

“KNUCKLE BUDDY”

INSTALLATION INSTRUCTIONS

MINI, BUDGET and JUMBO

Working Principle

When one or a combination of selector switches are turned on, an electro-chemical reactor cell is activated. This begins an electro-chemical reaction whereby electrical energy is converted into nitrogen gas. The gas is trapped in a hermetically sealed bellows type gas chamber. As the gas is produced, an internal pressure builds up, which is applied against a piston. The piston then forces the lubricant out of the cylinder and into the lube point. The strength of the electrical current determines the amount of gas produced, which in turn, controls the rate of lubricant flow and the length of time the ELECTRO-LUBER™ will operate.

General Information

On first installation, using a hand grease gun and the same type of grease, pump a few shots of lubricant into the bearing. If fittings or grease lines are used, these also should be filled with the same lubricant. This step need not be repeated when changing the ELECTRO-LUBER™

Install the ELECTRO-LUBER™, if possible, directly on the bearing. The ELECTRO-LUBER™ MINI LUBER has 1/4" NPT threads, the BUDGET and JUMBO LUBER have 1/2" NPT threads. To mount the ELECTRO-LUBER™ on bearings with different thread sizes use standard plumbing adapters or adapters available from A.T.S.

For remote installation of ELECTRO-LUBERS™ filled with grease use up to 3 feet of pipe or tubing with a minimum 1/4" ID (3/8" preferred). If oil is being used, line length may be up to 15 feet. Oil filled lubricators must be mounted with outlet pointed upward to avoid lubricant running out.

High temperature lubricants, with an NLGI 2 rating, tend to harden at low temperatures and the lubricator cannot push them out. In low temperature applications use Lowtemp lubricants with NLGI 0 or 1 rating.

Each ELECTRO-LUBER™ is supplied with a weather proof switch cap with O-Ring which must be installed and tightened in all cases as protection against weather and moisture. This cap must be kept on to insure the intrinsic safety rating of the unit.

To insure the success of your ELECTRO-LUBER™ installation, do not use in temperatures exceeding 130 degrees Fahrenheit, or in an application requiring more than 50 psi. The ELECTRO-LUBER™ is a single point lubricator and is not designed to feed more than one bearing.

Starting Procedure

Select the dispensing time and amount of lubricant required, then click the appropriate switch or switches. This action closes a circuit and the gas generation begins.

Also click on the "LIGHT" switch. The LED light will soon flash and will repeat every 15 to 20 seconds for as long as the circuit is closed. The presence of the LED light assures that the system is in working order.

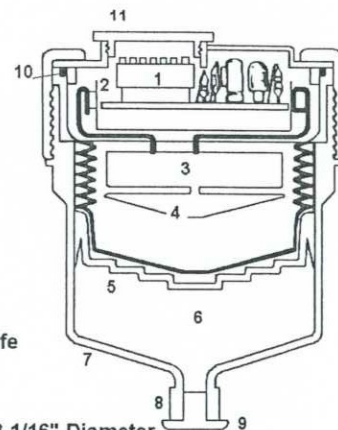
With the ELECTRO-LUBER, after the circuit is closed, there is a delay before enough gas is formed to start moving the piston. The longer the dispensing period, the longer the delay.

If continuous uninterrupted lubrication is required, "prestart" the ELECTRO-LUBER for 12 hours with all switches in the "ON" position. After this time return all switches to the "OFF" position except the ones for the chosen dispensing rate.

If you do not "prestart" the delay time will be:

	Time Delay to Dispense				
Month switch Setting	1 mo	2 mo	3mo	6 mo	12 mo
Delay in Hours To Start	18-24	40-48	60-70	120-140	240-280

1. Time selector switches, resistors and electronic circuit board.
2. Battery chamber with 2 x 1.5 volt alkaline batteries.
3. Electrochemical cell and electrolyte.
4. Bellow gas chamber.
5. Piston.
6. Lubricant reservoir.
7. Cylinder - nylon.
8. Mounting nipple.
9. Outer plug.
10. "O" ring.
11. Switch panel cap.



1 year shelf life

MINI LUBER dimensions: 4 7/16" High x 3 1/16" Diameter
 BUDGET LUBER dimensions: 6 1/4" High x 4" Diameter
 JUMBO LUBER dimensions: 6 1/2" High x 4 3/4" Diameter

