



Note:

After completion of work, check transmission oil level.

Transmissions are supplied filled with oil.



Important!

Use only the [approved gear oil](#) in this manual transmission.

Failure to comply with this requirement will result in serious damage to the transmission.



Drain off gear oil.

Remove and install transmission.

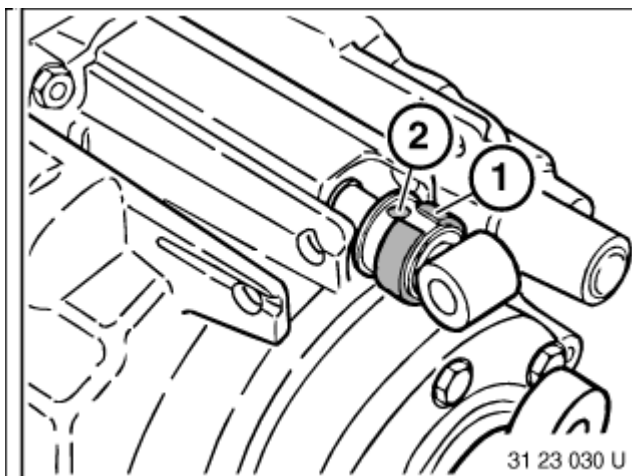
[Install release unit and release lever in new transmission.](#)



Recycling:

Catch and dispose of emerging gear oil.

Observe country-specific waste-disposal regulations.



Converting shift rod joint:

Push back locking sleeve and retaining ring (1).

Drive out straight pin (2).



Convert exhaust suspension.
Convert reversing light switch.
[Tightening torque, 23 41 5AZ.](#)

23 00 033
S5D 320Z)

Installing replacement transmission (S5D 310Z /



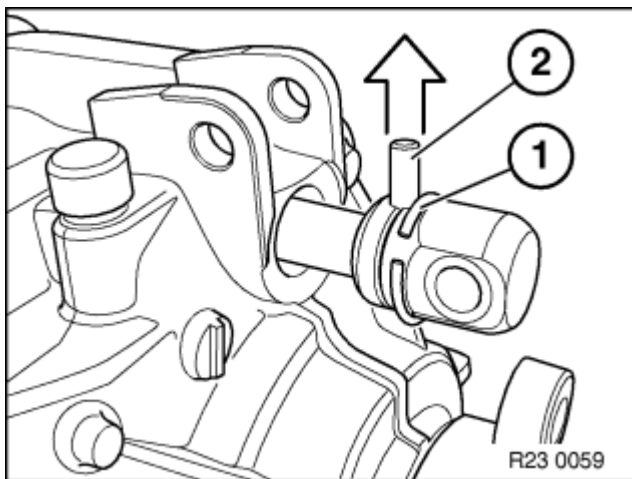
[Remove transmission.](#)



Fit following parts from old transmission on the new transmission:

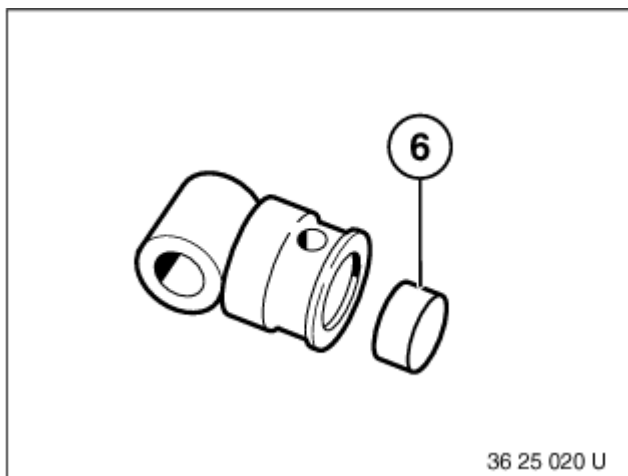
- [Release bearing and release lever](#)
- Dowel pin for slave cylinder
- Reversing light switch

[Tightening torque, 23 41 5AZ.](#)



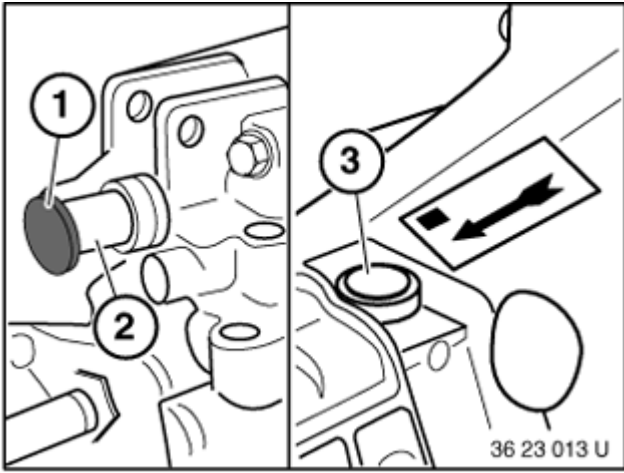
Convert shift rod joint.

Push retaining ring (1) back and drive out straight pin (2).



Installation:

Check damping disk (6) in joint for damage and replace if necessary.



Detach breather (1) and protective sleeve (2) from selector shaft.

Lever out s

Note:

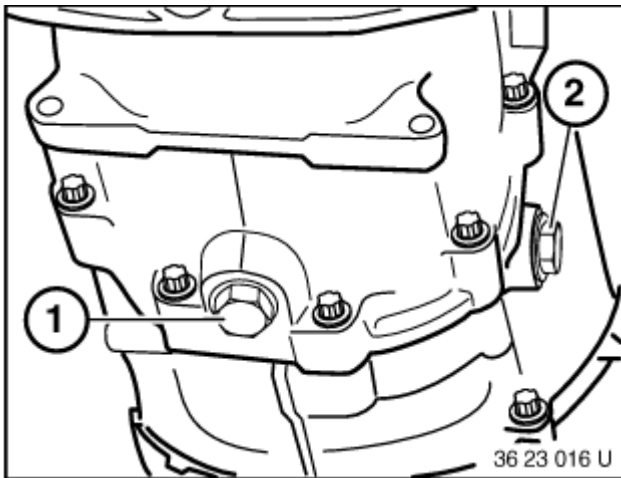
Gearbox must be at normal operating temperature.

Gear oil:

- Refer to BMW Service Operating Fluids.

Filling capacities:

- [Refer to Technical Data.](#)



Draining gear oil:

- Release oil drain plug (1) and filler plug (2).
- Clean oil drain plug (1) and screw in. Tightening torque [23 00 4AZ](#).

Fill transmission with ATF.

- Pour in gear oil until overflowing.
- Tighten in filler screw (2). Tightening torque: [23 00 4AZ](#).

11 00 050 Removing and installing engine (M52 / S52 / M52TU / M54)



Special tools required:

- [11 0 000](#)

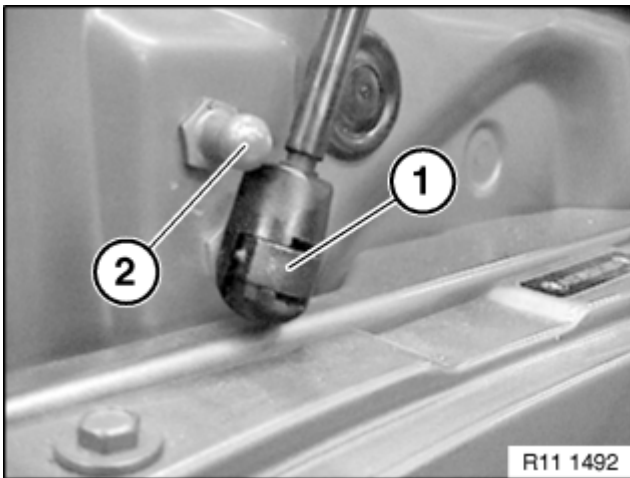
[Instructions for disconnecting and connecting battery.](#)

Disconnect negative battery lead.



E36

Move engine hood into assembly position and remove heater bulkhead (air collector). These work steps are described in Removing complete wiper bracket.



Z3

Move engine hood to assembly position:

Note:

The following work must be carried out with a second person assisting. Work instruction applies to left and right sides.

Hold engine bonnet/hood.

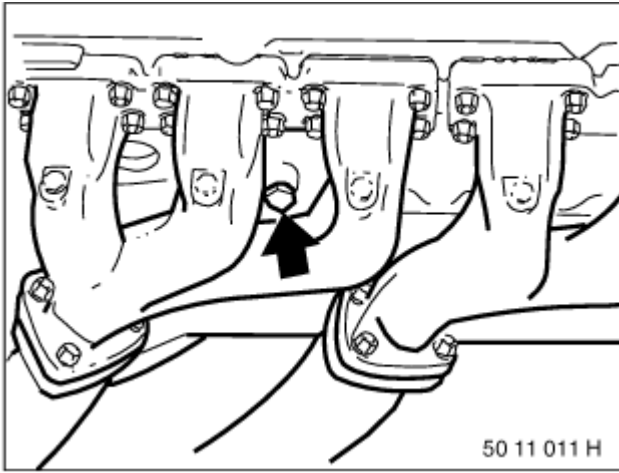
Unclip retainer (1).

Unhook damper and suspend in ball head (2).



Unscrew and remove splash guard.

Remove transmission, refer to MG 23 / MG 24.



Note:

M52 / S52

The water drain plug is located on the exhaust side between cylinders 4 and 5 in the engine block (as illustrated).

M52TU / M54

The water drain plug is located on the exhaust side on cylinder 2 in the engine block.



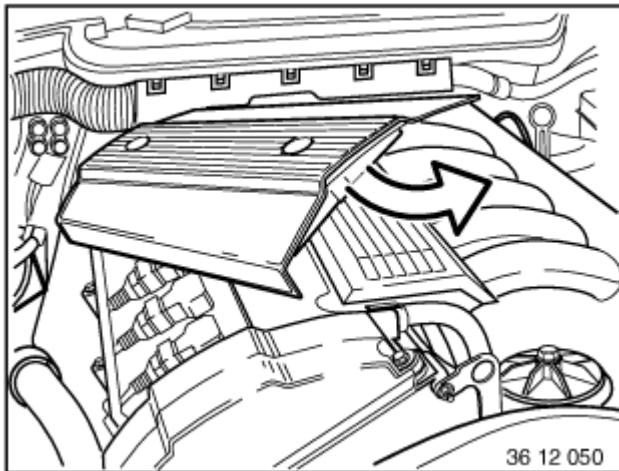
Drain off coolant and dispose of correctly.

Installation:

Replace seal.

[Tightening torque 11 11 5AZ.](#)

[Remove radiator.](#)



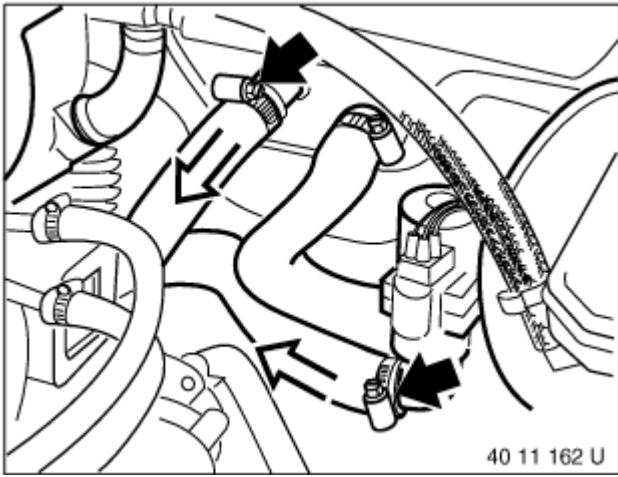
Take off cover.



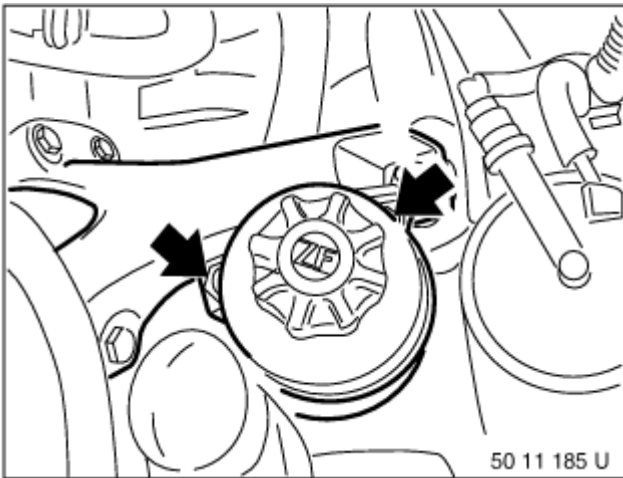
[Remove intake air manifold.](#)

Unfasten engine section of wiring harness and place to one side with cable duct.

[Remove fan clutch with fan impeller.](#)



Disconnect coolant hoses at heating valve and heater.



Unfasten reservoir for power steering unit and tie up to one side.

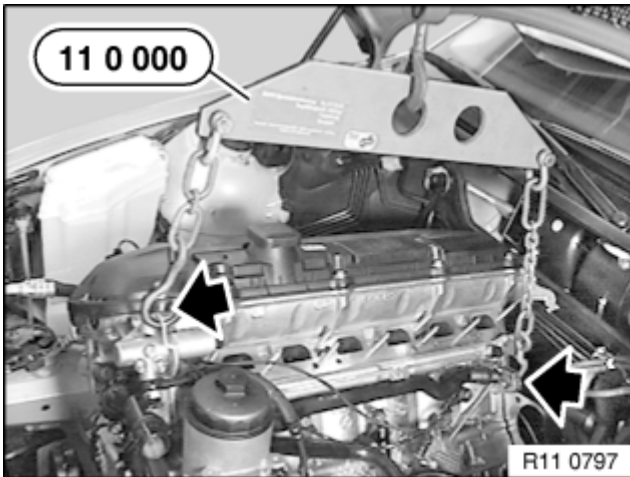
Note:

Lines remain connected.

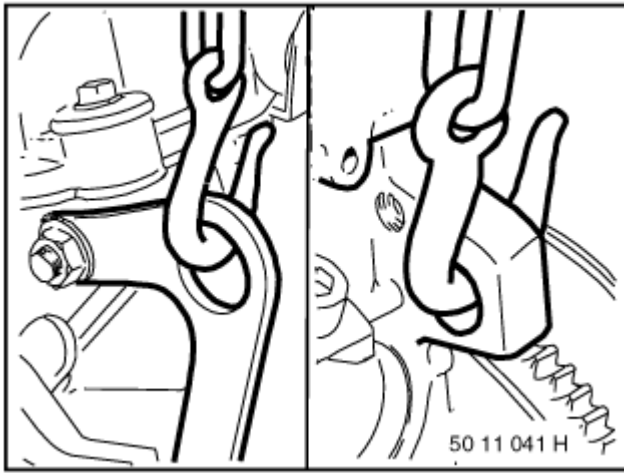
Remove vane pump from power steering unit.

Note:

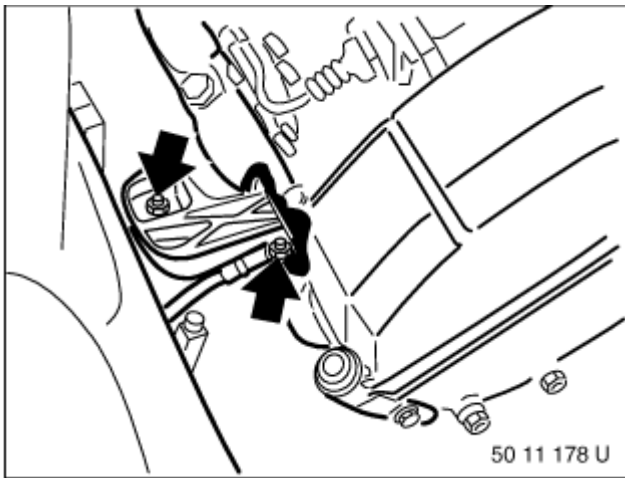
Lines remain connected.



Fit engine to special tool [11 0 000](#) .



Front and rear suspension arrangement



Unfasten right ground wire.
Unscrew left and right engine mounts.
Lift out engine.