

2009 BMW 328i Sedan (E90) L6-3.0L (N52K)

Vehicle > Engine, Cooling and Exhaust > Engine > Cylinder Head Assembly > Valve Cover > Service and Repair > Removal and Replacement

REMOVING AND INSTALLING/SEALING CYLINDER HEAD COVER (N52K) [REP-REP-RAE9011N52K-1112000 - V.5]

Repair instruction

Removing and installing/sealing cylinder head cover (N52K)

11 12 000 | REP-REP-RAE9011N52K-1112000 - V.5

11 12 000 Removing and installing/sealing cylinder head cover (N52K)



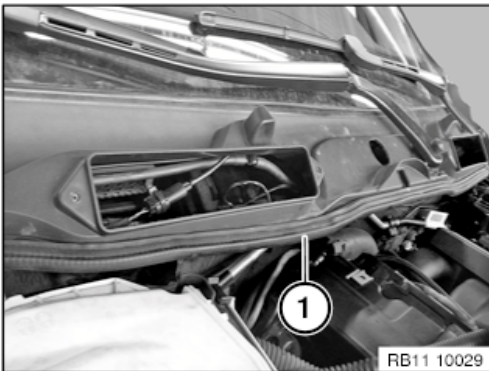
Necessary preliminary tasks:

- Remove trailing link
- Clamp off battery
- Release coolant expansion tank and place to one side
- Remove acoustic cover

Note:

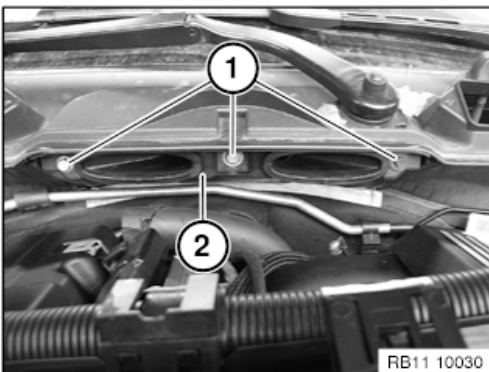
Illustrations feature the E91.

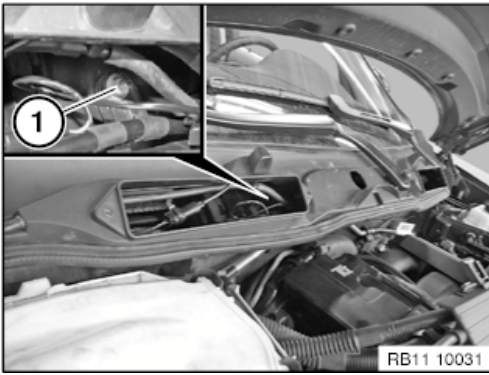
Detach sealing (1) from cowl panel.



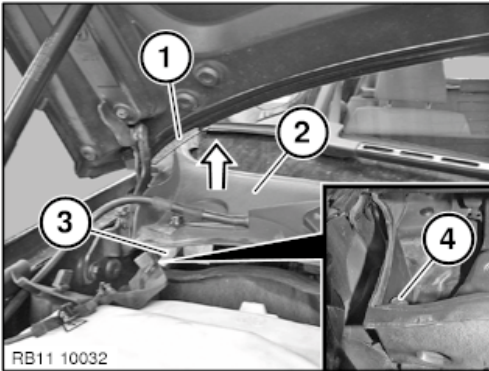
Release screws (1).

Remove cover (2).





Loosen nut (1).

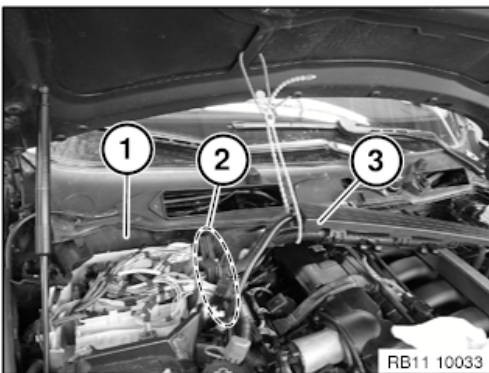


Tape off engine compartment lid (1) with adhesive tape.

Lift cover (2) in direction of arrow.

Support cover with cloth (3).

Release screw (4) of right cover.

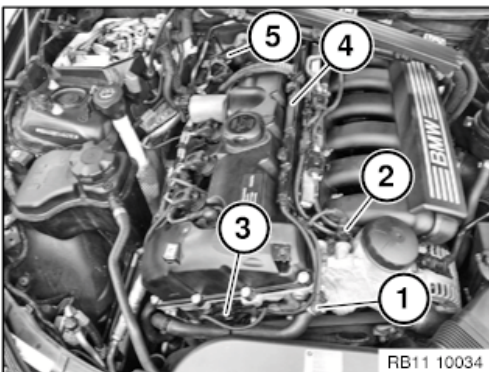


Remove right cover (1).

Remove electronics box cover.

Release rubber gaskets (2) on wiring harness from electronics box.

Tie up wiring harness (3) on engine compartment lid.



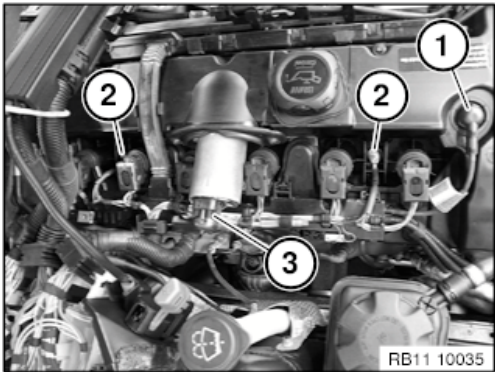
Unlock connector (1) from coolant thermostat and detach.

Unlock connector (2) on oil pressure switch and detach.

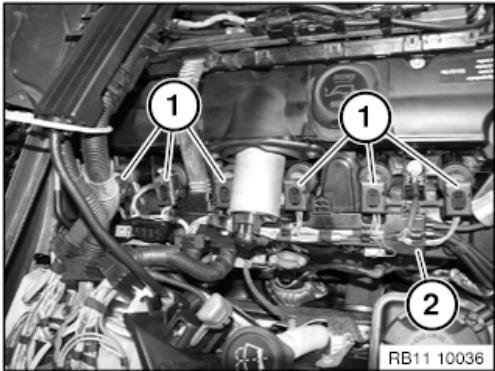
Unlock connector (3) on coolant temperature sensor (3) and detach.

Detach connector strip (4) from fuel injection pipe.

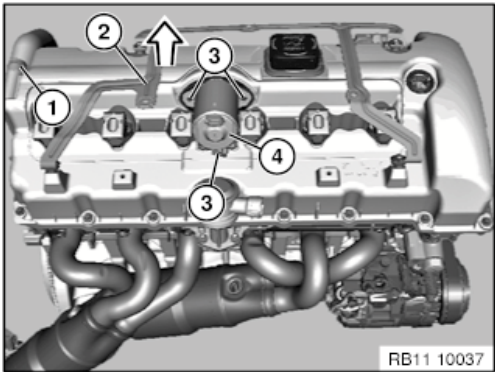
Unclip oxygen sensor cable (5).



- Detach plug connection of VVT sensor (1).
- Release ground connections (2) on engine.
- Unlock connector (3) of eccentric shaft servomotor and detach.



- Unlock plug connections (1) of ignition coils and detach.
- Unlock cable channel (2) of cylinder head cover and detach.
- Remove ignition coils.

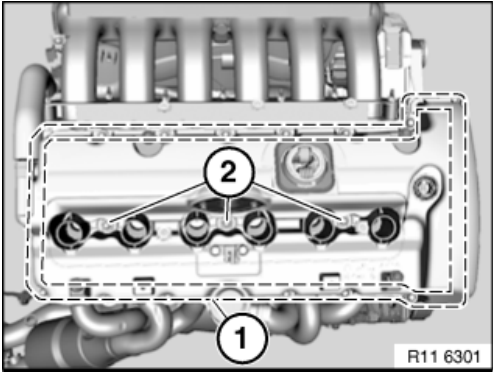


- Unlock and detach vent hose (1).
- If necessary, pull off metal bracket (2) in direction of arrow.
- Slacken screws (3) from electric servomotor (4).

Tightening torque:

11 37 3AZ	Type	Thread	Tightening specifications	Dimension
3AZ ASA screws	N52K	M6 x 16	1. Join screws hand-tight to cylinder head.	10 Nm
Electric servomotor to cylinder head and to cylinder head cover.			2. Join screw hand-tight to cylinder head cover.	
			3. Jointing torque on cylinder head.	
			4. Jointing torque on cylinder head cover.	

- Remove servomotor (4).

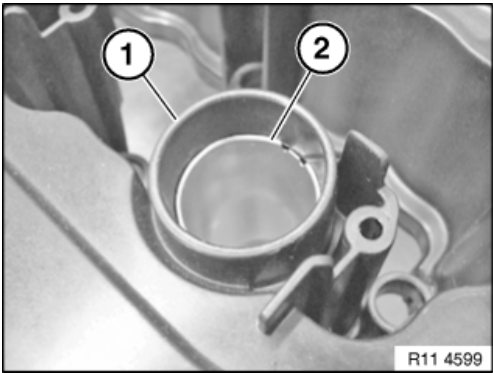


Important!
Observe different screw lengths.

Unfasten screws (1) and threaded bolts (2).

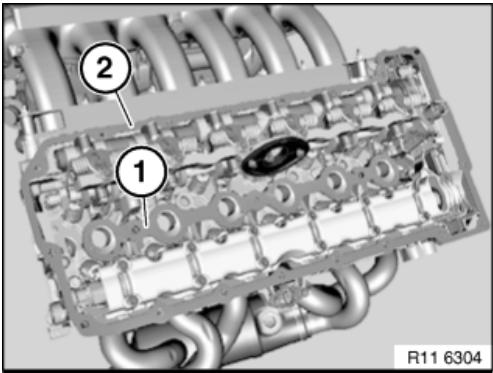
Tightening torque:

11 12 5AZ	Type	Thread	Tightening specification	Measure
5AZ ASA screws Cylinder head cover to cylinder head.	N52K	M7		9 Nm



Installation note:
Slotted sleeves (2) for guiding ignition coils in cylinder head cover (1) must be replaced.

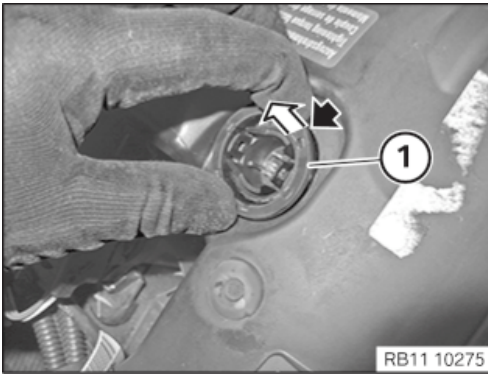
Remove slotted sleeves (2).



Installation note:
Clean all sealing surfaces (1 and 2).

Important!
Do not use any metal-cutting tools.

Installation note:
Replace gaskets (1 and 2).



Replace eccentric shaft sensor sealing ring (1) as necessary.

Installation note:

This operation cannot be performed with the cylinder head cover installed.



Assemble engine.