Mazda North American Operations Irvine, CA 92618-2922



# Subject: CX-50 SERVICE CAUTIONS FOR NEW AND REVISED FEATURES Service Alert No.: SA-011/22 Last Issued : 04/04/2022

# **BULLETIN NOTES**

This Service Alert supersedes the previously issued SA(s) listed below. The changes are noted in Red.

Previous SAs:	Date(s) Issued:
SA-011/22	03/10/22

# APPLICABLE MODEL(S)/VINS

2023 CX-50

# DESCRIPTION

The CX-50 has new and revised features that are different from previous models, and may be difficult to understand. This Service Alert provides valuable information to support potential dealer and customer concerns.

# Index

PDI fuse Key Transmitter and Auxiliary Key i-stop i-stop LN3 Battery Charging Smart Brake Support [Rear] (SBS-R) Driver Monitoring (DM) Driver Attention Alert (DAA) **Connected Vehicle Enrollment Connected Vehicle Maintenance Mode** Mazda Connected Vehicle Viewer (MCVV) Mazda intelligent Drive Select (Mi-Drive) Wireless Apple Carplay<sup>™</sup> / Android Auto<sup>™</sup> Wireless Qi Charger **Remote Power Window** Panorama Sunroof Electric Parking Brake (EPB) Front Radar Sensor Front Wiper Service Caution **MAZDA CONNECT Power Function** 

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Power Door Locks Walk-Away Auto Lock Function Transmitter Battery Saving Function Keyless Entry Using Auxiliary Key Rear Door Child Safety Locks Operation Theft-Deterrent System Link Seat & Climate Control Temperatures Web-Based Training Courses

Item	Service Information
<ul> <li>Fuse to be Installed at PDI</li> <li>Fuse F27 (25A) is removed from the engine compartment fuse block and is stored on the engine compartment fuse block lid.</li> <li>NOTE: <ul> <li>Make sure the fuse is fully installed into position and flush with all of the other fuses.</li> <li>Check for the Connected Vehicle signal after installing fuse F27. The connectivity signal bar looks like a vertical stack bar on the bottom right corner of the screen and should be white as shown below to be working properly. This bar is not displayed on the "Home" screen, but on the "Entertainment" or "Navigation" menu.</li> </ul> </li> </ul>	Service information         Fuse Block (Engine Compartment)         F1       F2       F3       F4       F5       F6         F2       F28       F1       F1       F2       F3       F4       F5       F6         F21       F29       F37       F39       F1       F1       F2       F34       F2       F33       F41       F2       F34       F41       F2       F35       F43       F44       F2       F35       F44       F35       F36       F44       F35       F36       F44       F35       F36       F36
<b>Key Transmitter and Auxiliary Key</b> Vehicles arrive at the dealer with auxiliary keys and key transmitters located in the front cup holders.	SA-056/21 Temporary Lost Key Procedure See Owner's Manual -> Before Driving -> Keys -> Auxiliary Key

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<ul> <li>If additional auxiliary metal keys a require a 5-digit code. Just add "5 to 5-digit.</li> </ul>	re needed, the key machine will " as the 1st digit to make the 4-digit	
The auxiliary keys need to be inserted in	to the key transmitters during PDI.	
Remove the transmitter lower cover by sliding the knob in the direction shown and then sliding the cover in the opposite direction.		
Insert the auxiliary key.		
Install the transmitter lower cover by inserting the tabs of the lower cover into the slots of the transmitter.		
Transmitter Note:		
<ul> <li>If one transmitter is lost, inform the customer to take cautions not to lose the 2nd transmitter.</li> <li>If both transmitters are lost, the vehicle will be disabled and MDARS will need to be used to program new transmitters.</li> <li>Replacement battery type is CR2032 (3V, 225mAh), which is different then previous 6th generation transmitter battery type CR2025 (3V, 160mAh). If the wrong battery is installed, the transmitter might not work properly (malfunction).</li> </ul>		

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i-stop\*

The i-stop function automatically stops the engine when the vehicle is stopped at a traffic light or stuck in traffic, and then restarts the engine automatically to resume driving. The system provides improved fuel economy, reduced exhaust gas emissions, and eliminates idling noise while the engine is stopped.

## i-stop OFF Switch

When pressing the switch, the i-stop function is disabled and the i-stop OFF switch indicator light turns on (1). If the switch is pressed again, the i-stop function is enabled and the i-stop OFF switch indicator light turns off.



# NOTE

- If the engine is stopped with the i-stop function stopped, the i-stop function becomes operational again when the engine is started the next time.
- New LN3 Battery for vehicles equipped with i-stop.
- Battery disconnect/reconnect Perform the battery condition initial setting (i-stop setting). Go to MGSS BATTERY CONDITION INITIALIZATION SETTING (i-stop SETTING)

\* if equipped

# i-stop\* LN3 Battery Charging

Temporary LN3 Battery Charging Procedure until DCA-8000 software update is available.

Owner's Manual -> When Driving -> Start/ Stop Engine -> i-stop

MGSS Service Highlights -> i-stop -> istop CONTROL

# Indicator Light



The i-stop indicator light (green) notifies the driver that the engine is stopped by istop control.

# **Amber Flashing**



If the i-stop control inhibits i-stop operation, the i-stop warning light (amber) flashes to inform the driver.

DTC stored

# Amber Solid



DCA-8000

If the i-stop control inhibits i-stop operation, the i-stop warning light (amber) turns ON solid to inform the driver.

•	Ignition switched ON (check of i-
	stop control system)
•	Engine stalls due to driver's
	operation while engine is stopped
	here at an annual

- by i-stop control Communication error to PCM and instrument cluster
- instrument cluster

1. Main Menu - Select In-Vehicle Charge

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<b>Connected Vehicle Enrollment</b> Vehicles produced before March 3, 2022 MyMazda App Connected Vehicle enrollment. Door jam VIN label scan fails using an Android Smartphone.	This is caused by the door Jam VIN label bar code having limited white space on both sides.
<ul> <li>Connected Vehicle Maintenance Mode</li> <li>When vehicle is being serviced, switch to Restricted Transmitting Mode.</li> <li>Restricts MyMazda App remote functions.</li> <li>Prevents error messages being sent to the customer during vehicle service.</li> <li>Cancel Restricted Transmitting Mode after completing vehicle service.</li> </ul>	Go to MGSS SERVICE CAUTIONS FOR VEHICLES WITH TELEMATICS COMMUNICATION SYSTEM [(US)].
Mazda Connected Vehicle Viewer (MCVV) The Mazda Connected Vehicle Viewer (MCVV) enhances the Mazda	MAZDA CONNECTED VEHICLE VIEWER USER GUIDE (MCVV)

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ownership experience by providing Mazda Service Advisors, Technicians and Call Center Associates access to real-time vehicle status information alerts for applicable Mazda connected vehicles.	
<text></text>	
Mazda intelligent Drive Select (Mi-Drive)* Mi-drive is a system that switches the drive modes depending on the driving conditions, road conditions and vehicle conditions. The mode can be switched from normal to sport, off-road or towing. The following drive modes can be switched according to the conditions.	MGSS Service Highlights -> Engine -> Mazda intelligent Drive Select (Mi-Drive) SYSTEM See Owner's Manual -> When Driving -> Mazda intelligent Drive Select (Mi-Drive) - > Mazda intelligent Drive Select (Mi-Drive) (AWD)

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Normal mode	
This mode is suitable for normal driving or gentle acceleration.	
Sport mode	
<ul> <li>This mode enhances vehicle responsiveness when the accelerator pedal is depressed.</li> <li>This provides additional quick acceleration which may be needed to safely make maneuvers such as lane changes, merging onto freeways, or passing other vehicles.</li> </ul>	
Off-road mode	
<ul> <li>This mode helps prevent drive-wheel spinning during off-road driving and improves driving performance.</li> <li>Use this mode to drive the vehicle on slippery roads such as muddy, sandy, or deep-snowy roads.</li> </ul>	
Towing mode	
<ul> <li>This mode suppresses the reduction of driving performance due to increased weight during trailer towing and promotes vehicle stability. Use this mode when towing a trailer.</li> </ul>	
* if equipped	
Wireless Apple Carplay™ / Android Auto™ Infotainment Touch Screen enabled during Wireless Apple Carplay™ / Android Auto™ operation.	Owner's Manual -> MAZDA CONNECT OWNER'S MANAUL -> Touch Panel Operation Owner's Manual -> MAZDA CONNECT OWNER'S MANAUL -> Apple Carplay <sup>™</sup> / Android Auto <sup>™</sup>

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15:12 11:14G 10:10 10:10 11:12 11:14G 10:10			
	See Owner's N > Interior Equip (Qi)	/anual -> Interi oment -> Wirel	or Features - ess Charger
Wireless Qi Charger* You can charge mobile devices such as Smartphones which comply with	Illumination / flash pattern	Infotainment Icon indication	Status
the Qi Wireless Charging standard. Only use mobile devices that have a maximum power consumption of 5 W, or 15 W or below. The maximum power consumption differs depending on the mobile device.	Does not turn on		Indicates that charging is turned off.
	Turns on white	5	Indicates that charging is possible.
	Turns on amber	4	Indicates normal charging.
	Turns on green	4	Indicates fast charging*.
1. LED indicator 2. Charging area	Flashes white		Indicates that the charging conditions are not met.
<ul> <li>The LED indicator turns on in amber or green when charging starts.</li> <li>For details on the LED indicator, refer to the LED indicator table.</li> <li>Charging starts when all the doors and liftgate are closed.</li> </ul>	Flashes red		Indicates that charging is not possible
* if equipped			because a high temperature is detected.

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		÷.	that charging is not possible because foreign matter is detected.
	Turns on red		Indicates that there is a problem with Wireless Charger (Qi) and it needs to be repaired. Consult an Authorized Mazda Dealer.
Remote Power Window Operation The windows can be opened for ventilating the cabin before getting in the vehicle. Press the unlock button on the key quickly and briefly 3 times and then immediately afterwards, press and hold the unlock button to open the windows.	See Owner's M Power Window Window Opera	lanual -> Befo /s -> Remote F tion	re Driving -> Power
Panorama Sunroof*	See Owner's M Windows -> Pa	lanual -> Befo anorama Sunro	re Driving -> oof

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Canceling the Parking Brake Auto Operation	
The parking brake auto operation can be canceled using the procedure in the Owner's Manual.	
NOTE: When the ignition is cycled back ON, the parking brake auto operation is restored.	
Parking Brake Automatic Release	
If the selector lever is shifted from the P position to a position other than P with the parking brake applied and all of the following conditions met, the parking brake is released automatically. When the parking brake is released, the EPB indicator light in the instrument cluster and the EPB switch indicator light turn off. Engine is running Driver's door is closed Shift interlock release is enabled The brake pedal is being depressed	
Front Radar Sensor	
<text></text>	MGSS FRONT RADAR SENSOR REMOVAL/INSTALLATION
Front Wiper Service Caution	See Owner's Manual -> Maintenance and Care > Replacing Windshield Wiper Blades
The wiper arm park position is located under the hood. When servicing front wipers, front wiper service mode is required or damage to wiper arms may occur (see Service Information). If the wiper arms are replaced, M-MDS is needed for wiper arm adjustment	MGSS: WINDSHIELD WIPER BLADE AND RUBBER REMOVAL/ INSTALLATION

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(see Service Information). DO NOT use the wiper arms as markers when in dealer inventory.	
<ul> <li>MAZDA CONNECT Power Off Function</li> <li>Image: State of the state of the</li></ul>	See Owner's Manual -> MAZDA CONNECT OWNER'S MANUAL -> Basic Operations -> Commander Switch Operation -> Power off/on
<ul> <li>Power Door Locks</li> <li>The doors cannot be unlocked using the outside door handle touch sensor. The door handle touch sensor system may not operate normally under the following conditions: <ul> <li>The front passenger (without key) grabs and holds the outside door handle before the driver (with key) touches the drivers outside door handle unlock touch sensor.</li> <li>The driver touches the sensing area of the door lock touch sensor and the sensing area of the door release touch sensor at the same time.</li> </ul> </li> </ul>	See Owner's Manual -> Before Driving -> Doors and Locks -> Locking, Unlocking with Touch Sensor, Door Handle

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Walk-Away Auto Lock Function				
A beep sound is heard when all doors and the liftgate are closed while the transmitter is being carried. All the doors, fuel-filler lid, and liftgate are locked automatically when the transmitter is out of the operational range. Also, the hazard warning lights flash once. (Even if the driver is in the operational range, all the doors, fuel-filler lid, and liftgate are locked automatically after about 30 seconds.) If the driver is out of the operational range before the doors and the liftgate are completely closed or another transmitter is left in the vehicle, the walk-away auto lock function will not work. Always make sure that all doors and the liftgate are closed and locked before leaving the vehicle. The walk-away auto lock function does not close the power windows.				
Operational Range				
Operational Range I Compared to the second			See Owner's Manual -> MAZDA CONNECT OWNER'S MANUAL -> Settings -> Vehicle Settings - Keyless Auto-Lock	
Scenarios Where W	/alk-Away Lock Function Ma	y Not Work		
Scenario	Reason	Solution		
Key transmitter is outside of antenna range while any of the doors have not been closed.	By the time all the doors are closed, the key transmitter is already out of operational range, causing walk-away lock to not function.	Always make sure the key transmitter holder is in operational range and is the last person to leave after all doors/trunk/ liftgate		

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		are closed.
Key transmitter holder exits driver's door then opens rear left door to retrieve items.	<ul> <li>Depending on the key transmitter holder's distance to the antenna when he/she is closing the driver side rear door, the walk-away lock may or may not function.</li> <li>If standing closer to the rear bumper area when closing the rear door, the key transmitter may be out of the operational range, causing walk-away lock to not function.</li> <li>If standing closer to the B-pillar when closing the rear door, the walk-away lock should function correctly.</li> </ul>	Be mindful of the key holder's position in relation to the door exterior antenna (31 in).
Key transmitter holder moves out of operational range too quickly.	<ul> <li>If the key transmitter holder is in a hurry to get out of the car and leaves the operational range too quickly before the audio beep, the walkaway lock function may not work.</li> <li>The key transmitter holder opens the driver's door, gets out, and walks away at a fast pace while shutting the door. It is possible</li> </ul>	Slow down and make sure the audio beep sounds before leaving the operational range, the audio beep sound will always sound to alert the key transmitter holder that the key was detected for walk- away door lock function.

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	that by the time the door is completely shut, the key transmitter holder is already out of operational range because she/ he is moving away too fast, causing walk-away lock to not function.			
<ul> <li>Transmitter Battery Saving Function (Key Fob)</li> <li>The CX-50 has a "power saving" function built into the keyless entry system where <u>some</u> key fob functions are disabled. This feature could accidentally be enabled and some concerns with the vehicle may be: <ul> <li>Engine does not start.</li> <li>Engine does not start unless you hold the fob to the start/stop button.</li> <li>Doors do not unlock using the door handle, but unlock with the remote.</li> <li>Transmitter indicator light does not turn on/flash.</li> </ul> </li> </ul>			See Owner's Manual -> Before Driving - > Keys -> Transmitter -> Power saving function	
Keyless Entry Using Auxiliary Key If the vehicle battery is discharged and/or the key battery is dead, vehicle entry is possible using the auxiliary key.			See Owner's Manual -> Before Driving -> Keys -> Auxiliary Key Then refer to Owner's Manual -> Before Driving -> Doors and Locks -> Unlocking with Auxiliary Key	
<b>Rear Door Child Sa</b> The auxiliary key is	afety Locks Operation	d disable (unlock) th	e rear	See Owner's Manual -> Before Driving -> Doors and Locks -> Rear Door Child Safety Locks

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door child safety locks.	
1. Auxiliary Key	
2. Lock	
3. Unlock	
Theft-Deterrent System	
The CX-50 is not equipped with a Theft-Deterrent System. <b>CAUTION</b> : DO NOT use MDARS to enable:	
<ul><li>Burglar Alarm</li><li>Intrusion Sensor</li></ul>	
The CX-50 does not have the necessary Theft-Deterrent System hardware to function if enabled using MDARS, and MDARS cannot disable the Theft-Deterrent System after it has been enabled. The following DTC's may be stored if the burglar alarm or intrusion sensor are enabled:	
<ul> <li>B109F:87 - Intrusion Sensor Module</li> <li>B2002:87 - On Board Charger DC/DC Low Voltage Side</li> </ul>	
Contact Hotline if the Theft-Deterrent System has been accidently enabled.	

Mada Daprotic and Tepair Software (MSAR)	0		- 0 X	
Minazba	🕑 amatsuta 🛛 🛻	VIN: 3MZBPAALOKM	13.6v	
Quick Check X Toolbox				
v 減 <b>F</b>			×   ×	
Burglar Alarm		Not Run	Run	
Intrusion Sensor		Not Run	Run	
Ambient Lighting		Not Run	Run	
Welcome Lamp		Not Run	Run	
Power Supply_IG		Not Run	Run	
Power Supply_TNS		Not Run	Run	
		Not Run	Run	
▶ LED HL_DRL		Not Run	Run	
Registration for Remote	te Engine Starter(RES)	Not Run	Run	
The driver and fr heated steering and off) by the c Auto Mode 1. Go to MAZDA 2. Select "Vehicl 3. Enable "Link S 4. Press the clim	eat Ventiliation and Heate ont passenger's seater war wheel* can be set to be aut limate control system, depe cONNECT home screen a e Settings". Seat & Climate Control Tem ate control AUTO switch.	d Steering Who mers*, seat ven omatically contr anding on the se and select "Setti aperatures".	eel Auto Mode* ntilation and the folled (turned on it temperature.	
Link Seat & Climate Control Temperatures Setting	Vehicle Settings Rain-Sensing Wipers Turn Signals Rear Window Defogger Link Seat & Climate Control Te Fuel Door Lock Delay	Automatic Shut Off > mperatures 20 90 seconds >	1:23 pm	Owner's Manual -> MAZDA CONNECT OWNER'S MANUAL -> Settings - Vehicle Settings -> Link Seat & Climate Control Temperatures / Occupant Comfort Owner's Manual -> Essential Safety Equipment -> Seats -> Seat Warmer / Heated Steering Wheel -> Seat Ventilation
Climate Control Auto Switch	AUTO		æ	
* if equipped				

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2023 CX-50 Web-Based Training Courses

Course	Description
90054	2023 CX-50 VIRTUAL LEARNING
40080	CX-50 Technical Overview IDL

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