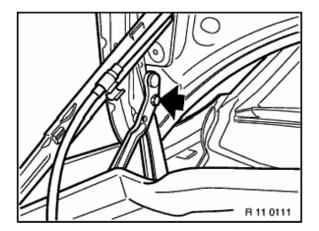
Note:

For removal of oil pan, front axle support must be lowered. There is no need to perform a front axle alignment check.

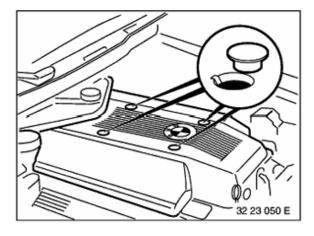
E38 only

Note instructions on connecting and decoupling battery, refer to General Information MG12 Disconnect negative battery lead.



Lift engine hood into assembly position.

Disconnect damper on hood, open hood fully and secure with a screw on left and right sides.

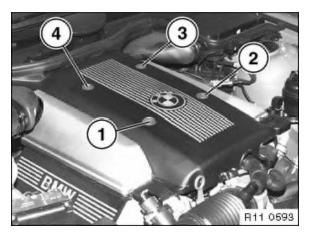


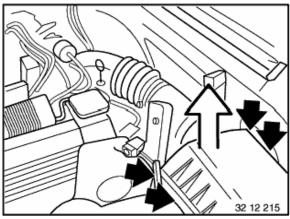
Version 1

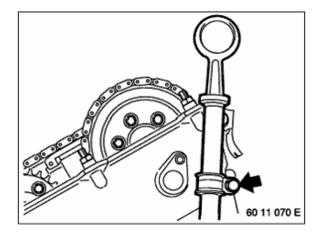
(acoustic cover screwed down)

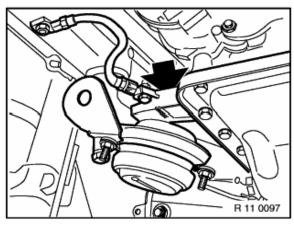
Pry out sealing cap. Unscrew nuts.

Remove acoustic cover.









Version 2

(acoustic cover with press-stud fastener)

Open press-studs (1 ... 4) one at a time, at the same time lifting the acoustic cover slightly. Once all four press-studs have been opened, remove the acoustic cover.

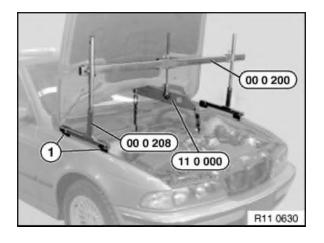
Installation:

Position acoustic cover and press downwards until pressstuds (1 ... 4) click into place.

Remove suction-filter housing with air-mass sensor, refer to 13 71 000

Unfasten dipstick guide from right timing case cover.

Unfasten top left and right nuts on engine mount.

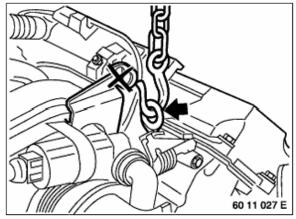


tool 00 0 201 / 202 / 204 / 208 and attach.

Note:

The supports (1) of special tool 00 0 208 must make contact with the screws on the side walls.

Secure special tool 11 0 000 to special tool 00 0 200.

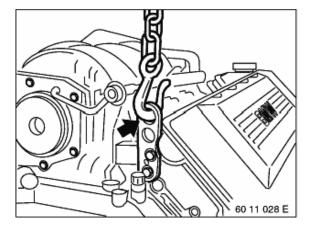


Caution!

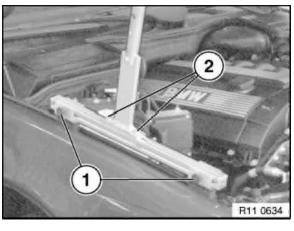
Only attach engine to relevant suspension lugs.

Layout of front engine mount.

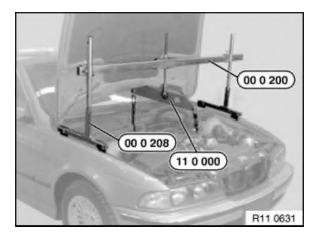
Fit special tool 00 0 200 to special



Layout of rear engine mount.



Tighten the screws (1 and 2).



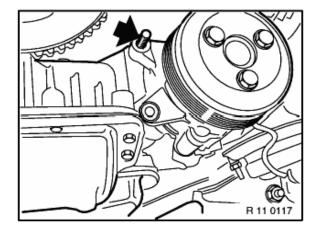
Lift engine with special tool 00 0 200 approx. 6 - 8 mm.

Remove lower section of oil pan,

refer to 11 13 020

Relieve load on drive belt of air conditioner and remove adjusting plate from oil pan,

refer to 11 28 050



Unfasten vane pump, refer to 32 41 060

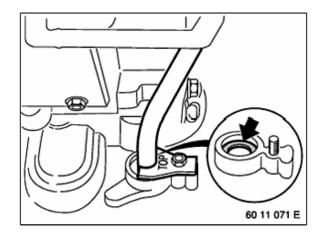
Note:

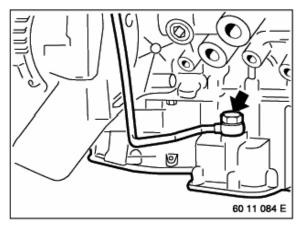
Lines remain connected. If necessary, remove stud bolt from upper section of oil pan and tie vane pump to one side.

E38

Unfasten protective tube on positive battery lead from oil pan and unfasten from right engine support.

Unfasten positive battery lead from starter motor and unfasten from left retaining bracket.





Unfasten guide tube for dipstick on oil pan.

Installation:

Check O-ring, replace if necessary.

Insert O-ring and washer in oil pan bore.

Unfasten return line from oil pan.

Installation:

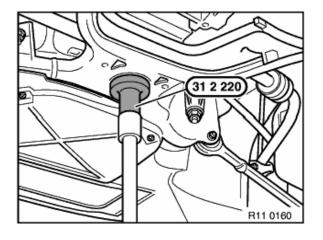
Replace sealing ring.

For Tightening torque, refer to Technical Data 11 42 5AZ

Unfasten steering spindle from steering gear.

This operation is described in section on removing and installing the steering gear,

refer to 32 13 060

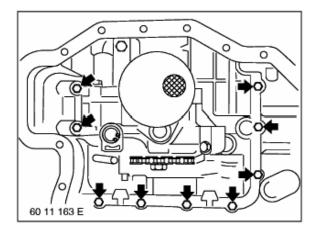


Unfasten bracket for hydraulic line from front axle support.

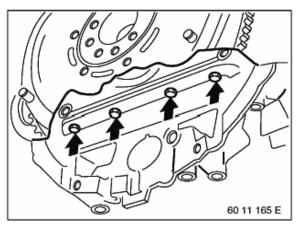
Brace front axle support with special tool 00 2 030 in conjunction with special tool 31 2 220.

Unfasten front axle support from engine support and lower approx. 60 mm,

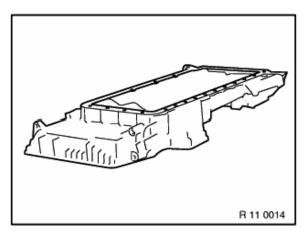
refer to 31 11 001



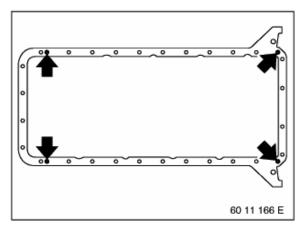
Unfasten screws inside oil pan. Remove oil pump, refer to 11 41 000



Unfasten screws to sealing cover.



If necessary, unfasten oil cooler line bracket from oil pan.
Unfasten remaining screws from oil pan.
Lift upper section of oil pan forwards to remove.



Installation:

Sealing faces clean and free of seal debris. Coat edges of joint with three Bond 1209 sealing compound (refer to BMW Parts Service).

- 1. Replace gasket
- 2. Install oil pan
- 3. Insert all screws in oil pan.
- 4. Insert screws in transmission end without preload at this stage.
- 5. Tighten down screws in engine end.
- 6. Tighten down screws in transmission end.