Replacing pilot bearing, right drive shaft

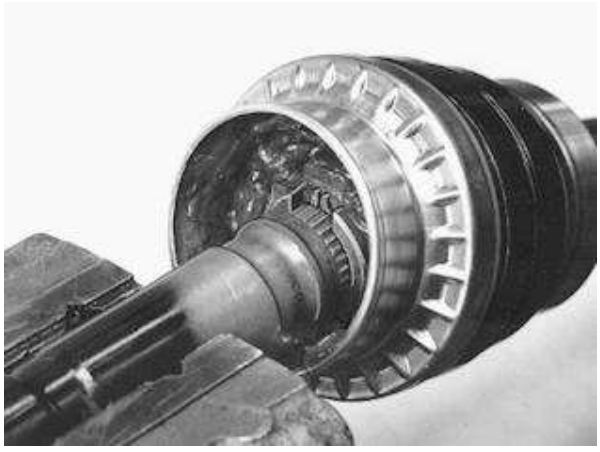
Special tools: 999 1801 , 999 2853 , 999 5118 , 999 5491 , 999 5318 , 999 5519 , 981 4215

Note! For drive shaft removal see Drive shafts, removing and to install see Drive shafts, installing . Unless otherwise stated the methods for replacing pilot bearing and cleaning the inner constant velocity joint is the same for both manual and automatic transmission cars.
The inner constant velocity joint can only be disassembled on cars with automatic transmission.

Expose the inner constant velocity joint

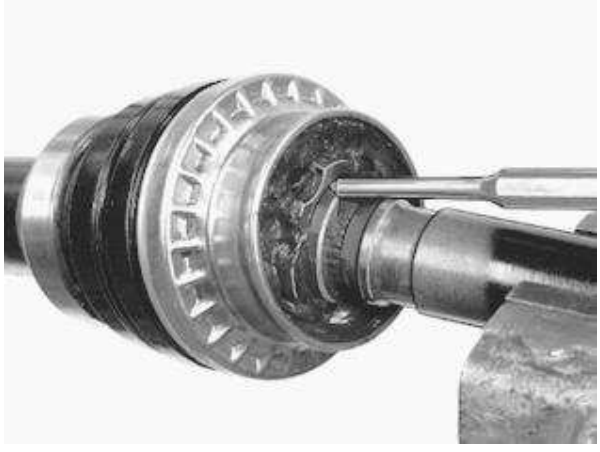
- Remove clamps from the inner boot.
- Pull off the inner boot from the inner constant velocity joint.

Wipe grease off constant velocity joint



Secure the drive shaft in a vise so that the circlip cut-out is upmost.
Position a drift, shaped according to section Adapting a drift between the circlip eyes.

Remove constant velocity joint from drive shaft



- Open the circlip so it disengages from the locking groove.
- Tap out the inner ring onto the shaft a few millmeters, so that the circlip will stay open.
- Use a **brass drift** to tap out the inner constant velocity joint.

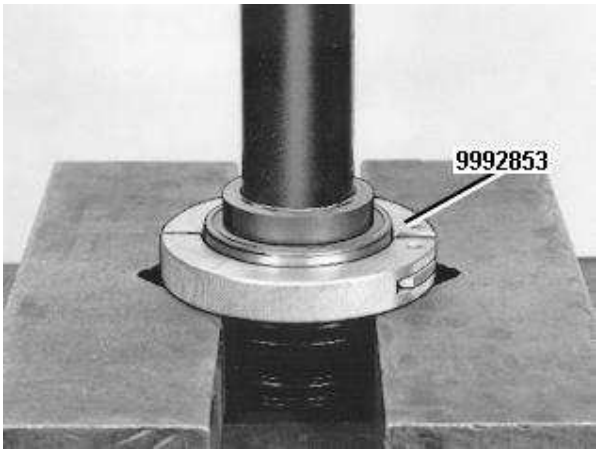
Caution! Only tap the inner ring so as not to damage the ball housing or outer ring.

Clean CV constant velocity joint thoroughly

The constant velocity joint must be cleaned assembled as it cannot be disassembled.

Press off circlip and pilot bearing from shaft

- Use tool 999 2853 . Support tool and shaft as illustrated.



Install new bearing and new circlip

Use tool 999 5491 as a support on circlip side.
Position handle 999 1801 at base of constant velocity joint and press on pilot bearing and circlip.
Check that pilot bearing is fully home to its contact surfaces.

Install new circlip in constant velocity joint

Grease constant velocity joint. See Drive shafts, installing .
Check that boot is undamaged; alternatively install new boot on the outer shaft.

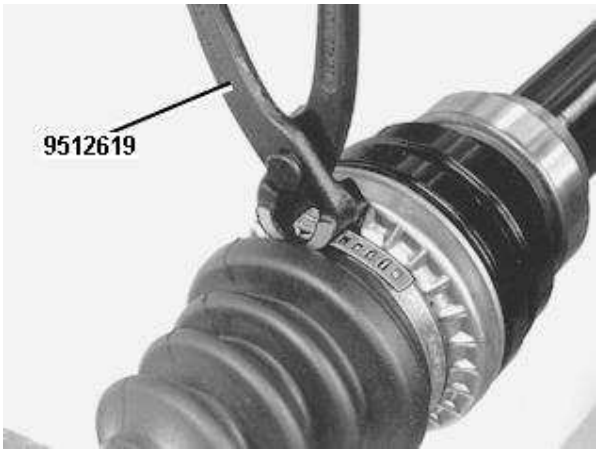
Assembly of inner and outer drive shafts:

Mount the outer drive shaft in a vise

- Ensure that inner ring is square in the constant velocity joint.

Tap on shaft to joint

- Check the circlip has seated in its groove.



Insert the rest of the grease into the constant velocity joint

Caution! Make sure that there is no grease on the mating surface of the boot on the sides facing the constant velocity joint and the shaft.

- Clean off excess grease with denatured alcohol.

Pull boot on to the constant velocity joint and ensure it is correctly positioned on the drive shaft.

Install new clamps

- Use pliers **981 4215** .

Note! Installing drive shafts **Drive shafts, installing**