

3.45-1 MODEL S-1200 WATER SWIVEL

The Model S-1200 Water Swivel is of compact design; 1-1/2" opening, Timken roller bearing to take heavy thrust loads. It has oil bath lubrication and is mounted on heavy trunions of the yoke. Packing is of the single rubber ring type which may be replaced in a minimum length of time.

Disassembly: After the swivel has been removed from the yoke and kelly, the gooseneck and bail may be removed from the swivel body by removing the seven 1/2" Allen capscrews. This will permit the removal of the S-1202 packing ring, S-1203 stem and the S-1205 shield; the four S-1204 pins are retainers which lock the S-1203 stem to the S-1209 body so they turn as one unit; the stem is sealed by use of the S-1206 "O" ring.

The bearings are removed by the removal of the eight 1/2" capscrews from the bottom plate S-1211; the body S-1209 and bearings will come out together so the bearings may be removed separately. The XTI-9220 cup may be removed from the housing by use of a punch through the tapped holes, which hold the gooseneck to the housing. The grease seals may be removed from the housing and bottom plate.

Inspection: Inspect and replace all worn parts. Always install new grease seals when reassembling. CAUTION: The wearing surface of the S-1203 stem is faced with hard metal which is very brittle. Do not damage or chip this surface.

Assembly: To assemble, put bearings on the S-1202 body. Replace upper cup in the housing, insert the body and bottom cup and install the bottom plate without seals and S-1210 shim by pulling capscrews down evenly until there is a slight drag on the bearings. Check the amount of shims necessary to maintain this adjustment with a feeler gauge. Remove capscrews and pull the bottom plate off and put in the grease seals, using the correct amount of shims to hold the adjustment of the bearings in the housing.

With the bearings and housing assembled, it will now be necessary to assemble the top part of the swivel. This is the only part necessary to remove in replacing the packing ring. Install the four pins in the holes of the body; line up the shield over the pins; insert the S-1203 stem with the "O" ring in place in the body, making sure the stem goes down on the shield and body flush.

The space for the packing ring should be adjusted by the use of a 3/8" spacer in place of the packing and set the gooseneck in place and, by using a feeler gauge, check the clearance between the housing and gooseneck. Then, remove the gooseneck and spacer (This could be washers or a piece of flat that measures 3/8" in thickness). Place packing ring in gooseneck and install with the shims required.

CAUTION: The 3/8" dimension is very important; if too close, it will bind the packing and cause it to wear excessively. If it is too wide, the packing will not expand enough and will leak.

Lubrication: With one plug in the ear of the housing, lay swivel on its side with the opening in a vertical position and fill the swivel completely full of TRANSMISSION OIL SAE 90.