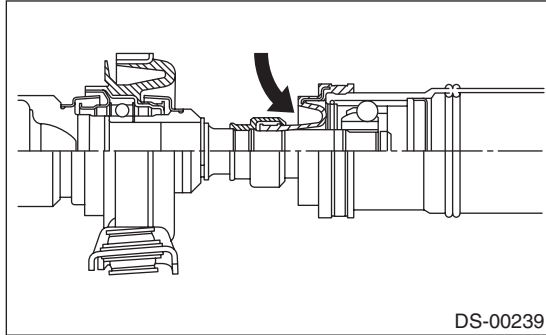


## 2. Propeller Shaft

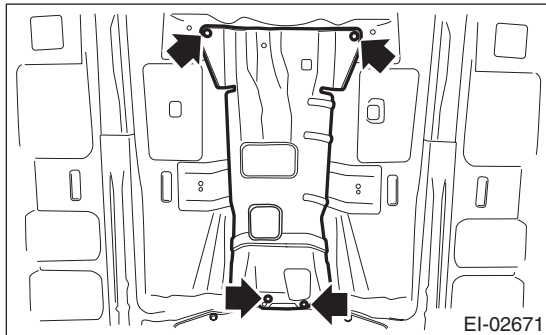
### A: REMOVAL

#### CAUTION:

- Before removing propeller shaft, wrap metal parts with a cloth or rubber material.
- Do not disassemble the center EDJ of the propeller shaft.
- Before removing propeller shaft, wrap the metal parts attached to the rubber boot of center EDJ with a cloth or rubber material, 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) Shift the select lever or gear shift lever to neutral.
- 2) Release the parking brake.
- 3) Lift up the vehicle.
- 4) Remove the center exhaust pipe, rear exhaust pipe, and muffler.
  - Center exhaust pipe & rear exhaust pipe: <Ref. to EX(H4DO(w/o HEV))-18, REMOVAL, Rear Exhaust Pipe.>
  - Muffler: <Ref. to EX(H4DO(w/o HEV))-22, REMOVAL, Muffler.>
- 5) Remove the bolts to remove the front heat shield cover.

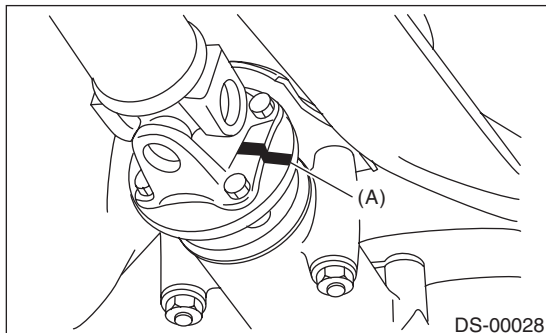


- 6) Remove the propeller shaft assembly.

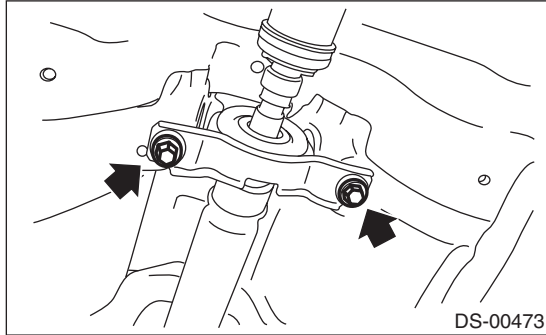
#### CAUTION:

**Do not disassemble the propeller shaft.**

- (1) Place alignment marks (A) on the flange yoke and rear differential.
- (2) Remove four bolts holding the propeller shaft to the rear differential.



(3) Remove the center bearing.



(4) Remove the propeller shaft from transmission.

## CAUTION:

**Be careful not to damage oil seals and contact surface of the sleeve yoke.**

## NOTE:

- Use a container to catch CVTF or oil flowing from propeller shaft.
- To prevent CVTF from leaking, install extension cap etc. to the transmission.

## B: INSTALLATION

1) Before installation, check the following items, and replace the propeller shaft assembly as necessary.

- Dents or cracks on the tube surface
- 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

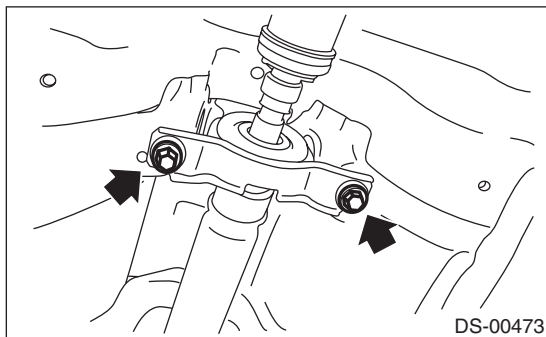
2) Apply fluid or gear oil to the oil seal lip and the propeller shaft.

- CVT model: SUBARU CVT OIL FOR LINEARTRONIC
- MT model: GL-5

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

## Tightening torque:

**52 N·m (5.30 kgf-m, 38.4 ft-lb)**



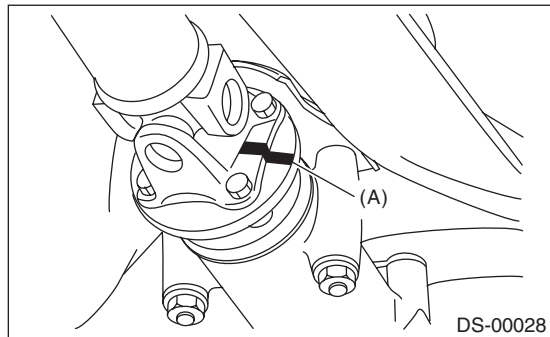
# Propeller Shaft

## DRIVE SHAFT SYSTEM

4) Align the alignment marks (A), and connect the yoke flange and rear differential.

**Tightening torque:**

**31 N·m (3.16 kgf-m, 22.9 ft-lb)**



5) Check the propeller shaft with the propeller shaft installed to the vehicle. <Ref. to DS-15, INSPECTION, Propeller Shaft.>

6) Install the heat shield cover.

**Tightening torque:**

**18 N·m (1.84 kgf-m, 13.3 ft-lb)**

7) Install the center exhaust pipe and rear exhaust pipe.

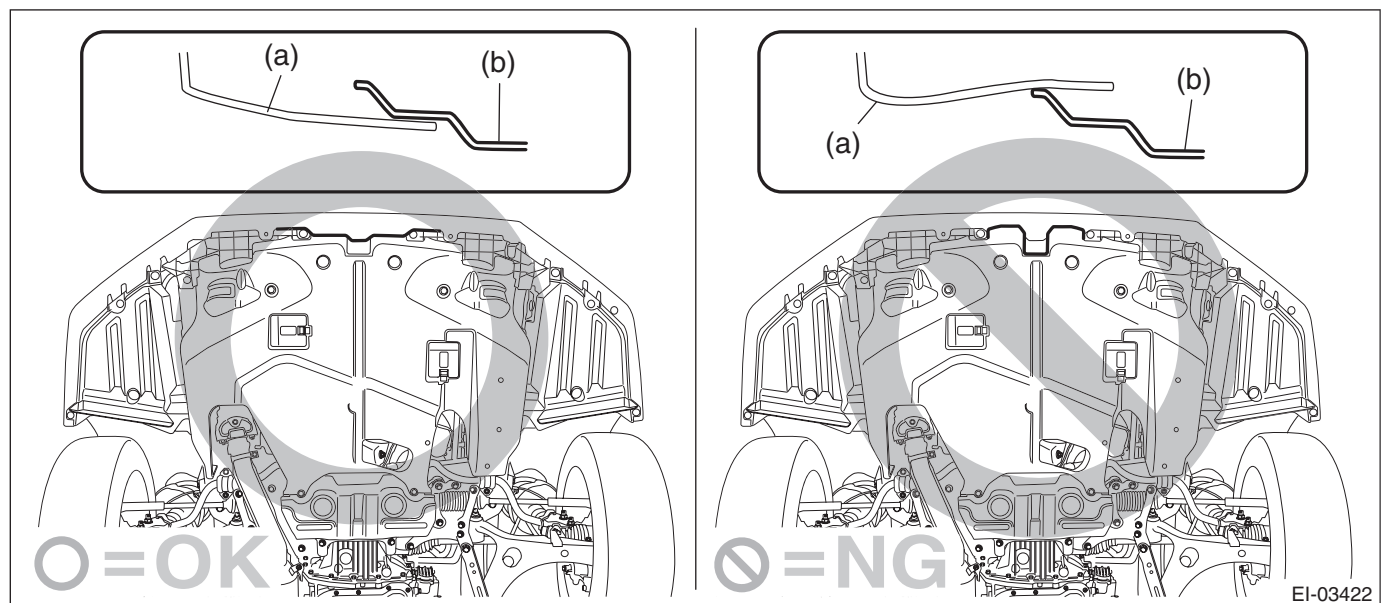
8) Install the under cover - front.

### CAUTION:

Install the under cover so that the under cover front end (b) comes inside of the bumper face - front (a).

**Tightening torque:**

**18 N·m (1.84 kgf-m, 13.3 ft-lb)**

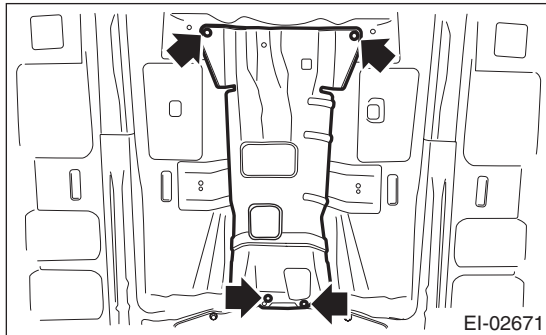


9) Lower the vehicle.

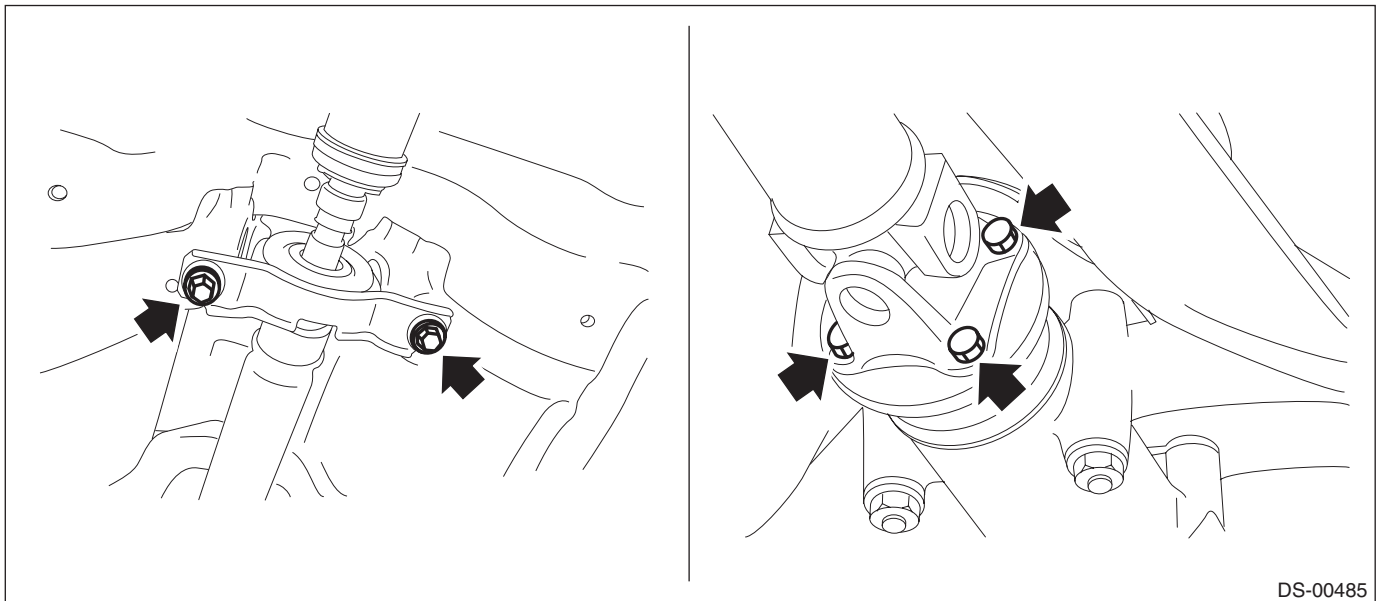
## C: INSPECTION

Check the propeller shaft with the propeller shaft installed to the vehicle.

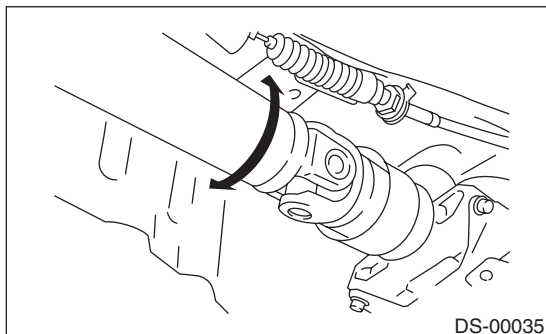
- 1) Remove the front exhaust pipe. <Ref. to EX(H4DO(w/o HEV))-6, REMOVAL, Front Exhaust Pipe.>
- 2) Remove the center exhaust pipe, rear exhaust pipe, and muffler.
  - Center exhaust pipe & rear exhaust pipe: <Ref. to EX(H4DO(w/o HEV))-18, REMOVAL, Rear Exhaust Pipe.>
  - Muffler: <Ref. to EX(H4DO(w/o HEV))-22, REMOVAL, Muffler.>
- 3) Remove the bolts to remove the front heat shield cover.



- 4) Check the propeller shaft mounting bolt for looseness.
  - (1) Yoke flange mounting bolts which connect to the rear differential
  - (2) Center bearing bracket mounting bolts



- 5) Check the spline and bearing for the propeller shaft.
  - (1) Turn the propeller shaft by hand to check if abnormal free play exists at splines.
  - (2) Also move yokes to check if abnormal free play exists at spiders and bearings.



# Propeller Shaft

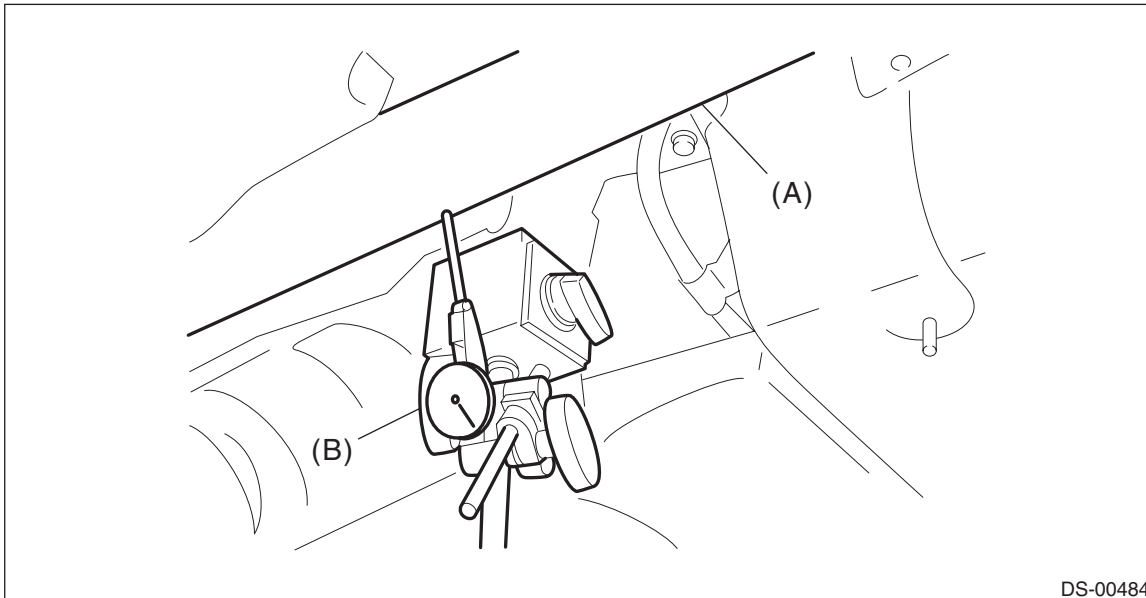
## DRIVE SHAFT SYSTEM

6) Measure the deflection of the propeller shaft.

- (1) Set the dial gauge (B) with its indicator stem at the center of the propeller shaft (A).
- (2) Turn the propeller shaft (A) slowly by hands to check for runout of the propeller shaft.

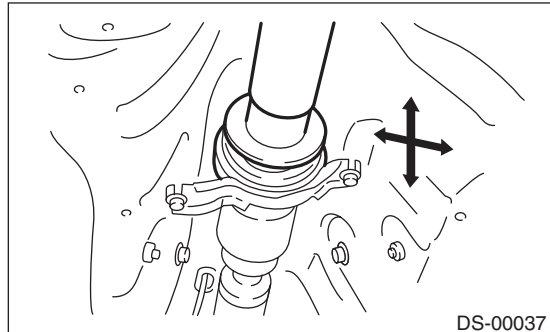
**Runout:**

**Limit: 0.6 mm (0.024 in)**



7) Check the center bearing for free play.

Move the propeller shaft near the center bearing up, down, left, right by hand, to check for any abnormal free play of the bearings.



8) Replace the propeller shaft assembly if faulty is found in the inspection.