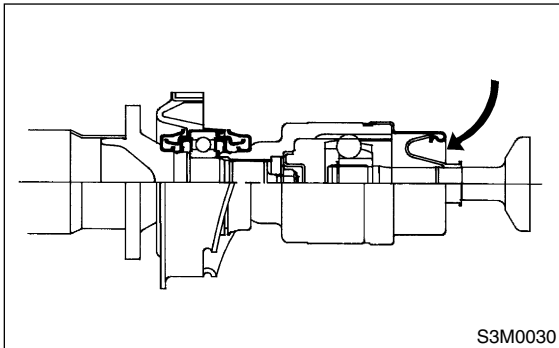


## 2. Propeller Shaft S301160

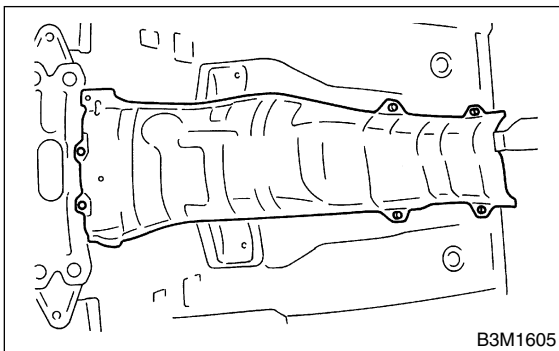
### A: REMOVAL S301160A18

**NOTE:**

- Before removing propeller shaft, wrap metal parts with a cloth or rubber material.
- In case of DOJ type, before removing propeller shaft, wrap 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 ground cable from battery.
- 2) Move select lever or gear shift lever to "N".
- 3) Release the parking brake.
- 4) Jack-up vehicle and support it with sturdy racks.
- 5) Remove center exhaust pipes.
- 6) Remove rear exhaust pipe and muffler.
- 7) Remove heat shield cover.

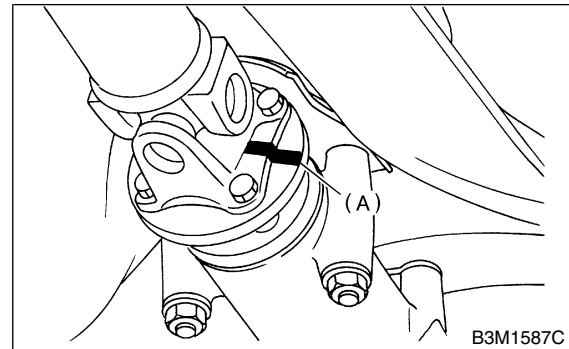


- 8) Put matching mark to propeller shaft and rear differential.

- 9) Remove the four bolts which hold propeller shaft to rear differential.

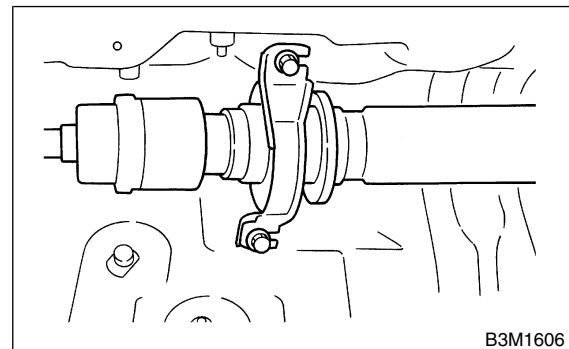
**NOTE:**

- Remove all but one bolt.



(A) Matching mark

- 10) Remove the two bolts which hold center bearing to vehicle body.



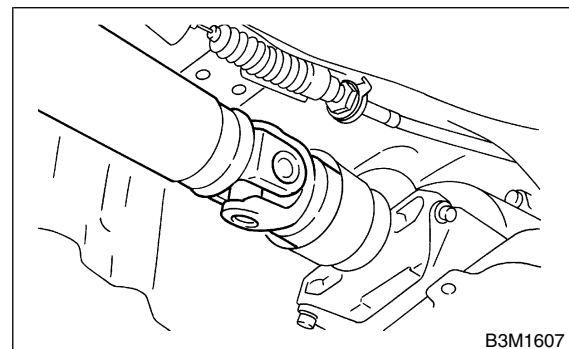
- 11) Remove propeller shaft from transmission.

**CAUTION:**

**Be sure not to damage oil seals and the frictional surface of sleeve yoke.**

**NOTE:**

- Be sure to use an empty oil can to catch oil flowing out when removing propeller shaft.
- Be sure to plug the opening in transmission after removal of propeller shaft.



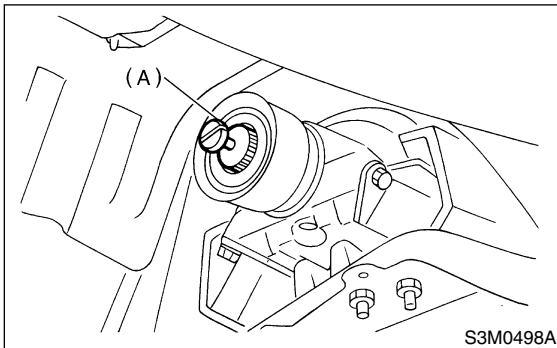
# PROPELLER SHAFT

## Drive Shaft System

12) Install the extension cap to transmission.

### NOTE:

If extension cap is not available, cover the opening with a vinyl bag in order to prevent transmission gear oil or ATF leakage.



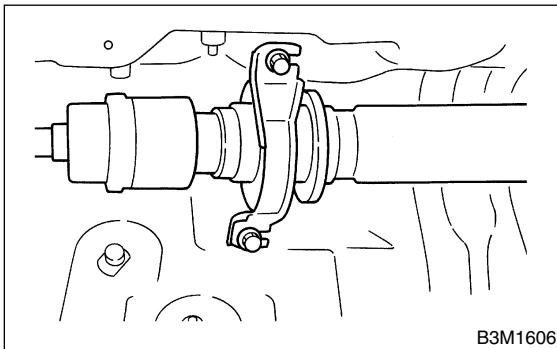
(A) Extension cap

## B: INSTALLATION S301160A11

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

### Tightening torque:

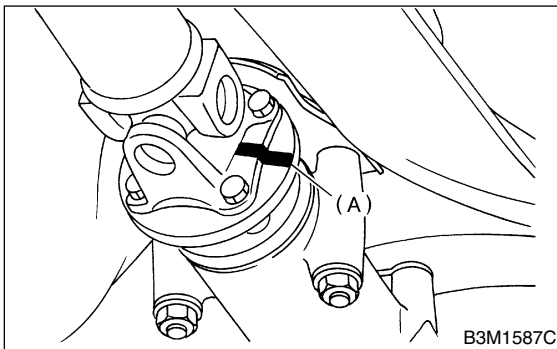
**52 N·m (5.3 kgf·m, 38.3 ft·lb)**



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

### Tightening torque:

**31 N·m (3.2 kgf·m, 23.1 ft·lb)**



(A) Matching mark

3) Install heat shield cover.

4) Install center exhaust pipes.

5) Install rear exhaust pipe and muffler.

## C: INSPECTION S301160A10

### NOTE:

Do not disassemble 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

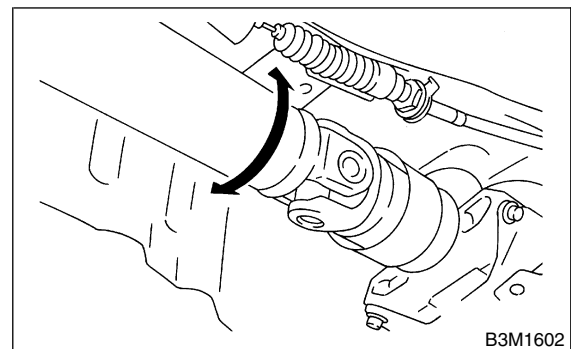
Check the following points with propeller shaft installed in vehicle.

## 1. JOINTS AND CONNECTIONS S301160A1001

- 1) Remove center exhaust pipes.
- 2) Remove heat shield cover.
- 3) Check for any looseness of yoke flange connecting bolts and center bearing retaining bolts.

## 2. SPLINES AND BEARING LOCATIONS S301160A1002

- 1) Remove center exhaust pipes.
- 2) Remove rear exhaust pipe and muffler.
- 3) Remove heat shield cover.
- 4) Turn 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

S301160A1003

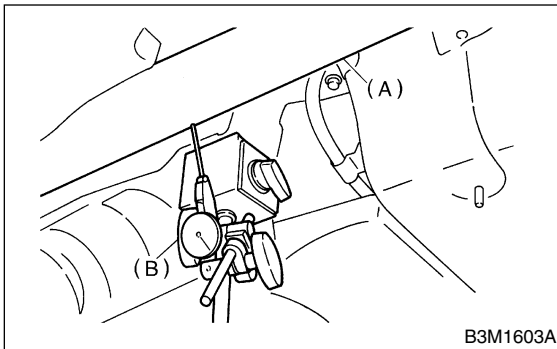
- 1) Remove center exhaust pipes.
- 2) Remove rear exhaust pipe and muffler.
- 3) Remove heat shield cover.
- 4) Turn rear wheels by hand to check for “runout” of propeller shaft.

### NOTE:

Measure runout with a dial gauge at the center of front and rear propeller shaft tubes.

### Runout:

**Limit 0.6 mm (0.024 in)**



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

## 4. CENTER BEARING FREE PLAY

S301160A1004

- 1) Remove front and center exhaust pipes.
- 2) Remove rear exhaust pipe and muffler.
- 3) Remove heat shield cover.
- 4) While holding propeller shaft near center bearing with your hand, move it up and down, and left and right to check for any abnormal bearing free play.

