

**WARNING:** To prevent personal injury, all moving parts must be protected. Protective guards for all exposed moving parts are available.

**A. Installation**

Level pump and secure at tie down bolt holes provided. After bolting baseplate, check alignment of motor coupling (41) and realign if necessary. Do NOT support piping with the pump or connect piping in strain. Jaeco pumps are supplied with single or double ball check valves on suction and discharge pump. Provide a flooded suction. Suction piping should be one pipe size larger than suction valve thread. Install a suction line strainer with a wire mesh screen. A relief valve may be installed in discharge line close to the pump. Set relief valve for 20% to 25% greater than average operating pressure. Remove red pin from gear reducer oil fill plug (207).

**B. Capacity Adjustment**

With pump stopped, loosen locknut (22) and turn adjusting screw (13) until required capacity is indicated on the capacity scale. Retighten locknut (22) after adjustment and before starting pump.

**C. Packing**

The factory has properly installed packing (33) and tested the pump. Gland nut (5) adjustment has been set and should not require further tightening, unless leakage is observed. If plunger (6) is scored/scratched, it should be replaced when installing new packing (see packing replacement below).

**D. Lubrication**

**Gear Reducer**

The gear reducer housing has two pipe plugs (201) on its end. The upper plug is the oil level fill plug; the lower plug is the oil drain plug. Check the oil level every 60 days and, if necessary, add oil through fill plug hole. Drain and replace oil annually using EP-150 gear oil (AGMA 7). EP-150 gear oil is available from Jaeco Fluid Systems (part no. 50076-P040).

**Crosshead/Connecting Rod Bearings/Packing**

Lubricate each grease fitting once a week with light hypoid grease until grease appears on outside of bearing area. Lubricate packing with one shot of grease per week.

**E. Pump Servicing – Part Replacement**

**Packing**

Loosen set screw (24) and remove liquid end assembly. Remove gland nut (5), packing set (33) and lantern ring (7) taking care not to scratch cylinder walls (4). Inspect plunger for scoring/scratches and replace if necessary (see below). Install the following packing rings one at a time: bottom adapter flat side down, 3 v-rings, top adapter flat side up, lantern ring, bottom adapter, 1 v-ring and then top adapter (Teflon packing is as follows: bottom adapter, 5 v-rings, top adapter, etc.). Loosely install gland nut. Reinstall liquid end assembly, tighten set screw (24) and finger tighten gland nut. Do NOT tighten more than one quarter turn past finger tight. If a rise in stuffing box temperature is observed, loosen and readjust gland nut. Packing adjusted too tightly will create excessive friction and heat, which will adversely affect the life of the packing, plunger and connecting rod bearings.



**INSTALLATION AND OPERATION**

Reference drawings 00220 and 00188

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**Plunger**

Loosen set screw (24) and remove liquid end assembly. Remove locknut (22) and rotate connecting rod assembly (31) off tee bolt (12). Slide plunger/connecting rod assembly out of pump housing end. Remove clevis pin (3) from crosshead using a pin punch and remove retaining screw (18) with an allen wrench. Install new plunger and reinstall liquid end assembly.

**Connecting Rod Assembly**

If connecting rod bearings are worn more than 0.010, replace connecting rod assembly (31, part no. 00025-G001). If replacing one end of connecting rod assembly, make sure center to center bearing distance of reassembled connecting rod does not exceed 2 7/8". Factory recommends replacing as a unit.