

DTC: P0298-00

Bulletin: GDC25-006

Date: Sept 29, 2025

Description: Engine Oil Over Temperature

Applies To: US24 and Newer Emissions Product Class (B2)

For Spanish click here: [ESPAÑOL](#) For French click here: [FRANÇAIS](#)

General Information

These repair instructions are intended to address the following fault(s):

DTC	Description	Possible Cause	Possible (Observable) Symptoms
P0298-00	Engine Oil Over Temperature	• Extreme driving conditions • Clogged oil cooler • Cooling System • Thermostat • Engine cooling fan • Engine oil level (EOL) and temperature sensor	• Info lamp lights up if the temperature is moderately above range • Red lamp lights up if the temperature is critically above range • A buzzer sounds if the temperature is critically above range • Engine de-rated

Required Parts

Part Number	Description	Quantity
23285701	Oil Level Sensor	1
20579690	Oil Drain Plug Gasket	1
24118272	Oil Pan Gasket	1
22645240	Dipstick Tube Sealing Ring	1

Additional Resources

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These repairs are the most likely fix for the identified fault, if this does not fix the issue, Tech Tool will need to be used for more detailed diagnostics. If filing a warranty claim, please include the ASIST case number.

Labor Code	
3861-03-02-06	1.9
3100-09-01-05 and 3100-09-01-06	0.2 each
Causal Part	23285701

Repair Instructions

3861-03-02-06 Engine Oil Level/Temperature Sensor, Replacement



Illustrations may differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.



Colors used in illustrations are for highlighting purposes only and do not correspond to the actual colors of the vehicle.



All threaded fasteners that do not have a tightening torque specification in the information are tightened to a standard torque. Standard torques are available in the following specification. ➡ [Standard Tightening Torques](#)



DANGER

Risk of serious illness or death.

Exhaust gases contain carbon monoxide. Avoid prolonged or excessive exposure.

- ▶ Always run the engine outdoors or use a properly vented exhaust hose.



CAUTION

Service Information Advisory.

If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

- ▶ You must read and understand the precautions and guidelines in Service Information, Function Group 3, "General Safety Practices, Electrical and Electronics" before performing this procedure.



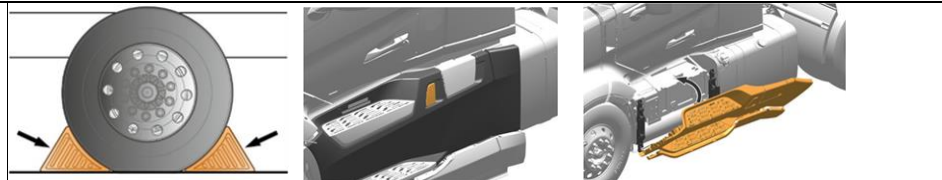
CAUTION

Risk of material damage.

Applying more sealant than a specified volume will lead to oil leakage. Excess sealant can result in over-compression and damage to the gasket.

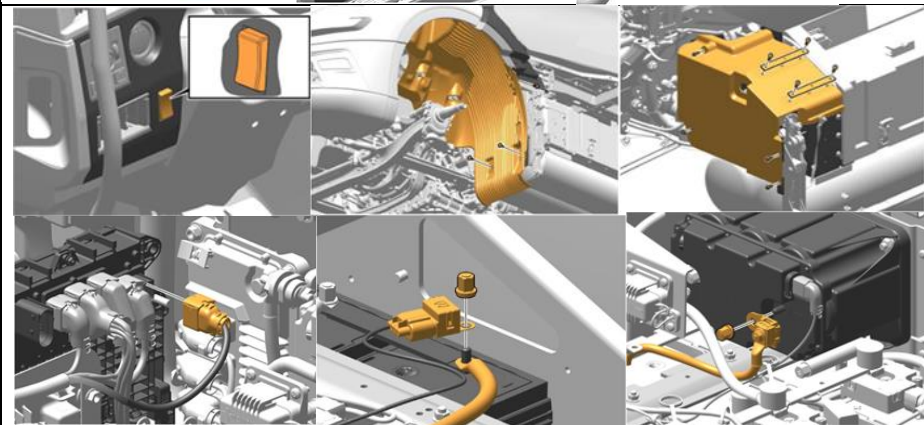
- ▶ The surface must be thoroughly cleaned and free of oil, dirt or grease prior to applying the sealant.
- ▶ Oil or grease on the surface will prevent proper bonding of parts.

Park the vehicle on a level surface. Apply the parking brake. Place the gear lever in neutral.
Install the wheel chocks.
Unlatch the LH fairing. Remove the tether.
Remove the fairing.

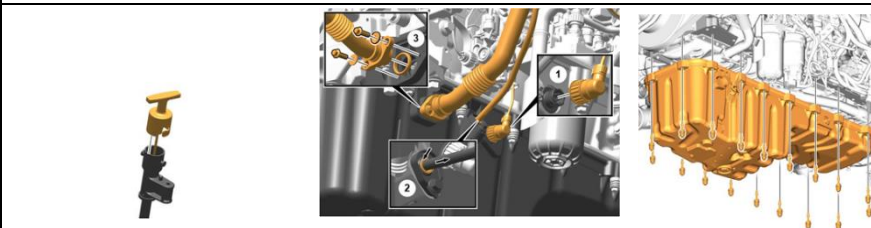


Decommission the low voltage system.

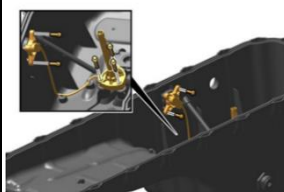
- 1 Turn the dash mounted battery switch to the (OFF) position or (if equipped) press the LOCK button twice.
- 2 Remove the screws and move the splash shield out of the way.
- 3 Remove the nut, screws, and brackets. Remove the battery switch cover.
- 4 Turn the battery disconnect switch to the (OFF) position.
- 5 Disconnect the connector.
- 6 Unlatch the battery cover and remove.
- 7 Remove the nut, fuse, and the battery negative cable.
- 8 If equipped with Ultra Capacitor. Remove the nut and battery negative cable from ultra capacitor.



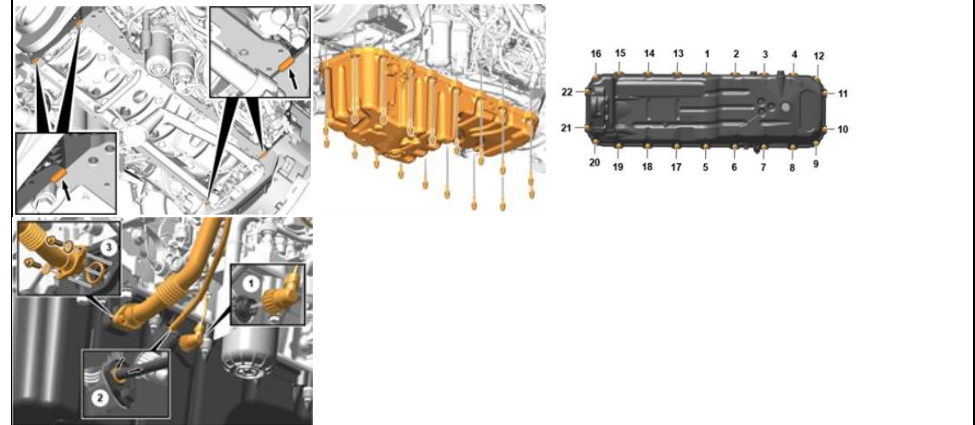
Unlatch and raise the hood. Remove the dipstick. Drain the oil. Disconnect the connector (1). Depress the release ring (2) remove the dipstick pipe. Remove the screws and the washers. Remove the pipe (3). Remove the sealing ring. Remove the screws, remove the oil pan.



Remove the screws, release the cable, remove the sensor.
Clean the contact surfaces, install the sensor, position the cable, install the screws. Torque tighten the screws to 10 ± 1.5 Nm (7 ± 1 lbf-ft).

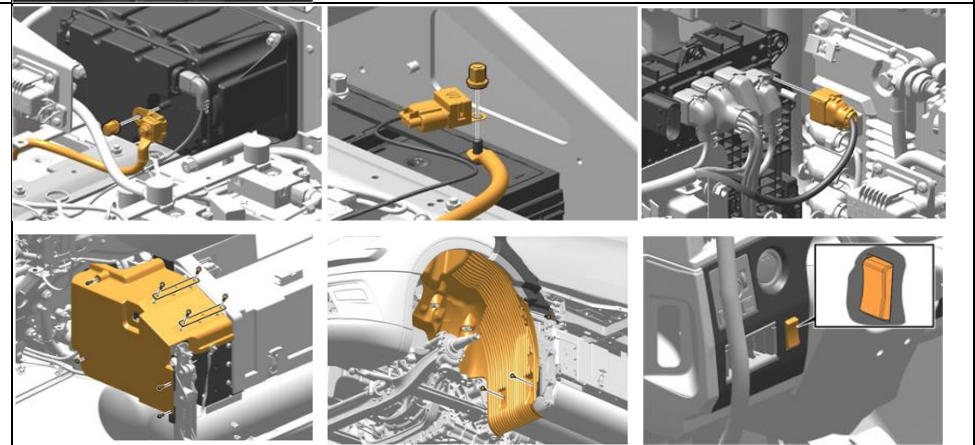


Remove the old sealant and clean the cylinder block contact surfaces. Ensure that the surfaces are completely clean from oil and grease. Apply recommended sealant as illustrated. Sealant, bead thickness 2 mm (0.08 in). Note: Install the oil pan within 20 minutes of applying the sealant. Clean the contact surfaces of the oil pan. Ensure that the surfaces are completely clean from oil and grease. Install the sealing strip. Note: Use a new part. Install the oil pan, install the screws. Torque tighten the screws 24 ± 4 Nm (18 ± 3 lbf·ft). Tightening sequence: 1-22. Install the sealing ring. Note: Use a new part. Install the pipe (3), Install the washers and the screws. Install the dipstick pipe (2), Note: Check the dipstick pipe for correct position. Connect the connector (1). Fill with recommended engine oil.



Commission the low voltage system.

- 1 Install the battery negative cable from ultra capacitor if equipped. Install the nut.
- 2 Tighten the nut to torque. Tightening torque cable terminal, nut 20 ± 2 Nm (15 ± 1 lbf·ft)
- 3 Install the battery negative cable. Install the fuse. Install the nut.
- 4 Tighten the nut to torque. Tightening torque battery, terminal, nut 20 ± 2 Nm (15 ± 1 lbf·ft)
- 5 Install the battery cover. Latch the battery cover. Connect the connector. Turn the switch to the (ON) position.
- 6 Install the battery switch cover. Install the brackets. Install the screws. Install the nut.
- 7 Position the splash shield. Install the screws.
- 8 Turn the dash mounted battery switch to (ON) position or (if equipped) push the Unlock button twice.



Install the LH fairing. Install the tether. Latch the fairing. Connect the diagnostic tool (Premium Tech Tool). Delete the diagnostic trouble codes according to the diagnostic tool (Premium Tech Tool) instructions. Disconnect the diagnostic tool (Premium Tech Tool). Start the engine. Check for leakage. Stop the engine. Remove the wheel chocks.

