



## **STREAMLINER M USER MANUAL**

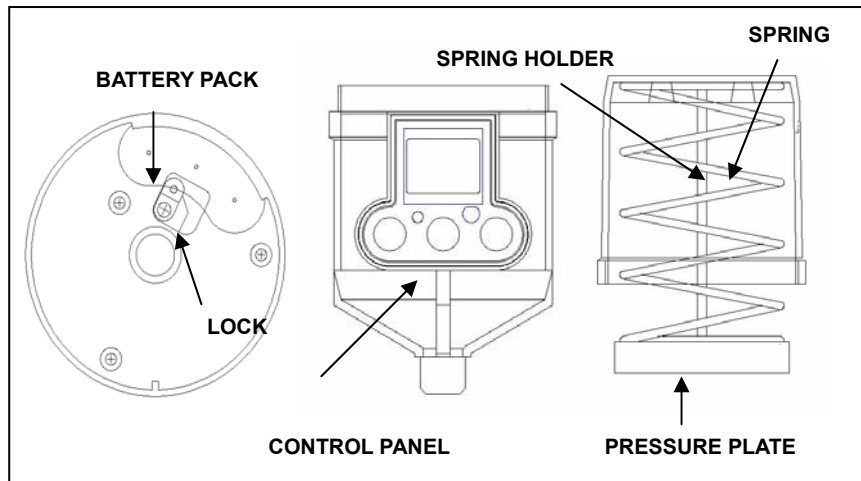
**TRICO MFG. CORP.**



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

## COMPONENTS

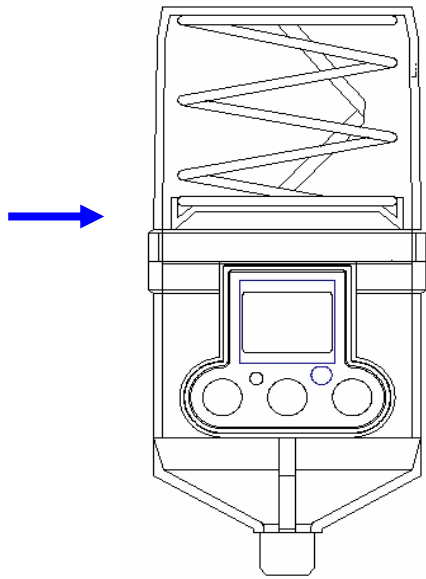
A STREAMLINER M package contains:



**Main Unit  
(Top view)**

**Main Unit  
(Front view)**

**Top Cover  
Assembly**

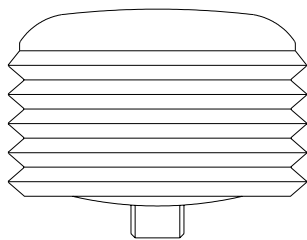


**Unit Assembled**

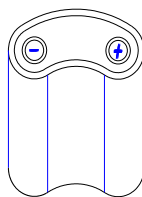
**STREAMLINER M  
USER MANUAL**

**\* SERVICE PACK**

**- 125cc**



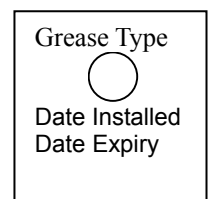
**GREASE POUCH**



**BATTERY  
PACK**

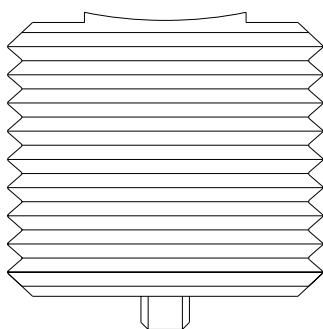


**EXTERNAL  
DUST COVER**

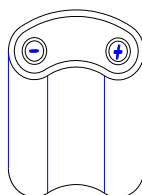


**STICKER**

**- 250cc**



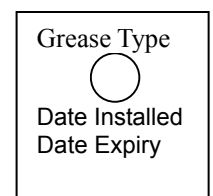
**GREASE POUCH**



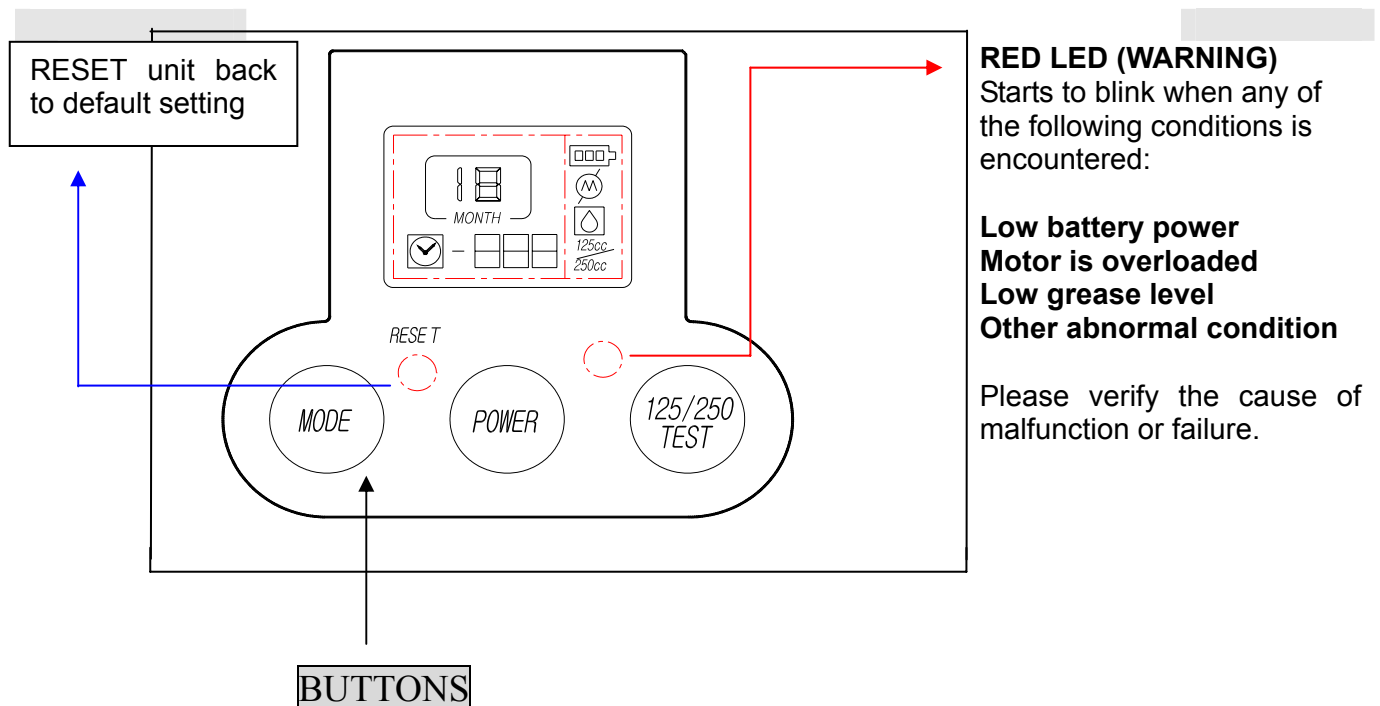
**BATTERY  
PACK**






**EXTERNAL  
DUST COVER**












**STICKER**









	<p><b>SELECT DISPENSING PERIOD</b></p> <ul style="list-style-type: none"> <li>- Six different dispensing rates are available (1M, 2M, 3M, 6M, 12M and Half Month). 1M means that the contents of the pouch will empty over a period of 1 month (approx. 4.2cc/day for a 125cc pouch and 8.3cc/day for a 250cc pouch). 2M means the grease pouch will empty over a period of 2 months (approx. 2.1cc/day for a 125cc pouch and 4.2cc/day for a 250cc pouch) etc...</li> <li>🔊 See “Dispensing Recommendation” on page 9.</li> <li>- The dispensing rate can also be changed during operation.</li> </ul>
	<p>Depress the button for 2 seconds to turn unit on and off. The default dispensing period setting is 1 month@125cc.</p>
	<p><b>SELECT GREASE VOLUME (125cc or 250cc)</b></p> <ul style="list-style-type: none"> <li>- Select the volume of Grease pouch to be used.</li> <li>- This button is also used for the TEST MODE.</li> </ul>

## FEATURES – LCD DISPLAY

	<p>DISPENSING PERIOD SET</p> <p>XX –01, 02, 03, 06, 12 or H month set</p> <p>※ “H” denotes “Half”</p>
	<p>DAYS TILL REPLACEMENT</p> <p>Indicates the remaining days till replacement (days to expire)</p>
	<p>DAYS AFTER MALFUNCTION</p> <p>E-XX indicates the number of days since the unit stopped. (All functions stopped except TEST MODE)</p> <p>※ “E” denotes “Error”</p>
	<p>DAYS AFTER DISPENSING COMPLETION (EXPIRE)</p> <p>S-XX indicates the number of days since the lube cycle has been completed or the grease pouch has become empty.</p> <p>※ “S” denotes “Stop”</p>
	<p>DISPENSING TEST MODE</p> <p>Indicates test mode is activated.</p> <p>※ “tst” denotes “Test”</p>
	<p>LOW BATTERY POWER</p> <p>Indicates low battery power</p>
	<p>MOTOR OVERLOAD</p> <p>Indicates motor overloaded and the unit has stopped functioning</p>
	<p>LOW GREASE LEVEL</p> <p>Indicates that the lube cycle has been completed or that the grease pouch is empty</p>
	<p>GREASE VOLUME SELECTION</p>






## FEATURES – FUNCTION

FUNCTION	BUTTON	DESCRIPTION
SET DISPENSING PERIOD		<ul style="list-style-type: none"> <li>Select one of the six different dispensing rates (1M, 2M, 3M, 6M, 12M and Half Month)</li> <li>The dispensing rate can be changed during operation.</li> </ul>
POWER ON/OFF		<ul style="list-style-type: none"> <li>Depress the button for 2 seconds to turn unit on and off.</li> <li>Default setting is 1 Month using the 125cc pouch.</li> </ul>
GREASE VOLUME SELECTION		<ul style="list-style-type: none"> <li>Select the volume of grease pouch (125cc/250cc).</li> </ul>
TEST MODE		<p>The test function is provided to confirm that the unit works prior to installation or after replacement of service pack. In addition, the test function is provided for troubleshooting purposes if the motor has been overloaded.</p> <p><b>IMPORTANT :</b> To activate TEST MODE, depress the button for 2 seconds. “tst” should start blinking and an audible gear mesh sound will confirm unit operation and a grease discharge should be observed. If the unit does not operate in Test Mode, it should be returned to your supplier. To deactivate TEST MODE, depress the button. The unit will then stop functioning in TEST MODE within 20 seconds. Otherwise, the unit will automatically stop TEST MODE after 2 minutes and be back to previous mode set.</p>
RESET 	RESET 	<ul style="list-style-type: none"> <li>Use when service pack is replaced.</li> <li>Use to reset unit back to its default setting following ; <ul style="list-style-type: none"> <li>- Abnormal display on LCD screen.</li> <li>- A unit malfunction or when the Power ON/OFF button is not available.</li> </ul> </li> </ul> <p><b>CAUTION!</b> Depressing RESET will <u>eliminate</u> all previous settings and records.</p>
WARNING LAMP	RED LED	For Low battery power, Motor overload, or Low grease level, the red LED will blink periodically.

### NOTE:

Whenever any function is selected, the red LED should blink once only.




## FIRST INSTALLATION

1. Before installation of the **STREAMLINER M**, the grease point (bearing and passage) should be manually lubricated using a grease gun to ensure that the bearing can accept grease. 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**.
2. If any doubt exists, 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/cm<sup>2</sup>: 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 main unit. (Make sure it is locked after insertion.) Unscrew the cap of the **GREASE POUCH**. Fit the pouch outlet to the pump suction inlet. Fit the top cover to main unit.
4. Turn the **STREAMLINER M** unit **ON** by depressing the **POWER** button for 2 seconds. Confirm that the LCD is turned on by checking that the red LED blinks once. As long as the LCD is displayed, the unit is working. To test that the unit is operational, simply follow the **TEST MODE** procedure :
  - Depress TEST button, the unit displays "tst" and start to discharge grease. The unit will continuously operate in purge mode until the TEST button is depressed.
  - To deactivate TEST MODE, depress the button. The unit will stop functioning in TEST MODE within 20 seconds. Otherwise, the unit will automatically stop TEST MODE after 2 minutes and be back to previous mode set.
5. To set a required dispensing rate, depress the MODE button. The dispensing rate changes in ascending frequency i.e. 1  2  3  6  12  Half month.
6. Remove the grease nipple used for back pressure testing and fit an appropriate adaptor of 3/8" NPT or BSPT and make sure that the unit is well tightened to it. The 3/8" brass thread of the unit ensures that fitting will not snap off even under severe vibration or shock load.
7. For installations that involve extreme vibration, excessive heat, or a service location considered dangerous, use the remote mounting clamp assembly and a steel pipe or copper tube of no less than 1/4" I.D. Remote installation over more than 1 meter may reduce the ability of the unit to dispense against elevated backpressure.

**IMPORTANT:** Be sure to fill the steel pipe or copper tube with lubricant prior to installation.

8. **STREAMLINER M** units have a shelf life of one-year with a one-year warranty from date of delivery.

## CHANGE OF SERVICE PACK

When the dispensing period has expired, the red LED will start to blink and the LCD screen will display **Low Grease Level** (  ), **Low Battery** signal (  ), and **Days after expire** (  **588** ). When this occurs, change the **STREAMLINER M SERVICE PACK**, which consists of one each of the following: A **GREASE POUCH** (125cc or 250cc), a **BATTERY PACK** (DC 4.5V), and a disposable **Dust Cover**.

**NOTE:** *The **STREAMLINER M GREASE POUCH** and **BATTERY PACK** MUST ALWAYS be changed at the same time to ensure the reliable operation of the unit. The **SERVICE PACK** is supplied as one kit and comes in boxes of 20 (for both 125 and 250cc).*

### SERVICE PROCEDURE

1. Remove external dust cover.
2. Turn the unit off.
3. Remove top cover (Caution: Cover is spring loaded)
4. Remove and dispose the used grease pouch, battery pack, and external dust cover in accordance with local regulations.
5. Insert a new battery pack as per the installation procedures.
6. Fit a new grease pouch as per the installation procedures.
7. Refit the top cover.
8. Depress RESET button to eliminate all previous settings and records.
9. Run **TEST MODE** to confirm unit operation.
10. Depress the MODE button to set a required dispensing rate.
11. Refit the new external dust cover.



## TROUBLESHOOTING GUIDELINE

TROUBLE	CAUSE	REMEDY
<u>LCD SCREEN DISPLAYS FAULT OR RED LIGHT BLINKING OR BLANK SCREEN.</u>	<ul style="list-style-type: none"> <li>Possible electrical malfunction of CPU or circuit.</li> </ul>	<ul style="list-style-type: none"> <li>Depress RESET button to Test unit.</li> <li>Replace unit as necessary.</li> </ul>
<u>UNIT WON'T OPERATE</u>	<ul style="list-style-type: none"> <li>BATTERY PACK missing, faulty or incorrectly installed.</li> <li>Old BATTERY PACK not replaced during changeover</li> </ul>	<ul style="list-style-type: none"> <li>The BATTERY PACK must be replaced with each changeover.</li> <li>Ensure BATTERY PACK is correctly installed.</li> </ul>
<u>LOW BATTERY INDICATION</u>	<ul style="list-style-type: none"> <li>BATTERY PACK expired (Low Battery)</li> <li>An unusual storage condition may be encountered (Temperature or Humidity)</li> <li>Damaged BATTERY PACK</li> <li>Extreme environment (e.g. exceeds -15°C~ +60°C: 5 ~ 140°F)</li> </ul>	<ul style="list-style-type: none"> <li>Replace BATTERY PACK</li> <li>Store BATTERY PACK in a cool and dry place</li> <li>Prevent impact damage</li> <li>Ensure operating environment meets requirements.</li> </ul>
<u>MOTOR OVERLOADED</u>	<ul style="list-style-type: none"> <li>Over lubrication occurring</li> <li>Grease blockage</li> <li>Excessive back pressure</li> <li>Extreme operating temperature (e.g. exceeds -15°C~ +60°C: 5 ~ 140°F)</li> </ul>	<ul style="list-style-type: none"> <li>Confirm correct dispensing rate</li> <li>Run TEST MODE for excessive back pressure, determine cause and rectify.</li> </ul> <p><b>IMPORTANT:</b> If the <b>RESET</b> is activated during the TEST MODE, the unit will revert to its default setting and <b>eliminate</b> all previous settings and records.</p>
<u>UNIT WON'T DISPENSE GREASE</u>	<ul style="list-style-type: none"> <li>GREASE POUCH incorrectly fitted</li> <li>GREASE POUCH empty</li> <li>Loose spring or pressure plate</li> <li>Grease hardening due to cold temperature or high oil bleeding.</li> </ul>	<ul style="list-style-type: none"> <li>Fit GREASE POUCH correctly</li> <li>Replace GREASE POUCH and BATTERY PACK</li> <li>Refit spring or pressure plate</li> <li>Use appropriate quality grease for operating environment</li> </ul>

## DISPENSING RECOMMENDATIONS

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

<b>Ball &amp; Roller Bearings</b>				
<b>Bearing Shaft Diameter</b>	125cc	Dispensing Equivalents	250cc	Dispensing Equivalents
121-305mm(4-3/4" ~ 12")	-	-	Half month	16.6cc/day
105-120mm(4-1/8" ~ 4-3/4")	Half month	8.3cc/day	1 month	8.3cc/day
88-104mm(3-1/2" ~ 4-1/8")	1 month	4.2cc/day	2 month	4.2cc/day
79-87mm(3-1/8"~3-1/2")	2 month	2.1cc/day	3 month	2.8cc/day
63-78mm(2-1/2"~3")	3 month	1.4cc/day	6 month	1.4cc/day
49-62mm(2"~2-1/2")	6 month	0.7cc/day	12 month	0.7cc/day
25-48mm(1"~2")	12 month	0.3cc/day	-	-

## PRECAUTIONS

- ◆ **DO NOT** TAMPER with the **STREAMLINER M** or **BATTERY PACK**.
- ◆ **AVOID** excessive shock loads.
- ◆ **AVOID** excessive vibration (Suggest remote mounting if necessary)
- ◆ **AVOID** temperatures outside of the recommended range (e.g. exceeds  $-15 \sim +60^{\circ}\text{C}$  :  $5 \sim 140^{\circ}\text{F}$ ).
- ◆ **DO NOT** immerse or submerge **STREAMLINER M**.
- ◆ **DO NOT PLACE** or **INSTALL STREAMLINER M** close to direct heat source (Avoid temperatures of over  $60^{\circ}\text{C}$  :  $140^{\circ}\text{F}$ )
- ◆ **NEVER** use an **UNAUTHORIZED BATTERY PACK**.
- ◆ **HAVE** to remove air pocket in the grease whenever you fill grease to empty pouch
- ◆ **AVOID** corrosive or extreme environments such as strong acids, alkalis, gases etc.

## SPECIFICATION

- ◆ Grease pouch : 125 or 250cc (replaceable)
- ◆ Power supply : DC 4.5 V (replaceable)
- ◆ Operating Pressure : upto 20kg-f(280 psi)
- ◆ Operating Temperature :  $-15 - +60^{\circ}\text{C}$  ( $5 \sim 140^{\circ}\text{F}$ )  
*Suggest the use of appropriate quality grease for application where a constant cold temperature exists.*
- ◆ Dispensing Rate : 1,2,3,6, 12 and Half month
- ◆ Lube cycle : approx. 20 seconds/stroke
- ◆ Dispensing volume :  $0.33 \pm 0.01$  gram/stroke @  $20^{\circ}\text{C}$   
(equivalent to 0.350cc/stroke for a grease of specific gravity 0.90)
- ◆ Dispensing Accuracy :  $\pm 3\%$ @ $20^{\circ}\text{C}$
- ◆ Output thread : 3/8"(NPT or BSP)

**NOTE:** Technical information is subject to change without notice.

### WARRANTY:

**Trico Mfg. Corp.** 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  $-15$  to  $60^{\circ}\text{C}$  ( $5$  to  $140^{\circ}\text{F}$ ), used with other than from a service pack. Please contact your local supplier or the manufacturer for the validity of the **Warranty**.

**Trico Mfg. Corp.**