

	Doc. No.: UM351636_351637		User manual
	Creator: RCO	Approver: LRH	Status: Approved
	Date: 21-05-2024		Rev.: 00

GreaseManager

High Flow and High Pressure



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1 Revision

1.1

Versions	Changes	Initials	Date
00	Initial document	RCO	21-05-2024

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2 General information

This user manual is related to the tool GreaseManager, sold and manufactured by Danhydra A/S). The manual provides important information and must be read thoroughly and understood before operating GreaseManager to ensure safe and optimal use.

All instructions stated in this manual must be followed and the operator must be aware of the risks involved in operating this tool.

2.1 Copyright ©

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2.2 Symbols

	Warning:	Potential hazard to yourself or other people. Information to prevent danger.
	Caution:	Potential hazard to the equipment. Information to prevent damage.
	Action:	Explanatory text for actions to be executed. Graphics for easy recognition
	Feedback:	The feedback from the action performed.
	Be aware:	Noteworthy information is to be observed.
	Info:	Information and/or tips.
		Foot protection required.
		Hand protection required.
		Eye protection required.

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Ear protection required.



Respiratory protection required.



Head protection required.



Face mask required



Read and understand

2.3 Organizational measures

The protective equipment necessary for personnel working with the unit, must be provided by the unit owner.



It is the owner's responsibility to ensure the availability and presence of all the statutory and official authorizations for operating the unit according to the national laws and regulations

2.4 Unit identification

The tool is defined as a machine and is therefore provided with CE marking plate with CE symbol, type and serial number of the tool. Refer to pictures below.

For location of the CE marking see picture below.

The unit is furthermore delivered with a declaration of conformity signed by the manufacturer proving that it is designed in accordance with the machine directive 2006/42/EF.



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2.5 Manufacturer

Danhydra A/S
 Lollandsvej 2
 7400 Herning
 Denmark
 Phone: +45 70 22 42 32
 Website: <http://www.danhydra.com>

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3 Safety

3.1 General



The item may not under any circumstances be used for any other operating situations or connected to any other tools than what it is designed for and is specified in this manual.

3.2 Required safety equipment



Always use the necessary personal safety equipment when working with chemicals, electrical tools, and pneumatic tools. Always check the safety data sheets prior to commencement of work. Always keep the work area clean from swarf and dirt etc. Please protect the environment and comply with all local laws and regulations.



When working with the hydraulic equipment it is required, that the operator and people nearby are wearing safety glasses to protect their eyes from possible high-pressure oil leaks. Do not expose your skin to the oil, as skin contact may cause eczema.



3.3 Work procedures

Before work begins it should be, if possible, ensured that:

1. The connection of the hose from the GreaseManager to the lubrication point is secured.
2. The installation of the grease cartridge is properly and safely performed.
3. Inspection of parts is performed to ensure that there are no defective parts.

3.4 Service

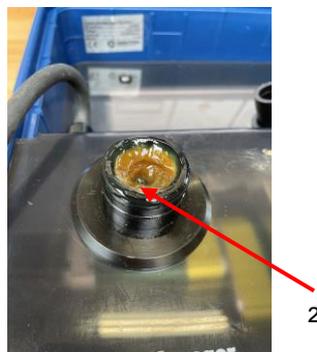
GreaseManager should be serviced once a year. Check the label for next service.

GreaseManager can be send to service on the following locations:

Danhydra Lollandsvej 2 DK-7400 Herning Denmark T: +45 7022 4232 E: sales.apac@danhydra.com	Danhydra GmbH Zum Storchennest 3 DE-04668 Grimma OT Mutzschen Germany T: +49 34385 680040 E: info@danhydra.com	Danhydra Inc. 5100 Boyd Lake Ave. CO 80538 Loveland USA T: +1 (720) 663-0673 E: sales.us@danhydra.com
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4 Item identification

4.1 Data Specification and overview



1	Power supply (variables voltage)	6	Button for Speed
2	Inlet connection for cartridge	7	Display
3	Outlet valve (ISO A or ISO B)	8	Grease inlet cover
4	Button for Set	9	Cartridge adaptor
5	Button for Start/Stop	10	Pins for cartridge adaptor (variable length)



4.2 Technical specification High Pressure

Max pressure	300Bar
Max flow	900 g/min
Temperature Range:	Min. -20°C Max. +70°C
Dimensions:	410mm x 320mm x 170mm
Weight:	16kg
Voltage:	CEE 230V 16A
	CEE 110V 16A
	Schuko 250V 16A
	US Type F110V 15A
Outlet connection (as per order):	Quick connection ISO 7241-1-A
	Quick connection ISO 7241-1-B

4.3 Technical specification High Flow

Max pressure	150Bar
Max flow	2300 g/min
Temperature Range:	Min. -20°C Max. +70°C
Dimensions:	410mm x 320mm x 170mm
Weight:	16kg
Voltage:	CEE 230V 16A
	CEE 110V 16A
	Schuko 250V 16A
	US Type F110V 15A
Outlet connection (as per order):	Quick connection ISO 7241-1-A
	Quick connection ISO 7241-1-B



ISO 7241-1-A



ISO 7241-1-B

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5 Operating guide

5.1 Installation

1. Connect power supply **NOTE FIRMWARE (2.12 / 2.34 / 2.37) Shown in display when connecting power. This is relevant for operation mode.**
For firmware 2.12 use section 5.2.
For firmware 2.34 use section 5.5.
For firmware 2.37 use section 5.8.
2. Remove the grease inlet cover (8)
3. Mount the adaptor with grease cartridge and install on inlet (2)
4. Mount grease adaptor with grease, put bag or container under flush coupling.
5. Turn "speed" button (6) to 25% setting.
6. Start pumping in manual mode, using "start/stop" button (5)
7. When air has been purged from the pump and the grease is flowing, stop the pump.
8. Remove the flushing adaptor. Pump is now ready for use.
9. Connect the hose to the outlet (3) and lubrication point on the turbine.

5.2 General use (Firmware 2.12)

5.2.1 Shifting program

Use "Set" to shift between the 2 programs.



5.2.2 Remote control (Optional accessory)

The button on the remote control has the same function as the "Start/Stop" button. The color on the button is used to give information on the pump condition.

Meanings:

Constant light:

- Red: Pump is running
- Green: Pump ready to start. Push to start.

Flashing light:

- Red: No flow in hose, or pump overloaded.
- Read display and go to section 5.2.3.



Red



Green

5.2.3 Pumping with empty grease cartridge

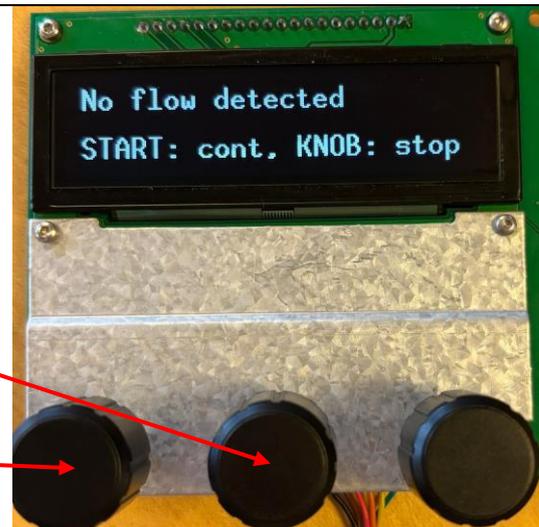
If GreaseManager is pumping and no grease is extruded, after 20 sec. it will stop and show this warning of "No Flow detected" in display.

If the cartridge is empty, it must be replaced before starting the pump again.

"Start/Stop" to continue pumping.

Or

"Set" to go back to main menu in display.

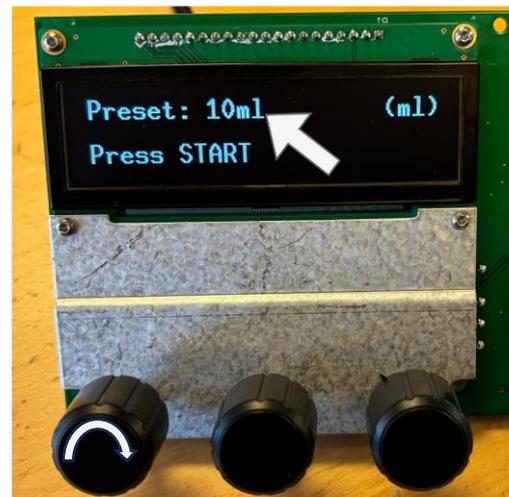


5.3 Pumping with preset mode

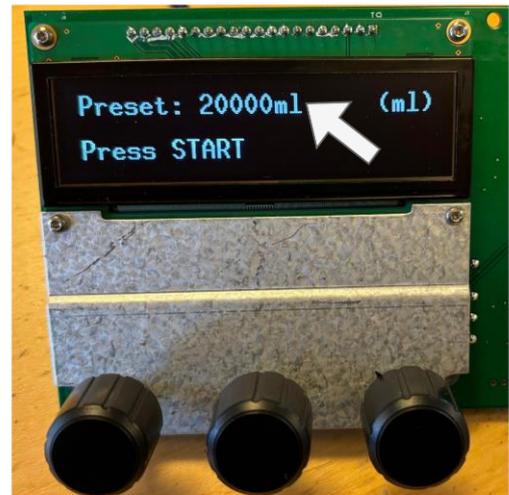
Preset mode allows an option for the pump to stop after a given amount of grease.

5.3.1 Setting of amount

The amount of grease is adjusted by turning the "Set" button.



Example is preset to 20.000ml grease.

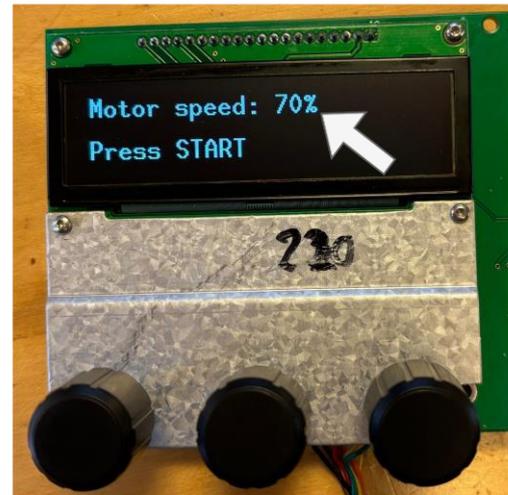


5.3.2 Setting of speed

The speed of the pump is adjusted by turning the "Speed" button.

Adjusting is also possible while the pump is running.

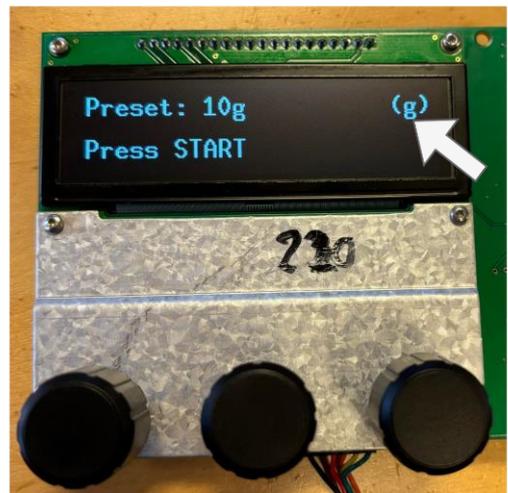
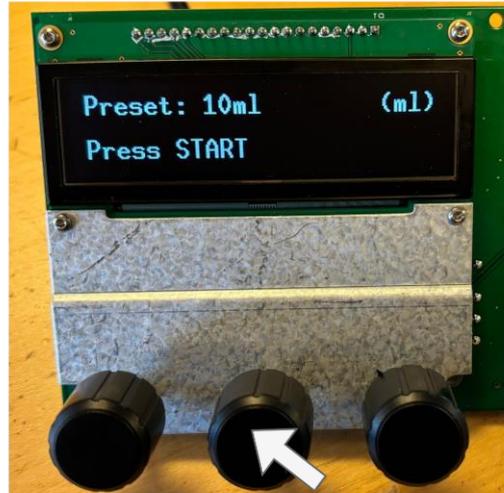
Example is adjusted from 30% to 70%.



5.3.3 Unit of measure

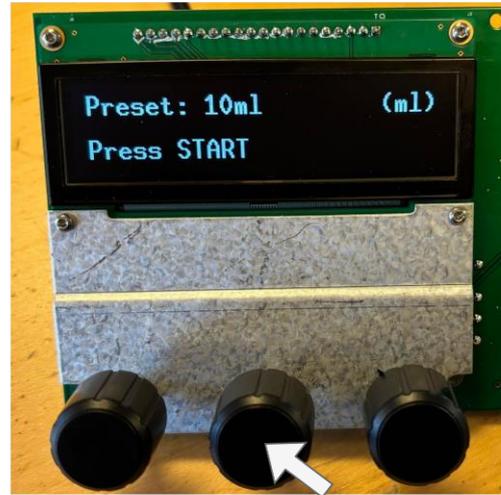
The unit of measure can be changed by holding "Start/Stop" button down for 7 sec.

Example is adjusted from ml (millilitre) to g (gram)



5.3.4 Start program

Start the program by pressing "Start/Stop".



When the pump is running, it shows the progress in the display.



When the program is finish, it is "Depressurizing".



When the pressure is equalized, it goes back to main menu in display.



5.3.5 Finish program

To manually finish a program, start by pressing the "Start/Stop" button,

followed by pressing the "Set" button.

The GreaseManager has now stopped.

Note:

Every time the pump is stopped, the pressure in the hose is automatically released.

This takes a few seconds.

Start only when system is depressurized.



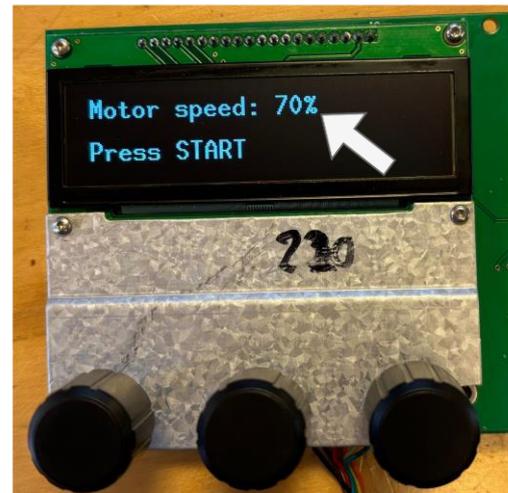
5.4 Pumping with manual mode

5.4.1 Setting of speed

The speed of the pump is adjusted by turning the "Speed" button.

Adjusting is also possible while the pump is running.

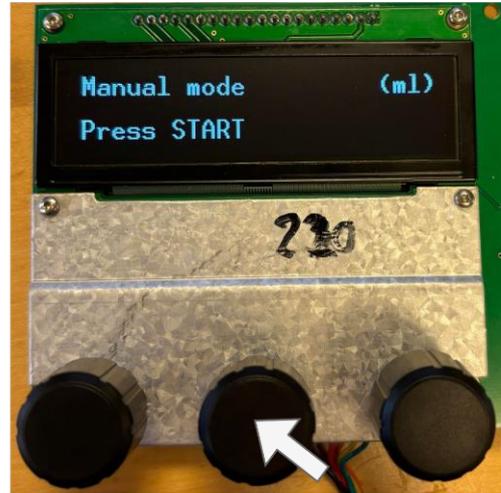
Example is adjusted from 30% to 70%.



5.4.2 Unit of measure

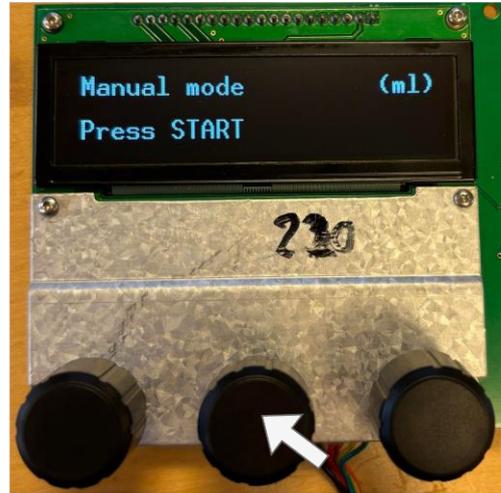
The unit of measure can be changed by holding "Start/Stop" button down for 7 sec.

Example is adjusted from ml (millilitre) to g (gram)

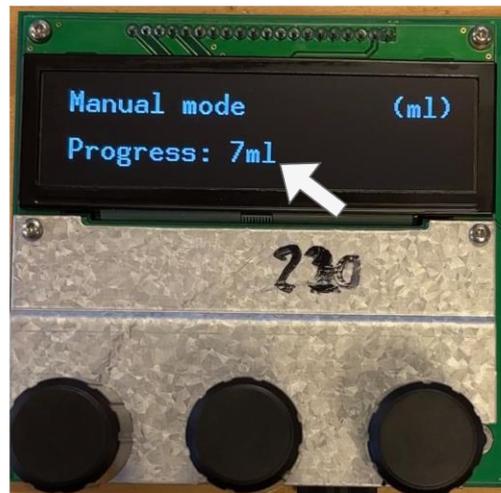


5.4.3 Start program

Start the program by pressing "Start/Stop".



When the pump is running, it shows the progress in the display.



5.4.4 Finish program

To manually finish a program, start by pressing the "Start/Stop" button,

followed by pressing the "Set" button.

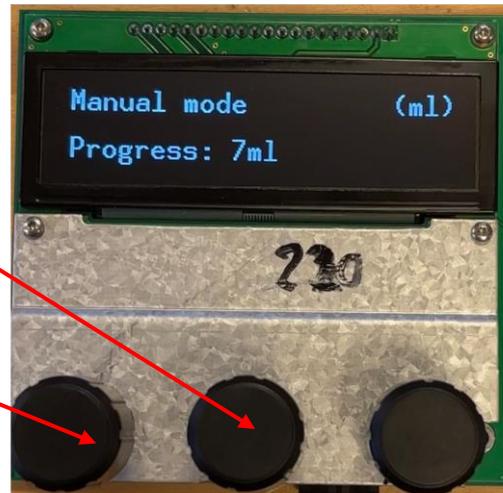
The GreaseManager has now stopped.

Note:

Every time the pump is stopped, the pressure in the hose is automatically released.

This takes a few seconds.

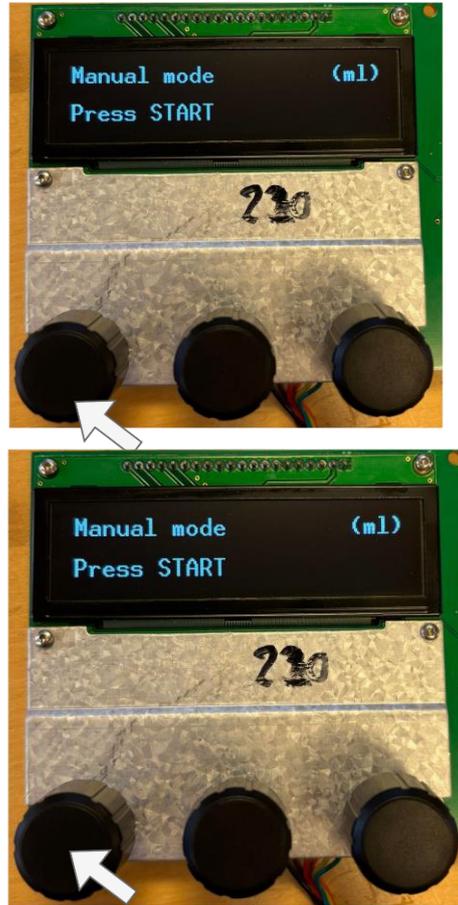
Start only when system is depressurized.



5.5 General use (Firmware 2.34)

5.5.1 Shifting program

Use "Set" to shift between the 2 programs.



5.5.2 Remote control (Optional accessory)

The button on the remote control has the same function as the "Start/Stop" button. The color on the button is used to give information on the pump condition.

Meanings:

Constant light:

- Red: Pump is running
- Green: Pump ready to start. Push to start.

Flashing light:

- Red: No flow in hose, or pump overloaded. Read display and go to section 5.2.3 or 5.2.4.



Red



Green

5.5.3 Pumping with empty grease cartridge

If GreaseManager is pumping and no grease is extruded, after 5 sec. it will stop and show this warning of "No Flow" in display.

If the cartridge is empty, it must be replaced before starting the pump again.

"Start/Stop" to continue pumping.

Or

"Set" to go back to main menu in display.

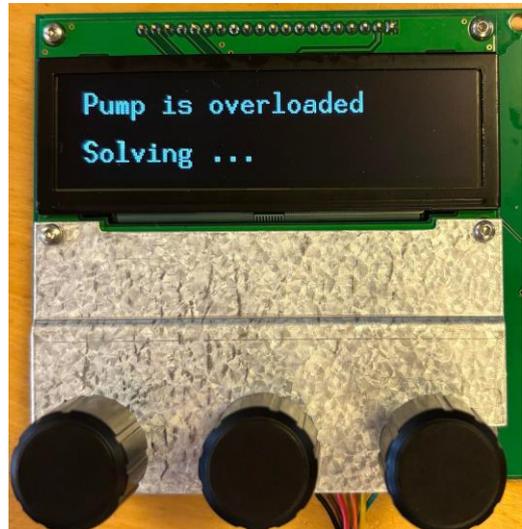


5.5.4 Pumping with blocked outlet

If outlet or hose is blocked, the pump will stop and show this warning of "Pump is overloaded" in display.

When the pressure in the hose is equalized, it will automatically go back to the main menu in display.

Remove the blockage/obstruction before starting again.



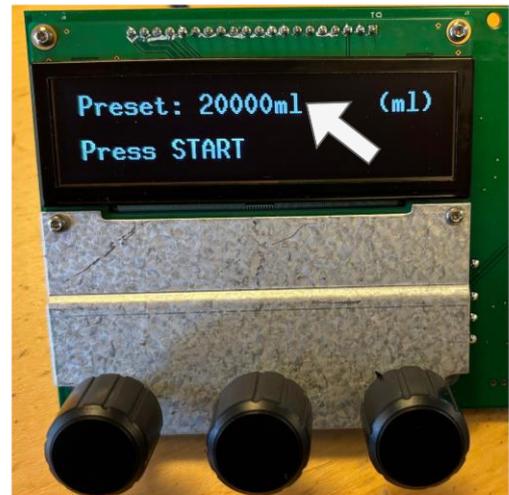
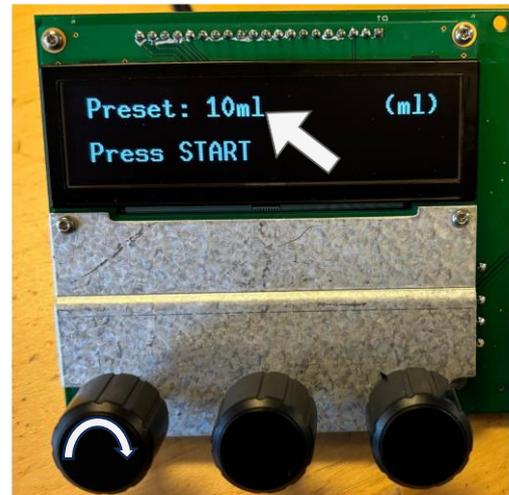
5.6 Pumping with preset mode

Preset mode allows an option for the pump to stop after a given amount of grease.

5.6.1 Setting of amount

The amount of grease is adjusted by turning the "Set" button.

Example is preset to 20.000ml grease.



5.6.2 Setting of speed

The speed of the pump is adjusted by turning the "Speed" button.

Adjusting is also possible while the pump is running.

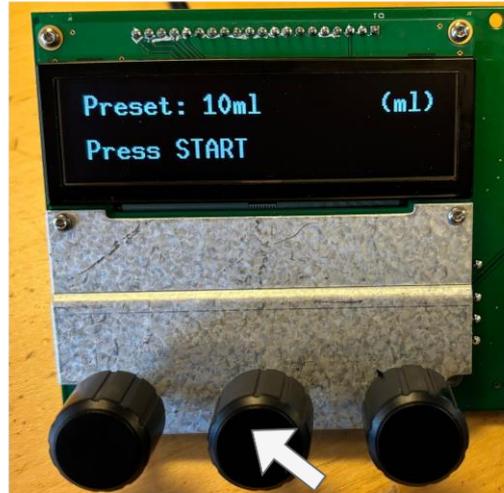
Example is adjusted from 30% to 70%.



5.6.3 Unit of measure

The unit of measure can be changed by holding "Start/Stop" button down for 7 sec.

Example is adjusted from ml (millilitre) to g (gram)



5.6.4 Start program

Start the program by pressing "Start/Stop".



When the pump is running, it shows the progress in the display.



When the program is finish, it is "Depressurizing".



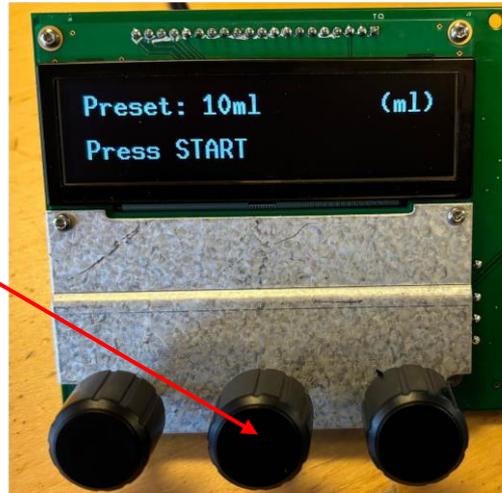
When the pressure is equalized, it goes back to main menu in display.



5.6.5 Pause program

The program can be paused, by pressing the "Start/Stop" button.

Press again to continue.



5.6.6 Finish program

To manually finish a program, start by pressing the "Start/Stop" button,

followed by pressing the "Set" button.

The GreaseManager has now stopped.

Note:

Every time the pump is stopped, the pressure in the hose is automatically released.

This takes a few seconds.

Start only when system is depressurized.



5.7 Pumping with manual mode

5.7.1 Setting of speed

The speed of the pump is adjusted by turning the "Speed" button.

Adjusting is also possible while the pump is running.

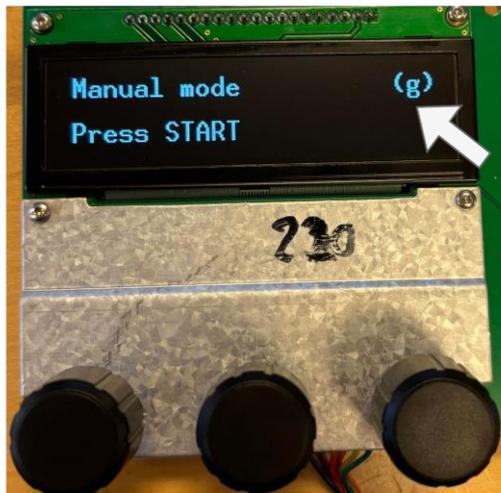
Example is adjusted from 30% to 70%.



5.7.2 Unit of measure

The unit of measure can be changed by holding "Start/Stop" button down for 7 sec.

Example is adjusted from ml (millilitre) to g (gram)

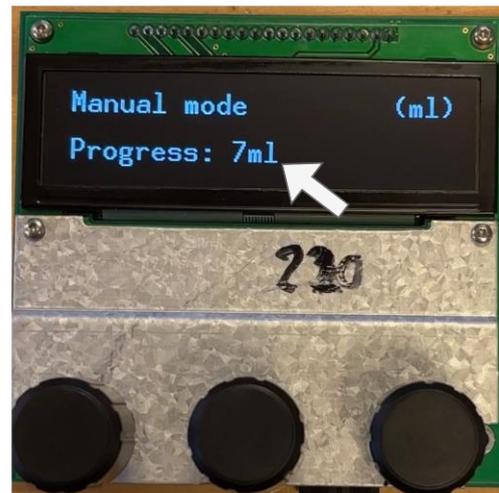


5.7.3 Start program

Start the program by pressing "Start/Stop".



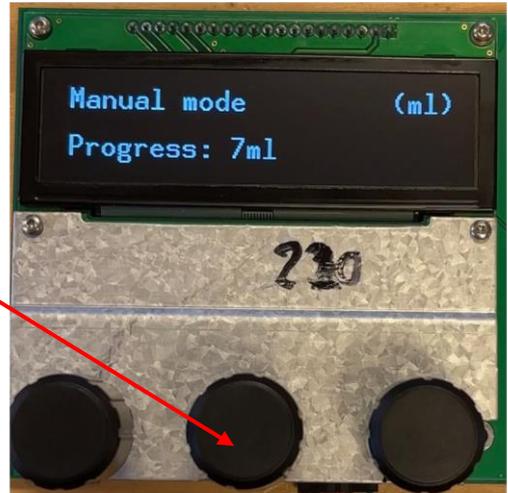
When the pump is running, it shows the progress in the display.



5.7.4 Pause program

The program can be paused, by pressing the "Start/Stop" button.

Press again to continue.



5.7.5 Finish program

To manually finish a program, start by pressing the "Start/Stop" button,

followed by pressing the "Set" button.

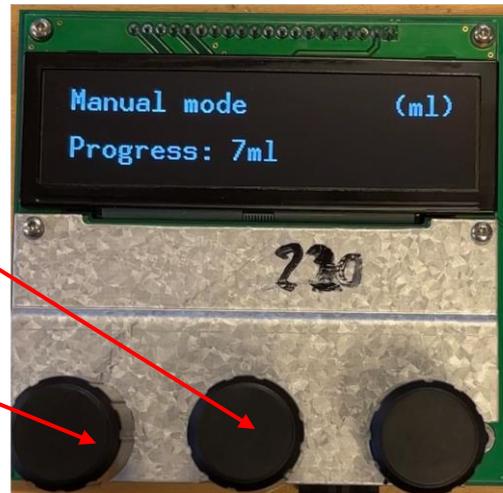
The GreaseManager has now stopped.

Note:

Every time the pump is stopped, the pressure in the hose is automatically released.

This takes a few seconds.

Start only when system is depressurized.



5.8 General use (Firmware 2.37)

5.8.1 Shifting program

Use "Set" to shift between the 2 programs.



5.8.2 Remote control (Optional accessory)

The button on the remote control has the same function as the "Start/Stop" button.
The color on the button is used to give information on the pump condition.

Meanings:

Constant light:

- Red: Pump is running
- Yellow: Waiting for system to equalize
- Green: Pump ready to start. Push to start.

Flashing light:

- Red: No flow in hose, or pump overloaded.
- Yellow: Equalizing pressure.



Red



Yellow



Green

5.8.3 Pumping with empty grease cartridge

If GreaseManager is pumping and no grease is extruded, after 5 sec. it will stop and show this warning of "No Flow" in display.

If the cartridge is empty, it must be replaced before starting the pump again.

"Start/Stop" to continue pumping.

Or

"Set" to go back to main menu in display.



5.8.4 Pumping with blocked outlet

If outlet or hose is blocked, the pump will stop and show this warning of "Pump is overloaded" in display.

When the pressure in the hose is equalized, it will automatically go back to the main menu in display.

Remove the blockage/obstruction before starting again.

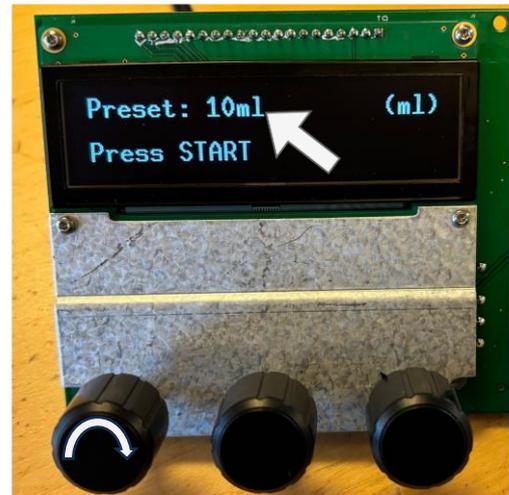


5.9 Pumping with preset mode

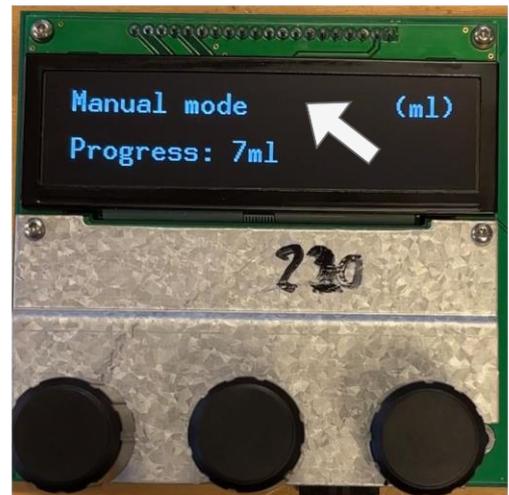
Preset mode allows an option for the pump to stop after a given amount of grease.

5.9.1 Setting of amount

The amount of grease is adjusted by turning the "Set" button.



Example is preset to 20.000ml grease.



5.9.2 Setting of speed

The speed of the pump is adjusted by turning the "Speed" button.

Adjusting is also possible while the pump is running.

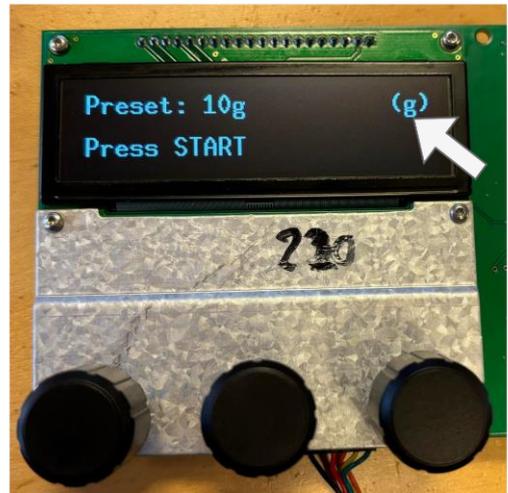
Example is adjusted from 30% to 70%.



5.9.3 Unit of measure

The unit of measure can be changed by holding "Start/Stop" button down for 7 sec.

Example is adjusted from ml (millilitre) to g (gram)

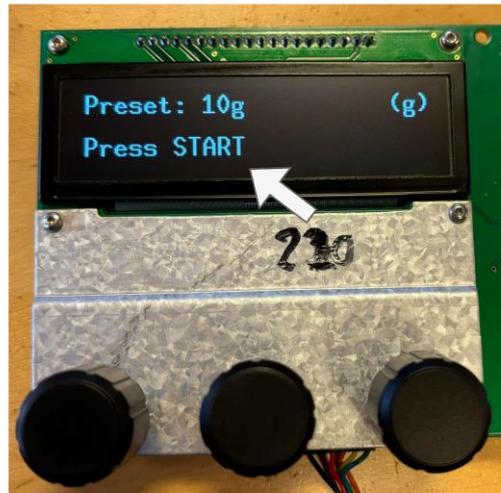


5.9.4 Start program

Start the program by pressing "Start/Stop".



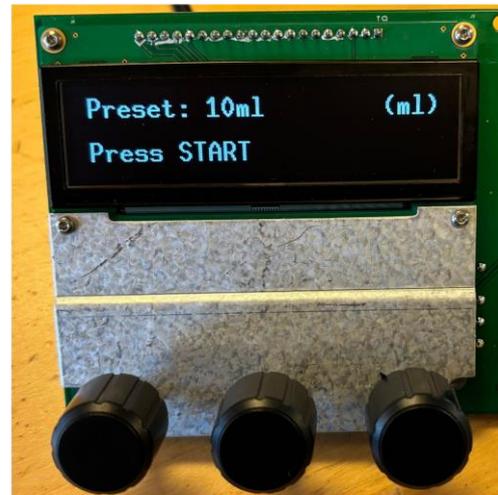
When the pump is running, it shows the progress in the display.



When the program is finish, it is "Depressurizing".

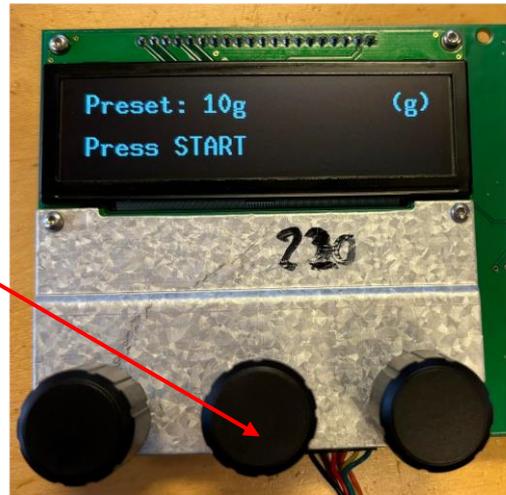


When the pressure is equalized, it goes back to main menu in display.



5.9.5 Pause program

The program can be paused, by pressing the "Start/Stop" button.



5.9.6 Finish program

To manually finish a program, press the "Start/Stop" button.



The GreaseManager has now stopped.

Note:

Every time the pump is stopped, the pressure in the hose is automatically released.

This takes a few seconds.

Start only when system is depressurized.



5.10 Pumping with manual mode

5.10.1 Setting of speed

The speed of the pump is adjusted by turning the "Speed" button.

Adjusting is also possible while the pump is running.

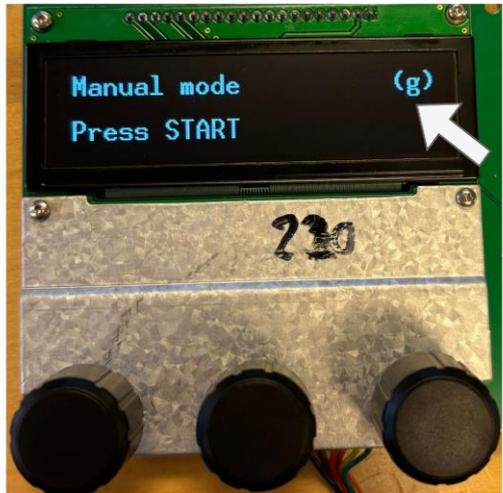
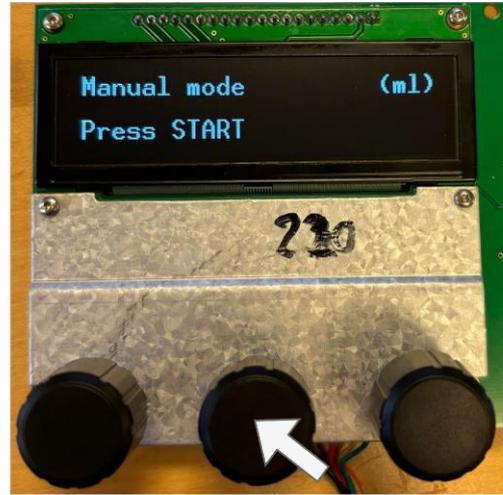
Example is adjusted from 30% to 70%.



5.10.2 Unit of measure

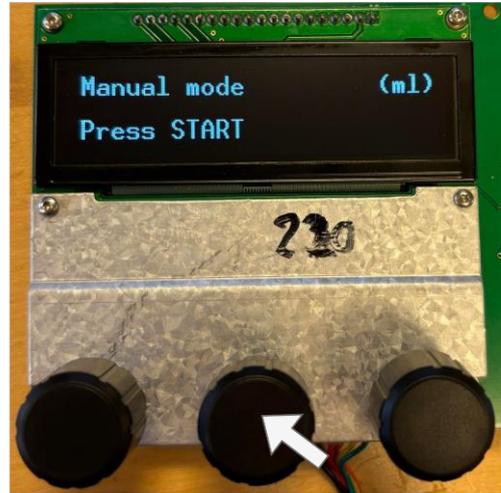
The unit of measure can be changed by holding "Start/Stop" button down for 7 sec.

Example is adjusted from ml (millilitre) to g (gram)

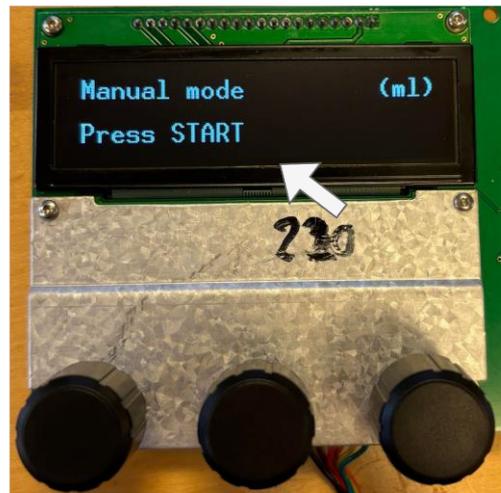


5.10.3 Start program

Start the program by pressing "Start/Stop".



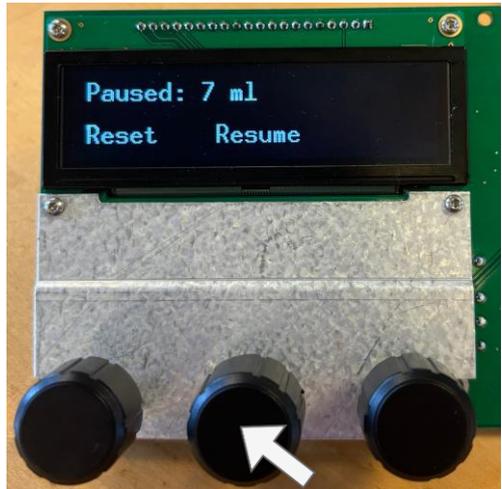
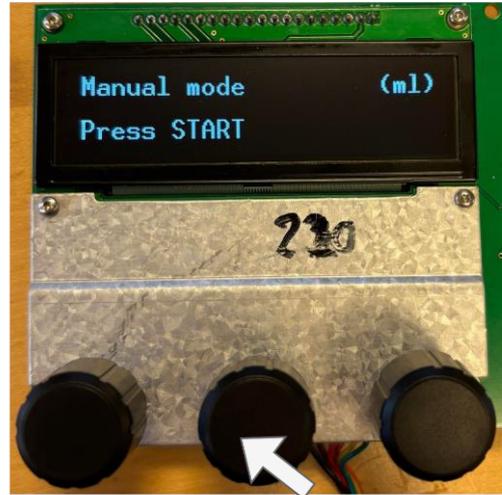
When the pump is running, it shows the progress in the display.



5.10.4 Pause program

The program can be paused, by pressing the "Start/Stop" button.

Press again to continue.



5.10.5 Finish program

To manually finish a program, start by pressing the "Start/Stop" button,

followed by pressing the "Set" button.

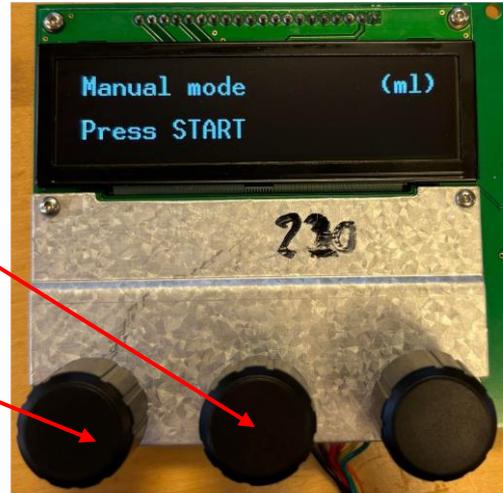
The GreaseManager has now stopped.

Note:

Every time the pump is stopped, the pressure in the hose is automatically released.

This takes a few seconds.

Start only when system is depressurized.



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	Creator: RCO	Approver: LRH	Status: Approved
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5.11 Disassembly

1. GreaseManager must be stopped.
2. Disconnect power supply.
3. Disconnect the hose and the cartridge adaptor.

5.12 Flush (only done when change of grease type)

1. Disconnect the hose and mount the flush coupling.
2. Mount grease adaptor with new type of grease, put bag or container under flush coupling.
3. Turn "speed" button (6) to lowest setting.
4. Start pumping in manual mode, using "start/stop" button (5)
5. Slowly increase flow by turning the "speed" button (6)
6. When new grease is flowing from the nozzle, the GreaseManager has been flushed.