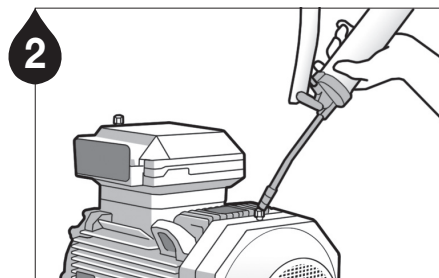
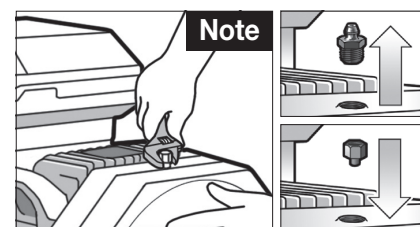


1 Remove contaminants around the lube point.



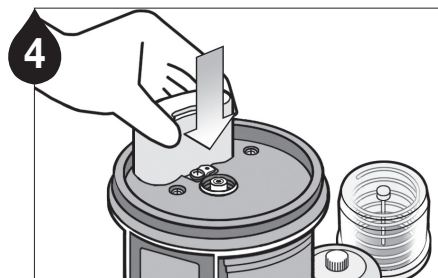
2 Ensure a clear passage using a manual grease gun. **Note 1** Remove any hardened grease by purging the lube point with a manual grease gun. **Note 2** The grease in the equipment and the grease contained in the unit should be the same or compatible.



5 Remove the grease nipple and install appropriate adaptors.



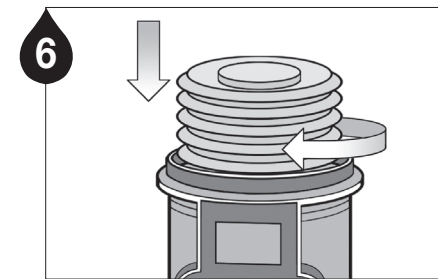
3 Check the grease pouch capacity and the service pack items (battery pack, grease pouch & dust cover).



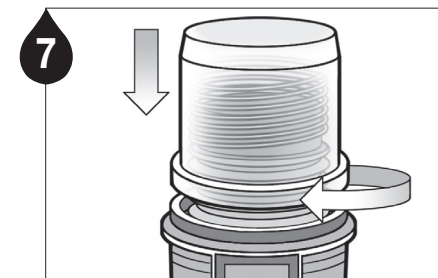
4 Insert battery pack.



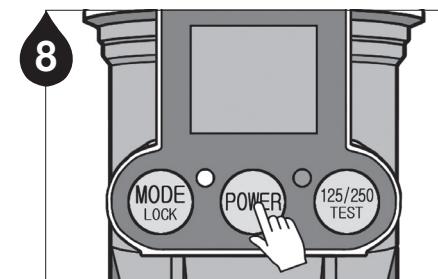
5 Purge the grease pouch until grease comes out of the tip.



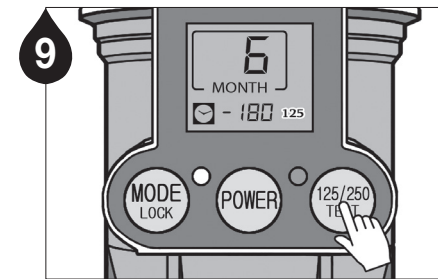
6 Carefully screw the grease pouch in by turning clockwise. Do not over tighten.



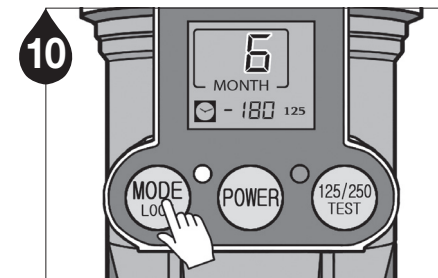
7 Refit the top housing on the unit and turn clockwise until it clicks.



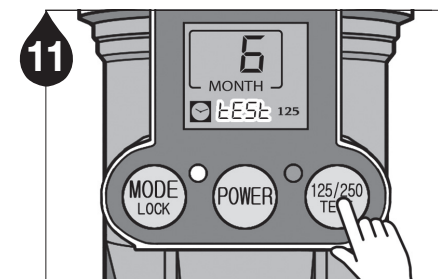
8 Press the POWER button for 2 seconds to turn the unit on.



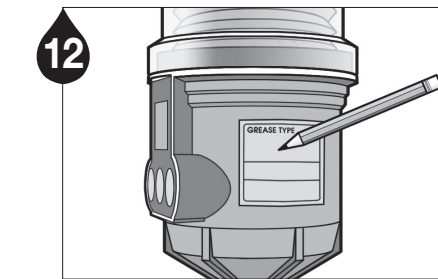
9 Select the appropriate grease pouch capacity by pressing the 125/250/TEST button.



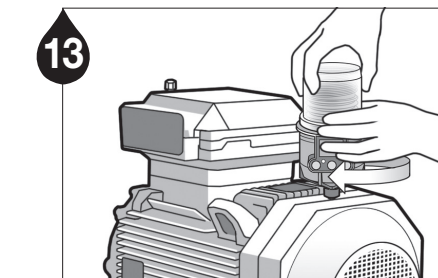
10 Press the MODE button to program the dispensing period.



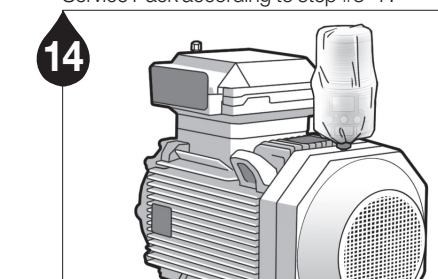
11 Press the TEST button for 2 seconds to run a test cycle and check for proper operation of the unit.



12 Note the installation date and the scheduled completion date of lube cycle on the lubricator using the label provided in the Service Pack for maintenance purposes.



13 Install the Lubri-Cup EM-S/SP unit on the lube point. When the selected dispensing period has completed, replace the unit with the Service Pack according to step #3-7.



14 Install the dust cover over the lubricator for added protection.

Both units turn "On" or "Off" in synchronization with the equipment on which they are installed upon. They will dispense the preset amount of grease as long as the machine is operating. If the equipment is not operating, the EM-S unit goes into "stand-by mode" and does not dispense lubrication until the machine operates again. EM-S is powered by the internal battery which needs to be replaced with every service kit replacement. EM-SP is externally powered. The power supply adapter is connected to equipment power, controller, indicator lamps/switches or PLC. There is no need to replace the internal battery, only the grease kit needs replacement.

Safety Instructions

- Water and Moisture:** The power supply should never be used in, or near water or any other chemicals due to the risk of fatal shock.
- Heat:** Never locate the power supply near a heat source.
- Hazard:** Please place the power supply in a safe area.
- Ventilation:** Please maintain power supply in a well-ventilated area to avoid overheating.
- Flammability:** Keep power supply away from flammable and combustible chemicals.
- Vibration:** Keep power supply away from high vibration areas.
- Service:** The user should not attempt to service the power supply beyond what is described in the user's manual.

All other servicing should be referred to qualified personnel.

LCD Functions

MODE LOCK

Selecting the dispensing period
Deactivate 'Automatic Lock Out' mode by pressing the button for 2~3 seconds

POWER

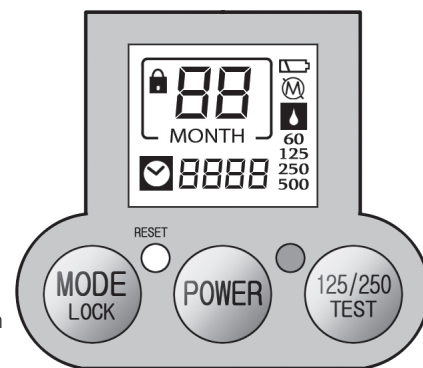
Power **ON/OFF**
Press the button for 2 seconds to turn unit **on** or **off**

125/250 TEST

For 125ml/250ml unit
A) Press the button to select 125ml or 250ml capacity **B)** Hold the button for 2 seconds to run a test cycle
**A quick press of the button will stop the test cycle mode*

TEST

For 500ml unit
Press the button for 2 seconds to run a test cycle



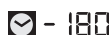
RESET

Reset the unit when the unit malfunctions and/or after changing the Service Pack

LCD Displays



The dispensing period setting



The # of days remaining until the end of lube cycle



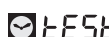
The unit is in "Automatic Lock Out" mode



Selected grease pouch capacity (default setting: 125ml)



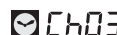
Grease capacity



The test mode is activated



The # of days after dispensing has completed



The # of days after the unit has stopped dispensing due to excessive backpressure



Low battery power



Excessive backpressure indication



Empty grease level



Signal lamp blinks periodically when battery power is low, excessive backpressure exists, or if grease level is empty

ISO9001/14001 CE

System Connection

EM-S Equipment

1	Automatic Lubricator	EM-S series
2	Relay Box	VC 100-480V
3	Control Panel	Connect wiring to main machine power
4	Electric Motor	

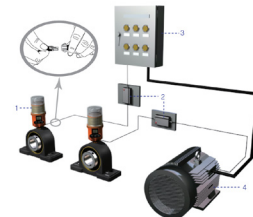
EM-SP Equipment

1	Automatic Lubricator	EM-SP series
2	Power Supply	AC, DC
3	Control Panel	Connect wiring to equipments power supply
4	Electric Motor	
5	Voltage Input AC/DC 100 - 220V, 50-60Hz	
	Voltage Input DC/DC 12V-24V	

Wiring Options (see diagrams below)

AC Adapter

- MC (Magnet Coil) Terminal of main machine power source
- Main machine power control switch ON lamp terminal which is on control panel case front
- Relay Terminal
- PLC Terminal

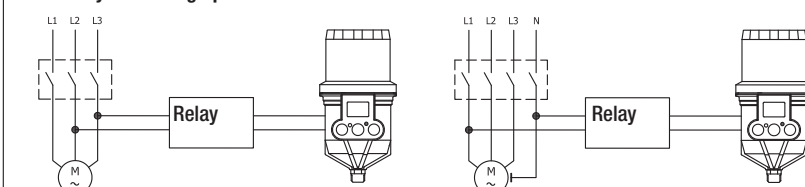


DC Converter

- DC 12 ~ 24 volt output terminal
- Other terminal check polarity of DC converter wires

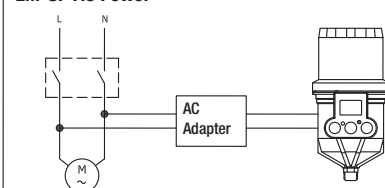
Note: The EM-SP Power Supply was designed specifically for the Lubri-Cup™ EM-SP unit. Product warranty will be null and void if any other type of unspecified adapter or converter is used.

EM-S Relay Box Wiring Options



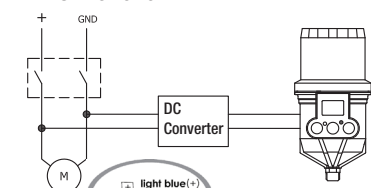
Relay Box can be connected directly to the power cable (EM-S Only)

EM-SP AC Power



Don't connect the EM-SP unit directly to Electric Motor or Electric Power cable.

EM-SP DC Power



Match polarity of DC connections

Installation & Time Control Programming

Rev.03

Installation

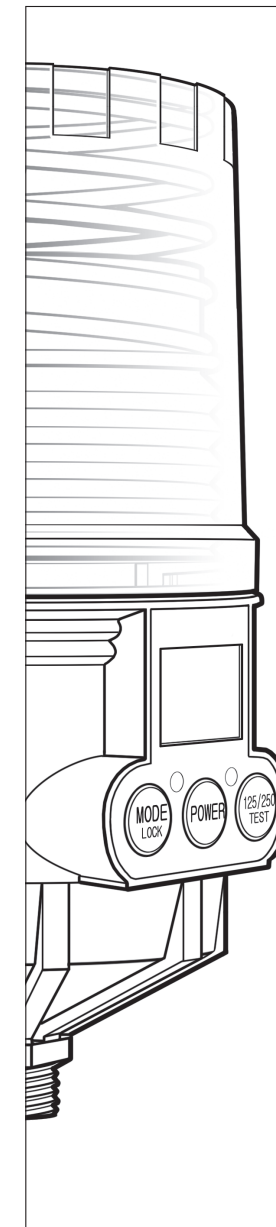
- Install the unit in a convenient location for easy access.
- Direct or remote mount the EM-S or EM-SP unit to the equipment as you would a Lubri-Cup EM unit.
- Connect the male end of the Relay Box (EM-S) or Power supply (EM-SP) to the female end coming from the main body of EM unit.
- EM-SP Only: Select voltage of power supply needed for your application. i.e. (AC, DC) Connect the power supply to machine's control box, junction box or power cable. (see wiring diagram on left of this page)
- It is not necessary to check for wire polarity (+) and (-) for the Relay Box (EM-S) or AC (EM-SP) power source. For DC powered units, please connect in corresponding polarity (+) to (+) and (-) to (-). The light blue color wire is (+) and the brown wire is (-).
- Hold the "POWER" button for a couple seconds to turn the lubricator on and program lubricator by pressing the "MODE" button.
- Please make sure that red LED blinks once while turning the power on.

Time Control Programming

- The EM-S or SP unit can be programmed by the month 1 Month, the # "1" (month) will start blinking and "-30" (days) will be displayed on the LCD. (2/60 days, 3/90 days) etc.
- During operation the (Month) will continue to "Blink" and the running days remaining will be displayed on the LCD.
- The EM-S/SP unit can go into "Stand by Mode" when the equipment is idle or shut down.
- If the equipment is turned ON the EM-S/SP unit will reactivate and start dispensing again.
- After completing the total running days as programmed on the MODE setting, a red LED light will start blinking, indicating that it's time to replace the grease pack.
- With EM-SP only the grease pack needs to be replaced. It is not necessary to change the battery pack even if there is a low battery icon. On EM-S both grease pack and Battery must be replaced. After changing the service pack on EM-S/SP carefully press the "RESET" button. This will reprogram the LCD back to its default mode. Once having reset the lubricator, program the EM-SP unit to the desired monthly setting using the "MODE" button.

Notes:

- The EM-SP unit rate input power is DC 5.0 Volts. EM-S is DC 4.5 Volts
- The EM-S/SP unit can be turned off at any time by pressing the "POWER" button for 2 seconds.
- The EM-S/SP unit will go into stand-by mode 6 to 7 seconds after the equipment has been turned off.
- The equipment that the EM-SP is connected to must be ON while programming the lubricator.



CHESTERTON
Global Solutions, Local Service.

User Manual

LUBRI-CUP™

EM-S, EM-SP

Series

(125 & 250ml / 500ml)