

REMOVING AND INSTALLING BRAKE PRESSURE REGULATOR

Removing

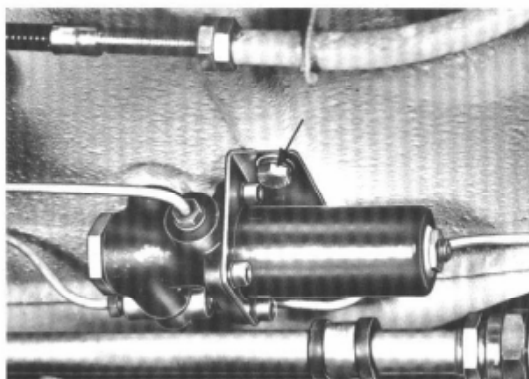
1. Depress brake pedal slightly with pedal retainer and lock, so that the brake fluid will not run out when the brake lines are disconnected.
2. Remove brake lines at brake pressure regulator.
3. Remove bolts on flange of regulator and remove regulator.

Checking and Adjusting

To determine whether or not the brake pressure regulator is operating, one mechanic must step down hard on the brake pedal while another mechanic places his hand on the valve to feel if the piston in the regulator is moving. (When the brake pedal is released, a slight knock should be felt on the regulator.)

An accurate pressure check and adjustment of the regulator required two high-pressure gauges with hoses and connections.

Check the following items in the sequence shown:



1. Remove bleeder valve on left front caliper and install connector (M 7 thread).
2. Install a similar connection (M 6 threads) on left rear caliper, remove the caps from the hose connections and connect both hoses.
3. Bleed both hoses and pressure gauges via the bleeder valves of the pressure gauges.
4. Apply the brake pedal several times with force so that a pressure of at least 100 kg/cm^2 (1420 psi) is attained in the front brake circuit.

Installing

Note the following:

Bleed brake system and check operation of brake pressure regulator.

5. Then apply load to brake pedal until the pressure gauge of the front brake circuit shows a pressure of 65 kg/cm^2 (924 psi). At this pressure the second pressure gauge in the rear brake circuit should indicate $55.8 \text{ kg/cm}^2 \pm 2 \text{ kg/cm}^2$ (795 psi \pm 28 psi).
- (On Type 914/6 at a pressure of 50 kg/cm^2 (711 psi) in the front brake circuit, the pressure in the rear brake circuit should be $43 \text{ kg/cm}^2 \pm 2 \text{ kg/cm}^2$ (612 psi \pm 14 psi).
6. The same measurements must be made at a pressure of 100 kg/cm^2 (1420 psi) in the front brake circuit. Here the pressure in the rear brake circuit should be $72 \text{ kg/cm}^2 \pm 3 \text{ kg/cm}^2$ (1024 \pm 42 psi). (On vehicle Type 914/6 for the same test and at 100 kg/cm^2 in the front brake circuit, the pressure in the rear brake circuit should be $66 \text{ kg/cm}^2 \pm 3 \text{ kg/cm}^2$ (939 psi \pm 42 psi). If the specified pressures in the rear brake circuit are not attained or are exceeded, the preload of the spring should be changed by turning the adjusting screw until the required pressure is attained. By turning in, the pressure increases in rear axle circuit; by turning out, the pressure decreases.
7. Seal adjusting screw and nut with D 14 sealing compound after tightening lock nut.
8. Bleed the brake system, if necessary.
- Note:
Do not disassemble the 914 or 914/6 brake pressure regulators since they can only be replaced as a unit.
- If the specified test pressure is not attained even after making adjustments, the brake pressure regulator must be replaced.

Symptom	Cause	Remedy
1. Rear brakes apply with too much force	a. Changerover point too high	Adjust regulator
	b. Piston is corroded and does not move (valve cannot close)	Replace regulator
2. Regulator cannot be adjusted to maintain the permissible tolerances during both pressure tests	Sealing ring leaks	Replace regulator
3. No "knock" is felt during operation check of regulator	Piston is corroded and does not move	Replace regulator