Check gearbox bearings for wear

It is IMPORTANT to ensure that the exposed end of the main selector shaft (49) Fig. 2 is perfectly clean from rust or burrs otherwise damage to the bore of the cover will result.

Engaging 2nd or 4th gear will extend the shaft further from the casing to enable cleaning to be carried out.

Remove retaining plug with spring and detent ball (50).

Remove mounting cover (1. Fig. 2).

Remove reverse idler and lever (51), interlock plate and roller (47).

Remove reverse plunger and spring (78) and turn main selector (49) 90° clockwise.

Measure the torque required to turn the pinion shaft, using a spring balance and a length of cord or soft wire wound round the reverse gear as shown in Fig. 12. Note the reading on the balance as the reverse wheel is rotated by pulling on the balance.

If friction torque prior to dismantling is 1 lb. (·45 kg.) or less on scale, replace preload washer (56) with one ·002 in. (·05 mm) thinner and recheck friction torque.

If torque has definitely increased then bearings are serviceable, subject to a visual check for damage.

If there is no increase in torque, bearings must be scrapped.

If mileage of a new transaxle is 2,000 (3,200 km) or less, bearings may be used, subject to a visual check for damage.

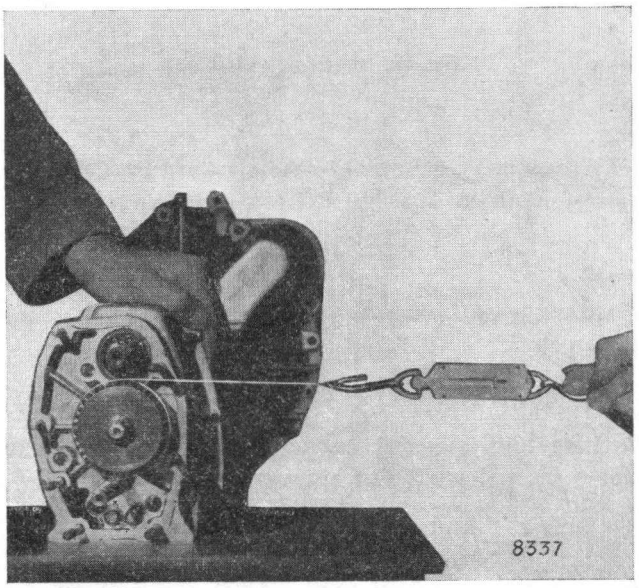

Fig. 12. *Taking torque reading*

With a new transaxle, if bearings are serviceable and no further dismantling is deemed necessary remove preload washer (NOT the 4th selective washer) and fit a graded thinner washer (See Page 19) to obtain correct torque of 4-6 lbs. (1·8-2·7 kg) on the balance scale.

Refit bearing and gear (55/54) and tighten the nut (53) progressively in three stages.

1st Stage: torque to 15 lbs./ft. (2·0 kg.m) (Fig. 13), rotate assembly and check preload. (See Fig. 12).

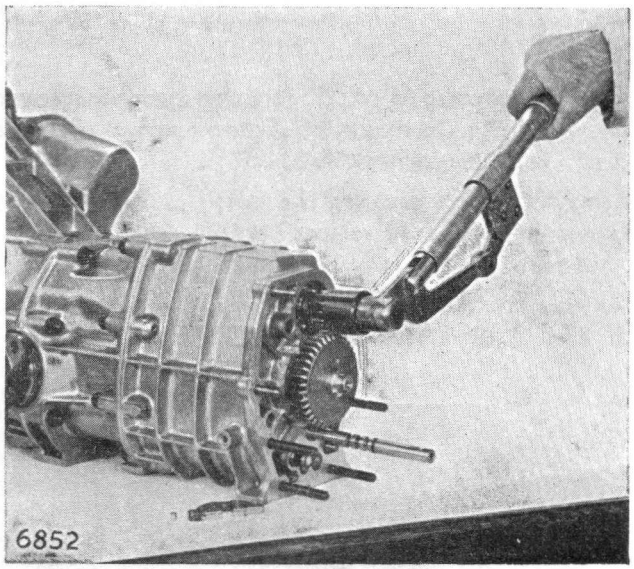

Fig. 13. *Applying torque to locknut*

2nd Stage: torque to 30 lbs./ft. (4·1 kg.m), rotate and test.

3rd Stage: torque to 45 lbs./ft. (6·2 kg.m), rotate and test.

If necessary try various sizes in washers to obtain the correct preload. It is essential that torqueing and testing is done in stages to avoid overloading the bearings and causing damage.

When correct preload is obtained, rotate the entire assembly. Provided there is no roughness of bearings, etc., continue to rebuild.

When fitting a mounting cover retained by bolts, ensure that the two short bolts are fitted to the correct holes.

When the gearbox rebuild is complete and satisfactory, return to the Hypoid assembly.