

23 00 028

Removing and installing transmission (GS6-45BZ) N55



Special tools required:

- [23 4 050](#)
- [00 2 030](#)
- 00 9 010
- [21 2 240](#)
- [00 9 120](#)
- 00 9 130



Important!

After completion of repair work, check transmission oil level.

Use only the approved [transmission oil](#).

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



Important!

For vehicles with N54/N55 engine up to production date 09/2012, aluminium bolts for the for the securing of the transmission are also installed.

As of production date 09/2012, **only** steel bolts are installed for the securing of the transmission.

Note:

Aluminium screws/bolts must be replaced each time they are **released**.

Aluminium screws/bolts are permitted with and without colour coding (blue).

For reliable identification:

Aluminium screws/bolts are **not magnetic**.

Jointing torque and angle of rotation must be observed without fail **(risk of damage)**.

The aluminium bolts can be optionally replaced by steel bolts.



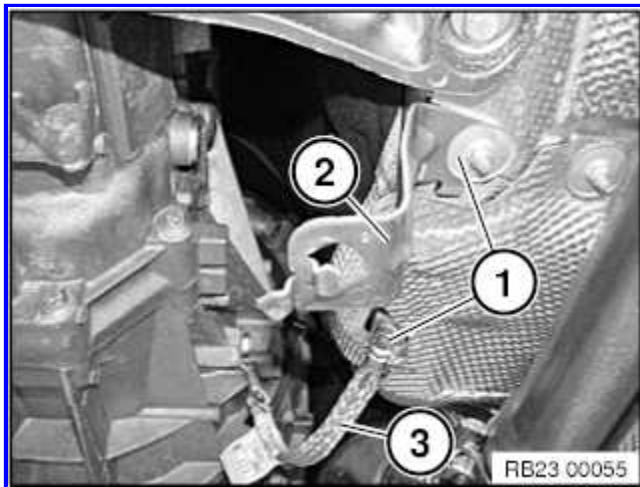
Necessary preliminary tasks:

- [Remove underbody protection at front and rear.](#)
- [Remove complete exhaust system.](#)
- Remove heat shields.
- Partially remove [propeller shaft](#).
 - Disconnect propeller shaft at transmission.
 - Release centre mount.
 - Tie up propeller shaft to underbody.

Note:

Bending the propeller shaft by an excessive angle can cause premature damage to the joint/propeller shaft!

- Support engine with jack when removing gearbox



Unscrew nuts (1).

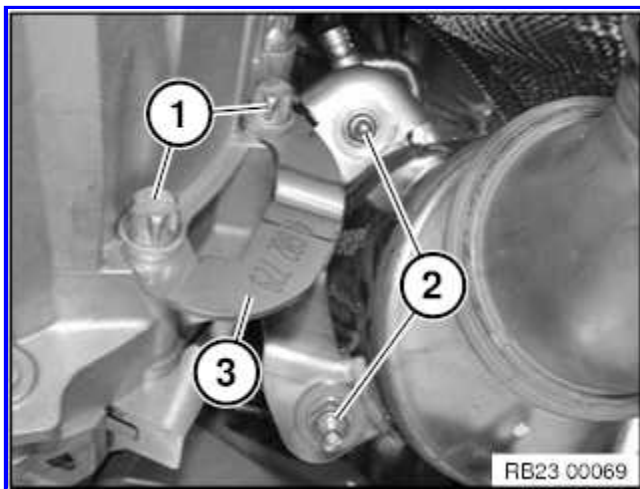
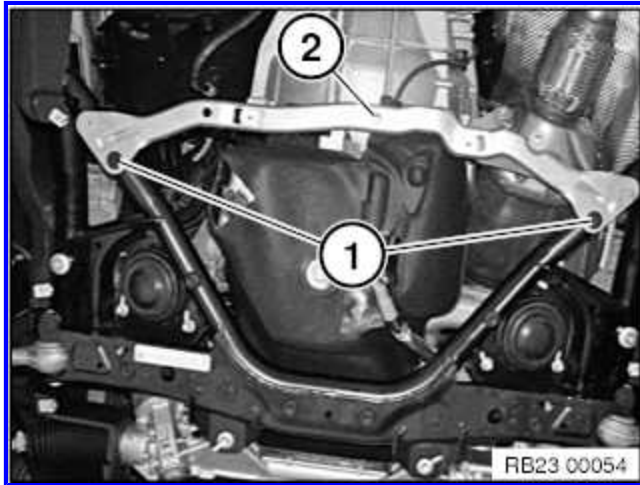
Release holder (2) and ground strap (3) from vehicle underbody.

Nut (ground strap on body) tightening torque [23 11 8AZ](#).

Release screws (1).

Remove strut (2).

- Similar to graphic.



Release aluminium screws (1) on transmission.

Tightening torque 23 00 1AZ.

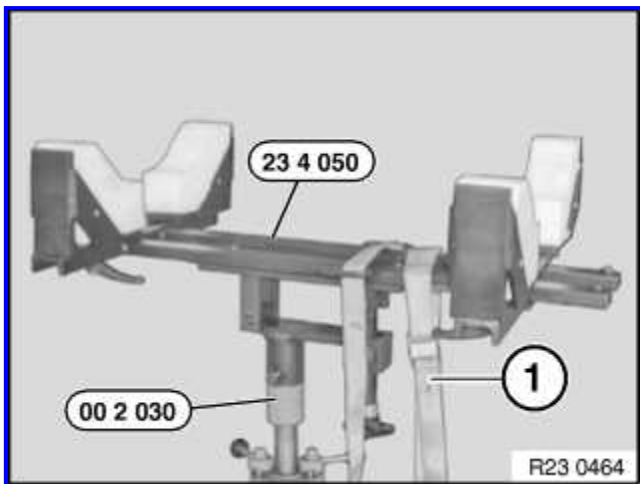
Unscrew nuts (2).

Tightening torque [18 20 1AZ](#).

Remove bracket (3).

Installation note:

Renew aluminium screws (1).



Supporting transmission:

Support transmission with special tools [23 4 050](#), [00 2 030](#).

Secure transmission to mounting with tensioning strap (1).

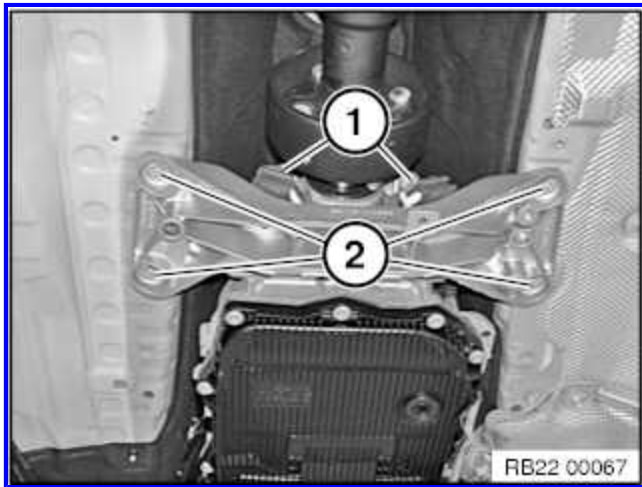
Tasks are described in [Gearbox holder](#).

Unscrew nut (1) and bolts (2).

Remove gearbox cross member (3).

Tightening torque [22 32 3/4AZ](#).

Illustration: Automatic



Note:

Pressure line of clutch slave cylinder remains connected.

Important!

Relieve tension on clutch slave cylinder slowly; otherwise air will be drawn in through sealing cup.

Release nuts and remove clutch slave cylinder.

Tightening torque [21 52 1AZ](#).



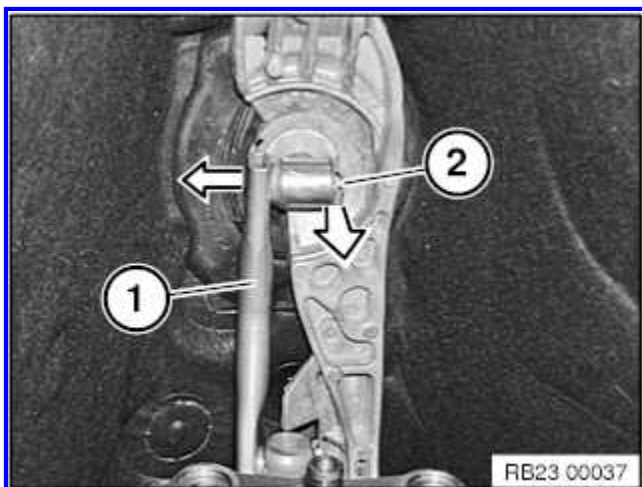
Lift off retainer (2).

Detach gearshift rod (1).

Installation note:

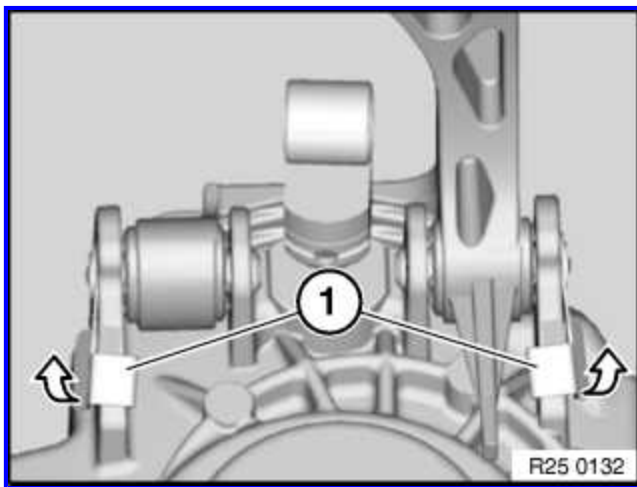
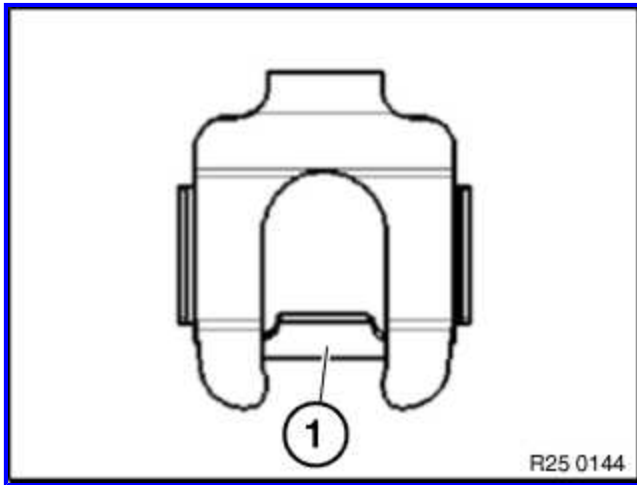
Grease gearshift rod.

Grease, refer to [BMW Service Operating Fluids](#).



Important!

Retaining clip must interlock captively with retaining web (1) **behind** gearshift rod pin.

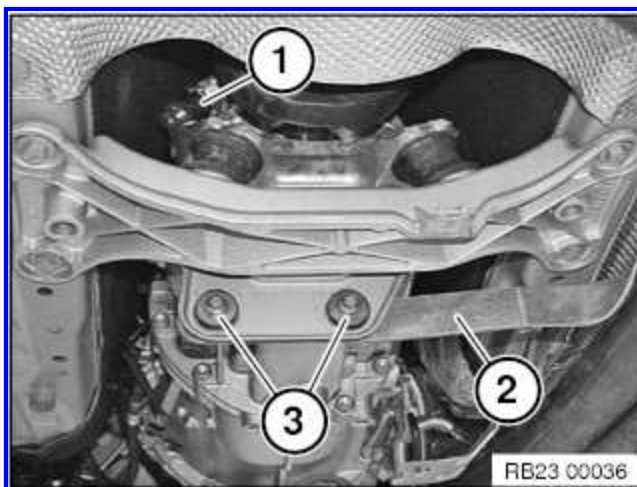


Unlock bearing journal (1) in direction of arrow and remove.
Lift out gearshift arm.

Installation note:

Grease bearing journals (1).

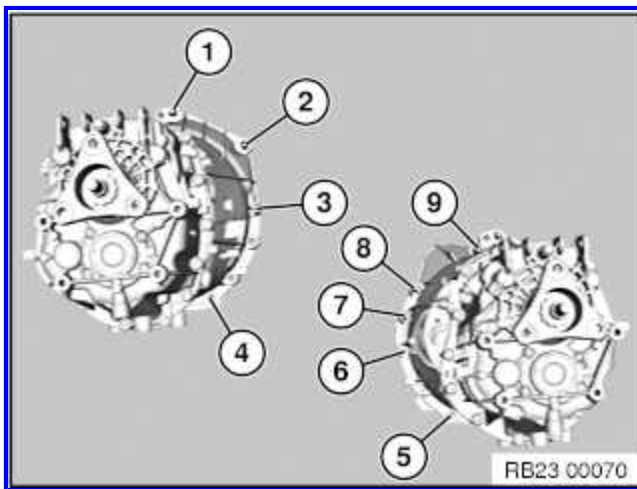
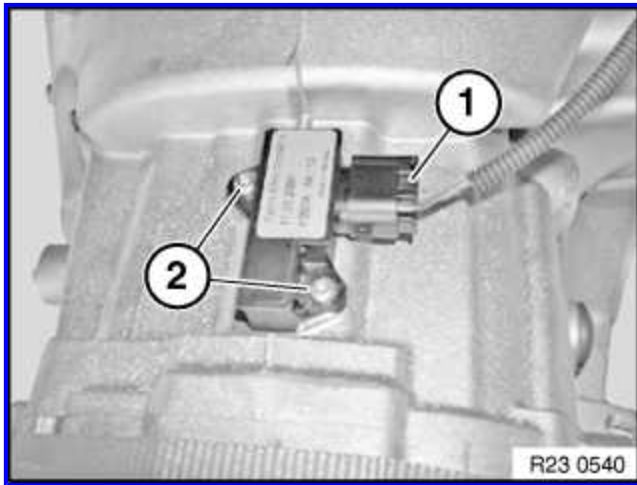
Grease, refer to [BMW Service Operating Fluids](#).



Disconnect plug connection (1) on reverse gear switch.
Release line from holder.

- Similar to graphic.

Disconnect plug connection (1) on zero gear sensor.
Release all lines from holder.



Release screws.

In vehicles with an N54/N55 engine from production date 09/2012, **only** steel bolts are installed.

Steel screws (1,2,4,5,6,9), tightening torque 23 00 1AZ.

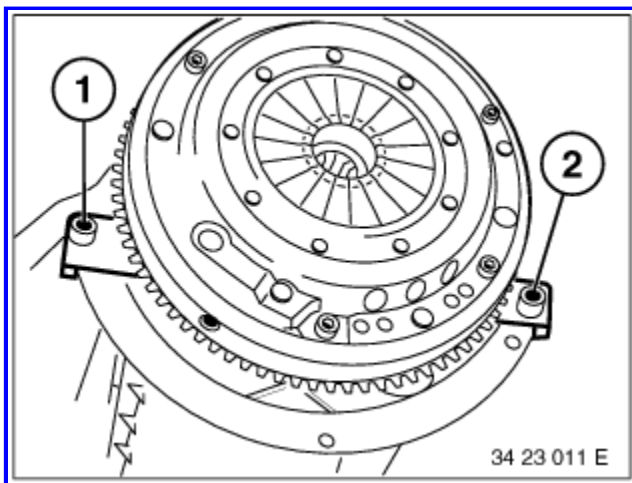
Release aluminium screws with special tool 00 9 010.

Aluminium screws (3,6,7,8), tightening torque 23 00 1AZ.

Important!

Do not allow transmission to hang on transmission input shaft when removing and installing, as the clutch disc will be deformed. Pull transmission downwards and remove.

Renew aluminium screws (3,6,7,8).



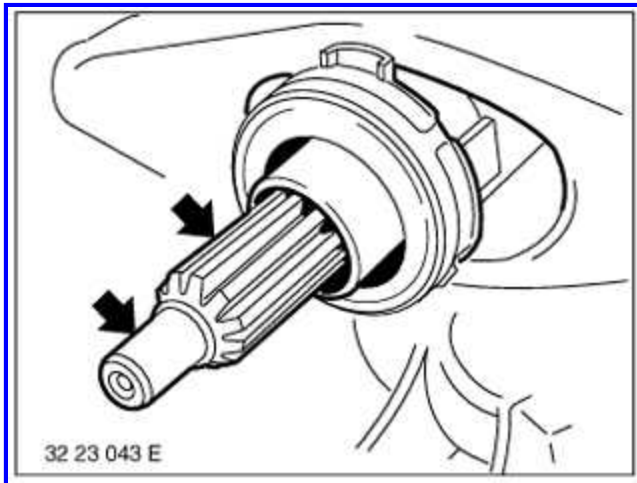
Installation note:

Check that fitting sleeves are correctly fitted.

Replace damaged fitting sleeves.

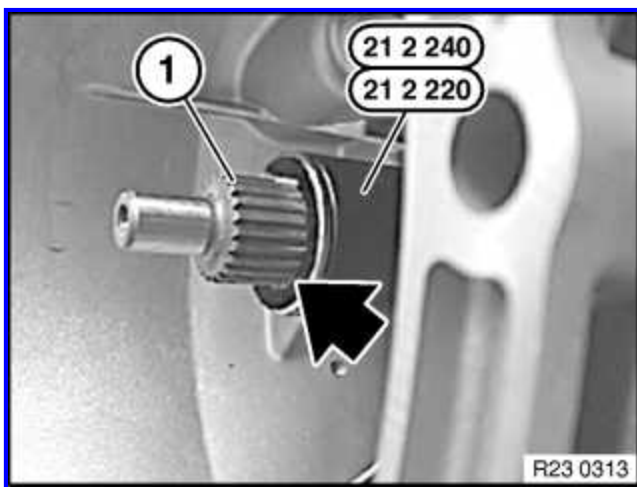
Installation note:

Check lubrication of transmission input shaft for sticky consistency. If grease is sticky, clean input shaft and replace clutch disc.



Check clutch disc for frictional corrosion in gearing and replace if necessary.

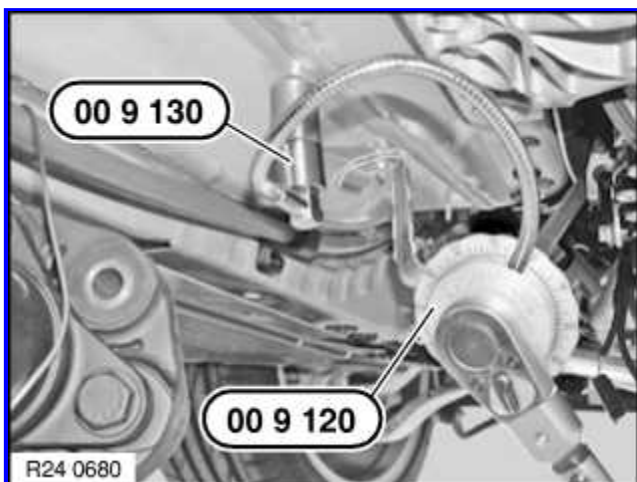
Remove any grease and lining abrasion from gearing of clutch disc by mechanical means (with a cloth).



Installation note:

Greasing specification:

- Remove and clean [release bearing and release lever](#).
- Push on grease scraper ring [21 2 240](#) to the limit position.
- Grease gearing (1) of input shaft with a brush.
Grease, [refer to BMW Service Operating Fluids](#).
- Detach grease scraper ring.



Installation note:

Tighten down screws/bolts to specified torque.

Special angle-of-rotation tool [00 9 120](#) with magnet [00 9 130](#).

Secure to vehicle underbody and screw down aluminium screws/bolts in accordance with angle of rotation.

Angle of rotation 23 00 1AZ.