SB-10058506-9339

SI M12 01 15
Engine Electrical Systems

March 2015
Technical Service

SUBJECT
Engine Misfire Due to Failed Ignition Coil

MODEL
R55 (Cooper Clubman)

R56 (Cooper)

R57 (Cooper Convertible)

R58 (Cooper Coupe)

R59 (Cooper Roadster)

R60 (Cooper Countryman)

R61 (Cooper Paceman)

With the N16 engine

SITUATION

- The Check Engine or Service Engine Soon (MIL) lamp is on with misfire fault(s) stored in the DME.
- Intermittent performance or rough running without a relevant DME fault stored

The most likely cause is that an ignition coil has failed, which in many cases can be confirmed with basic diagnosis.

CAUSE
During operation with high temperature fluctuations, the different materials used in the Bosch ignition coil construction can deteriorate over time, leading to a failure.

CORRECTION
The current ISTA misfire test plan for these engines can be lengthy to complete, and does not provide an effective method to diagnose a faulty secondary ignition component.

If basic diagnosis determines the cause to be a faulty coil, follow the inspection/replacement procedure listed below.

Make certain to test drive the vehicle after the repair is completed, to verify the effectiveness of the repair.

Only if misfire faults or rough running are still present, continue with further diagnosis as recommended in the misfire test plan.

Since the remaining ignition coils have been subjected to the same operating conditions, it will be necessary to follow the appropriate procedure listed below (specific to the engine variant), to ensure the best customer-oriented repair.

- For vehicles with the **N16** engine which have been in service for over 24 months or 10,000 miles, during the first service visit due to an ignition coil failure, replace **all Bosch** ignition coils with the replacement **Delphi** coils.

PARTS INFORMATION

Part Number	Description	Quantity
12 13 8 616 153	Delphi coil (N16)	Up to 4

Note: ETK will be updated in 4/2015 to indicate this part change.

WARRANTY INFORMATION

Covered under the terms of the MINI New Passenger Car Limited Warranty or the MINI NEXT Certified Pre-Owned Limited Warranty.

Defect Code:	**12 13 00 12 00**	
Labor Operation:	**Labor Allowance:**	**Description:**
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
And:		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD 2 as Charging battery)
And, as necessary:		
12 00 009	Work time (WT)	Troubleshooting

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead.

Even though work time labor operation code 12 00 009 ends in “009,” it is not considered a Main labor operation.

Work time (WT) labor operation 12 00 009 requires an individual punch time and an explanation in the claim comments.

And:

Replacing Coil(s) Only

Labor Operation:	**Labor Allowance:**	**Description:**
12 13 511	Refer to KSD2	Replacing one ignition coil
Or:		
12 13 512	Refer to KDS2	Replacing more than one ignition coil

Or:

Replacing Coil(s) with Checking and/or Replacing Spark Plug(s) when Necessary

Labor Operation:	**Labor Allowance:**	**Description:**

12 12 521	Refer to KSD2	Removing and installing/renewing all spark plugs

Refer to KSD2 for the corresponding flat rate unit (FRU) allowances.

Other Repairs

If performing the additional ISTA diagnostics and related test plans results in other eligible and covered work, claim this work with the applicable defect code and labor operations listed in KSD2.