#### Page 10

## To fit transmission couplings

SHOULD NEW COUPLINGS BE FITTED IT WILL BE FOUND THAT THEY ARE SUPPLIED IN A STATE OF COMPRESSION AND SHOULD BE FITTED IN THIS CONDITION. REMOVE THE BANDS WHEN THE BOLTS HAVE BEEN TIGHTENED TO THE TORQUE FIGURE GIVEN IN GENERAL DATA.

#### Refit the original couplings

If already compressed with a strap as given in the paragraph for removal of the transmission (See Fig. 7, Page 8), this will facilitate the operation.

## Proceed as follows:-

Fit the three bolts to the coupling, in alternate holes, with the head of the bolt, to the short boss of the coupling. (See Fig. 6) and the coupling in its original position. (See Page 8.)

Now fit the coupling to the transmission flange, using the other three bolts, with the heads of the first three bolts towards the transmission casing.

These bolts are then fitted to the drive-shaft flanges and all bolts tightened to the torque as given in the General Data Section.

Attach the gear change operating shaft to the selector shaft in the transmission unit, line up the groove in the selector shaft with the hole in the operating shaft, fit the bolt, and locking tab, tighten the bolt and secure by turning over the locking tab.

# CHECK HYPOID AND PINION BEARINGS PRIOR TO DISMANTLING

To decide if the existing bearings are fit for further service. Visual inspection and "feel" for roughness is insufficient. A check of remaining preload or endfloat must be made before dismantling. If hypoid or pinion bearings are found to have run with  $\cdot 001$  in. ( $\cdot 0254$  mm) endfloat both bearings of the affected assemblies must be renewed.

## **Check hypoid bearings**

Remove the clinch nuts (5) (Fig. 2) and discard.

Remove the drive flanges (6/29) to expose the inner and outer screwed sleeves (10/11-24/25).

With interference fit flanges, withdraw the flange/shaft assembly. No circlips are fitted.

Remove the retaining spring rings (7/28).

On the cage side note the position of the inner screwed sleeve slots, and mark the position of one inner sleeve slot on the outer sleeve. (See Fig. 11A.)

Unscrew the inner sleeve about  $135^{\circ}$  (See Fig. 11B), and then screw in to **JUST** nip, using the special Churchill Tool No. RG373 with a 7 in. (18 cm) tommy bar. (See Fig. 11C.)

Fit drive flanges loosely and turn Diff. assembly and again test for nip.

Repeat this process five or six times or until no new nip position is obtained. This is known as true nip.



Fig. 11. Screwed sleeve marking

When the true nip position is found, check the markep inner sleeve slot relative to the marked outer sleeve.

If the vehicle has done over 2,000 miles (3,200 km), the bearings must be scrapped if the mark on the inner sleeve goes more than  $\frac{3}{8}$  in. (9 mm) past the previous mark.

If  $\frac{3}{8}$  in. (9 mm) or less, the bearings are serviceable, providing they pass the visual check. (See Fig. 11C.)

If vehicle has done less than 2,000 miles (3,200 km), the bearings can be refitted, subject to visual examination, and regardless of position of sleeve markings.

**DO NOT** at this stage apply any pre-load to the hypoid bearings but leave in the state of true nip.