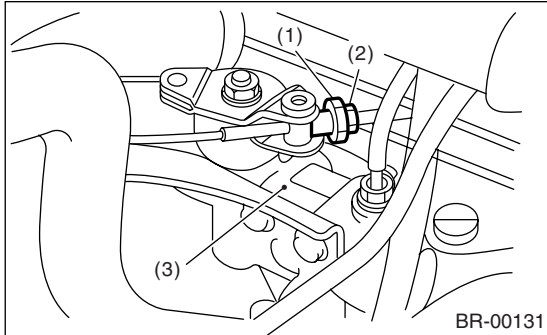


## 20. Hill Holder

### A: REMOVAL

#### 1. PHV (PRESSURE HOLD VALVE)

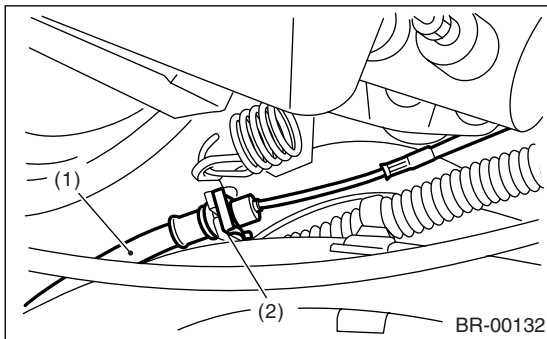
- 1) Drain the brake fluid from reservoir of master cylinder.
- 2) Remove the adjusting nut and lock nut.



- (1) Adjusting nut
- (2) Lock nut
- (3) PHV

- 3) Remove the cable clamp, and disconnect the PHV cable from PHV.

**CAUTION:**  
Carefully protect the boots and inner cable from damage when disconnecting PHV cable.



- (1) PHV cable
- (2) Clamp

- 4) Disconnect the brake pipes from PHV.

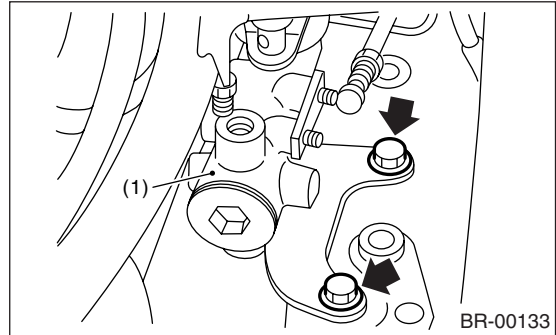
**CAUTION:**

- Pay attention not to drop the brake fluid onto body painting since it may dissolve paint.
- Pay attention not to damage hexagonal head of the flare nut by using pipe wrench without fail.

- 5) Detach the PHV along with support from side frame.

**CAUTION:**

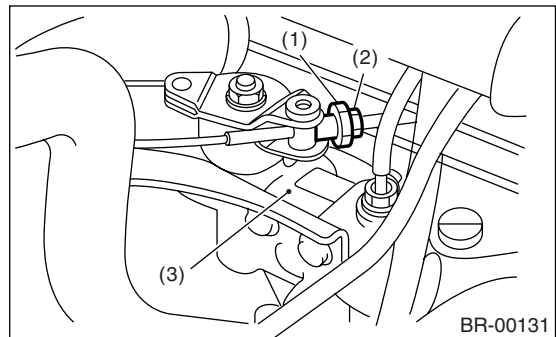
Exercise utmost care to prevent foreign matter from entering into the PHV when removing it.



- (1) PHV

#### 2. PHV CABLE

- 1) Remove the adjusting nut and lock nut.

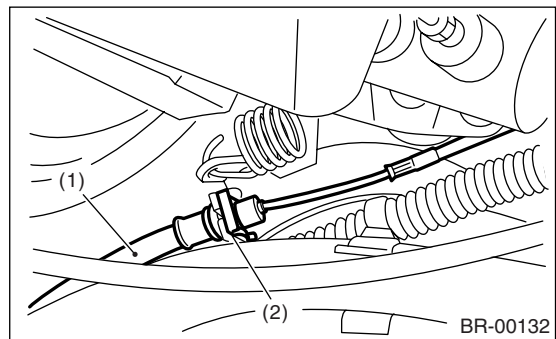


- (1) Adjusting nut
- (2) Lock nut
- (3) PHV

- 2) Remove the cable clamp, and disconnect PHV cable from PHV.

**CAUTION:**

Carefully protect the boot and inner cable from damage when disconnecting PHV cable.



- (1) PHV cable
- (2) Clamp

3) Remove the cable clamp from clutch pedal bracket.

4) Remove the PHV cable.

## B: INSPECTION

Check up removed parts as follows, and replace defective ones.

1) Check if the boots of PHV cable are damaged or degraded, the inner cable is damaged or corroded.

2) Check if the return spring is worn out, damaged or corroded.

3) Confirm that rolling sound of the ball is heard with PHV inclined and lever rotates smoothly.

### CAUTION:

**Never disassemble the PHV. Replace entire PHV assembly if necessary.**

## C: INSTALLATION

### 1. PHV (PRESSURE HOLD VALVE)

1) Install the PHV onto side frame.

#### *Tightening torque:*

**18 N·m (1.8 kgf-m, 13.0 ft-lb)**

2) Connect the brake pipes to PHV.

#### *Tightening torque:*

**15 N·m (1.5 kgf-m, 10.8 ft-lb)**

### CAUTION:

**Confirm that the brake pipes are not deformed and/or damaged. Replace them with new ones if necessary.**

3) Install the PHV cable to PHV.

### CAUTION:

- **If the cable clamp (and clips) is damaged, replace it with a new one.**
- **Avoid sharp bending of PHV cable as it may cause breakage.**

4) Connect the PHV cable with clips.

5) Apply grease to the following points.

- Hook portion of return spring
- Cable end portion of lever

#### *Grease:*

**SUNLIGHT 2 (Part No. 003602010)**

6) Be sure to bleed air from the brake system. <Ref. to BR-41, Air Bleeding.>

7) Adjust the PHV cable. <Ref. to BR-51, PHV CABLE, INSTALLATION, Hill Holder.>

### CAUTION:

**After replacing the PHV cable with new one, operate the clutch pedal about 30 times as a running-in operation prior to adjustment.**

## 2. PHV CABLE

1) Install the PHV cable in the reverse order of removal.

### CAUTION:

- **If the cable clamp is damaged, replace it with a new one.**
- **Avoid sharp bending of PHV cable as it may cause breakage.**

2) Apply grease to the following points.

- Hook portion of return spring
- Cable end portion of lever

#### *Grease:*

**SUNLIGHT 2 (Part No. 003602010)**

3) Adjust the PHV cable. <Ref. to BR-51, ADJUSTMENT, Hill Holder.>

### CAUTION:

**After replacing the PHV cable with new one, operate the clutch pedal about 30 times as a running-in operation prior to adjustment.**

## D: ADJUSTMENT

Confirm stopping and starting performances by activating the hill holder on an uphill road of 3° or higher inclination.

1) If the vehicle does not stop;

Tighten the adjusting nut of PHV cable.

2) If the vehicle does not start properly;

- **Case A** — When the hill holder is released later than engagement of clutch pedal (Engine tends to stall.):

Loosen adjusting nut gradually until smooth starting is enabled.

- **Case B** — When the hill holder is released earlier than engagement of clutch pedal (Vehicle slips down slightly.):

Tighten the adjusting nut so that hill holder is released later than engagement of clutch pedal (status in Case A). Then make adjustment the same as in Case A.

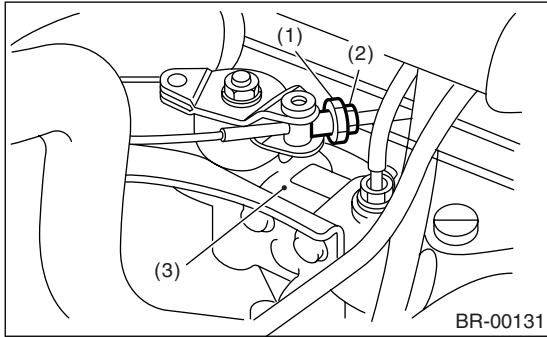
# HILL HOLDER

## BRAKE

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### CAUTION:

Whenever turning the adjusting nut, prevent the PHV cable from revolving.



- (1) Adjusting nut
- (2) Lock nut
- (3) PHV

3) Tighten the lock nut.

### **Tightening torque:**

**3.5 N·m (0.36 kgf·m, 2.6 ft·lb)**