

SECTION 3 . . SIDE COVER, SUMP AND FILTER

The side cover, sump and filter can be removed with the gearbox in position but removal of these items should only be necessary when investigating a defect or when renewing the gearbox oil. Two types of sump are in service: a sheet metal pressing with a hole in the side through which the ride control oil feed passes and a light alloy casting for gearboxes having this feed passing through the main casing.

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

The gearbox and chassis in the vicinity of the side cover and sump should be cleaned thoroughly to obviate the risk of dirt entering the gearbox as the work proceeds. Apertures must be kept covered as much as possible.

The sump must be drained before removal and filled after refitting, when the ride control oil pump must also be primed; these operations are described in Chapter 2.

REMOVAL FROM GEARBOX

The instructions given below assume that the gearbox is installed in the car. The procedure is generally the same when the gearbox is on the stand except that the selector lever will have been disconnected from the control unit and the sump will be uppermost.

To remove the side cover, first 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. Remove the bolts and withdraw the cover.

To remove the sump, undo the ride control pipe connection on the ride control pump (1952 model only),

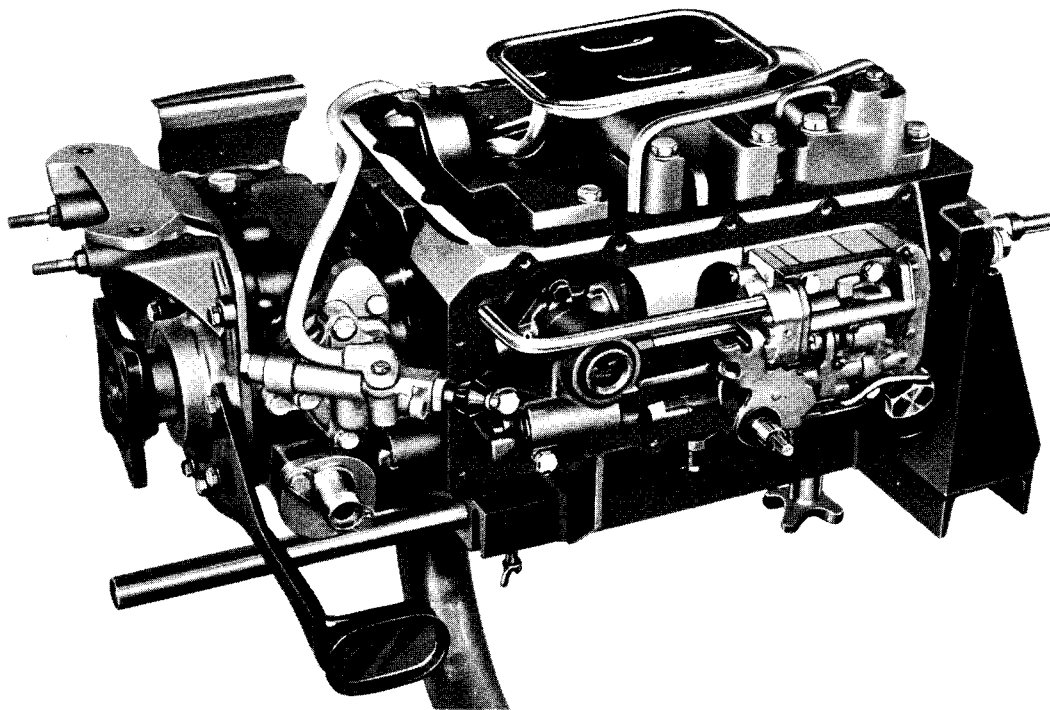


Fig. 1. Gearbox with covers removed

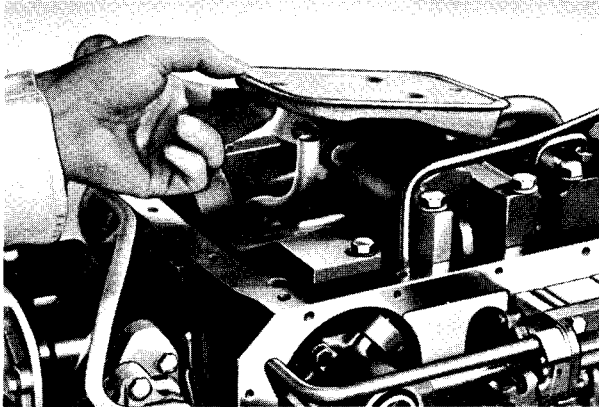


Fig. 2. Removing filter

and release the clip securing the pipe to the sump flange. Remove the securing bolts and the sump and gasket. Before cleaning the interior of the sump examine the remaining oil for sludge and other deposits, such as white metal or bronze powder, which may indicate incipient failure. Examine the sump for damage and cracks.

The filter can now be removed by easing it gently from the rear oil feed pipe and sliding it carefully backwards from the front oil pipe. Care must be taken to avoid damage to 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; cloth must not be used.

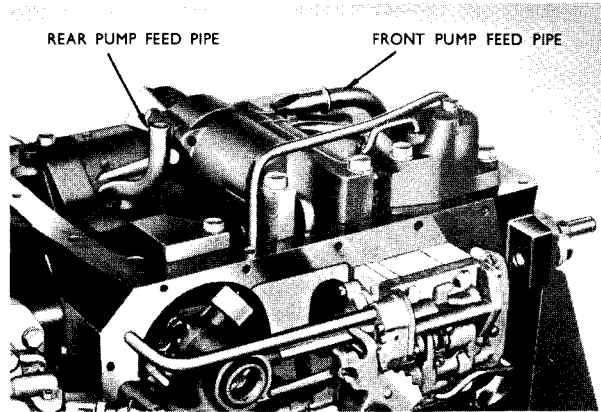


Fig. 3. Filter removed

REFITTING TO THE GEARBOX

When refitting 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 described in Section 4.

Fit new gaskets to the sump and side cover and ensure that the side cover copper washers are in their correct position on the bolts along the bottom edge of the side cover and that locking washers are correctly fitted.