# **Service Installation Bulletin #5**

# Oil Return Sump Pump

# **Installation Recommendations**

#### DESCRIPTION

Model NLS-3 and Model NLS-3-FC (Flood Control Option) Oil Return Sump Pumps provide a clean and efficient method of saving and recycling hydraulic elevator oil. Oil collected at the jack head drains in to the sump pump reservoir. When the oil reaches a certain level in the reservoir, the pump is automatically activated and pumps the hydraulic elevator oil to the elevator pump reservoir.

#### **MOUNTING**

- 1. The unit must be horizontal (true level) to function properly. It is strongly recommended that a leveling device be used to correctly mount the unit.
- 2. The unit may be mounted either to a wall or to the floor. In case of flooding it is important to secure the unit in such a way that it will remain horizontal and not be allowed to float. If the unit tips over or tilts at an angle, the flood control mechanism will be bypassed and the pump will flood water into the oil reservoir.

#### **CAUTION**

In case of flooding, power to the pit area must be turned off before anyone enters the area to perform maintenance. The pump is powered by 120 VAC, and the danger of electric shock may be present.

#### PRE-SERVICE TESTING OF PUMP UNIT

The following tests should be performed before a pump unit is put into final service:

- 1. Pull the test chain on top of the tank to activate the motor and insure that the pump is working electrically. If the pump does start, open the tank cover and check the small tab on the wired end of the mercury switch; it should be in an upward position...if not, rotate it until it is upward. (A mercury switch is also on the flood control mechanism. This same procedure applies to making that switch operational.)
- 2. If the unit has been supplied with the flood control feature, manually test the flood control mechanism by pushing the lever upward while the test chain on the main unit is being held in the up position. The pump should turn off. Reset the flood control mechanism.
- 3. Check to make sure the plumbing is unobstructed by filling the tank with oil until the unit starts and pumps the oil out. (Once oil has been placed in the pump tank, there will always be some oil left in the bottom of the tank even after the pump has been in operation.)

## MAINTENANCE RECOMMENDATIONS

- 1. There is a filter screen where the overflow tube enters the pump tank cover. By opening the top of the tank (three screws hold it in place), the screen can be visually checked for sludge and dirt. If the screen is fouled, it should be removed, cleaned, and reinstalled in the unit.
- 2. Because the pump motor is usually submerged in oil, it is very quiet and therefore it is very difficult to tell when the unit is in operation. The unit must be checked periodically to make sure it is properly pumping oil back into the reservoir. (Continuous operation of the pump motor will heat the motor up, which will raise the temperature of the oil and shorten the service life of the pump.) We recommend the pump be checked quarterly, along with its plumbing, to make sure there are no obstructions or restrictions.

### GENERAL SPECIFICATIONS AND FEATURES

Motor: 1/15 hp, 115 VAC, 60hz, 1 phase, 3.5 amp

**Size of Unit**: 16" L X 11" W X 6" H

Weight: 16 lbs.

**Mounting**: floor or side wall, to be done as required by the customer. Mounting brackets and hardware are not supplied by Nylube.

Tank Capacity: 3 gallons Maximum lifting height: 23 ft.

Maximum length of tubing run: 100 ft. (with 1/2" tubing)
Pumping Capacity: approximately 5 gallons per minute

**Flood Control Option**: May be included with the unit (factory installed) by specifying Model No. NLS-3-FC, or purchased separately (Model FC accessory kit) for field installation.

**Test Feature**: upon installation, it is possible to make sure the unit operates electrically by pulling a chain on the top of the tank. Pull the chain up and the pump will start; release the chain and the pump will shut off.

**Check Valve**: there is a check valve in the oil return line to keep oil from flowing back into the sump pump resrvoir, and also to prevent siphoning of oil from the elevator pump reservoir back to the sump pump.

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