

PROPELLER SHAFT

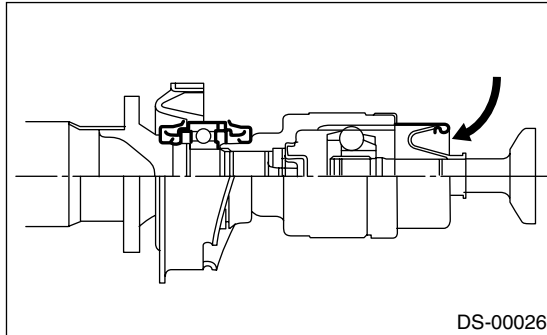
DRIVE SHAFT SYSTEM

2. Propeller Shaft

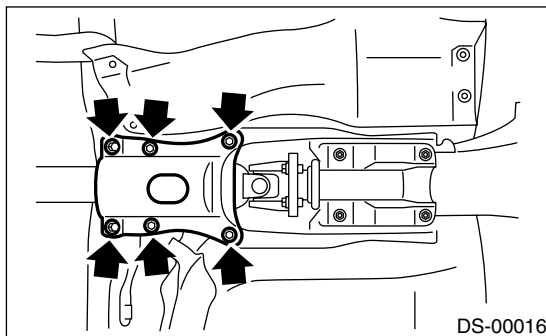
A: REMOVAL

NOTE:

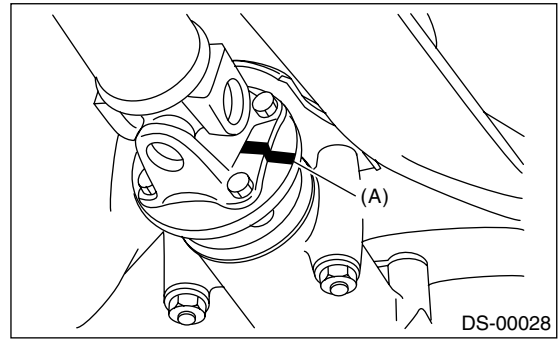
- Before removing the propeller shaft, wrap the metal parts with a cloth or rubber material.
- In case of DOJ type, before removing the propeller shaft, wrap the metal parts (installed at the rubber boot of center DOJ) with a cloth or rubber material, as shown in the figure. Rubber boot may be damaged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



- 1) Disconnect the ground cable from battery.
- 2) Move the select lever or gear shift lever to "N".
- 3) Release the parking brake.
- 4) Jack-up the vehicle and support it with sturdy racks.
- 5) Remove the center exhaust pipes.
- 6) Remove the rear exhaust pipe and muffler.
- 7) Remove the differential mount front cover.

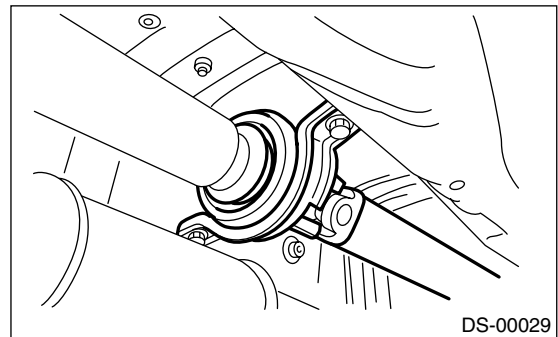


- 8) Make matching marks on affected parts before removal.



(A) Matching mark

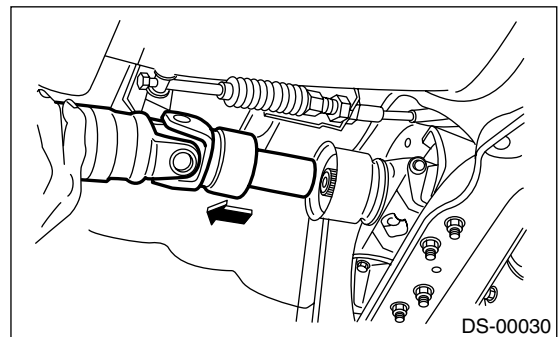
- 9) Remove the three bolts which hold the propeller shaft to rear differential.
- 10) Remove the remaining bolt.
- 11) Remove the two bolts which hold the center bearing to vehicle body.



- 12) Remove the propeller shaft from transmission.

CAUTION:

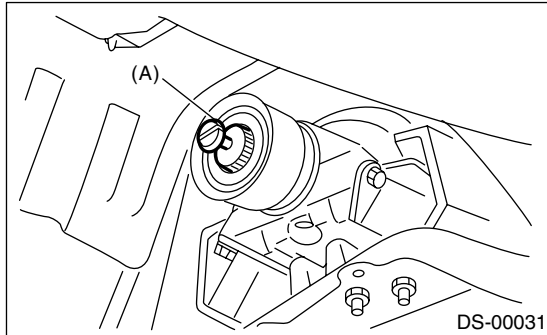
- Be careful not to damage the oil seals and frictional surface of sleeve yoke.
- Cover the center exhaust pipe with a cloth to keep off any ATF or oil spilled from transmission when removing the propeller shaft.



13) Install the extension cap to transmission.

NOTE:

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



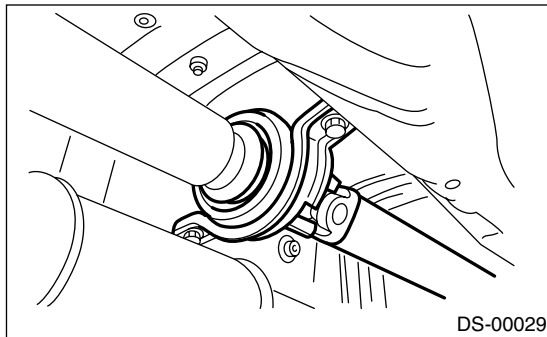
(A) Extension cap

B: INSTALLATION

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

Tightening torque:

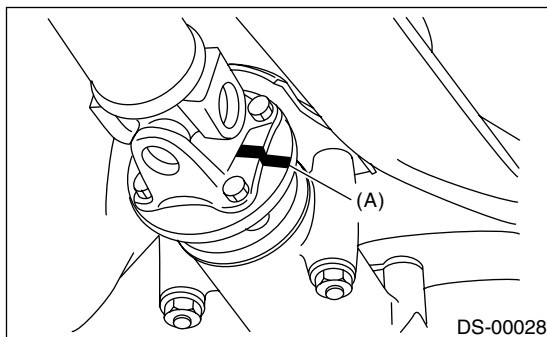
52 N·m (5.3 kgf-m, 38.3 ft-lb)



2) Align the matching marks, and then connect the flange yoke and rear differential.

Tightening torque:

38 N·m (3.9 kgf-m, 28.3 ft-lb)



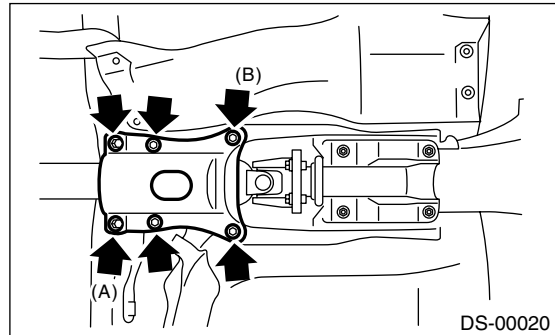
(A) Matching mark

3) Using new bolts, install the differential mount front cover.

- (1) Temporarily tighten the bolt (A) while pushing cover forward.
- (2) Tighten the bolt (B) to specified torque.
- (3) Tighten the bolt (A) to specified torque.
- (4) Tighten the remaining bolts to specified torque.

Tightening torque:

90 N·m (9.2 kgf-m, 66 ft-lb)



- 4) Install the center exhaust pipes.
- 5) Install the rear exhaust pipe and muffler.

C: INSPECTION

NOTE:

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

- 1) Tube surfaces for dents or cracks
 - 2) Splines for deformation or abnormal wear
 - 3) Joints for non-smooth operation or abnormal noise
 - 4) Center bearing for free play, noise or non-smooth operation
 - 5) Oil seals for abnormal wear or damage
 - 6) Center bearing for breakage
- Check the following points with propeller shaft installed in vehicle.

1. JOINTS AND CONNECTIONS

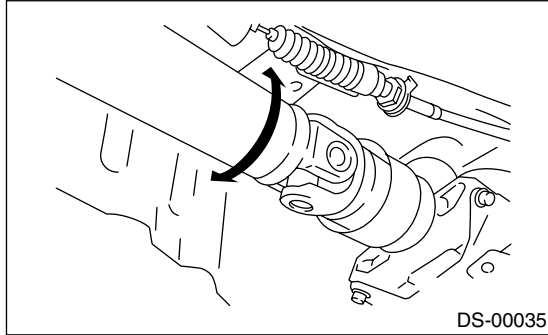
- 1) Remove the center exhaust pipes.
- 2) Remove the heat shield cover.
- 3) Check for any looseness of the yoke flange mounting bolts which connect to rear differential and center bearing bracket mounting bolts.

PROPELLER SHAFT

DRIVE SHAFT SYSTEM

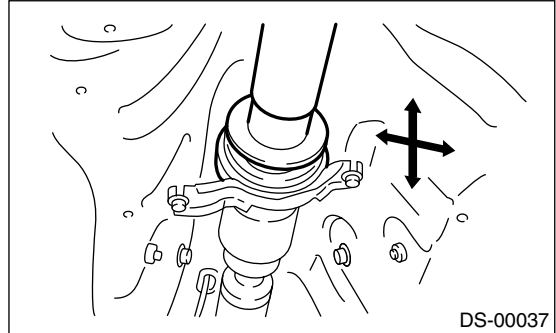
2. SPLINES AND BEARING LOCATIONS

- 1) Remove the center exhaust pipes.
- 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 the yokes to see if abnormal free play exists at spiders and bearings.



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 center bearing up and down, and left and right with your hand to check for any abnormal bearing free play.

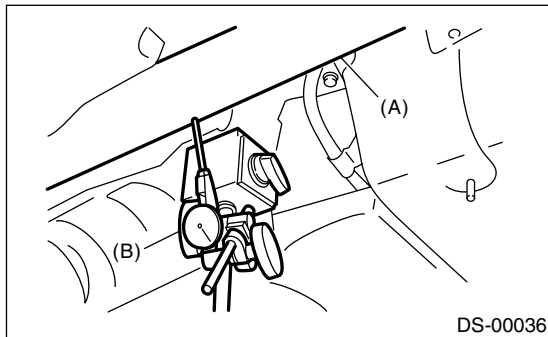


3. RUNOUT OF PROPELLER SHAFT

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

Runout:

Limit 0.6 mm (0.024 in)



- (A) Propeller shaft
- (B) Dial gauge