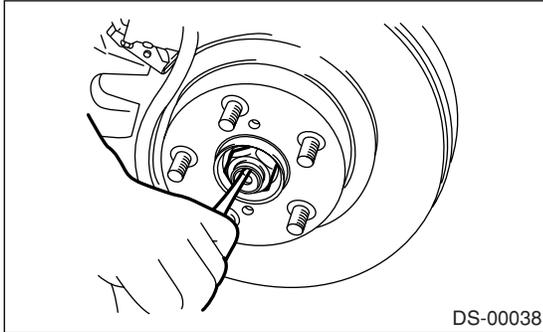


7. Rear Drive Shaft

A: REMOVAL

- 1) Disconnect the ground cable from battery.
- 2) Lift-up the vehicle, and then remove the rear wheels.
- 3) Unlock the axle nut.



- 4) While applying the parking brake, remove the axle nut using the socket wrench.

CAUTION:

Remove the wheel before loosening the axle nut. Failure to follow this rule may damage the wheel bearings.

- 5) Remove the rear differential assembly.

- T-type

<Ref. to DI-28, REMOVAL, Rear Differential (T-type).>

- VA-type

<Ref. to DI-44, REMOVAL, Rear Differential (VA-type).>

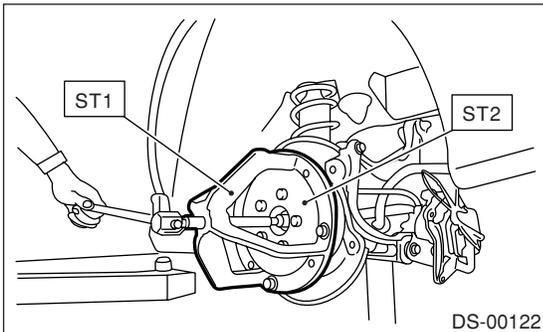
- 6) Remove the axle nut and rear drive shaft. If it is hard to remove, use ST1 and ST2.

ST1 926470000 AXLE SHAFT PULLER

ST2 927140000 AXLE SHAFT PULLER PLATE

CAUTION:

- Do not hammer drive shaft when removing.
- Do not damage the oil seal and magnetic encoder.

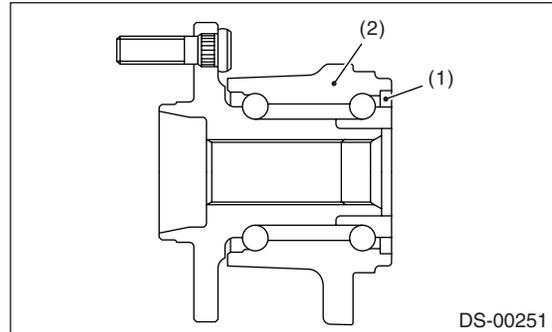


B: INSTALLATION

- 1) Insert the BJ or EBJ into rear hub splines.

CAUTION:

- Be careful not to damage the magnetic encoder.
- Do not get closer the tool which charged magnetism to magnetic encoder.



(1) Magnetic encoder

(2) Rear hub unit bearing

- 2) Draw the rear drive shaft into specified position.

CAUTION:

Do not hammer drive shaft when installing it.

- 3) Tighten the axle nut temporarily.

- 4) Install the rear differential assembly.

- T-type

<Ref. to DI-29, INSTALLATION, Rear Differential (T-type).>

- VA-type

<Ref. to DI-45, INSTALLATION, Rear Differential (VA-type).>

- 5) While applying the parking brake and depressing the brake pedal, tighten a new axle nut (olive color) to specified torque and lock it securely.

Tightening torque:

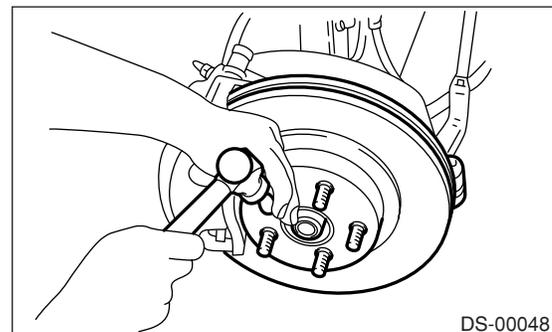
190 N·m (19.4 kgf-m, 140 ft-lb)

CAUTION:

- Install the wheel after installation of the axle nut. Failure to follow this rule may damage the wheel bearing.

- Be sure to tighten the axle nut to specified torque. Do not overtighten it as this may damage wheel bearing.

- 6) Lock the axle nut securely.



7) Install the wheel.

Tightening torque:

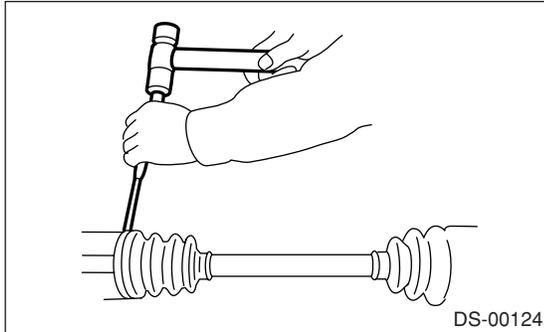
90 N·m (9.2 kgf·m, 66 ft·lb)

C: DISASSEMBLY

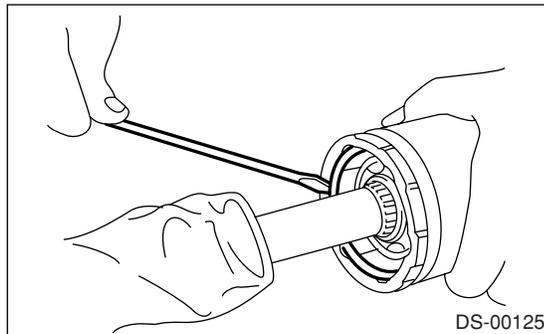
- 1) Straighten the bent claw of larger end of DOJ boot.
- 2) Loosen the band by means of screwdriver or pliers.

CAUTION:

Be careful not to damage boot.



- 3) Remove the boot band on the small end of DOJ boot in the same manner.
- 4) Remove the larger end of DOJ boot from DOJ outer race.
- 5) Pry and remove the round circlip located at the neck of DOJ outer race with a screwdriver.



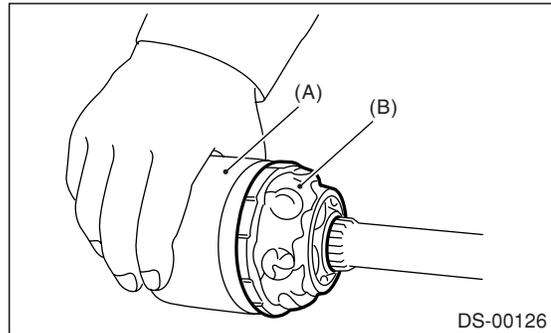
- 6) Take out the DOJ outer race from shaft assembly.
- 7) Wipe off the grease and take out balls.

CAUTION:

The grease is a special grease (grease for constant velocity joint). Do not confuse with other greases.

NOTE:

Disassemble exercising care not to lose balls (6 pcs).



- (A) Outer race
- (B) Grease

- 8) To remove the cage from inner race, turn the cage by a half pitch to the track groove of inner race and shift the cage.
- 9) Remove the snap ring, which fixes inner race to shaft, using pliers.
- 10) Take out the DOJ inner race.
- 11) Take off the DOJ cage from shaft and remove DOJ boot.

CAUTION:

Be sure to wrap shaft splines with vinyl tape to prevent boot from scratches.

- 12) Remove the BJ boot or EBJ boot in the same procedure as DOJ boot.

NOTE:

Further disassembly of axle is impossible because the BJ and EBJ cannot be disassembled.

D: ASSEMBLY

NOTE:

Use specified grease.

BJ side:

NTG2218-M (Part No. 28395AG010)

EBJ side:

NTG2218-M (Part No. 28395AG000)

DOJ side:

NKG205 (Part No. 28495AG000)

- 1) Install the BJ or EBJ boot in specified position, and fill it with 60 to 70 g (2.12 to 2.47 oz.) of specified grease.
- 2) Place the DOJ boot at the center of shaft.

CAUTION:

Be sure to wrap shaft splines with vinyl tape to prevent boot from scratches.

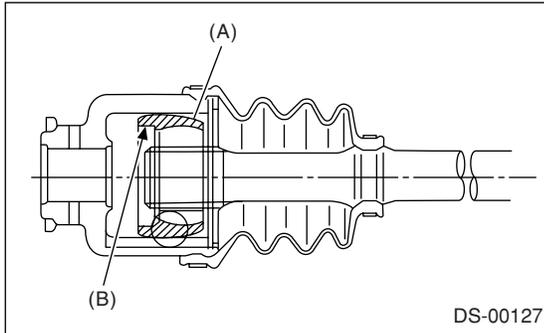
- 3) Insert the DOJ cage onto shaft.

Rear Drive Shaft

DRIVE SHAFT SYSTEM

NOTE:

Insert the cage with the cut-out portion facing the shaft end, since the cage has an orientation.

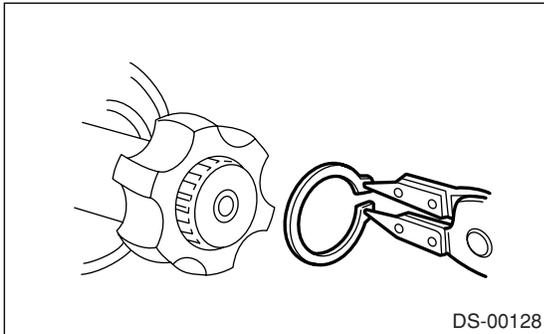


- (A) Cage
- (B) Cutout

4) Install the DOJ inner race on shaft and fit the snap ring with pliers.

NOTE:

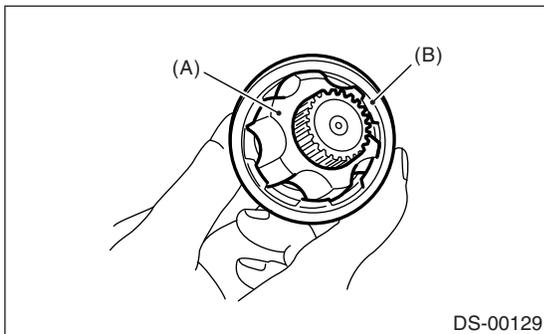
Confirm that the snap ring is completely fitted in the shaft groove.



5) Install the cage to inner race fixed upon shaft.

NOTE:

Fit the cage with the protruded part aligned with the track on the inner race and then turn by a half pitch.



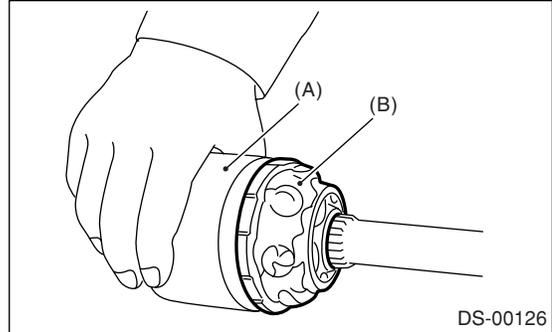
- (A) Inner race
- (B) Cage

6) Fill 80 to 90 g (2.82 to 3.17 oz.) of specified grease into the interior of DOJ outer race.

7) Apply a coat of specified grease to the cage pocket and six balls.

8) Insert six balls into the cage pocket.

9) Align the outer race track and ball positions, and place the shaft, inner race, cage and balls in the original positions and then fit outer race.

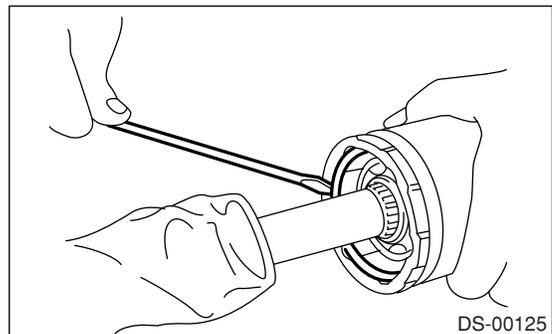


- (A) Outer race
- (B) Grease

10) Install the snap ring in the groove on DOJ outer race.

NOTE:

- Assure that the balls, cage and inner race are completely fitted in the outer race of DOJ.
- Use care not to place the matched position of snap ring in the ball groove of outer race.
- Pull the shaft lightly and assure that the circlip is completely fitted in the groove.



11) Apply an even coat of the specified grease [20 to 30 g (0.71 to 1.06 oz.)] to the entire inner surface of boot. Also apply grease to shaft.

12) Install the DOJ boot taking care not to twist it.

NOTE:

- The inside of the larger end of DOJ boot and the boot groove shall be cleaned so as to be free from grease and other substances.
- When installing DOJ boot, position outer race of DOJ at center of its travel.

13) Put a new band through the clip and wind twice in alignment with band groove of boot.

14) Pinch the end of band with pliers. Hold the clip and tighten securely.

NOTE:

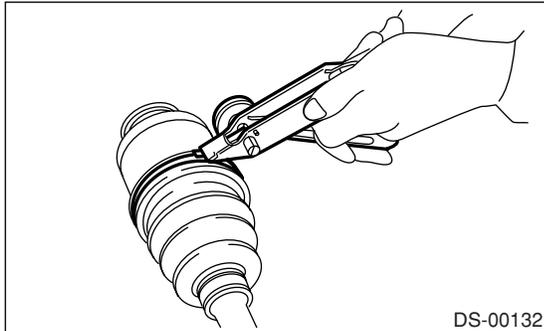
When tightening boot, exercise care so that the air within the boot is appropriate.

15) Tighten the band by using ST.

ST 925091000 BAND TIGHTENING TOOL

NOTE:

Tighten the band until it cannot be moved by hand.

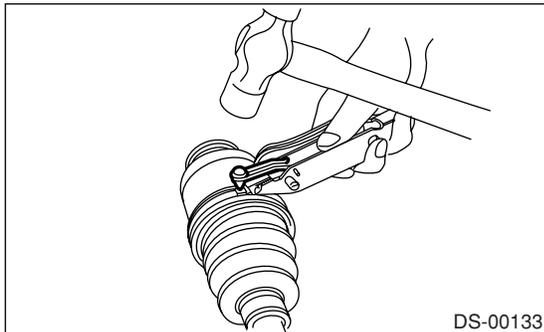


16) Tap on the clip with the punch provided at the end of ST.

ST 925091000 BAND TIGHTENING TOOL

NOTE:

Tap to an extent that the boot underneath is not damaged.



17) Cut off the band with an allowance of about 10 mm (0.39 in) left from the clip and bend this allowance over the clip.

NOTE:

Be careful so that the end of the band is in close contact with clip.

18) Install the BJ boot or EBJ boot in the same procedure as DOJ boot.

19) Extend and retract the DOJ to provide equal grease coating.

E: INSPECTION

Check the removed parts for damage, wear, corrosion etc. Repair or replace if defective.

- DOJ (Double Offset Joint)

Check for seizure, corrosion, damage, wear and excessive play.

- EBJ (high-efficiency compact ball fixed joint)

Check for seizure, corrosion, damage, wear and excessive play.

- Shaft

Check for excessive bending, twisting, damage and wear.

- BJ (Bell Joint)

Check for seizure, corrosion, damage and excessive play.

- Boot

Check for wear, warping, breakage and scratches.

- Grease

Check for discoloration and fluidity.