

## LUBRICATION INSTRUCTIONS

The ball bearings in the 2P-75, 2P-200, 2P-450, 4P-350, 4P-700, 4P-1000, 6P-500, FC, SFC, SPR, US, and SCR, are pre-lubricated for life. Model 2P-800 has one pre-lubricated ball bearing and one roller bearing. All other models have two roller bearings. The life of the roller bearings reach far beyond the ball bearings, however, the roller has a larger contact area than the ball and need more lubricant. Therefore they have to be re-lubricated at certain intervals. For vibrators with 3450 RPM, every two weeks for continuous duty or 400 or 500 operating hours; for 1725 RPM vibrators, every 1000 to 2000 operating hours or every month for continuous duty. The amount of lubricant should be 2.5 to 3 grams (two pumps with standard manual grease gun). Do not overgrease, if too much grease, it will leak out. By removing the end cover you will find out if unit has been excessively over-greased. Clean out excess grease. The same amount is on inside of bearings on stator side. If too heavy, unit should be taken apart and cleaned. For vibrators without grease nipple, (2P-800), the outside eccentric and bearing cover have to be removed. If the bearing has a grease seal, remove it and discard it, remove as much as possible of the old grease and repack bearing.

## RECOMMENDED LUBRICANT

American Oil Co., Rykon #2 EP, or Chevron BRB #2, or other comparable lithium base lubricant with a temperature range of 300°F; for 4P-10000 use lithium base lubricant with a temperature range of 350°F.

## TROUBLE SHOOTING DIAGRAM

Vibrator does not start: short in lines; burned out overload protection; short in winding, check with ohmmeter.

Overload protection shuts off vibrator.

Vibrator overloaded, caused by:

1. Bad Bearings
2. Bolts holding vibrator are loose.
3. Fatigue cracks in structure to be vibrated.
4. Structure to be vibrated too weak, reinforce structure by welding on additional stiffeners.
5. Excessive ambient heat.
6. One phase open, check: (a) Power source; (b) wiring.

## TEST PROCEDURE FOR ELECTRIC VIBRATORS, FOR SHORT, BURNED OUT WINDING, CONTINUITY TEST, ETC.

### SINGLE PHASE

**Model 2P-75** - Remove red, black and white wire from switch and capacitor in switch box, test with continuity meter between black-white (running circuit), black-red (starting circuit), and white and red - all should show a reading, lowest reading between black and white. If all readings are different, stator is OK; then check out the rest of the cable, switch for loose or cut wires, test capacitor with continuity meter.

**Models with 4 wires from stator to conduit box** — Disconnect all wires in the conduit box. Continuity should show between (10) 5 & 8 (starter winding) and 1 & 4 (running winding).

**Models with 6 wires** — Disconnect all wires in conduit box. Continuity should show between 5 (10) & 8 (starter winding) / 1 & 2; 3 & 4 (running winding).