

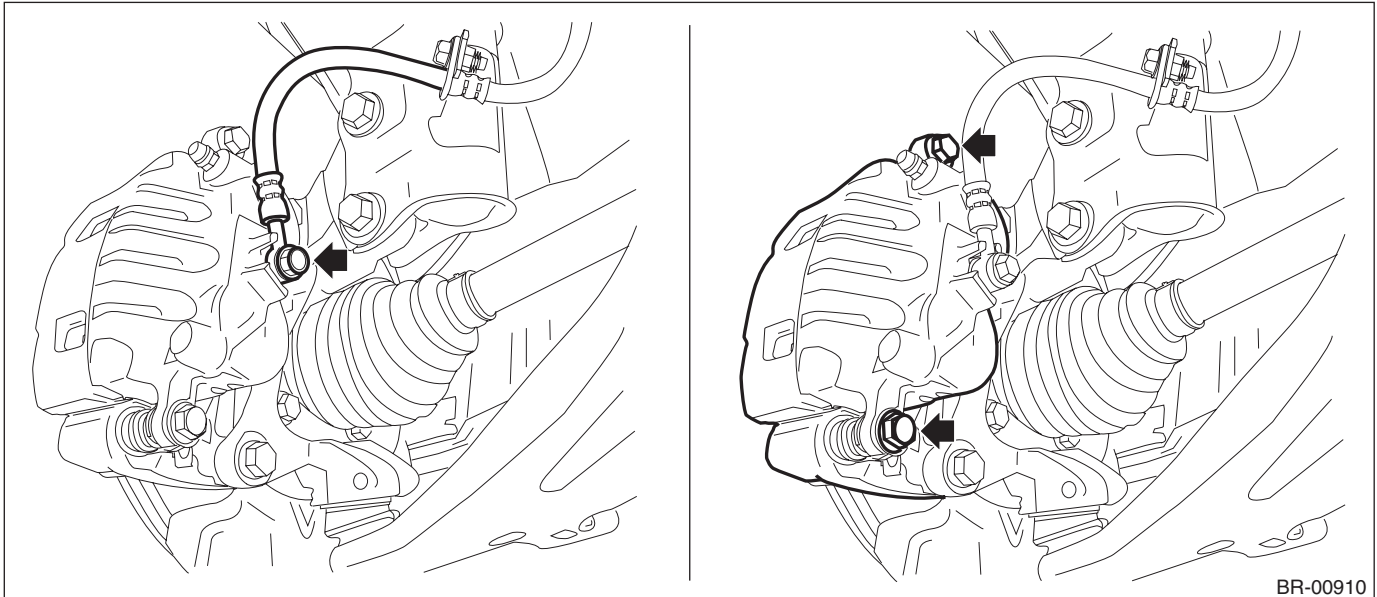
## 4. Front Disc Brake Assembly

### 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.

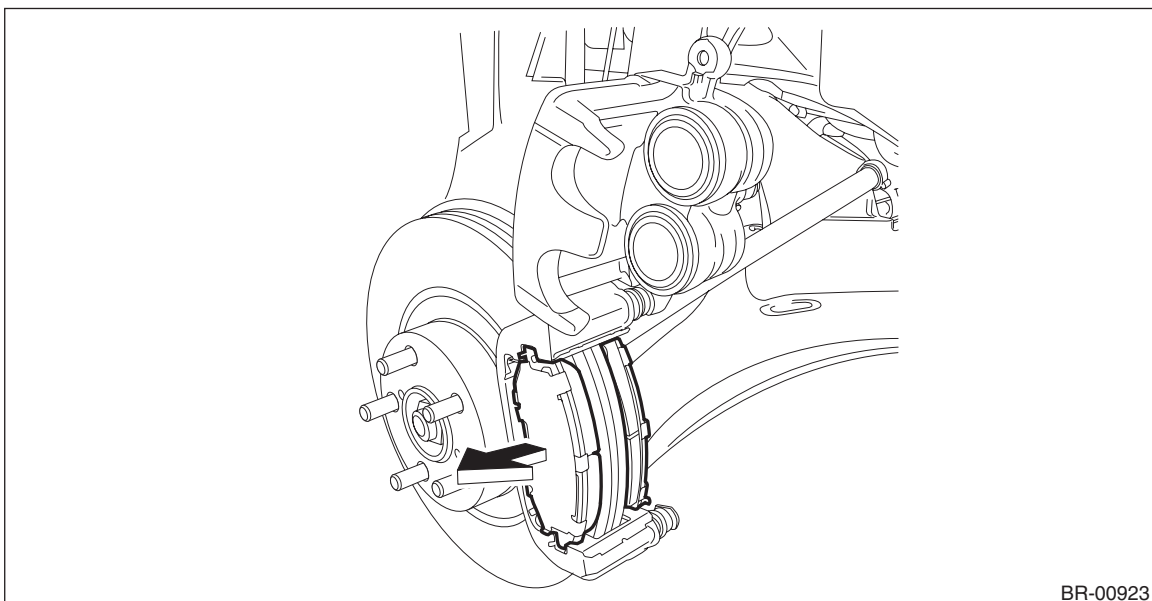


- 3) Remove the support - front disc brake.

**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.

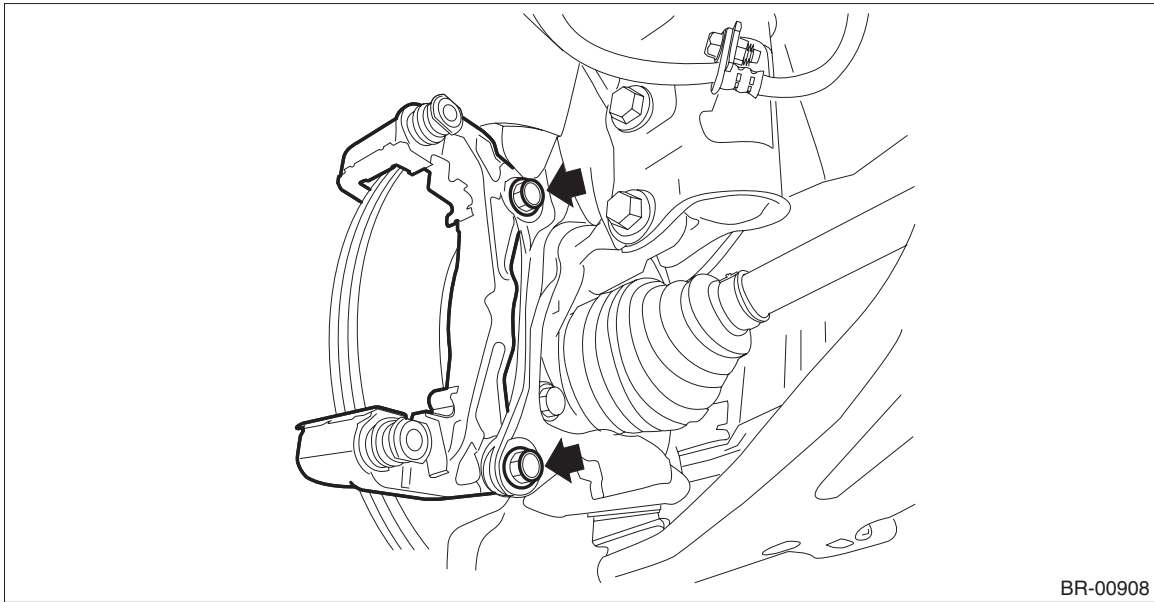
- (1) Remove the brake pad from support - front disc brake.



# Front Disc Brake Assembly

## BRAKE

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



## B: INSTALLATION

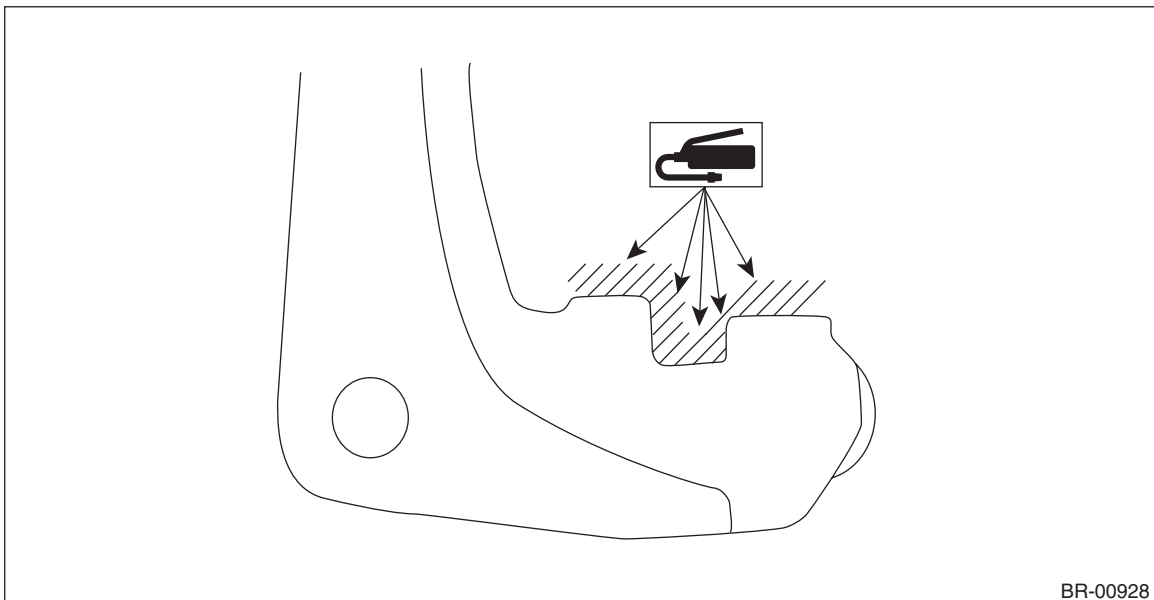
### NOTE:

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

- 1) Check each part. <Ref. to BR-28, INSPECTION, Front Disc Brake Assembly.>
- 2) Apply a thin coat of grease to the support - front disc brake.

### Grease:

**Molykote M7439 (Part No. 003602001)**



- 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)

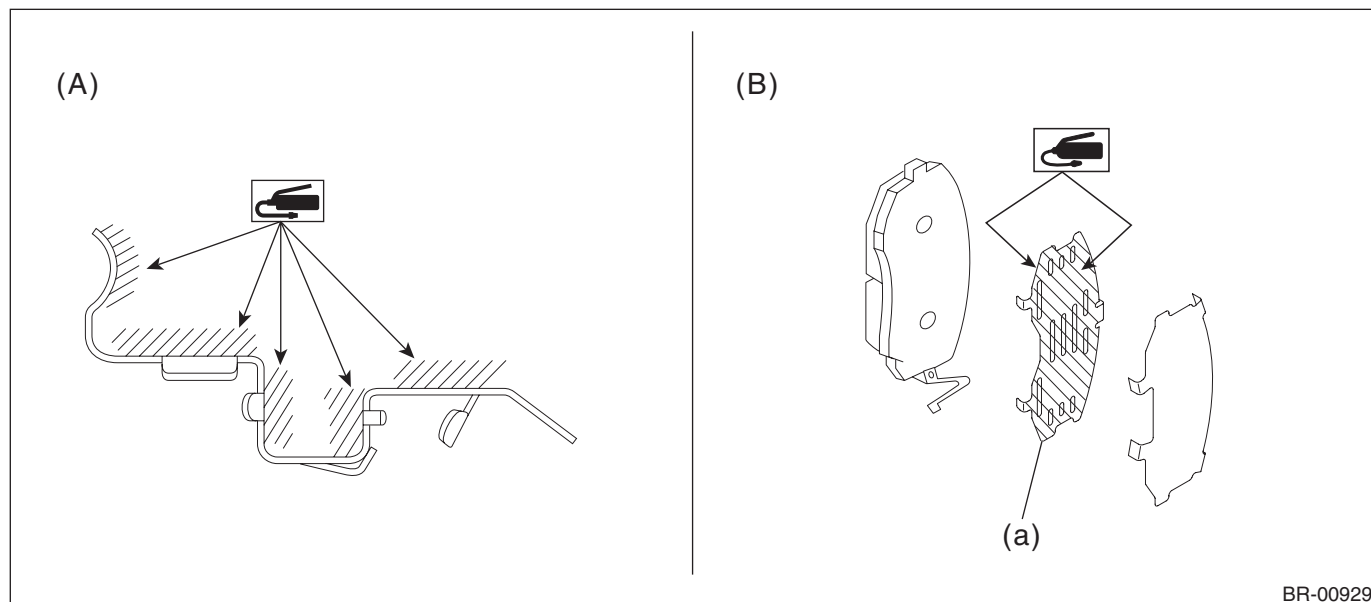
### Grease:

**Molykote M7439 (Part No. 003602001) or an item contained in the pad kit**

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 (Part No. K0777YA010) or an item contained in the pad kit*

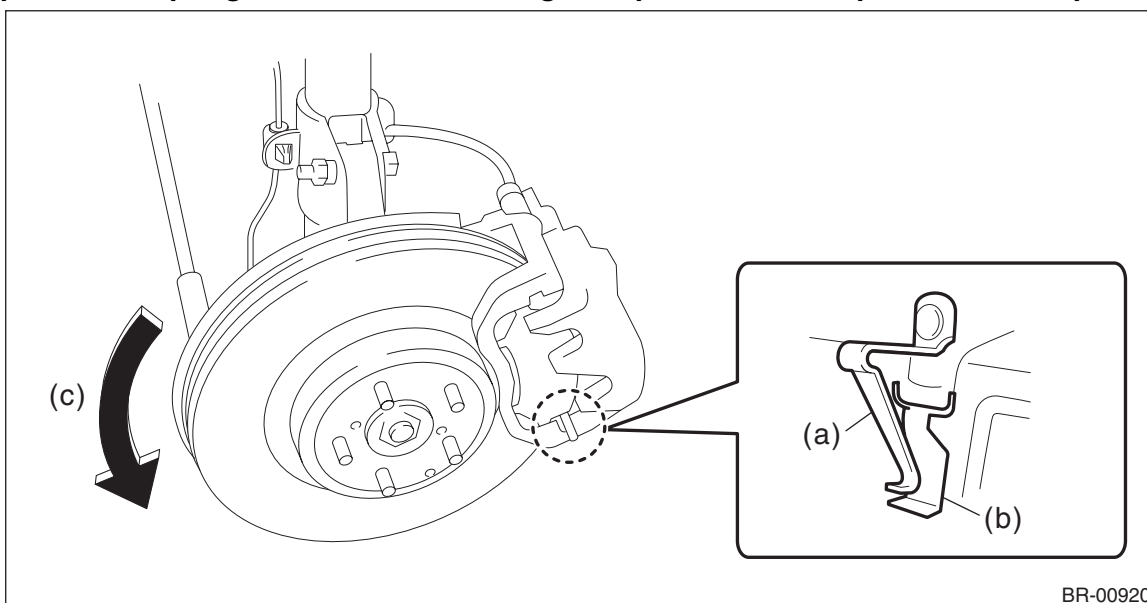


BR-00929

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.



BR-00920

(a) Pad return spring

(b) Supporting surface of pad clip

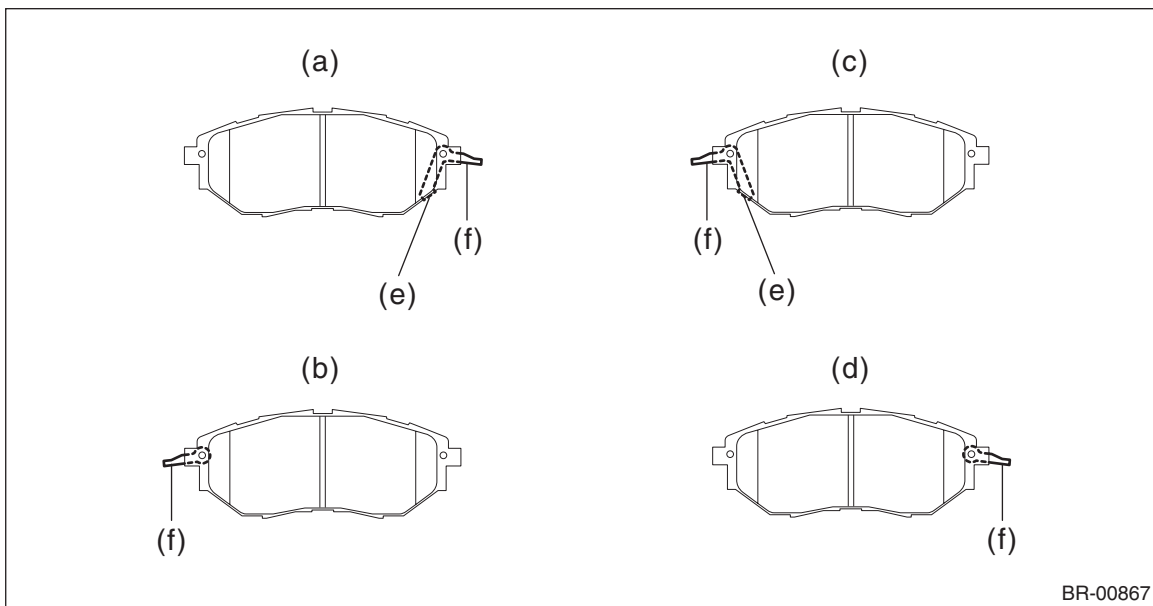
(c) Direction of brake rotor rotation

# Front Disc Brake Assembly

## BRAKE

### NOTE:

Install the brake pad indicator in proper direction.



(a) LH — IN

(b) LH — OUT

(c) RH — IN

(d) RH — OUT

(e) Pad indicator

(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:**

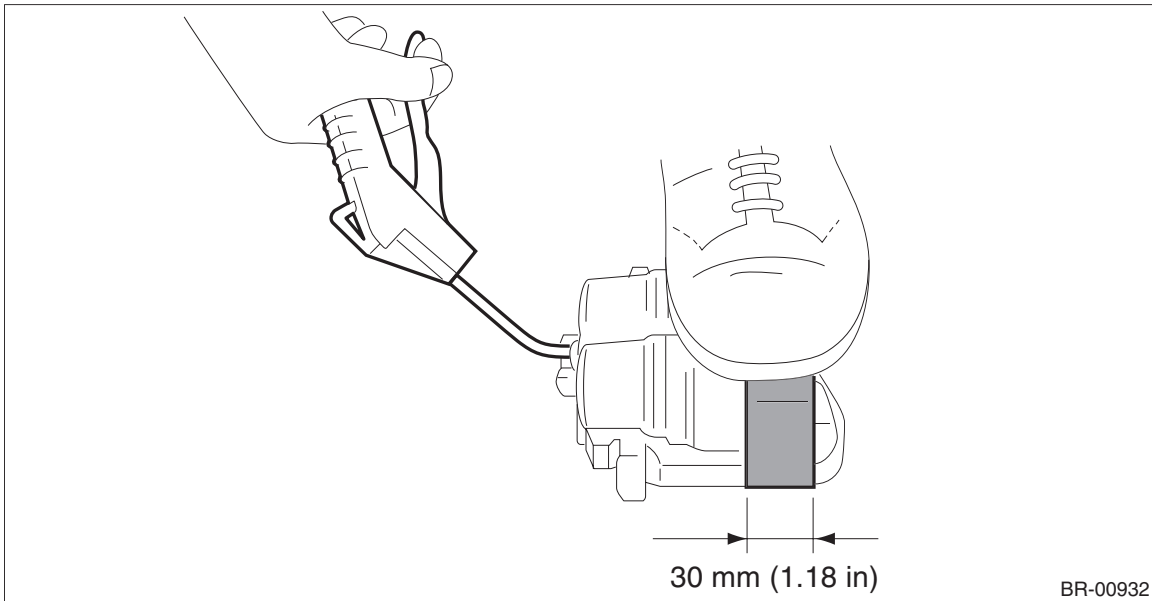
**120 N·m (12.24 kgf-m, 88.5 ft-lb)**

## C: DISASSEMBLY

### CAUTION:

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

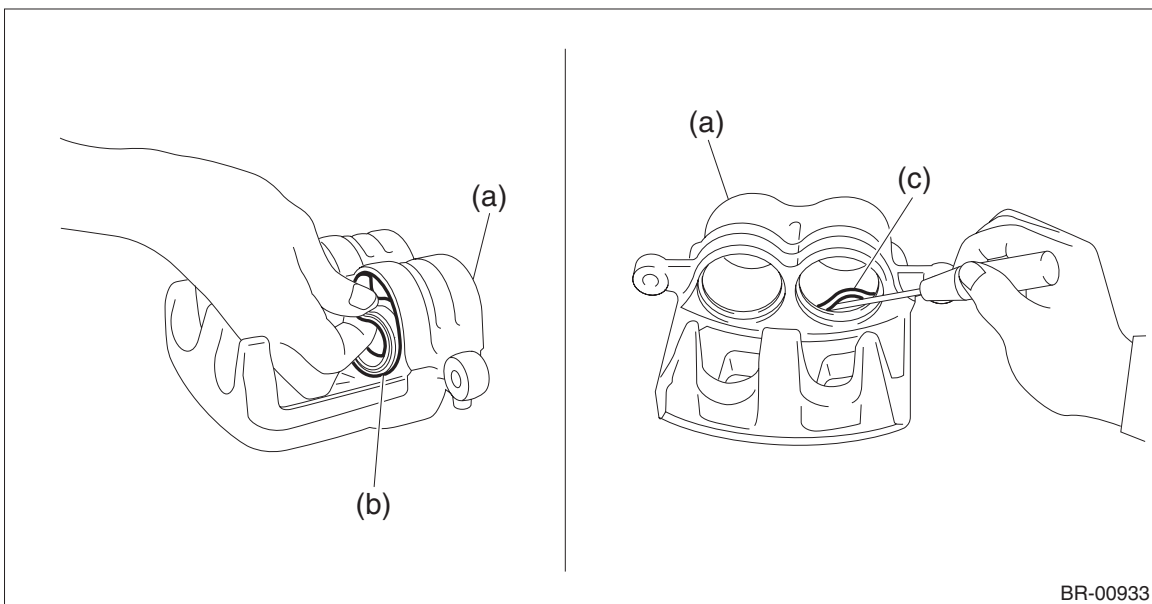
- 1) Remove mud and foreign matter from the caliper body.
- 2) Remove the piston - disc brake.
  - (1) Place a wooden block in the caliper body as shown in the figure to prevent the piston - disc brake from jumping out and being damaged.
  - (2) Using an air gun, gradually apply compressed air via the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

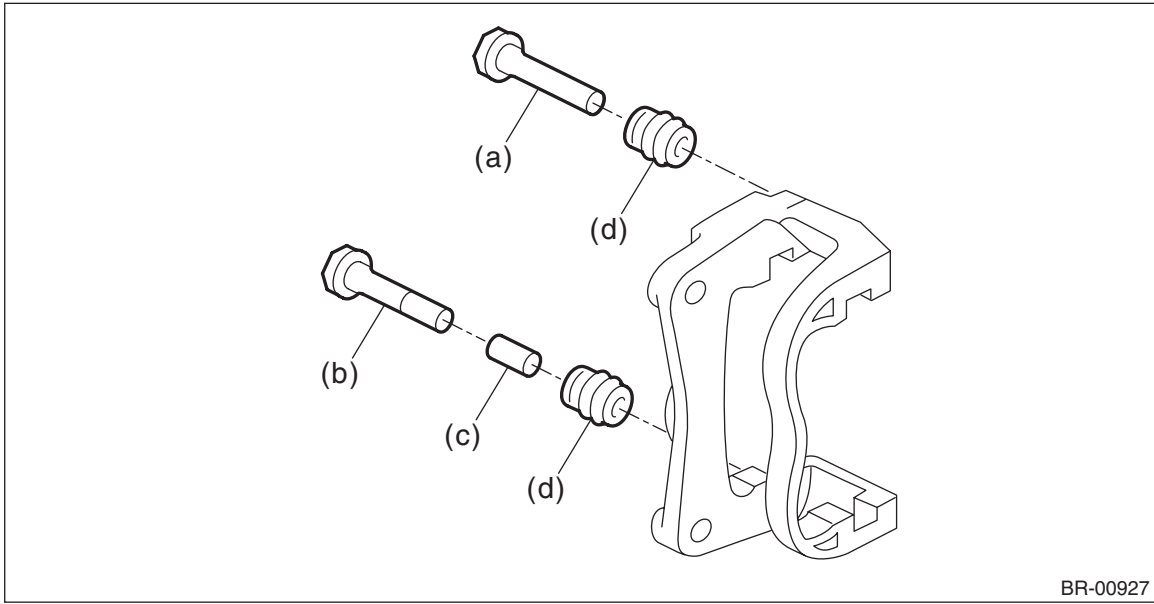
**Do not damage the cylinder and piston seal groove.**



# Front Disc Brake Assembly

## BRAKE

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



(a) Guide pin - front brake (black)  
(b) Lock pin - front brake (silver)

(c) Lock pin - sleeve

(d) Pin boot

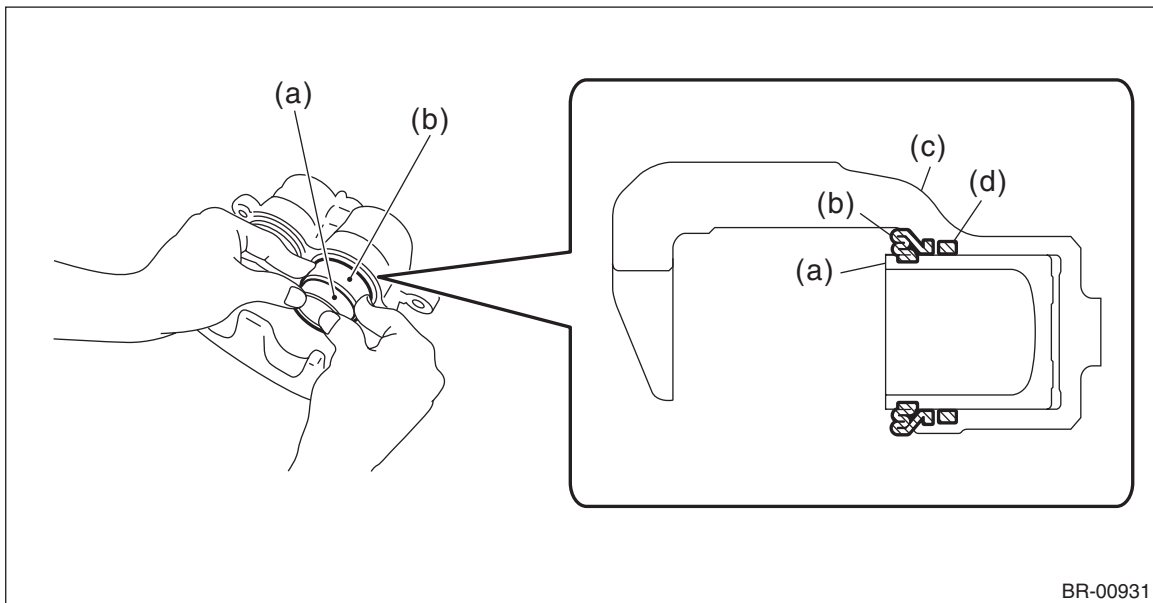
BR-00927

## D: ASSEMBLY

- 1) Before assembly, check each part. <Ref. to BR-28, 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.**



(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.

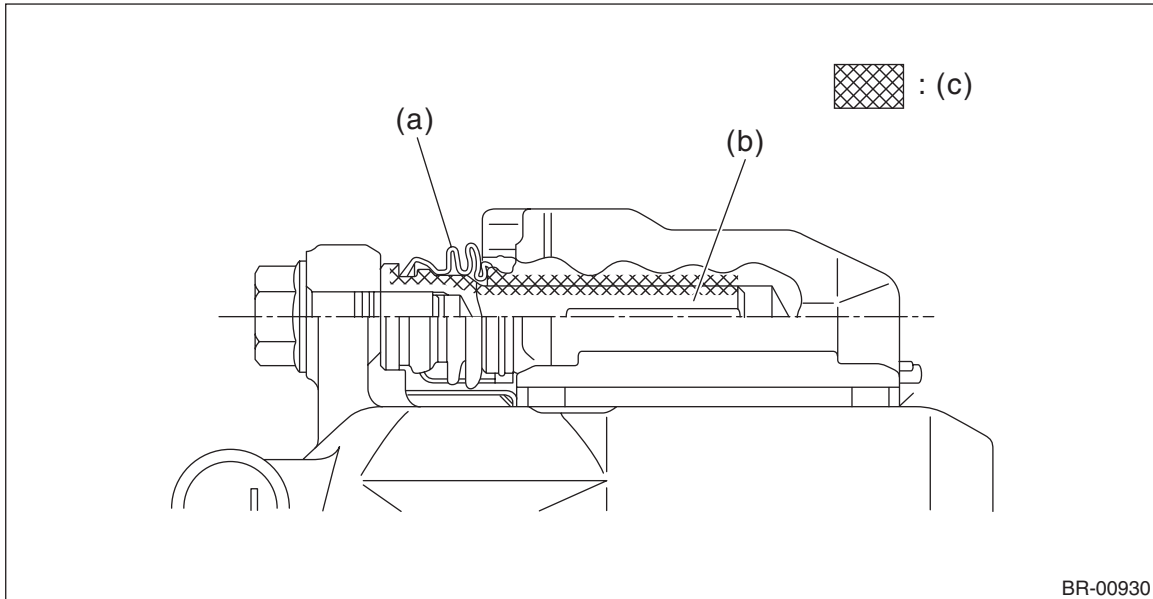
# Front Disc Brake Assembly

## BRAKE

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

(c) Grease applied area  
- front brake

## 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.