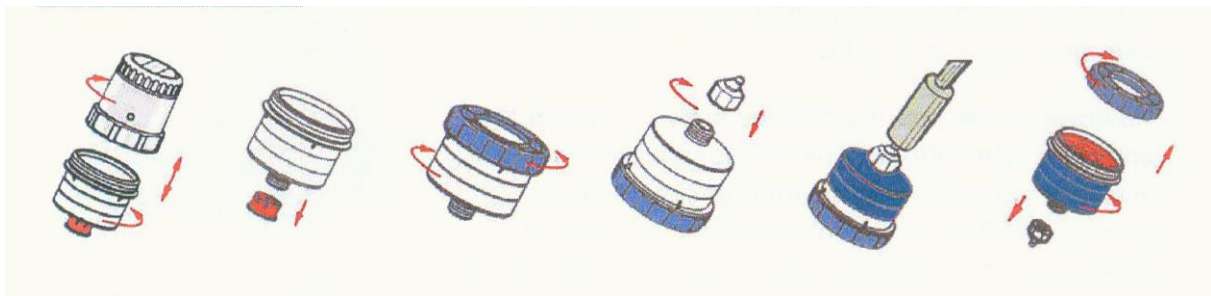


# EasyLube® 150 Classic – Service Guide

## Re-usable single-point automatic lubricator

### Step 1. Preparation:

- ▶ If you purchased empty grease cup, fill the cup with lubricant as below.



### ⚠ Caution :

If the cup is being filled for the first time, the red piston must be pressed down to bleed air. Fill the empty grease cup until the red piston reaches the top and in a level position.

### Step 2. Position the press plate:

- ▶ Facing the bottom of the body assembly, turn the press plate clockwise until it seats.
- ▶ Next, rotate the press plate counterclockwise with a  $\frac{3}{4}$  turn.
- ▶ Screw the prefilled grease cup into the body assembly securely and make sure the press plate touches the red piston in the cup. If done properly, a small amount of grease is supposed to discharge when the cup is securely screwed in.



### ⚠ Caution :

Failing to engage the press plate and the red piston will disable the piston movement and result in zero grease output after start-up.

### Step 3. Test Easylube before installation:

- ▶ The Easylube can be tested by setting all four DIP switches to the ON position. Use a ball pen or similar tool ( small screwdriver).
- ▶ In this test mode the Easylube will cycle 7 to 8 seconds moving the red piston downward automatically. A small amount of grease should be discharged.
- ▶ After the test mode is successfully completed, go to step 4.

#### ⚠ Caution:

Whenever the red indicator light is flashing during test mode, remove the battery and reset the DIP switches, then put the battery back to restart.

### Step 4. Set/change the dispense period time:

- ▶ Remove the battery from the body assembly.
- ▶ Set the levers on the switch to correspond to the time period required.



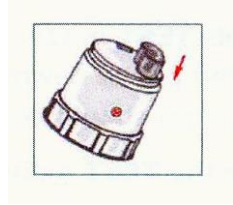
**Table 1. DIP-switch setting for dispense period time**

| Dispense period | DIP switch "ON" | Time span between cycles | Amount/ cycle | Amount/ day | Amount/ week | Amount/ month |
|-----------------|-----------------|--------------------------|---------------|-------------|--------------|---------------|
| Month           |                 | Hours                    | ml            | ml          | ml           | ml            |
| 1               | 1               | 2                        | 0.417         | 5           | 35           | 150           |
| 2               | 2               | 4                        |               | 2.5         | 17.5         | 75            |
| 3               | 1+2             | 6                        |               | 1.67        | 11.67        | 50            |
| 4               | 4               | 8                        |               | 1.25        | 8.75         | 37.5          |
| 5               | 1+4             | 10                       |               | 1.00        | 7.00         | 30            |
| 6               | 2+4             | 12                       |               | 0.83        | 5.83         | 25            |
| 7               | 1+2+4           | 14                       |               | 0.71        | 5.00         | 21.43         |
| 8               | 8               | 16                       |               | 0.63        | 4.38         | 18.75         |
| 9               | 1+8             | 18                       |               | 0.56        | 3.89         | 16.67         |
| 10              | 2+8             | 20                       |               | 0.50        | 3.50         | 15            |
| 11              | 1+2+8           | 22                       |               | 0.45        | 3.18         | 13.64         |
| 12              | 4+8             | 24                       |               | 0.42        | 2.92         | 12.5          |

The lubricator can be set to any of 12 (represents months) dispensing periods. It will be empty at the end of the chosen setting. Each monthly setting dispenses the same amount of lubricant per cycle, but at a different frequency.

### **Step 5. Start Easylube:**

- ▶ Install the battery back into the body assembly to start Easylube.
- ▶ The red indicator light on the body illuminates for 5 seconds and then goes out. This indicates the lubricator has been started correctly.
- ▶ Screw the cover onto the body securely.
- ▶ Record the following on the cover label :
  - dispensing period setting
  - type of lubricant
  - date of installation



- ▶ After the start, Easylube will turn into “sleep” mode and the timer starts to count till each cycle time is up for the dispensing.

#### **⚠ Caution:**

Every time the DIP switches are reset, the battery must be removed for approximately 15 seconds to clear the CPU memory.

### **Step 6. Installation/ preparation:**

- ▶ Flush the bearing and the pipeline completely with same grease or compatible with that in the prefilled grease cup.
- ▶ The flushing process must be done slowly stroke by stroke to detect any potential blocking in the pipeline or bearing. When a power stroke is required to push the grease through, this might indicate a jam or blockage..
- ▶ Feed the fresh grease into the bearing until the used grease is completely purged.

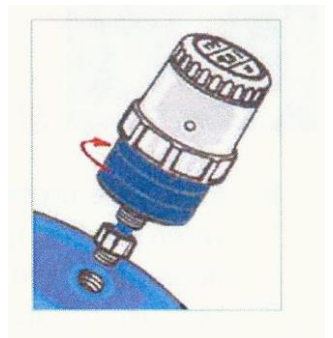


### **Step 7. Direct mount:**

#### **⚠ Caution:**

If one of the following conditions, please do not direct mount Easylube onto bearings:

- (1) The ambient temperature is over 60°C.
- (2) The bearing pipe thread is 6 mm, 1/16” or less.
- (3) Bearings are in difficult to access areas or hazardous environment.



### Installation steps:

1. Remove grease nipple from bearing.
2. Select the right size of adapter and accessories required.
3. Tighten seal tape on the outlet thread of the grease cup and accessories.
4. Mount the adapter into the bearing's input hole, if necessary.
5. Manually tighten Easylube into the bearing or the adapter.
6. Put the protection casing back to the body.



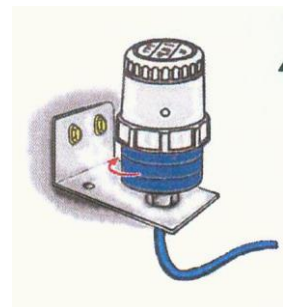
### Step 8. Remote mount:

#### ⚠ Caution:

Do not install the lubricator in ambient temperature over 60°C or on any equipment with system pressure of 75 psi (5.2 bar) or higher. Always keep the number of bends and the length of extension line to a minimum.

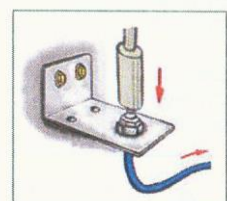
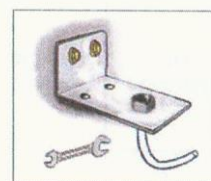
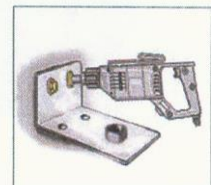
#### Important:

- Always install the lubricator at a rigid and stable position.
- Use copper piping hardware when the bearing temperature exceeds 50°C. PU tubing hardware can be used at bearing temperature lower than 50°C.



### Installation steps:

1. Remove grease nipple from bearing.
2. Select the right size of adapter and accessories required.
3. Tighten seal tape on the outlet thread of the grease cup and accessories.
4. Mount the adapter into the bearing's input hole.
5. Install the mounting bracket at a rigid and stable position.
6. Connect the piping or tubing between the bearing and the mounting bracket.
7. Fill the connecting pipeline and the bearing with grease same or compatible to the prefilled grease.
8. Manually tighten Easylube into the bearing or the adapter.



9. Put the protection casing back onto the body.

The Easylube can be remote mounted up to 4,5 meter from the application, but only if the grease properties such as viscosity, consistency and operating temperature range are suitable.

### Battery usage

- ▶ The battery pack is designed to use 40% of it's capacity for grease dispensing and 60% for the red indicator alarm. The alarm function is the most important feature of Easylubeas it will inform users when lubricator fails to feed grease into the bearing.
- ▶ Other single point lubricators without alarm function are unable to warn users when no grease grease or only oil ( through separation from soap) is being fed into the bearing.
- ▶ Therefore it is important to replace the battery at the end of a dispensing period or anytime the voltage is below 6V/

**Table 3 . Lubricator dispense period compared with DIP switch lever positions and battery life**

| Dispense period in months | DIP switch "ON"      | Battery life in days * | Dispense period in months | DIP switch "ON" | Battery life in days* | Dispense period in months | DIP switch "ON" | Battery life in days * |
|---------------------------|----------------------|------------------------|---------------------------|-----------------|-----------------------|---------------------------|-----------------|------------------------|
| 1                         | 1                    | 87                     | 5                         | 1+4             | 194                   | 9                         | 1+8             | 300                    |
| 2                         | 2                    | 114                    | 6                         | 2+4             | 221                   | 10                        | 2+8             | 328                    |
| 3                         | 1 + 2                | 140                    | 7                         | 1+2+4           | 245                   | 11                        | 1+2+8           | 351                    |
| 4                         | 4                    | 168                    | 8                         | 8               | 277                   | 12                        | 4+8             | 382                    |
| Back**                    | 1+4+8<br>of<br>2+4+8 |                        | Test***                   | All "On"        |                       | OFF                       | All "Off"       |                        |

Note: Refer to step 3 for location of DIP switch levers.

\* The number of days is approximate and is base don a system counterbalance under 45psi(3bar).

\*\* Back is for dispersing pressure inside of the cup.

\*\*\* Test is simulated examination of automatic greasing program control.

#### **⚠ Caution:**

Always dispose of batteries in compliance with local environmental protection laws. Do not puncture or burn the battery pack. Toxic materials may be emitted and cause injury.

## Troubleshooting

| Indications                         | Possible problems   | Solution   |
|-------------------------------------|---|--|
| Red indicator light begins to flash | Installation error  | Follow the instruction step by step and test the lubricator before start-up  |
|                                     | Empty grease cup  | Fill grease cup  |
|                                     | Battery voltage is below 6V   | Test battery voltage with volt meter.  |
|                                     | Pipeline or bearing blockage  | Flush the bearing and the pipeline manually; operate the grease gun slowly to detect any jams or blockages. Make sure used grease is completely purged until fresh grease comes out. |
|                                     | Base oil separation from soap or viscosity variation                                  | Choose the proper grease or contact grease manufacturer for information  |
|                                     | Back pressure exceeds 75 psi (5.2 bar)  | Use test apparatus to measure back pressure.   |
|                                     | Lubricator lines not completely filled.   | Fill the bearing and pipeline manually with same or compatible grease.   |
| Lubricator does not dispense        | Lubrication period incorrectly set up   | Shorten the lubrication period and observe the changes   |
|                                     | Weak battery  | Verify the output voltage of battery exceeds 6V, which is the minimum voltage requirement for operation. Always start the lubricator with a new battery.                             |
|                                     | Press plate is not properly engaged with the red piston in the cup                    | Follow the instruction step by step and test the lubricator before start-up.   |
| Unable to set DIP switch levers.    | Ambient temperature too low for the viscosity, consistency and operating temperature. | Choose the proper grease. Consult grease supplier.   |
|                                     | Incorrect tool being used.  | Move the levers with a ball point pen or a small screwdriver.  |

Doc: E-Easylube-Service guide/2013-07-11