Service Bulletin

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Mazda North American Operations Irvine, CA 92618-2922



Subject: LACK OF POWER / WRENCH LIGHT ON / CHECK ENGINE LIGHT ON WITH DTCs	Bulletin No:	01-012/15
P0123 / P0222	Last Issued:	06/17/2015

BULLETIN NOTE

- This bulletin supersedes the previous bulletin 01-017/13, issued on 07/02/13. The REPAIR PROCEDURE and WARRANTY INFORMATION have been revised.
- Changes are noted below in Red beside the change bar.

APPLICABLE MODEL(S)/VINS

2011-2013 CX-9 with VINs lower than JM3TB*****419830 (produced May 1, 2013)

DESCRIPTION

Some vehicles may experience a lack of power and the wrench light comes on with DTCs P0123 / P0222 stored in memory.



Wrench Light: Powertrain Malfunction / Reduced Power Warning Light

- DTC: P0123:00 TP sensor No.1 circuit high input.
- DTC: P0222:00 TP sensor No. 2 circuit low input.

To eliminate this concern, the emissions harness has been improved.

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

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REPAIR PROCEDURE

- 1. Verify the customer concern.
- 2. Inspect the following according to the instructions on MS3 online or the Workshop Manual (section 01-02 DTC P0123:00 [MZI-3.7] or DTC P0222:00 [MZI-3.7]).

DTC: P0123:00 TP Sensor No. 1 Circuit High Input.

The TP sensor No.1 circuit was flagged as a concern by the PCM indicating a high voltage.

- Connector or terminal malfunction.
- Short to constant voltage supply circuit between throttle body terminal F and PCM terminal 2AN.
- TP sensor signal circuits are shorting each other.
- TP sensor No.1 malfunction.

DTC: P0222:00 TP Sensor No. 2 Circuit Low Input.

The TP sensor No. 2 circuit was flagged as a concern by the PCM indicating a low voltage or open circuit.

- Connector or terminal malfunction.
- Short to ground circuit between throttle body terminal C and PCM terminal 2AL.
- Open circuit between throttle body terminal C (E) and PCM terminal 2AL (2Z).
- TP sensor No. 2 malfunction.

If no trouble is found during the inspection above, replace the emissions harness (A) with a modified part.



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Emissions Harness Modification (2011 CX-9 Only):

Since the shape of the "S" (starter) terminal in the 2011 CX-9 is different than later models, the new (modified) emissions harness (p/n: TG20-67-020C) cannot be used as is. It must be modified.

Follow the steps below to modify the new harness using the connector for the "S" terminal from the original harness:

- 1. Original Emissions Harness: Cut the original harness 50 mm from the end of the connector (A).
- 2. Strip 20 mm of insulation from the end of the wire (B).



New (Modified) Emissions Harness: Cut off the existing connector (A) near the "S" terminal (B).
 NOTE: Discard the connector.



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4. Solder the connector wire from the original emissions harness (A) to the wire from the new modified emissions harness (B) as shown below.



- Insulate the soldered wires with butyl tape, then again with electrical tape (over the butyl tape).
 NOTE: For additional information, refer to MS3 online (section 00-00 REPAIR-USE CONNECTOR REPLACEMENT PROCEDURE).
- 6. After completing harness replacement, clear the DTCs.
- 7. Verify the repair.

PART(S) INFORMATION

Part Number	Description	Qty.	Notes
TG20-67-020C	TG20-67-020C Emissions Harness		

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 and California Emission Defects Warranty (Long Term).
- Additional diagnostic time cannot be claimed for this repair.

I	Model Year(s)	2012 - 2013 CX-9	2011 CX-9
I	Warranty Type	A	А
I	Symptom Code	14	14
I	Damage Code	9Q	9Q
I	DTC	P0123 or P0222	P0123 or P0222
I	Part Number Main Cause	TG20-67-020C	TG20-67-020C
I	Quantity	1	1
	Operation Number / Labor Hours:	XXJ79XRX / 2.6 Hrs. (includes diagnostic time)	XXJ79ARX / 2.7 Hrs. (includes diagnostic time)

NOTE: Warranty claim submission will require entry of a valid DTC.