

5. Rear Axle

A: REMOVAL

1) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

2) Lift up the vehicle, and then remove the rear wheels.

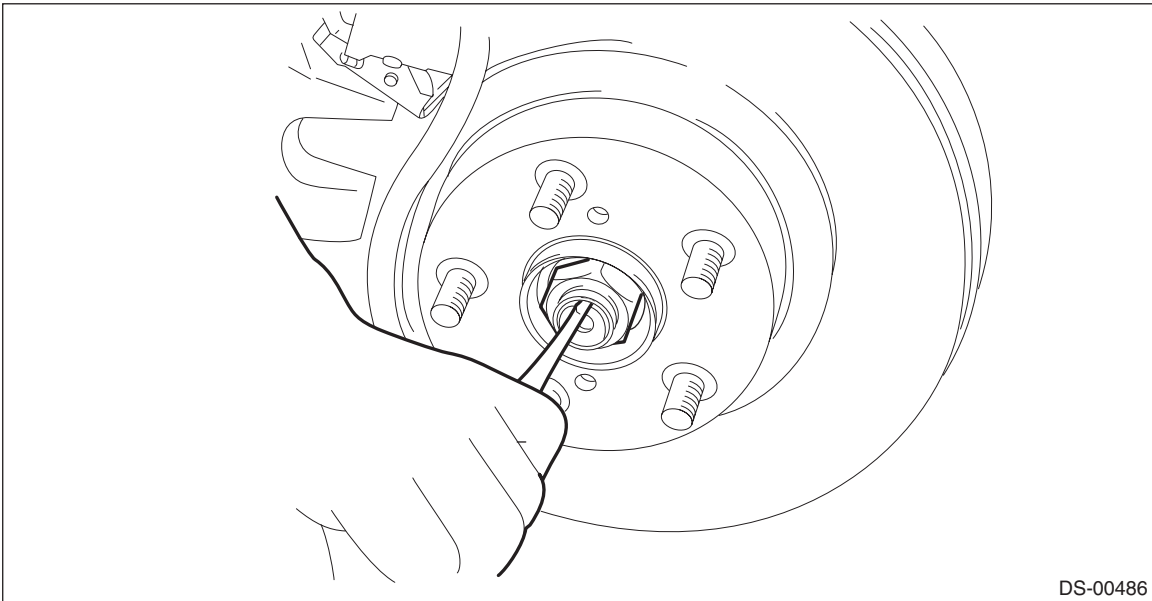
3) Remove the nut - axle.

CAUTION:

Do not loosen the nut - axle while the rear axle is loaded. Doing so may damage the hub unit COMPL.

(1) Lift the crimped section of the nut - axle.

(2) Remove the nut - axle using a socket wrench while depressing the brake pedal.



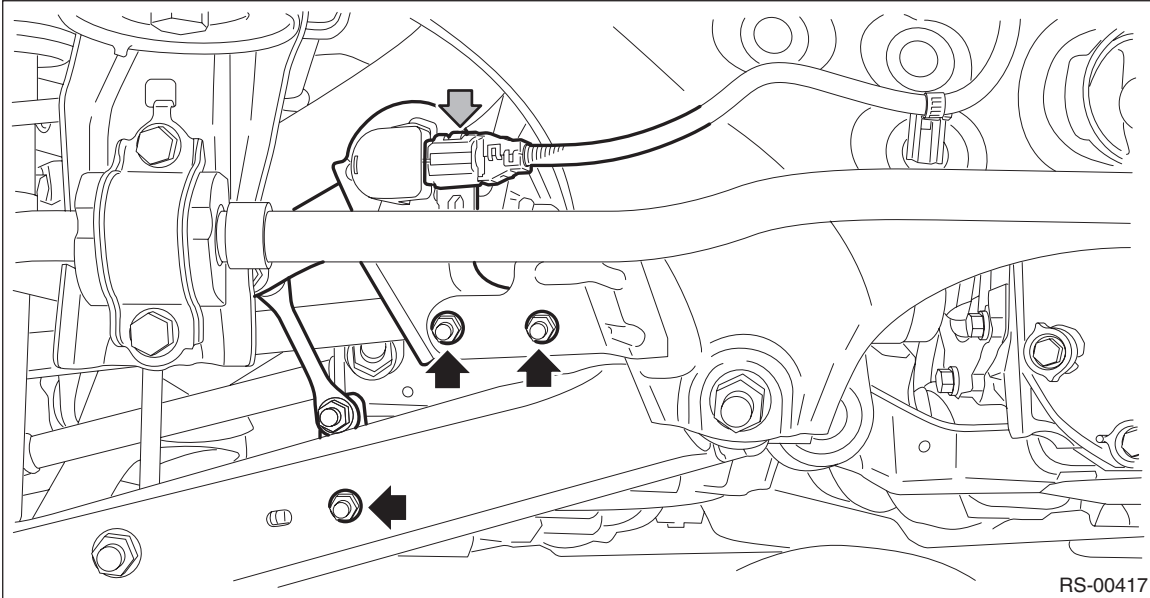
DS-00486

- 4) Disconnect the sensor assembly - headlight beam leveler. (Model with auto headlight beam leveler)

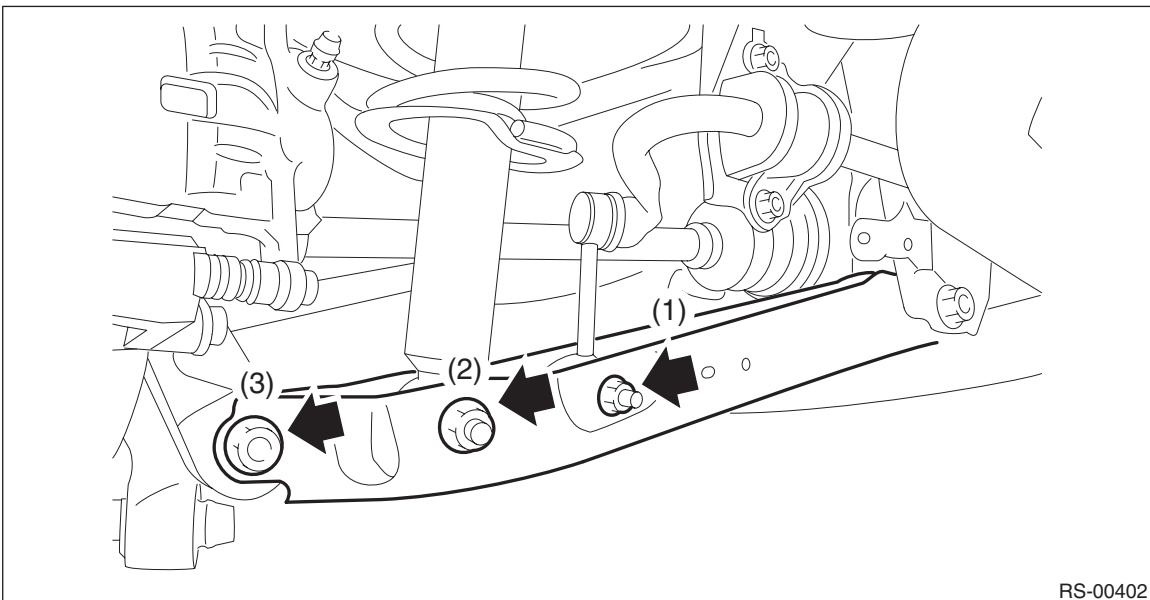
CAUTION:

Do not apply impact to the sensor assembly - headlight beam leveler or forcibly move the arm. Doing so may cause sensor damage and malfunction.

- (1) Disconnect the connector of the sensor assembly - headlight beam leveler.
- (2) Remove the bolts and nuts, and remove the sensor assembly - headlight beam leveler.



- 5) Remove the bolts and nuts, and lower the lateral link assembly - rear.
 - (1) Remove the nut and disconnect the rear stabilizer link assembly. (Model with rear stabilizer)
 - (2) Remove the bolts at the bottom of rear strut assembly.
 - (3) Disconnect the housing assembly - rear axle from the lateral link assembly - rear.



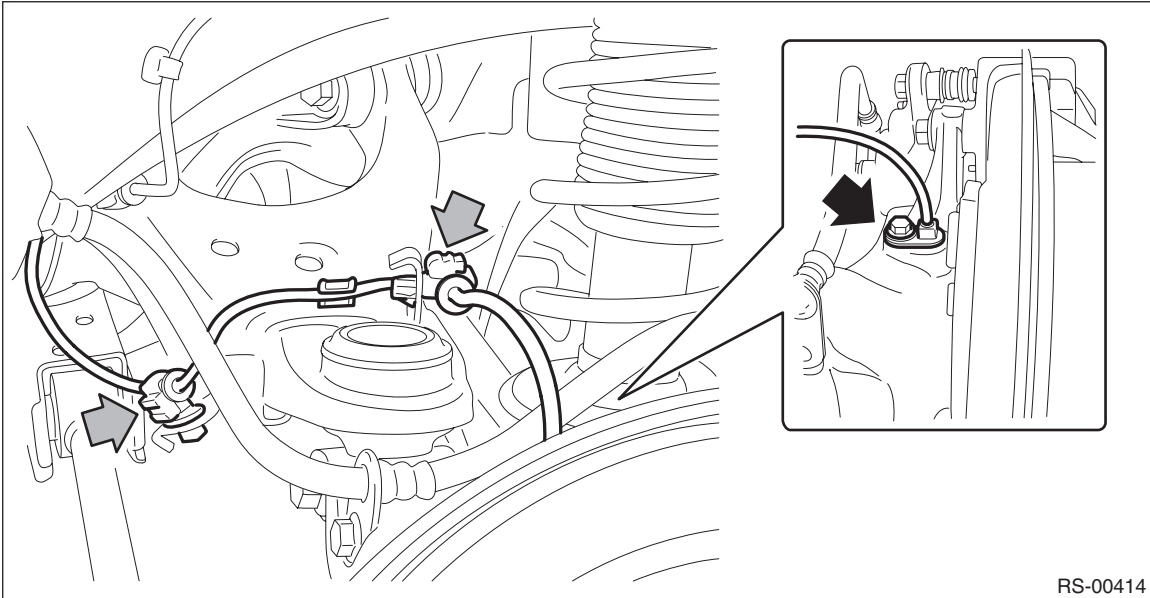
Rear Axle

DRIVE SHAFT SYSTEM

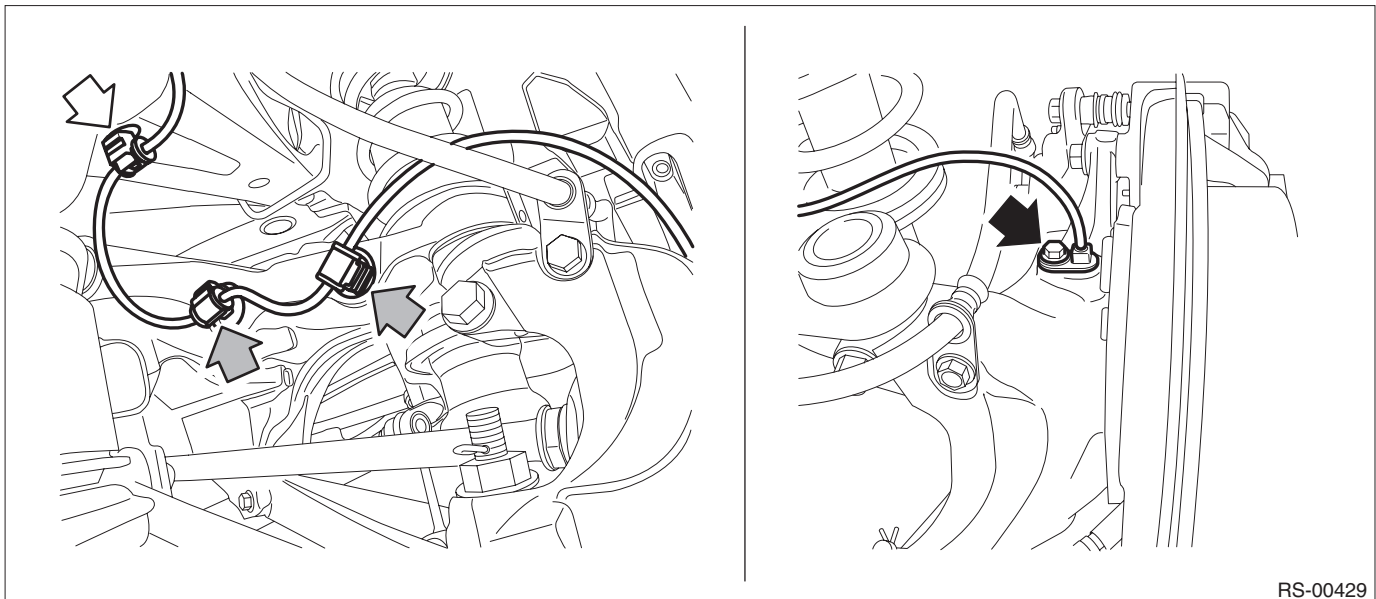
- 6) Remove the rear ABS wheel speed sensor from the housing assembly - rear axle.
- (1) Remove the bolts, and remove the ABS wheel speed sensor.
 - (2) Remove the rear ABS wheel speed sensor harness from the upper arm.

CAUTION:

- Be careful not to damage the sensor.
- Do not apply excessive force to the sensor harness.
- Leave the sensor harness clamp (white arrow) on the vehicle side.
 - Except for XV model

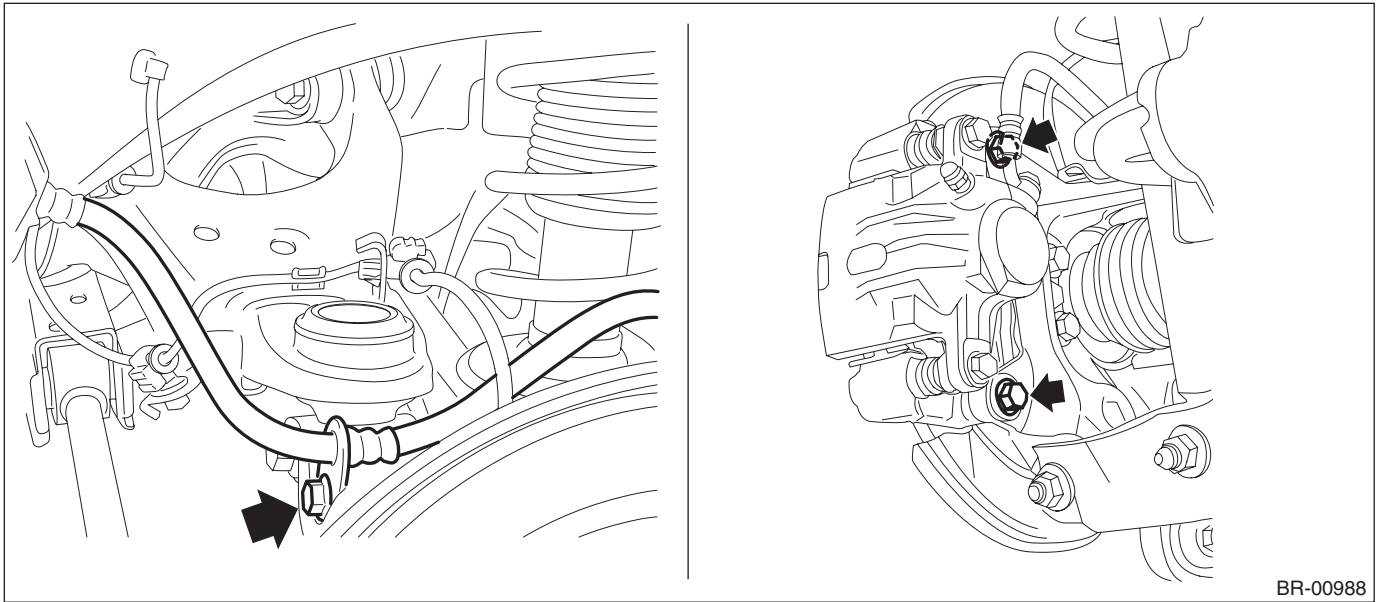


- XV model

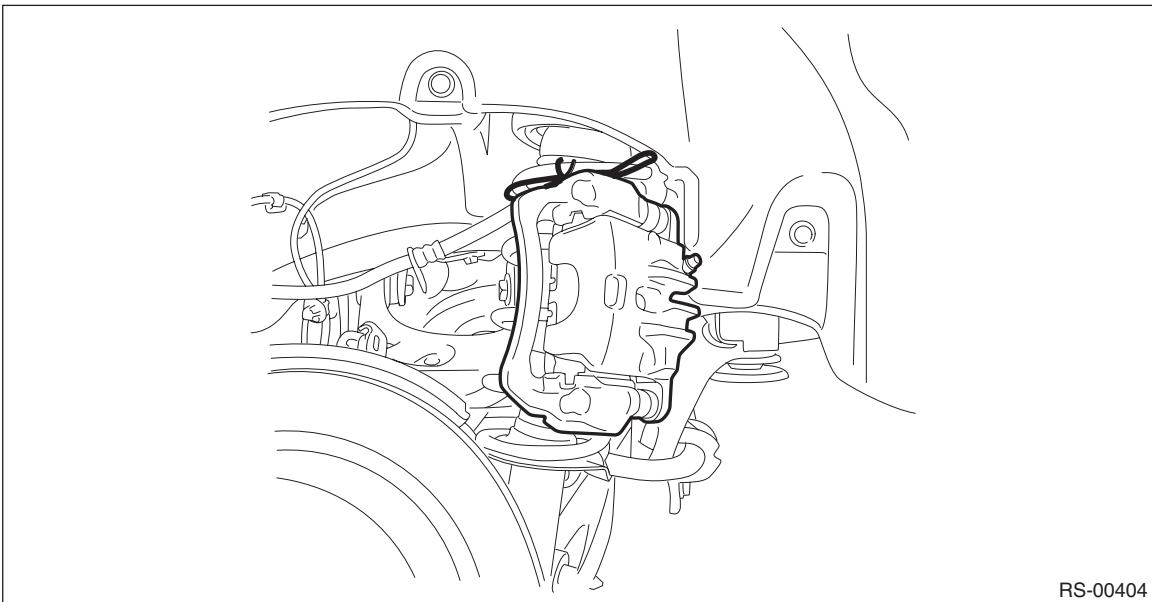


7) Remove the caliper body assembly from the housing assembly - rear axle.

(1) Remove the bolts and then remove the brake hose bracket and caliper body assembly.



(2) Prepare wiring harnesses etc. to be discarded, and suspend the caliper body assembly from the strut assembly.



Rear Axle

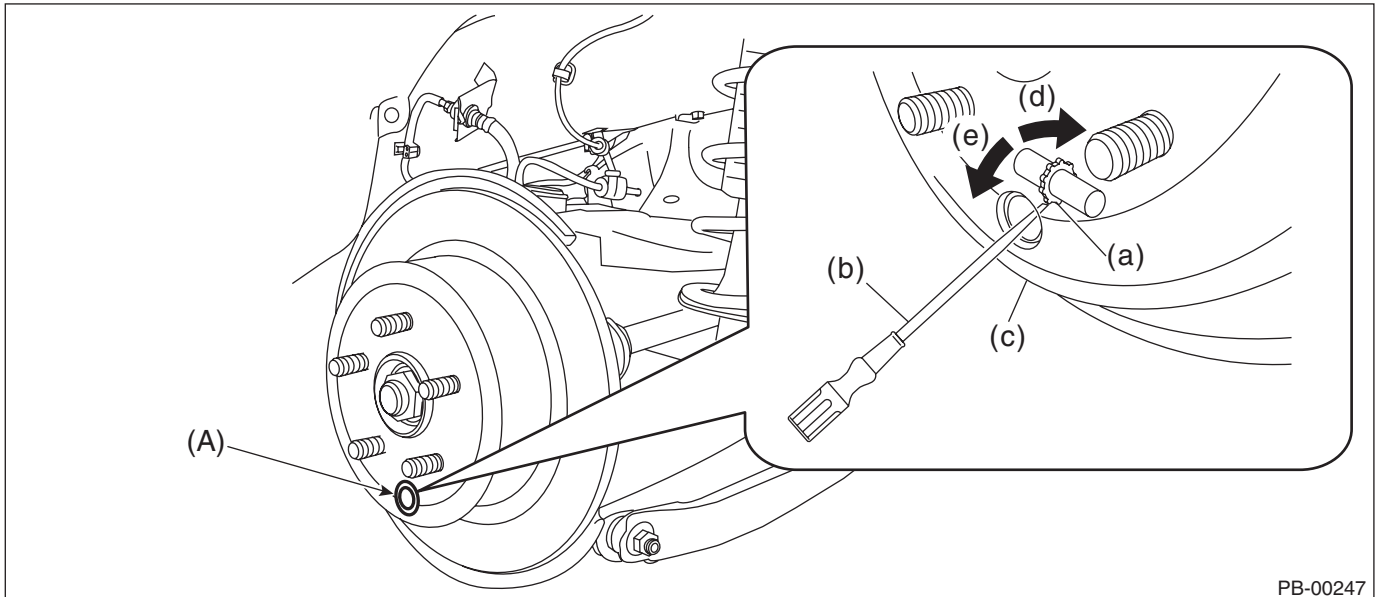
DRIVE SHAFT SYSTEM

8) Remove the rear disc rotor.

NOTE:

If it is difficult to remove the rear disc rotor, perform the following two methods in order.

1. Remove the adjusting hole cover (A), insert the flat tip screwdriver, and rotate the adjuster assembly - rear brake until the brake shoe moves far enough to remove the disc rotor.



(a) Adjuster ASSY - rear brake

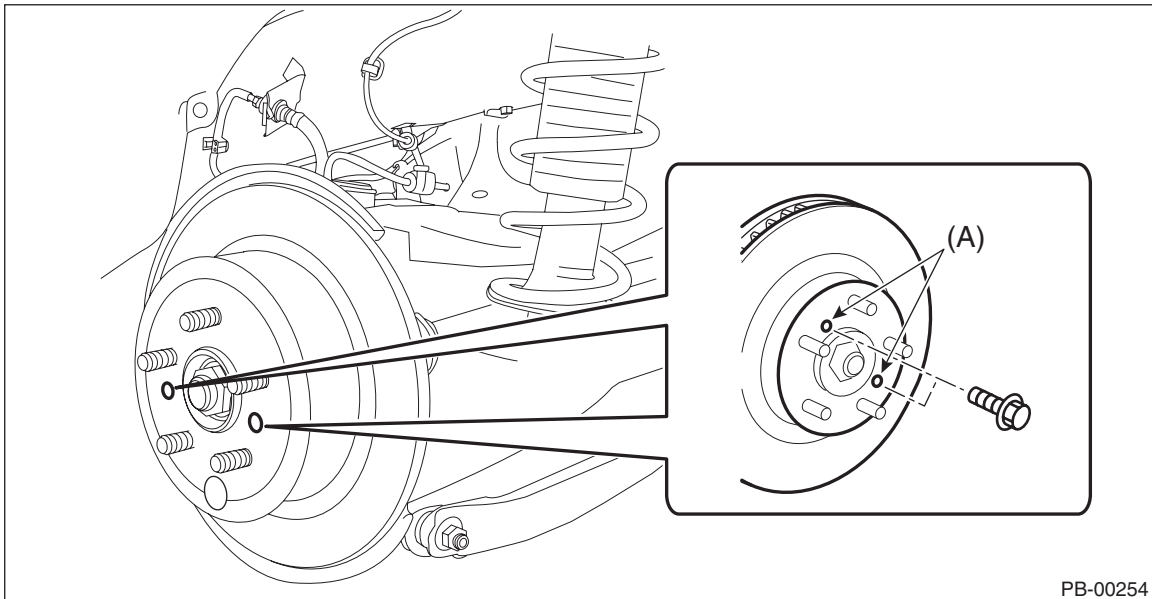
(b) Flat tip screwdriver

(c) Disc rotor

(d) Extend the adjuster ASSY - rear brake

(e) Shorten the adjuster ASSY - rear brake

2. If the disc rotor is not removed after performing above step, screw in an 8 mm (0.31 in) bolt to the threaded part (A) of the disc rotor, and remove the disc rotor.



9) Remove the rear axle shaft assembly from the hub unit COMPL - rear axle.

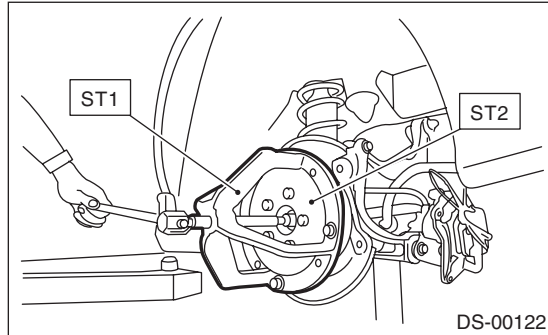
NOTE:

If it is hard to remove, use the ST.

Preparation tool:

ST1: AXLE SHAFT PULLER (926470000)

ST2: AXLE SHAFT PULLER PLATE (28099PA110)



10) Remove the lateral link assembly - front.

(1) Remove the snap pin (a) and nut (b).

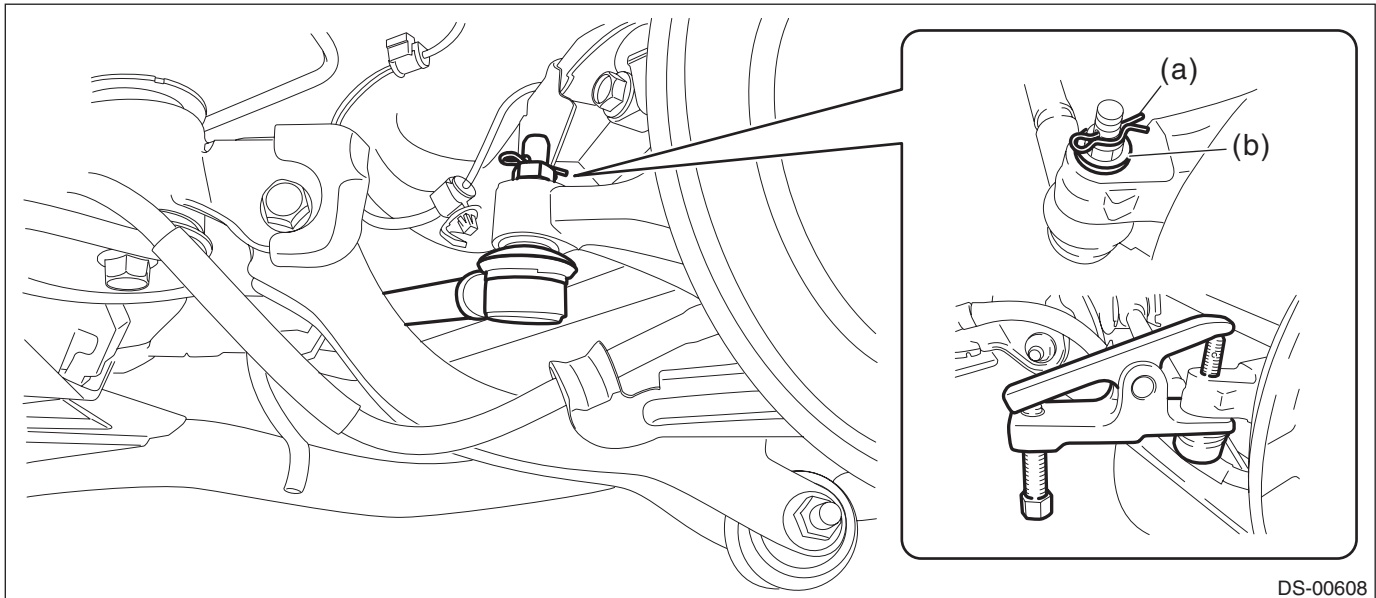
(2) Remove the ball joint from the housing assembly - rear axle.

CAUTION:

Be careful not to damage the boot of the joint.

Preparation tool:

Tie-rod ball joint puller



Rear Axle

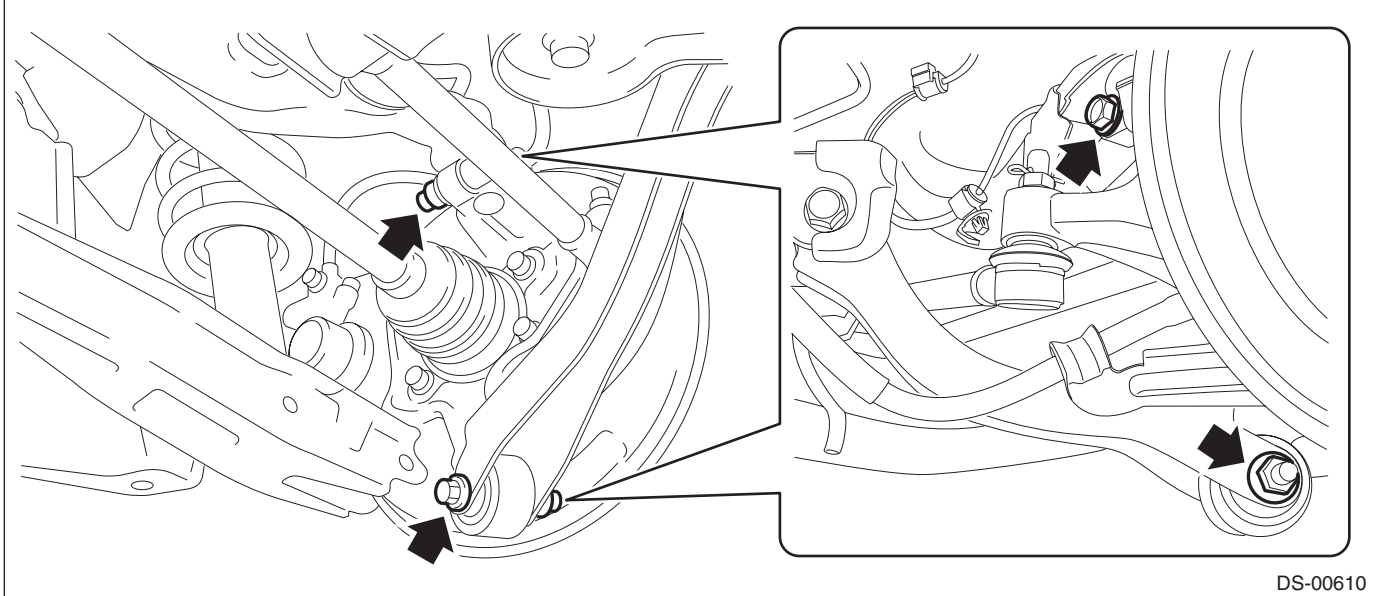
DRIVE SHAFT SYSTEM

11) Remove the housing assembly - rear axle.

(1) Remove the bolts for the upper arm, the trailing link, and the lateral link assembly - rear, and then separate the housing assembly - rear axle.

CAUTION:

Be careful not to damage the boot of the joint.



(2) Remove the housing assembly - rear axle.

CAUTION:

- **Be careful of the weight of the housing assembly - rear axle.**
- **Be careful not to damage the spline portion of the axle shaft.**

12) Refer to "Rear Hub Unit Bearing" for removal of the hub unit COMPL - rear axle. <Ref. to DS-45, REMOVAL, Rear Hub Unit Bearing.>

B: INSTALLATION

- 1) Temporarily tighten the housing assembly - rear axle to the upper arm assembly.
- 2) Install the rear axle shaft assembly.

CAUTION:

- **Do not tap the axle shaft using a hammer when installing axle shaft assembly.**
 - **Use new nut - axle.**
 - (1) Insert the axle shaft assembly into the hub spline, and pull in the axle shaft assembly into specified position.
 - (2) Temporarily tighten the nut - axle.
- 3) Tighten the rear strut assembly, rear stabilizer link assembly and other links to the specified torque.

Tightening torque:

Rear suspension: <Ref. to RS-3, REAR SUSPENSION, COMPONENT, General Description.>

Rear strut: <Ref. to RS-5, REAR STRUT, COMPONENT, General Description.>

- 4) Install the rear disc rotor.
- 5) Install the caliper body assembly.

Tightening torque:

66 N·m (6.73 kgf-m, 48.7 ft-lb)

- 6) Install the brake hose bracket and rear ABS wheel speed sensor.

Tightening torque:

Brake hose bracket: 33 N·m (3.36 kgf-m, 24.3 ft-lb)

Rear ABS wheel speed sensor: 7.5 N·m (0.76 kgf-m, 5.5 ft-lb)

- 7) Install the sensor assembly - headlight beam leveler. (Model with auto headlight beam leveler)

Tightening torque:

7.5 N·m (0.76 kgf-m, 5.5 ft-lb)

- 8) While depressing the brake pedal, tighten new nuts - axle to the specified torque.

CAUTION:

Do not load the rear axle before tightening the nut - axle. Doing so may damage the hub unit COMPL.

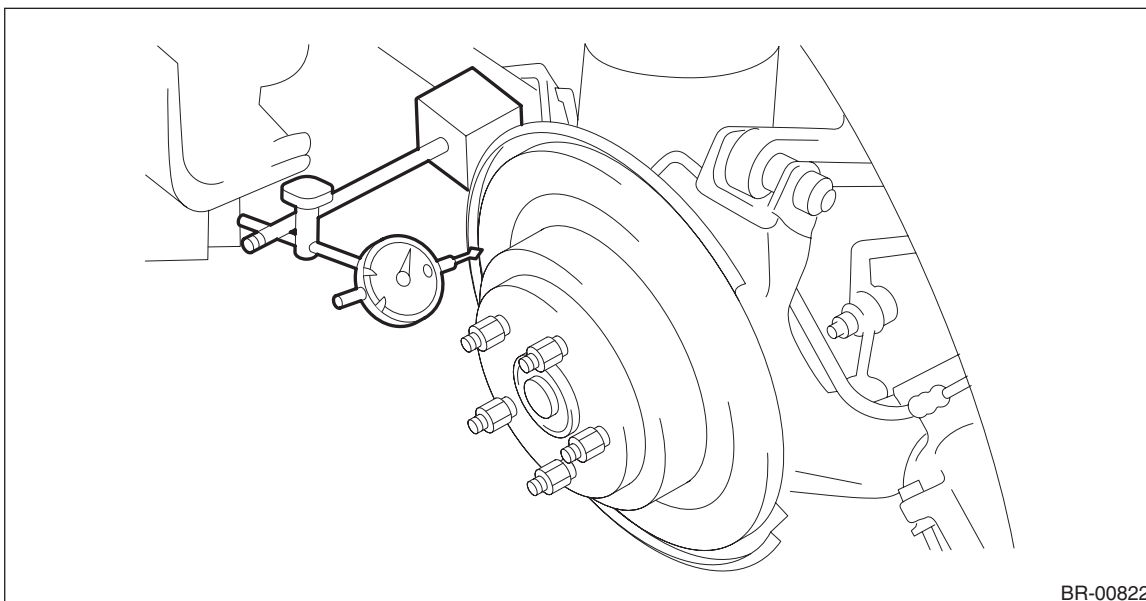
Tightening torque:

190 N·m (19.37 kgf-m, 140.1 ft-lb)

- 9) Inspect the lean of axis direction using a dial gauge. Replace the hub unit COMPL - rear axle if the play exceeds the limit.

Service limit:

Maximum: 0.05 mm (0.0020 in)

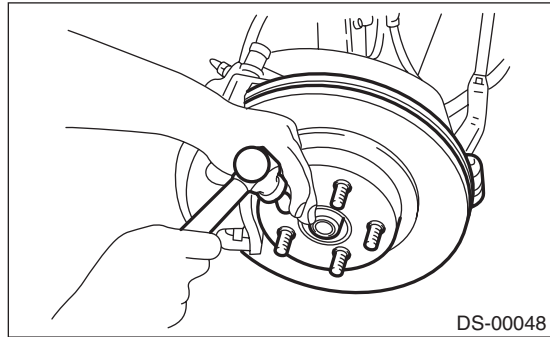


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Rear Axle

DRIVE SHAFT SYSTEM

10) After tightening the nut - axle, lock it securely.



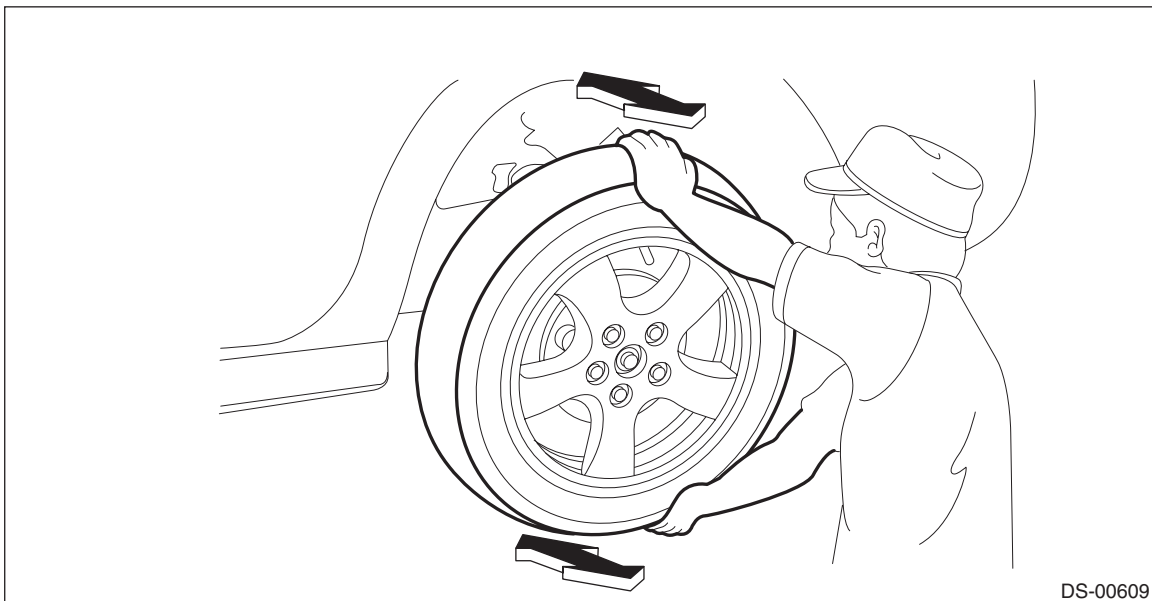
11) Install the rear wheels, and perform the following inspections.

Tightening torque:

Except for C4 model: 120 N·m (12.24 kgf-m, 88.5 ft-lb)

C4 model: 100 N·m (10.20 kgf-m, 73.8 ft-lb)

1. Check the wheels for smooth rotation.
2. Check that there is no play by moving the upper and lower portions of rear tire in an axial direction with the brake pedal released.



- **Play exists** → Check the hub unit COMPL - rear axle. <Ref. to DS-55, INSPECTION, Rear Hub Unit Bearing.>

12) Inspect the wheel alignment and adjust if necessary.

- Inspection: <Ref. to FS-7, INSPECTION, Wheel Alignment.>
- Adjustment: <Ref. to FS-12, ADJUSTMENT, Wheel Alignment.>

13) Perform reinitialization of the auto headlight beam leveler system. (Model with auto headlight beam leveler) <Ref. to LI-20, PROCEDURE, Auto Headlight Beam Leveler System.>

C: DISASSEMBLY**1. BUSHING - REAR AXLE HOUSING**

Do not remove the housing assembly - rear axle because the bushing - rear axle housing cannot be replaced. If it is removed, replace the housing assembly - rear axle.

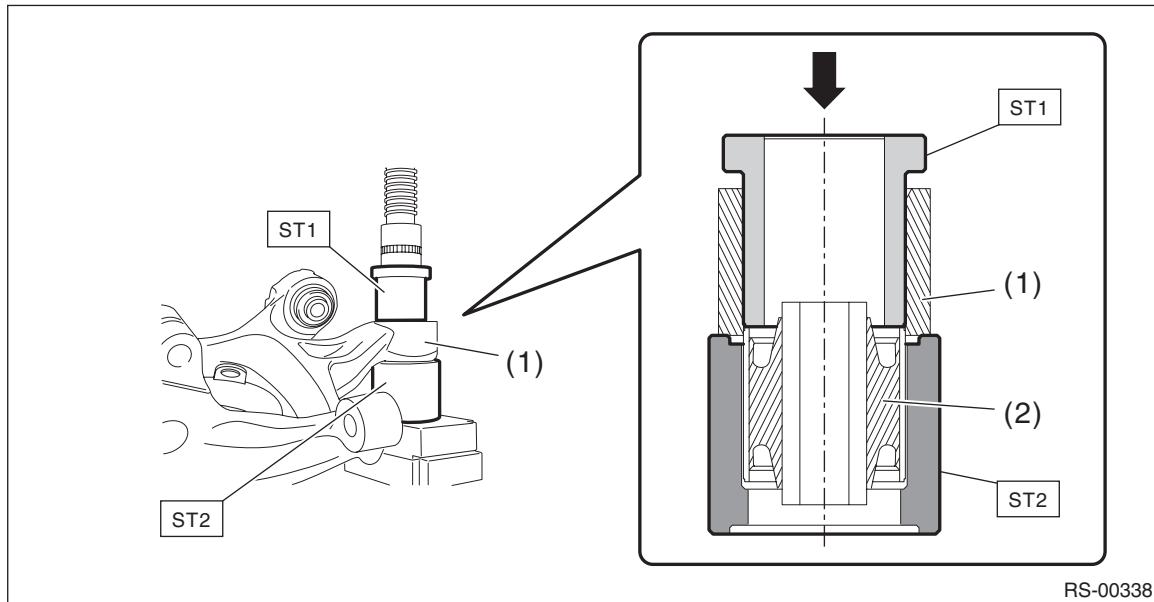
2. BUSHING - TRAILING LINK

- 1) Remove the housing assembly - rear axle. <Ref. to DS-34, REMOVAL, Rear Axle.>
- 2) Using the ST and a hydraulic press, push out the bushing.

Preparation tool:

ST1: BUSHING REMOVER (20099FG000)

ST2: INSTALLER & REMOVER (BASE) (20099PA010)



(1) Housing ASSY - rear axle

(2) Bushing - trailing link

D: ASSEMBLY

1. BUSHING - REAR AXLE HOUSING

Do not remove the housing assembly - rear axle because the bushing - rear axle housing cannot be replaced. If it is removed, replace the housing assembly - rear axle.

2. BUSHING - TRAILING LINK

1) Before assembly, inspect the following items and replace any faulty part with a new one.

- Perform visual check for damage or bend on the trailing link.
- Visually check the bushing for abnormal cracks, fatigue or damage.

2) Press-fit the bushing using ST and the hydraulic press.

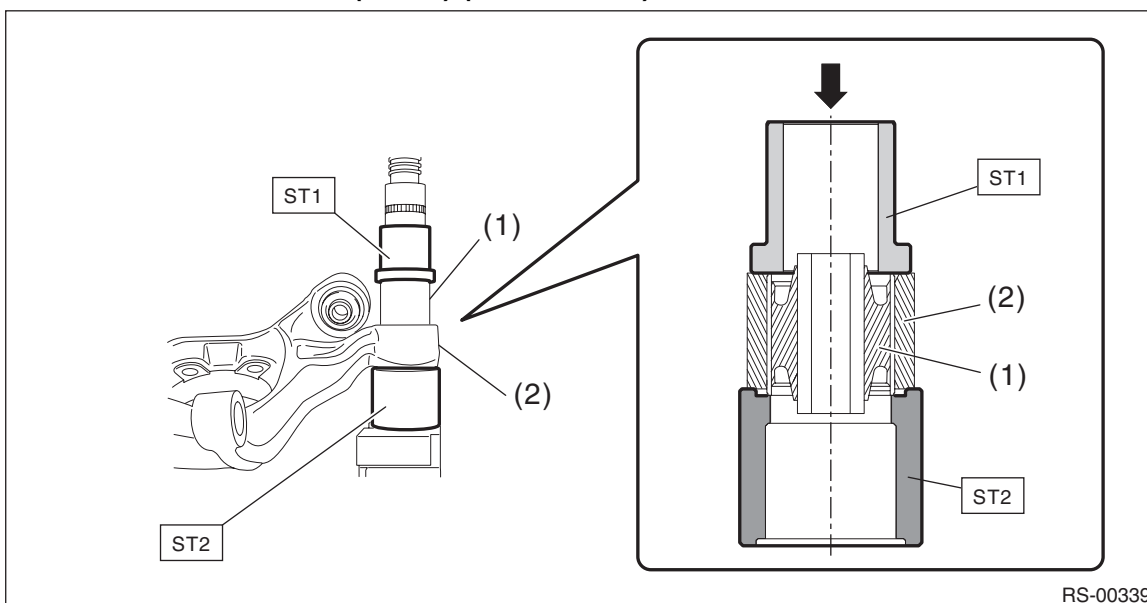
CAUTION:

Make sure to press the bushing straight in.

Preparation tool:

ST1: BUSHING REMOVER (20099FG000)

ST2: INSTALLER & REMOVER (BASE) (20099PA010)



RS-00339

(1) Bushing

(2) Housing ASSY - rear axle