-2	RCR07G102KS
A2R62	3-18	RCR07G102KS
A2U2	3-40	MC1558G
A2Z5-A2Z8	3-41	288-2154-000
A3	1-24	609-4961-001
A3	1-24	618-1135-001
A3	1-24	618-1135-001
A3	5-1	618-1135-001

ADDENDUM 8

TO

COLLINS 332C-10 RADIO MAGNETIC INDIATOR
INSTRUCTION BOOK

PART NUMBER 523-0767591-00411A, 4TH EDITION, DATED 15 MAY 1985

Insert this addendum sheet facing page 4-43
of the Parts List Section (523-0764710-006118)

In the REFERENCE DESIGNATION INDEX, the part number for REFERENCE DESIGNATION A5, FIG-ITEM 7-1, should be **601-4498-001**.

REFERENCE DESIGNATION INDEX

REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER
A3	4-1	609-4961-001
A3CR28	4-3	1N3016B
A3CR28	5-21	1N4002
A3CR29	4-17	1N969B
A3CR29	5-4	1N968B
A3CR29	5-4	1N968A
A3CR30	5-5	1N4002
A3CR31	4-4	SC5614
A3CR32	4-22	1N4002
A3CR33	4-23	1N4002
A3CR41	5-19	1N4002
A3CR42	5-10	1N968A
A3CR42	5-10	1N968B
A3CR43	**5-31**	**1N4002**
A3C10	**5-26**	**CK06BX104M**
A3C11	**5-13**	**LP88A1A105K**
A3C9	**5-28**	**CK06BX104M**
A3L3	**5-27**	**MS75089-19**
A3Q1	**4-44**	**2N3054**
A3Q1	**5-36**	**2N3054**
A3Q2	**5-33**	**2N3741**
A3Q2	**4-41**	**2N3741**
A3Q20	**4-39**	**2N4236**
A3Q20	**5-35**	**2N3741**
A3Q21	**4-40**	**2N4239**
A3Q21	**5-34**	**2N3054**
A3Q23	**4-38**	**2N4234**
A3Q25	**4-28**	**2N2907A**
A3Q26	**4-27**	**2N2222A**
A3Q27	**4-29**	**2N2907A**
A3Q3	**5-37**	**2N3054**
A3Q3	**4-43**	**2N3054**
A3Q30	**4-25**	**2N2222A**
A3Q30	**5-12**	**2N2222A**
A3Q31	**5-2**	**2N2907A**
A3Q31	**4-26**	**2N2907A**
A3Q32	**5-11**	**2N2222A**
A3Q32	**4-33**	**2N2222A**
A3Q33	**4-32**	**2N2907A**
A3Q33	**5-3**	**2N2907A**
A3Q4	**4-42**	**2N3741**
A3Q4	**5-32**	**2N3741**
A3R1	**4-34**	**RW70U1R00F**
A3R1	**5-25**	**RW70U1R00F**
A3R10	**4-13**	**T055-7871-1F**
A3R10	**5-17**	**T055-7871-1F**
A3R2	**5-29**	**RW70U1R00F**
A3R2	**4-16**	**RW70U1R00F**
A3R200	**4-23A**	**RW70U1R00F**
A3R201	**4-21A**	**RW70U1R00F**
A3R26	**4-5**	**RCR20G392KS**
A3R3	5-6	RN55D3092F
A3R3	5-6	T055-29400-1F
A3R3	4-15	T055-29400-1F
A3R3	4-15	T055-36500-1F
A3R4	5-8	RN55D1002F
A3R4	**4-10**	**T055-10K1F**
A3R4	**5-8**	**T055-10K1F**
A3R45	**5-22**	**RCR07G471KS**
A3R45	**4-24**	**RCR07G222KS**
A3R46	**5-20**	**RCR07G471KS**
A3R46	**4-7**	**RW69V102**
A3R47	**4-21**	**RW69V102**
A3R48	**4-8**	**RCR07G222KS**
A3R5	5-18	RN55D7871F
A3R5	**5-18**	**T055-7871-1F**
A3R5	**4-9**	**T055-7871-1F**

REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER
A3R50	**4-6**	**RCR20G332KS**
A3R51	**5-14**	**RCR07G102KS**
A3R51	**4-14**	**RCR07G102KS**
A3R52	**5-9**	**RCR07G102KS**
A3R52	**4-18**	**RCR07G102KS**
A3R6	**5-24**	**RW70U1R00F**
A3R6	**4-19**	**RW70U1R00F**
A3R63	**4-30**	**RCR07G103KS**
A3R63	**4-30**	**RCR07G222KS**
A3R7	**4-31**	**RW70U1R00F**
A3R7	**5-30**	**RW70U1R00F**
A3R8	5-15	RN55D3092F
A3R8	**5-15**	**T055-29400-1F**
A3R8	**4-11**	T055-36500-IF
A3R8	**4-11**	**T055-29400-1F**
A3R9	5-16	RN55D1002F
A3R9	5-16	T055-10K1F
A3R9	4-12	T055-10K1F
A3R10	5-17	RN55D7871F
A3U1	4-35	MC1558G
A3U1	5-7	MC1558G
A3Z1-A3Z4, A3Z14	5-23	F1913-1-01
A4	1-7	618-4088-001
A4	1-7	618-4088-002
A4	1-7	618-4088-003
A4	1-7	618-4088-005
A4DS1-A4DS4	1-9	262-1101-010
A4DS1-A4DS4	1-9	262-1095-000
A4DS1-A4DS4	1-9	262-1095-000
A4DS1-A4DS4	1-9	262-1101-000
A4DS1-A4DS4	1-9	262-2732-000
A5	7-1	601-4496-001
A5CR47	7-2	1N4454
A5CR48	7-10	1N4454
A5CR49	7-12	1N4454
A5C17	7-4	CK06BX105K
A5C17	7-4	CY30C105M
A5C18	7-13	CK06BX105K
A5C18	7-13	CY30C105M
A5R107	7-3	RCR05G103KS
A5R107	7-3	RN55D1152F
A5R107	7-3	RCR05G822KS
A5R108	7-19	RCR05G822KS
A5R108	7-19	RN55D8251F
A5R109	7-7	RCR05G822KS
A5R110	7-14	RCR05G682KS
A5R111	7-17	RN55D3831F
A5R112	7-11	RCR05G562KS
A5R113	7-16	RN55D3831F
A5R113 (OPTIONAL SB 8)	7-16	RN55D4641F
A5R114	7-8	RN55D3011F
A5R115	7-5	RN55D1003F
A5U5	7-18	MC1558G
A5VR44	7-15	1N4104
A5VR44 (OPTIONAL SB 8)	7-15	RN55D4641F
A5VR45	7-9	1N4104
A5VR45 (OPTIONAL SB 8)	7-9	RN55D4641F
A5VR46	7-6	MZ4626
A6	**6-1**	**618-4290-001**
A6	**1-142**	**618-4290-001**
A6CR2	**6-3**	**1N645**
A6CR24	**6-13**	**1N645**
A6CR24	6-13	1N4002

REFERENCE DESIGNATION INDEX

REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER
A6CR3	**6-10**	**1N645**
A6CR4	**6-4**	**1N645**
A6CR5	**6-8**	**1N645**
A6K1	**6-17**	**M5757-9-005**
A6K2	**6-16**	**M5757-9-005**
A6M1	**6-25**	**SR2000**
A6Q1	**6-14**	**2N2222A**
A6Q2	**6-15**	**2N2222A**
A6R101	**6-11**	**RCR07G752JS**
A6R101	6-11	RCR07G273JS
A6R101	6-11	RCR07G682KS
A6R102	6-5	RCR07G752JS
A6R102	6-5	RCR07G682KS
A6R102	6-5	RCR07G273JS
A6R103	6-12	RCR07G102KS
A6R104	6-9	RCR07G752JS
A6R104	6-9	RCR07G273JS
A6R104	6-9	RCR07G682KS
A6R105	6-7	RCR07G752JS
A6R105	6-7	RCR07G273JS
A6R105	6-7	RCR07G682KS
A6R106	6-6	RCR07G102KS
A7	1-43	618-4006-001
B1	1-168	CRH10AS4
B2	1-169	CRH10AS4
B3	1-150	0905-27
B3	1-149	41A205
B3	1-150	41A711
B3	1-150	4A1711
B3	1-150	41A967
B3	1-150	41A711
B4	1-159	CM41004035
B4	1-160	CDSH-8-A-4/L927
B5	1-157	CTH8A40/L906
B5	1-156	4277-01-05
B5	1-158	CM41004167
B6	1-164	CGH-8-A-1/L943
B6	1-163	CM41014037
B7	1-162	CDSH-8-A-4/L927
B7	1-161	CM41004035
C4	1-31	601D117G050FE6
C7	1-32	601D117G050FE6
C8	1-28B	CK05BX104K
C9	1-28A	LP88A1A105K
J1	1-33	BT02A20-41P
L1	1-29	MS90541-11
L1	1-29	MS90539-08
L1	1-29	MS91189-37
L1	1-29	MS91189-37
L1	1-29	MS90541-11
L1	1-29	6150-7
L2	1-30	MS91189-37
L2	1-30	MS91189-36
L2	1-30	MS91189-36
L2	1-30	6150-7
L2	1-30	6150-7
L2	1-30	6150-7
L2	1-30	6150-7
L2	1-30	6150-7
L2	1-30	6150-7
L2	1-30	6150-7
L2	1-30	6150-7
L2	1-30	6150-7
S1	1-49	MES2P0BDS0106

REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER
S1	1-49	MES2POBDS0106
S1	1-49A	7409L2YZQE
S1	1-49A	7409L2YZQE
S1	1-49A	7409L2YZQE
S1	1-49A	7409L2YZQE
S1	1-49A	7409SYZQE
S1	1-49A	7409SYZQE
S1	1-49A	7409SYZQE
S2	1-50	MES2POBDS0106
S2	1-50A	7409L2YZQE
S2	1-50A	7409L2YZQE
S2	1-50A	7409L2YZQE
S2	1-50A	7409L2YZQE
S2	1-50A	7409SYZQE
S2	1-50A	7409SYZQE
S2	1-50A	7409SYZQE
S3	1-51	MES2POBDS0106
S4	1-52	MES2POBDS0106

Collins 332C-10 Radio Magnetic Indicator

Rockwell International

bulletins

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Service Bulletins and Service Information Letters Issued to Date

SB/SIL Number	*Unit*	*Title*	*Date*
1 Rev 1	332C-10	Eliminate Possibility of Compass Card Rate Oscillations	Aug 1/73
2 Rev 1	332C-10	Square-Wave Driver Circuit Protection	Dec 1/73
3	332C-10	New Square-Wave Driver Circuit	Jul 15/73
4 Rev 1	332C-10	Replace Leaf-Spring Switches With Toggle Switches	Aug 30/74
5 Rev 1	332C-10	Improved Compass Card Servo Performance	Jun 1/78
6 Rev 1	332C-10	Add 26-V AC Power Detection Circuits	Jun 1/76
SIL 1-76 Rev 1	332C-10	Correct Adjustment of Pushbutton ADF/VOR Switch	Nov 15/77
SIL 1-77	332C-10	Test Select Resistor A1R23	May 30/77
7	332C-10	More Reliable Replacement Servo Motor B3	Jun 1/78
SIL 1-78	332C-10	Relays K1 and K2	Mar 1/78
8	332C-10	Improve Heading Flag Operation and Reliability	May 1/79
9	332C-10	Improve 26 V AC Monitor Operation and Reliability	Jun 15/81

NOTICE: This title page replaces second edition title page dated 20 February 1979.