

Do this by means of a mandrel $1\frac{1}{32}$ in. diameter with one end stepped down to $\frac{3}{4}$ in. diameter to locate it in the inner sleeve of the bush.

Note—This procedure will normally scrap one or both the rubber bushes which should not be removed unnecessarily. When fitting replacement bushes do not forget the distance piece between them.

118. Centre Stand

To remove the centre stand unscrew the nut from one end of the stand spindle, knock out the latter and withdraw the stand complete with its bearing sleeve after disconnecting one end of the stand spring.

119. Wheel Alignment

Note that it is not possible to guarantee that the wheels are correctly aligned when the same notch position is used on both adjuster cams. It is therefore not sufficient to count the notches and use the same position on both sides of the machine. The only way to guarantee that the wheels are in line is to check the alignment from front wheel to back using either a straight edge or a piece of taut string. The alignment should be checked on both sides of the machine and if the front and rear tyres are of different section allowance must be made for this.

It is usual to check the alignment of the wheels at a point about six inches above the ground but, if the alignment is checked also towards the top of the wheels, it will be possible to ascertain whether or not the frame is twisted so as to cause one wheel to be leaning while the other is vertical. To do this it is always necessary to remove the mudguards and, unless a straight edge cut away in its centre portion is available, it will be necessary also to remove the cylinders, battery, etc., in order to allow an unbroken straight edge or a piece of taut string to contact the front and rear tyres.

120. Lubrication

The steering head races, and stand pivot bearing should be well greased on assembly. The stand pivot is provided with a grease nipple but no nipples are provided for the steering head as experience has shown that the provision of nipples at this point causes trouble through chafing and cutting of control and lighting cables. If the steering head bearings are well packed they will last for several years or many thousands of miles.

Recommended greases are Shell Retinax A, Castrol LM, Esso Multipurpose Grease H, Marfak Multipurpose 2, Mobilgrease MP, or Energrel L2.

Front Forks

121. Lubrication

Use one of the grades of oil, S.A.E. 20 as shown in the table of lubricants. The normal oil content is $6\frac{1}{2}$ fluid ozs. (170.4 cc.) Attention is only necessary at the first 1,000 miles and again at 10,000 miles when the oil should be changed by draining. An exploded drawing of the front forks is shown in Fig. 00 from which it will readily be seen that the fork springs abut against the filler plugs (34), before removing these plugs weight must be taken off the front wheel, by placing the machine on its central stand to avoid the forks collapsing.

122. To Drain the Forks

With the machine on the central stand: Unscrew the two filler plugs (34). Have available a container to catch oil drained, then remove the drain plug screw (7) with its washer, with the container under the fork leg. If the wheel is inclined to one side, draining will be more complete. Deal with the other fork leg in a similar manner.

123. Filling Oil

It will be seen the air space between the fork spring, and the inside of the tube is very close: therefore fresh oil must be filled with extreme care,

to avoid losses by spilling. Use a measured container for the correct content of $6\frac{1}{2}$ ozs. Replace the drain plugs before filling, also firmly tighten the filler plugs after.

124. Steering Head Adjustment

On a new machine the filler plugs (34) should be checked for tightness due to settling down, check as well the steering head bearings at the first 100 miles, and then occasionally, as the mileage increases. Using the machine with movement in these bearings will damage the races. Movement in these bearings can usually be detected when the front brake is applied. To check, raise the front wheel well clear of the ground with a box under the crankcase. Try to raise or lower the front wheel with one hand and use the fingers of the other hand encircling the handle bar lug where it meets the frame, when movement can be felt. To adjust bearings a thin open ended spanner $1\frac{3}{8}$ in. across the flats is needed. First release the tube clamping stud nut (28), unscrew the stem nut (37) slightly. Use the thin spanner on the sleeve nut (30) and manipulate as necessary. The bearing should be devoid of play with free movements. Retighten the