

# MEMOLUB CANISTER LUBRICATION SYSTEM

## Installation & Maintenance Manual

- Standard Output - adjustable 1 to 6 months
- Fast Output – fixed 17 day



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## 1 General

- Health & Safety legislation requires that rail lubricators are fitted and maintained by trained personnel only; warranty will be affected if un-trained teams work on the Whitmore Rail products. Whitmore Rail provides training courses.
- This Instruction Manual is intended to be generic, some differences will be necessary for alternative rail types.

## 2 Product Transport / Storage

- Goods are packed and delivered to requested address in a form that is suitable for the product given good practice in the off-loading by the receiving company.
- Systems are not intended for outside storage, equipment should be off loaded and stored inside a secure watertight building until required for installation.

## 3 Cartridge Changing

### 3.1 Fitting the Trackside Cabinet to mounting tube

The amount of Grease that is pumped out of the Memolub each day is controlled by three coloured rings located inside the top cap of the canister. When the Memolub is set up you can accurately predict when the grease will run out and a new grease cartridge will be required.

It is important that the cartridge change is completed in dry weather to prevent moisture entering Memolub system.

Only cartridges supplied by Whitmore Rail should be used.

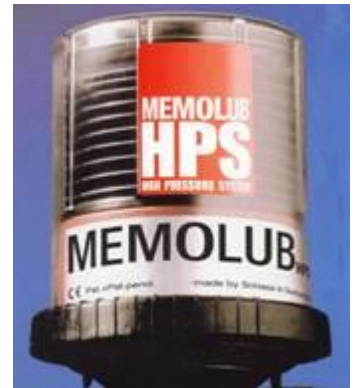
### 3.2 Open Canister

To change the grease cartridge the Memolub will need to be removed from the Blade. Unscrew the canister from the Blade, leaving the brass attachment and the top cap attached to the Blade. On early models you will have to ease the spring clip back to do this. Removing the canister in this way will ensure the pump resets itself ready for the new cartridge.

Place the canister face down on a clean flat surface. Unscrew the ribbed locking ring from the canister by rotating it anti-clockwise. The canister and the grease cartridge can now be dismantled by removing the transparent cover.

### 3.3 Change Battery

Once the canister has been opened as described above, pull off the used grease cartridge. Remove the old batteries from the red casing by pulling on the black support strip. Discard both items at approved waste sites.



Every new grease cartridge pack comes with replacement batteries to ensure the Memolub remains in top condition. Insert the new batteries making sure they are the right way round as shown on the silver label on the side of the red casing.

When the new batteries are in place the motor will turn for about one second.



### 3.4 Insert the New Cartridge

The Memolub is now ready for the new grease cartridge. Remove the new cartridge from the packaging and peel off the paper disc-shaped label. This label should be filled in with the start date (the date the cartridge was installed), and the change date. The change date will depend on how the coloured rings have been set up in the top cap of the Memolub. See - **Setting the Grease Output**.



These dates should be filled in to provide a record of maintenance.

**Note** It is important cartridges are not fully emptied such that air can enter the system

Carefully squeeze the cartridge until all the air has come out and grease appears at the cartridge nozzle. This is important to avoid and air getting into the pump. Carefully press the cartridge nozzle onto the pump inlet. Make sure it is well seated.

Clean the O ring at the top of the red housing and ensure it is fully fitted in the O ring groove. Put the clear plastic cover over the cartridge and over the red casing (Blue casing on 17 day discharge units), this will compress the large spring inside the clear cover. Make sure the plate which is attached to the spring, presses in the middle of the new cartridge.

Slide the locking ring over the clear plastic cover and lock by rotating it clockwise until it clicks into place.

Check the Memolub is working correctly; aim the nozzle away from yourself then press and hold one of the three gold coloured buttons for three seconds. This will operate the motor and grease should be pumped from the nozzle.

Screw the Memolub back onto the brass thread which is still attached to the Blade. On early models you will have to lift the spring clip out the way as you go. Be careful not to over tighten the Memolub or the moulded thread will be damaged.



The Memolub is now set and will operate until the next set change date, the same procedure should then be followed.

### Note

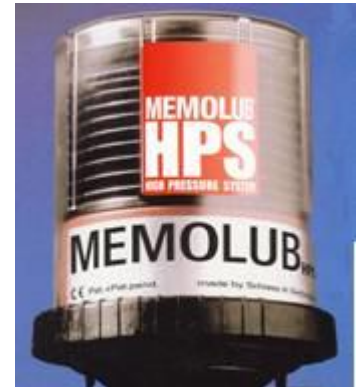
**If the cartridge has been emptied before the new one is fitted air will have entered the system. This situation must be rectified by pumping grease through the red pump housing using the Priming Pump from the cartridge side**

## 4 Grease Output Setting

### 4.1 Standard Output Canister – adjustable 1 to 6 months

The amount of Grease that is pumped out of the Memolub each day is controlled by three coloured rings concealed inside the top cap of the canister. The more Grease that is pumped out of the Memolub, the quicker it will become empty.

By unscrewing the top cap from the canister the rings can be altered. To alter the Grease output any rings that are not required must be removed from the top cap and the cap screwed back onto the canister. The rings that have been removed should be stored in a safe place in case the canister needs to be altered at a later date.



The following table shows how altering the coloured rings in the top cap effects the quantity of Grease pumped from the Memolub.

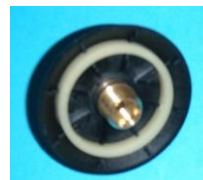
- Check on the output table below, and decide which ring configuration is required.
- Unscrew the top cap from the canister.
- Remove the unwanted ring / rings, and store in a safe place.
- Screw the top cap back onto the canister.
- 

The Memolub is now set and ready to be installed.

Which Coloured Rings are Installed?	How Much Grease is pumped Each Day	How Often will Grease Pump Out	How Long will the Memolub last
Red & White & Black	15.12cc	Every 1 Hour	1 Month
Red & White	7.56cc	Every 2 Hours	2 Months
Red & Black	2.52cc	Every 6 Hours	6 Months

### 4.2 Fast Output Canister (17 days)

This optional canister type has an increased output compared to the Standard Canister. The output is fixed at 14 days for the 480cc cartridge, it is not adjustable. The canister can be distinguished by the blue motor housing and single white ring in the ring cap. All other install / maintain details are the same as described for the Standard Output canister.



## 5 Blade Installation

### 5.1 Running Rail Systems

5.1.1 Units are supplied complete. From the 4' / Gauge and midway between Sleepers / Ties slide the base (W bracket) over the rail foot as shown. Locate the hook bolt around the opposite side of the foot and tighten the single Nyloc nut (24mm long reach socket). Fully bed the base onto the rail using a hammer on the vertical faces of the 'W' bracket. Re-tighten the Nyloc nut.



5.1.2 Tilt the blade up so that the blade tip is towards the rail head and as high as possible, lightly tighten the two pivot bolts (24mm socket and 24mm spanner).

5.1.3 Decide the required blade height and tap the steel lugs on the blade down using a hammer to achieve the required height. Ensure the blade tip is pressed against the rail by tapping the two blade adjuster lugs, do not hammer the blade itself. Fully tighten the pivot bolts.

### 5.2 Anti-vibration Clip Fitting (LCS300-107)

5.2.1 To reduce rail vibration effects a special clip is available to restrict Memolub rotation (Part No LCS300-107)

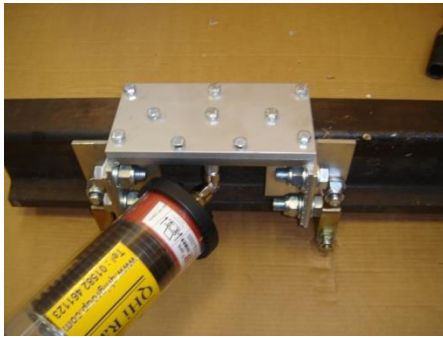
5.2.2 Fit the clip to the blade as shown in the adjacent picture using the M8 x 30 bolt and washer provided. The smaller black band is fitted over the base of the clip and the larger band around the clip and the Memolub clear casing



### 5.3 Check / Restraining Rail Blade Systems

Procedure outlined covers Bull Head, Flat Bottom and UIC33/U69 Check Rail systems.

- 5.3.1 Fit rail clamps to the Check Rail as pictured. Blade fixing studs on the clamps should be oriented towards the 4', clamp spacing to suit check rail blades and the full assembly located midway between sleepers.
- 5.3.2 Locate the Check Rail assembly on the two rail clamp studs and tighten the two M16 fasteners securely.
- 5.3.3 The blade has vertical and horizontal adjustment through setting of the M16 fastenings on the support bracket. Arrange the blade so that the exit ports are between 1 and 2mm from the Check Rail face and the blade is horizontal, lock securely in that position.



95lb Bull Head Check / Restraining Rail



U69 / UIC33 Check / Restraining Rail



Flat Bottom Check / Restraining Rail

## 6 Weather / Protection Cover

The optional cover can be fitted to the Whitmore Rail running rail blade. Secure the cover to the blade using the 4 M8 x 30 long hex screws provided through the cover and the blade. Fit the canister to the inlet on the blade and support the rear of the canister using the black bands as pictured below in a similar manner to that described for the anti-vibration clip fitting.



## 7 System Priming

After fitting a system to the track and before attaching the Memolub itself it is necessary to prime / fill the system with grease. Priming Pumps and Priming Tubes are available; LCS300-92 and LCS300-95 respectively. Insert the Priming Tube into the Hand Pump, screw the Hand Pump Flexible Hose into the blade inlet and pump until grease can be seen at each exit port.

If the system has been left unused for some time then this process should also be followed to clear 'old' grease from the system.

If the Memolub cartridge had been allowed to fully empty and the pump run dry then the hand pump should be used to prime the Memolub pump before fitting to the blade.

## 8 Parts List

Basic spares / accessories below, contact Whitmore Rail for advice / availability and full range of items.

## 9 Basic Installation Tool Kit

A selection of hand tools is suggested to correctly fit and maintain the lubricator.

- Ratchet Handle ½" Drive
- Combination Spanner 24mm
- Socket 13mm ½" drive
- Socket Long Reach 24mm ½" drive
- Ball Pein 1lb Hammer
- Blade Height Setting Tool

## Schematic of Memolub (canister) Rail Lubricator on EasiBlade

LCS300-58 0057/055023

Full system for 109lb, 110lb, 113Alb, UIC54, UIC60, UIC56 rails

or

LCS300-68 0057/055028

Full system for 95lb Bullhead rail

