

VSCS PUMP CONVERSION INSTRUCTIONS PACKING TO SINGLE MECHANICAL SEAL

To convert the VSCS pump from packing to a single flushed seal begin by removing the bearings, the bearing housings, the packing gland, and the stuffing box bracket along with the packing rings. Removal of the shaft sleeve will complete the disassembly procedure.

Reassembly procedure: Clean the pump shaft in the area where the shaft sleeve will locate with fine grade emery cloth, install the shaft sleeve O ring and apply a liberal amount of anti-seize compound to the shaft. **NOTE:** On earlier model pumps the O ring groove is cut into the sleeve rather than the shaft. In such cases, it is suggested that the anti-seize compound be applied to the inside surface of the sleeve to prevent its being wiped off when the sleeve is positioned onto the shaft. Bolt the stuffing box bracket to the volute coverplate.

Seal and shaft sleeve assembly: Position the shaft sleeve in the drive collar and tighten two dog point set screws in holes provided. Set the sleeve and collar assembly on end and place assembly aid spacer around the sleeve and position against drive collar. Lubricate O ring on stationary seal seat (carbon) and insert in seal housing. Use soapy water or silicone grease. **DO NOT USE MINERAL OR VEGETABLE OIL.** Place seal housing over end of sleeve and position against assembly aid spacer.

Lubricate O ring in rotating seal assembly and slip over end of shaft sleeve and position against stationary seal (carbon). Compress rotating seal members to required working length by measuring $1/4"$ space between seal parts that house compression springs and tighten set screws in seal collar. Seal is now adjusted for proper working length and is ready for installation in the pump.

Place seal housing gasket in position and slide complete assembly over pump shaft but do not bolt in place. Assemble bearing housing and ball bearing to pump shaft and properly locate and lock in position. Push seal and sleeve assembly to its final position against packing box bracket and bolt in place. Tighten drive collar set screws in undercut of shaft. Remove assembly aid spacer. Connect flush tubing to seal housing.

