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ODR DATA UPLOAD (critical step for all campaigns)
FINAL CLEARING OF SLEEP MODE FOR RECALL 6223J AND DTCS

A. VEHICLE INSPECTION PROCEDURE AND PREPARATION FOR REPAIR

1. Verify that the vehicle is within the following ranges and there is a Not Launched \underline{or} OPEN 6223J and/or 6323J recall in eMDCS:

SUBJECT VEHICLES RECALL 6223J

Model	Subject VIN range	Subject production date range
2024 CX-90 All powertrain	JM3 KK ****R1 100044–132978	From December 27, 2022 through September 5, 2023
2024 MAZDA3	JM1 BP****R1 650006 - 657565	From May 25, 2023 through August 23, 2023

SUBJECT VEHICLES RECALL 6323J

Model	Subject VIN range	Subject production date range
2024 CX-90 PHEV	JM3 KK ****R1 1000454–118462	From December 28, 2022 through June 20, 2023

*Only the vehicles in this range and with a "Not Launched" or "Open" status in eMDCS are affected. If the vehicle is in the range above and 6223J and/or 6323J is OPEN or Not Launched in eMDCS, proceed to Step 2. If the vehicle <u>does not</u> have an OPEN or Not Launched 6223J and/or 6323J campaign, return the vehicle to the customer or inventory.



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2. Perform an eMDCS Warranty Vehicle Inquiry and inspect the vehicle for a Campaign Label with **6223J and/or 6323J** attached to the vehicle's hood, driver door or firewall.

NOTE: Always be sure to verify the campaign number as the vehicle may have multiple campaign labels on the hood, radiator support, firewall or driver door jamb.





eMDCS - Warranty Vehicle Inquiry Results:

If eMDCS displays:	Campaign Label is:	Action to perform:	
If no repair date is displayed on the line with CAMPAIGN 6223J, and/or 6323J or any of the SSP campaigns has not been completed	Present	Fill out Dealer Recall Help on OneMazda contact or the Mazda Warranty Department at <u>warrantydept@mazdausa.com</u> to review vehicle history.	
on this vehicle	Not present	Proceed to "REPAIR PROCEDURE".	
If repair date is displayed for	Present	Return vehicle to inventory or customer.	
CAMPAIGN 6223J and/or 6323J or any of the SSP campaigns is "CLOSED"	Not present	Complete a label and apply to vehicle's hood with repair date and dealer code from eMDCS Warranty Inquiry.	
CAMPAIGN 6223J and/or 6323J or any of the SSP campaigns is not displayed	See Action	The vehicle is not affected by the Recall or SSP	

Technician level required: Certified or above.

Note: Technician repairing needs to be Certified or above and does not need to be Senior or Master as long as they have had the required training for ODR – Collection of Diagnostic Information

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Section A : Flow Chart – NOTE: You must clear any DTC's (diagnose and repair) before performing any of these campaigns. The recall or SSP repairs will NOT fix/clear a DTC issue. Once repaired, then start the repair process for campaigns.

CX-90 PHEV

CX-90 TURBO AND TURBO S Mazda3

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*NOTE: <u>All vehicles require the upload of ODR after the technician has completed all</u> software updates. If ODR is not uploaded successfully, or if one or more software updates are missed, the applicable campaign(s) will remain open, the warranty claim will not accept, and your dealer will have to contact the customer to bring back the car to correct the concern.

-----END OF SECTION A------



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Section B : Repair Procedure Recall 6223J



NOTE:

- 1. Recall 6223J applies to vehicles with a Rear View (one camera) or a 360 Degree Camera (four cameras).
- 2. Make sure that HV charging cable is not connected to HV battery charging port.

Vehicle Identification

Connect MDARS with the DLC cable and VCM-II to the vehicle, then set the ignition to the ON position.

CAUTION:

Connect the DLC cable and the VCM- II to the vehicle with the ignition OFF. The CAN bus line might detect some noise and it might cause a diagnostic error when connecting the DLC cable with the ignition ON.

- 1. Click the "Start" button.
- 2. The Vehicle Identification process will start and automatically inspect every connection and then collect the vehicle information.

0	
Mazba	Change VCI
Vehicle Identification	Select another VCL You do not need to do this unless you use a wireless VCL
Identify a vehicle using current VCL	Change
Start	Continue Offline
Micro-mini vehicle: FAMEJA VAN (VP), TITAN	Use button to continue without a network connection. You will be restricted on what you can do, depending on the data that has been prepared.
Start	Officer Model
	Start with no connected vehicle
	Use button to continue without connecting to a wehicle. You will be restricted in what you can do.



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3. Verify the DTC according to the directions on the quick check screen. If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection.



4. Reprogram VMC as below

Mazda	Diagnostic and Repair Software (MDARS)	~ ×
⊗m	6036	🛛 m172110 🚔 VIN: JMZDMFW8A00100044 🗟 💷 🔤
👜 Quick	Check X Toolbox	
S	ă ii-	* *
-	Software update	
1	Software update	Not Run Run
+	Configuration	
> +	ENGINE (SKYACTIV-D)	
+	ENGINE (SKYACTIV-X)	
+	BRAKES	
+	TRANSMISSION/TRANSAXLE	
+	RESTRAINTS	
+	SEATS	ampla
+	SECURITY AND LOCKS	
+	LIGHTING SYSTEMS	
+	WIPER/WASHER SYSTEM	

There is 'Software update' on 'Toolbox' tab. Select 'Run'.

- 5. Select required module on 'ECU Reprogramming' screen. Start Reprogramming.
 - VMC (View Monitor Camera) -

NOTE:

If software is already the latest, MDARS does not reprogram subject ECU. It is normal behavior.

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6. After completion of software update, the previous and current software version are shown. Check current version at "Calibration File information" below. Then, click on "Finish" to exit the ECU reprogramming and disconnect the 12V battery charger.

			O cnicely	VIN: JM3KKEHA	7R1100074 🕭	🕼 🛅 14.6V
🖻 Quick Check	★ Toolbox 📲 Software u	ир Х				
ECU Reprogr	amming					
	Current Software					
	Description		Current Version	Required Version	Size	
	VMC		KDNP-66UK2-D	KDNP-66UK2-E	8.39 MB	÷
	VMC		KDNP-66UK3-A	KDNP-66UK3-B	-	
					Next	
					INCAL	
💮 mazba			O cnicely	VIN: JM3KKE	HC6R1100052 Z	S (12.9V
💩 Quick Check	X Toolbox ≇ Software u	up X				
ECU Reprogi	ramming					
Result for writi	ng RxSWIN.					
	-MZD-R000152		000000012	0		
	-MZD-R000152 -MZD-R00013H -MZD-R000079		0000000012 0000000015 0000000012	0 8 0		
	-MZD-R000152 -MZD-R00013H -MZD-R000079		0000000012	0 8 0		Next
	-MZD-R000152 -MZD-R00013H -MZD-R000079		0000000012 0000000012 0000000012	0		Next
	-MZD-R000152 -MZD-R00013H -MZD-R000079	CX-9(0000000012 0000000015 0000000012 0 Sho	o 8 0 WN		Next
	-MZD-R000152 -MZD-R00013H -MZD-R000079	CX-9(0000000012 0000000015 0000000012 0 Sho	0 8 0 WN		Next
	-MZD-R000152 -MZD-R00013H -MZD-R000079	CX-9(0000000012 0000000015 0000000012	0 8 0 WN		Next
	-MZD-R000152 -MZD-R00013H -MZD-R000079	CX-90	0000000012 0000000015 0000000012	0 8 0 WN		Next
	-MZD-R000152 -MZD-R00013H -MZD-R000079	CX-90	0000000012 0000000012 0000000012	0 8 0 WN		Next
	-MZD-R000152 -MZD-R00013H -MZD-R000079	CX-90	000000012 000000012 000000012	0 8 0 WN		Next



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mazoa Quick Check * To ECU Reprogramn	olbox Software up. X		O cnicely	R VIN: JM3KKEHC6R11000	052 <u>त</u> े	(12); (1 2.9V
Sof	tware Update Summa	ry					
Des	scription	Previous Version		Current Version		~	
VM	с	KDNP-66UK2-D		KDNP-66UK2-E		~	
VM	с	KDNP-66UK3-A		KDNP-66UK3-B			
CX-90 C	Dolbox Software up. ×		O cnicely	🖶 VIN: JM3KKEHA7R110	Finish		14.4V

Calibration file information

NOTE: - If the calibration file is with the suffix in the table or later, unit is already modified.

Module	Target ECU (Hardware #)	Target Software file #	Reprogramming Time (min.)	Note	
		KDNP-66UK2-E		CX-90	
	VMC KEME-66UU0	KDNP-66UK3-B		4 Camera	
VMC		KEME-66UK2-E	E-66UK2-E E-66UK3-B C-66UK2-B C-66UK3-B D-66UK2-B	CX-90	
(View		KEME-66UK3-B		1 Camera	
Monitor		BHSC-66UK2-B		Mazda3	
Cameraj	Camera) BIISC-00000	BHSC-66UK3-B		4 Camera	
BHSD-66UU		BHSD-66UK2-B		Mazda3	
	6130-00000	BHSD-66UK3-B		1 Camera	

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Section B : Repair Procedure SSPD3 & Recall 6323J SSPD3 contains a later calibration of the same two modules, so this will also repair Recall 6323J.

(Steps 1-4 do not need to be done if already performed Recall 6223J)



NOTE: Make sure that HV charging cable is not connected to HV battery charging port.

Vehicle Identification

Connect MDARS with the DLC cable and VCM-II to the vehicle, then set the ignition to the ON position.

CAUTION:

Connect the DLC cable and the VCM- II to the vehicle with the ignition OFF. The CAN bus line might detect some noise and it might cause a diagnostic error when connecting the DLC cable with the ignition ON.

1. Click the "Start" button.



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2. The Vehicle Identification process will start and automatically inspect every connection and then collect the vehicle information.



3. Verify the DTC according to the directions on the quick check screen. If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection.

Mazda Diagnostic and	d Repair Software (MD	ARS)		-			- 🗆 ×
mazoa							1
a Quick Check	Toolbox						1
. .							୪ ୦
DLC							
							_
ADD	ALHUNISURIA	œu	CMU	DASILISU	FR	150	iwu
DOOR_LSU_D	DOOR, LSU, P	osc	US	190	IGHL	NO REAL	
ю	LOIL	LONR	υu	RON			
RG	545	тсм	100				

4. Reprogram PCM and ECM as below

Mazda Diagnostic and Repair Software (MDARS)	~ ×
mazoa	🛛 m172110 🖨 VIN: JMZDMFW8A00100044 🗟 💷 🧮 🗮
Quick Check X Toolbox	
የ ጃ ዙ	¥ \$
Software update	
Software update	Not Run
+ Configuration	
+ ENGINE (SKYACTIV-D)	
+ ENGINE (SKYACTIV-X)	
+ BRAKES	
+ TRANSMISSION/TRANSAXLE	
+ RESTRAINTS	
+ SEATS	Sampla
+ SECURITY AND LOCKS	
+ LIGHTING SYSTEMS	
+ WIPER/WASHER SYSTEM	

There is 'Software update' on 'Toolbox' tab. Select 'Run'.

5. Select required module on 'ECU Reprogramming' screen.

- Start Reprogramming.
 - PCM
 - ECM

NOTE:

If software is already the latest, MDARS does not reprogram subject ECU. It is normal behavior.

By reprogramming either PCM or ECM, another module will be reprogrammed at the same time. Confirm PCM and ECM software are required version or later suffix at step 6.

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6. After completion of software update, the previous and current software version are shown. Check current version at "Calibration File information" below. Then, click on "Finish" to exit the ECU reprogramming and disconnect the 12V battery charger.

Quick Check ECU Reprog	★ Toolbox	O cnicely	R vin: JM3KKEHAT	7R1100074 🙈 🕼 🗎 14.6V
	Current Software			
	Description	Current Version	Required Version	Size
	РСМ	MS06-186K2-L	MS06-186K2-N	1.17 MB
	Duran darah Gafe unan			
	Dependent Software	DVDC 100//21	DYDC 100K2 N	1.05.110
	ECM	PXRC-188K2-L	PXRC-188K2-N	1.05 MB
				Next
Quick Check	★ Toolbox 🔹 Software up… 🗙	e cnicely	😝 VIN: JM3KKEHA7R	1100074 🗟 🕼 🗎 14.4V
ECU Reprog	ramming			
Result for writ	ing RxSWIN.			
	-MZD-R000152	0000000122		
	-MZD-R00013H	0000000122		
				Next
1				
Quick Check	(Toolbox Software up··· X	O cnicely	🖨 VIN: ЈМЗККЕНАЛ	R1100074 🖄 💷 🚞 14.4V
ECU Reprogra	mming			
	Software Update Summa	ry		
	Description	Previous Version	Current Version	~
	DCM	MS06-186K2-L	MS06-186K2-N	
	FCM			~
	ECM	PXRC-188K2-L	PXRC-188K2-N	 ✓ ✓

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Calibration file information

NOTE: - If the calibration file is with the suffix in the table or later, unit is already modified.

Module	Target ECU (Hardware #)	Target Software file #	Reprogramming Time (min.)	Note
PCM	MS01-186B1	MS05-186K2-M or greater	Л	PHEV AWD 1500W PSU
F CIVI	M301-100D1	MS06-186K2-M or greater	4	PHEV AWD
ECM	PXGH-18881	PXRC-188K2-M or greater	4	-

Note current file level is N

Section B : Repair Procedure SSPD4 (Steps 1-4 do not need to be done if already performed another update)



Vehicle Identification

Connect MDARS with the DLC cable and VCM-II to the vehicle, then set the ignition to the ON position.

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CAUTION:

Connect the DLC cable and the VCM- II to the vehicle with the ignition OFF. The CAN bus line might detect some noise and it might cause a diagnostic error when connecting the DLC cable with the ignition ON.

- 1. Click the "Start" button.
- 2. The Vehicle Identification process will start and automatically inspect every connection and then collect the vehicle information.



3. Verify the DTC according to the directions on the quick check screen. If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection.



4. Reprogram PCM as below There is 'Software update' on 'Toolbox' tab. Select 'Run'.





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5. Select required module on 'ECU Reprogramming' screen. Start Reprogramming.

PCM

NOTE:

If software level is already at the latest calibration, MDARS does not reprogram subject ECU, which is normal behavior.

6. After completion of software update, the previous and current software version are shown. Check current version at "Calibration File information" below. Then, click on "Finish" to exit the ECU reprogramming and disconnect the 12V battery charger.

Quick Check X Toolbox # S	Software up·· X	O cnicely	🖶 VIN: ЈМЗККЕНСС	5R1100052 👌	🖅 💼 12.9
ECU Reprogramming					
Current Soft	ware				
Description		Current Version	Required Version	Size	
PCM		H302-188K2-K	H302-188K2-L	1.67 MB	*
				Next	_



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					_	
nazda			O cnicely	VIN: JM3KKEHC6R110	00052 💍	✓ 13V
ck Check	🗙 Toolbox 🛛 🖀 Software up ··	×				
Reprogra	amming					
	8					
sult for writin	ng RxSWIN.					
	-MZD-R000152		0000000120			
	-MZD-R00013H		0000000158			
	-MZD-R000079		00000000120			
						Next
	2203					🕼 苗 13.1V
ര Ouick (Check 🗙 Toolbox 🖀 Softwa	are up 🗙				
E CILI D						
ECU Re	eprogramming					
	Software Update	e Summary				
	Description	Previous Version		Current Version	•	/
	РСМ	H302-188K2-K		H302-188K2-L	•	/
				\square		_
					Finish	

Calibration file information

NOTE: - If the calibration file is with the suffix in the table or later, unit is already modified.

Module	Target ECU (Hardware #)	Target Software file #	Reprogramming Time (min.)	Note
		H301-188K2-L	Target tware file #Reprogramming Time (min.)01-188K2-L702-188K2-L7	H3T MHEV AWD LO
PCM	Target ECU (Hardware #) H301-18881	H302-188K2-L	7	H3T MHEV AWD HI

Section B : Repair Procedure SSPD1 (Steps 1-5 do not need to be done if already



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performed another update)



NOTE: Make sure that HV charging cable is not connected to HV battery charging port.

Vehicle Identification

Connect MDARS with the DLC cable and VCM-II to the vehicle, then set the ignition to the ON position.

CAUTION:

Connect the DLC cable and the VCM- II to the vehicle with the ignition OFF. The CAN bus line might detect some noise and it might cause a diagnostic error when connecting the DLC cable with the ignition ON.

1. Click the "Start" button.



2. The Vehicle Identification process will start and automatically inspect every connection and then collect the vehicle information.

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3. Verify the DTC according to the directions on the quick check screen.



NOTE: This campaign will not repair existing DTC(s).

If any of the following DTC's are stored, clear the DTC(s).

- U3000:01-0B:FSRR Front side radar sensor (RH) internal malfunction.
- U3000:01-0B: RSRL Rear side radar sensor (LH) internal malfunction •
- B14F1:04 [VMC] Front side radar sensor (LH)/(RH) internal malfunction or poor installation
- B1542:00-0B:VMC Rear side radar sensor related malfunction
- B14F2:04-0B:VMC Rear side radar sensor (LH)/(RH) internal malfunction or poor installation

Did the DTC(s) clear?

- Yes Go to next step. •
 - No Does vehicle have a history of battery discharge?
 - Yes Replace the Side Radar Sensor(s) related to the DTC stored.
 - NOTE: If replacement part is not available, order part and continue with repairs (Do Not Hold Vehicle).
 - No Perform needed repair per MGSS troubleshooting.
- 4. Reprogram Side Radar as below

There is 'Software update' on 'Toolbox' tab. Select 'Run'.

🖾 Mazda	a Diagnostic and Repair Software (MDARS)	~ ×
Θ	BZDB	🛛 m172110 🛱 VIN:JMZDMFW8A00100044 🗟 🖾
👜 Quic	k Check X Toolbox	
S		* *
-	Software update	
1	Software update	Not Run Run
+	Configuration	
+	ENGINE (SKYACTIV-D)	
+	ENGINE (SKYACTIV-X)	
+	BRAKES	
+	TRANSMISSION/TRANSAXLE	
+	RESTRAINTS	
+	SEATS	
+	SECURITY AND LOCKS	
+	LIGHTING SYSTEMS	
+	WIPER/WASHER SYSTEM	

5. Select required module on 'ECU Reprogramming' screen.

ZD3

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6. Start Reprogramming.

🖓 mazoa	O cnic	ely 🖨 VIN: JM3KKEI	HC6R1100052 💍	(2) 🗎 📺
ⓐ Quick Check X Toolbox ≇ Software up… X				
ECU Reprogramming				
Current Software				
Description	Current Version	Required Version	Size	
FSRL	KR9P-67YK2-J	KR9P-67YK2-L	702.18 KB 🛃	
Dependent Software				
FSRR	KR9P-67YK2-J	KR9P-67YK2-L	702.18 КВ 🛃 🛃	
RSRL	KR9P-67YK2-J	KR9P-67YK2-L	702.18 КВ 🛃 🛃	
RSRR	KR9P-67YK2-J	KR9P-67YK2-L	702.18 КВ 🛃	
			Next)

Side Radar Sensor ECU Programming	Applicable Vehicle	Not Applicable
NOTE: Not all trims have Front Side Radar • FSRR (Front Side Radar Right) • FSRL (Front Side Radar Left)	Standard PT • 3.3 Turbo Premium Plus High PT • 3.3 Turbo S Premium • 3.3 Turbo S Premium Plus PHEV • PHEV Premium Plus	Standard PT • 3.3 Turbo Select • 3.3 Turbo Preferred • 3.3 Turbo Preferred Plus • 3.3 Turbo Premium High PT • 3.3 Turbo S PHEV • PHEV Preferred • PHEV Premium
 RSRR (Rear Side Radar Right) RSRL (Rear Side Radar Left) 	All	N/A – All vehicles have Rear Side Radar Sensors

NOTE:

If software is already the latest, MDARS does not reprogram subject ECU. It is normal behavior.

7. After completion of software update, the previous and current software version are shown. Check current version at "Calibration File information" below. Then, click on "Finish" to exit the ECU reprogramming and disconnect the 12V battery charger.



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) mazoa		🕑 cnicely 🚔 VIN: JM3KKEHC6R1100052 🖄 🖪	13.6V
Quick Check	🗙 Toolbox 📲 Software up… 🗙		
CU Reprog	ramming		
	Ŭ		
Result for writ	ing RxSWIN.		
			_
	N7D D000153	00000000120	
	-MZD-R000152	0000000120	
	-MZD-R000079	0000000120	
			Next
Martin Varda	Depretic and Repair Software (MDARS)	🖸 cnicely 🖨 VIN: IM3KKFH.C6R1100052 🔊 🕼	- d
6 Q	uick Check 🕅 Y. Toolbox 🔹 Software up. 🗙		
EC			
	o neprogramming		
r	Software Update Summary		
	Software opdate Summary		

KR9P-67YK2-J

KR9P-67YK2-J

KR9P-67YK2-J

KR9P-67YK2-J

Calibration file information

FSRL

FSRR

RSRL

RSRR

NOTE: - If the calibration file is with the suffix in the table or later, unit is already modified.

~

~

~

~

~

Finish

KR9P-67YK2-L

KR9P-67YK2-L

KR9P-67YK2-L

KR9P-67YK2-L

Module	Target ECU (Hardware #)	Target Software file #	Reprogramming Time (min.)	Note
FSRR FSRL RSRR RSRL	KR9P-67Y30	KR9P-67YK2-L	16	-



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Section B: Repair Procedure SSPD2 – (Steps 1-4 do not need to be done if already performed another update)



Vehicle Identification

Connect MDARS with the DLC cable and VCM-II to the vehicle, then set the ignition to the ON position.

CAUTION:

Connect the DLC cable and the VCM- II to the vehicle with the ignition OFF. The CAN bus line might detect some noise and it might cause a diagnostic error when connecting the DLC cable with the ignition ON.

- 1. Click the "Start" button.
- 2. The Vehicle Identification process will start and automatically inspect every connection and



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then collect the vehicle information.

Mazda Diagnostic and Repair Software (MDARS)	-	• ×
U		

3. Verify the DTC according to the directions on the quick check screen. If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection.



4. Reprogram TCM as below There is 'Software update' on 'Toolbox' tab. Select 'Run'.

Mazo	da Diagnostic and Repair Software (MDARS)	\sim		- 🗆 ×	
Θ	nazoa				
@ Quid	ck Check 🗙 Toolbox				
ų	ä #			* *	
-	Software update				
	Software update		Not Run	Run	
+	Configuration		1		
) +	ENGINE (SKYACTIV-D)				
+	ENGINE (SKYACTIV-X)				
+	BRAKES				
+	TRANSMISSION/TRANSAXLE				
+	RESTRAINTS	<u>Sample</u>			
+	SEATS				
+	SECURITY AND LOCKS				
+	LIGHTING SYSTEMS				
+	WIPER/WASHER SYSTEM				

5. Select required module on 'ECU Reprogramming' screen. Start Reprogramming.

TCM -

NOTE:

If software is already the latest, MDARS does not reprogram subject ECU. It is normal behavior.

6. After completion of software update, the previous and current software version are shown. Check current version at "Calibration File information" below. Then, click on "Finish" to exit the ECU reprogramming and disconnect the 12V battery charger.



MULTIPLE CAMPAIGNS REPAIR PROCEDURE AND MULTIPLE MODULE REPROGRAMMING Page 21 of 28

ECU Reprogramming Current Software TCM Turbo Shown TCM Turbo Shown Next Next CX-90 Turbo Shown Next CX-90 Turbo Shown Next CX-90 Turbo Shown Next		O cnicely	🚗 VIN: ЈМЗККЕН	C6R1100052 උි	(12) 🗰 13.	7V
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Calibration file information

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🖻 Quick Check 🗙 Toolbox 🖀 Softw	are up·· 🗙		
ECU Reprogramming			
Software Update	e Summary		
Description	Previous Version	Current Version	✓
ТСМ	H328-21PS1-G	H328-21PS1-J	~
CX-90 Tur	bo Shown		Finish



MULTIPLE CAMPAIGNS REPAIR PROCEDURE AND MULTIPLE MODULE REPROGRAMMING Page 22 of 28

NOTE: - If the calibration file is with the suffix in the table or later, unit is already modified.

Module	Target ECU (Hardware #)	Target Software file #	Reprogramming Time (min.) PLUS RELEARN	Note
		H327-21PS1-J		H3T MHEV AWD LO
ТСМ	RZ01-219E1	H328-21PS1-J	35m H3T MHEV	H3T MHEV AWD HI
		PXPN-21PS1-G	27m PHEV	PHEV AWD

Proceed to TCM Initial Learning after reprogramming

TCM Initial Learning after reprogramming

Warning

• When performing the initial learning, apply the parking brake securely and block the front and rear wheels using wheel chocks so that the vehicle does not move. Otherwise, the vehicle may move which could lead to an accident because the gears are forcibly changed with the engine running and the shift lever in the drive position while in the initial learning.

Note:

- While the initial learning is being performed, the following phenomena may occur.
- Shift shock occurs intermittently.
- Indications such as selector lever positions differ from those displayed normally.

Preparation before servicing

8. Switch the ignition ON (engine on)/main power ON (READY on).

- 9. Apply the parking brake.
- 10. Shift the selector lever to P range, and set the wheel chocks for both the front and rear wheels.
- 11. The ATF temperature is 45°C to 105°C as an execution condition for AT initial learning, but after learning starts, the ATF temperature may drop to 44°C and learning may be interrupted, so learning should be started after raising the temperature to 50°C or higher.

Initial learning procedure

- 12. Connect the M-MDS to the DLC-2.
- 13. Open the engine hood. (To ensure that the engine starts. If engine hood is opened, EV mode does no work)
- 14. Switch the ignition ON (engine off).
- 15. Perform the following procedure using the M-MDS.
 - i) Press [Start] for the vehicle identification.
 - ii) Press the [Toolbox] tab.
 - iii) Press the [Work Support] icon.
 - iv) Press [TRANSMISSION/TRANSAXLE].

MULTIPLE CAMPAIGNS REPAIR PROCEDURE AND MULTIPLE MODULE REPROGRAMMING Page 23 of 28

- v) Press [Run] for Initial learning of AT.
- 16. Perform the automatic transmission initial learning.
- 17. Using the M-MDS, verify that TCM DTC P06B8:00 has not been stored. (See DTC INSPECTION.)
 - If DTC P06B8:00 is displayed, switch the ignition off/main power OFF and repeat the procedure from Step 15.
 - If any other DTCs are displayed, repair or replace the malfunctioning location according to the applicable DTC troubleshooting of workshop manual.
- 18. Disconnect the M-MDS and perform following learning procedure.

PowerTrain start-up learning

- (1) Switch the ignition ON. Either "Engine run" or "READY ON (NOT Engine run)" is fine.
- (2) After holding the idling or READY ON for 5 seconds or more, turn the ignition switch OFF and hold it for 5 seconds or more.
- (3) Repeat steps (1) and (2) above for 3 times.

Shift range learning

- (1) Switch the ignition ON. Either "Engine run" or "READY ON (NOT Engine run)" is fine.
- (2) While idling or READY ON, depress the brake and perform the following steps.
 - Move the shift lever in "D". i)
 - ii) Move the shift lever from "D" to "R" and wait 5 seconds *
 - Move the shift lever from "R" to "D" and wait 5 seconds * iii)

* Do not stop in N range while moving the shift lever.

(3) Repeat steps i) to iii) for 5 times.

Note:

In addition to the above learning, TCM also performs learning while driving automatically. Immediately after reprogramming and initial learning, the above driving learning will be reset. Therefore, it is important to explain the followings to customers.

Explanation to customers

To improve shift feel, the vehicle learns the timing of engaging the clutch while driving. This reprogramming will improve the shift feel and optimize by learning. However, the learning values would be reset to initial once.

Once the learning values were initialized, a slight shift shock might be felt intermittently, however by proceeding the learning by driving. It may take a few days but it will be improved.

PROCEED TO ODR COLLECTION

WARNING! FAILURE TO UPLOAD ODR DATA WILL RESULT IN CLAIM DENIAL, CAMPAIGN REMAINING IN OPEN STATUS AND VEHICLE HAVING TO COME BACK TO REDO THE DATA PUSH

MULTIPLE CAMPAIGNS REPAIR PROCEDURE AND MULTIPLE MODULEREPROGRAMMINGPage 24 of 28

Upload ODR Data

Check ODR collection result after reprogramming all required modules with vehicle verification.

7. Open the vehicle history on toolbox tab.

🖻 Quick (Check X Toolbox		
ပ <mark>်</mark> န	а́ њ		× ×
\sim	Datalogger	Not Run	Run
+	Confirmation test for system operation		
+	On-demand self-test		
+	Operational records	-	
<u>©</u> .	Vehicle History	Not Run	Run

8. Click the 'Collect Diagnostic Information' and the status has 'SUCCESS' on green.

NOTE:

Verify the "Collect Diagnostic Information' <u>after all required modules are updated</u>. Not necessary to confirm the 'Collect Diagnostic Information' after required module reprogram <u>every time</u>.

Only the latest "Collect Diagnostic Information" is the valid one and that needs to show "SUCCESS"

Mazda Diagnostic and Repair Software (MDARS)				- 0 ×
🔂 mazoa				
a Vehicle History 🗠 DataLogger				
November 20, 2020				C ^
	<	Nov 20, 2020 22:15 UTC +0900	>	
Start	11/20/20 10:15 PM	Status: SUCCESS		Duration: 46 seconds
Vehicle Identification	11/20/20 10:15 PM			
Quick Check > Network View	11/20/20 10:15 PM			
Quick Check > DTC List	11/20/20 10:15 PM			
Collect Diagnostic Information (Aut	omat…11/20/20 10:16 PM			
Collect Diagnostic Information (ECU	J SW … 11/20/20 10:21 PM			
Software update	11/20/20 10:22 PM			
Software update	11/20/20 10:23 PM			

XIf the status is 'FAILURE', the ODR (latest vehicle information) has not been submitted to the server. Perform following process

Status: FAILURE	
-----------------	--

Duration: 1 seconds

BZID3



MULTIPLE CAMPAIGNS REPAIR PROCEDURE AND MULTIPLE MODULE REPROGRAMMING Page 25 of 28

(1) 'Collect Diagnostic information' then click 'Run' at the tool box tab.

Mazda Diagnosti	c and Repair Software (MDARS)		- 0 X
🖻 Quick Ch	eck 🗙 Toolbox 🔉 Vehicle History		
U. 7	· ·		
			* *
+ :	SECURITY AND LOCKS		
+	LIGHTING SYSTEMS		
+ 1	WIPER/WASHER SYSTEM		
+	POWER SYSTEMS		
+ 1	i-ACTIVSENSE		
+	Mazda Connect		
	Collect Diagnostic Information		
۶	Moving into i-ACTIVSENSE data collecting mode	Not Run	Run
٢	Withdrawing from i-ACTIVSENSE data collecting mode	Not Run	Run
٢	Moving into Driving data collecting mode	Not Run	Run
٢	Withdrawing from Driving data collecting mode	Not Run	Run
,Qa	Collect Diagnostic Information	Not Run	Run
2	Vehicle History	Running	Run

(2)Click 'Next'

Mazda Diagnostic and Repair Software (MDARS)	- Ø	×
⊖ mazpa		
👜 Quick Check 🗙 Toolbox 😒 Vehicle History 🔉 Collect Diag 🗙		
ODR Collection		
Verify the following conditions are met before continuing this procedure.		
···· , ·······························		
Ignition Condition : On Current value : On		

(3) It may take around 60 seconds.

Mazda Diagnostic and Repair Software (MDARS)				- a ×
💮 mazoa		O m172110 ♣ VIN: JMZDMFWG600200003	2	(🖾 💼 12.4V 🗮
🖨 Quick Check 🗙 Toolbox 🛸 Vehicle History	,⇔ Collect Diag…			
ODR Collection				
Collect Diagnostic Information				
		3s		
				Next

(4) MDARS has collected ODR and sent to the server.

Massis Diagnostic and Repair Software (MDARS)	-	σ	×
⊖ mazoa			
📾 Quick Check 🕺 Toolbox 😒 Vehicle History 🔉 Collect Diag 🗙			
ODR Collection			
✓ ODR collection has been successful.			

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(5)Go back to step 7 and 8 to confirm the Collect Diagnostic Information (Manual) status shows 'SUCCESS' on green.

Mazda Diagnostic and Repair Software (MD)	AKS)			
💮 mazoa		O m172110	🖨 VIN: JMZDMFWG600200003	🔊 No Vehicle Mode 🗮
a Vehicle History 🗠 DataLogger				
November 30, 2020				2
	< N	ov 30, 2020 16:31 UTC +0900	>	
venicle identification	11/30/20 4:32 PM	Status: SUCCESS		Duration: 82 seconds
Quick Check > Network View	11/30/20 4:32 PM			
Quick Check > DTC List	11/30/20 4:32 PM			
Collect Diagnostic Information (Autom	···11/30/20 4:32 PM			
Collect Diagnostic Information (Manua	I) 11/30/20 4:35 PM			
Software update	11/30/20 4:37 PM			
Software update	11/30/20 4:38 PM			
Software update	11/30/20 4:38 PM			
Quick Check > Clear DTCs	11/30/20 4:39 PM			
Quick Check > Network View (Refresh E	011/30/20 4:39 PM			
Quick Check > DTC List (Refresh DTCs)	11/30/20 4:39 PM			

Proceed to clearing Sleep Mode after VMC Update (Recall 6223J) and DTC Clear

Sleep mode after reprogramming VMC (View Monitor Camera)

Note:

When vehicle was reprogrammed multiple times, the 360° View Monitor may stop its operation such as stop displaying camera output in the center display. Therefore, after reprogramming the VMC, put it into sleep mode to reset the reprogramming count.

Note:

Disconnect battery charger before starting "Sleep mode for CAN communication". DCDC converter and the power supply from the battery charger may be interfered and it may causes damages of the battery charger. In addition, warning light may illuminate and DTCs may be stored. (Ex. P0DAA)

Sleep mode for CAN communication

- 9. Perform the following operation.
 - Switch the ignition off/main power OFF.
 - Remove all of the remote transmitters from the vehicle, lock all doors, and then wait for 5 min.

DTC inspection

Note:

Disconnect battery charger before starting engine at next step because the power supply from the DCDC converter and the power supply from the battery charger may interfere and damage the battery charger. Then warning light comes up and DTCs are stored. (Ex. P0DAA)

MULTIPLE CAMPAIGNS REPAIR PROCEDURE AND MULTIPLE MODULE REPROGRAMMING Page 27 of 28

10. Verify the repair by starting the engine. If subject vehicle is PHEV, proceed with following steps. Make sure there is no MIL illumination or abnormal warning lights present.



<How to start the engine in PHEV>

- (10-1) Switch to 'Sport Mode' and shift to 'D' range
- (10-2) Confirm Engine RPM is shown correctly in IC.
- (10-3) Shift to 'P' range then stop the engine. Turn ignition off.

Note:

After the reprogram, pending DTC P2610:00 [PCM] may be stored without MIL illumination. Since this DTC may turn to a current DTC depending on operations after the reprogramming, clear DTC after all repair work done.

- 11. If any DTCs should remain after performing DTC erase, diagnose the DTCs according to the appropriate troubleshooting section of the Workshop Manual.
- 12. Disconnect the MDARS from the DLC-2.
- 13. Move to Section C. Campaign Label(s) installation. You must install a label for all campaigns or highlight multiple campaigns on one label.

C. CAMPAIGN LABEL INSTALLATION

a. Fill out a Black "Campaign Label" (9999-95-055A-06) with Campaign #: "6223J, 6323J, SSPD1, SSPD2, SSPD3, SSPD4", your dealer code, and the repair date. It is OK to bundle multiple campaigns on one label as long as each campaign is legible. Use more than one label if necessary. For example, if you repair 6223J, 6323J and SSPD1, then have one label with 2 Safety Recall and the second label with SSPD1.

CAMPAIGN NO;		
DEALER CODE;		
DATE:	11	

b. Affix it to the hood as shown. If you cannot place the label here, the radiator support, firewall or driver door jamb are acceptable locations:



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End of Repair Procedure.