

ROLLS-ROYCE AUTOMATIC GEARBOX

SECTION 9 — BEARINGS AND THRUST WASHERS

The complete rotating assembly is carried in plain bearings at the front and centre, and in ball bearings at the rear. Axial thrust is transmitted by phosphor-bronze thrust washers, backed by steel washers.

The front plain bearings are between the front end of the intermediate shaft, the front annulus gear shaft and the front pump casing.

The centre plain bearing is also an oil delivery sleeve which supports the intermediate shaft between the front and rear drums. It also provides a bearing surface for the rear drum when in reduction. A spigot bearing in the front end of the output shaft supports the rear end of the main shaft; the output shaft also carries the reverse sun gear on the plain bearing.

The two ball bearings are housed in the rear extension.

Thrust washers are situated as follows

A pair of steel and phosphor-bronze washers between the rear torus hub and the end face of the front annulus gear shaft.

One phosphor-bronze washer between the hub of the planet gear carrier and the front annulus gear.

A pair of steel and phosphor-bronze washers between the front sun gear and planet gear carrier.

A pair of steel and phosphor-bronze washers behind the front unit sun gear bearing; these are retained on the intermediate shaft by a snap ring.

A phosphor-bronze washer on each side of the rear unit clutch hub.

A phosphor-bronze adjusting washer between the rear face of the rear unit sun gear and the front face of the rear unit planet carrier. This washer is to be selected to give the required mainshaft end float.

A pair of steel and phosphor-bronze washers between the rear unit planet carrier and the reverse drive flange.