

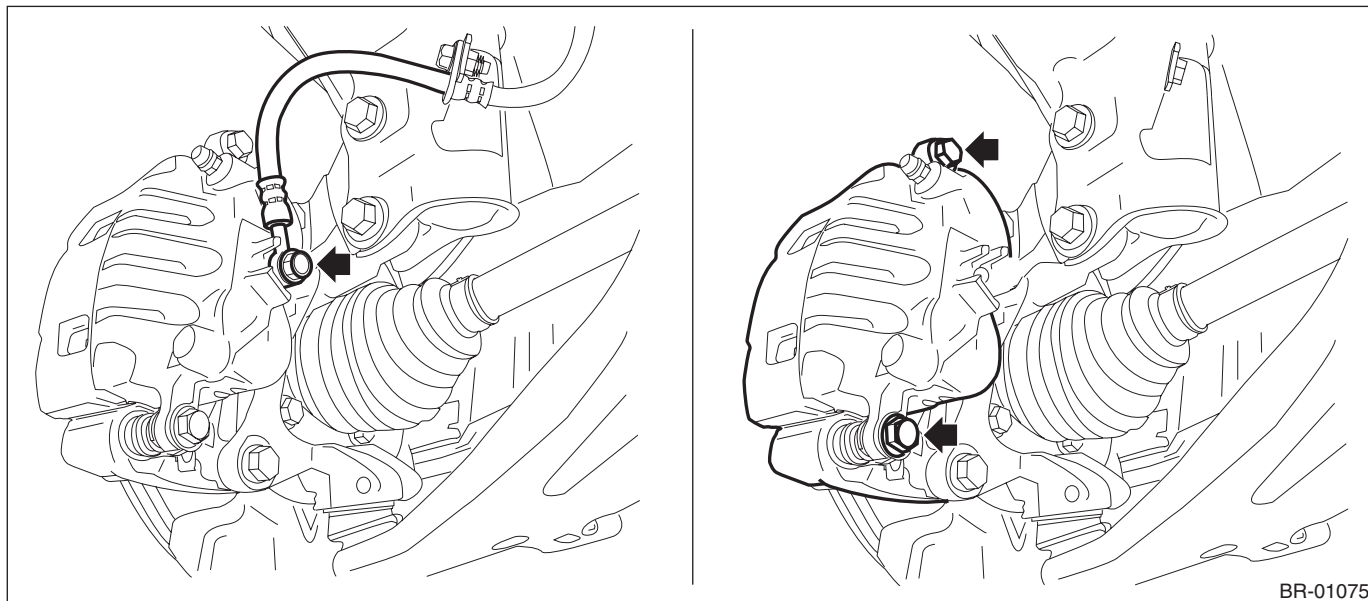
4. Front Disc Brake Assembly

A: REMOVAL

CAUTION:

Do not allow brake fluid to come in contact with the painted surface of the vehicle body. If it does, wash off with water and wipe away completely.

- 1) Lift up the vehicle, and then remove the front wheels.
- 2) Remove the caliper body assembly.
 - (1) Remove the union bolt and caliper bolt, and remove the caliper body assembly from the support - front disc brake.

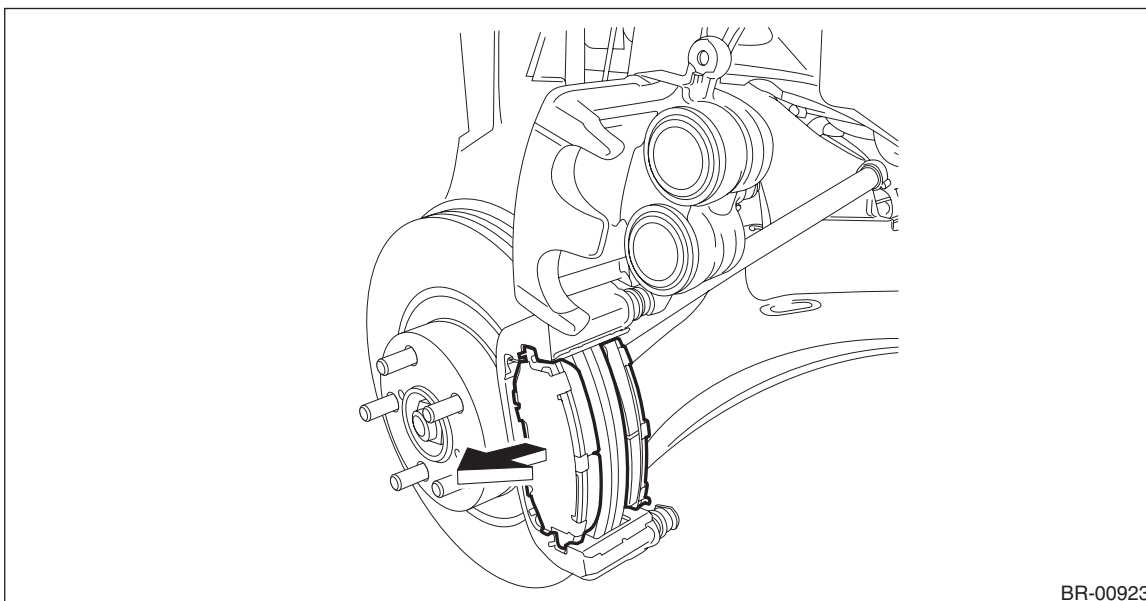


- 3) Remove the support - front disc brake.

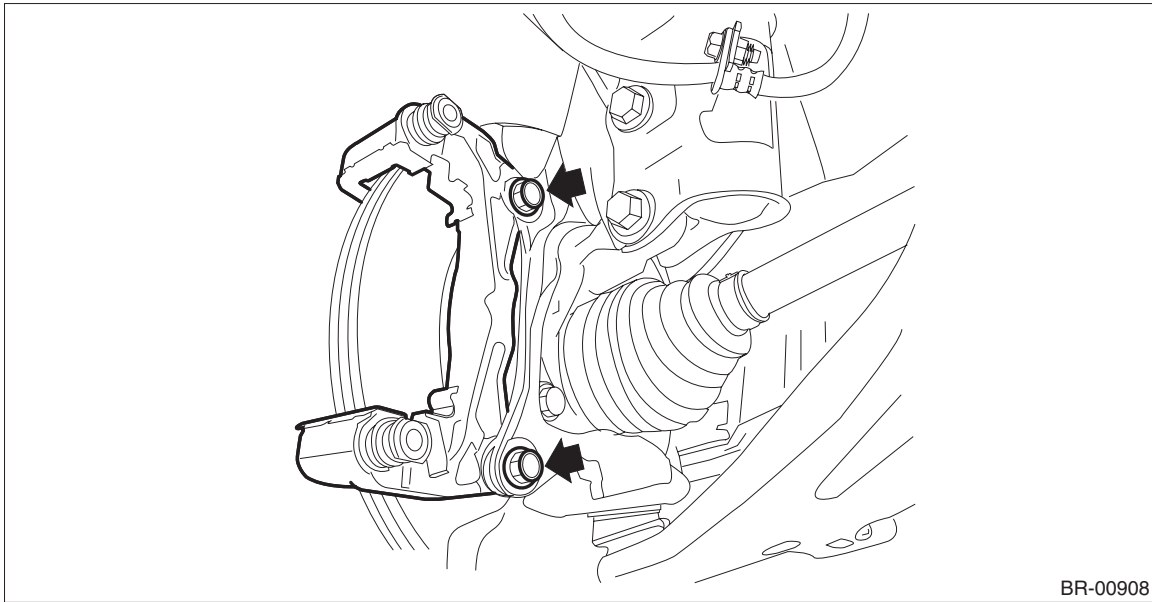
NOTE:

Remove the support - front disc brake only when replacing the disc rotor or the support - front disc brake. It is not necessary to remove it when servicing the caliper body assembly.

- (1) Remove the brake pad from support - front disc brake.



- (2) Remove the mounting bolts, and then remove the support - front disc brake from the housing assembly - front axle.



B: INSTALLATION

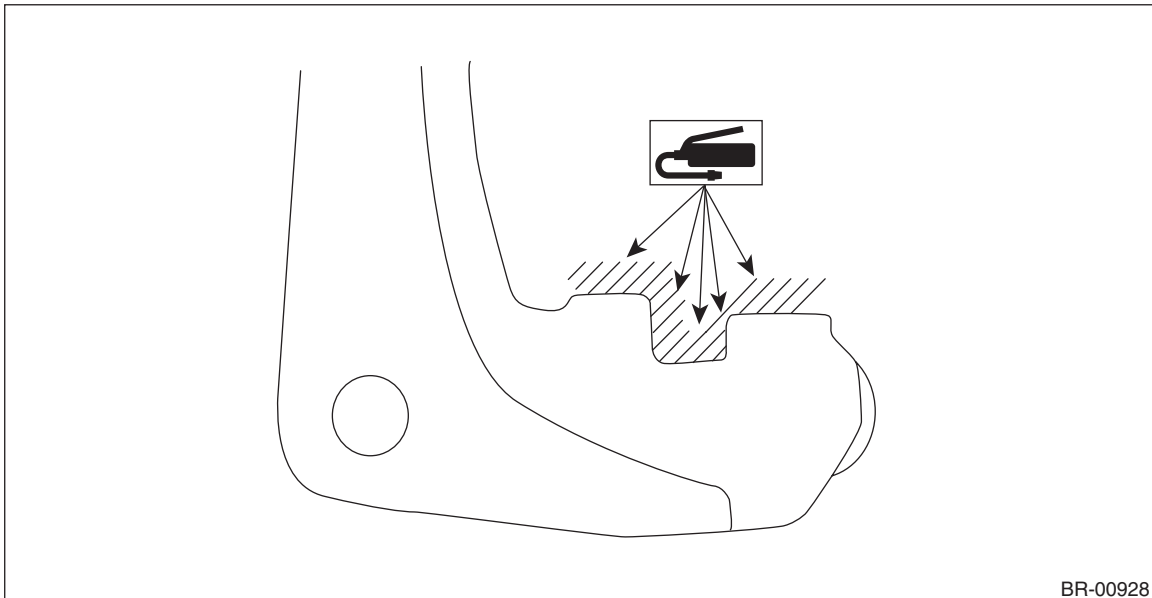
NOTE:

Before installation, remove mud and foreign matter from the caliper body assembly and support - front disc brake.

- 1) Check each part.<Ref. to BR-29, INSPECTION, Front Disc Brake Assembly.>
- 2) Apply a thin coat of grease to the support - front disc brake.

Grease:

Grease contained in the pad kit or equivalent



- 3) Install the support - front disc brake to the housing assembly - front axle.

Tightening torque:

Mounting bolt: 80 N·m (8.16 kgf-m, 59.0 ft-lb)

- 4) Apply a thin coat of grease to the pad clip. (A)

Grease:

Grease contained in the pad kit or equivalent

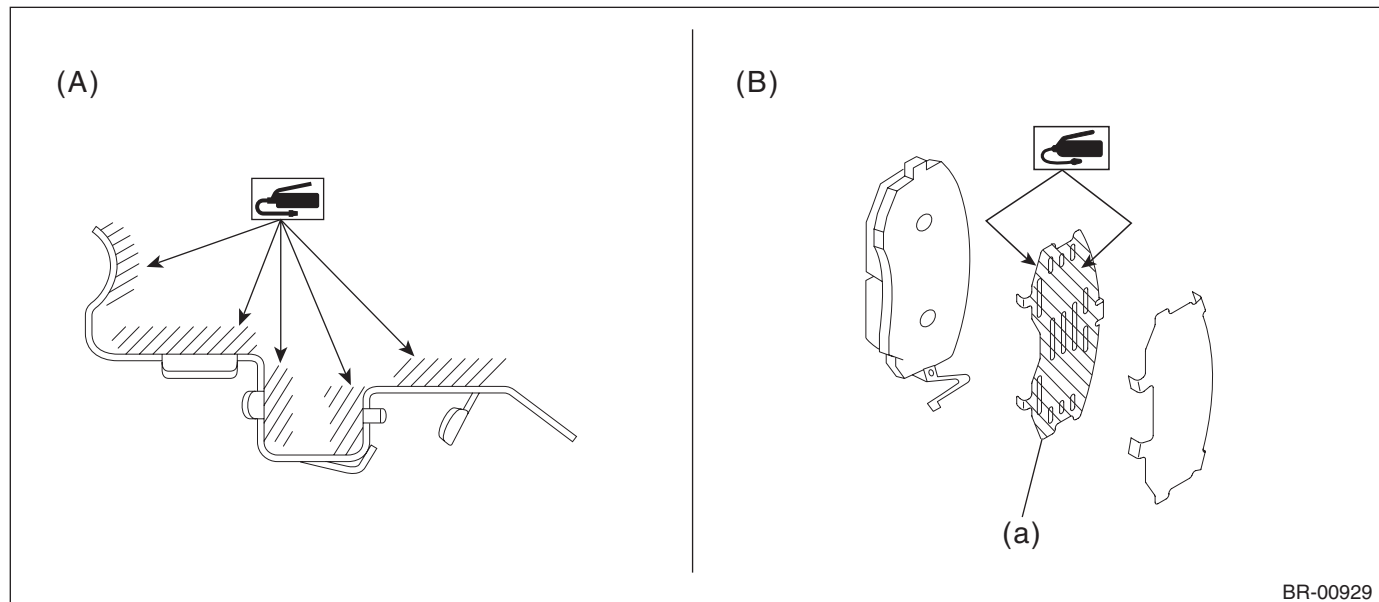
Front Disc Brake Assembly

BRAKE

5) Apply a thin coat of grease to the pad and both sides of the shim - disc brake front inner (a). (B)

Grease:

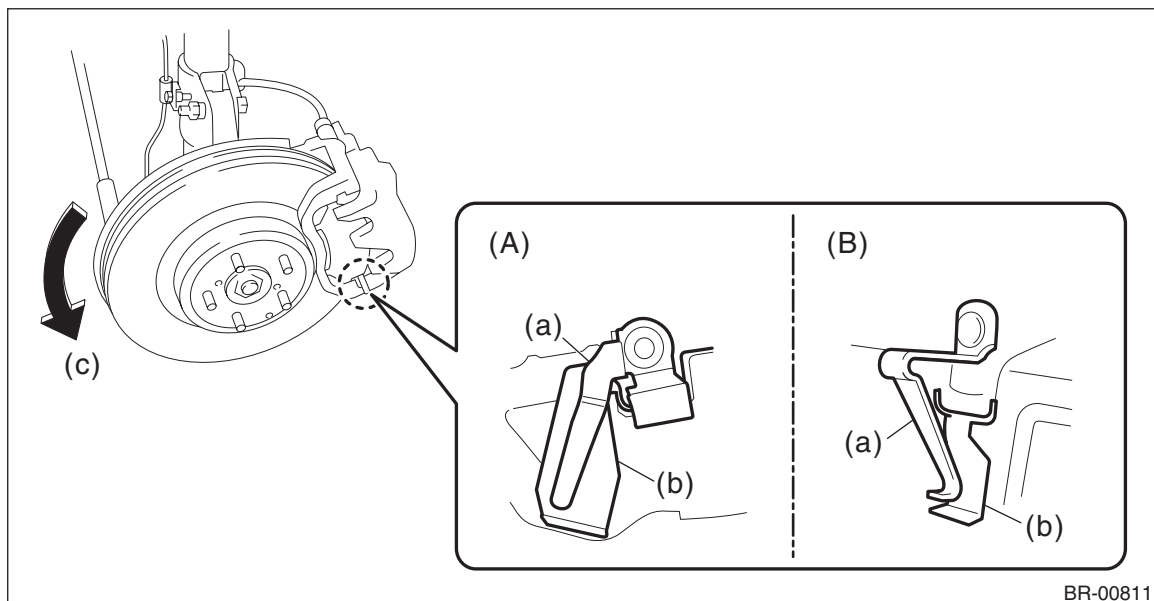
Molykote AS880N or an item contained in the pad kit



6) Install the brake pad to the support - front disc brake.

CAUTION:

- Be sure to install so that the pad return spring faces the input side of the direction of brake rotor rotation, as shown in the figure.
- Correctly install the pad return spring to the supporting surface of the pad clip as shown in the figure.
- If the pad return spring is deformed or damaged, replace the brake pad with a new part.



(A) 16-inch

(B) 17-inch

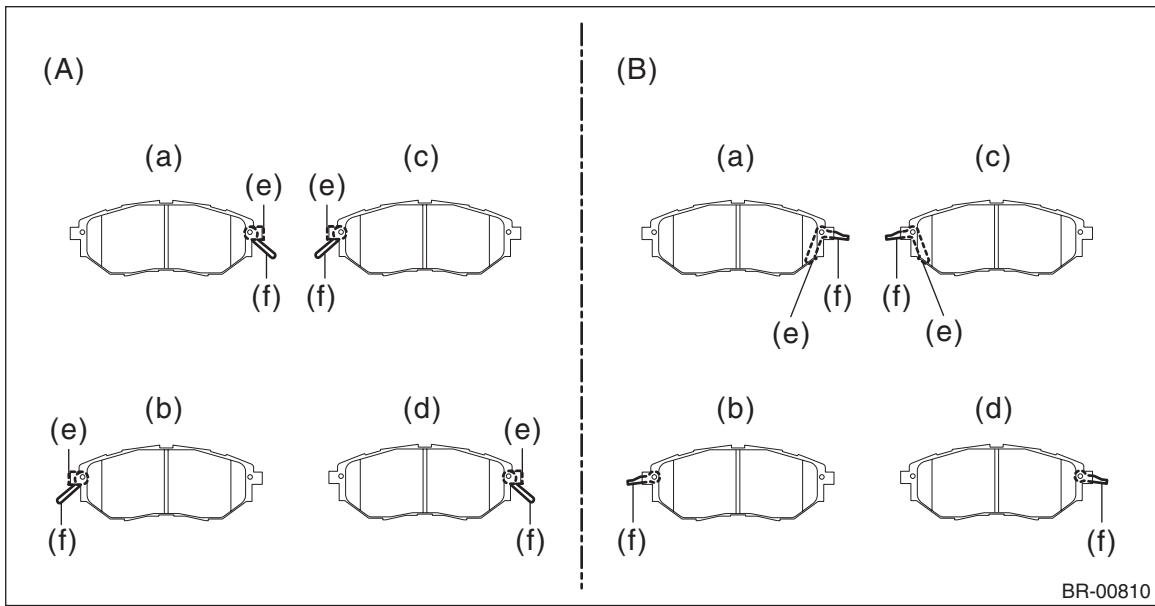
(a) Pad return spring

(b) Supporting surface of pad clip

(c) Direction of brake rotor rotation

NOTE:

Install the brake pad indicator in proper direction.



(A) 16-inch

(B) 17-inch

(a) LH — IN

(c) RH — IN

(e) Pad indicator

(b) LH — OUT

(d) RH — OUT

(f) Pad return spring

7) Install the caliper body assembly to the support - front disc brake.

Tightening torque:

Caliper bolt: 27 N·m (2.75 kgf-m, 19.9 ft-lb)

8) Connect the brake hose using a new brake hose gasket.

Tightening torque:

Union bolt: 18 N·m (1.84 kgf-m, 13.3 ft-lb)

9) Bleed air from the brake system.<Ref. to BR-60, BRAKE LINE, PROCEDURE, Air Bleeding.>

10) Install the front wheels.

Tightening torque:

120 N·m (12.24 kgf-m, 88.5 ft-lb)

Front Disc Brake Assembly

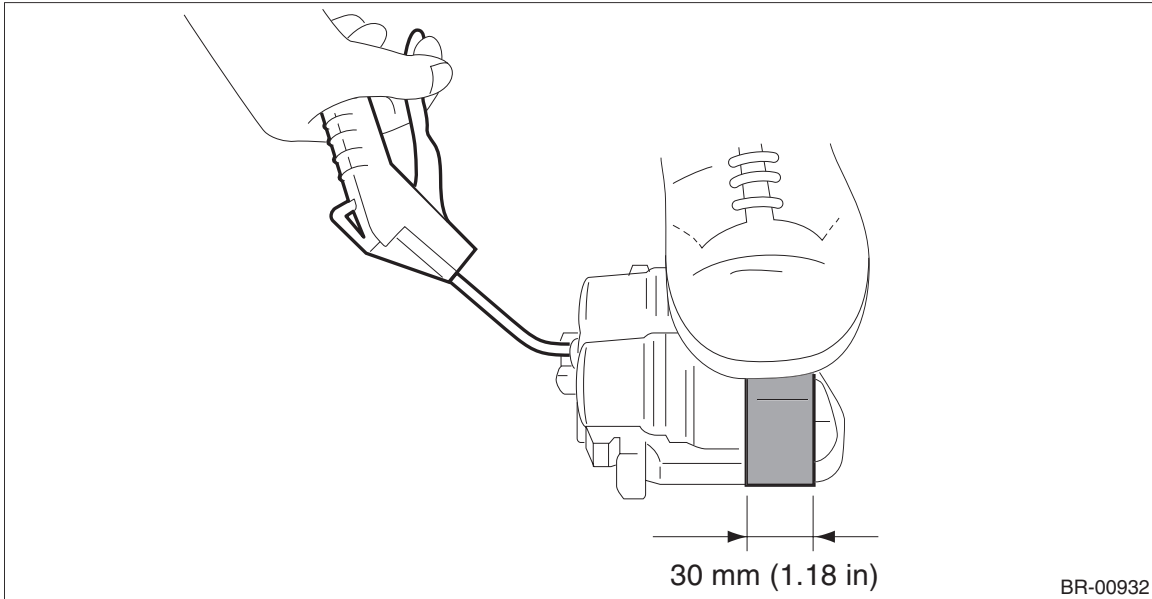
BRAKE

C: DISASSEMBLY

CAUTION:

Be careful not to allow foreign matter to enter the brake hose connector.

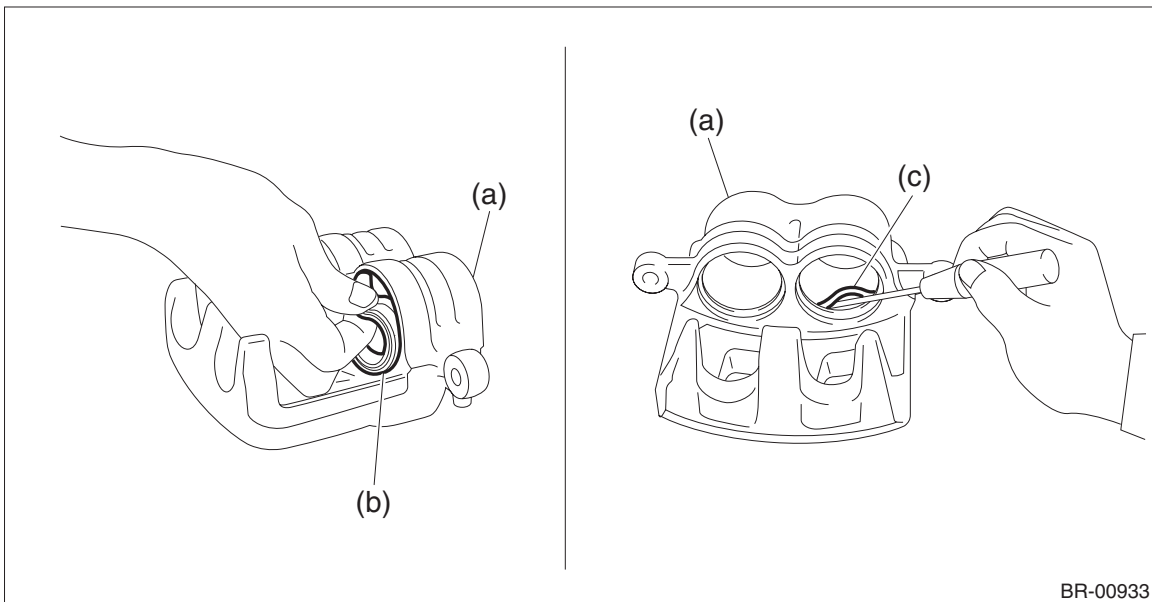
- 1) Remove mud and foreign matter from the caliper body.
- 2) Remove the piston - disc brake.
 - (1) Place a wooden block in the caliper body as shown in the figure to prevent the piston - disc brake from jumping out and being damaged.
 - (2) Using an air gun, gradually apply compressed air via the brake hose installation hole to push out the piston - disc brake.



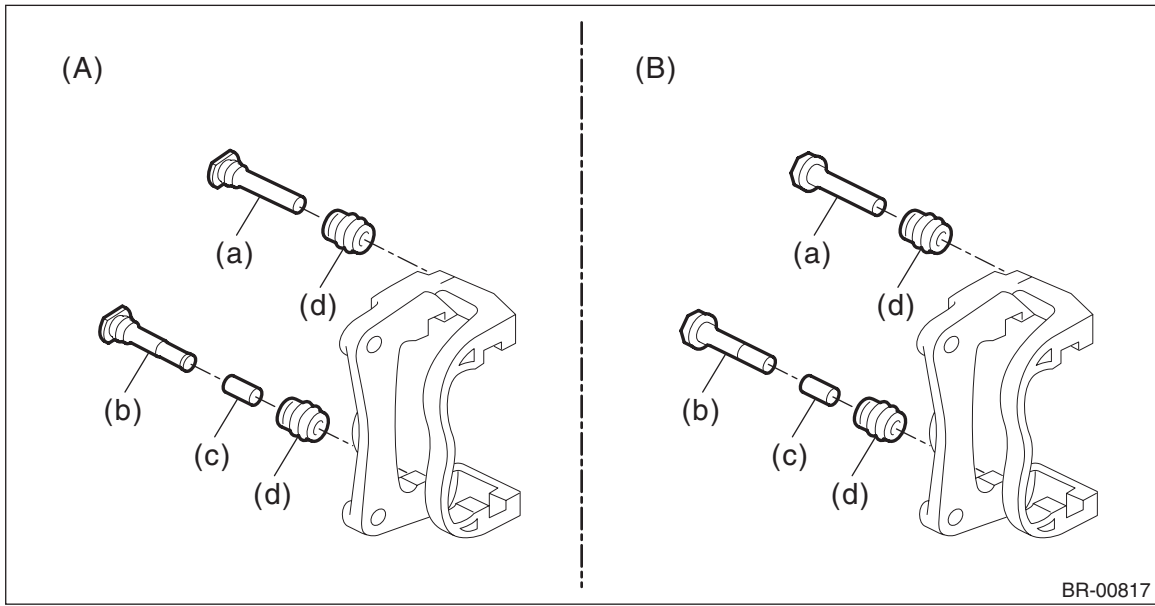
- 3) Remove the piston boot (b) and piston seal (c) from the caliper body cylinder (a).

CAUTION:

Do not damage the cylinder and piston seal groove.



4) Remove the guide pin - front brake, lock pin - front brake, lock pin - sleeve, and pin boot from the support - front disc brake.



(A) 16-inch

(B) 17-inch

(a) Guide pin (black)

(c) Bushing

(d) Pin boot

(b) Lock pin (silver)

Front Disc Brake Assembly

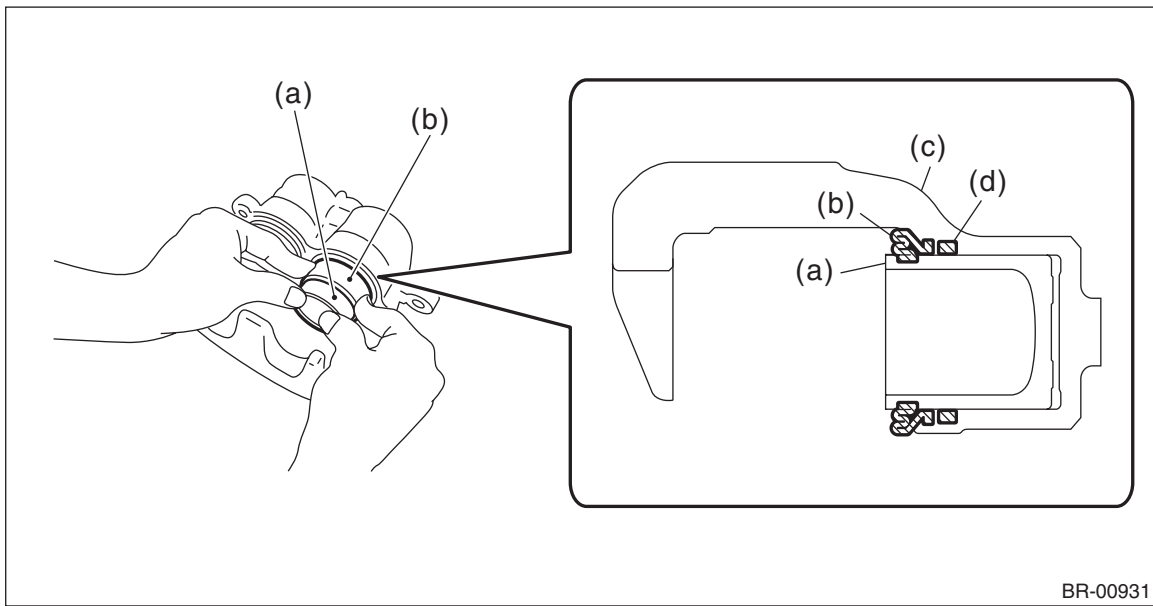
BRAKE

D: ASSEMBLY

- 1) Before assembly, check each part. <Ref. to BR-29, INSPECTION, Front Disc Brake Assembly.>
- 2) Clean the inside of the caliper body cylinder using brake fluid.
- 3) Apply a coat of brake fluid to piston seal and install the piston seal to the caliper body cylinder groove.
- 4) Apply a coat of brake fluid to the inner surface of caliper body cylinder and the entire outer surface of the piston - disc brake.
- 5) Apply grease contained in the piston seal kit to the piston boot, and install it to the groove at the end of the cylinder.
- 6) Insert the piston - disc brake into the caliper body cylinder.
- 7) Position the piston boot in the grooves on the piston - disc brake and the caliper body cylinder.

CAUTION:

Do not force the piston - disc brake into the caliper body cylinder.



BR-00931

(a) Piston - disc brake

(c) Caliper body assembly

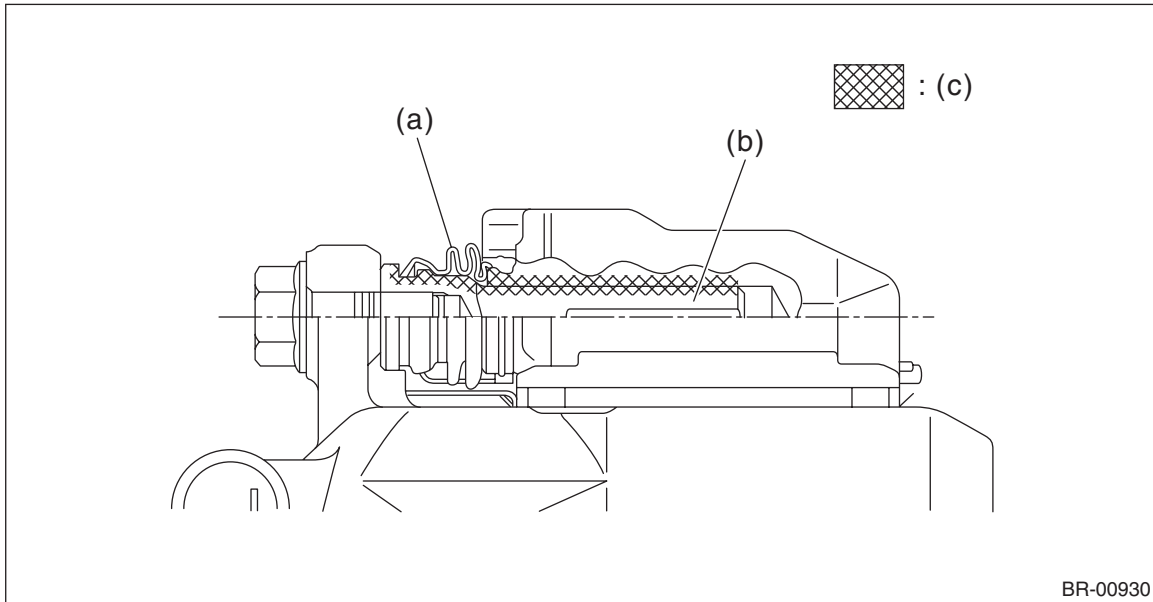
(d) Piston seal

(b) Piston boot

- 8) Apply grease contained in the piston seal kit to the lock pin - front brake, the outer surface of guide pin - front brake, the inner surface of support cylinder, and the grooves of pin boot.
- 9) Install the pin boot to the lock pin - front brake and guide pin - front brake, and insert them into the support cylinder.

CAUTION:

Insert the lock pin - front brake and guide pin - front brake into specified position, and make sure that they slide and seat properly.



- (a) Pin boot (b) Lock pin - front brake or guide pin - front brake (c) Grease applied area

E: INSPECTION

- 1) Check the caliper body cylinder and piston for uneven wear, damage or rust.
- 2) Check the rubber parts for damage or deterioration.
- 3) If faulty is found in the inspection, replace the relevant part.