

- 5 Use a small magnet or screwdriver. Also remove the ball bearing.
- 6 Clean the removed parts in petrol and allow to dry. Locate the small drilling near to the base of the valve and check that it is free of dirt.
- 7 Inspect the ball bearing for signs of pitting which, if evident, indicates that a new ball bearing should be obtained. It has a diameter of  $\frac{5}{16}$  inch.
- 8 If the ball bearing is satisfactory reseal it by placing the ball bearing in a block of soft wood. Invert the valve, place on top of the ball bearing and lightly tap the end. If it is tapped too hard the drilling in the side of the valve or in the end may be closed.
- 9 Reassembling the valve is the reverse sequence to removal.

### 18 Overdrive - pump non-return valve

- 1 Access to the non-return valve located in the bottom of the overdrive is simply gained. First drain the oil from the gearbox and overdrive.
- 2 Remove the solenoid from the side of the overdrive unit.
- 3 Slacken off the clamping bolt in the operating lever and remove the lever complete with the solenoid plunger.
- 4 Lift away the distance collar from the valve operating shaft.
- 5 Unscrew the two nuts from the studs securing the solenoid bracket to the overdrive unit body. Lift away the two nuts and spring washers.
- 6 Unscrew the two bolts identified with red paint marks. Do not remove the bolts before the nuts (paragraph 5) are removed.
- 7 As the two bolts are slackened the tension on the accumulator spring will be released.
- 8 Lift away the solenoid bracket.
- 9 Unscrew the valve cap (Fig 6.19) and lift out the spring, plunger and ball.
- 10 Clean the valve ball and seat with a non-fluffy rag. Reseat the ball by tapping it on its seat with a light hammer and drift.
- 11 Reassembly is the reverse sequence to removal. Make sure that the soft copper washer located between the valve cap and pump housing is nipped up tightly to prevent subsequent oil leaks.
- 12 Refer to Section 16 and reset the valve operating lever.

### 19 Throttle switch - adjustment

It is important that the throttle switch is correctly adjusted as otherwise the overdrive will disengage when the car slows down with the throttle closed. This will be accompanied by a noticeable braking effect.

Normally the switch will require adjustment only when the carburettor or accelerator controls have been reset. To check and adjust the switch setting proceed as follows.

- 1 Connect a 12 volt 2.2 watt test lamp across terminal 'A' (Fig 6.20) and a convenient earth point on the car.
- 2 It should be observed that the bulb lights when the overdrive and the ignition are both switched on and the gear lever is set in the third or top gear position.
- 3 When the overdrive is switched off the bulb should remain alight with the throttle still closed.

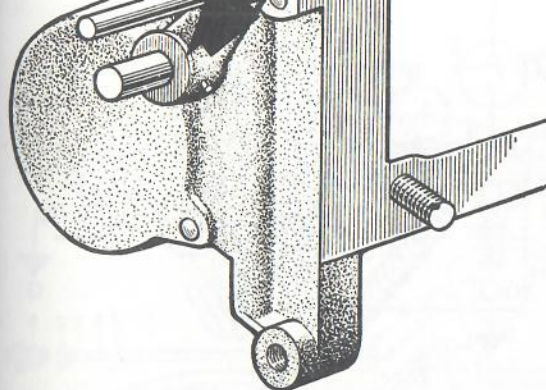


Fig 6.16 VALVE SETTING LEVER (ARROWED)

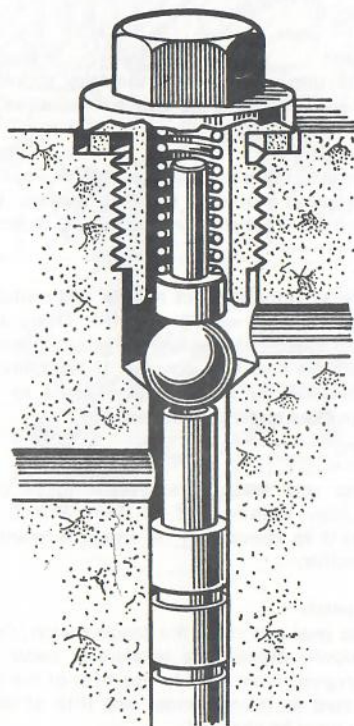


Fig 6.18 CROSS SECTIONAL VIEW THROUGH OPERATING VALVE

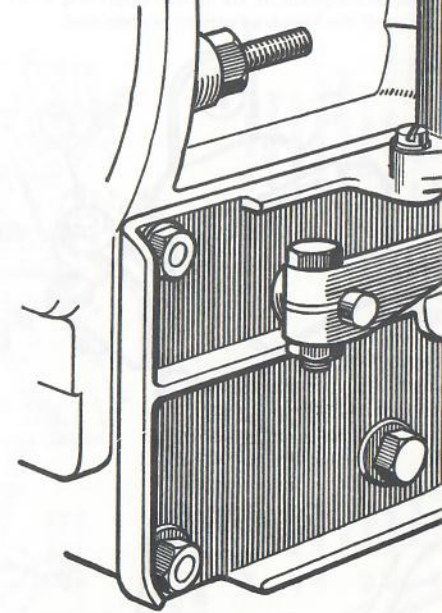


Fig 6.17 SOLENOID PLUNGER BOLT RESTING STOP

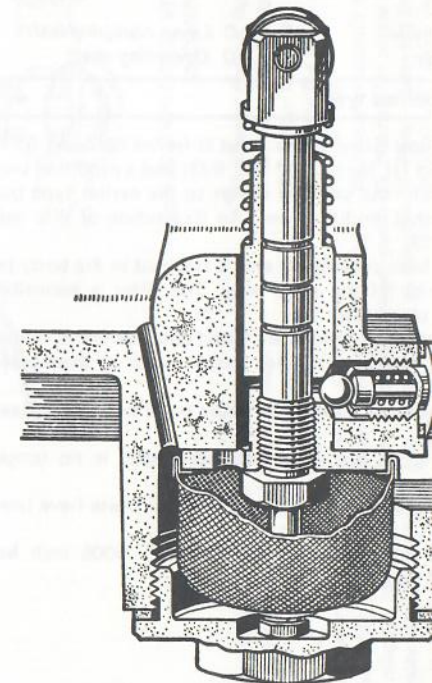


Fig 6.19 CROSS SECTIONAL VIEW THROUGH NON-RETURN VALVE