

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

## BULLETIN NOTE

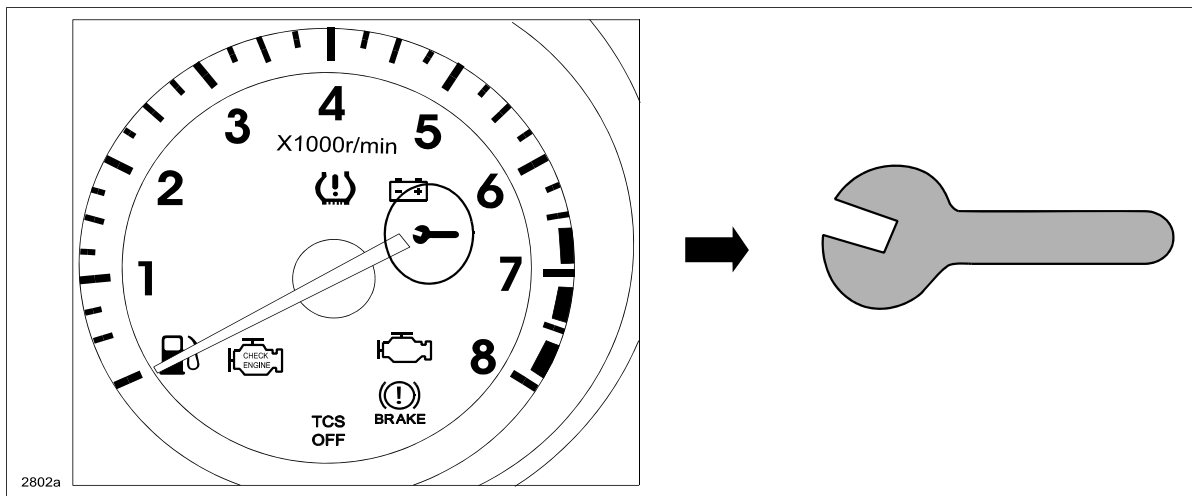
- This bulletin supersedes the previous bulletin 01-017/13, issued on 07/02/13. The **REPAIR PROCEDURE** and **WARRANTY INFORMATION** have been revised.
- Changes are noted below in Red beside the change bar.

## 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.

## 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.

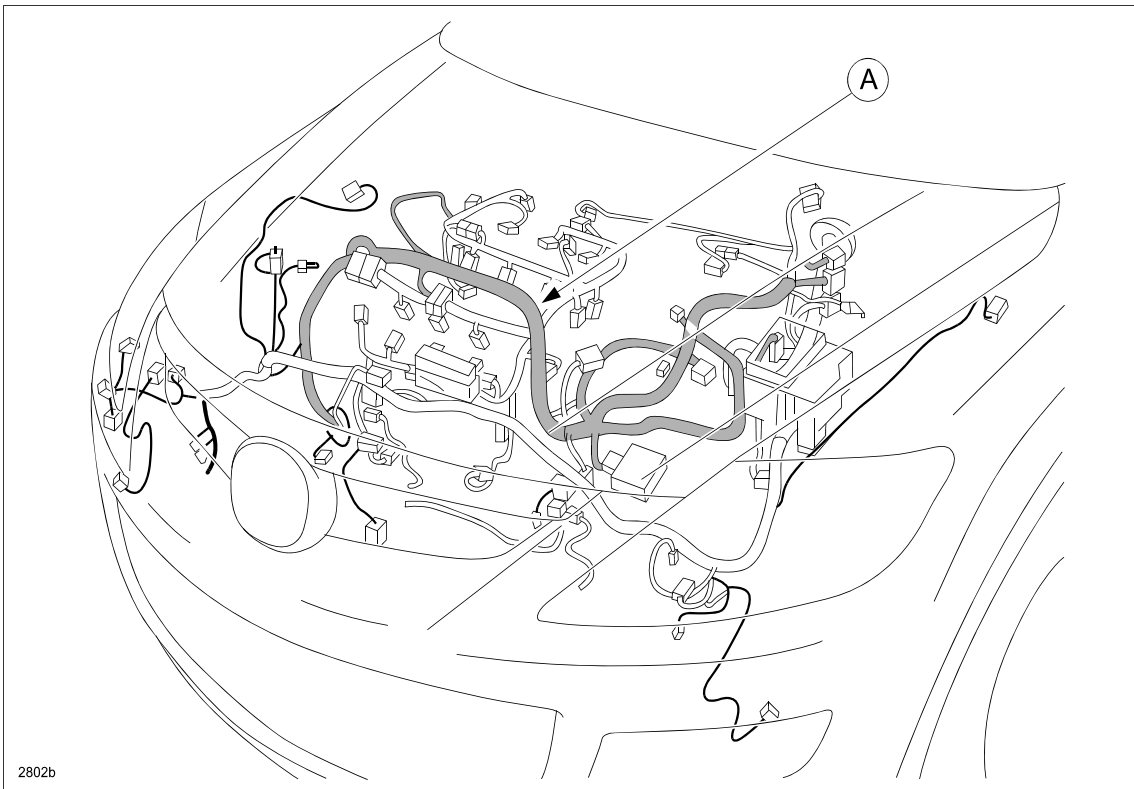
- Connector or terminal malfunction.
- Short to constant voltage supply circuit between throttle body terminal F and PCM terminal 2AN.
- TP sensor signal circuits are shorting each other.
- TP sensor No.1 malfunction.

### **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.



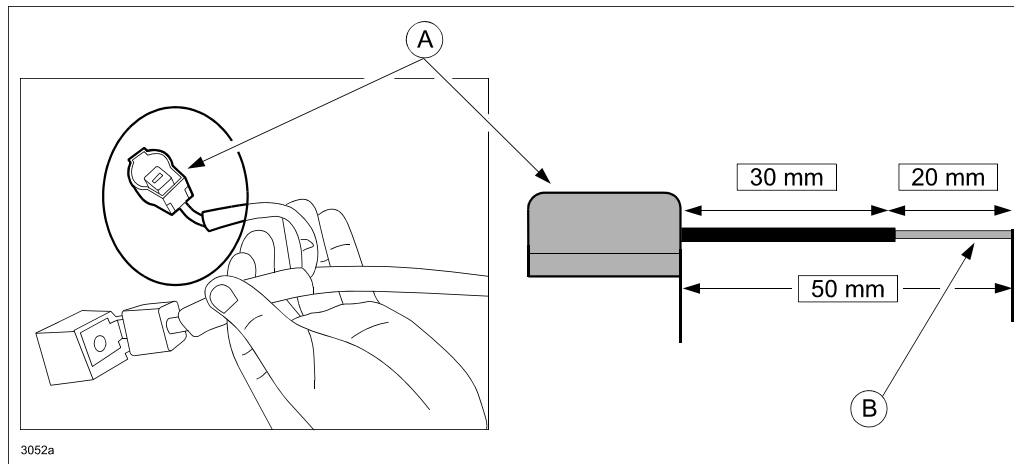
2802b

**Emissions Harness Modification (2011 CX-9 Only):**

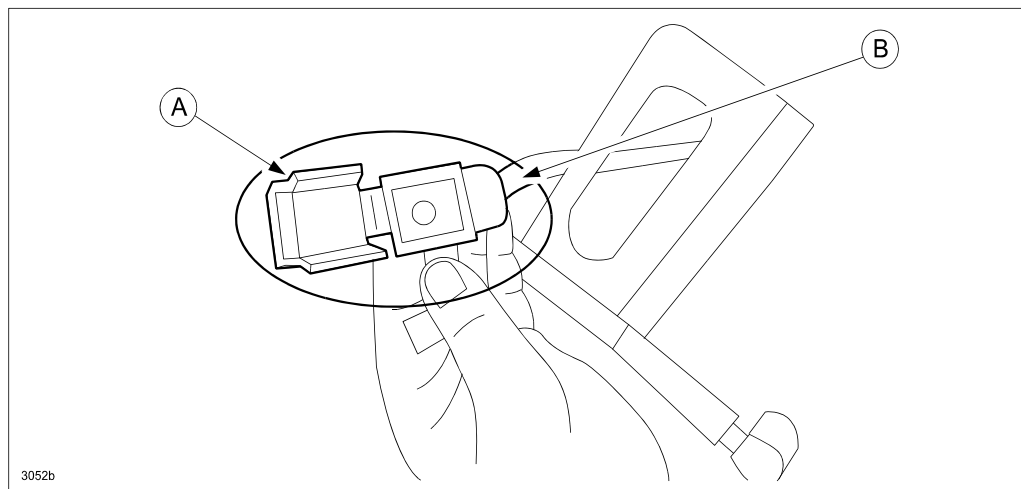
Since the shape of the “S” (starter) terminal in the 2011 CX-9 is different than later models, the new (modified) emissions harness (p/n: TG20-67-020C) cannot be used as is. It must be modified.

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

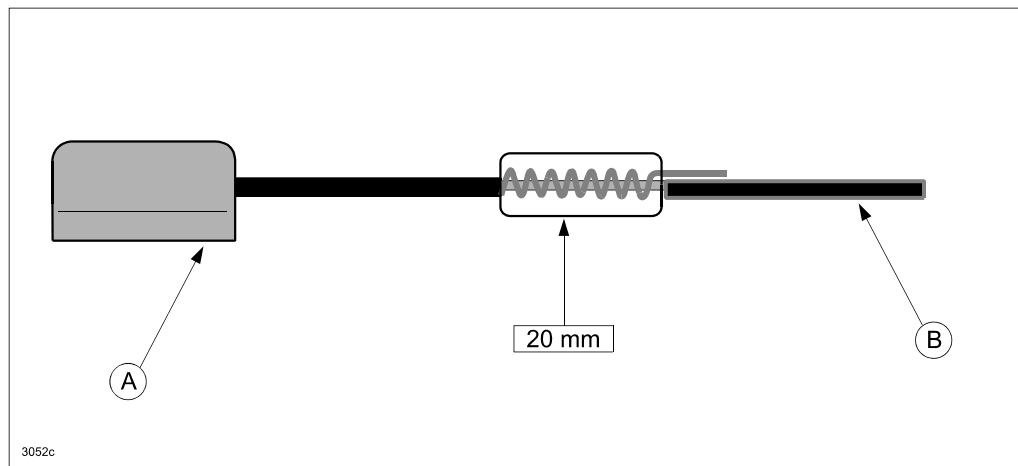
1. **Original Emissions Harness:** Cut the original harness 50 mm from the end of the connector (A).
2. Strip 20 mm of insulation from the end of the wire (B).



3. **New (Modified) Emissions Harness:** Cut off the existing connector (A) near the “S” terminal (B).
- NOTE:** Discard the connector.



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



5. 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	Emissions Harness	1	---

## 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.

Model Year(s)	2012 - 2013 CX-9	2011 CX-9
Warranty Type	A	A
Symptom Code	14	14
Damage Code	9Q	9Q
DTC	P0123 or P0222	P0123 or P0222
Part Number Main Cause	TG20-67-020C	TG20-67-020C
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.