

Constant Velocity Joint Boot: Service and Repair With AW55-50/51SN Transmission

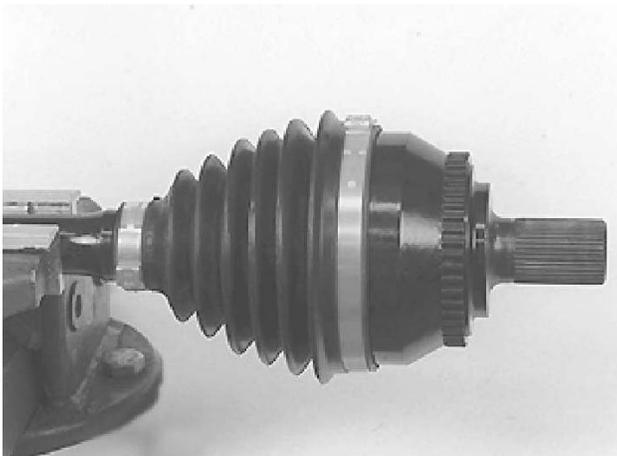
Boot, half shaft, replacing

Special tools: 951 2619, 999 2412

Disassembly

Note: Preparatory work, see Axle Shaft Assembly; Service and Repair.

Remove the boot

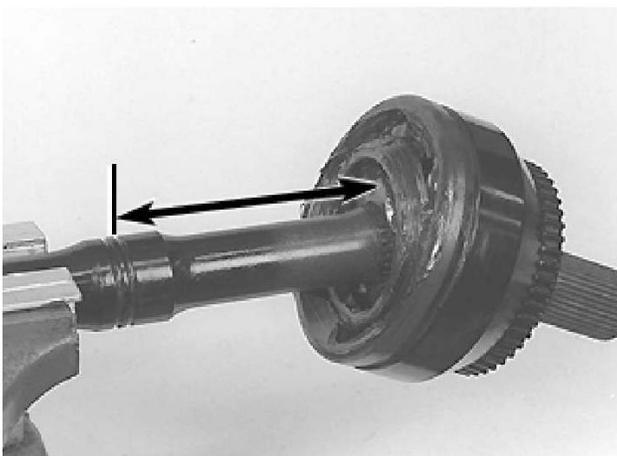


Secure the drive shaft in a vise with soft jaws.
Remove the clamps from the boots.
Cut the boot and remove it from the shaft.

Check the measurement

Wipe off the grease from the constant velocity joint housing.
Measure the distance from the inner ring to the inner groove on the shaft. Note the measurement.

Tap off the constant velocity joint housing



Use a brass drift.

Note: Only tap the inner ring. Take care not to damage the ball holder or outer ring.

For cleaning/assembly and greasing the outer joint, see below



Note: The joint can be cleaned when assembled and blown clean before greasing. For disassembly and inspection, see Mark the outer constant velocity joint outer ring, ball holder and inner ring, Remove the ball bearings, Remove the ball bearing holder and the inner ring from the shaft. Wash the constant velocity joint components thoroughly and install the inner ring in the ball holder. For greasing see Lubricate the constant velocity joint thoroughly. To install the boot and joint, see Replace the snap ring, Install the new boot/boots on the drive shaft, Apply grease in the boot and Vent the boot.

Replacing the inner boot: Remove the clamps from the inner boot

Cut the boot and remove it from the shaft.

Note: The inner constant velocity joint can be cleaned while assembled and blown clean. For greasing see Lubricate the constant velocity joint thoroughly. Install the boot on the shaft. Carry out Apply grease in the boot, Vent the boot

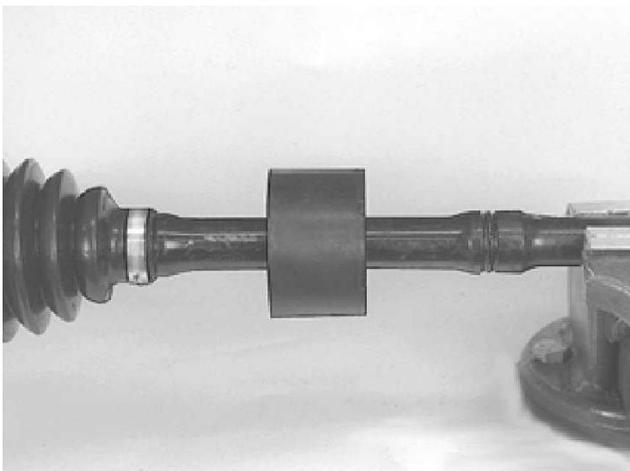
Only drive shafts with vibration damper:



Measure and note the vibration damper location on the shaft.

Note: When replacing the inner boot on a left drive shaft with the vibration damper installed (only applies to cars with automatic transmissions), the damper must be removed and installed.

Brush the drive shaft thoroughly with soapy water



Position the drive shaft on a support in a workshop press. Carefully press out the vibration damper from the drive shaft. Clean the assembled constant velocity joint and blow clean. Grease the joint See Lubricate the constant velocity joint thoroughly Install the boot on the shaft. Carry out operations Apply grease in the boot and Vent the boot

Position the shaft in a vise

Ensure that the shaft is absolutely free of grease.

Brush the shaft and the hole in the vibration damper with soapy water.

Use drift 999 2412. Tap the vibration damper on.

Dry the soapy water off the shaft. Adjust the damper to the measurement noted previously.



See Only drive shafts with vibration damper:

Cleaning/checking the outer constant velocity joint

Mark the outer constant velocity joint outer ring, ball holder and inner ring



Mark components in relation to each other.

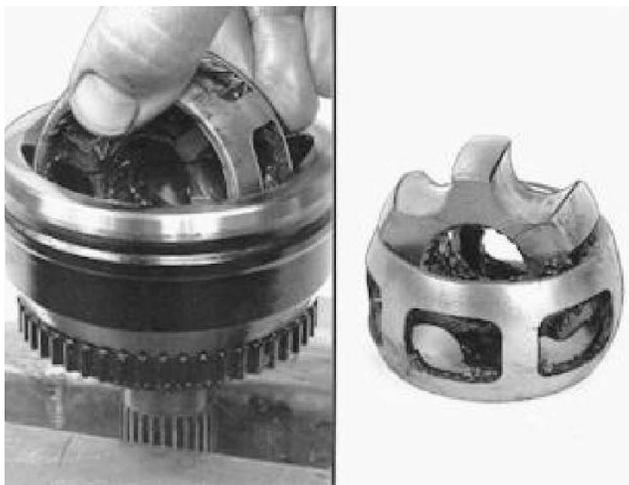
Use an electric scriber.

Remove the ball bearings

Turn the inner joint ring and ball holder. Remove the ball bearings clockwise one by one.

Use the marking as the starting point when removing. See Mark the outer constant velocity joint outer ring, ball holder and inner ring
Place the ball bearings in order so that they can be reinstalled in the same positions.

Remove the ball bearing holder end the inner ring from the shaft



Turn the inner ring **90°** in relation to the ball holder.

Remove the inner ring.

Wash the constant velocity joint components thoroughly



Note: Replace the drive shaft assembly if any component has cracking or wear damage. Scratches and minor pitting of the ball tracks are permitted.

Install the inner ring in the ball holder

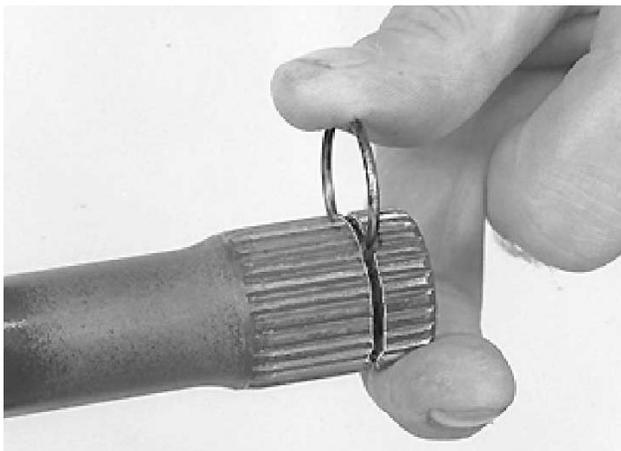


Locate the markings to each other. Install a ball bearing.

Note: The location of the ball bearings.

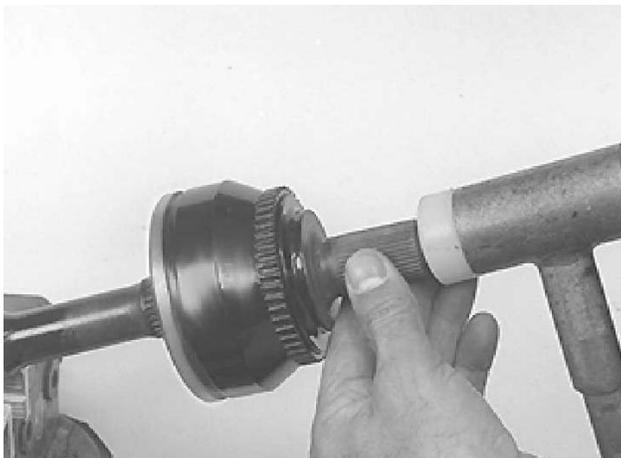
Turn the inner ring and the ball bearing holder.
Install the balls one by one in the same positions as before.

Lubricate the constant velocity joint thoroughly



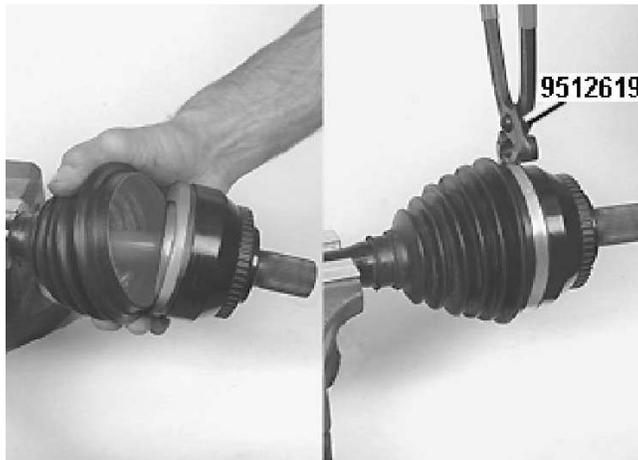
Apply grease behind the joint via the shaft hole in the inner ring.
Use half of the grease packet. The remainder will be used later in the boot. See Apply grease in the boot

Replace the snap ring

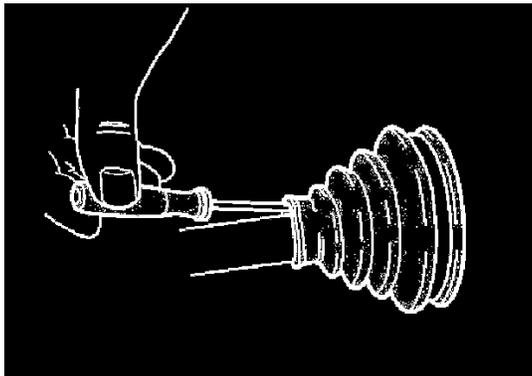


Install the new snap ring included in the boot kit.

Reassembly

Install the new boot/boots on the drive shaft Install the constant velocity joint on the drive shaft

Ensure that inner ring is straight in the constant velocity joint.
Tap on the constant velocity joint. Use a rubber mallet.
Check that the snap ring is seated in its groove.
Do this by measuring the distance.

Apply grease in the boot

Apply the remaining grease from Lubricate the constant velocity joint thoroughly.

Note: Ensure that there is no grease on the mating surfaces between the boot and the constant velocity joint and the shaft.

Remove excess grease. Use denatured alcohol.
Ensure that the boot is in position on the constant velocity joint housing.
Install a new clamp. Use pliers 951 2619.

Vent the boot

Venting is carried out to remove any over pressure in the boot. Use a rounded screwdriver.
Carefully insert the screwdriver between the drive shaft and boot. Ensure that the boot is in position on the drive shaft.
Ensure that the boot is aligned against the inner rib on the drive shaft.
Install a new clamp. Use pliers 951 2619.

Install the drive shafts