



<b>Subject:</b>  <b>AWD DIFFERENTIAL OIL TEMPERATURE SENSOR PID IS READING INCORRECTLY</b>	<b>Service Alert No.: SA-077/22</b>
	<b>Last Issued : 12/05/2022</b>

**BULLETIN NOTES**

**APPLICABLE MODEL(S)/VINS:**

2023 CX-50

**DESCRIPTION**

Some vehicles may experience the rear differential oil temperature sensor PID (OIL\_TEMP\_SEN) on MDARS displaying the wrong value. This is due to a software bug (glitch) with MDARS.

**REPAIR PROCEDURE**

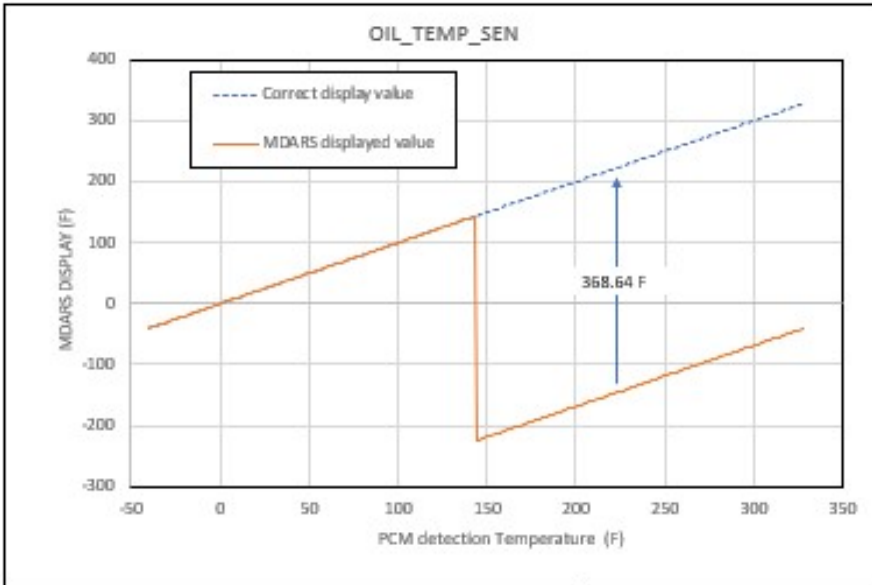
**NOTE:**

- When performing diagnosis for the DTC below, you may need to convert the OIL\_TEMP\_SEN.
  - P1888:11
  - P1888:15
  - P188A:00
- This conversion calculation is only needed when the differential oil temperature is above 142.88F. Temperature readings below 142.88F are displayed correctly.

Use the chart and formula to determine if a calculation is needed and how to correct OIL\_TEMP\_SEN value.

OIL_TEMP_SEN Displayed value on MDARS.	Calculation needed?	Action.
-40F to 142.88F	The displayed value is correct.	No calculation is required.
-224.32F to -41.44F	Incorrect value.	Take the value displayed on MDARS and add 368.64.

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Example:

OIL\_TEMP\_SEN reads 100F. No Calculation is required. The displayed value is correct.

OIL\_TEMP\_SEN reads -224.32F.

Calculation  $-224.32 + 368.64 = 144.32\text{F}$  The correct OIL\_TEMP\_SEN reading will be 144.32F

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