

## 6. Rear Drive Shaft

### A: REMOVAL

- 1) Disconnect ground cable from battery.
- 2) Jack-up vehicle, support it with safety stands, and remove rear wheels.

**CAUTION:**

**Be sure to loosen and retighten axle nut after removing wheel from vehicle. Failure to follow this rule may damage wheel bearings.**

- 3) Unlock axle nut.
- 4) Have another technician depress brake pedal so that rear drive shaft does not rotate, while removing axle nut.
- 5) Remove rear differential assembly.

With T-type

<Ref. to DI-23, REMOVAL, Rear Differential for T-type.>

With VA-type

<Ref. to DI-39, REMOVAL, Rear Differential for VA-type.>

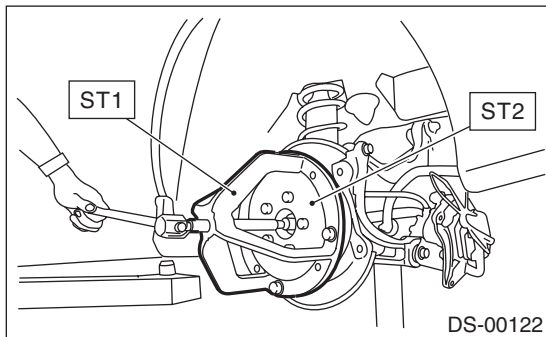
- 6) Remove axle nut and drive shaft. If it is hard to remove, use ST1 and ST2.

ST1 926470000 AXLE SHAFT PULLER

ST2 927140000 PLATE

**CAUTION:**

**Be careful not to damage tone wheel when removing rear drive shaft.**



### B: INSTALLATION

- 1) Insert outer joint into rear hub splines.

**CAUTION:**

**Be careful not to damage tone wheel.**

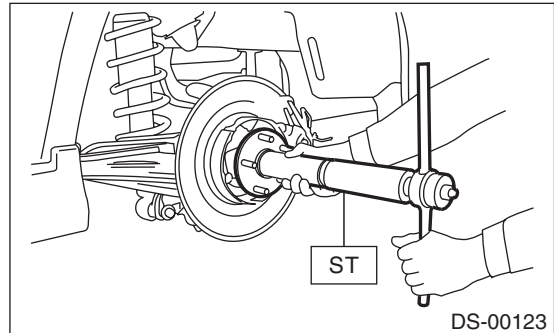
- 2) Using ST1 and ST2, pull drive shaft into place.

ST1 922431000 AXLE SHAFT INSTALLER

ST2 927390000 ADAPTER

**CAUTION:**

**Do not hammer drive shaft when installing it.**



- 3) Tighten axle nut temporarily.

- 4) Install rear differential.

With T-type

<Ref. to DI-24, INSTALLATION, Rear Differential for T-type.>

With VA-type

<Ref. to DI-40, INSTALLATION, Rear Differential for VA-type.>

- 5) Have another technician depress brake pedal so that rear drive shaft does not rotate, while tightening axle nut.

**Tightening torque:**

**240 N·m (24 kgf-m, 177 ft-lb)**

**CAUTION:**

- Replace the removed axle nut with a new one. Use an axle nut for rear use only (Olive color).
- Always tighten axle nut before installing wheel on vehicle.
- Be sure to tighten axle nut to specified torque. Do not overtighten it as this may damage wheel bearing.

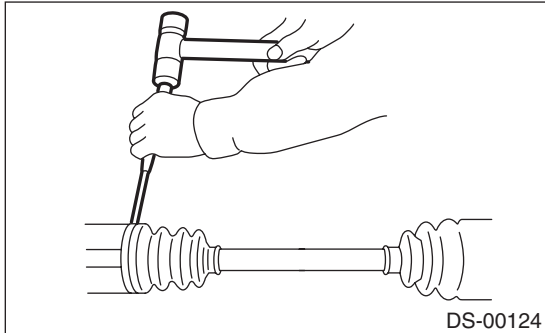
- 6) After tightening axle nut, lock it securely.

# REAR DRIVE SHAFT

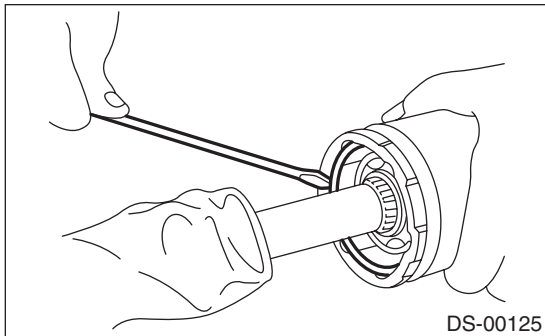
## DRIVE SHAFT SYSTEM

### C: DISASSEMBLY

- 1) Straighten bent claw of large band which is installed on inner joint boot.
- 2) Loosen band by means of screwdriver or pliers, being careful not to damage the boot.



- 3) Remove small band which is installed on inner joint boot in the same manner.
- 4) Remove larger end of inner joint boot from outer race of inner joint.
- 5) Remove inner snap ring of inner joint outer race.



- 6) Take out inner joint outer race from shaft assembly.

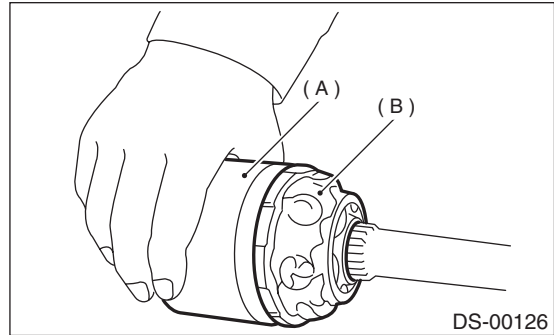
- 7) Wipe off grease and take out balls.

#### CAUTION:

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

#### CAUTION:

**Be careful not to damage boot by wrapping shaft splines with vinyl tape.**

- 12) Remove outer joint boot in the same procedure as inner joint boot.
- 13) Thus, disassembly of axle is completed, but outer joint is unable to be disassembled.

## D: ASSEMBLY

### CAUTION:

Use specified grease.

#### BJ side (outer joint):

*Molylex No. 2 (Part No. 723223010)*

#### DOJ side (inner joint):

*VU-3A702 (Yellow) (Part No. 23223GA050)*

1) Install outer joint boot in specified position, and fill it with 60 to 70 g (2.12 to 2.47 oz) of specified grease.

2) Place inner joint boot at the center of shaft.

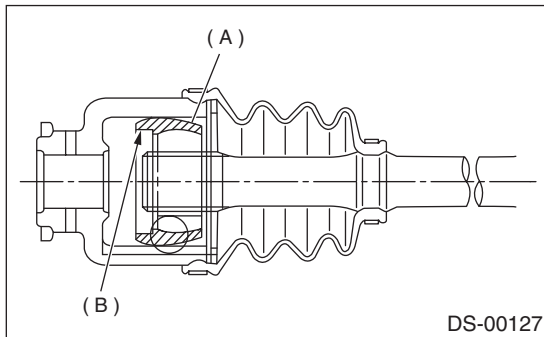
### CAUTION:

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

3) Insert inner joint cage onto shaft.

### NOTE:

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

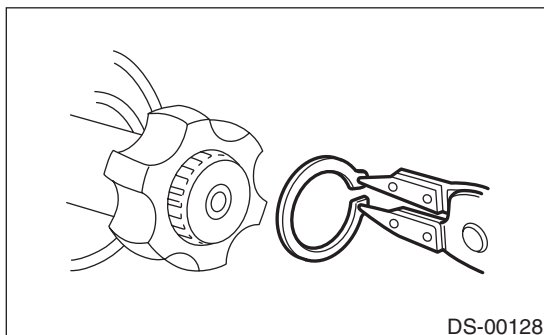


(A) Cage  
(B) Cut-out portion

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

### NOTE:

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

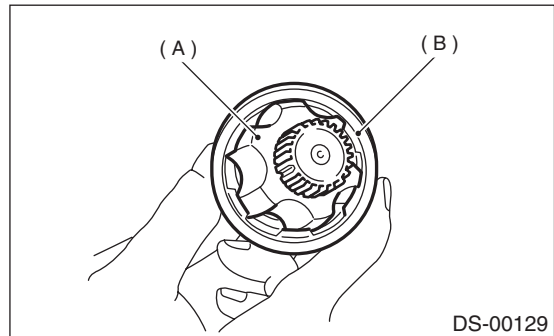


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5) Install cage, which was previously fitted, to inner race fixed upon shaft.

### NOTE:

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



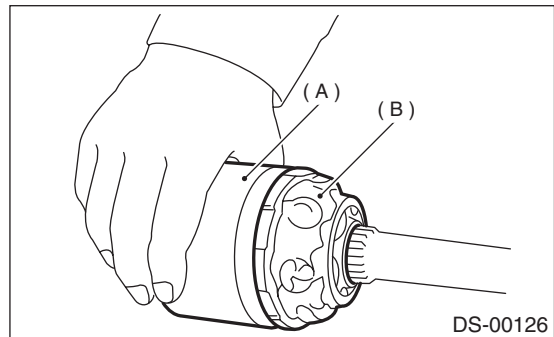
(A) Inner race  
(B) Cage

6) Fill 80 to 90 g (2.82 to 3.17 oz) of specified grease into the interior of inner joint 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 in the part where shaft, inner race, cage and balls are previously installed, and then fit outer race.



(A) Outer race  
(B) Grease

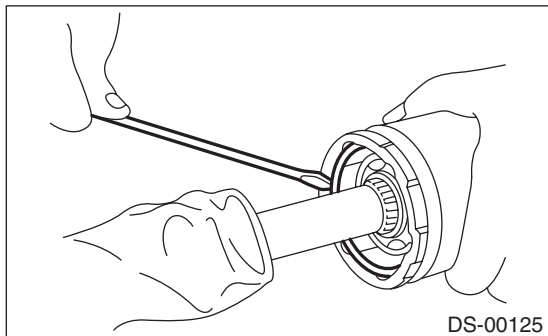
## REAR DRIVE SHAFT

### DRIVE SHAFT SYSTEM

10) Install circlip in the groove on inner joint outer race.

#### NOTE:

- Assure that the balls, cage and inner race are completely fitted in the outer race of inner joint.
- Exercise care not to place the matched position of circlip 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 inner joint boot taking care not to twist it.

#### CAUTION:

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

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

#### CAUTION:

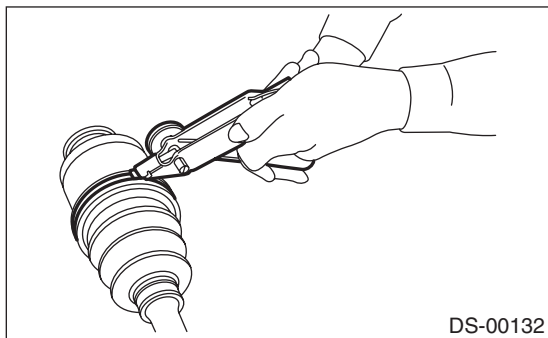
**The boot must be replaced with a new one whenever it is removed.**

14) Tighten band by using ST.

ST 925091000 BAND TIGHTENING TOOL

#### NOTE:

Tighten band until it cannot be moved by hand.

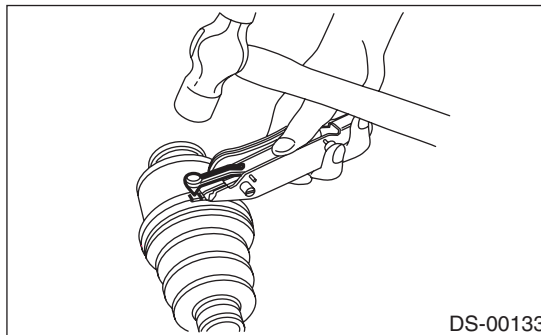


15) Tap on the clip with the punch provided at the end of ST.

ST 925091000 BAND TIGHTENING TOOL

#### CAUTION:

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



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

#### CAUTION:

**Bend the band so that its end is in close contact with clip.**

17) Fix up boot on outer joint in the same manner.

18) Extend and retract inner joint so that the grease in inner joint may spread equally.

### E: INSPECTION

Check the removed parts for damage, wear, corrosion etc. If faulty, repair or replace.

1) Inner joint

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

2) Outer joint

Check seizure, corrosion, damage and excessive play.

3) Shaft

Check excessive bending, twisting, damage and wear.

4) Boot

Check for wear, warping, breakage or scratches.

5) Grease

Check for discoloration or dilution.