

SB-10044719-8481

SI M12 07 12
Engine Electrical Systems

June 2012
Technical Service

SUBJECT

N18 Engine: Service Engine Soon Lamp Illuminated, Various Faults Related to Valvetronic System

MODEL

R55 Clubman S

R56 Cooper S

R57 Cooper S Convertible

R58 Cooper S Coupe

R59 Cooper S Roadster

R60 Cooper S Countryman

Vehicles produced from series introduction to February 29, 2012

SITUATION

The Service Engine Soon lamp is illuminated with the following faults stored in DME memory:

- FC 2DCE “Not possible to adjust Valvetronic system” and the environment-related condition”
- FC 58A2 “Actual value of VVT eccentric angle is above 174 degrees”
- FC 2DCF “No movement detected in Valvetronic system”

CAUSE

DME software error related to Valvetronic diagnostics

PROCEDURE

1. If FC 2DCE and 58A2 are stored in the DME, reprogram the vehicle using ISTA/P 2.30 or higher (integration level 12-03-500 or higher). Disregard FC 2DCF at this time, and do not perform any further repairs related to this fault before programming.

Note: FC 58A2 may not be stored in all vehicles, but the procedure is still the same.

When the ISTA system message displays: Battery voltage only “XX.XX” V. Please connect charger. Please note the displayed battery voltage reading in the repair order comments section.

2. Start the vehicle and allow the engine to idle for 1 minute; then turn the engine off.
3. Perform a vehicle test.

4. If FC 2DCF is not present after programming, take no further action. If FC 2DCF is stored after the programming is complete, then the eccentric shaft actuator motor is at one of the end stop positions. It will need to be moved manually to initiate the actuator position relearning. Proceed to step 5.
5. Turn off the ignition.
6. The eccentric shaft actuator motor will need to be rotated 3 turns, using a 4mm hex key or socket. Refer to Repair Instruction 11 37 020 “Removing and installing/replacing position servomotor for eccentric shaft (N18)” for component location. The 3rd step of the repair instruction indicates where to insert the tool to rotate the actuator motor. Do not remove or replace the actuator motor.
7. After rotating the actuator shaft, reassemble the vehicle; turn on the ignition; and start the engine. The Valvetronic position learning procedure will automatically start.
8. Turn off the engine and clear the fault memory.

WARRANTY INFORMATION

Covered under the terms of the MINI New Passenger Car Limited Warranty, and as applicable, any Federal, State or MINI Emissions Warranty or the MINI NEXT Certified Pre-Owned Limited Warranty (only applies to MINI NEXT vehicles that are still within the MINI NEXT coverage period but beyond New Passenger Car Limited Warranty or Emissions Warranty coverage that applies to the specific repair).

Please see SI M01 03 11 for “Emissions Warranty Coverage” and refer to the “Glossary of Emissions Coverage” attachment for more information.

Defect Code: 11 37 09 96 00

Programming only:

Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
and if necessary, also		
61 21 528	Refer to KSD2	Charging battery
and		
61 00 710	Refer to KSD2	Programming and encoding control units w/o CAS
or		
61 00 720	Refer to KSD2	Programming and encoding control units with CAS

or

Programming and rotating eccentric shaft actuator motor:

Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
and if necessary, also		
61 21 528	Refer to KSD2	Charging battery
and		
61 00 710	Refer to KSD2	Programming and encoding control units w/o CAS
or		
61 00 720	Refer to KSD2	Programming and encoding control units with CAS
and		
11 99 000	2 FRU	Work time for rotating eccentric shaft actuator motor

Labor operation code 00 00 006 is a Main labor operation. If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead.

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.

Even though work time labor operation code 11 99 000 ends in “000”; as described above, it is not considered a Main labor operation.

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