Fit the "O" ring (9/26) into the recess on the inner screwed sleeve (10/25).

Screw the inner screwed sleeve (10/25) into the outer screwed sleeve (11/24).

The smaller (cage side) screwed sleeve assembly (8/9/10/11) is assembled in the same manner as the larger (crown wheel side) except there is no abutment ring fitted.

Place the sleeve assemblies on the bearings (the larger sleeve assembly on the crown wheel side).

Coat the abutting faces of the hypoid casing and the clutch casing with Hylomar jointing compound.

Fit the assembly to the hypoid casing making sure that the inner screwed sleeves are projecting approx. $\frac{1}{16}$ in. (1.5 mm) each side.

Fit the clutch casing to the hypoid casing and tighten the securing nuts finger tight. Screw the smaller bearing inner screwed sleeve (in future called cage side) in as far as possible, rotating the Hypoid assembly while doing so. This will expand the outer screwed sleeve outwards in the casing.

Tighten the casing securing nuts to the torque given in General Data. Screw back the cage side inner screwed sleeve about one turn.

To adjust the crown wheel for backlash and pre-load of the bearings

Using the special tubular adjusting spanner (Tool No. RG373) adjust the larger bearing inner screwed sleeve (in future called the gear side) until there is ample backlash between the crown wheel and the pinion, and a slot in the inner sleeve is in line with a slot in the outer sleeve (See Fig. 43).

Mark these two slots.

Screw in the cage side inner screwed sleeve until the bearings are just contacted.

Loosely fit the drive flanges and spin the assembly.

Re-adjust the cage side inner screwed sleeve to contact the bearings. Repeat the spinning of the assembly and the tightening of the cage side inner screwed sleeve until no further tightening of the sleeve is required to contact the bearings.

If a pair of slots are not lined up on the cage side at this point move the gear side inner screwed sleeve round to a new pair of slots and find bearing contact again as previously described.

When this position is found, screw in the cage side inner screwed sleeve a further 90° minimum and line up two slots.

Mark these two slots.

Clamp a clock gauge to the clutch housing (See Fig. 44) with the stylus against the heel of the crown wheel teeth, as nearly in line with the direction of travel as possible, and loosely fit the drive flanges.



Fig. 43. Adjusting inner screwed sleeve (RG373)

Check the backlash between the crown wheel and the pinion by rotating the flanges backwards and forwards together as shown in Fig. 44.

The pinion shaft must be held stationary.