SERVICE TIPS FOR CUSHION ROD ASSEMBLY

- 1. Turn engine over slowly to get diaphragm in lowest position.
- 2. Remove the four bolts that hold diaphragm top plate to diaphragm.
- **3.** Turn engine over slowly to get eccentric at 12:00 position.
- **4.** Remove castle nut that holds cushion rod assembly to eccentric. Now cushion rod assembly can be removed for further disassembly if needed.
- **5.** Remove bearings from cushion rod assemblies and place rod end weldment in vise.
- 6. Next, remove diaphragm top plate by installing two bolts in diaphragm top plate 180 degrees apart. Place pry bar between bolts and remove it. Make note what position the bolts are in.
- 7. Remove jam nut, washer, spring and connecting rod; and check these items for wear appx. every 1200-1500 hrs. Replace parts with ones that are specifically designed for your pump. (See drawing for adjustment)
- **8.** Install diaphragm top plate in the same position that it was removed. (Hold jam nut with wrench so adjustment won't move.)
- **9.** Remove cushion rod assembly from vise, clean up and repack with fresh grease.
- **10.** Place one O-ring over the top of the cushion rod assembly.
- 11. Now install cushion rod assembly on pump.

 Make sure that bevel washers are installed
 with bevel towards cushion rod assembly,
 tighten castle nut down snugly then back off
 until rod end moves freely, and install carter key.

 ***BEARING SHOULD BE ADJUSTED PERIODICALLY, IF
 BEARING RUNS TOO LOOSE, THIS WILL CAUSE PREMATURE
 FAILURE.
- **12.** Flip O-ring over cushion rod assembly onto inside bevel washer and install O-ring on outer bevel washer, for this will retain grease in the bearings and help keep contaminates out.
- **13.** Grease cushion rod assembly until grease comes out around O-rings.
- **14.** Turn engine over slowly, lowering diaphragm top plate down onto diaphragm while aligning bolt hole with bolts. Tighten bolts down evenly.

