

Flying Spares

Fit the rear oil pump discharge pipe into the bore in the rear pump until it will go no further. Fit the front pump delivery pipe into the front pump.

Rotate the front drum band until the slot for the operating rod is in the correct position and the other end of the band is engaged with the adjusting screw. Engage the band operating rod in the band slot and manoeuvre the servo unit into position engaging the front pump delivery pipe and the rear pump discharge pipe in their respective bores. Do not fit the securing bolts at this stage.

Place the rear band release spring in the housing in the end of the rear band, using petroleum jelly to hold it temporarily in position. Engage the short end of the operating strut in the spring coil and tie the ends of the band together, with a piece of wire, to hold the spring in position during subsequent operations; the wire should be fixed in such a manner that it can be removed easily at a later stage. Rotate the band until it engages with the adjusting screw.

Hold the rear servo operating lever against the operating rod and move the rear servo unit forwards

to enter the transfer pipe on the front servo unit into its bore and at the same time engage the socket on the operating lever with the end of the operating strut.

Push both servos to the face on the gearbox casing, enter the securing bolts and tighten them evenly, taking care that the front and rear pump pipes move smoothly into full engagement; the rear servo must be supported during this operation. Tighten the bolts to the torque loading given in the Summary of Repair Data. Check that the band release spring is in the correct position and remove the locking wire from the ends of the band ensuring that no wire is left in the gearbox.

Adjust the setting of the front and rear bands as described later in this section.

Fit the compensator pressure pipe (if applicable) and the governor oil delivery pipe; this latter pipe is not interchangeable between 1952 and 1953 gearboxes.

Fit the oil filter and sump as described in Section 3 and carry out a road test as described in Chapter 2.

SETTING THE BANDS

Setting of both bands must be carried out whenever a servo unit has been removed and may also be necessary to rectify faulty operation of the gearbox. The procedure is the same whether the gearbox is installed in the car or is on the bench.

Front band

The procedure for setting the front band is the same for the 1952 and 1953 models. The tools used differ in that one model is fitted with a taper thread to engage in the servo body and the other has a parallel thread. These tools are, of course, not interchangeable.

Unscrew the blanking plug from the front servo body and screw in the setting tool as shown in fig. 7. Turn the plunger nut by hand until the plunger makes contact with the servo piston. Turn the drum opposite to normal rotation to centralize the band and then, using a spanner, screw in the plunger five complete turns. Check that the knurled washer cannot be rotated; if it is loose, slacken the band adjusting screw until the washer is gripped.

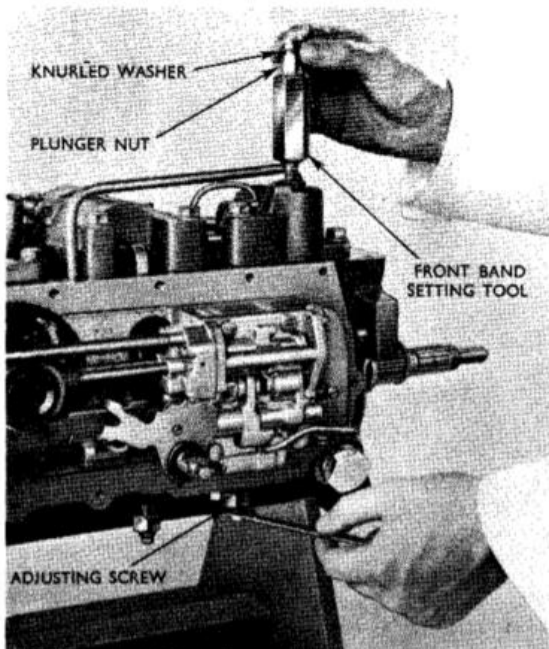


Fig. 7 Setting the front band.

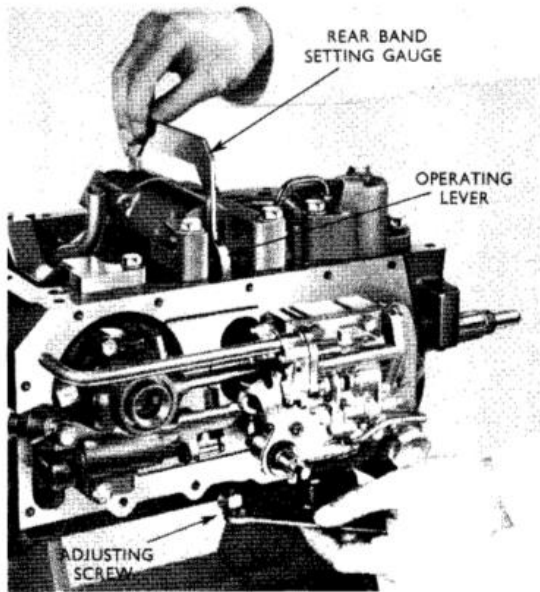


Fig. 8 Setting the rear band.

Hold the knurled washer of the tool as shown in fig. 7, and tighten the band adjusting screw until the washer just slips. Hold the adjusting screw firmly to prevent it from turning and tighten the locknut to the correct torque loading. Check that the tension on the knurled washer has not changed indicating that the setting has not altered.

Slacken the plunger nut more than 5 turns, to relieve the pressure on the screw thread in the servo body,

unscrew the tool and refit and tighten the blanking plug.

Rear band

Setting of the rear band is the same for all gearboxes and one band setting gauge can be used.

Remove the governor oil delivery pipe.

Check that there is a clearance between the end of the operating lever and the operating rod of the rear servo ; if necessary, slacken the band adjusting screw. Turn the rear drum opposite to normal rotation to centralize the band. To ensure that the band is centralized, hold a screwdriver against the riveted end of the band and shock it into position on the drum.

Hold the band setting gauge with the cut-away leg firmly against the spring end of the servo and the other end of the gauge resting on the servo operating rod as shown in fig. 8.

Screw in the adjusting screw until the face of the operating lever just touches the gauge ; care must be taken not to allow the gauge to be pushed by the operating lever or an incorrect setting will be obtained. If this occurs, slacken the adjusting screw and recommence the setting operation, which must always be carried out by adjusting the operating lever moving towards the gauge and never away from it. Hold the adjusting screw firmly and tighten the locknut to the correct torque loading. Check that the setting has not altered.

Refit the governor oil delivery pipe.