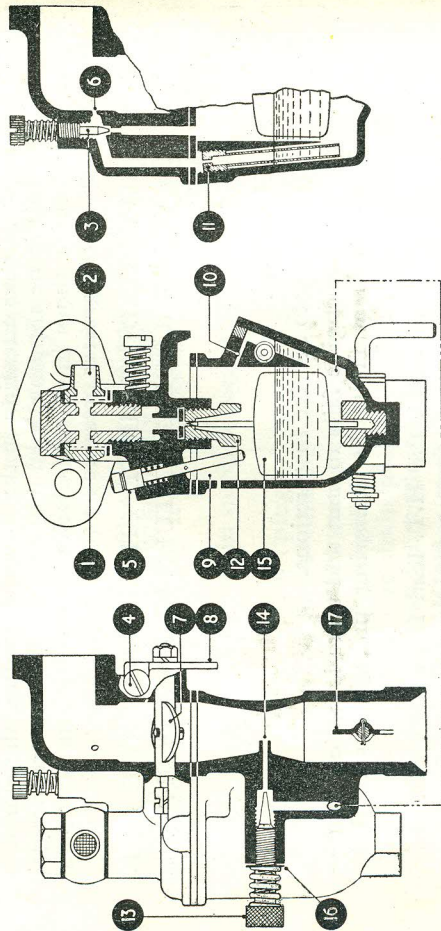


at no time should the fixed contact be loosened to provide adjustment.

If either the fixed or moving points at any time need replacement, it is recommended that both be replaced at the same time.

(vi) A weak or faulty condenser can be detected by badly burnt or pitted points, or a continuous blue spark across the contacts when running. A small white spark is normal. The condenser can be removed by undoing the screws holding the clamp and disconnecting the leads from it.



(b) Carburettor Adjustments and Maintenance.

Adjusting main jet.

The main jet adjustment (13) is set by the engine manufacturer and should not be altered without good reason. This adjustment is always somewhat sensitive on small engines, consequently it should not be altered more than one-eighth of a complete turn until the effect of any such adjustment has been carefully noted. (The shallow notch in the head is provided only to indicate the position of the screw). Always make this adjustment with the engine under load at normal full speed with the throttle wide open. It is not satisfactory to adjust the main jet when the engine is running light on the speed governor with the throttle nearly closed. Turning the screw (13) clockwise, will reduce the fuel flow and weaken the mixture supplied to the engine. Turning it anti-clockwise will increase the flow and provide a richer mixture. **DO NOT FORCE THE SCREW INTO ITS SEATING AS THIS WILL DAMAGE THE TAPER** thereby making correct adjustment extremely difficult. If the setting is too weak it will result in lack of power and possibly overheating of the cylinder, together with poor pick up or cutting out when load is applied. Do not attempt to operate on a very lean mixture, as better performance and fuel economy will be obtained if the mixture is set for full power. An excessively rich

mixture will produce black smoke from the exhaust and may cause rapid carbon formation in the cylinder head and on the piston crown. Carbon will also quickly form on the sparking plug points, resulting in difficult starting. The head of the adjusting screw (13) is drilled for a locking wire, and a small drilled lug on the bowl is provided for the other end of the wire. The washer (16) prevents fuel leaking from the head of the screw. The main jet screw (13) should be set at about 1.5 complete turns in an anti-clockwise direction from the fully closed position

Adjusting Idle Speed.

The throttle stop screw (4) should be turned clockwise to increase the idle speed. Conversely, turning anti-clockwise will reduce the speed at which the engine runs with the throttle in the closed position. It is usual to set the idling speed at 1000—1100 r.p.m. Smooth idling is ensured by regulating the slow running jet adjusting screw (3), the head of which is drilled for locking wire. In case of difficulty in obtaining satisfactory idling, make quite sure the gasket between the bowl and the barrel is in good condition and that the attachment flange on the barrel portion is perfectly flat. A thin gasket should always be used at this flange joint. Slow running jet adjusting screw (3) should be set about 3/4 of a complete turn in anti-clockwise direction from the fully closed position.

General.

Flooding may be caused by excessive engine vibration, dirt in the needle seating, a bent float needle, or possibly by the tickler (5) sticking down and depressing the float. Should the flooding continue after cleaning and checking the carburettor, the next step is to fit a new float and needle (15) and needle seating (12) as this part is subject to wear as a result of engine vibration. Periodically check and clean the filter gauze in the banjo fixing the petrol pipe to the carburettor. It is not intended that the petrol level should be altered.

IMPORTANT. In all cases of bad starting or unsatisfactory performance, first check the settings of the **MAIN JET SCREW (13)** and **SLOW RUNNING JET ADJUSTING SCREW (3)**.

(See Carburettor Illustration Page 8)

4. CONTROL CABLE ADJUSTMENT.

The control lever is connected to the carburettor by the cable (107) which is located in the carburettor manifold by a ferrule. If after considerable use it is found that the cable has stretched, adjustment can be made by loosening the anchor screw (86) pulling the cable through the hole in the anchor and retightening the screw. This adjustment should be made with the control lever in the closed position and the throttle return spring fully expanded.

See Engine Assembly Illustration.