

Subject: MIL ON WITH DTCs P0123 AND / OR P0222	Bulletin No: 01-008/13
	Last Issued: 07/02/2013

BULLETIN NOTE

- This bulletin supersedes the previous bulletin 01-008/13 issued 02/26/2013, 01-001/12 issued 01/05/2012 and 01-036/11 issued 11/30/11. The APPLICABLE MODEL(S)/VINS has been revised (2011-2013 CX-9 has been removed from bulletin).

APPLICABLE MODEL(S)/VINS

2011-2013 Mazda6

DESCRIPTION

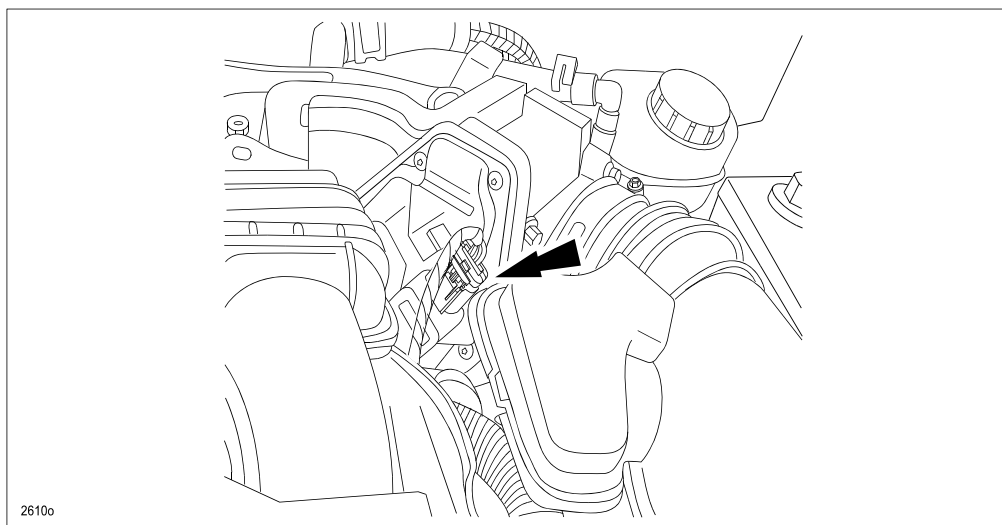
Some vehicles may experience a MIL illumination with DTCs P0123 and/or P0222 stored in memory.

- DTC P0123: Throttle Position Sensor No.1 Circuit High Input
- DTC P0222: Throttle Position Sensor No.2 Circuit Low Input

DTCs P0123 and/or P0222 may be stored immediately. This is due to an abnormal electrical noise within the engine harness of certain vehicles. This condition can be corrected by installing the throttle body harness (with diode) as described in this service bulletin.

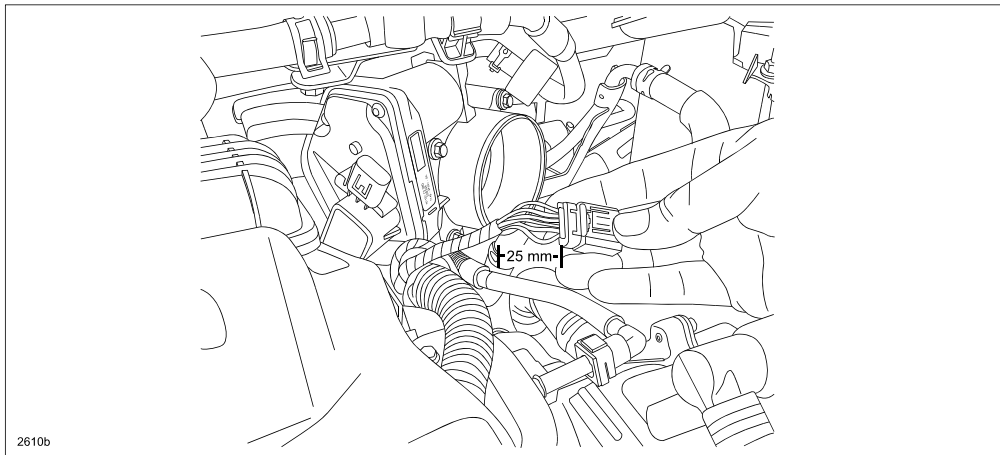
REPAIR PROCEDURE

1. Verify customer concern.
2. Install throttle body harness/diode (AJT1-13-ZS8). Refer to "Throttle Body Harness (with Diode) Installation Procedure" on page 2.

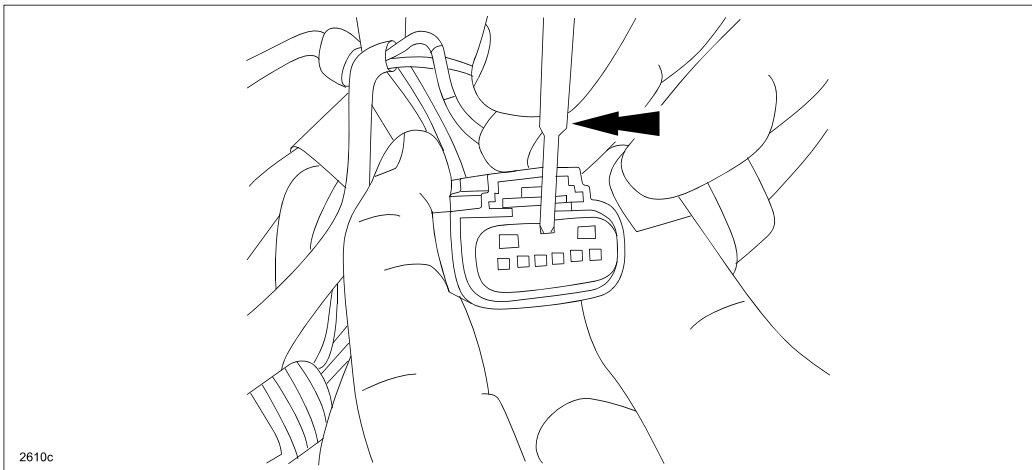


Throttle Body Harness (with Diode) Installation Procedure:

1. Record the customer's preset radio stations.
2. Disconnect the negative battery cable.
3. Disconnect connector from the MAF/IAT sensor.
4. Disconnect the MAF/IAT sensor harness retainer from the air cleaner cover.
5. Remove the air cleaner cover and resonance chamber as an assembly.
6. Disconnect connector 0140-222 from the throttle body.
7. Cut off approximately 25 mm (1 inch) of harness insulation (electrical tape) from connector 0140-222.



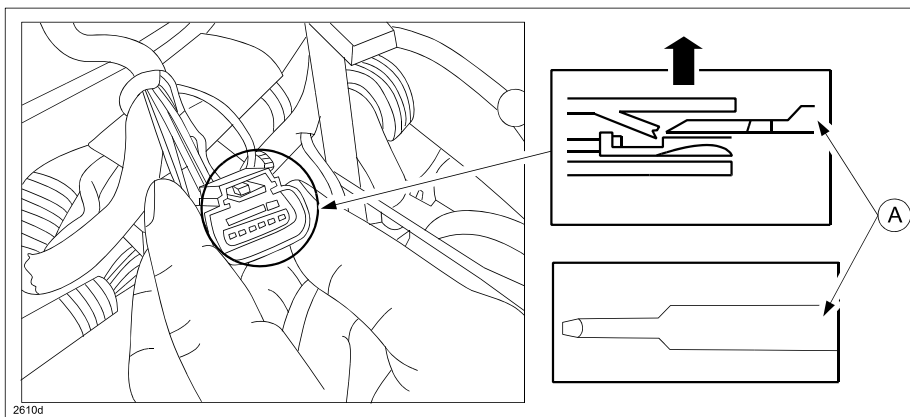
8. Remove the terminal lock from the connector.



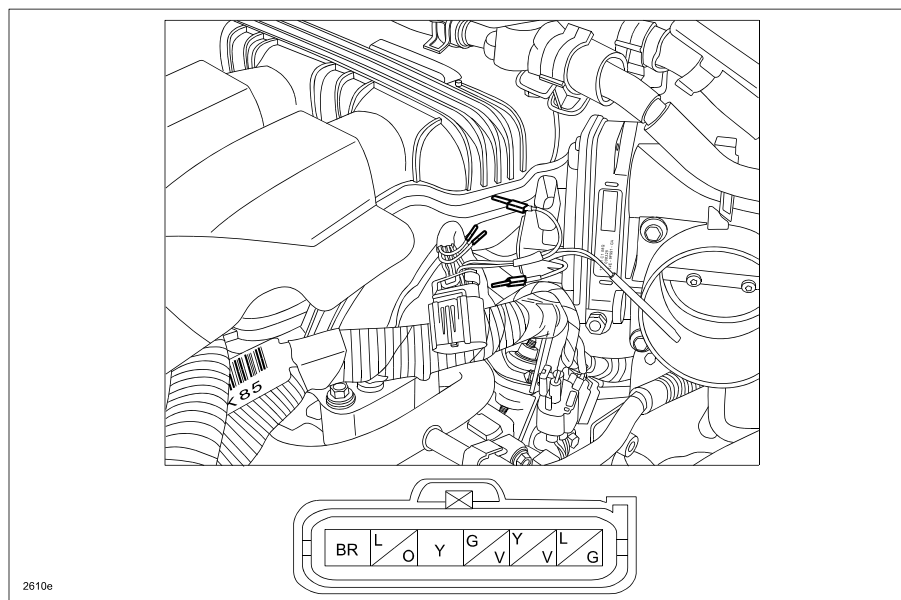
9. Remove all six (6) terminals from the original connector using an appropriate terminal tool (A) as shown below.

NOTE:

- This is necessary to install the new connector with the pre-installed diode.
- Angle of the tool goes upward to release the terminal lock.
- Discard the original connector.



10. Re-insert BR, GV, Y/V, and L/G female terminals into the new connector.

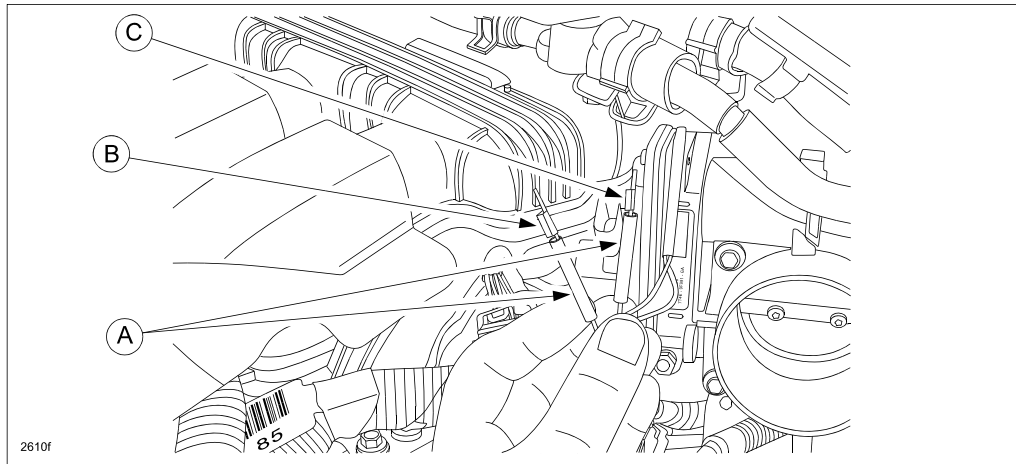
ETB Connector 0140-222 Wiring Locations:

Location	Wire Color		Location	Wire Color
#1	Brown (BR)		#4	Green/Violet (G/V)
#2	Blue/Orange (L/O) * **		#5	Yellow/Violet (Y/V)
#3	Yellow (Y) *		#6	Blue/Green (L/G)

* - Pre-installed wires

** - Pre-installed wire is not the same color as the vehicle harness

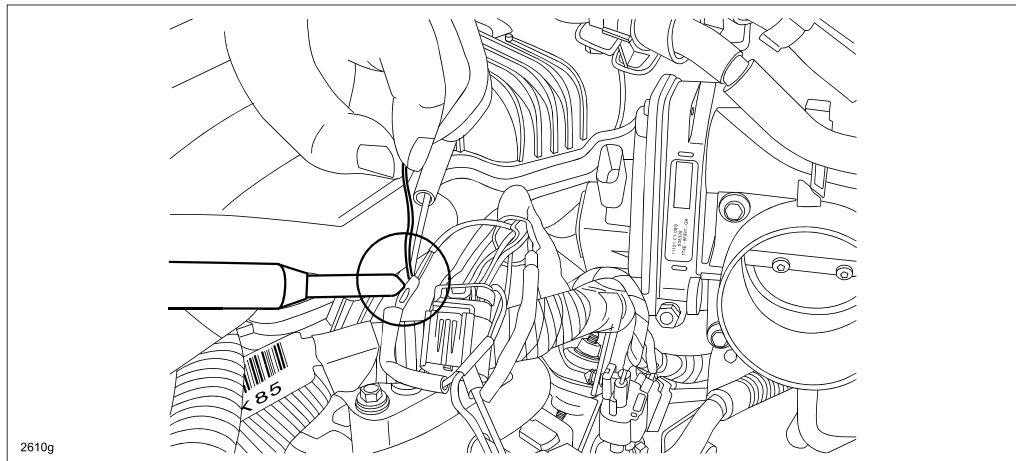
11. Re-install the red terminal lock onto the connector.
12. Place the heat shrink (A) over both Yellow (B) and Brown (C) male terminals (from new connector).



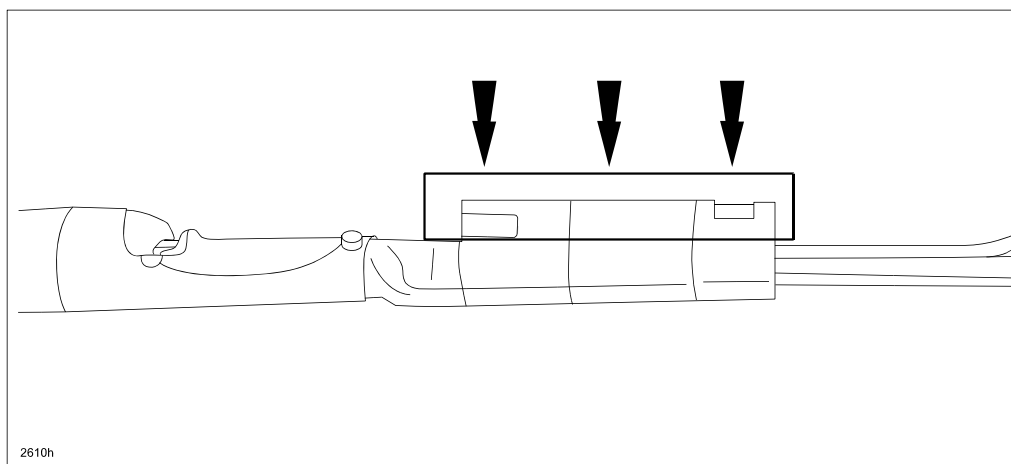
13. Connect the Yellow female terminal (from vehicle harness) and the Yellow male terminal (B) (from new connector).
14. Connect the Blue/Orange female terminal (from vehicle harness) and the Brown male terminal (C) (from new connector).
15. Solder the joints together.

CAUTION:

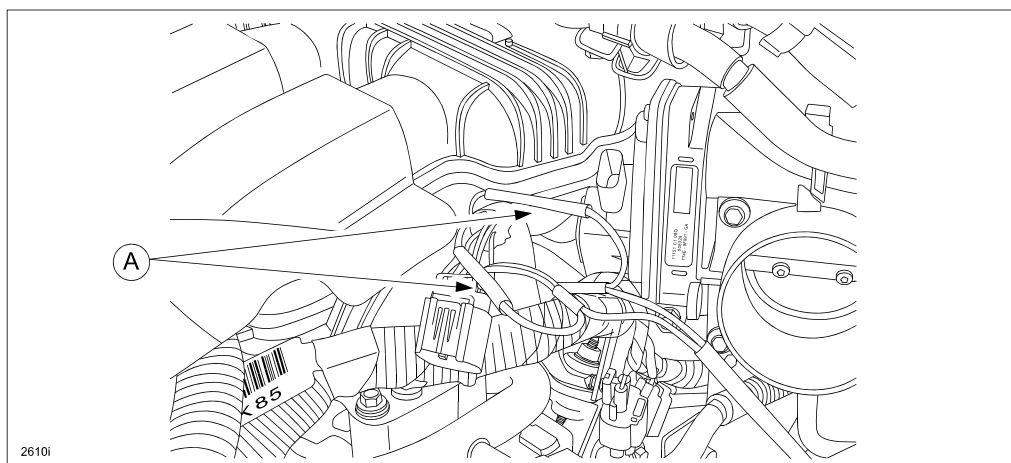
- Before soldering, make sure the soldering iron is fully warmed up and its edge is cleaned with a sponge or rag soaked in water.
- Be careful not to melt the heat shrink tube while soldering.
- To prevent the heat shrink tube from shrinking due to heat generated during soldering, the heat shrink tube must be kept away from the heat generated at the soldering spot.



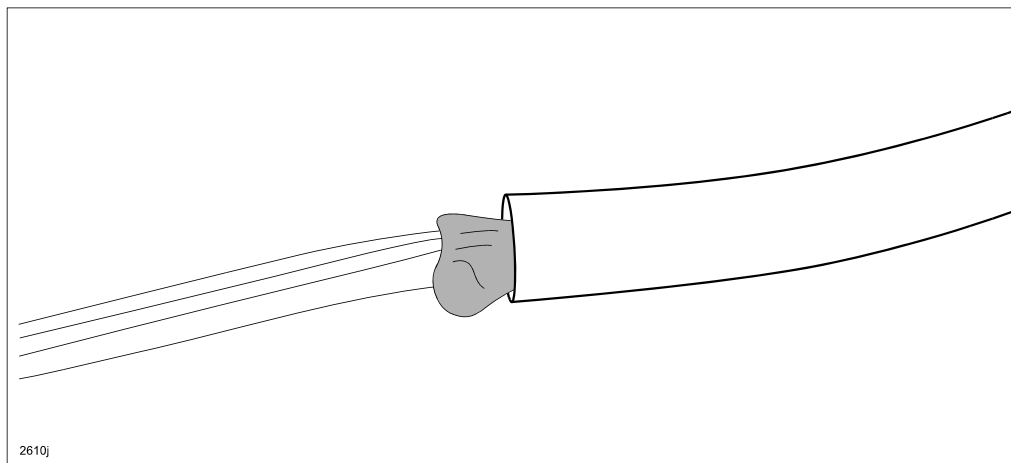
16. Using suitable pliers, squeeze both the Yellow and Brown male terminals at the protrusion to prevent sharp edges protruding through the heat shrink tubing.



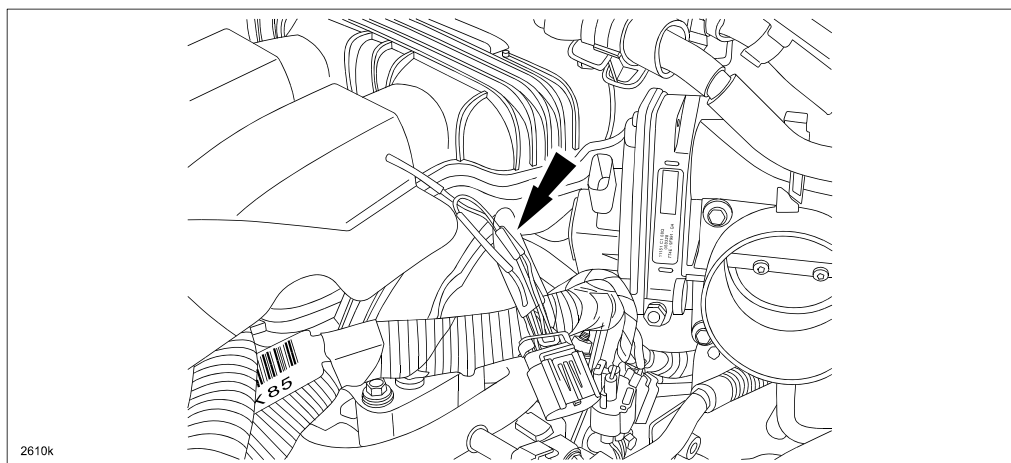
17. Place heat shrink (A) over both solder joints and shrink using a heat gun.



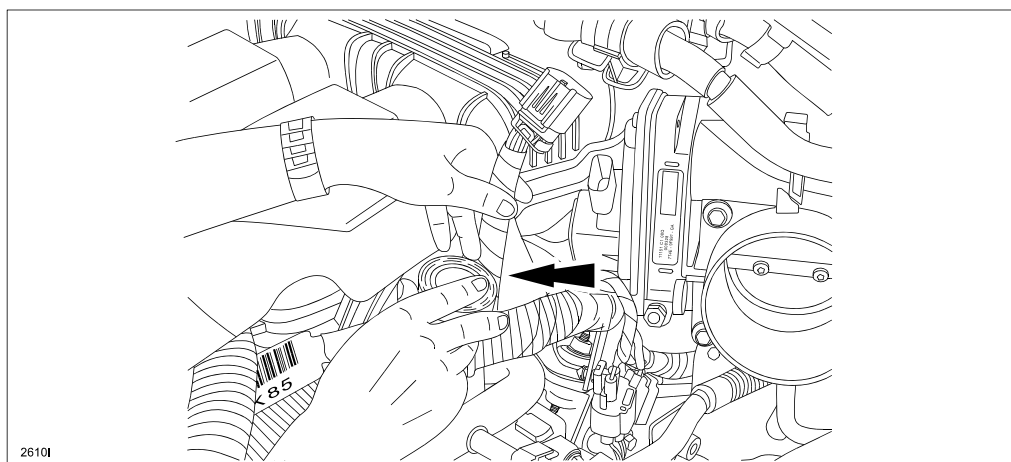
NOTE: Warm the wire up until plastic comes out from the edge, but do not touch the plastic right after shrinkage when it is soft.



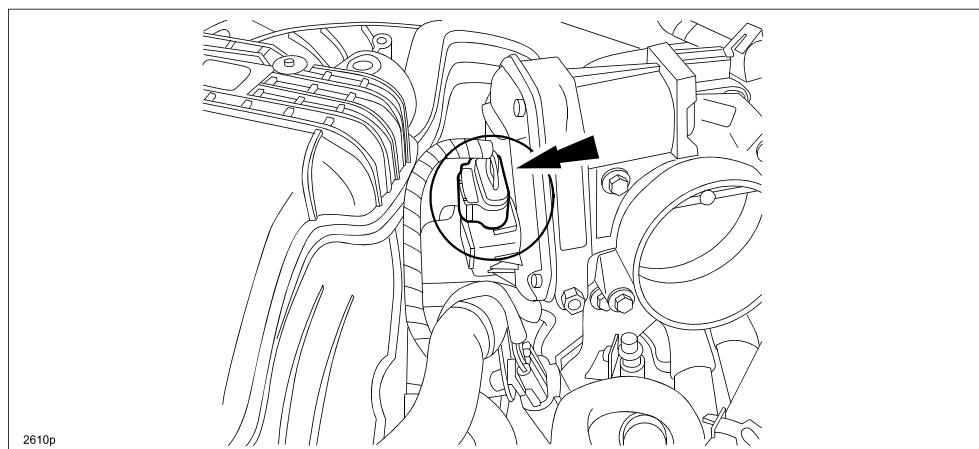
18. Fold the wires so they are flush with the harness.



19. Re-tape the harness.



20. Reconnect the harness to the electronic throttle body.



21. Install the air cleaner cover and resonance chamber.
22. Connect the MAF/IAT sensor and harness retainer to the air cleaner cover.
23. Connect the negative battery cable.
24. Re-enter the customer's preset radio stations.
25. If equipped with Auto-Open/Close Windows, proceed to "Power Window Initialization Procedure".
26. Verify repair.

Power Window Initialization Procedure

1. Turn the ignition switch to the ON position.
2. Press the switch of each window and fully open the door glass.
3. Pull the switch of each window to the manual-up position to fully close the door glass, and keep holding the switch up at the position for approximately 2 seconds.

PART(S) INFORMATION

Part Number	Description	Qty.	Note
AJT1-13-ZS8	Throttle Body Harness/ Diode Kit	1	Discard corrugated tube and installation instructions from the kit



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.

Warranty Type	A
Symptom Code	6X
Damage Code	9Q
DTC Code	P0123 or P0222
Part Number Main Cause	AJT1-13-ZS8
Quantity	1
Operation Number / Labor Hours:	XXG66XRX / 0.4 Hrs.

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