

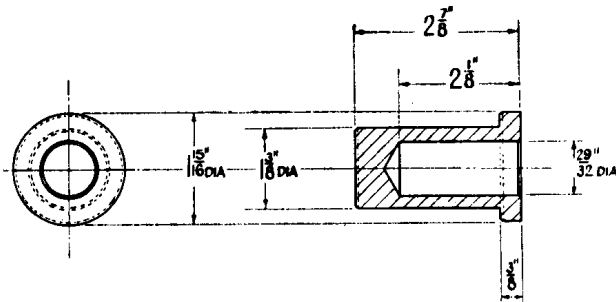
146. Removal of Hub Driving Pins

To remove the six driving pins from the aluminium full-width hub, first remove the hub cap after unscrewing the three screws attaching it to the hub. Unscrew the six Simmonds nuts and drive out the pins.

147. Refitting Ball Bearings

To refit the sprocket/brake drum bearing, use a hollow drift as shown in Fig. 47. The bearing is first fitted to the fixed section of the spindle; the spindle and bearing are then entered into the sprocket/brake drum and driven home, preferably under a press or using light hammer blows.

The two bearings in the hub barrel are pressed in, using the drift part of E.4823. First assemble the bearing into the circlip grooved end of the barrel and fit the circlip. Replace the bearing spacer, the slot in the spacer can be at either end of the hub, and assemble the second bearing, supporting the hub on the inner race of the other bearing. If the drift part of E.4823 is not available it is essential that the last bearing is assembled by applying pressure to both inner and outer races simultaneously to avoid pre-loading the two hub barrel bearings.



DRIFT FOR REFITTING RLS7 BEARING

Fig. 47

148. Reassembly of Brake Shoes and Operating Cam into Cover Plate

No difficulty should be experienced in carrying out these operations. Put a smear of grease on the pivot pin and on the operating face of the cam; also on to the cylindrical bearing surface of the operating cam if this has been removed. Fit the operating lever and trunnion on its splines in a position to suit the extent of wear on the linings and secure with the nut. The range of adjustment can be extended by moving the lever on to a different spline.

149. Final Reassembly of Hub Before Replacing Wheel

Before replacing the felt washers which form the grease seals, pack all bearings with grease. If new felt seals are fitted, soak these in engine oil.

Recommended greases are:— Shell Retinax A, Castrol LM, Esso Multipurpose Grease H,

B.P. Energrease L2, Mobilgrease MP and Marfak Multipurpose Grease 2. These are all lithium soap greases and should not be mixed with lime, aluminium or soda soap greases.

Make sure that the inside of the brake drum is free from oil, grease, dust or damp. Replace the felt washers, distance collars and brake cover plate and securely tighten the spindle nuts.

150. Wheel Rim

The wheel rim is WM3-18 in. plunged and pierced with forty holes for spoke nipples. The spoke holes are symmetrical, i.e., the rim can be assembled to the hub either way round. The rim diameter after building is 18.06 in. the tolerances on the circumference of the rim shoulders where the tyre fits being 56.783/56.723 in. The standard steel measuring tape for checking rims is $\frac{1}{4}$ in. wide, .011 in. thick, and its length is 56.843/56.783 in.

151. Spokes

The spokes, Part No. 40636, are of the single-butted type, 8-10 gauge, with 90° countersunk heads and rolled threads, .144 in. diameter, 40 t.p.i., thread form British Standard Cycle, $6\frac{3}{16}$ in. long. All spokes initially are bent to approximately 110° at the head end. Spokes threaded from the outside of the spoke flanges are hit with a hide hammer after lacing, but before truing the wheel to make them fit close to the flange. This increases the bend to approximately 80°.

152. Wheel Building and Truing

The spokes are laced one over two and the wheel rim must be built central in relation to the outer faces of the distance collars. The rim should be trued as accurately as possible, the maximum permissible run-out both sideways and radially being plus or minus $\frac{1}{32}$ in.

153. Tyre

The standard tyre is Dunlop Gold Seal K70, 4.00 × 18 in.

When removing the tyre always start close to the valve and see that the edge of the cover at the other side of the wheel is pushed down into the well in the rim.

When replacing the tyre fit the part by the valve last, also with the edge of the cover at the other side of the wheel pushed down into the well. Slightly inflate the tube and, if available, paint the rim and tyre with soapy water, or water containing a soapless detergent to assist the tyre in slipping over the edge of the rim.

If the correct method of fitting and removal of the tyre is adopted it will be found that the covers can be manipulated quite easily with the small levers supplied in the tool-kit. The use of long levers and/or excessive force is liable to damage the walls of the tyre. After inflation make sure that the tyre is fitting evenly all the way round the