

33 10 016 Removing and installing (replacing) rear axle differential



Special tools required:

- [33 5 206](#)
- [33 5 200](#)
- [33 5 120](#)
- [2 360 787](#)
- [2 240 465](#)
- [0 496 862](#)
- [33 5 124](#)
- [33 5 122](#)
- [2 360 944](#)
- [2 240 464](#)
- [2 406 774](#)
- [33 5 125](#)



Warning!

Rear axle differential must be lashed with tensioning strap [33 5 206](#) to prevent it from falling out when the output shafts are pressed off.



Attention!

When reinstalling the current rear axle differential, [both radial shaft seals of the output shafts](#) must be replaced!

The circlips on both output shafts must be replaced!

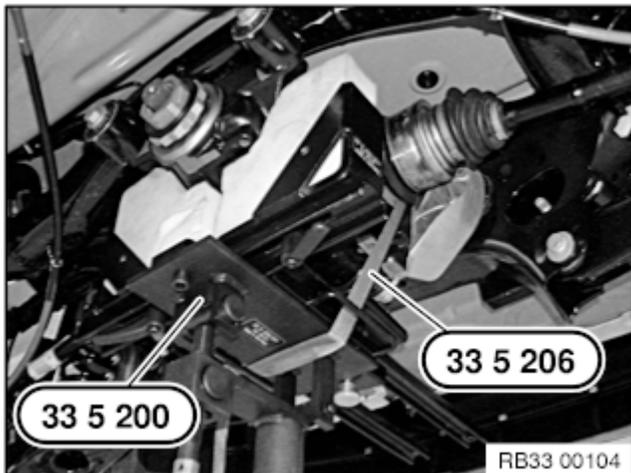


Necessary preliminary tasks:

- Remove [vibration absorber](#) at screw connection of rear of rear axle differential.
- If necessary, remove rear [tension struts](#).
- Remove [propeller shaft from rear axle differential](#).
 - Disconnect propeller shaft at rear axle differential.
 - 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!



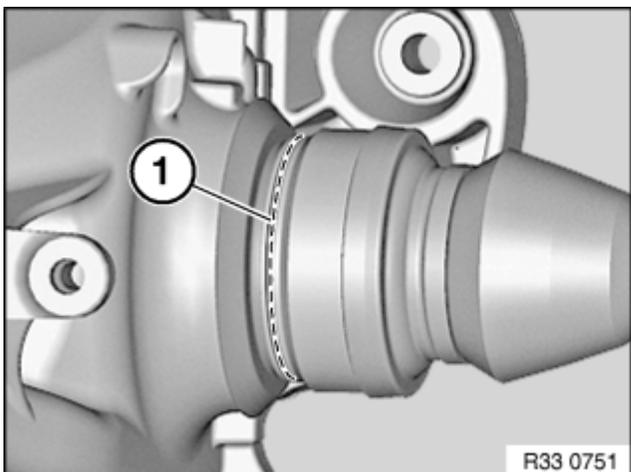
Place the special tool [33 5 200](#) onto the universal jack .

Support rear axle final drive [33 5 200](#) with special tool .

Lash rear axle final drive unit to special tool [33 5 200](#) with tightening strap [33 5 206](#) .

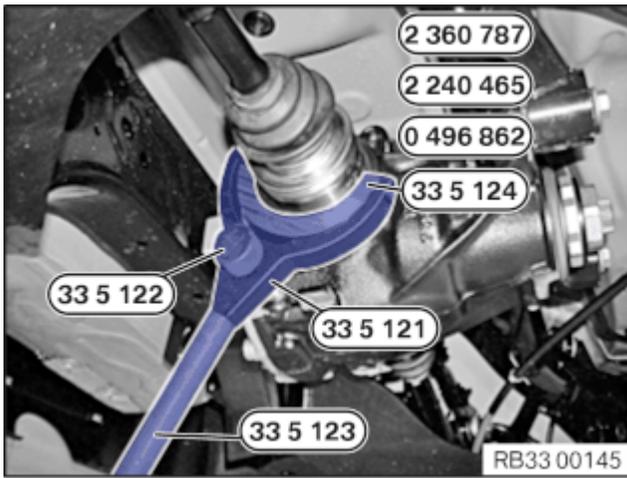
Attention!

Securing strap [33 5 206](#) must be passed through between output shafts and rear axle final drive cover.



Attention!

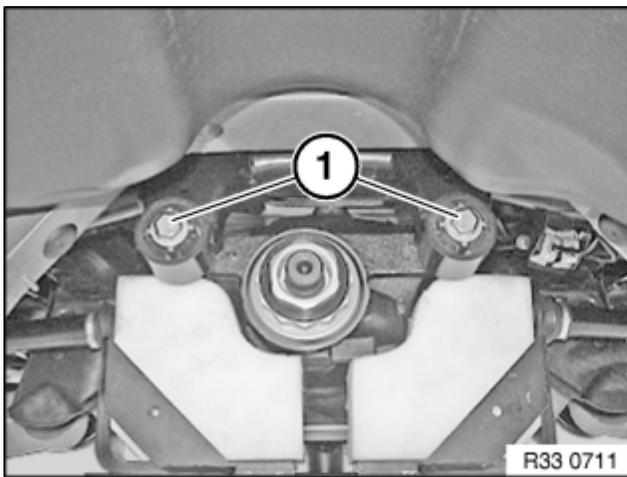
The following special tool must be inserted into the slot (1) of the output shaft on all sides.



Left output shaft only:

Press output shaft out of the rear axle differential with an abrupt movement using the set of special tools [33 5 120](#) and the appropriate special tool [2 360 787](#) , [2 240 465](#) , [0 496 862](#) or [33 5 124](#) .

The thrust piece of the screw [33 5 122](#) must be in contact with the rear axle differential.

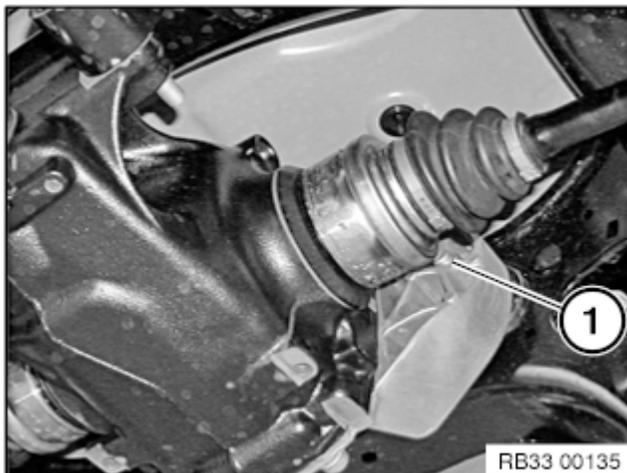


Release screws (1).

Tightening torque [33 17 1AZ](#)

Installation note:

Adhere to the assembly sequence at the end of the document in order to prevent distortion of the rear axle differential during installation and thereby avoid potential complaints about noise.



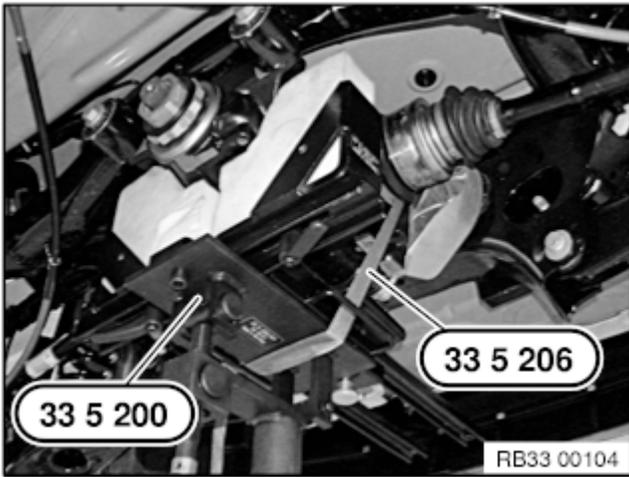
Release nut (1) and push screw towards rear to the limit position.

Tightening torque [33 17 2AZ](#).

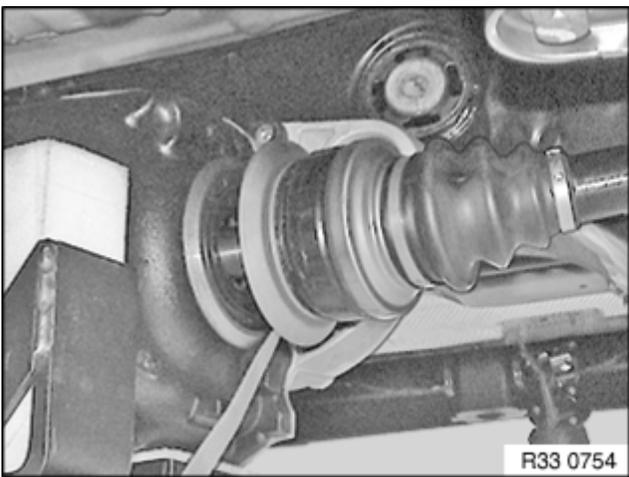
Installation note:

Renew nut.

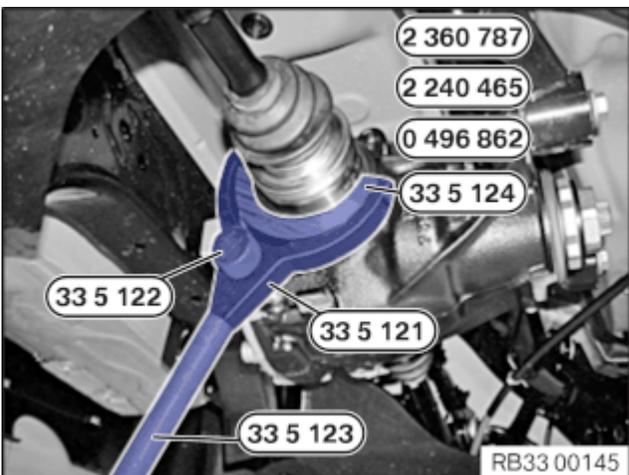
Adhere to the assembly sequence at the end of the document in order to prevent distortion of the rear axle differential during installation and thereby avoid potential complaints about noise.



Lower rear axle final drive with special tool [33 5 200](#).



Press (tilt) rear axle final drive on right upwards.
Feed out left output shaft in downward direction and tie up.
Swing rear axle final drive towards left side.



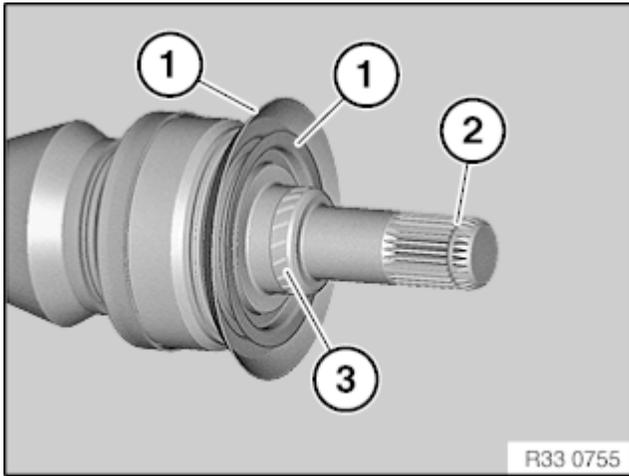
Right output shaft:

Press output shaft out of the rear axle differential with an abrupt movement using the set of special tools [33 5 120](#) and the appropriate special tool [2 360 787](#) , [2 240 465](#) , [0 496 862](#) or [33 5 124](#) .

The thrust piece of the screw [33 5 122](#) must be in contact with the rear axle differential.

Feed out output shaft and tie up.

Remove rear axle final drive.



Attention!

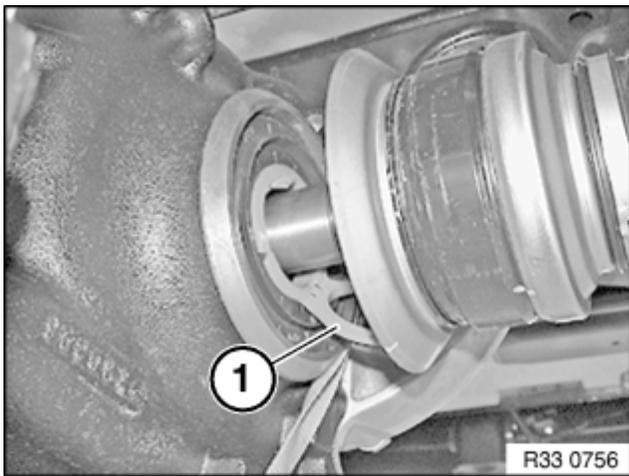
High installation forces indicate that the output shaft spline teeth are damaged or deformed!

Check gearing and replace components if damaged.

Check dust plate (1) for damage, renew if necessary.

Circlip (2) must be renewed!

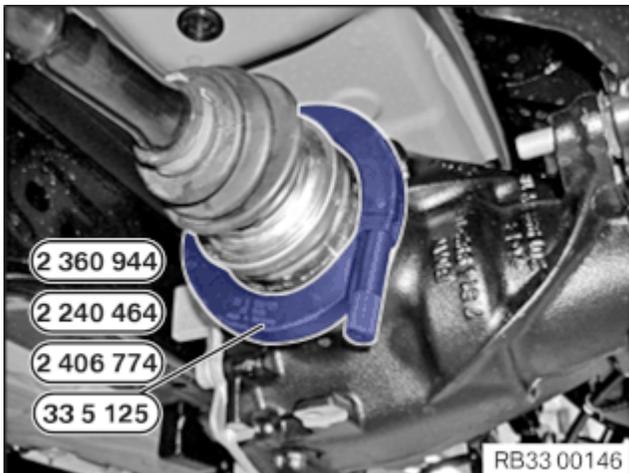
Coat highlighted contact surface (3) of output shaft with [approved final drive oil](#).



Installation note:

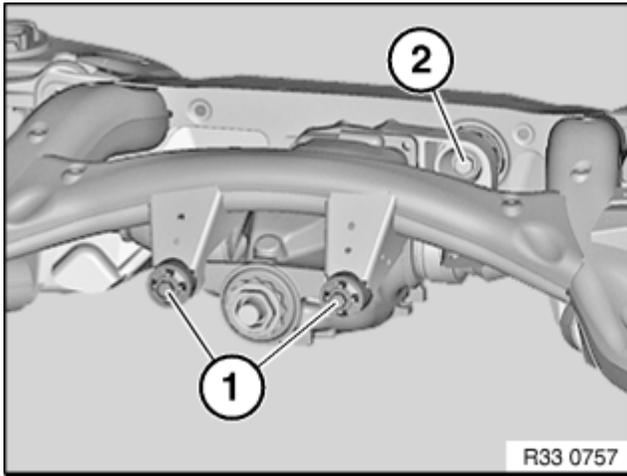
Insert output shaft into rear axle differential.

Pull out assembly protection ring at lug (1) until one of the two predetermined breaking points gives.



Drive in output shafts into the rear axle differential using the appropriate special tool [2 360 944](#) , [2 240 464](#) , [2 406 774](#) or [33 5 125](#) and a rubber mallet.

Installation note:
The output shafts must audibly snap in place on the rear axle differential.



Assembly sequence:

1. Insert the rear axle differential into the rear axle support using the workshop jack and special tool [33 5 200](#) .
2. Insert screws (1) (do not tighten).
3. Insert bolt from rear and replace nut (2) (do not tighten down).
4. Release securing strap, lower special tool [33 5 200](#) and move it away.
5. Tighten down screws (1).
Tightening torque [33 17 1AZ](#)
6. Tighten nut (2).
Tightening torque [33 17 2AZ](#)



After installation:

- Check [oil level in the rear axle final drive](#), correct if necessary.