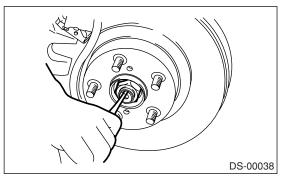
# 6. Front Drive Shaft

# A: REMOVAL

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



4) Remove the axle nut using a socket wrench while depressing the brake pedal.

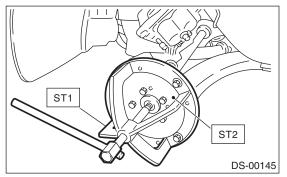
#### CAUTION:

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

- 5) Remove the stabilizer link from front arm.
- 6) Disconnect the front arm from housing.

7) Remove the front drive shaft assembly. If it is hard to remove, use ST1 and ST2.

- ST1 926470000 AXLE SHAFT PULLER
- ST2 927140000 AXLE SHAFT PULLER PLATE



8) Using a bar, remove the front drive shaft from transmission.

#### CAUTION:

Be careful not to allow the bar to damage holder area.

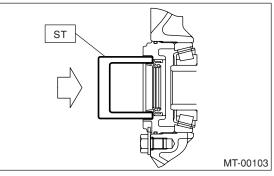
## **B: INSTALLATION**

1) Using the ST, replace the differential side retainer oil seal with a new one.

ST 18675AA000 DIFFERENTIAL SIDE OIL SEAL INSTALLER

#### NOTE:

After pulling out the drive shaft, be sure to replace with a new oil seal.



2) Insert the EBJ into hub splines.

3) Draw the drive shaft into specified position.

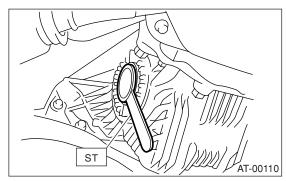
### CAUTION:

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

4) Tighten the axle nut temporarily.

5) Using the ST, install the front drive shaft to transmission.

ST 28399SA010 OIL SEAL PROTECTOR



6) Connect the front arm to housing.

## Tightening torque: 49 N·m (5.0 kgf-m, 36 ft-lb)

## CAUTION:

Be sure to use a new self-locking nut.

7) Install the stabilizer bracket.

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

#### Tightening torque:

220 N·m (22.4 kgf-m, 162 ft-lb)

#### CAUTION:

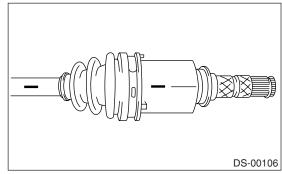
• Install the wheel after installation of the axle nut. Failure to follow this rule may damage the wheel bearing.

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

9) After tightening axle nut, lock it securely.

# C: DISASSEMBLY

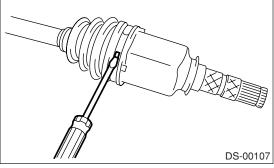
1) Place alignment marks on the shaft and outer race.



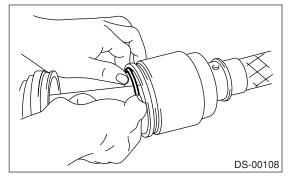
2) Remove the PTJ boot band and boot.

#### CAUTION:

Be careful not to damage boot.



3) Remove the snap ring from PTJ outer race.



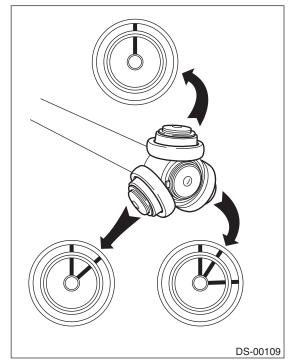
4) Remove the PTJ outer race from shaft assembly.

5) Wipe off grease.

#### CAUTION:

The grease is a special grease. Do not confuse with other greases.

6) Place alignment marks on the roller kit and trunnion.

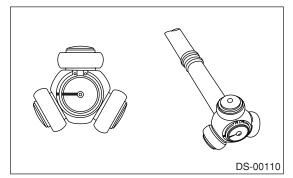


7) Remove the roller kit from trunnion.

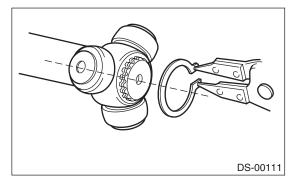
# CAUTION:

#### Be careful with the roller kit position.

8) Place alignment marks on the trunnion and shaft.



9) Remove the snap ring and trunnion.



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

10) Remove the PTJ boot.

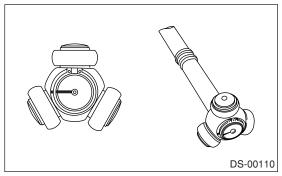
#### NOTE:

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

# D: ASSEMBLY

1) Place the PTJ boot at the center of shaft.

2) Align alignment marks and install the trunnion on the shaft.



3) Install the snap ring to shaft.

### CAUTION:

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

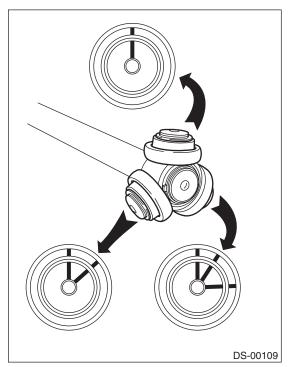
4) Fill 100 to 110 g (3.53 to 3.88 oz.) of specified grease into the interior of PTJ outer race.

5) Apply a thin coat of specified grease to the roller kit and trunnion.

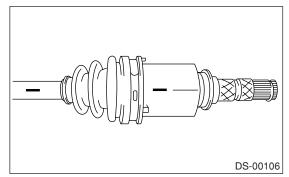
6) Align alignment marks on roller kit and trunnion and install the roller kit.

#### CAUTION:

#### Be careful with the roller kit position.



7) Align alignment marks on the shaft and outer race, and install outer race.



8) Install the snap ring in the groove on PTJ outer race.

#### CAUTION:

# Pull the shaft lightly and assure that the snap ring is completely fitted in the groove.

9) Apply an even coat of the specified grease 30 to 40 g (1.06 to 1.41 oz.) to the entire inner surface of boot.

10) Install the PTJ boot taking care not to twist it.

#### CAUTION:

• The large end of PTJ boot and the boot groove shall be cleaned completely so as to be free from grease and other substances.

• When installing PTJ boot, position outer race of PTJ at center of its travel.

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

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

#### NOTE:

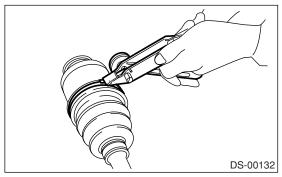
When tightening boot, use care so that the air within the boot is appropriate.

13) Tighten the band using ST.

ST 925091000 BAND TIGHTENING TOOL

#### NOTE:

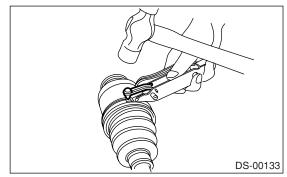
Tighten the band until it cannot be moved by hand.



14) 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.



15) 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.

#### CAUTION:

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

16) Extend and retract the PTJ to provide equal grease coating.

# **E: INSPECTION**

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

• PTJ (pillow tripod joint)

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

• EBJ (high-efficiency compact ball fixed joint)

Check for seizure, corrosion, damage and excessive play.

Shaft

Check for excessive bending, twisting, damage and wear.

Boot

Check for wear, warping, breakage and scratches.

Grease

Check for discoloration and fluidity.