

1997 BMW 328is (E36) L6-2793cc 2.8L DOHC (M52)

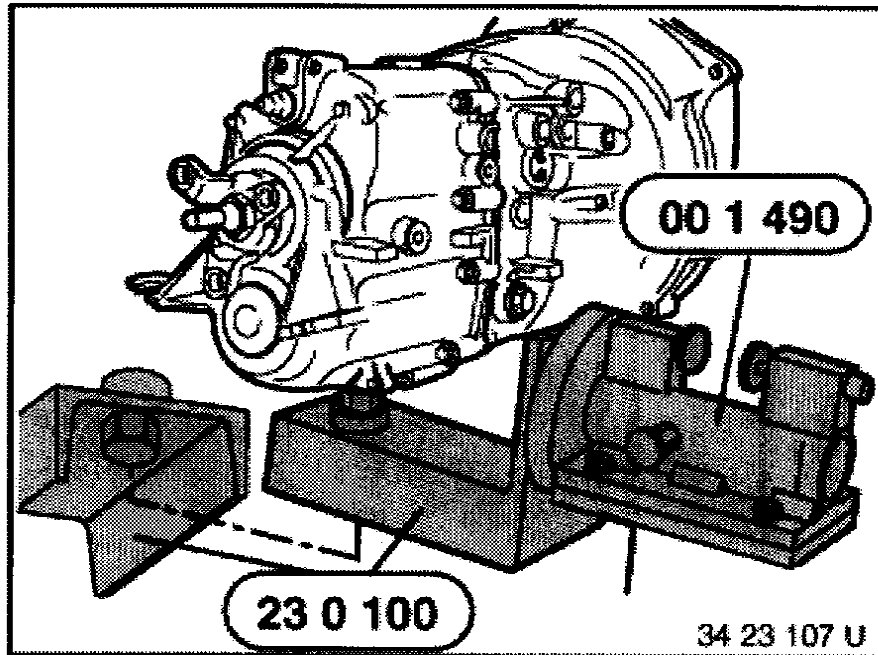
Vehicle > Transmission and Drivetrain > Manual Transmission/Transaxle > Service and Repair > Procedures

DISASSEMBLY AND ASSEMBLY

Remove and install the input and output shafts (S5D 260Z/310Z/320Z)

Remove the transmission (depending on model).

Remove the clutch operator/lever, refer to Clutch M/T.

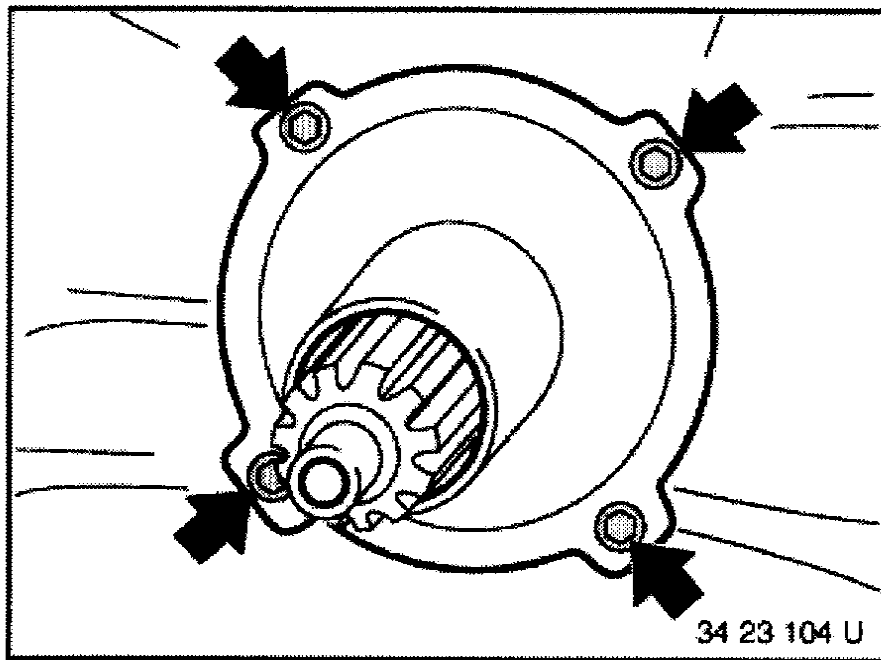


Unscrew drain plug.

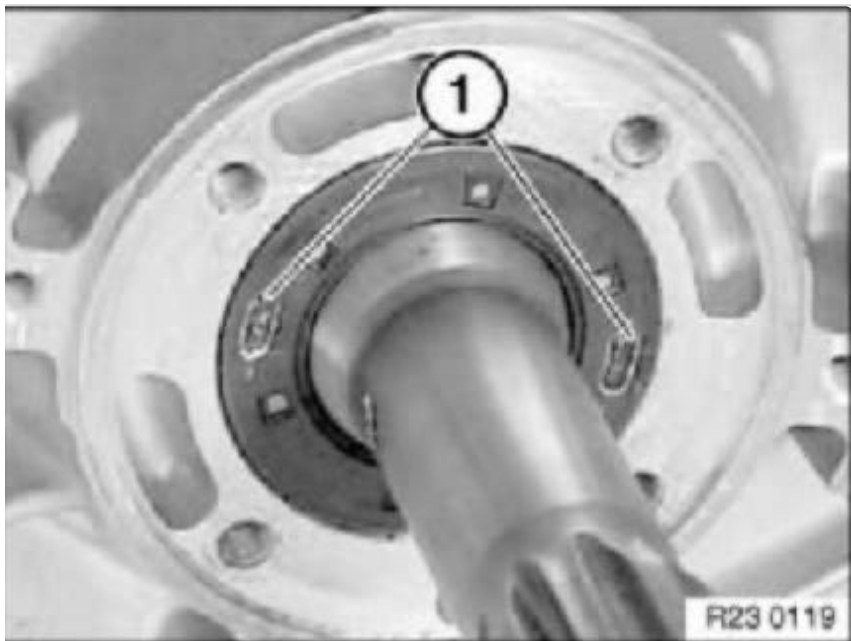
Drain oil.

Screw Special Tool 23 0 100 (transmission support) into bore of drain plug and secure.

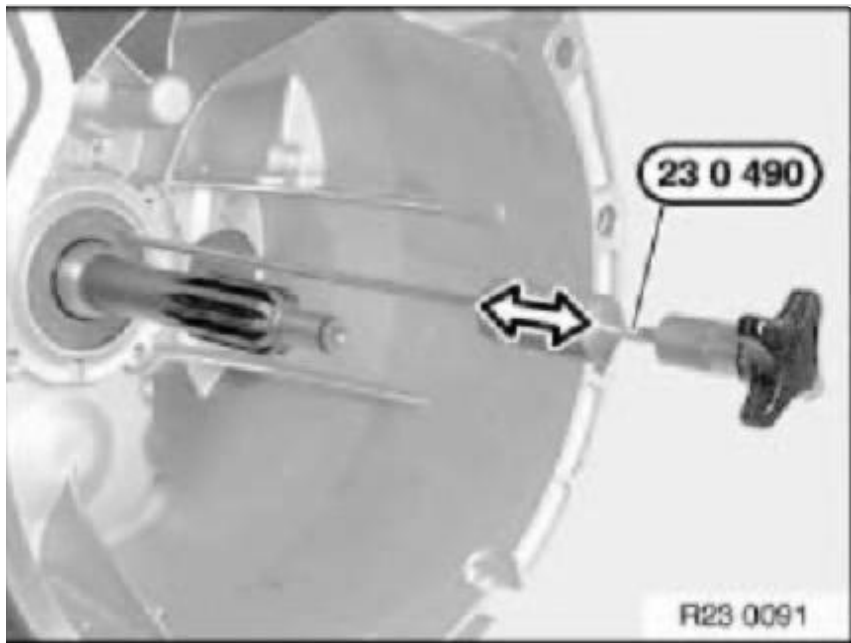
Locate Special Tool 23 0 100 (support) in Special Tool 00 1 490 (assembly frame).



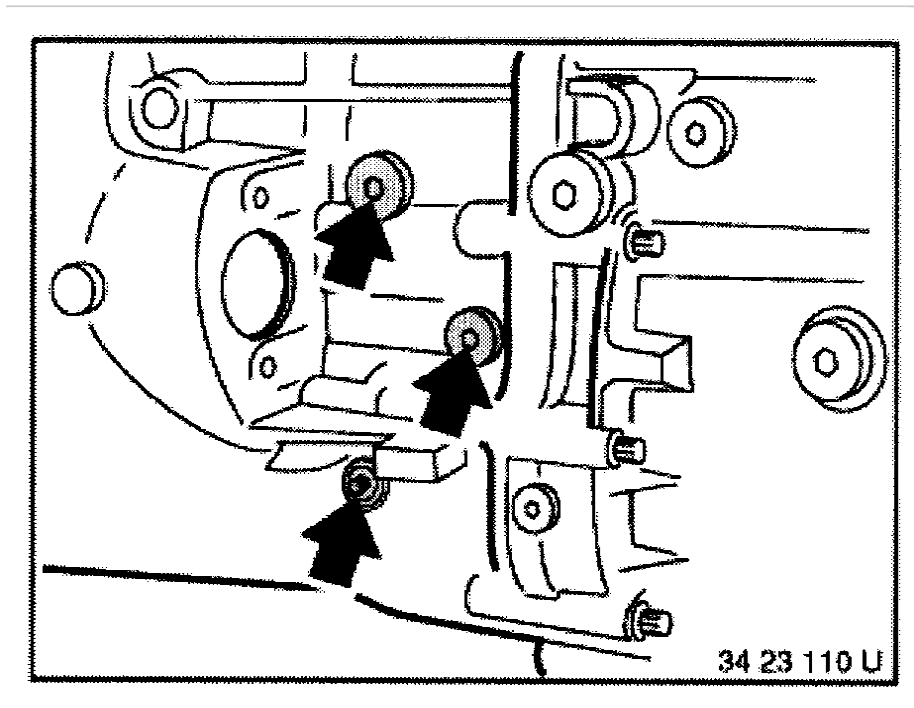
Loosen the screws and pull off the guide pipe.



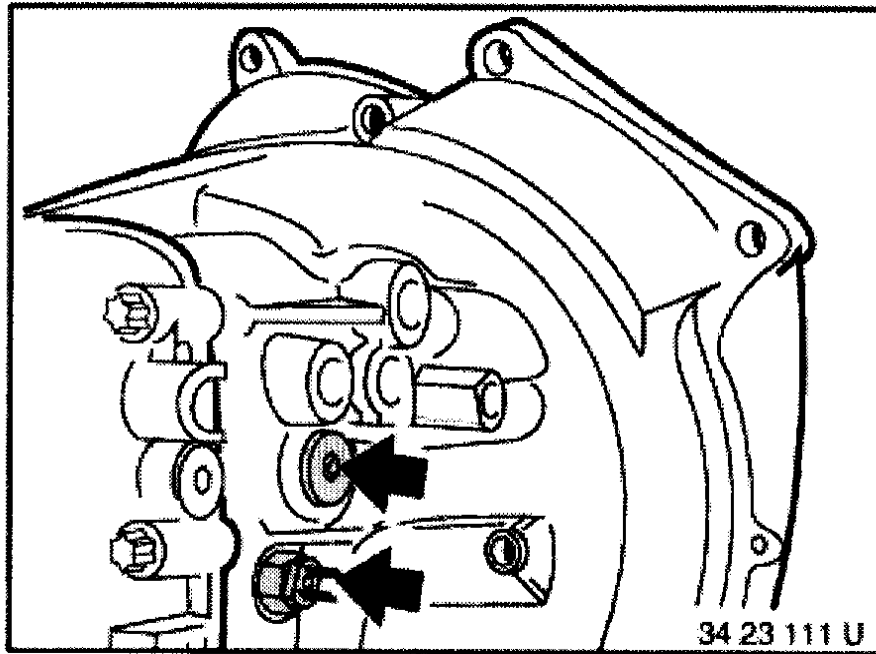
Note: Two covered removal holes (1) are located on end face of radial seal.



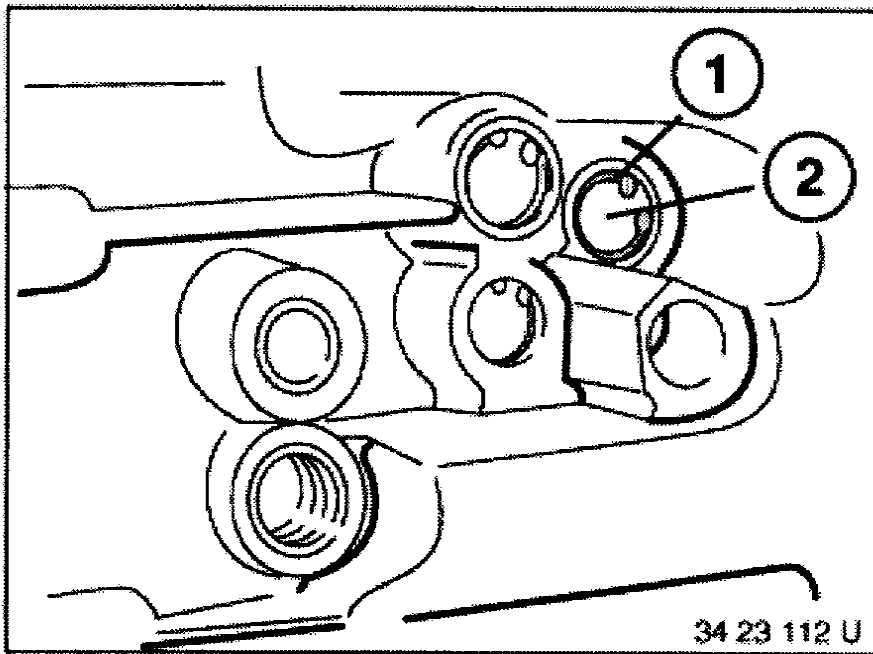
Screw special tool 23 0 490 into one of the two removal holes.
Pull out radial seal from transmission housing with the aid of impact weight.



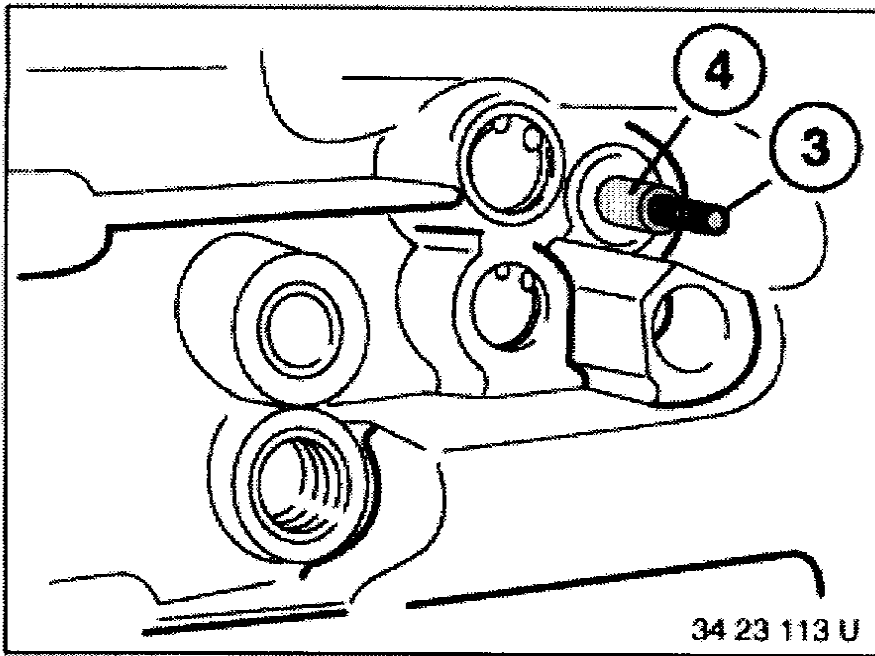
Remove left bearing pin and screw for reverse gear pin in front housing section.



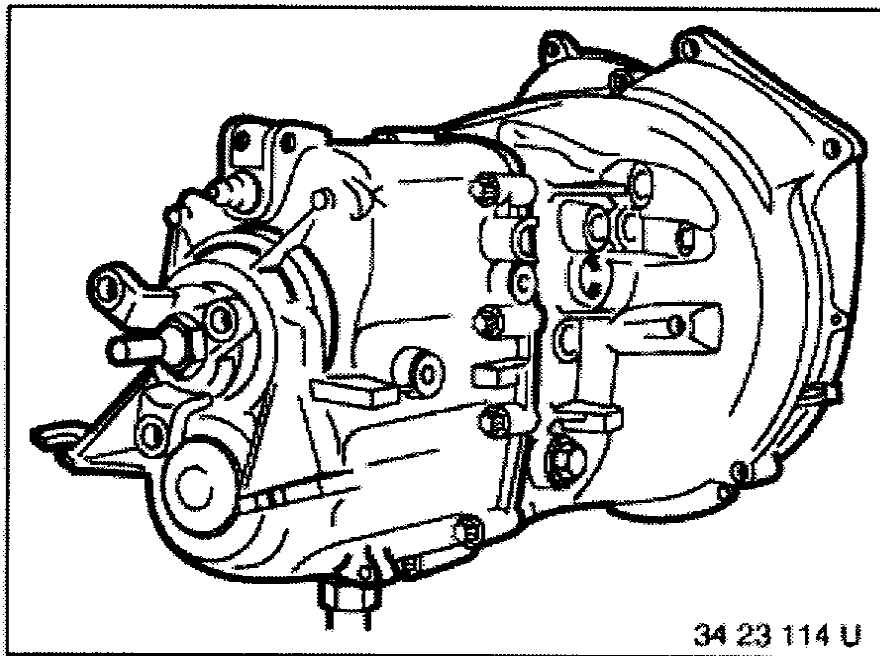
Remove reverse gear switch and right bearing pin in front housing section.



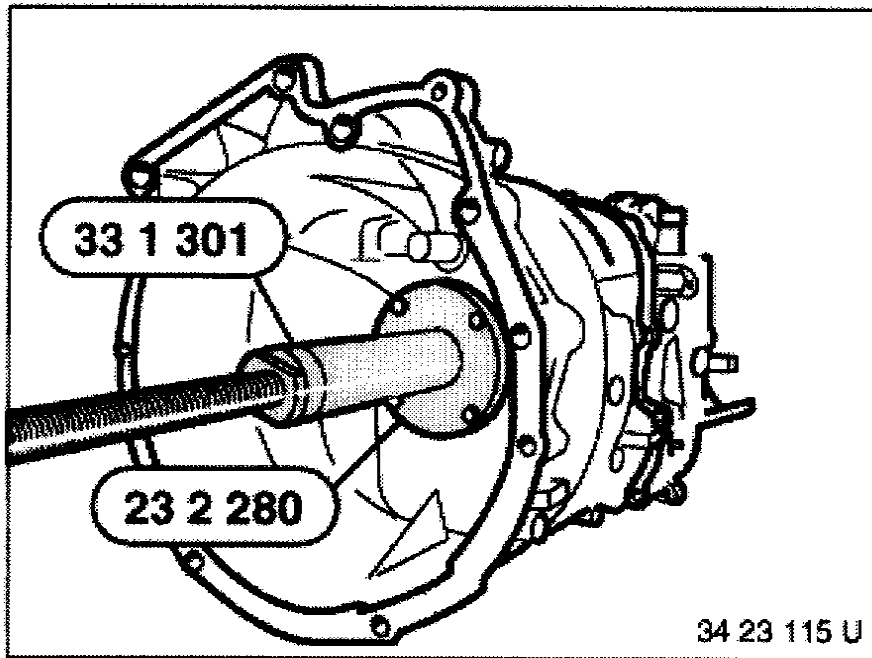
Lever out retaining ring (1).
Remove sealing cover (2).



Remove pressure spring (3) and catch pin (4).



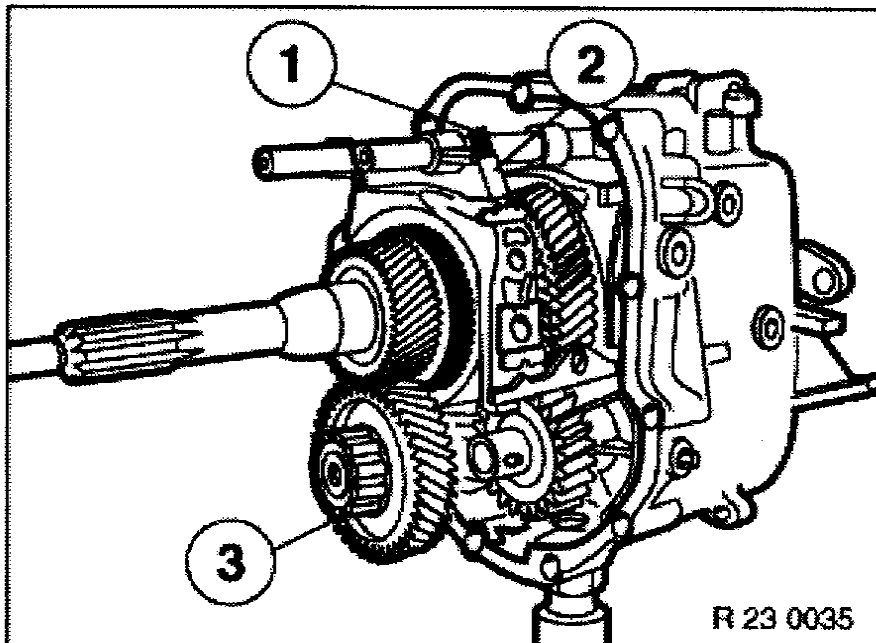
Unscrew case bolts.



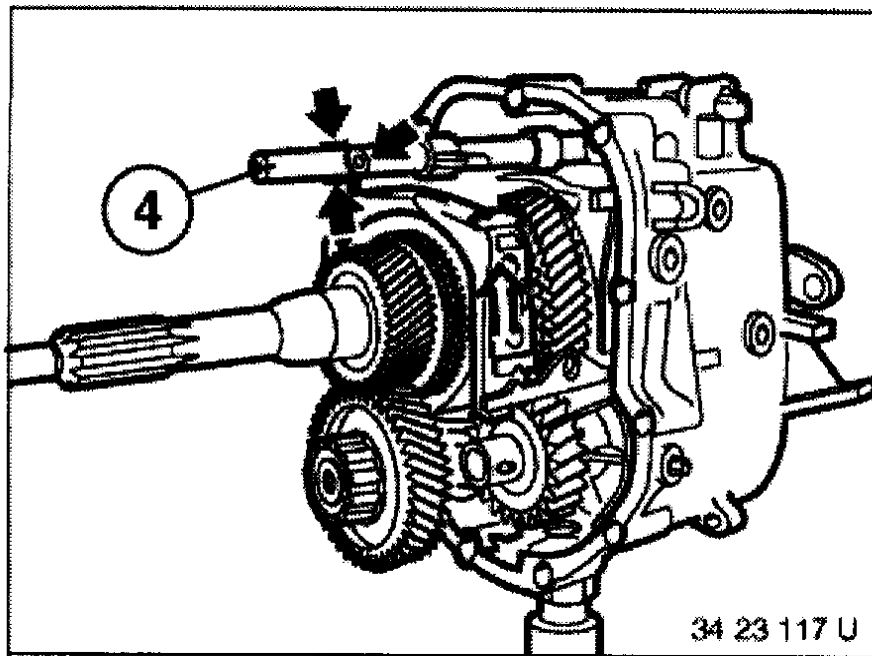
Pull off front case section using Special Tools 23 2 280 and 331 301.

Caution:

Bearings or elements of the bearing brackets could be damaged while pulling off the front case section. Always replace bearings or elements after removal.



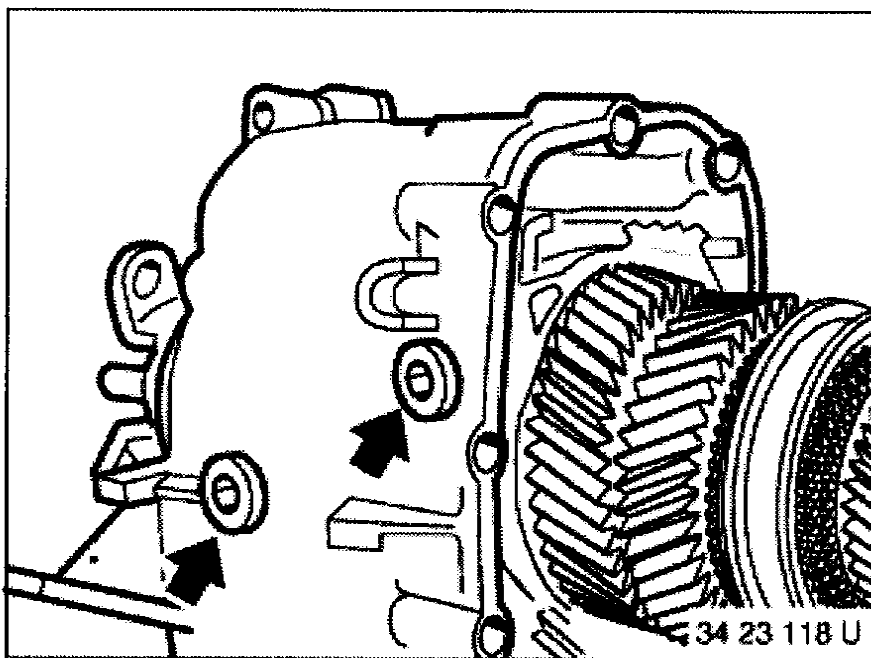
Remove loose spring (1) and thrust pin (2).
Take off needle bearing (3).



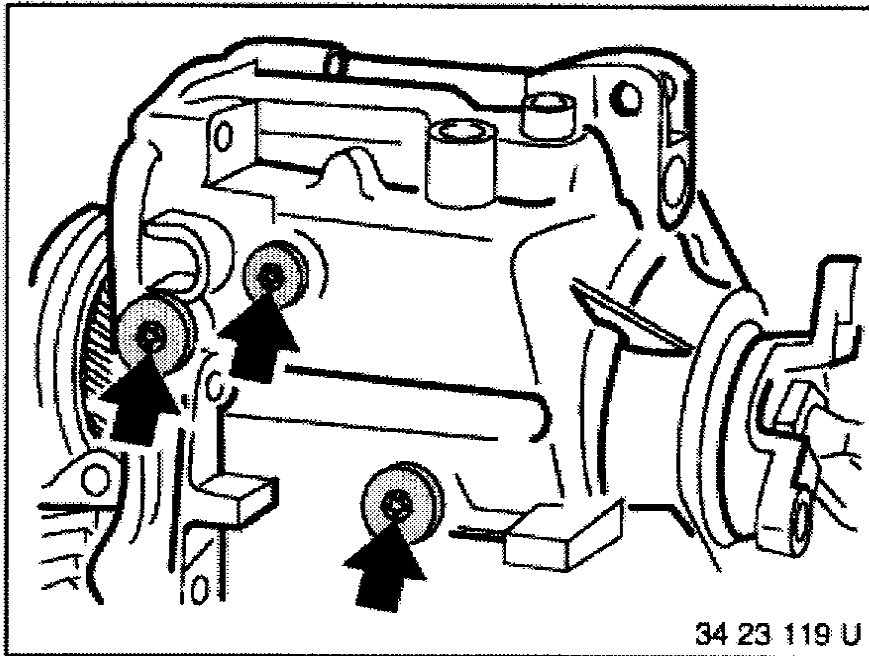
Pull out selector shaft (4).

Caution: Needles on selector shaft.

Take off 5th/reverse gear shift arm upwards.

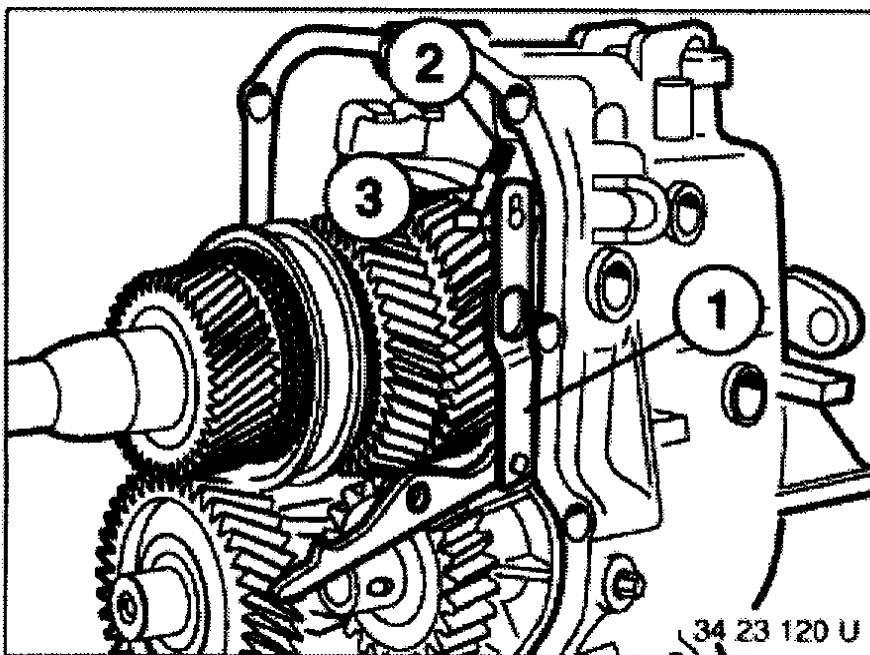


Remove 2 right bearing pins.

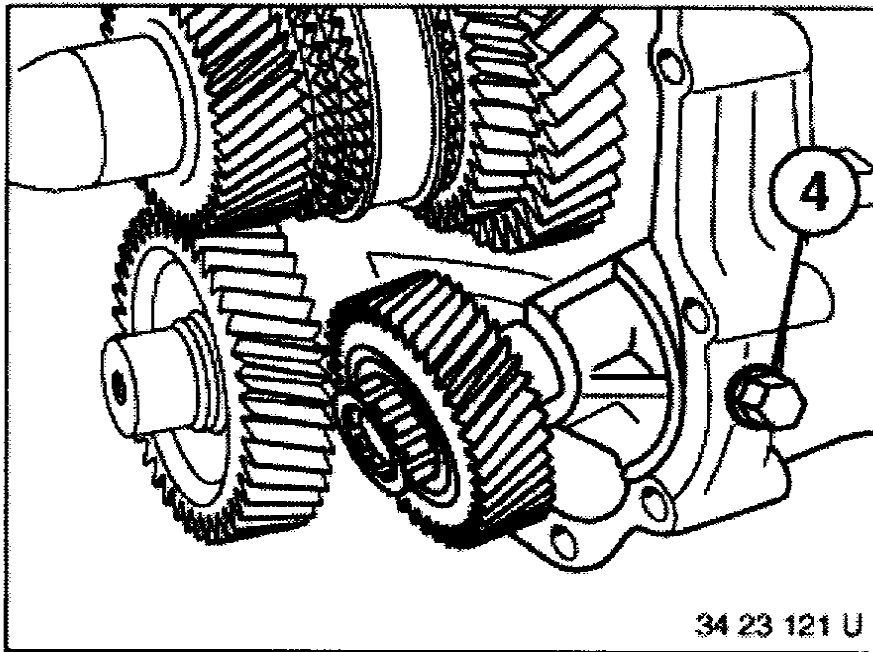


Remove 3 left bearing pins.

Note: Bearing pins must be replaced.

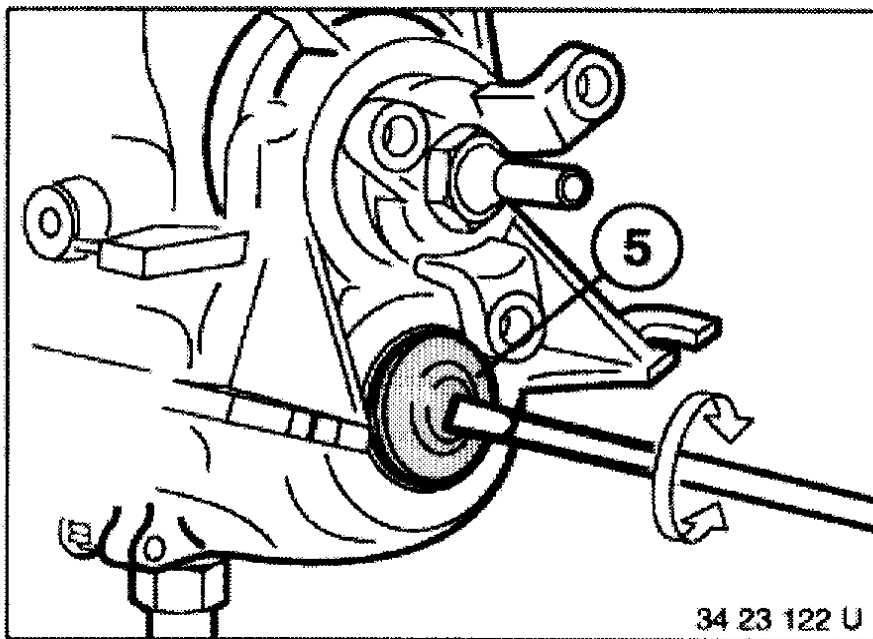


Remove locking lever (1) completely.
Remove spring (2) and thrust pin (3).



Remove screw (4).

Remove reverse gear with needle bearings, thrust washer pin and half-shell.

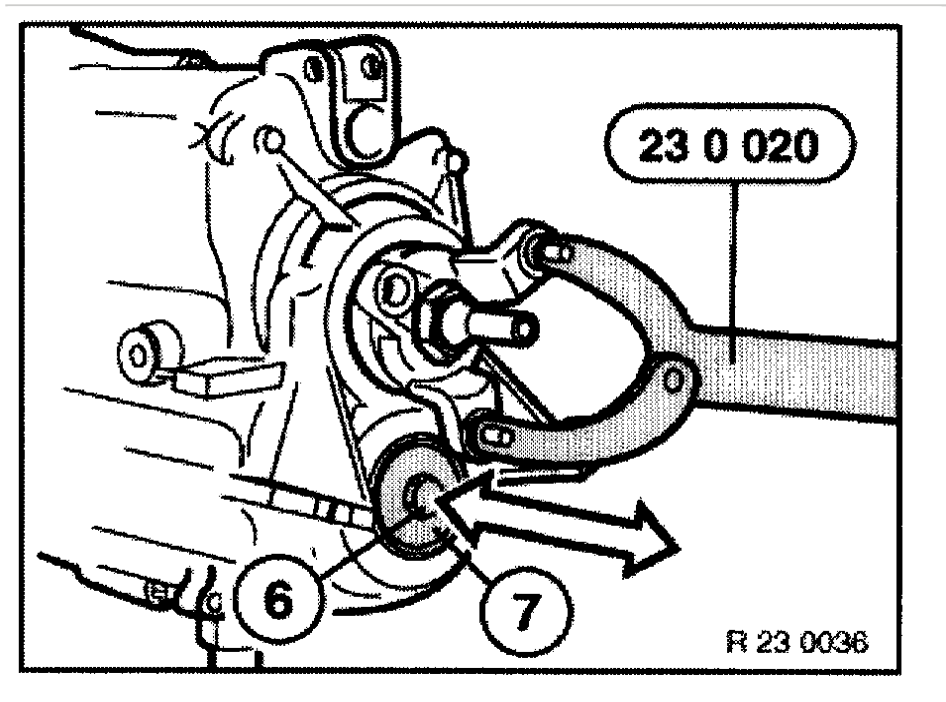


Pierce sealing cover (5) on side.

Lever out sealing cover (5) with a screwdriver inserted into the hole.

Installation:

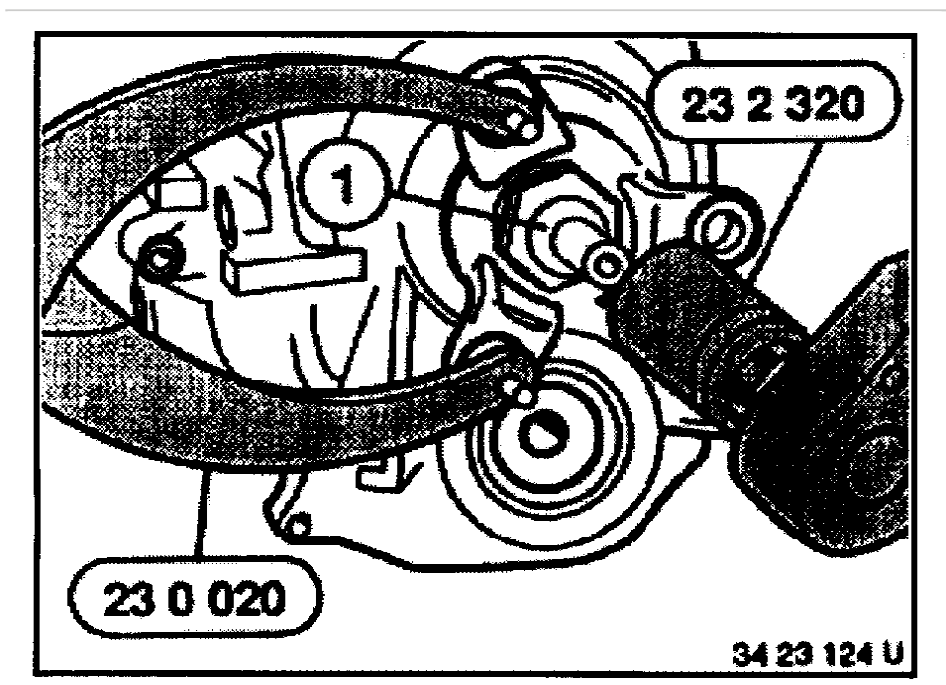
Replace sealing cover.



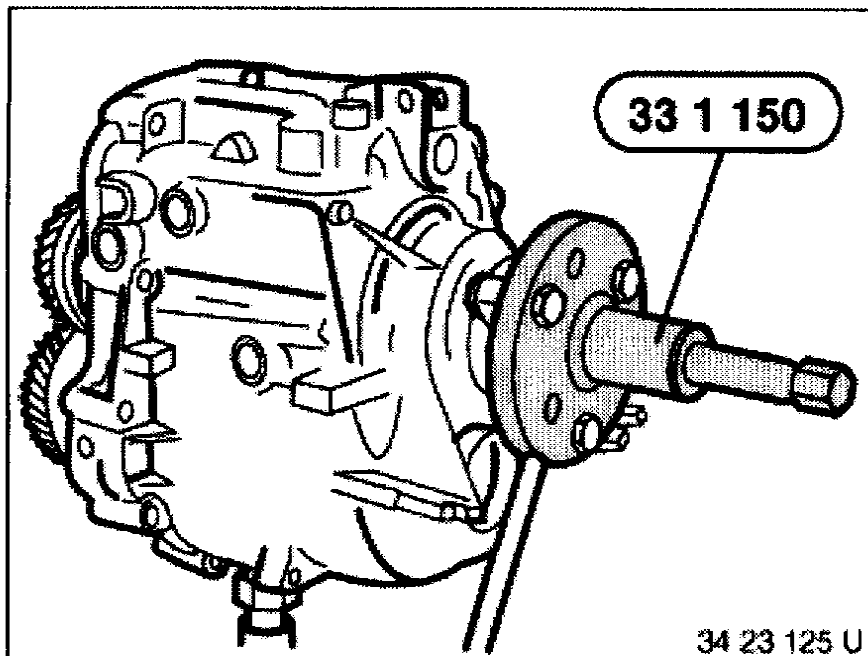
Engage a gear by hand.
 Grip output flange using Special Tool 23 0 020.
 Unscrew bolt (6).

Caution: Left-hand threads.

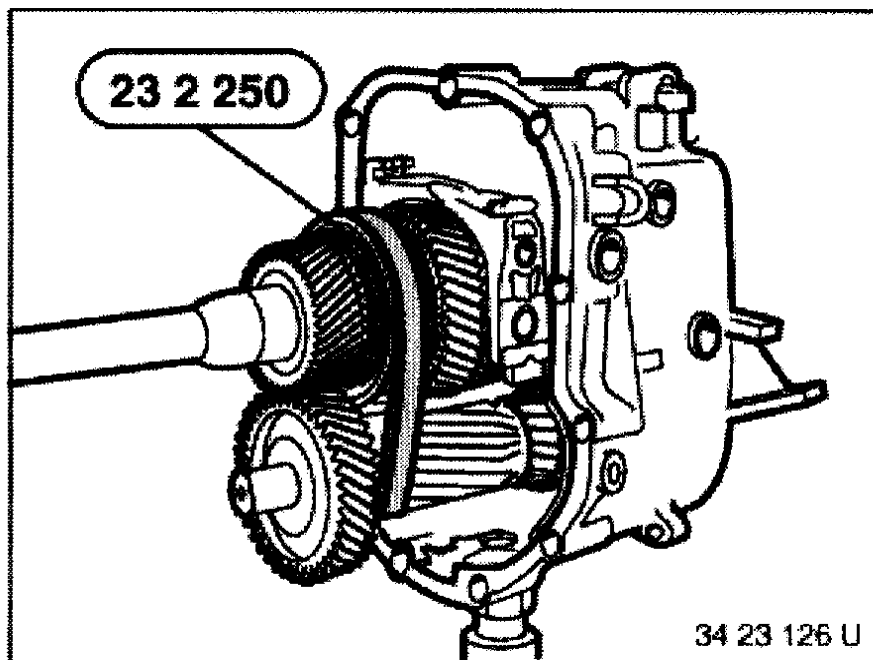
Take off washer (7).
 Take out engaged gear.



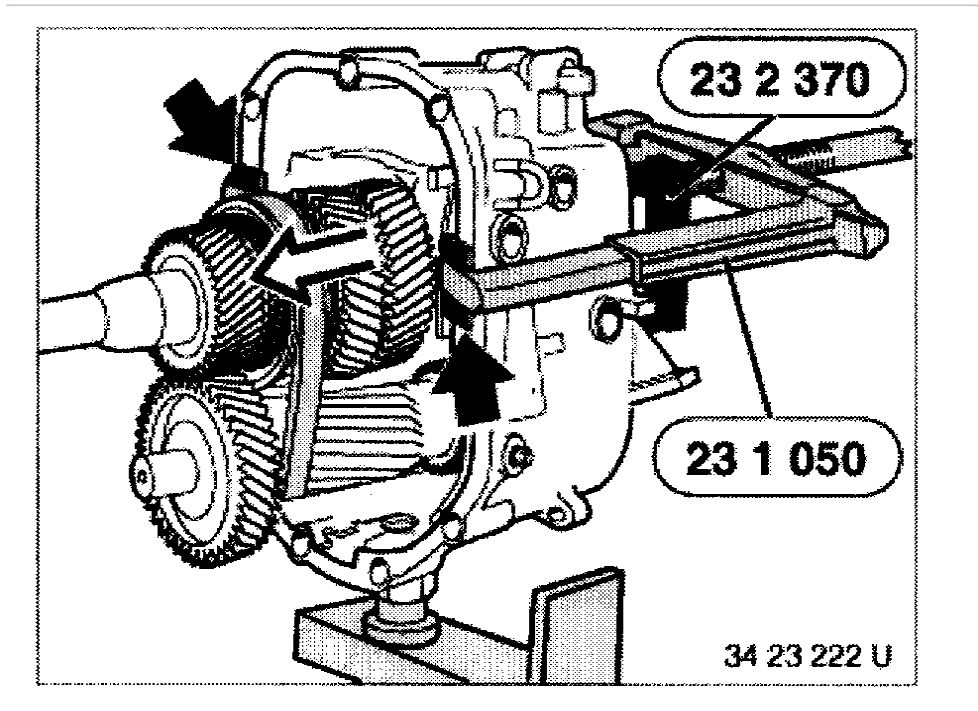
Block output flange using Special Tool 23 0 020.
Unscrew collar nut (1) with Special Tool 23 2 320.



Pull out output flange using Special Tool 33 1 150.



Compress gear set at 5th/reverse gear operating sleeve with countershaft with Special Tool 23 2 250.



Attach Special Tool 23 2 370 on output shaft and countershaft.

Attach Special Tool 23 1 050 to housing sealing surface and center of Special Tool 23 2 370.

Caution: Use a piece of wood, plastic or similar on the sealing surfaces.

Press out gear train and countershaft uniformly.

Make sure that the gear train and countershaft do not jam while pressing out.

Installation:

The bearings or elements of the bearing brackets could be damaged while pressing out the drive and output shafts. Always replace bearings or elements after removal.