

# RALEIGH SUPERMATIC MAINTENANCE

Centaur learns about maintenance in earnest on this luxurious model from Nottingham

**I**N the road test of the Raleigh Supermatic, I criticized the fact that I was unable to turn on the petrol tap with mitten-covered hands, and also suggested that the tap mechanism could possibly get even a little stiff for bare fingers. In fact this situation could easily be remedied by drilling a small hole through the plastic top of the tap, and putting a small metallic rod through this, to afford more purchase.

A few days after I wrote the road test, I discovered another disadvantage with the tap (not a serious one, I admit, to anyone who becomes familiar with the Supermatic)—I wasn't quite sure which direction spelt "Off" and which "On." Impatiently I screwed it in the direction I supposed to be right and then took oil and petrol into an empty tank. In fact I had guessed wrong and my carburetter had more oil in it than petrol, the result being a dead engine.

## Carburetter Strip Down

All of which leads me to carburetter stripping, since this was naturally my next chore as I wanted the moped for use immediately. Let me add at this point that there is a world of difference between taking a carburetter to pieces merely to record the procedure in an article, and taking the carburetter to pieces in real earnest. Recognizing the Gurtner model as one I have dealt with many times in the past, I tended to rush at the job without the right tools to hand, with the final result that it took longer because I had to break off in the middle to hunt up new tools. Perhaps others may profit from this irritating lesson I learnt.

The Gurtner is different from earlier models of this make, in that a large polythene filter unit is attached to the mouth and is secured by a collar. The first task is to slacken the nut and bolt which holds this collar, and then to ease the unit away from the carburetter body. There is no need, once the unit is free, to try and remove it from its "nest" in the frame. I doubt whether it would come out at this point.

Disconnect the fuel pipe by unscrewing the banjo union at the top of the float chamber and take this opportunity of clearing the nylon filter of any debris that may have accumulated.

The next job is to unscrew the small nut which holds down the "lid" of the slide shaft and then pull the slide and strangler free. Put the screw in a safe place and be careful to replace the serrated washer which goes with it when the time comes for reassembly. It is particularly important that the associated screw, and subsequently the "lid," be held down firmly.

With the slides free, the locking collar which holds the body on the stub should be loosened, and a box spanner of correct dimensions used on the tightening screw. On secondhand machines maltreatment of this particular component, due to incorrect spanner use, often results in a round nut. When the collar has been slackened the body can be rocked from side to side until it has pulled free of the stub.

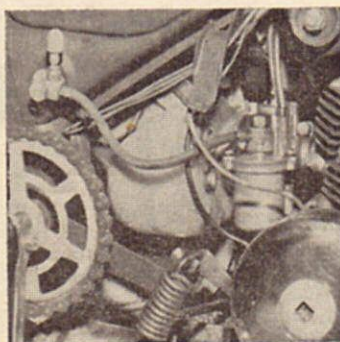
## Casting Position

The float chamber top is held down by two screws, and because of a casting inside, it is impossible to replace it "180 degrees out of phase." The float has a separate and detachable needle, and both components should be removed.

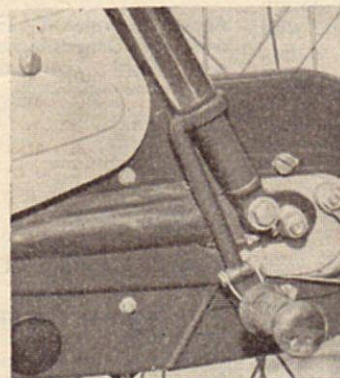
The Gurtner is a "stack pipe" type carburetter and the main slide, therefore, has no associated needle. Nevertheless there is, of course, a jet below and access is gained to this by removing a six-sided brass nut at the bottom. There is provision on this nut for a screwdriver to be used, but my preference is for an appropriately-sized spanner, since the brass is very easily damaged.

To clean the oil from all the various orifices and jets, the usual procedure is to swill with fuel from the fuel pipe. If, however, this is considered messy and wasteful, and the repair is proceeding in the vicinity of a garage, a more spectacular and less chancy method may be employed if the garage is equipped with a high pressure air hose. This immediately removes the oil in a fine mist.

Before reassembly the external surfaces of the carburetter should be cleaned with a cloth. Mount the carburetter on its stub in a vertical position.



(Right) Novel front suspension unit of rubber bands



(Top left) The Gurtner carburetter filter nestles snugly in the frame. Note the petrol tap at the top left of the picture, and the engine springing.

(Left) The constant height footrests, attached above the moving suspension plunger.

After the job is finished and the fairings are back in place take out the plug and clean it, particularly if some hard pedalling was tried originally before the engine was pronounced "dead."

Now that the hour has finally gone back and the homeward journeys in the evening are in the dark, lights assume a greater role of importance. Daylight is necessary for a good check on the lighting system, although obviously the acid test must be at night, as it is impossible to gauge the strength of the headlamp in sunshine.

## Check All Wiring

If the lighting system has never been checked before it is as well to start on the wiring. Note particularly the point where it leaves the generator on the Raleigh and ensure that the insulation has not succumbed to the heat of the engine, turned hard and later cracked. It is always best to renew wires with faulty insulation if possible, but when renewing the connection to the generator, great care should be taken when adding the extra protection. Insulation tape, for instance, is useless down here, since it is susceptible to oil and grease, which are both prevalent. Ideally a rubber collar should be slid on at the other end of the wire, and smeared with grease.

Other points to watch with the wiring are those where it is routed in the neighbourhood of moving parts. Actually it is a good thing to make a move before the insulation becomes worn, and to bind the wire with insulation tape in the first place, so that it is the tape that wears first.

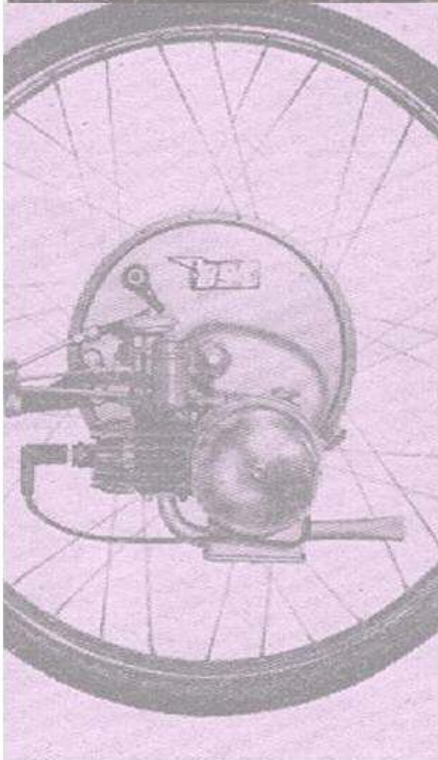
The inside of the headlamp should be examined for signs of corrosion. If there are signs of this, an attempt should be made to seal off the lamp, and this can sometimes be done by inserting a large rubber washer, of the sort used on bottling jars, round the inside of the headlamp rim at the point where it contacts the edge of the lamp "shell." If water is getting in through the switch hole, frequent applications of grease is the answer, although care should be taken to ensure that none of this gets on the switch contacts.

The back light can usually look after itself and the one employed on the Raleigh is of typical simple design. Should the red plastic get cracked from over-tightening the screws, or from a sharp knock, it should be replaced immediately to prevent corrosion from reaching the bulb contact. If water is inexplicably finding its way in, insulation tape or even "Sellotape" can be bound round to make it watertight.

Finally, always carry two spare bulbs, one for the front and one for the rear. The rear one can be replaced within a couple of minutes, while the headlamp bulb could certainly be installed within three or four minutes. Spare bulbs are a worthwhile precaution.



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