



STREAMLINER M 500 cc Instructions

User Operating Manual

Lubricator Model Types

STREAMLINER M (500cc Grease Lubricator)

Before Use

Thank you for purchasing the STREAMLINER M 500cc unit, the new electro-mechanical, single-point, automatic grease dispenser from Trico Corporation. To ensure the safe operation and proper installation of the STREAMLINER M 500cc unit, we strongly recommend that you read the following instructions carefully before use. If you require further information, please contact Trico.

Safety Instructions

1. Please read and save all notices, warnings and safety instructions included with equipment.

2. **Battery Safety Instructions**

- Store battery at temperatures between 40°F and 80°F for best results.
- Do not expose battery pack to direct sunlight or high heat for extended periods of time.
- Keep battery within 20°F and 150°F when transporting or temporarily storing battery pack.
- Keep battery pack away from flammable materials.
- Exposing battery pack at temperatures greater than 170°F for extended periods of time (more than 2 hours) may cause damage to battery pack and cause possible fire.

3. **Warning**

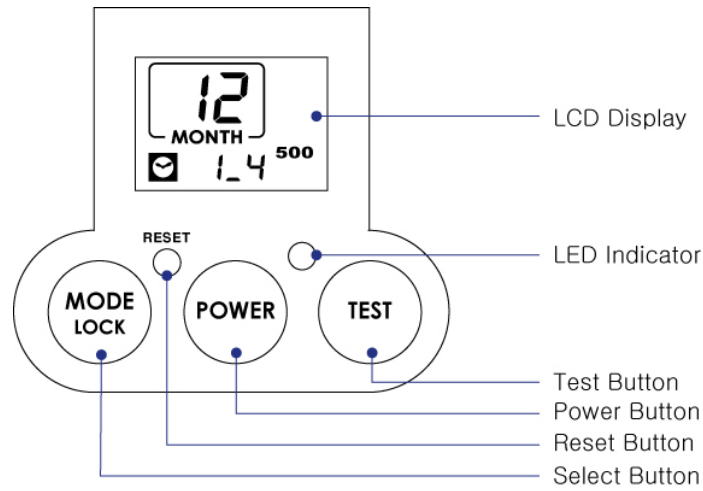
Do not install lubricator in areas where the unit may be exposed to flames and or excessive heat. These conditions may cause the battery pack to burst thereby putting people in danger due to the presence of noxious fumes.

4. **Product Warranty**

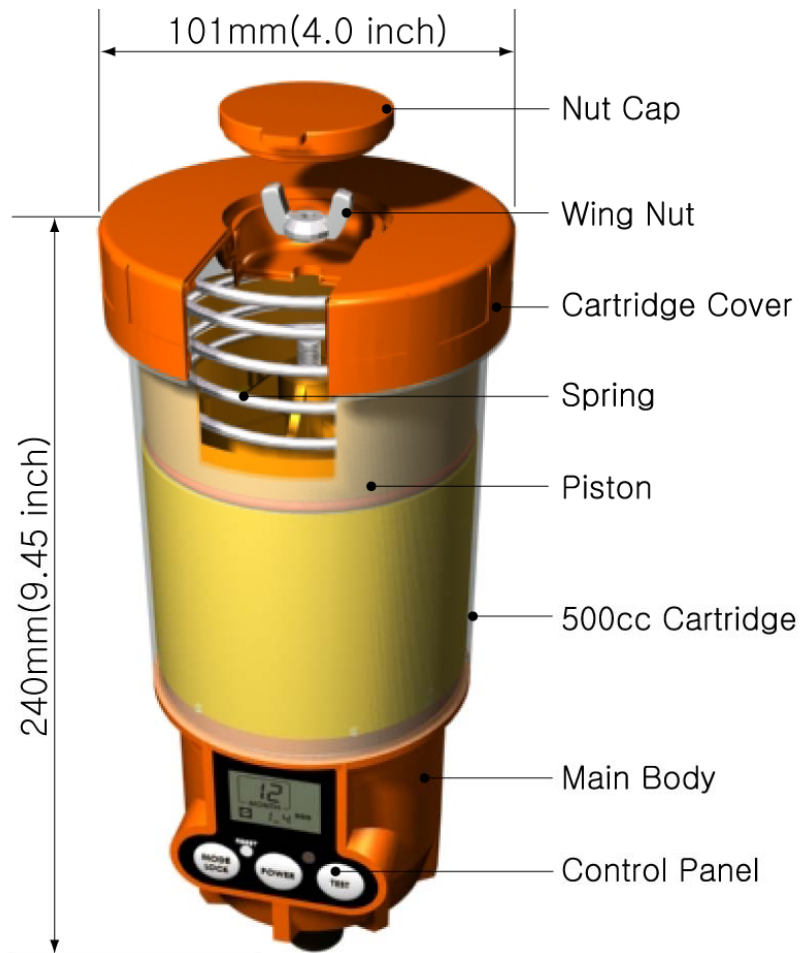
Product warranty is limited to original defects in material and workmanship. Warranty does not cover collateral damage due to mishandling, abuse, incorrect charging and or any other inappropriate use of this product.



Control Panel








Cross Section View





Buttons

Name	Display	Function
<p>For Setting Dispensing Period & To de-activate lock</p>		<p>Select any of the eight different dispensing rates available... (1/2, 1, 2, 4, 6, 12, 18 and 24 Months)</p> <p>Note: The dispensing rate can be changed during operation.</p> <p>The 500cc lubricator comes with a unique automatic “Locking system” to prevent any possible accidental re-programming of the unit after it has been set. The unit automatically locks the keypad 30 seconds after it has been programmed, and will display a lock icon →  on the LCD. You <u>cannot</u> reprogram the unit once the locking system has been activated. To unlock, simply press the “Mode/Lock” button on the unit’s keypad for two seconds or until the Lock icon disappears. You may re-program the unit once the locking system has been de-activated.</p>
<p>Power ON/OFF</p>		<p>Press this button for 2 seconds to turn unit on or off.</p>
<p>Test</p>		<p>The test function is provided to make sure that the unit is working properly prior to installation or after changing the service pack.</p> <p>IMPORTANT: To activate the test mode, depress the test button for 2 seconds. The word “test” will start blinking on the LCD and the unit will begin to dispense grease during a 2 minute cycle. To deactivate test mode, depress the test button again. The unit will stop the testing cycle within 20 seconds; otherwise it will continue testing for the remainder of the 2 minutes. If the unit does not operate in Test Mode, it should be returned to your supplier for inspection.</p>
<p>Reset</p>		<p>Use to reset the unit back to its original default setting if:</p> <ul style="list-style-type: none"> - There exists an abnormal display on LCD screen. - The unit malfunctions, or if the Power Button is not responding. <p>CAUTION! Pressing the reset button will <u>delete</u> all previous settings and preprogrammed data in memory (i.e. counter).</p>




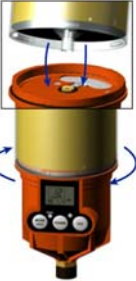
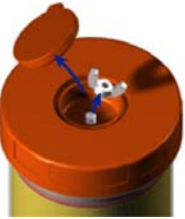




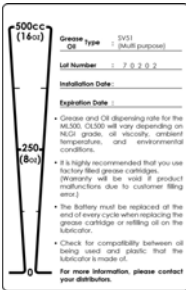

LCD Display-Function

Description	Display	Function
Dispensing period		Indicates period of time the unit has been set for.
Days remaining until empty		Indicates the # of days remaining until the units' service pack must be replaced (days until lubricant expiry)
Daily dispensing rate		Indicates daily dispensing rate (volume)
Days after dispensing cycle completion		Days after dispensing cycle completion (Expiry) St-XX indicates the number of days since the lube cycle has been completed or the grease pouch has become empty. "St" denotes "Stop"
Check lube line		# of days on standby mode due to excessive backpressure Ch-XX indicates the number of days since the unit has stopped due to excessive lube line backpressure. (All functions will stop except TEST MODE to protect unit)
Test		Indicates that the test mode is activated.
Auto lock		Indicates that the unit is in lock mode. The unit cannot be reprogrammed in this mode.
Battery		Indicates low battery power
Backpressure sensing capability		Backpressure sensing capability function. Indicates to check bearing zerck and grease feed line To clear this icon, just press the "Test" Button for 2 seconds.
Replace service pack		Empty grease level Indicates that the lube cycle has been completed and that the grease pouch is empty.
Cartridge Capacity	500	Indicates cartridge size (volume 500cc)
Signal Lamp		The red LED will blink periodically when low battery power, excessive backpressure, or low grease levels exist.

Installation & Service Pack Replacement


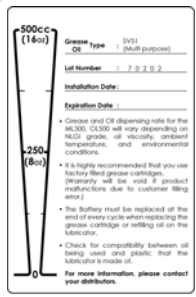

A. First Installation

<p>1</p> 	<p>1. Before installing the Streamliner M 500cc, the lubrication point (bearing and passage) should be manually lubricated using a grease gun to ensure that the bearing has a clear passage. It is recommended that this procedure be conducted using either the same or a compatible lubricant with what is contained in the grease pouch of the Streamliner M 500cc unit.</p> <p>If any doubts exist in 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 or 34.5 bar). It is always best to keep the constant delivery pressure as low as possible.</p>
<p>2</p> 	<p>2. Remove the grease nipple. Check for hardened grease in bearing zerk. If hardened grease exists, clean zerk before mounting the unit on bearing.</p>
<p>3</p> 	<p>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.</p>
<p>4</p> 	<p>4. Place the pointed open end of the grease cartridge over the lubricators' top check valve and turn cartridge clockwise until you hear the top housing "click".</p>
<p>5</p> 	<p>5. To activate/release the cartridge spring, remove the top "center" cap from the grease cartridge. Unscrew wing nut located on top of grease cartridge and place "center" cap back on.</p> <p>Note: The spring is held in place to avoid oil separation in the grease due to the constant pressure exerted by the spring over long periods of time. This wing nut function is extremely useful especially in cases when the grease cartridge is in storage for an extended period of time.</p>

<p>6</p> 	<p>6. Install an appropriate 3/8" NPT or BSP adaptor and make sure that the adaptor is well tightened to the unit. The 3/8" brass tip of the unit is vibration proof. In other words it ensures that the fitting will not snap off at the nose even under severe vibration or shock load.</p> <p>For installations that involve extreme vibration, excessive heat, or service location that is considered dangerous, use the remote mounting bracket (clamping device) and 1/4" hose no longer than 10ft.</p>
<p>7</p> 	<p>7. Turn the Streamliner M 500cc 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.</p> <p>Next, press the TEST button for 2 seconds. The unit will start to dispense grease. The unit will operate continuously in Purge mode and go through an entire cycle of approximately 2 min.</p> <p>To deactivate the TEST MODE FUNCTION, press the TEST button again. The unit will stop testing within the next 20 seconds.</p> <p>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.)</p> <p>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.</p> <p>Program your lubricator. The unit will automatically lock 30 seconds after you stop pressing any of the 3 programming buttons.</p>
<p>8</p> 	<p>8. Use attached label to note grease type, installation and date of expiration of lube cycle.</p>
<p>9</p> 	<p>9. Use dust cover to keep the unit clean.</p>



B. Cartridge replacement

<p>1</p> 	<p>1. Remove the cartridge, then remove the battery pack from the battery compartment of the main unit.</p> <p><u>IMPORTANT:</u></p> <p>1) It is highly recommended that you use factory filled grease cartridges. Warranty will be void if unit malfunctions due to a problem caused by a customer filled cartridge.</p> <p>2) Battery pack <u>Must Always</u> be replaced along with cartridge.</p>
<p>2</p> 	<p>2. Use attached label to record grease type, installation, and date of expiration of lube cycle.</p>
<p>3</p> 	<p>3. Use dust cover to keep the unit clean.</p>



Dispensing Recommendations

In the chart below are some guidelines for bearing lubrication requirements.
 Requirements may vary with individual bearing types or operating conditions.

Bearing Shaft Diameter	125cc		250cc		500cc		Grease Volume (cc/Day)
	Grease Volume (cc/day)	250cc	Grease Volume (cc/day)	500cc	Grease Volume (cc/day)	500cc	
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")	H Month	8.3	1 Month	8.3	2 Months	8.3	
90 – 101mm (3 1/2" – 4")	1 Month	4.2	2 Months	4.2	4 Months	4.2	
77 – 89mm (3" – 3 1/2")	2 Months	2.8	3 Months	2.8	6 Months	2.8	
65 – 76mm (2 1/2" – 3")	3 Months	1.4	6 Months	1.4	12 Months	1.4	
					18 Months	0.9	
51 – 64mm (2" – 2 1/2")	6 Months	0.7	12 Months	0.7	24 Months	0.7	
25 – 50mm (1" -2")	12 Months	0.3	N/A	-	N/A	33.3	



Lube Cycles and Dispensing Volumes

Dispensing Period (Month)	Lube Cycle (cycles/day)	Dispensing Volume (cc/day)	Display on LCD
½	(96) cycles / 15 min	33.3	33.3
1	(48) cycles / 30 min	16.6	16.6
2	(24) cycles / 1 hour	8.3	8.3
4	(12) cycles / 2 hours	4.2	4.2
6	(8) cycles / 3 hours	2.8	2.8
12	(4) cycles / 6 hours	1.4	1.4
18	(2.66) cycles / 9 hours	0.9	0.9
24	(2) cycles / 12 hours	0.7	0.7
TEST	Continuous (-)	16.6	TEST

Streamliner M 500cc Unit Battery Selection Guide

Type	Temperature Range	Features
Alkaline Battery	14°F~122°F (-10°C~+50°C)	Can be used in constant backpressure situations of: *280psi (20kgf/cm ²) or less
Lithium Battery	-40°F~140°F (-40°C~+60°C)	Can be used in areas with: *Over 280psi (20kgf/cm ²) *With distribution block (1 -8 pts) *Set up to (24 Months)

Note: Battery must always be replaced along with grease cartridge on the Streamliner M 500cc.



Streamliner M 500cc Troubleshooting Guideline

Trouble	Cause	Remedy
LCD Screen displays error, a red blinking light exists, or blank screen.	<ul style="list-style-type: none"> - Possible electrical malfunction of CPU or circuitry. - Battery pack missing, incorrectly installed, or may be faulty. - Old battery pack was not replaced during service pack replacement. - Battery leakage occurred. 	<ul style="list-style-type: none"> - Utilize a standard manufacturer's battery. - The battery pack must be replaced with each service pack replacement. - Store battery pack in a cool, dry area to prevent damage.
Low battery indication	<ul style="list-style-type: none"> - Battery pack expired (Low Battery) - An unusual storage condition may be encountered (temp & humidity) - Damaged battery pack - Extreme environment 	<ul style="list-style-type: none"> - Change battery pack. - Unit should be installed within a backpressure range of 280psi (20kgf/cm²) or less - In high temp areas, with greater than 280psi (20kgf/cm²) backpressure, we recommend you use a lithium battery.
Backpressure Sensing Capability	<ul style="list-style-type: none"> - Over lubrication is occurring - Lube line blockage - Excessive back pressure - Extreme operating temperature - Low battery 	<p>TEST METHOD</p> <p>Press Mode Button for 2 seconds</p> <p>↓ Unlock</p> <p>Press Test Button for 2 seconds</p> <p>↓</p> <p></p> <p> </p> <p>Check Reinstall unit</p> <p>↓</p> <ul style="list-style-type: none"> - Check backpressure. - Check grease dispensing rate - Reduce remote install distance - Use a Lithium battery in low ambient temperatures.



Unit won't dispense grease	1. De-aeration	Air pockets must be eliminated from the grease in the cartridge. This is the reason why it is highly recommended that you use factory filled grease cartridges. Pump will idle and will not dispense if air exists in grease cartridge.
	2. Air pocket is trapped in the pump inlet check valve	<p>To eliminate air pocket, insert a Phillips screw driver into the check valve located at the bottom of the cartridge and push in an in and out motion until grease comes out from the nozzle.</p> <p>To eliminate air from the pump</p> <p>Press Mode button for 2 seconds to unlock the unit</p> <p>↓</p> <p>Press Test button for 2 seconds</p> <p>↓</p> <p>Gently insert a Phillips screw driver (5mm dia) into the check valve located at the bottom of the cartridge and carefully push in an in and out motion until grease and or air comes out from the inlet.</p> <p>↓</p> <p>Repeat until grease is dispensed</p> <p>↓</p> <p>Assemble cartridge to unit and set mode</p>



Specifications

Specification	Streamliner M 500cc	
Capacity	500 cc	
Power	DC 4.5 Volt (Battery pack)	
Temperature	Alkaline Battery: 14°F~122°F (-10°C~+50°C) Lithium Battery: -40°F~140°F (-40°C~+60°C)	
Working Pressure	Under 280 psi (20kgf/cm ²)	
Size	Height; 9.5in(240mm) x Diameter; 4in (101mm)	
Weight	2.8 lb (1.3kg) - Including Grease weight	
Thread size	PT 3/8"	
Dispensing Period	1/2, 1, 2, 4, 6, 12, 18, 24 Months (8 different mode)	
Multi point	Up to 8 points	
Package	Main unit	Service pack
	Individually packed 1 case (8 units)	Individually packed 1 case (10 units)

Note: Product design upgrades are subject to change without prior notice.

Warranty

Trico Corporation guarantees the product to be free of defects in material and workmanship for a period of 12 months from date of delivery. Warranty is limited to replacement of the product. There is no consequential loss covered by the Warranty. The Warranty will be void if the unit is mistreated, tampered with, used in a hostile chemical environment, used under water, maliciously damaged, used outside the specified ambient operating temperature range of -15°C ~ +60°C (5~140°F), or used with other than a Streamliner service pack. Please contact Trico for the validity of the Warranty.

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