SECTION 3 — SIDE COVER, SUMP AND FILTER

Printed in England

SEPTEMBER 1963

ISD 3042

The side cover, sump and filter can be removed while the gearbox is in position in the car but this should only be necessary when investigating a defect.

Early gearboxes are fitted with a sump consisting of a metal pressing with a hole in one side through which the ride control oil passes.

A light alloy sump is fitted to gearboxes having the ride control oil passing through the main casing. The alloy sump is also fitted to all gearboxes without a ride control unit.

Before removal, the side cover and sump should be examined carefully for signs of oil leakage; if a leak is present, it must be traced and rectified. If the gearbox has been removed from the car, the examination should be carried out before the gearbox is inverted on its stand.

To avoid the risk of dirt entering the gearbox as work proceeds, the gearbox and adjacent chassis members should be thoroughly cleaned, especially in the vicinity of the side cover and sump. Apertures in the box must be kept covered as much as possible.

The sump must be drained before removal of the gearbox, then filled after refitting.

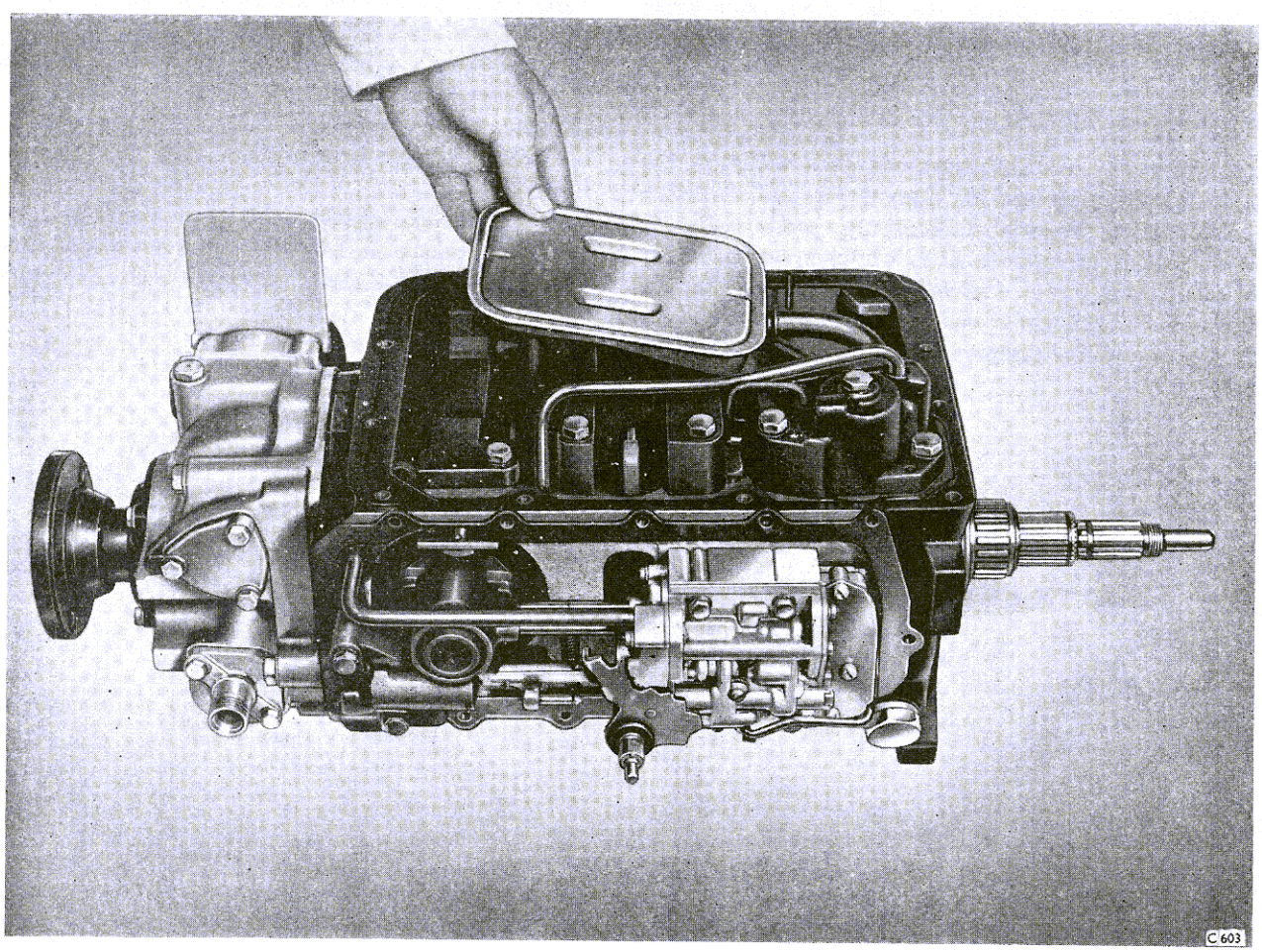

Fig. 47 Removing the filter

The following instructions are for working on the gearbox whilst it is installed in the car. The procedure is generally the same when the gearbox is on the bench except that the selector lever will have been disconnected from the control unit and the sump will be uppermost.

Side cover — To remove

Disconnect the selector and throttle levers by unscrewing the pinch bolts and sliding the levers from their shafts; tie the levers and rods to convenient points on the chassis.

On left-hand drive cars, remove the isolating stay from its anchor bolt on the side cover.

Remove the securing setscrews and aluminium washers, then withdraw the side cover and paper gasket. Discard the gasket.

Sump and filter — To remove

Remove the securing setscrews, then withdraw the sump and paper gasket; discard the gasket. Before cleaning the interior of the sump, examine the oil residue for deposits such as white metal or bronze powder which may indicate an approaching failure. Examine the sump for damage and cracks.

To remove the sump on a '1952' gearbox remove the ride control pipe connection on the ride control oil pump, release the clip securing the pipe to the sump flange, then unscrew the securing setscrews and remove the sump.

Remove the filter by easing it gently from the rear oil feed pipe and sliding it rearward from the front oil pipe (see Fig. 47). Care must be taken not to damage the filter by wrenching the mesh away from the sheet metal base or by stretching the gauze and so increasing the filtration size of the mesh. Clean the filter thoroughly using a brush; **do not** use a cloth.

Side cover, sump and filter — To fit

Before fitting the filter, sump and side cover the following precautions must be observed.

Examine the interior of the gearbox for cleanliness and check that all pipes are secure in their sockets and that all nuts and bolts are tight.

Check that the rubber seal and the two steel washers are correctly positioned on the selector shaft, as shown in Figure 53 — 'Section 4 — Control valve unit'.

Check that the filter is clean, then fit it to the oil feed pipes.

Fit the sump, together with a new paper gasket.

Fit the side cover, together with a new paper gasket, ensuring that aluminium washers are fitted on all setscrews.

Fit the control levers.