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2004 Cadillac CTS

Check Engine Light Illuminated, DTCs P0138, P0158 Set (Replace Oxygen Sensor and Harness Connector, if Necessary) #04-06-04-062 - (Aug 31, 2004)

Check Engine Light Illuminated, DTCs P0138, P0158 Set (Replace Oxygen Sensors and Harness Connectors, if Necessary)

2004 Cadillac CTS, SRX

with 3.6L or 4.6L Engine (VINs 7, A -- RPOs LY7, LH2)

Condition

Some customers may comment that the check engine light is illuminated. This condition may set any #2 oxygen sensor DTC. P0138 and P0158 have been the most common.

Cause

These conditions may be due to water entering the engine side harness connector body of the #2 oxygen sensor resulting in corrosion of the terminals within that connector.

Correction

Follow service information for DTC P0138 or P0158. If diagnostics identify a faulty oxygen sensor, then replace both right and left bank # 2 oxygen sensors and inspect the engine side harness connectors for signs of corrosion. If the terminals show signs of corrosion, then also replace both connector bodies using the procedure listed below:

1. Remove the 2 bolts and the tunnel brace from the floor pan.
2. Remove the nuts securing the exhaust pipes to the exhaust manifolds.
3. Pry the front exhaust hangers free from the rear suspension hanger rods.
4. With the aid of an assistant, pry the tail pipe hangers free from the tail pipe hanger rods and

- remove the exhaust system.
- 5. Remove the 4 bolts and the underbody heat shield.
- 6. Remove the transmission manual shift shaft nut.
- 7. Disconnect the shift linkage from the transmission.
- 8. Support the engine with a suitable jack.
- 9. Remove the 4 rear cradle bolts.
- 10. Remove the transmission support to frame bolts.

Important

Be careful to NOT allow the front differential drive pinion flange, if equipped, to come in contact with power steering rack while lowering the transmission.

- 11. Lower the engine and transmission enough to provide clearance to access the right and left bank #2 oxygen sensor engine side wiring harness connectors.
- 12. Cut off the connector approximately 25 mm (1 in) back.
- 13. Install the new service connector pigtail using the sealed splice instructions provided with the pigtail.
- 14. Repeat steps 15 and 16 for the other bank.
- 15. Raise the engine and transmission into position.
- 16. Install the transmission support to frame bolts.
- 17. Install the 4 rear cradle bolts. **Tighten**

Tighten the rear cradle bolts to 191N·m(141 lb ft).

- 18. Remove the support from the engine.
- 19. Install the new clips to the service pigtails and secure to the transmission.
- 20. Connect the shift linkage to the transmission.
- 21. Install the transmission manual shift shaft nut.
- 22. Install the underbody heat shield and the 4 bolts.
- 23. With the aid of an assistant, raise the exhaust system into position, aligning the exhaust pipe flanges with the studs located in the rear of the exhaust manifolds.
- 24. Finger tighten the nuts to the exhaust manifolds studs.
- 25. Press the tail pipe hangers over the tail pipe hanger rods.
- 26. Press the front exhaust hangers over the rear suspension hanger rods.
- 27. Tighten the exhaust pipes to exhaust manifold nuts. **Tighten**

Tighten the nuts to 30N·m(22 lb ft).

- 28. Install the tunnel brace and the 2 bolts to the floor pan. **Tighten**

Tighten the bolts to 25N·m(18 lb ft).

Parts Information

Part Number	Description	Qty
12587533	Sensor Asm. -- HTD OXY (POSN 2)	2
88987991	Connector, HTD OXY Sensor	2
12587532	Clip, OXY SEN Lead	2

Parts are currently available from GMSPO.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
J6380	Sensor, Oxygen-Replace	Use Published Labor Time
Add:	To Replace Both Engine Side Harness Connector Bodies (Includes Lowering Transmission for Access)	1.3 hr

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