

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: AMBIENT TEMPERATURE IS DISPLAYED LOWER THAN ACTUAL TEMPERATURE AND A/C DOES NOT WORK SUFFICIENTLY	Bulletin No.: 07-002/23
	Last Issued : 02/01/2023

BULLETIN NOTES

APPLICABLE MODEL(S)/VINS

2014-2023 Mazda3	2016-2021 CX-3	2016-2022 CX-9	2022 MX-30	2016-2022 Mazda2 (PR/Mexico spec)
2017-2021 Mazda6	2017-2023 CX-5	2016-2022 MX-5	2023 CX-50	2022-2023 CX-3 (Mexico spec)

NOTE: For models with full-auto air conditioner only.

DESCRIPTION

Some customers may complain that the ambient temperature on the instrument cluster is displayed more than 50 °F (10 °C) lower than the actual temperature, resulting in insufficient performance of the air conditioning. This is caused by inappropriate soldering in the ambient temperature sensor. To eliminate this concern, the soldering process has been enhanced since December 2021 at the supplier.


Customers having this concern should have their vehicle repaired using the following repair procedure.

REPAIR PROCEDURE

1. Verify the customer concern.
2. Check the lot number of the ambient temperature sensor.

NOTE:

- The ambient temperature sensor countermeasure started in Lot 0411 of 2021/Dec.
- Make sure to disconnect the negative terminal of the battery during the replacement of the sensor, otherwise the sensor may not be reset correctly.

Ambient Temperature Sensor Countermeasure	
LOT Number 202112AS0411	
<ul style="list-style-type: none"> • First 4 digits - Year • Digit 5-6 - Month • Digit 7-8 - Production Line Identification Code • Last 4 digits - Product Lot (number assigned to each lot) 	Example: 2021 12 AS 0411 = Dec/2021 Lot Number 411

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Is the lot number before Lot 0411 of 2021/Dec?

- **Yes** - Replace the ambient temperature sensor according to the instructions in MGSS.
 - Mazda2 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - Mazda3
 - 2014-2016 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - 2017-2018 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - 2019-2023 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - Mazda6 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION)
 - CX-3 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - CX-30 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - CX-5
 - 2017-2020 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - 2021-2023 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - CX-9
 - 2016-2020 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION)
 - 2021-2022 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION)
 - MX-5 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - MX-30 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
 - CX-50 (AMBIENT TEMPERATURE SENSOR REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER])
- **No** - This service information does not apply. Refer to to normal MGSS troubleshooting.

3. Verify the repair.**PARTS INFORMATION**

Parts Number	Description	Qty.
G518-61-764A	SENSOR,AMBIENT	1

NOTE: All service parts in stock are modified ones.

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WARRANTY INFORMATION**NOTE:**

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under:
 - CA Emission Warranty (Short) or PZEV Warranty for 2017 and earlier models.
 - Mazda New Vehicle Limited Warranty for 2018 and later models.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	59
Damage Code	9R
Part Number Main Cause	G518-61-764A
Quantity	1
Operation Number / Labor Hours:	Refer to tables below.

Operation No. and Labor Hours**2016-2023 CX-3**

Operation No.	Labor Hours (Hrs.)
XXW92DRX	0.5

2014-2018 Mazda3

Operation No.	Labor Hours (Hrs.)
XXW92ARX	0.5

2017-2021 Mazda6

360°view monitor system	360°view monitor system screen display verification and 360°view monitor system aiming	360°view monitor system screen display verification only	Operation No.	Labor Hours (Hrs.)
x	x	-	XXW92ARX	0.7
x	-	x	XXW92BRX	0.6
-	-	-	XXW92CRX	0.5

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2017-2023 CX-5

360°view monitor system	360°view monitor system screen display verification and 360°view monitor system aiming	360°view monitor system screen display verification only	Operation No.	Labor Hours (Hrs.)
x	x	-	XXW92ARX	0.7
x	-	x	XXW92BRX	0.6
-	-	-	XXW92CRX	0.5

2016-2022 CX-9

360°view monitor system	360°view monitor system screen display verification and 360°view monitor system aiming	360°view monitor system screen display verification only	Operation No.	Labor Hours (Hrs.)
x	x	-	XXW92BRX	0.7
x	-	x	XXW92CRX	0.6
-	-	-	XXW92DRX	0.5

2019-2023 Mazda3

360°view monitor system	360°view monitor system screen display verification and 360°view monitor system aiming	360°view monitor system screen display verification only	Front cross traffic alert (FCTA) system	Mazda radar cruise control (MRCC) system	Operation No.	Labor Hours (Hrs.)
x	x	-	x	-	XXW92BRX	0.8
x	x	-	-	x		
x	-	x	x	-		
x	x	-	-	-	XXW92CRX	0.7
x	-	x	-	x		
-	-	-	x	-		
-	-	-	-	x	XXW92DRX	0.6
x	-	x	-	-		
-	-	-	-	-	XXW92FRX	0.4

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2020-2022 CX-30

360°view monitor system	360°view monitor system screen display verification and 360°view monitor system aiming	360°view monitor system screen display verification only	Front cross traffic alert (FCTA) system	Mazda radar cruise control (MRCC) system	Operation No.	Labor Hours (Hrs.)
X	X	-	X	-	XXW92BRX	0.9
X	-	X	X	X		
X	X	-	-	X	XXW92CRX	0.8
X	-	X	X	-		
X	-	X	-	X		
-	-	-	X	-		
-	-	-	-	X		
X	X	-	-	-	XXW92DRX	0.7
X	-	X	-	-	XXW92ERX	0.6
-	-	-	-	-	XXW92FRX	0.5

2023 CX-50

360°view monitor system	360°view monitor system screen display verification and 360°view monitor system aiming	360°view monitor system screen display verification only	Mazda radar cruise control (MRCC) system	i-stop	Operation No.	Labor Hours (Hrs.)
X	X	-	X	-	XXW92ARX	0.9
X	-	X	X	X		
X	X	-	-	X	XXW92BRX	0.8
X	-	X	X	-		
-	-	-	X	-		
X	X	-	-	-	XXW92CRX	0.7
X	-	X	-	-		
-	-	-	-	X	XXW92DRX	0.6
-	-	-	-	-	XXW92ERX	0.5

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2016-2022 MX-5

Operation No.	Labor Hours (Hrs.)
XXW92ARX	0.5

2022 MX-30

360°view monitor system	360°view monitor system screen display verification and 360°view monitor system aiming	360°view monitor system screen display verification only	Operation No.	Labor Hours (Hrs.)
X	X	-	XXW92ARX	0.9
X	-	X	XXW92BRX	0.8
-	-	-		

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