

PULSARLUBE ML500



The Pulsarlube ML 500cc

THE PULSARLUBE ML 500CC ELECTRO-MECHANICAL UNIT

General Description

- The ML500 consists of a vertical feed pump, motor/gear set, and Microprocessor control system, which delivers an operating pressure of (280 psi, 20Kg-f/cm²). The lubricant is supplied in 500cc Pulsarlube grease cartridges, which are replaceable along with a Pulsarlube battery pack. It offers 8 optional dispensing rates from ½ (Half) to 24 months in a single unit.

Specifications

- ▣ Operating temperature for Standard Battery: 14° F ~ 122° F (-10° C~50° C)
Lithium Battery: -40°F~140°F (-40°C~+60°C)
- ▣ Normal operating pressure : 280psi (20kgf/cm²)
- ▣ Grease Capacity : 500cc
- ▣ 5 Standard greases available (OEM grease filling available)
- ▣ Variable Settings Available : ½, 1, 2, 4, 6, 12, 18, 24 months
- ▣ Default Setting : 1 Month
- ▣ D.C. 4.5-Volt Lithium Battery

- LCD locking system included
- Can be used to lubricate multiple points (Up to 8 points).

▫ Dimensions

- 500cc Diameter: 3.6 inches, Height: 9.5 inches, Weight: 2.65Lb(1.20Kg)

▫ Packaging

- **Each 500cc unit is individually packaged. (8 units per case; 23.00Lb/case)**

▫ Replacement part #'s

- **B001:** Standard Battery Pack

Three 1.5V Duracell Alkaline Batteries create one DC 4.5V Standard Battery Pack

- **LTB001:** Lithium Battery (For low Temps, High Back Pressure & or 24 month settings)

Three 1.5V Energizer Lithium Batteries create one DC 4.5V Standard Lithium Battery Pack.

- **P500:** Disposable 500cc Grease pouch.
- **D500:** 500cc Dust Cover (Transparent Plastic cover)
- **H500:** 500cc Top Housing (Transparent Plastic Housing)

▫ Disposable 500cc Service pack



 New 500cc Grease Pouch Assembly Procedure



Step1.
Remove top lid from a 500cc cartridge.



Step2.
Remove plastic cartridge from the base of the lubricator.



Step3.
Insert your battery pack.



Step4.
Remove cap from 500cc grease pouch and place grease pouch into plastic cartridge before placing it on the base of the lubricator.



Step5.
Important! Make sure to purge grease manually until grease comes out of the tip of cartridge to eliminate air pocket.



Step6.
Wipe out the excess grease.



Step7.
Install the filled 500cc cartridge onto the base of the lubricator by turning clockwise.



Step8.
Install cartridge lid by turning clockwise.



Step9.
The assembly procedure has been completed.

Initial Installation Procedure.

1. Make sure the lubrication point is manually lubricated with a grease gun to ensure that the bearing has a clear passage way before installing your 500cc unit. It is recommended that this procedure be conducted using either the same or a compatible lubricant to what is contained in the grease cartridge of the Pulsarlube M 500cc unit
2. If any doubts exist with regards to a clear lubrication flow, test the backpressure of the bearing with a grease gun connected to a pressure gauge. Ensure that the break - off pressure is below 500 psi (approx. 35 kg-f/cm²: 34.5 bar). Note that it is always desirable to keep the constant delivery pressure as low as possible
3. Insert the Battery Pack into the battery compartment of the main unit. (Make sure that the battery is locked in place after insertion by turning the metal clip on top). Turn top housing clockwise until you hear the top housing "click". Open top housing cap and place the pointed open end of the grease pouch over the lubricators' top check valve and Turn Top housing cap until you hear the top housing "click"
4. Turn the Pulsarlube ML 500 unit ON by depressing the POWER button for 2 seconds. To confirm that the LCD is working, make sure that the Red LED blinks once as soon as you press the "power" button. The unit is working as long as the LCD displays information.
5. To test that the unit is functioning properly, simply follow the TEST MODE PROCEDURE:
 - Press the POWER button first (for 2 seconds) to turn the unit on, and then press the TEST button for 2 seconds. The unit will begin to start dispensing grease. The unit will operate continuously in Purge mode and go through an entire cycle of (approximately 2 min).
 - To deactivate the TEST MODE FUNCTION, press the TEST button again. The unit will stop testing within the next 20 seconds.
 - If the unit is malfunctioning or if you encounter any difficulty, please refer to the troubleshooting guide.
6. Depress the MODE button to set the dispensing rate. Each time the MODE button is depressed, the dispensing rate changes in ascending order i.e. 1▶2▶4▶6▶12▶18▶24▶ H. Note: (H = Half month.)

Note : If you are unable to program a setting and a lock icon is displayed, press the mode button for 2 seconds until the lock icon disappears. Program your lubricator. The unit will automatically lock 60 seconds after you pressed any of the 3 programming buttons.

7. Remove the grease nipple on lube point. Wrap some Teflon tape on the lubricator tip and install a 3/8" female NPT or BSP adaptor to bottom of unit. The other end of the adaptor must have the correct size of your fitting. Make sure that the unit is snugly tightened to adaptor. The 3/8" brass thread of the unit is vibration proof. In other words, it ensures that the fitting will not snap off at the tip even under severe vibration or shock loads.
8. For installations that involve extreme vibration, excessive heat, or service locations that are considered hazardous, we recommend you use a Pulsarlube remote mounting bracket (clamping device) and 1/4" line no longer than 10ft. (if possible) that is available from your local dealer.

IMPORTANT : Please make sure that the 1/4" line is pre-filled, prior to installation. Remote installation of over 10ft will reduce the ability of the unit to dispense against elevated backpressure.

Special Features.

▣ **Automatic Locking System:**






The Microprocessor locks the LCD within 60 seconds after having been programmed. A "Non - blinking lock I-Con is visible when the LCD is in "Lock - Mode". To unlock the LCD, press the "mode" button for 2 seconds until lock icon disappears.




▣ **Low Battery Sensing Capability:**

A Red LED warning light next to the test mode button blinks every second when the battery is low.

▣ **Daily Dispensing Rate Display:**

After selecting a monthly setting, the daily dispensing rate will display as shown on chart below. The LCD will automatically lock 60 seconds after the unit has been programmed. The LCD will then display days until end of cycle.

Setting	Daily Dispensing Rate	LCD Display
1/2	33.3	 33_3
1	16.6	 16_6
2	8.3	 8_3
3	4.2	 4_2
6	2.8	 2_8

12	1.4	 1.4
18	0.9	 0.9
24	0.7	 0.7

Other Important Technical Information

Pump dispensing cycles.

No	Mode Settings	Cycles/time intervals (Cycles/day)
1	½ (H month)	1 cycle / 15 min (96 cycles/day)
2	1	1 cycle / 30 min (48 cycles/day)
3	2	1 cycle / 1hr (24 cycles/day)
4	4	1 cycle / 2hrs (12 cycles/day)
5	6	1 cycle / 3hrs (8 cycles/day)
6	12	1cycle / 6hrs (4 cycles/day)
7	18	1cycle / 9hrs (2.66 cycles/day)
8	24	1cycle / 12hrs (2 cycles/day)
9	TEST Function	Press TEST button for 2 seconds

Grease dispensing rate guide for 125cc, 250cc & 500cc lubricators.

Bearing Shaft Dia.	125CC	Grease Volume (CC/Day)	250CC	Grease Volume (CC/Day)	500CC	Grease Volume (CC/Day)
230-330mm (9" - 13")	N/A	-	N/A	-	H Month	33.3
166-229mm (6 1/2" - 9")	N/A	-	H Month	16.6	1 Month	16.6
102 - 165mm (4" - 6 1/2")	1/2 Month	8.3	1 Month	8.3	2 Month	8.3
90 - 101mm (3 1/2" - 4")	1 Month	4.2	2 Month	4.2	4 Month	4.2
77 - 89mm (3" - 3 1/2")	2 Month	2.1	3 Month	2.8	6 Month	2.8
65 - 76mm (2 1/2 - 3")	3 Month	1.4	6 Month	1.4	12 Month	1.4
					18 Month	0.9

51 - 64mm (2 ~ 2 1/2")	6 Month	0.7	12 Month	0.7	24 Month	0.7
25 - 50mm (1 ~ 2")	12 Month	0.3	N/A	-	N/A	-

▣ **Pulsarlube M 500 cc unit Battery Selection Guide**

No	Standard Alkaline Battery	Lithium Battery
Temperature	14°F~122°F (-10°C~+50°C)	-40°F~140°F (-40°C~+60°C)
Back Pressure	280psi or less Constant Back Pressure	Handles > Than 280psi Constant Back Pressure.
Divider Block	N/A	Upto 8 points
Distance	10ft or less for remote installations	Handles greater than 10ft/line for remote