

# Propeller Shaft

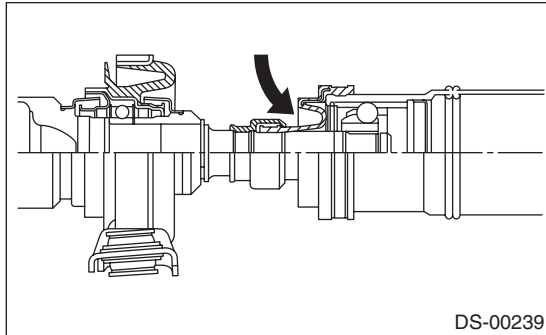
## DRIVE SHAFT SYSTEM

### 2. Propeller Shaft

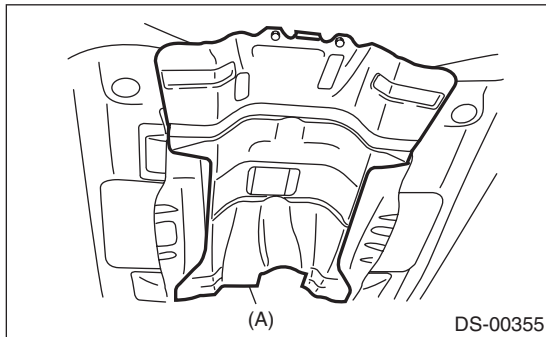
#### A: REMOVAL

##### NOTE:

- Before removing propeller shaft, wrap metal parts with a cloth or rubber material.
- In case of EDJ type, wrap the metal parts at the rubber boot at the center EDJ with a cloth or rubber material before removing propeller shaft, as shown in the figure. The rubber boot may be damaged due to interference with adjacent metal parts while bending the EDJ during removal.

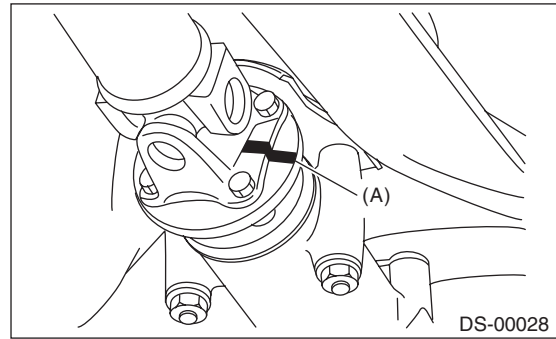


- 1) Disconnect the ground cable from battery.
- 2) Shift the select lever or gear shift lever to neutral.
- 3) Release the parking brake.
- 4) Lift up the vehicle.
- 5) Remove the center exhaust pipe.
- 6) Remove the rear exhaust pipe and muffler.
- 7) Remove the heat shield cover.



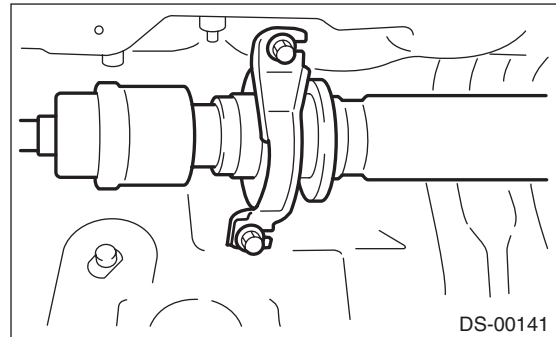
(A) Heat shield cover

- 8) Make alignment marks on the flange yoke and rear differential before removal.



(A) Alignment mark

- 9) Remove the three bolts holding the propeller shaft to the rear differential.
- 10) Remove the remaining bolt.
- 11) Remove the two bolts which hold center bearing to vehicle body.



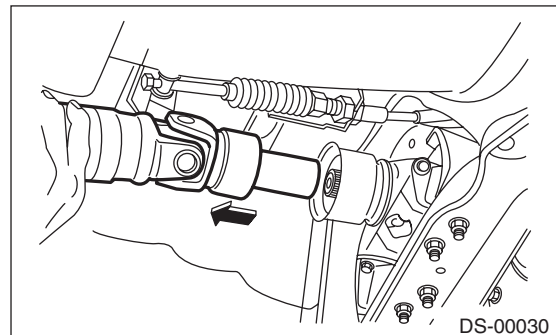
- 12) Remove the propeller shaft from transmission.

##### CAUTION:

- Be careful not to damage oil seals and frictional surface of the sleeve yoke.
- Cover the center exhaust pipe with a cloth to keep off any ATF or oil spilled from transmission when removing propeller shaft.

##### NOTE:

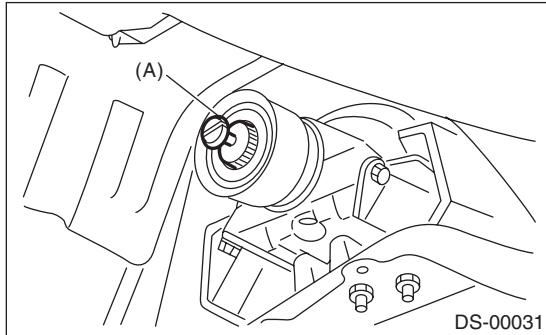
Use a container to catch ATF or oil flowing from propeller shaft.



13) Install an extension cap to the transmission.

**NOTE:**

If extension cap is not available, place vinyl bag over opening and fasten with string to prevent gear oil or ATF from leaking.



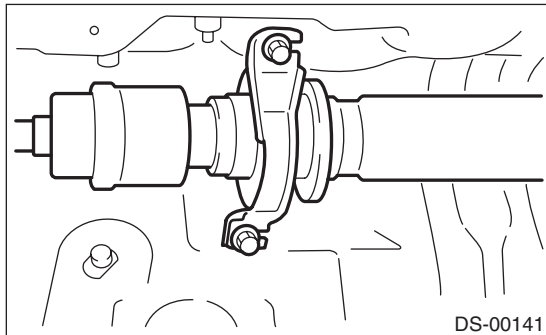
(A) Extension cap

## B: INSTALLATION

1) Insert the sleeve yoke into the transmission and attach center bearing to body.

**Tightening torque:**

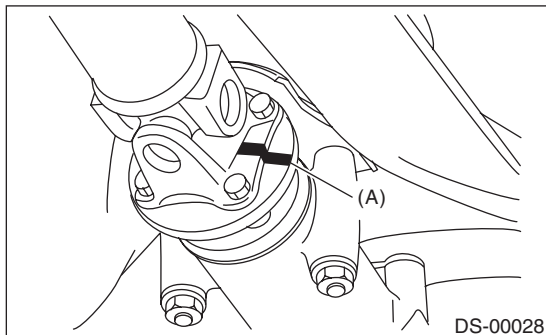
**52 N·m (5.3 kgf-m, 38.3 ft-lb)**



2) Align the alignment marks and connect the flange yoke and rear differential.

**Tightening torque:**

**31 N·m (3.2 kgf-m, 23.1 ft-lb)**



(A) Alignment mark

3) Install the heat shield cover.

4) Install the center exhaust pipe.

5) Install the rear exhaust pipe and muffler.

6) Lower the vehicle.

7) Connect the ground cable to battery.

## C: INSPECTION

**NOTE:**

Do not disassemble propeller shaft. Check the following and replace if necessary.

- Tube surface for dents or cracks
- Splines for deformation or abnormal wear
- Unsmooth joint operation or abnormal noise
- Center bearing for free play, noise or non-smooth operation.
- Oil seals for abnormal wear or damage
- Damaged center bearing

Check the following points with propeller shaft installed in vehicle.

### 1. JOINTS AND CONNECTIONS

1) Remove the center exhaust pipe.

2) Remove the heat shield cover.

3) Check for any looseness of the yoke flange mounting bolts which connect to the rear differential and center bearing bracket mounting bolts.

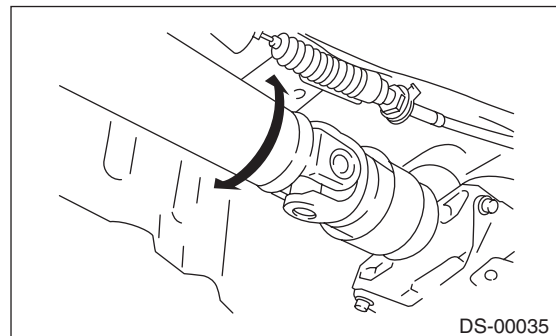
### 2. SPLINES AND BEARING

1) Remove the center exhaust pipe.

2) Remove the rear exhaust pipe and muffler.

3) Remove the heat shield cover.

4) Turn the propeller shaft by hand to see if abnormal free play exists at splines. Also move yokes to see if abnormal free play exists at spiders and bearings.

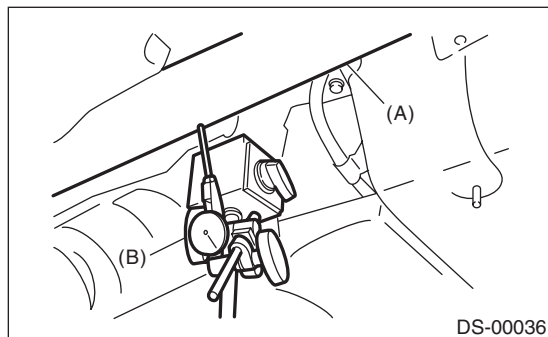


### 3. RUNOUT OF PROPELLER SHAFT

- 1) Remove the center exhaust pipe.
- 2) Remove the rear exhaust pipe and muffler.
- 3) Remove the heat shield cover.
- 4) Set the dial gauge with its indicator stem at the center of the propeller shaft tube.
- 5) Turn the propeller shaft slowly by hands to check for runout of the propeller shaft.

#### **Runout:**

**Service limit 0.6 mm (0.024 in)**



- (A) Propeller shaft  
(B) Dial gauge

### 4. CENTER BEARING FREE PLAY

- 1) Remove the front and center exhaust pipes.
- 2) Remove the rear exhaust pipe and muffler.
- 3) Remove the heat shield cover.
- 4) Move the propeller shaft near the center bearing up, down, left, right by hand, to check for any abnormal free play of the bearings.

