

# SUMMER SERVICING

*Grant Williams recommends a run round some components that do not always get their full meed of attention in preparation for the summer.*



On the left, the retaining screw of one of the sliding roof guide plates, often just hidden by the roof lining cloth, is being slackened before the plate is moved outwards. The roof panel is then drawn forward and lifted out, as shown on the right, complete with the two rear felt guides.

**T**HE modern car has so many parts which render service day in and day out with little or no attention that they are liable to be overlooked, and a projected summer holiday trip, especially if taking one to a difficult or isolated motoring country, calls for a run round these "odds and ends." Often they are treated with indifference in the maintenance routine simply because, perhaps, their function is not fully understood, and an old maxim complacently tells us to "leave well alone." Should this indifference degenerate into neglect all sorts of trouble might ensue, so let us have a look before it is too late. The carburetter first, then.

The most frequent attention required by an S.U. carburetter is the addition of a small quantity of light oil to lubricate the piston rod. To get this oil into the place where it will do most good, unscrew the small brass cap fitted to the top of the suction chamber and top-up the tube below it with oil approximately every 500 miles. Use a good machine oil or cycle oil for this, as engine oil is too heavy for the best results. Make sure the air vent hole in the cap is clear before replacing it. Incidentally, some models have a damping device attached to the oil cap nut which contains a non-return ball valve to prevent the piston fluttering and improve acceleration. This valve is only effective when immersed in oil; lack of oil in the chamber

below the filler cap will prevent it working effectively and may cause the engine to stall when crawling in traffic.

After topping-up, any surplus oil is ejected as the engine is started and the throttle opened, so you need not worry about over-filling.

Before reaching the float-chamber the petrol passes through two filters. One is in the petrol pump and the other is behind the hollow bolt attaching the flexible pipe to the carburetter float-chamber cover. Have a look at them both about every 6,000 miles. To get at the carburetter filter, remove the bolt and hook it out from its housing. Wash it in petrol with a brush—never use rag—and replace it, spring-end first; then re-tighten the bolt with a fibre washer each side of the flexible pipe union. To avoid straining the float-chamber casting, support the float-chamber in one hand while tightening the bolt with the other. The petrol pump filter is held in the base of the pump by a hexagon nut which releases the filter tube when removed. As before, wash in petrol with a brush and replace tightly.

Carburetter troubles are few, the most common being a sticking piston or the float-chamber flooding over. To check for a sticking piston, insert a finger through the air intake and lift the piston. If, in the case of non-damper carburetters, it does not rise freely and drop to its seating

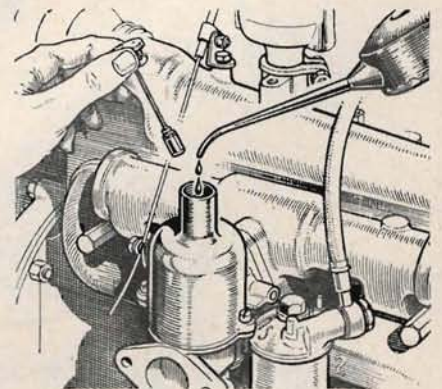
immediately the finger is withdrawn, remove the oil cap nut and add some oil, then free off by working up and down several times with the finger. In the case of carburetters fitted with an oil dashpot, the brass cap must be removed together with the attached damper piston before applying this test.

In an extreme case the suction chamber must be removed by unscrewing the two retaining screws, but before lifting the chamber from the carburetter body, mark it with a pencil to make sure it is returned to the original position. Raise the chamber carefully so that the suction piston is left in position and apply a little metal polish with a cloth to clean the inside of the chamber. Wash it out with petrol, dry and replace, firmly tightening the screws.

## The Float Needle

That the float-chamber is flooding can be seen by the petrol overflowing from the chamber and also from the air inlet. If repeated pressing of the float plunger pin does not wash the grit from the needle and allow it to return to its seating, thus stopping the flow of petrol, the float-chamber cover and jet needle must be removed and the seating cleaned by washing it in petrol or blowing it with an air blast.

Now what about the distributor? This needs a few spots of oil about every 3,000 miles, and the points usually need attention about every 6,000 miles. For either job the cover must be removed, so spring back



The carburetter oil cap, complete with the piston damper, must be withdrawn completely to allow the lubricating oil to be replenished.

the retaining clips and lift it off. The rotor arm is probably tight on the shaft and will have to be prised off gently with a screwdriver blade, but be very careful not to crack the bakelite. If the points are being removed for cleaning, attend to them before oiling.

First examine them to see if they are dirty and pitted, by opening them with a screwdriver. If they need refacing and cleaning up, undo the nut to release the spring arm of the moving contact and lift the contact and spring from the pivot. Note the position of the various special washers, including the fibre one, take out the two screws, and remove the other contact point. By the way, these two latter screws are those used when adjusting the contact gap.

### Cleaning the Points

For efficient working, each contact must have a smooth flat face and be of even height all over, but before setting out to obtain this by rubbing on a fine carborundum stone or piece of very fine emery cloth, examine the contacts carefully. In cases where the centre of one contact is badly pitted, a new set must be fitted, because the hard tungsten tip has burned through and the mild steel base which is left cannot withstand the burning action of the spark which occurs. A new set of points is obtainable at most dealers, but if possible take the old set along as a pattern, because the method of fixing the return spring varies.

If the original points are being refitted, remember that they must be dead smooth and flat or the contact area will be so small that they will be pitted again in no time. Excessive pitting of the points may indicate a faulty condenser. It is therefore advisable to replace it by a new one for safety.

### Setting the Spark Gap

Now for replacing, which is just the reverse to removing, except for a few things to watch. After wiping the points clean, the fixed contact is replaced first without tightening the screws. Next the fibre insulating washer over the contact pivot and finally the moving contact itself. Make sure that the cleaned faces of the contacts are parallel and in line and then tighten the lever spring before adjusting the gap.

Tighten the two screws in the contact plate until just nipping and move the plate towards the cam spindle as far as it will go. Next rotate the engine with the starting handle until the contact arm is bearing on the peak of the cam, bringing the two contacts into the wide open position. Gradually reduce the gap by moving the contact plate outwards until a .012 in. feeler blade (as provided in the tool kit attached to the small screwdriver), will

just slide between the two. At this point tighten the two securing screws.

To complete the attention to the distributor, drop a few spots of oil on the screw head in the centre of the cam spindle (there is clearance below the head for the oil to pass to the cam bearing) and a few more drops down the outside of the spindle on to the automatic tuning device of springs and weights. If your distributor has a bakelite platform, extract the two screws and remove it to get at this control. A single drop on the pivot for the moving contact and a slight smear of grease on the cams will complete the lubrication, but be sparing everywhere or the lubricant will get on to the points, and that is fatal.

Clean the brass finger of the rotating arm before replacing it and, to complete, wipe out the distributor cover and scrape the deposit from the brass segments. If the small spring-loaded carbon brush is working freely, replace and clip up the cover.

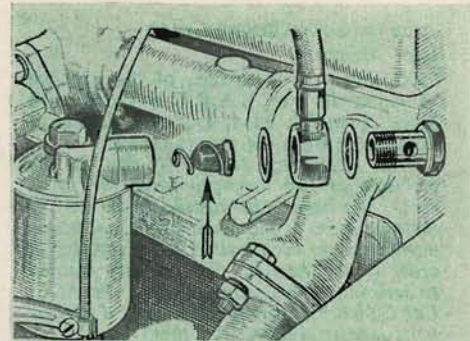
Before closing the bonnet, just check the fan belt for slackness. You should only be able to move it from side to side for between  $\frac{1}{2}$  in. and 1 in. and a gentle pull on the fan blades should not rotate the pulley inside the belt. Tighten the belt by slackening the two bolts on which the dynamo pivots and the one securing it to the slotted link, and gently pulling it bodily upwards until the tension is correct before retightening the bolts. If the belt is slack the dynamo may not be driven at sufficient speed to keep the battery fully charged.

### The Sliding Roof

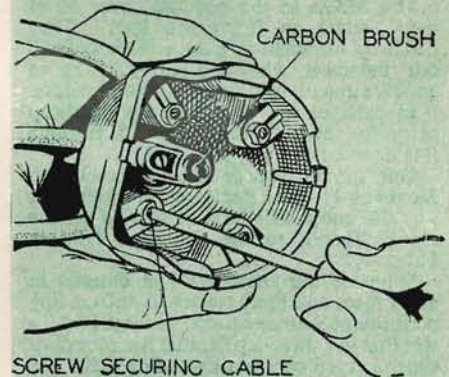
Now for a quick look at one body item. Though not fitted to many new models, there are still many sliding roofs in use. Their operation is another of those things made so much easier by a smear of grease. Open the roof about half-way, undo the screw on either side of the sliding portion at the forward end and push the guide plates outwards to release them from the runners. Pull the roof panel forward, raising the front edge over the windscreen, and draw it from the body.

Before coating the runners with grease (don't forget the underside, too!), pour a drop of water down the rubber drain tubes in each corner just to make sure they are clear, and thus preventing the sliding roof channel becoming a reservoir capable of overflowing on to passengers. If any are blocked, examine the lower ends which are either beneath the wheel arches or centre door pillar; you will most likely find they are choked with caked under-body mud.

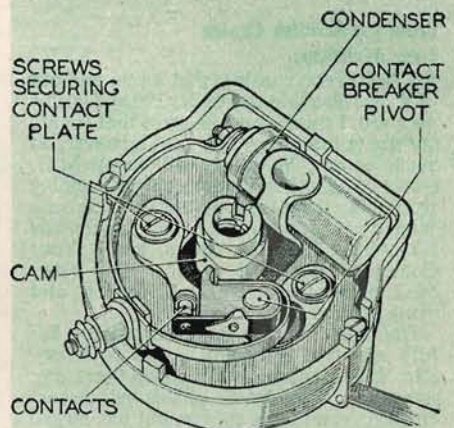
When refitting the panel, engage the centralising rod in the slot in the rear face, engage the rear felt guides in the runners and then push the panel backwards into position. Locate the front guides, replace, and tighten the two screws.



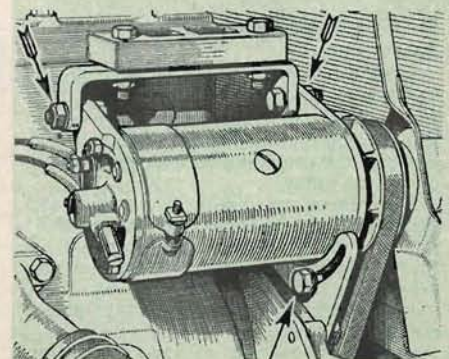
The arrow indicates the carburettor filter which needs cleaning periodically with petrol and brush. The nut must be kept tight.



Replace perished plug leads with 7mm. H.T. cable. Push the ends well into the distributor cover and pierce with the pointed screws.



Contact breaker components. If suspicious of your condenser, let your dealer test it for you.



Arrows indicate the three bolts which must be slackened before the fan belt can be tensioned.