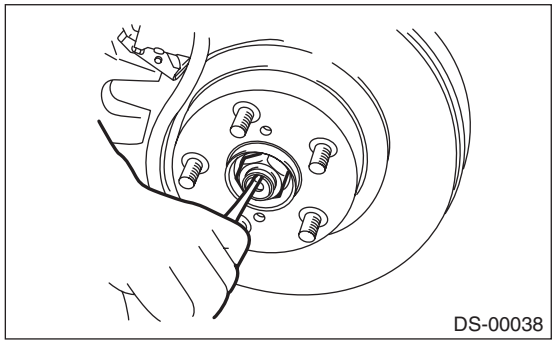
5. Rear Axle

A: REMOVAL

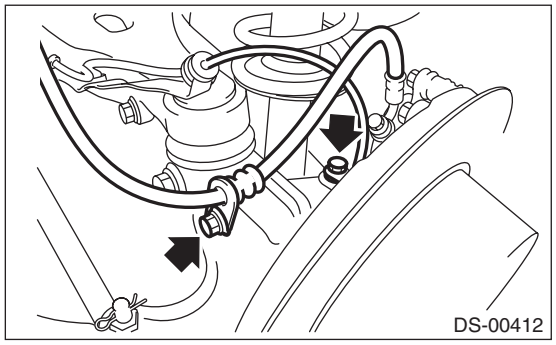
1) Disconnect the ground cable from battery.
2) Lift up the vehicle, and then remove the rear wheels.
3) Lift the crimped section of axle nut.


DS-00038

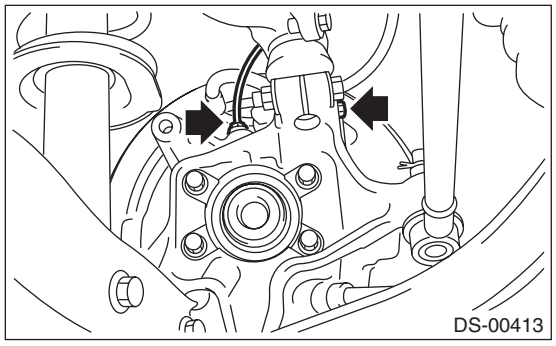
4) Remove the axle nut using a socket wrench while depressing the brake pedal.

CAUTION:
Do not loosen the axle nut while the rear axle is loaded. Doing so may damage the hub bearing.
5) Remove the brake hose bracket and the rear ABS wheel speed sensor.

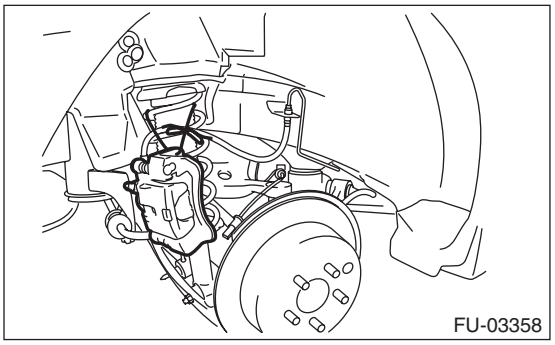
- Disc brake model


DS-00412

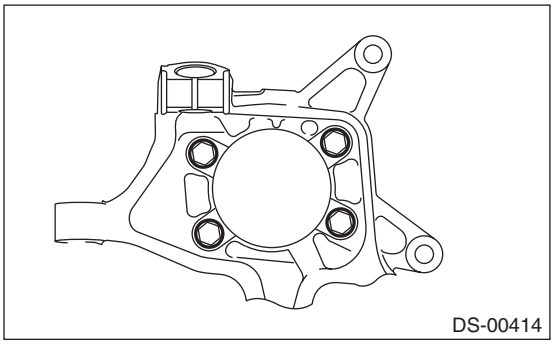
- Drum brake model


DS-00413

6) Remove the disc brake caliper from the rear housing, and suspend it from vehicle using a string. (Disc brake model)

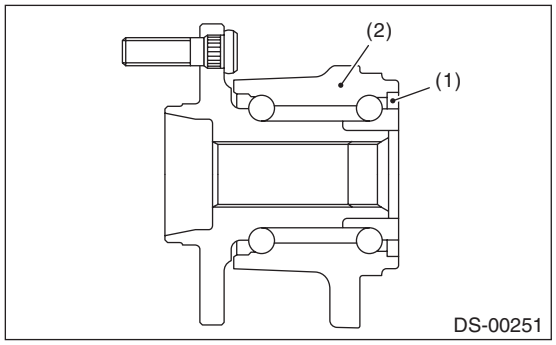

FU-03358

7) Remove the rear disc rotor. (Disc brake model)
8) Remove the brake drum. (Drum brake model)
9) Remove the four bolts from the rear housing.

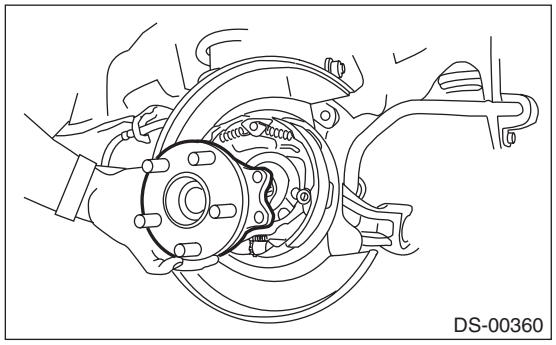

DS-00414

10) Remove the rear hub unit bearing.

CAUTION:
• Be careful not to damage the magnetic encoder.
• Do not get closer the tool which charged magnetism to magnetic encoder.

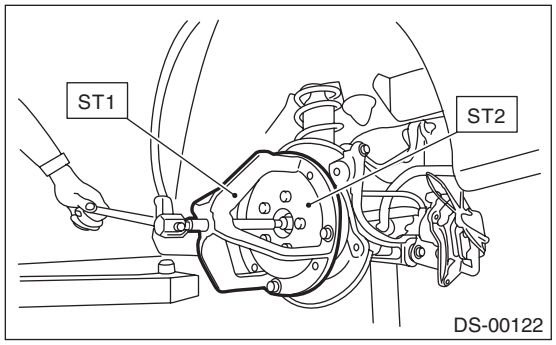


(1) Magnetic encoder
(2) Rear hub unit bearing

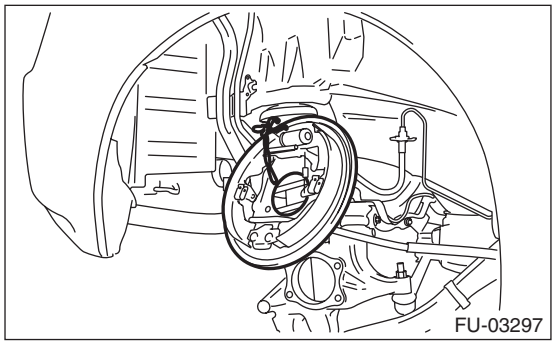


NOTE:
If it is hard to remove, use the ST.

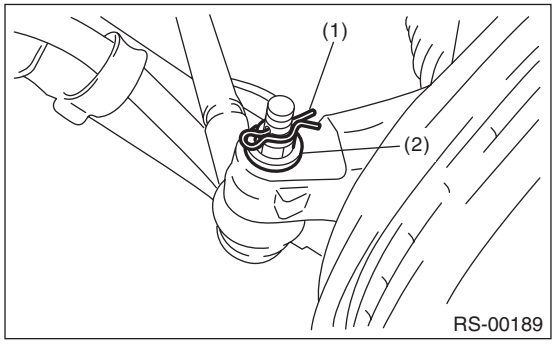
ST1	926470000	AXLE SHAFT PULLER
ST2	28099PA110	AXLE SHAFT PULLER PLATE



11) Suspend the rear brake from the shock absorber. (Drum brake model)

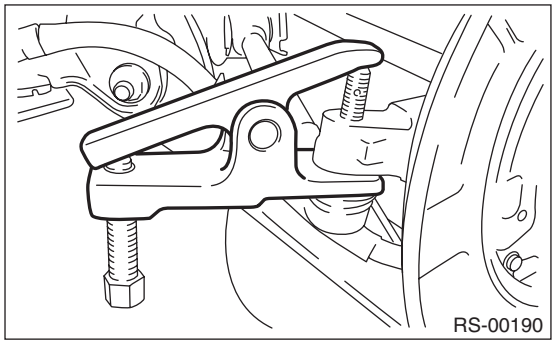


12) Remove the snap pin and nut from the front lateral link.

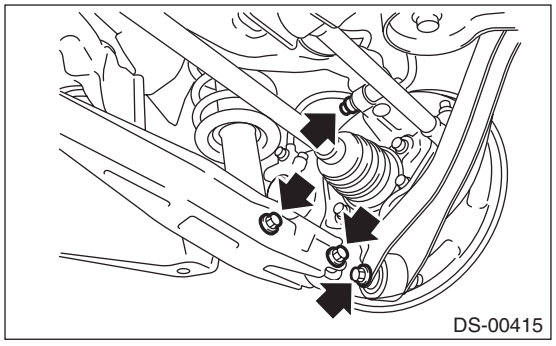


(1) Snap pin
(2) Nut

13) Separate the rear housing and the ball joint using the puller.



14) Separate the upper arm, trailing link and rear lateral link from the rear housing.

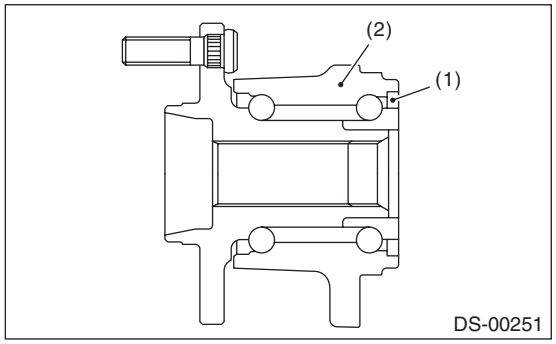


15) Remove the rear axle.

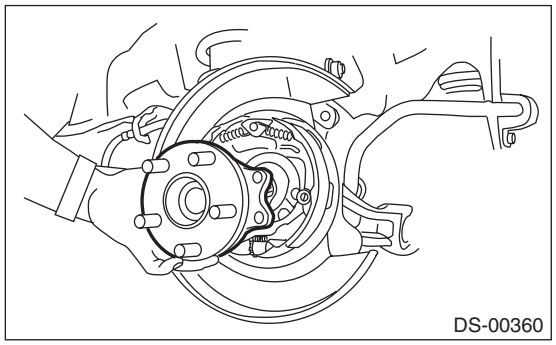
B: INSTALLATION

1) Temporarily tighten the rear housing to the upper arm.
2) Aligning with the mounting hole of the rear brake back plate, temporarily tighten the rear hub unit bearing to the rear housing.

CAUTION:
• Be careful not to damage the magnetic encoder.
• Do not get closer the tool which charged magnetism to magnetic encoder.



(1) Magnetic encoder
(2) Rear hub unit bearing



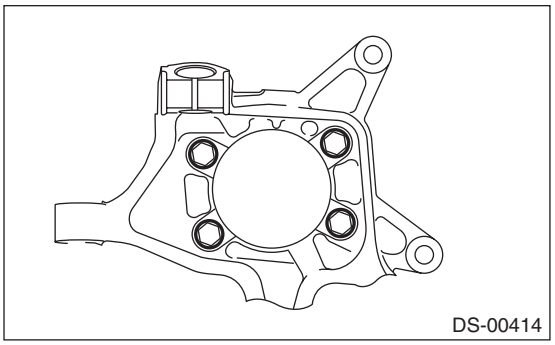
3) Attach the rear drive shaft to the rear hub unit bearing.
4) Tighten the new axle nut temporarily.

CAUTION:
Use new axle nuts.
5) Attach the links to the rear housing and tighten them to the specified torque.

Tightening torque:
Upper arm
80 N·m (8.2 kgf-m, 59 ft-lb)
Front lateral link
60 N·m (6.1 kgf-m, 44.3 ft-lb)
Rear lateral link
120 N·m (12.2 kgf-m, 88.5 ft-lb)
Trailing link
90 N·m (9.2 kgf-m, 66.4 ft-lb)

6) Tighten the four bolts of the rear housing.

Tightening torque:
65 N·m (6.6 kgf-m, 47.9 ft-lb)



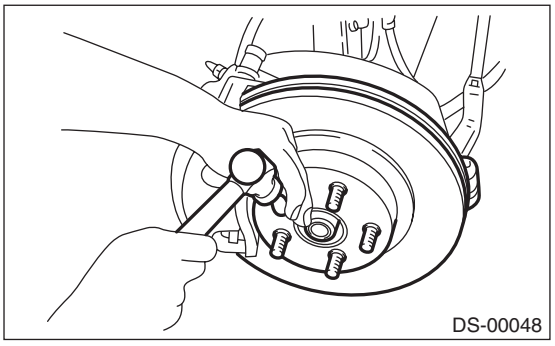
7) Install the rear disc rotor. (Disc brake model)
8) Install the brake drum. (Drum brake model)
9) Install the rear disc brake caliper on the rear housing. (Disc brake model)

Tightening torque:
66 N·m (6.7 kgf-m, 48.7 ft-lb)
10) Install the brake hose bracket and rear ABS wheel speed sensor.

Tightening torque:
Brake hose bracket
33 N·m (3.4 kgf-m, 24.3 ft-lb)
Rear ABS wheel speed sensor
7.5 N·m (0.76 kgf-m, 5.5 ft-lb)
11) While pressing the brake pedal, tighten the new axle nuts to the specified torque.

CAUTION:
Do not apply weight to the rear axle before tightening the axle nut. Doing so may damage the hub bearing.

Tightening torque:
190 N·m (19.4 kgf-m, 140.1 ft-lb)
12) After tightening the axle nut, lock it securely.



13) Install the rear wheels.

Tightening torque:
100 N·m (10.2 kgf-m, 73.8 ft-lb)
14) Connect the battery ground terminal.
15) Inspect the wheel alignment and adjust if necessary.

C: DISASSEMBLY

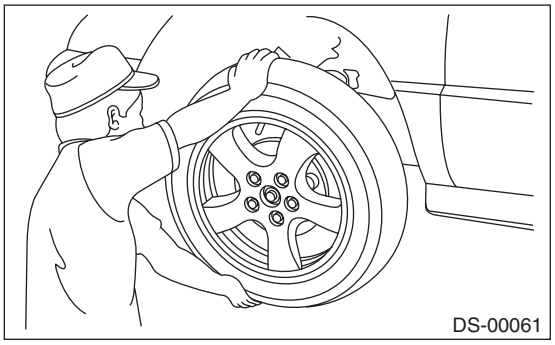
For the removal procedure of bushing, refer to “Rear Trailing Link” in “REAR SUSPENSION”. <Ref. to RS-11, REAR HOUSING BUSHING, DISASSEMBLY, Rear Trailing Link.>

D: ASSEMBLY

For the installation procedure of bushing, refer to “Rear Trailing Link” in “REAR SUSPENSION”. <Ref. to RS-12, REAR HOUSING BUSHING, ASSEMBLY, Rear Trailing Link.>

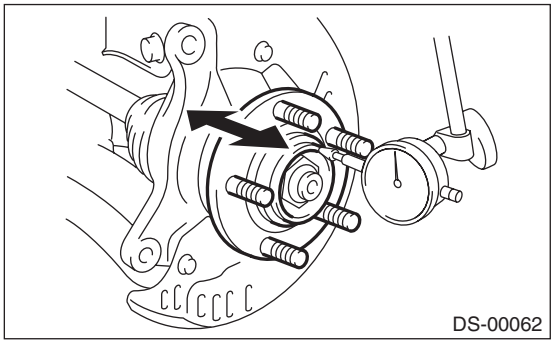
E: INSPECTION

1) Moving the rear tire up and down by hand, check that there is no backlash in bearing, and check that the wheel rotates smoothly.


DS-00061

2) Inspect the lean of axis direction using a dial gauge. Replace the bearing if the load range exceeds the limitation.

Service limit:
Maximum: 0.05 mm (0.0020 in)


DS-00062