Constant velocity joints, inner

Special tools: <u>951 2619</u>

Note! For removing drive shafts Removing drive shafts. The method is the same for the left and right drive shaft.

Expose outer constant velocity joint

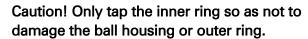
- Remove clamps from boot.
- Pull off boot from constant velocity joint.
- Wipe grease off constant velocity joint.
- Secure the drive shaft in a vise so that the circlip cut-out is upmost.

Adapt a drift according to Adapting a drift.



Remove constant velocity joint from the shaft

- Open circlip so it is free of the groove and position a drift, as above, between the eyes of the circlip.
- Tap out the inner ring onto the shaft a little, so that the circlip will stay open.
- Use a brass drift and tap out the constant velocity joint.



- Remove circlip from CVJ.



- Pull off boot(s) from drive shaft.

Cleaning the inner constant velocity joints

Note! All inner constant velocity joints (manual and automatics) must be washed while assembled and blown clean with compressed air before greasing.

Use grease according to Oil, grease etc

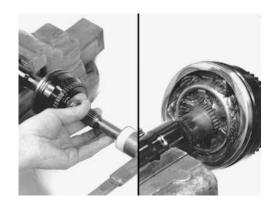


Install the new boots on the drive shaft

- Secure drive shaft in a vise.

Install constant velocity joint on drive shaft

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





Tap on constant velocity joint with a plastic mallet

- Check the circlip has seated in its groove.

Install boots

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 boots on to the constant velocity joints and ensure they are correctly positioned on the drive shaft.

Install new clamps

- Use pliers <u>951 2619</u>.

Note! Installing drive shafts <u>Installing drive</u> shafts. The method is the same for the left and right drive shaft.

Drive shafts, installing

Special tools: 999 5461, 999 5540, 951 2050

Note! Unless otherwise stated the method is the same for left and right drive shafts. Preparations: Check that the ABS sensor and pulse wheel are clean.

Install the drive shaft into the transmission

Caution! Take care not to damage driveshaft seal or bellows (gaiter).

Right drive shaft

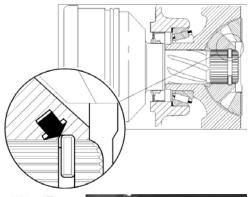
- Replace bearing cap. Tighten to **25 Nm**.
- Install cover under engine. (Earlier models only.)



Left drive shaft

Check that ABS sensor gearwheel on driveshaft is free of dirt.

Push driveshaft in correctly so its circlip engages with differential slot. Check by carefully pulling on drive shaft inner joint.



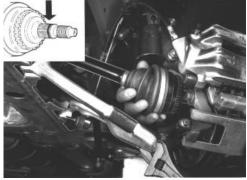
Reinstall drive shaft in hub.

Note! Apply metal adhesive, P/N 1161370-0, to the drive shaft splines as shown.

Twist MacPherson strut clear and insert driveshaft in hub. Use a socket wrench to hold suspension arm down.

Install a new driveshaft nut (hand-tight only).

Note! Grease nut threads and flange.



Install:

- Suspension arm to ball joint. Use new nuts.

Note! Check that ball-joint seating in suspension arm is clean and free of grease.

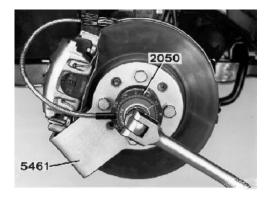
Tighten from inside and out to $18 \text{ Nm} + 120^{\circ}$., use a protractor 951 2050.

Apply rustproofing agent to area between ball joint, suspension arm and nuts correctly and precisely. Use rustproofing agent P/N.



1161432-8.

- Link arm to anti-roll bar with new nuts, tighten to 50 Nm (37 ft. lb.).



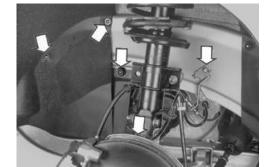
Tighten drive shaft nut

Use counterhold 999 5461 (4 x wheel studs) or. 999 5540 (5 wheel studs) and protractor 951 2050 and tighten to 120 Nm +60°.

Remove the counterhold.

Lock the drive shaft nut

Use a cold chisel and chase the lock flange on the nut into the drive shaft groove.



Install:

- Brackt for the brake line/ABS cable.

Note! Check ABS sensor seat is absolutely clean

- Clean the ABS sensor first using a soft brush. Then install it to the stub axle and tighten to 10 Nm.

Reinstall the front wheel

Ensure that the brake disk and wheel rim mating surfaces are clean. Grease hub center locating pin in front of pad using rustproofing agent 1161038-3. Fit bolts but do not tighten. Tighten diagonallay to 110 Nm. When tightening with socket wrench, use

torque sleeve 1158147-7.

