Technical Service Bulletin

Mazda North American Operations Irvine, CA 92618-2922



Subject: MIL ON WITH DTCs P1285, P1299, P0128, P0300, P0301, P0302, P0303, P0304, P0316	Bulletin No.: 01-005/20	
	Last Issued: 04/01/2020	

BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted in Red text.

Previous TSBs:	Date(s) Issued:
01-025/11	07/12/11 and 09/01/11

APPLICABLE MODEL(S)/VINS

2010-2011 Tribute 2.5L

DESCRIPTION

Some vehicles may exhibit a MIL on with DTC(s) P1285, P1299 and/or P0128. Engine temperature may be cold and report as hot or be hot and report as cold. Engine cooling fan operation may also be affected by the incorrect cylinder head temperature (CHT) sensor reading - turning on or off at inappropriate times. These vehicles may also exhibit rough run, lack of power, MIL on with DTCs P0300, P0301, P0302, P0303, P0304, and/or P0316.

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

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REPAIR PROCEDURE

Use Chart below to identify required repair procedure.

DTC	Description	Action
P1285	Cylinder Head Over Temperature Condition	Proceed to Procedure A
P1299	Cylinder Head Over Temperature Protection Active	
P0128	Coolant Temperature Below Thermostat Regulating Temperature	
P0300	Random Misfire Detected	Proceed to Procedure B
P0301	Cylinder 1 Misfire Detected	
P0302	Cylinder 2 Misfire Detected	
P0303	Cylinder 3 Misfire Detected	
P0304	Cylinder 4 Misfire Detected	
P0316	Misfire Detected On Startup (First 1000 Revolutions)	

PROCEDURE A

Engine temperature concerns may be due to corrosion at connector 0140-119 (A). Refer to MGSS online (CONTROL SYSTEM - 2.5L).

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1. Inspect the cam cover trough, making sure it is clear of debris like leaves, wasps, dirt and the drain hole by cylinder 4 is open.

2. Inspect connector 0140-119 (A) at cylinder head temperature (CHT) sensor (B) for evidence of water contamination.

- If evidence of water contamination, proceed to Step 3.

- If water contamination is not evident, do not continue with this procedure. Refer to MGSS online (DTC INDEX - PCM).

3. If corrosion from water contamination is severe and terminals are rusted and disintegrated:

a. Cut off connector 0140-119 (A) and install a new pigtail connector. Refer to instruction sheet.

b. Replace the CHT sensor (B). Refer to MGSS online (CYLINDER HEAD TEMPERATURE (CHT) SENSOR REMOVAL/INSTALLATION - 2.5L).

NOTE: If corrosion is not severe, remove any water and thoroughly clean connector 0140-119 (A) and the CHT sensor (B)

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4. Attach the CHT sensor cover (C) to the cam cover and add Mazda Gray RTV Silicone Gasket Maker (0000-77-1217-ES) around the CHT sensor cover (C), to seal and prevent water entry. **NOTE:** Before reattaching the CHT sensor cover to the cam cover, clean the cam cover and CHT sensor cover (C) with Mazda Brake Parts Cleaner.

5. Verify repair.

PROCEDURE B

Driveability concerns may be due to water entry into the spark plug wells, affecting ignition coil-on-plug(s) performance.

1. Inspect the cam cover trough, making sure it is clear of debris like leaves, wasps, dirt and the drain hole by cylinder 4 is open.

2. Remove the ignition coil-on-plugs and check for water in the spark plug wells.

- If evidence of water contamination is present, proceed to Step 3.

- If water contamination is not present, do not continue with this procedure. Refer to MGSS online (DTC INDEX - PCM).

3. Dry out the spark plug well(s).

4. Replace the affected ignition coil-on-plug(s), refer to MGSS online (IGNITION COIL-ON-PLUG REMOVAL/INSTALLATION - 2.5L).

5. Verify the repair.

NOTE:

- Ensure to center the ignition coil-on-plug in the bore. When tightening the last mounting fastener, the coil might become pressed to one side, biasing the seal to one side of the spark plug well, over the other.
- Do not use RTV silicone sealant or dielectric grease on the boot. The spark plug boot-to-spark plug well seal is designed to breath through the molded notches in the rubber boot, to allow gases to pass freely in and out of the spark plug bore.

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5. Verify repair.

PARTS INFORMATION

Part Number	Description	Qty.	Note 1	Note 2
ZZC4-67-SH1	Pigtail Connector Kit	1		Procedure A
1FAA-18-707A	Cylinder Head Temperature Sensor	1	CHT sensor	
0000-77-620E- 03	Mazda Brake Parts Cleaner	1	Shop Supply	
0000-77-1217- ES	Mazda Gray RTV Silicone Gasket Maker	1	Shop Supply	
L507-18-100	Coil-On-Plug	As Needed	Only replace the coil-on- plug(s) related to the DTC	Procedure B

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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 Mazda's New Vehicle Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

	Procedure A		Procedure B
	Check DTCs, clean connector and sensor.	Check DTCs, replace connector and sensor.	Check DTCs, dry out spark plug wells, and replace coil-on-plug(s) related to DTC only.
Warranty Type	А	А	А
Symptom Code	6X	6X	6X
Damage Code	9R	9R	9R
DTC Code	P1285, P1299, P0128	P1285, P1299, P0128	P0300, P0301, P0302, P0303, P0304, P0316
Part Number Main Cause	1FAA-18-707A	1FAA-18-707A	L507-18-100
Quantity	0	1	1
Operation Number / Labor Hours:	YY718XRX / 0.4 Hrs.	YY719XRX / 0.6 Hrs.	YY726XRX / 0.5 Hrs.

NOTE: Mazda Gray RTV Silicone Gasket Maker (0000-77-1217-ES) and brake parts cleaner (0000-77-620E-03) are shop supplies and cannot be claimed under warranty.

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