

and all further braking effort is transmitted to the front wheels only. As pressure is released the spring forces the piston off its seat thus re-opening the outlet ports to the rear wheel cylinders once more.

The pressure regulating valve is extremely reliable, and gives very little trouble in service. If, however, the condition of the valve is suspect it may be removed for dismantling and inspection as described in the following Sections.

22 Pressure regulating valve (single circuit system) – removal and refitting

- 1 Jack up the rear of the car and support it on axle stands.
- 2 Remove the brake master cylinder filler cap, top up the reservoir, place a thin piece of polythene over the filler neck and refit the cap. This will reduce hydraulic fluid loss when the rear brake pipes are removed from the regulating valve.
- 3 Thoroughly clean the exterior of the valve, located on the rear subframe, ensuring that all dirt and grit is removed from the area around the brake pipe unions.
- 4 Undo and remove the three hydraulic unions and lift the brake pipes out of the valve. Protect the ends of the pipes to prevent possible dirt ingress.
- 5 Undo and remove the retaining nut and bolt and lift the valve off its mounting.
- 6 Refitting the valve is the reverse sequence to removal. Bleed the hydraulic system as described in Section 3 after refitting. If hydraulic fluid loss has been kept to a minimum it should only be necessary to bleed the rear brakes.

23 Pressure regulating valve (single circuit system) – dismantling and reassembly

- 1 Clamp the valve in a vice and remove the large end plug and sealing washer.
- 2 Lift out the valve assembly and return spring.
- 3 Thoroughly clean the components in clean hydraulic fluid and dry with a lint-free cloth.
- 4 Examine the valve, cylinder bore and rubber seals for wear and renew as necessary. Rubber seals are not supplied separately, and if they appear swollen or worn it will be necessary to obtain a new valve assembly complete with seals.
- 5 Lubricate the components in clean hydraulic fluid and then refit the spring and valve assembly into the valve body. Now refit the end plug and sealing washer.
- 6 The valve can now be refitted to the car as described in the previous Section.

24 Pressure reducing valve (dual circuit system) – removal and refitting

Note: On certain models fitted with dual circuit braking systems a pressure reducing valve is used to limit the braking force at the rear wheels. The operation of the valve is similar to the pressure regulating valve used on single circuit systems.

- 1 Remove the brake master cylinder filler cap, top up the reservoir, place a thin piece of polythene over the filler neck and refit the cap. This will reduce hydraulic fluid loss when the brake pipes are disconnected from the valve.
- 2 Unscrew the four pipe unions from the reducing valve and carefully lift out the pipes. Protect the disconnected unions to prevent possible dirt ingress (photo).
- 3 Undo and remove the retaining bolt and lift off the valve.
- 4 The pressure reducing valve is a sealed unit and cannot be dismantled. If the valve is faulty it must be renewed as a complete assembly.
- 5 Refitting is the reverse sequence to removal. Bleed the hydraulic system as described in Section 3 after refitting.

25 Pressure differential warning actuator (dual circuit system) – removal and refitting

Note: On early type dual circuit braking systems, a separate pressure

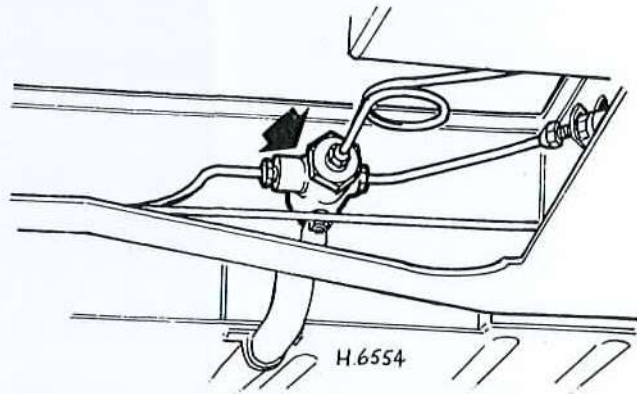


Fig. 9.19 Location of pressure regulating valve on rear subframe (Sec 22)

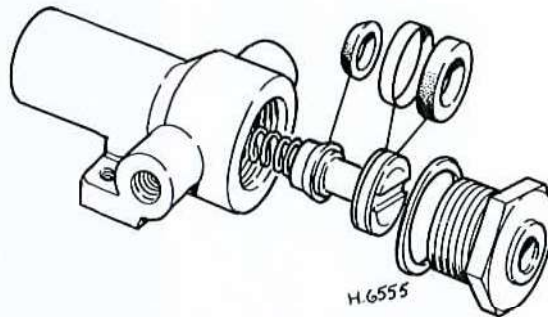
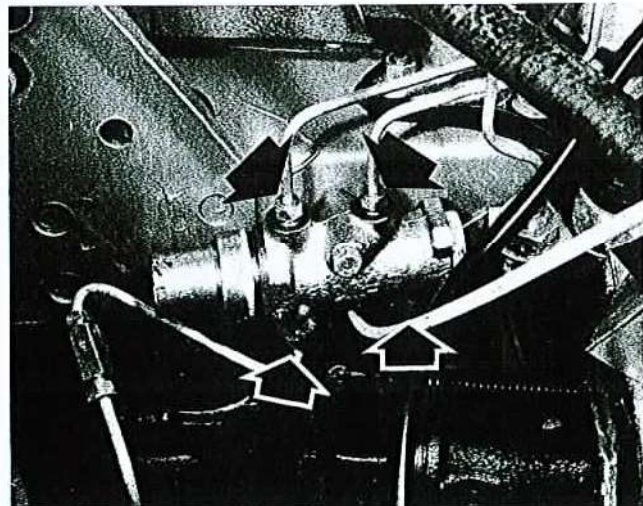


Fig. 9.20 Exploded view of the pressure regulating valve (Sec 23)



24.2 Pressure reducing valve hydraulic pipe unions

differential warning actuator, located on the engine compartment bulkhead, informs the driver of failure of one of the braking hydraulic circuits. On later systems the warning actuator is incorporated in the master cylinder.

- 1 Unscrew the brake master cylinder filler cap, place a piece of polythene over the filler neck and refit the cap. This will reduce hydraulic fluid loss when the brake pipes are disconnected.
- 2 Detach the electrical connector from the side of the warning actuator body.
- 3 Unscrew the hydraulic pipe unions and carefully remove the pipes.