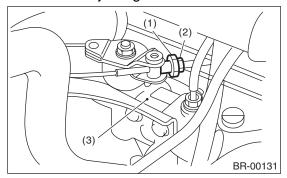
# 19.Hill Holder

# A: REMOVAL

# 1. PHV (PRESSURE HOLD VALVE)

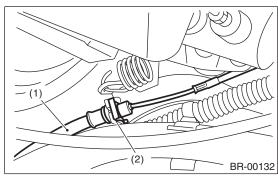
- 1) Drain brake fluid from the master cylinder reservoir tank.
- 2) Remove the adjusting nut and lock nut.



- (1) Adjusting nut
- (2) Lock nut
- (3) PHV
- 3) Remove the cable clamp, and disconnect the PHV cable from the PHV.

## **CAUTION:**

When disconnecting the PHV cable, protect it carefully so as not to damage the boot and inner cable.



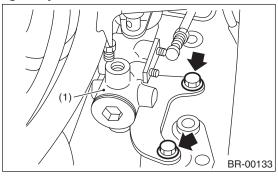
- (1) PHV cable
- (2) Clamp
- 4) Disconnect the brake pipes from the PHV.

# **CAUTION:**

- Do not let brake fluid come into contact with the painted surface of the vehicle body. Completely wash away with water immediately and wipe off if it was accidental.
- Use a pipe wrench so that the hex head of the flare nut is not damaged.
- 5) Separate the PHV from the side frame, along with the support.

#### **CAUTION:**

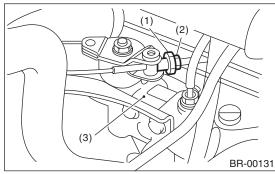
When removing the PHV, take great care that no foreign objects enter inside.



(1) PHV

## 2. PHV CABLE

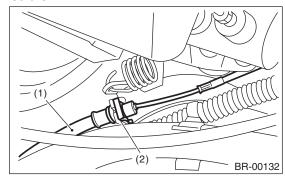
1) Remove the adjusting nut and lock nut.



- (1) Adjusting nut
- (2) Lock nut
- (3) PHV
- 2) Remove the cable clamp, and disconnect the PHV cable from the PHV.

## **CAUTION:**

When disconnecting the PHV cable, protect it carefully so as not to damage the boot and inner cable.



- (1) PHV cable
- (2) Clamp
- 3) Remove the cable clamp from the clutch pedal bracket.
- 4) Remove the PHV cable.

## **B: INSPECTION**

Inspect the following items for the removed parts, and replace those that apply.

- 1) If the PHV cable boot is damaged or deteriorated, or if the inner cable is damaged or rusted.
- 2) Check for weak return springs, damage, and rust.
- 3) Check that the rotation of the ball can be heard when the PHV is tilted and the lever is moved smoothly.

### **CAUTION:**

The PHV cannot be disassembled. If it requires replacement, replace the entire PHV assembly.

## C: INSTALLATION

# 1. PHV (PRESSURE HOLD VALVE)

1) Attach the PHV to the side frame.

## Tightening torque:

18 N·m (1.8 kgf-m, 13.0 ft-lb)

2) Connect the brake pipe to the PHV.

## Tightening torque:

15 N⋅m (1.5 kgf-m, 10.8 ft-lb)

### **CAUTION:**

Check that there is no deformation or damage on the brake pipe. If necessary, replace with a new part.

3) Attach the PHV cable to the PHV.

#### **CAUTION:**

- If the cable clamp (and clip) is damaged, replace it with a new part.
- Do not bend the PHV cable sharply to avoid damage.
- 4) Connect the PHV cable with a clip.
- 5) Apply grease to the following points.
- Return spring hook position
- Lever cable end portion.

### Grease:

## KOPR-KOTE (Part No. 003603001)

- 6) Bleed air from the brake system. <Ref. to BR-42, Air Bleeding.>
- 7) Adjust the PHV cable. <Ref. to BR-52, PHV CA-BLE, INSTALLATION, Hill Holder.>

#### **CAUTION:**

After replacing with a new PHV cable, operate the clutch pedal approximately 30 times to break it in, then perform adjustment.

## 2. PHV CABLE

1) The installation of the PHV cable is performed in the reverse order of removal.

#### **CAUTION:**

- If the cable clamp is damaged, replace it with a new part.
- Do not bend the PHV cable sharply to avoid damage.
- 2) Apply grease to the following points.
- · Return spring hook position
- · Lever cable end portion.

#### Grease:

## KOPR-KOTE (Part No. 003603001)

3) Adjust the PHV cable. <Ref. to BR-52, ADJUST-MENT, Hill Holder.>

### **CAUTION:**

After replacing with a new PHV cable, operate the clutch pedal approximately 30 times to break it in, then perform adjustment.

## D: ADJUSTMENT

Perform inspection of stop, start performance on a hill with an incline of 3° or more.

1) If the vehicle will not stop:

Tighten the adjusting nut of the PHV cable.

- 2) If the vehicle does not advance properly:
- Case A If the hill holder is released after the clutch is connected (engine stalls easily):

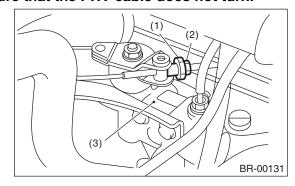
Loosen the adjusting nut gradually until a smooth start is possible.

 Case B — If the hill holder is released before the clutch is connected (vehicle moves backward):

Tighten the adjusting nut so that the hill holder releases after connecting the clutch pedal. (Case A) then perform the same adjustment as for Case A.

### **CAUTION:**

When turning the adjusting nut, always make sure that the PHV cable does not turn.



- (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)