

#### This Service Information bulletin supersedes SI M11 01 12 dated March 2014.

NEW designates changes to this revision

#### SUBJECT

#### N16 and N18 Engine: Engine Oil Leak

#### MODEL

R55 (Cooper Clubman and Cooper Clubman S)

- R56 (Cooper and Cooper S)
- R57 (Cooper Convertible and Cooper Convertible S)
- R58 (Cooper Coupe and Cooper S Coupe)
- R59 (Cooper Roadster and Cooper S Roadster)
- R60 (Cooper Countryman and Cooper S Countryman)

R61 (Cooper Paceman and Cooper S Paceman)

Produced to 1/2013

#### SITUATION

The customer states that a small engine oil leak can be seen from the underside of the engine.

#### CAUSE

The internal sealing of the oil pump volume control solenoid valve is compromised, allowing engine oil to leak from the oil pump volume control solenoid.

#### **DIAGNOSTIC PROCEDURE**

Follow the procedure below to identify how far the engine oil has migrated inside the engine electrical harness when this issue occurs, if at all. The procedure must be followed very carefully so that the proper repair is identified and performed.

1. NEW Disconnect the oil pump volume control solenoid valve electrical connection per Repair Instruction 11 41 ... "Installing repair kit for oil pump solenoid valve wiring (N16, N18)."

Inspect the electrical connector; if no engine oil is found inside the electrical connector, perform the oil pump volume control valve repair procedure. Refer to Parts table 1.

If engine oil is found inside the electrical connector, proceed to step 2.

2. New Remove the cover from the DME and remove all three electrical connectors from the DME. Inspect the connectors for traces of engine oil. If no engine oil is found, install the repair kit for the oil pump solenoid valve wiring.

**Do not replace the entire engine electrical harness.** Install the additional wiring harness per Repair Instruction 11 41 ... "Retrofit oil pump solenoid valve additional wiring harness (N16, N18)."

Refer to the "Step 1 and Step 2" Parts list for the applicable repair kit (additional) harness.

If engine oil is found in the DME connector, proceed to step 3.

3. New If engine oil is found in the DME electrical connector, perform the oil pump volume control valve repair procedure. Replace the engine section of the wire harness and replace the DME. Refer to EPC for the applicable harness and DME part numbers.

Refer to Repair Instruction 11 41 ... "Installing repair kit for oil pump solenoid valve wiring (N16, N18)" to install the repair kit.

Refer to the applicable repair instruction in ISTA/D if replacing the engine electrical harness and the DME. Refer to Parts table 3.

#### Do not remove the engine oil pan.

Do not replace the oil pump volume control valve.

Do not replace the engine oil pump.

Do not perform a wheel alignment if the tie rod (track rod) length has been not changed or the control arm (wishbone) has not been replaced. Refer to Repair Instruction 31 60 004, "Removing and installing/replacing right output shaft."

#### Programming and Coding the DME after Replacement

Always connect a MINI approved Battery charger/power supply (SI M04 08 09).

ISTA/P will automatically reprogram and code all programmable control modules that do not have latest software.

For information on programming and coding with ISTA/P, refer to DealerNet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

## NEW PARTS INFORMATION

1	Procedure Step 1 only				
Part Number Description		Description	Quantity		
	11 41 8 609 973	Repair kit for wire to solenoid valve (N16, N18)	1		

#### Procedure Step 1 and Step 2 only

#### N16 Engine only

Part Number	Description	Quantity
11 41 8 609 973	Repair kit for wire to solenoid valve (N16, N18)	1
12 51 8 626 763	N16 repair kit wire harness	1
61 13 8 353 747	Cable connector	2
61 13 1 379 833	Shrink tube	2

#### N18 engine only

Part Number	Description	Quantity
11 41 8 609 973	Repair kit for wire to solenoid valve (N16, N18)	1
12 51 8 626 764	N18 repair kit wire harness	1

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61 13 8 353 747	Cable connector	2
61 13 1 379 833	Shrink tube	2

#### **Procedure Step 3 only**

Part Number	Description	Quantity
11 41 8 609 973	Repair kit for wire to solenoid valve	1
Refer to EPC	DME	1
Refer to EPC	Engine section of the wire harness	1

**NEW 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:	11 41 90 02 00	

#### Install Repair Kit for Wire to Solenoid Valve Only (Procedure Step 1)

Labor Operation:	Labor Allowance:	Description:
00 61 110	Refer to KSD2	Installing repair kit for wire to solenoid valve (Main work)
Or:		
00 61 844	Refer to KSD2	Installing repair kit for wire to solenoid valve (Plus work – Vehicle already in the workshop)

Or, if necessary:

#### Installing Wire to Solenoid Valve and Wire Harness Repair Kits (Procedure Step 1 and Step 2)

P/N 12 51 8 626 763 (N16 repair kit wire harness) or 12 51 8 626 764 (N18 repair kit wire harness)

Labor Operation:	Labor Allowance:	Description:
00 62 005	Refer to KSD	Installing wire to solenoid valve and the wire harness repair kits (Main work)
Or:		
00 62 517	Refer to KSD	Installing wire to solenoid valve and the wire harness repair kits (Plus work – Vehicle already in the workshop)

Or, if necessary:

# Installing Repair Kit for Wire to Solenoid Valve, Replacing the Engine Section of the Wire Harness and the DME (Procedure Step 3)

Labor Operation:	Labor Allowance:	Description:
00 62 017	Refer to KSD	Installing repair kit for wire to solenoid valve, replace engine section of the wire harness, replace DME and program and encode the vehicle (without CAS) (Main work)
Or:		
00 62 568	Refer to KSD	Installing repair kit for wire to solenoid valve, replace engine section of the wire harness, replace DME and program and encode the vehicle (without CAS) (Plus work – Vehicle already in the workshop)

### Or:

Labor Operation:	Labor Allowance:	Description:
00 62 018	Refer to KSD	Installing repair kit for wire to solenoid valve, replace engine section of the wire harness, replace DME and program and encode the vehicle (with CAS) (Main work)
Or:		
00 62 569	Refer to KSD	Installing repair kit for wire to solenoid valve, replace engine section of the wire harness, replace DME and program and encode the vehicle (with CAS) (Plus work – Vehicle already in the workshop)

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the "Search" button, and then enter the applicable flat rate labor operation in the FR code field.

#### Procedure Step 3 – DME Replacement/Programming and Encoding

If a control module or component was working properly and/or had no related faults stored prior to vehicle programming and it fails to program correctly or requires initialization, this additional work must be claimed with separate labor operations under the defect code listed above; refer to KSD2.

Repairs to control modules and components with pre-existing conditions are not eligible to be claimed under the defect code listed in this bulletin.

#### **Sublet - Materials**

Sublet Code 4	See sublet reimbursement calculation below	Reimbursement for used quantities of required operating fluids (applicable MINI part numbers. Do not use these part numbers for claim submission)
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Reimbursement for used quantities of required operating fluids (applicable MINI part numbers) at dealer net plus handling.

MINI antifreeze/coolant (Bulk container reference P/N 82 14 0 031 133) - refill drained quantity (50/50 mixture) at dealer net plus handling.

Enter these material costs in sublet and itemize the amount in the claim comment section.

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