

# Service Bulletin



Applies To: **2013 MDX** – From VIN 2HNYD2...DH500001 thru 2HNYD2...DH525406 **2013 TL** – From VIN 19UUA9...DA000001 thru 19UUA9...DA005530 **2013 ZDX** – From VIN 2YNYB1...DH500001 thru 2YNYB1...DH500365 June 5, 2013

# MIL Comes On With DTCs P0301 Thru P0306

#### **SYMPTOM**

The MIL comes on with at least one of the following DTCs:

- P0301 No. 1 Cylinder Misfire Detected
- P0302 No. 2 Cylinder Misfire Detected
- P0303 No. 3 Cylinder Misfire Detected
- P0304 No. 4 Cylinder Misfire Detected
- P0305 No. 5 Cylinder Misfire Detected
- P0306 No. 6 Cylinder Misfire Detected

## **POSSIBLE CAUSE**

The cylinder bore may be out of round causing low compression.

### **CORRECTIVE ACTION**

Inspect the vehicle and, if necessary, replace the engine block.

## WARRANTY CLAIM INFORMATION

OP#	Description	FRT
1115A3	Connect the HDS and do the total misfire value inspection.	0.3
А	Do an engine compression test and, if necessary, misfire B inspection.	0.9
1121F6	Replace the engine block.	TBD

Failed Part: P/N 10002-RYE-A10

Defect Code: 09999 Symptom Code: 09107

Skill Level: Repair Technician

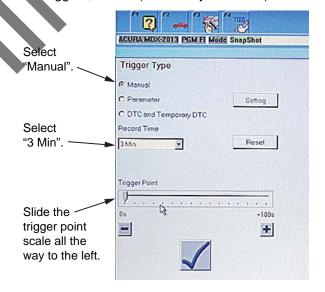
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#### **DIAGNOSIS**

## **Total Misfire Value Inspection**

NOTE: If the MIL comes on in an unsold vehicle, make sure the vehicle has at least a quarter tank of fresh, premium fuel, and **do this inspection after completing the TQI procedures**.

- 1. Make sure the engine is cold; connect the HDS to the vehicle and check that the ECT SENSOR 1 temperature value is less than 100 °F (38 °C).
- 2. Go to PGM-FI, then select Snapshot. Set the HDS to the following snapshot settings:
  - Trigger Type Manual
  - Record Time 3 minutes
  - Trigger Point 0 (all the way to the left)

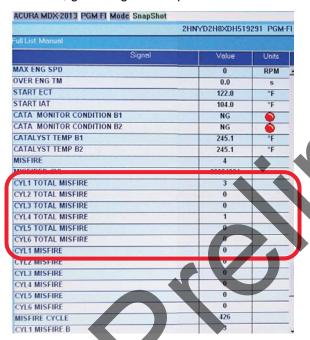




 Start the engine, then start recording data. Let the engine idle with the transmission in Park for 3 minutes.



- 4. After 3 minutes, turn the engine off.
- 5. In the OBS snapshot file, scroll down and review each cylinder's TOTAL MISFIRE value.
  - If each of the cylinders TOTAL MISFIRE values are 5 or less, the vehicle is OK.
  - If any cylinder's TOTAL MISFIRE value is more than 5, go to Engine Compression Test.



# **Engine Compression Test and Misfire B Inspection**

- Let the engine cool down so that the ECT SENSOR 1 temperature value is less than 100 °F (38 °C).
- 2. Print out page 1 of the Job Aid titled *Engine* Compression Test and Cylinder Leakage Test (V6).
- 3. Do steps 2 through 12 from the job aid, and record the compression value for each cylinder in the space provided.

#### NOTE:

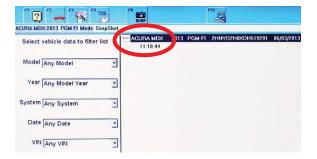
- Do not warm up the engine for the engine compression test.
- Make sure that you use a compression gauge that measures up to 300 psi.
- 4. Find the amount of variation between the highest and lowest cylinder reading.
  - If the variation between the cylinders is 30 PSI or more, go to REPAIR PROCEDURE.
  - If the variation between the cylinders is 29 PSI or less, go to step 5.

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5. Check each cylinder's MISFIRE B data recorded in the OBS snapshot file.

NOTE: Do the engine compression test first because if you only check the MISFIRE B value, you may not properly diagnose the vehicle.

- If the MISFIRE B value is 10 or less, the vehicle is OK.
- If the MISFIRE B value on any cylinder is more than 10, this bulletin does not apply. Continue with normal troubleshooting for the cause of the misfire.





# REPAIR PROCEDURE

Replace the engine short block. Refer to the online service manual, enter keywords **ENGINE REMOVAL**, and select **Engine Removal**.

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