

(cylinder bank 5 to 8)

Necessary preliminary tasks:

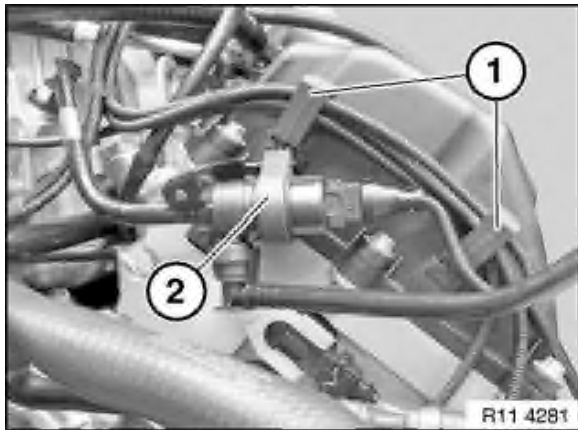
- Remove design cover
- Remove acoustic cover
- Remove centre engine compartment partition wall
- Remove ignition coil cover
- BMW ALPINA B7 vehicles:
 - Remove radial compressor

Note:

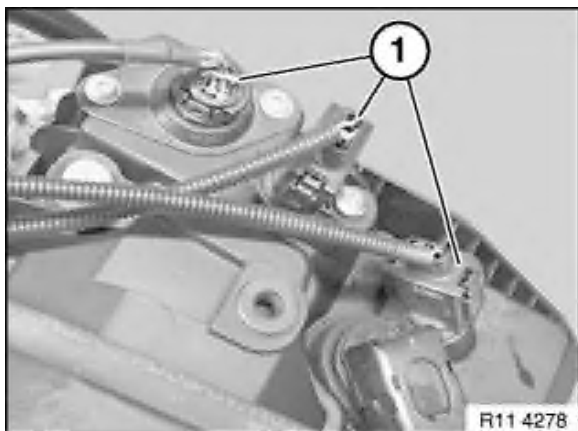
For purposes of clarity, the following work steps are shown on the engine after it has been removed.

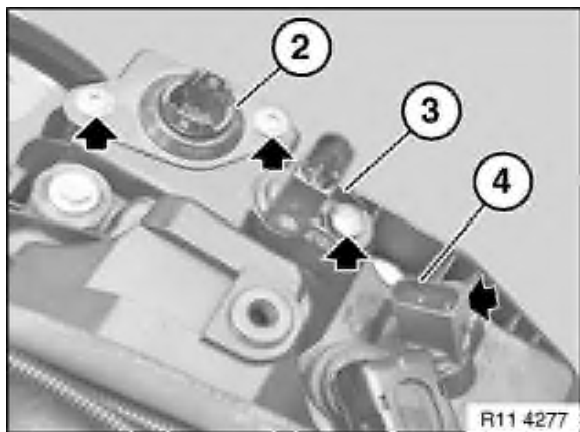
Unclip cable holder (1) with cables.

Pull tank venting valve (2) off holder.



Unlock plug (1) and remove.

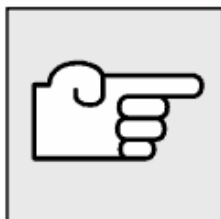




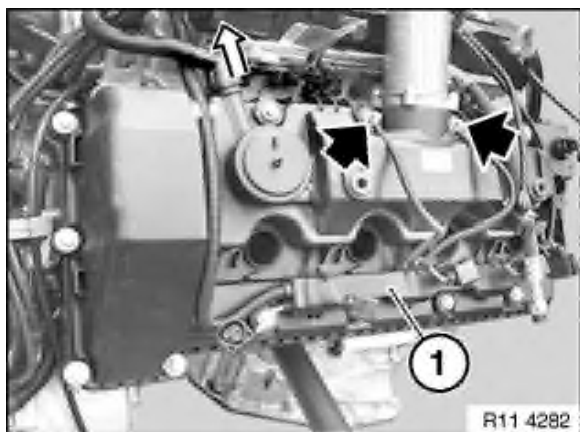
Release screws and remove sealing element (2).
Remove sensors (3 and 4).

Installation:

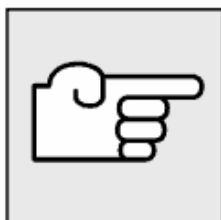
Replace sealing element (2).
Replace sealing rings on sensors (3 and 4).



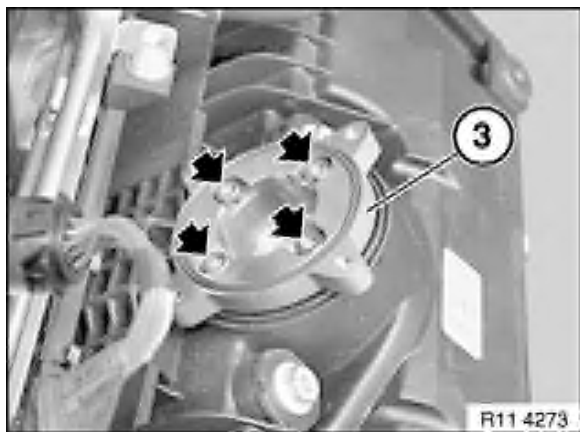
Removing ignition coils.



Release both grounding cables.
Unlock and detach vent hose.
Unclip cable duct (1) and remove cable from holder.



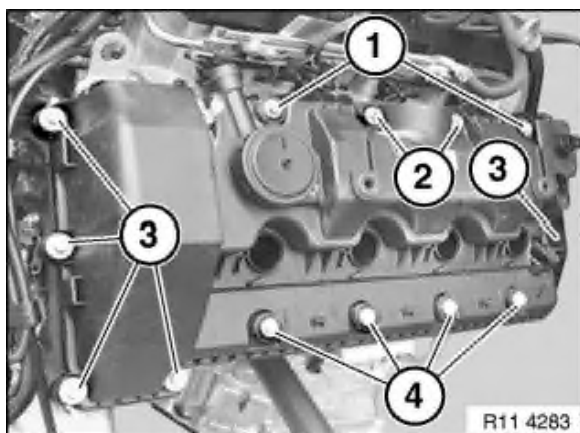
Remove servomotor for left eccentric shaft.



Unfasten screws.
Remove spacer (3) upwards.

Installation:

Replace sealing ring.



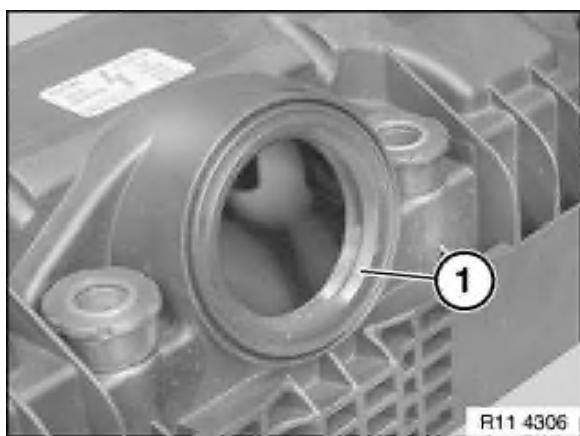
Remove injection pipe
Release screw connections (1, 2, 3 and 4).
If necessary, pull out oil dipstick.
Remove cylinder head cover.



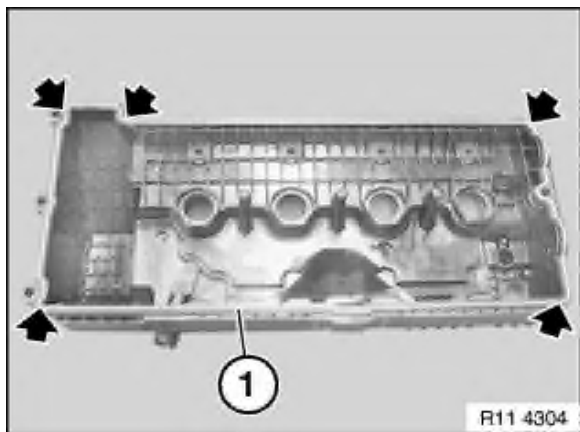
Installation:

Note installation direction of sealing ring (1).

Groove in sealing ring (1) points outwards.



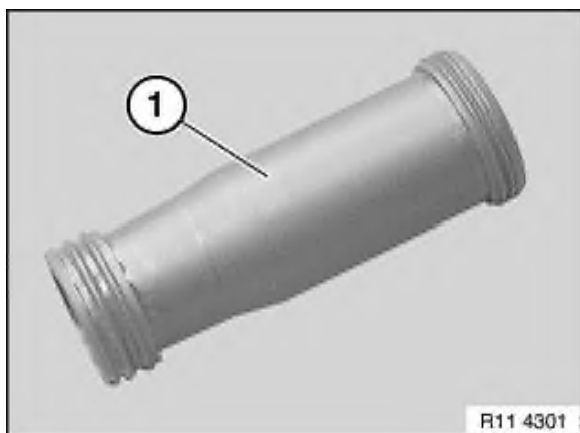
Replace sealing ring (1) and press into cylinder head cover until flush.



Installation:

Replace seal (1).

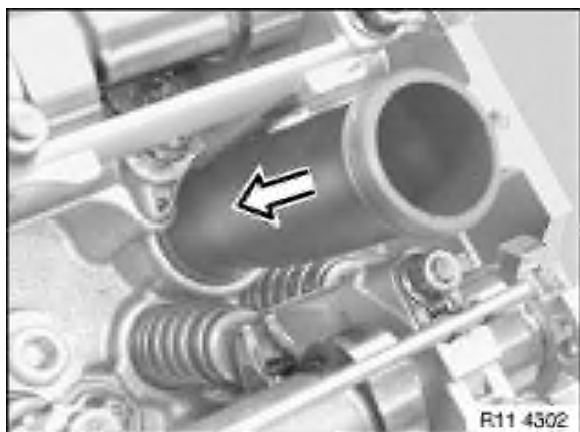
Align gasket (1) loosely in cover groove. Starting at corner radii, secure gasket (1) in cover groove and press into groove so that it is free of tension.



Installation:

Replace spark plug domes.

Coat rubber seals on spark plug dome (1) with anti-friction rubber coating.



Installation:

Install spark plug domes in cylinder head.

When fitting cylinder head cover:

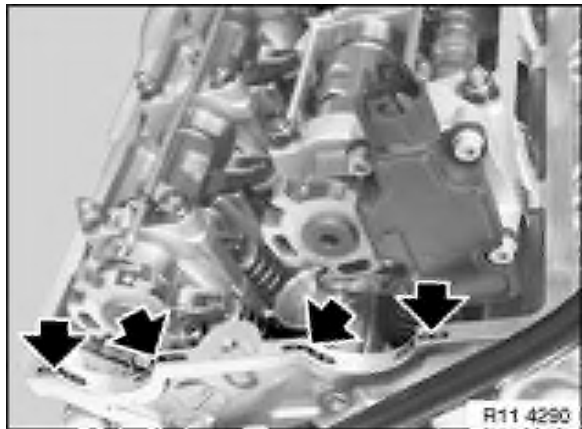
Align spark plug domes to cylinder head cover.



Installation:

Clean seal residue from sealing surfaces.

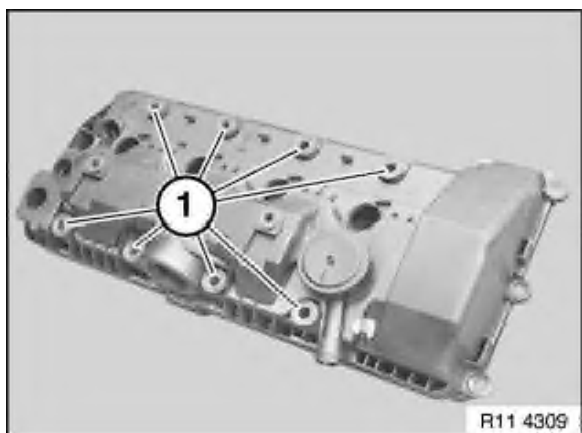
Coat contact surfaces of joint with Drei Bond 1209 (refer to BMW Parts Service).



Installation:

Clean seal residue from sealing surfaces.

Apply a thin, uniform bead of Drei Bond 1209 sealing agent (refer to BMW Parts Service) to transition area of half-moon sections.

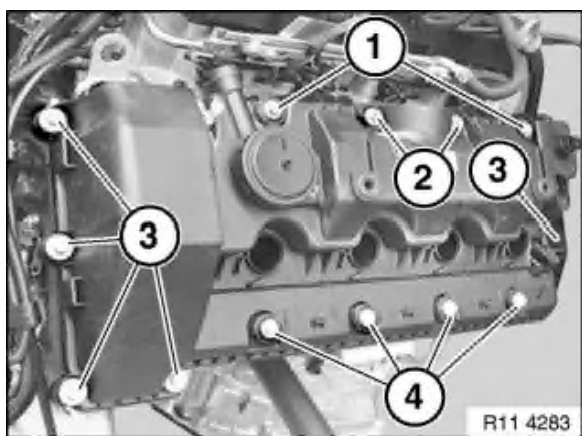


Replace sealing elements (1).



Installation:

Make sure gasket is correctly seated at sides and on rear side of cylinder head.



Installation:

Screw connections (1, 2, 3 and 4) of cylinder head cover are different.

Replace screw connections (3).

Insert screw connections (1, 2 and 3) without pretension and align cover.

Tighten down screw connections (1, 2 and 3) in diagonal sequence from inside to outside.