so that the jet assumes its highest possible position. The locking screw (15) should now be loosened just sufficiently to release the jet and jet bush assembly (5), (13), (14), etc. and permit this to be moved laterally.

A moderate side loading applied to the lower protruding part of the lower jet bush (14), will indicate whether or not the assembly has been sufficiently freed. The piston should now be raised, and, maintaining the jet in its highest position, the piston should be allowed to drop. This will cause the needle to be driven fully into the jet mouth, and thus bring about the required centralisation. The locking screw should now be tightened and the jet returned to its former position. Should any indication of contact between the needle and the jet persist, which may sometimes occur due to further displacement of the assembly on finally tightening the locking screw, this must again be slacked off and the operation repeated.

## 2. Flooding from Float-chamber or mouth of Jet.

Flooding may occur due to a punctured and petrol-laden float, or to dirt between the float chamber needle valve and its seating. To remedy either defect, the float chamber lid should be removed, and the necessary cleaning, float replacement or repair effected. The needle and seating unit number is T2; to identify, two ring grooves are machined around the seating.

Flooding also may occur if the original manufacturer's setting of the hinged fork lever (11), in the top of the float chamber has been disturbed, possibly causing the petrol level to be higher than normal, this higher level giving a slow petrol bleed over the jet bridge. The setting figure for this fork is that with the fork pressing the needle home in its seating then a  $\frac{3}{8}$ " dia. test bar should just slide easily between the curve of the fork and the circular facing of the float lid casting.

## 3. Leakage from bottom of Jet.

If persistent slow leakage is observed in the neighbourhood of the jet head, it is probable that the jet gland washer (7), and its lower counterpart, together with the locking screw washer (19), require replacement. The jet lever (23), should first be detached from the jet head, the locking screw (15), removed, and the entire jet and jet bush assembly withdrawn. On reassembly, great care should be taken to replace all parts in their correct situations, as shown in the diagram. Re-centring of the jet, as previously described, will, of course, be necessary after this operation.

## AIR FILTER.

THE AIR FILTER SHOULD NOT BE DISCONNECTED IN AN ATTEMPT TO INCREASE THE MAXIMUM SPEED OF THE MACHINE, THE CARBURETTER AND AIR FILTER BEING DESIGNED TO GIVE MAXIMUM EFFICIENCY, AND IN FACT THE REMOVAL OF THE FILTER WILL IMPAIR THE GENERAL PERFORMANCE OF THE ENGINE.

AS THE CARBURETTER IS EXPOSED TO ROAD DUST AND OTHER FOREIGN MATTER IF THE AIR FILTER IS NOT CONNECTED, THERE IS A POSSIBILITY THAT THE FREEDOM OF THE PISTON IN THE SUCTION CHAMBER WILL BE INTERFERED WITH. THIS IS NOT A DESIRABLE CONDITION AS THE PERFORMANCE OF THE MACHINE AND FUEL CONSUMPTION WILL BE AFFECTED.

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