# 5. Parking Brake Assembly (Rear Disc Brake)

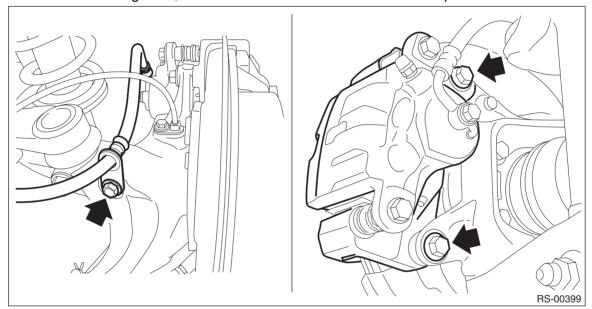
# A: REMOVAL

- 1) Lift up the vehicle, and then remove the rear wheels.
- 2) Perform "Parking Brake Removal Mode" after connecting the Subaru Select Monitor. <Ref. to PB(diag)-16, PARKING BRAKE REMOVAL MODE, OPERATION, Subaru Select Monitor.>

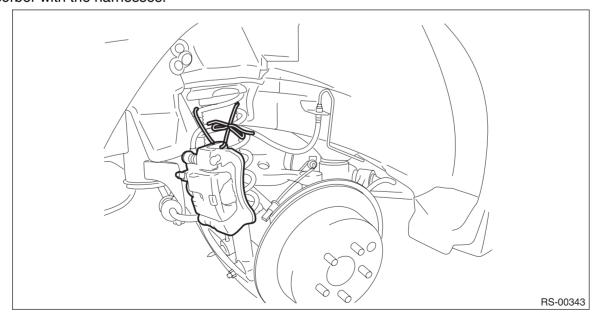
### **CAUTION:**

Be sure to lift up the vehicle before performing the "Parking Brake Removal Mode".

- 3) Disconnect the ground cable from battery.
- 4) Remove the rear disc brake caliper from the rear axle housing.
  - (1) Remove the bolt from the brake hose bracket.
  - (2) Remove the mounting bolts, and then remove the rear disc brake caliper.



(3) Prepare wiring harnesses etc. to be discarded, and suspend the rear disc brake caliper from the shock absorber with the harnesses.

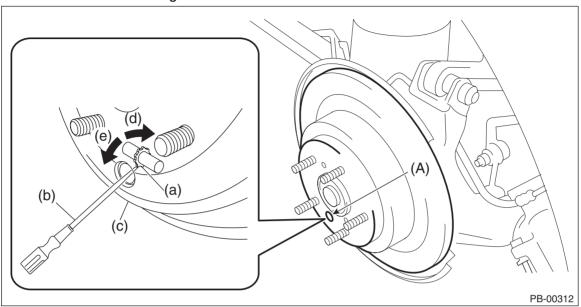


5) Mark an alignment mark on the rear disc brake rotor and the rear hub unit bearing, and remove the rear disc rotor.

# NOTE:

If the disc rotor is difficult to remove, try the following two methods in order.

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



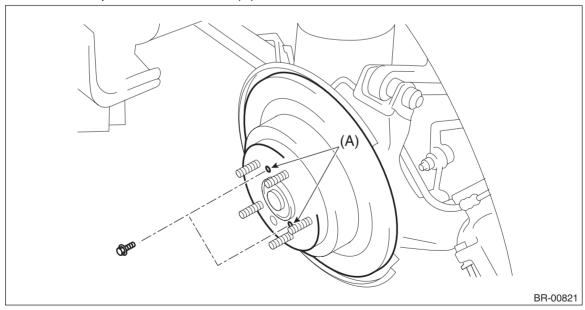
(a) Adjusting screw

(c) Disc rotor

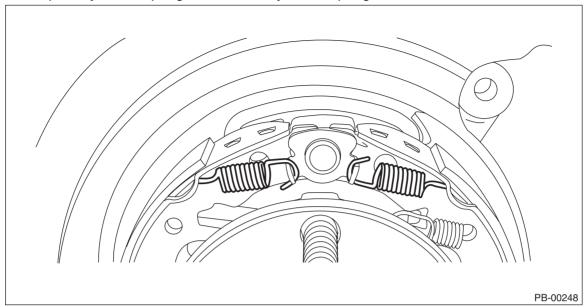
(e) Shorten the adjusting screw

- (b) Flat tip screwdriver
- (d) Extend the adjusting screw

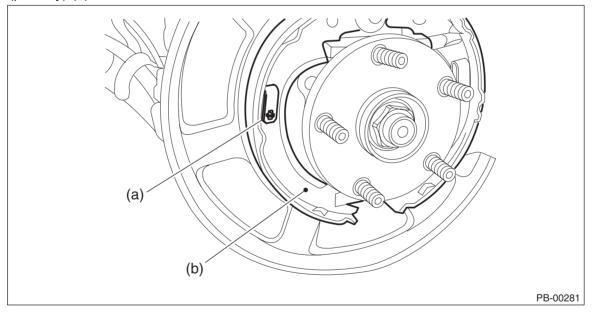
(2) When the disc rotor is difficult to be removed from the rear hub unit bearing, screw in 8 mm (0.31 in) bolt to the threaded part of the disc rotor (A), and remove the disc rotor.



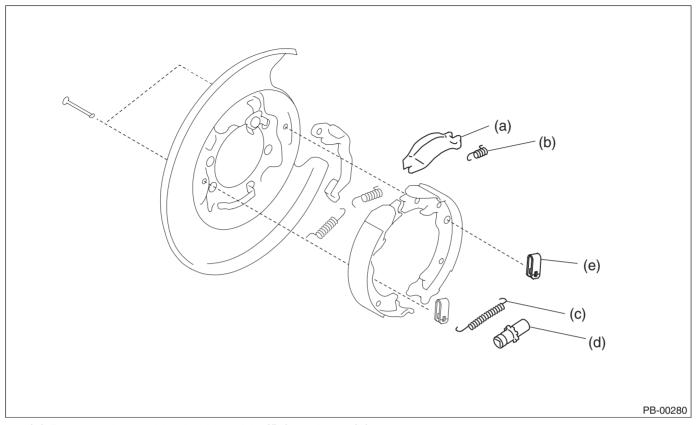
6) Remove the primary return spring and secondary return spring.



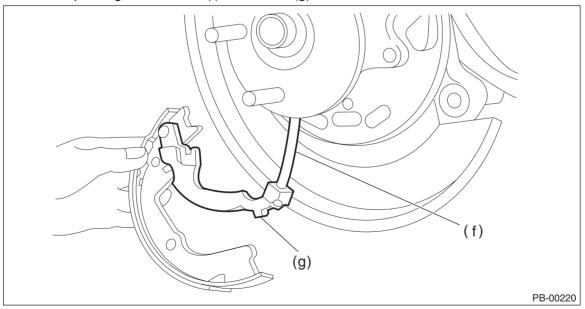
- 7) Remove the brake shoe on the primary side.
  - (1) Remove the shoe hold-down spring (a) and the shoe hold-down pin, and remove the parking brake shoe (primary) (b).



- 8) Remove the parking brake shoe (secondary).
  - (1) Remove the strut (a), spring strut (b), adjusting spring (c) and adjusting screw (d).
  - (2) Remove the shoe hold-down spring (e), and pull out the shoe hold-down pin.



(3) Remove the parking brake cable (f) from lever (g).



- (4) Remove a retainer from the secondary side brake shoe.
- (5) Remove the lever from the brake shoe.
- (6) Remove the clamp, and remove the parking brake cable from the back plate.

# **B: INSTALLATION**

- 1) Before assembly, check the brake disc rotor and brake shoe. <Ref. to PB-16, INSPECTION, Parking Brake Assembly (Rear Disc Brake).>
- 2) Install the parking brake cable to the back plate, and secure it with the clamp.

### **CAUTION:**

# Be sure the lining surface is free from brake fluid and grease.

3) Apply brake grease to the following locations.

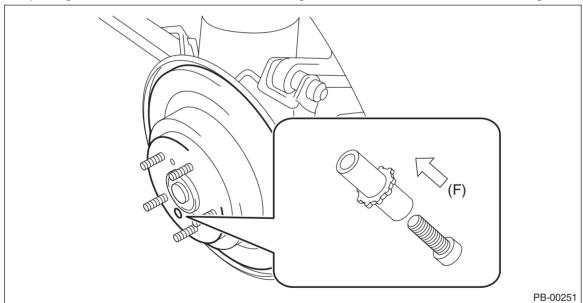
# Brake grease:

# Molykote 44MA (Part No. 26648FJ000)

- Six contact surfaces of the brake shoe rim and back plate gasket
- Contact surface of the brake shoe and the anchor pin
- Contact surface of the parking brake lever and strut
- Contact surface of the brake shoe and adjusting screw
- · Contact surface of the brake shoe and strut
- Contact surface of the lever and brake shoe
- 4) Install the wave washer and lever to the secondary side brake shoe pin, and lock the retainer securely.
- 5) Install the parking brake cable to the lever.
- 6) Install the adjusting screw and adjusting spring to the brake shoe.

#### NOTE:

Install the adjusting screw with the screw section facing toward the direction shown in the figure below.



(F) Left wheel: front side of vehicle, right wheel: rear side of vehicle

# Parking Brake Assembly (Rear Disc Brake)

#### PARKING BRAKE

- 7) Check that the parking brake cable does not fall from the cable guide.
- 8) Install the brake shoes to the back plate with shoe hold-down pins and shoe hold-down springs.
- 9) Install the strut and the spring strut to the brake shoes.

#### NOTE:

Install the spring - strut so that it comes towards the front side of the vehicle.

- 10) Install the return springs on the primary side first, and then the secondary side.
- 11) Install the brake disc rotor and brake caliper.
- 12) Install the brake hose bracket.

# Tightening torque:

Refer to "COMPONENT" of "General Description". <Ref. to BR-4, COMPONENT, General Description.>

- 13) Adjust the parking brake. <Ref. to PB-17, ADJUSTMENT, Parking Brake Assembly (Rear Disc Brake).>
- 14) When replacing with the new brake shoe, connect the Subaru Select Monitor and perform the "Break-in Parking Brake Drive Mode". <Ref. to PB(diag)-16, BREAK-IN PARKING BRAKE DRIVE MODE, OPERATION, Subaru Select Monitor.>
- 15) After breaking-in, re-adjust the parking brakes. <Ref. to PB-17, ADJUSTMENT, Parking Brake Assembly (Rear Disc Brake).>

# C: INSPECTION

1) Measure the inner diameter of the brake disc rotor.

If scoring or worn is found on the disk, replace the brake disc rotor.

## Disc rotor inner diameter:

Specification: 190 mm (7.48 in) Service limit: 191 mm (7.52 in)

2) Measure the lining thickness. If it exceeds the limit, replace the brake shoe.

### Lining thickness:

Specification: 3.5 mm (0.14 in) Service limit: 1.5 mm (0.059 in)

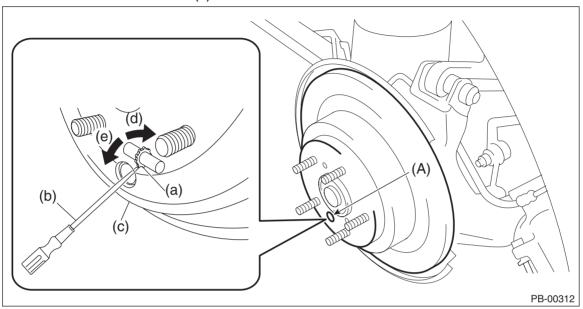
#### NOTE:

Replace the right and left brake shoe as a set.

# D: ADJUSTMENT

# 1. SHOE CLEARANCE

- 1) Lift up the vehicle, and then remove the rear wheels.
- 2) Remove the adjusting hole cover from the disc rotor.
- 3) Insert the flat tip screwdriver (b) into the brake adjustment hole (A), and rotate the adjusting screw (a) until the brake shoe contacts the disc rotor (c).



(a) Adjusting screw

(c) Disc rotor

(e) Shorten the adjusting screw

- (b) Flat tip screwdriver
- (d) Extend the adjusting screw
- 4) Loosen the adjusting screw by 10 notches in the direction of arrow (e).

### **CAUTION:**

- After operating the parking brake several times, check that there is no brake drag.
- If the amount that the adjusting screw is turned back is little, securely loosen it by 10 notches to avoid dragging.
- 5) Install the adjusting hole cover to the disc rotor.
- 6) Install the rear wheels and lower the vehicle.
- 7) Park the vehicle on a level ground with the four wheels on the ground.
- 8) Connect the Subaru Select Monitor to perform the "Force Sensor Calibration Mode". <Ref. to PB(diag)-16, FORCE SENSOR CALIBRATION MODE, OPERATION, Subaru Select Monitor.>