

**Special tools required:**

- [00 2 030](#)
- [21 2 220](#)
- [23 4 050](#)

**Important!**

To prevent heavy damage to the engine block, the protruding thread of the transmission bolts absolutely must be checked for damage and corrosion **before removal**.

If there are signs of corrosion, the rust must be removed and the threads must be cleaned **before removal**.

Replace rusted, damaged screws.

Failure to comply with this instruction will result in serious damage to the engine block and transmission.

**Important!**

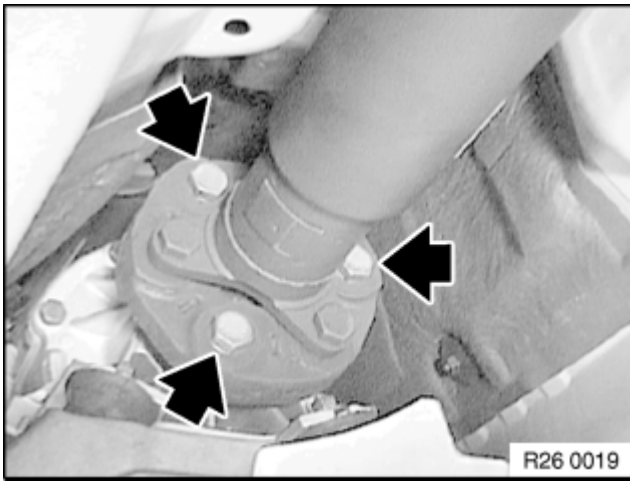
After completion of work, check [transmission oil level](#).

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

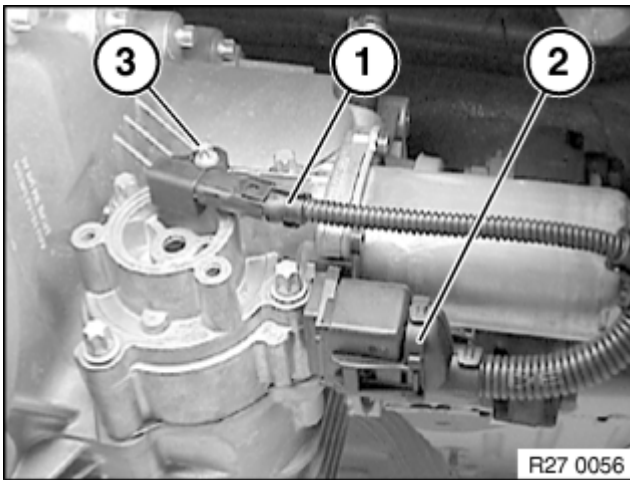
Failure to comply with this requirement will result in serious damage to the manual gearbox.

**Necessary preliminary tasks:**

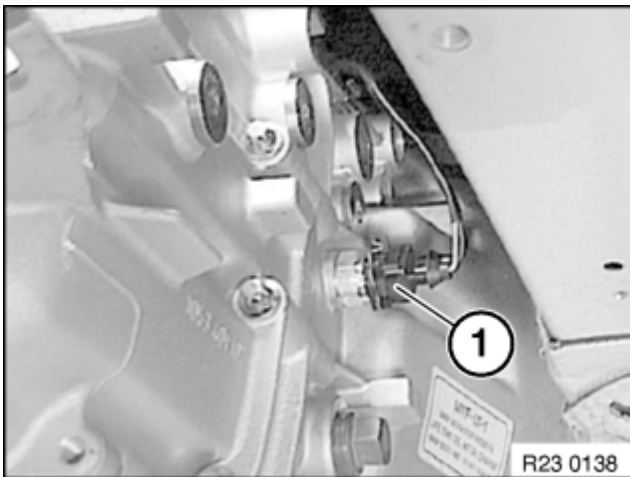
- Clamp off [battery](#).
- Remove [intake silencer housing](#)
- Remove [reinforcement plate](#)
- Remove complete [exhaust system](#)
- Remove heat shields
- Remove front [propeller shaft](#) from transfer box and tie to one side



- Remove propeller shaft from transmission.
- Release centre mount.
- **Note:**
- Bending the propeller shaft by an excessive angle can cause premature damage to the joint/propeller shaft!
- Tie up propeller shaft to underbody.
- Support engine with lifter when removing transmission.

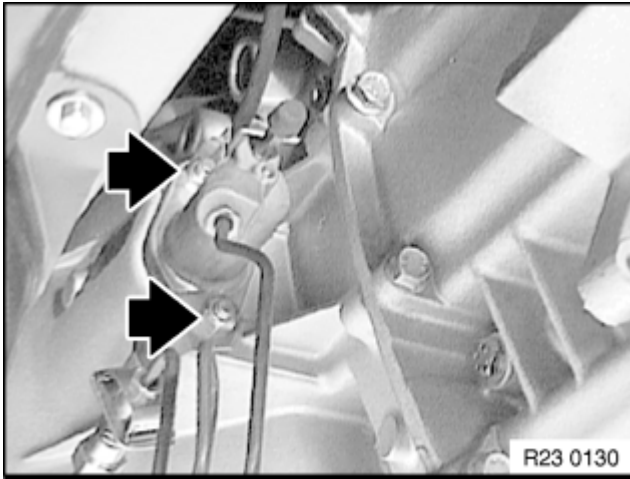


Detach plugs (1) and (2) from servomotor.



Detach connector (1) from reversing light switch.

Release cable from mountings and tie to one side.

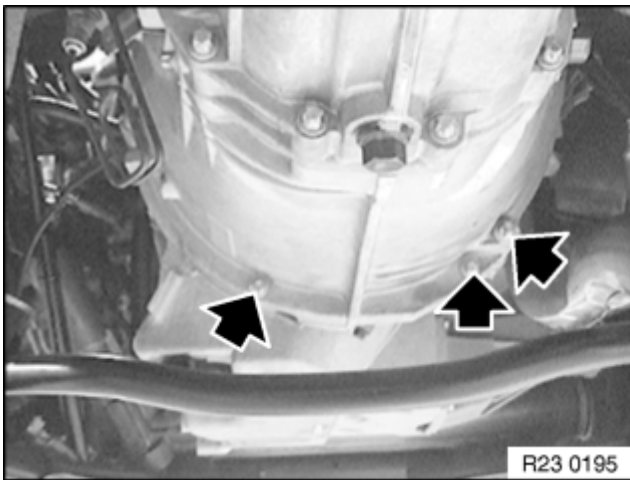


Note:
Pressure line of clutch slave cylinder remains connected.

Important!

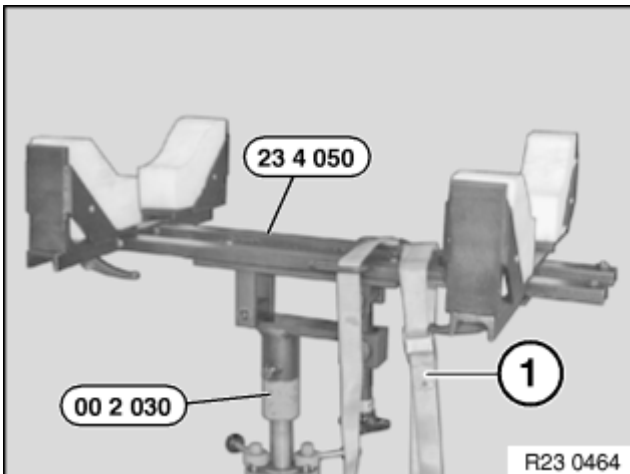
Relieve tension on clutch slave cylinder slowly; otherwise air will be drawn in through sealing cup.

Release nuts and remove clutch slave cylinder.
Tightening torque [21 52 5AZ](#).



Release screws.

Tightening torque [23 00 1AZ](#).



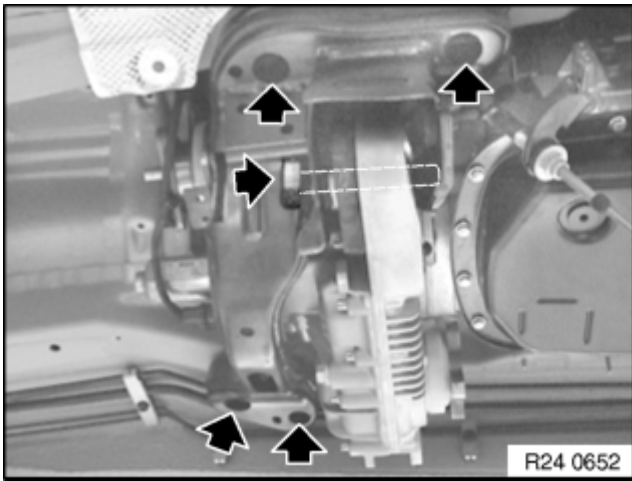
Supporting transmission:

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

Secure transmission to mounting with tensioning strap (1).

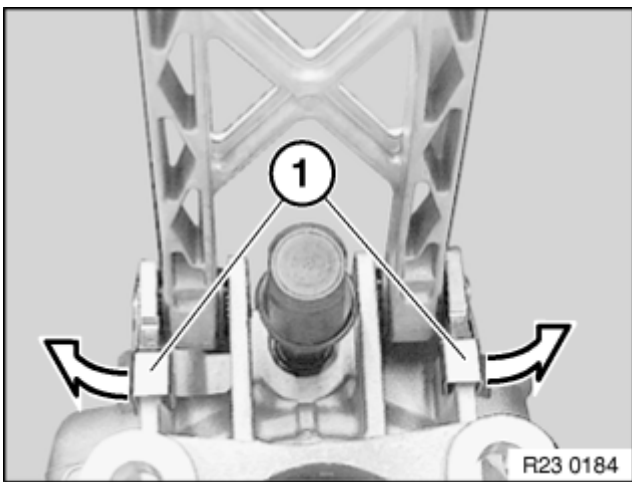
Tasks are described in [Transmission bracket](#).

After completion of work, check transmission fluid level.



Unfasten screws and remove transmission cross-member.

Tightening torque [22 32 4AZ/5AZ](#).



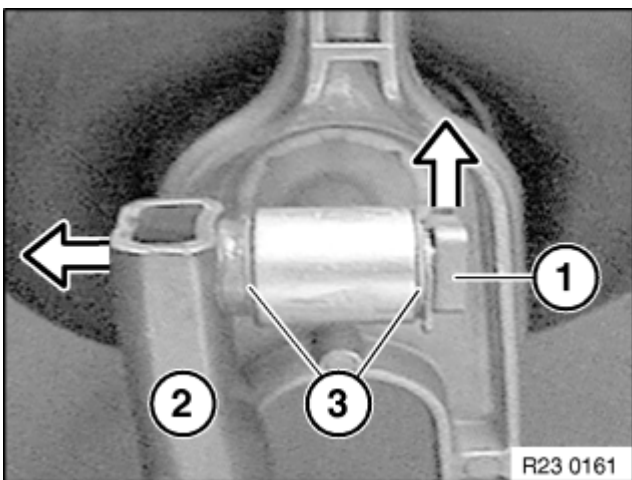
Unlock bearing journal (1) in direction of arrow and remove.

Lift out gearshift arm.

Installation note:

Grease bearing journals (1).

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



Lift off retainer (1).

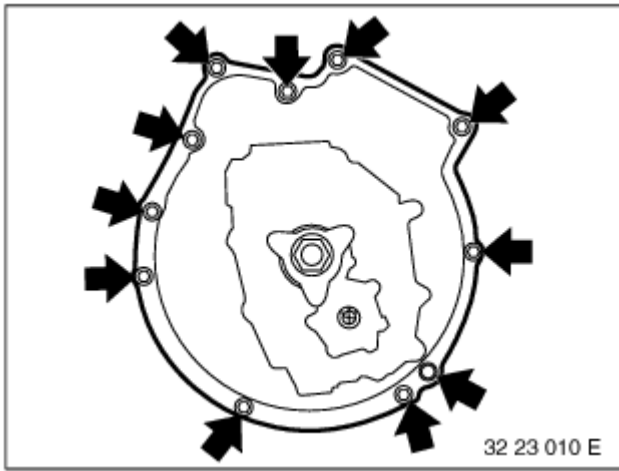
Detach gearshift rod (2).

Installation note:

Grease gearshift rod.

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

Make sure shims (3) are in correct position.

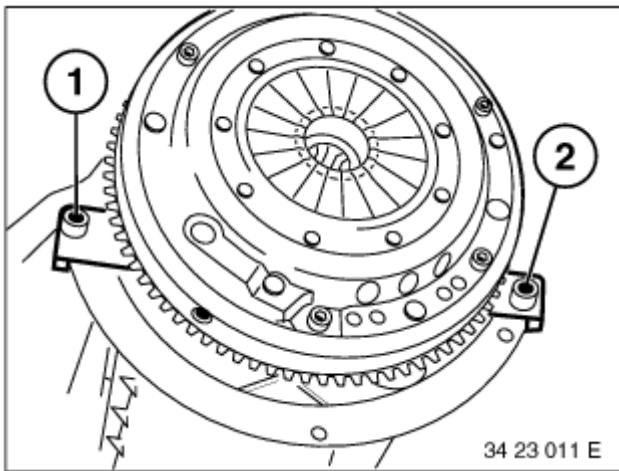


Release screws.

Tightening torque [23 00 1AZ](#).

Important!

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

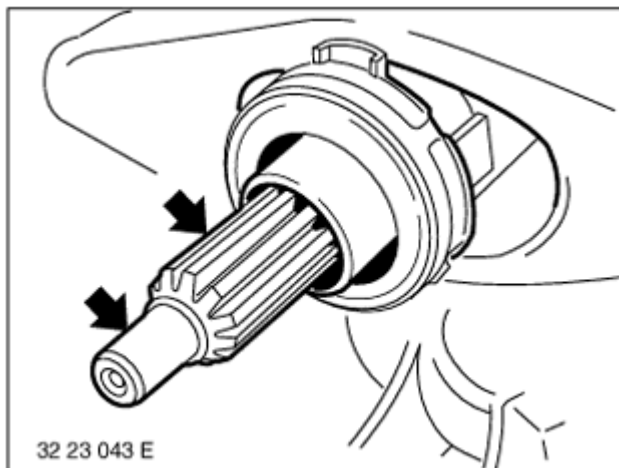


Installation note:

Check that fitting sleeves are correctly fitted.

Replace damaged fitting sleeves.

Ensure correct position of cover plate.

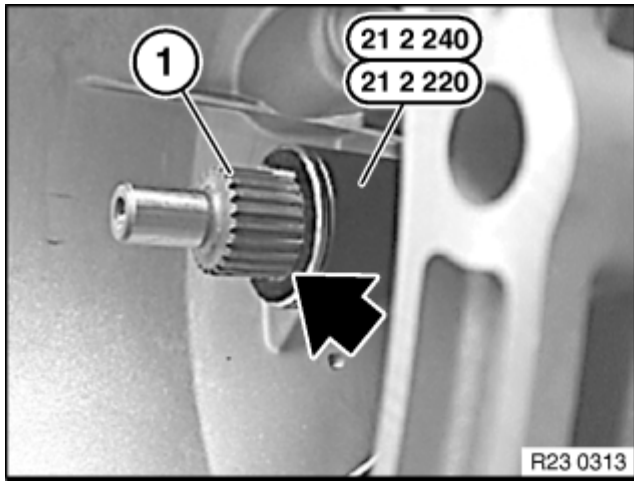


Installation note:

Check lubrication of transmission drive shaft for sticky consistency. If grease is sticky, clean input shaft and [replace clutch plate](#).

Check clutch disc for friction rust in gearing and [replace](#) if necessary.

Mechanically remove existing grease and lining abrasion from gearings of clutch disc (with a cloth).



Installation note:

Greasing specification:

- Remove and clean [release bearing and release lever](#).
- Push on grease scraper ring [21 2 220](#) to the limit position.
- Grease gearing (1) of input shaft with a brush. [Refer to BMW Service Operating Fluids](#).
- Detach grease scraper ring.