

SOLOLUBE

electromechanical
lubricator

user manual



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Sololube installation and start-up

General safety instructions

Before installing and starting up the Sololube lubricator on the machine, these operating instructions must be read through carefully by all persons entrusted with the assembly, installation, maintenance and operation of the system.

Proper, trouble-free functioning of the Sololube lubricating unit is only ensured by using the recommended and tested lubricants of Gruetzner GmbH and by following the installation, operating and maintenance instructions. Failure to follow these instructions releases Gruetzner GmbH from any liability whatsoever for consequential loss or damage.

Before installing and starting up the Sololube lubricating unit, both the lubricating point and any extensions and grease lines must be greased through or pre-greased with the appropriate lubricant using a grease gun.

IMPORTANT
Only use original Sololube accessories (cartridges/threaded couplings) and Sololube batteries.
Other batteries can irreparably damage the electronics.

Preparation

Depending on the model the Sololube lubricator consists of a drive unit, a lubricant cartridge, a transparent protective cover, an adapter (1/2" => 1/4") and a set of batteries OR a 24V adapter for external power supply. Before starting the installation, please check that all parts are included in the scope of delivery.

If you decide to fill the Sololube lubricant cartridge yourself, please follow the instructions given below before starting the installation.

Filling with grease

1. Unscrew cartridge (fig. 1)
2. Unscrew green plug (fig. 2)
3. Push the piston towards outlet by using a plastic bar
4. Connect the grease gun and fill the cartridge slowly until the piston is totally pushed backwards (fig. 3).
WARNING: Do not overfill! No plunger stop!
You can also use a hand lever press. Therefore we recommend our refill nipple SAT3012 (fig. 4).
5. Screw on green plug if the cartridge will be stored temporarily.



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To fill the lubricant cartridge a standard grease gun and the refill nipple SAT3012 is needed.

An ideal result is achieved if you rotate the cartridge while it is being filled.

Filling with oil

1. Unscrew cartridge (fig. 1)
2. Unscrew green plug (fig. 2)
3. Carefully push the piston towards the edge of the cartridge by using a plastic bar. **WARNING: No plunger stop!**
4. Fill in oil
5. Filled cartridges have to be equipped with back pressure valve SAT2021.

Please only use lubricants tested and approved by Gruetzner GmbH.

Position the pressure plate

The pressure plate of the Sololube lubricating unit must be placed in the correct position before starting.

1. Carefully turn the pressure plate clockwise until you notice a slight resistance (see sticker on pressure plate).
2. Screw together drive and filled cartridge (without plug) until the piston touches the pressure plate.
Ensure that both parts are securely connected.

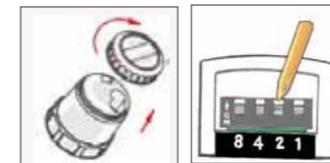
If done properly, a small quantity of lubricant should emerge from the outlet.

IMPORTANT

If the pressure plate does not touch the green piston when cartridge and drive unit are screwed together, no lubricant will be pumped.

Start Sololube – make settings

Sololube can operate for up to one year (1-12 months). In discontinuous operation of the application (external power supply), longer delivery times are possible.



The setting is made at the drive unit using DIP switches. Please unscrew the cover of the drive unit and refer to the table on page 8 for the required running period. By switching the dip switch to „ON“, Sololube is set for the relevant running period and is ready to start.

IMPORTANT

Please switch the DIP switch BEFORE inserting the battery or screwing on the adapter.

If any subsequent changes are made to the runtime setting, the power supply must always be disconnected for at least 15 seconds before changing the DIP positions.

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After switching the DIP switches, insert the battery in the battery compartment provided and screw the cover back onto the drive unit. If the 24VDC adapter is used, screw the adapter instead of the cover onto the drive unit. Pull the transparent protective cover over the drive unit of the Sololube lubricating unit to protect it from dust, dirt and moisture.



When the power is supplied, Sololube responds as follows:

SOLOLUBE BASIC

The drive unit's motor starts up briefly, the red LED lights up for 10 seconds. Sololube then switches to operating mode and operates according to the setting made. The Basic model only provides one red LED which lights up when Sololube is started and if any errors or faults occur afterwards (empty cartridge, excess pressure, voltage problems).



SOLOLUBE Xtra150 & SOLOLUBE Xtra250

Unlike the Basic model, Xtra150 and Xtra250 provide a red and a green LED.



After the power is supplied, the green LED flashes 5 times and the Sololube drive performs an automatic test run (one turn: green LED flashes quickly while the motor is running).

Sololube then switches to operating mode and operates according to the setting made.

In operating mode, the green LED flashes briefly every 15 sec. (=everything okay).

The red LED only flashes if errors or faults occur (empty cartridge, excess pressure, voltage problems).

DIP switches

IMPORTANT

Please switch the DIP switch BEFORE inserting the battery or screwing on the adapter.

If any subsequent changes are made to the runtime setting, the power supply must always be disconnected for at least 15 seconds before changing the DIP positions.

DIP switch setting for lubrication cycle

Different lubricant delivery rates can be implemented depending on the setting of the DIP switches (see chart p. 8).

Additional switch settings

Apart from the running period settings (1-12 months), Sololube also allows other DIP switch positions. Depending on the model, additional tests can be performed or the withdrawal of the pressure plate can be initiated.

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It is not absolutely necessary to perform the additional tests to guarantee Sololube's correct functioning.

SOLOLUBE BASIC

BACK:

The switch positions 1+4+8 and 2+4+8 allow the pressure plate to return automatically. Alternatively, the spindle can also be wound back by hand.

TEST:

If you switch DIP switches 1+2+4+8, Sololube Basic starts a test run. Warning: This test function is performed continuously until the power supply is disconnected. If the test run is not interrupted, Sololube will completely empty the lubricant cartridge!

SOLOLUBE Xtra150 & 250

BACK:

Switch position 1+4+8 allow the pressure plate to return automatically. Alternatively, the spindle can also be wound back by hand.

TEST1:

In switch position 2+4+8 the pressure plate turns a half-turn clockwise (green LED flashes) and anticlockwise (red LED flashes). Afterwards the test run ends and the green LED lights up.

TEST2:

In switch position 1+2+4+8 the pressure plate switches to idle (no load). The green LED flashes while the motor is running. Warning: This test is performed until the power supply is disconnected.

Faults / error messages

Checking the function of Sololube is easy:

SOLOLUBE BASIC: no LED Signal = everything okay
LED flashes red (every 5s) = fault indication

SOLOLUBE Xtra: LED green (every 15s) = everything okay
LED red (every 5s) = fault indication

When the red LED flashes every 5 seconds, a fault occurred. Possible errors or faults are:
- lubricant cartridge is empty
- back pressure is too high (>7.5 bar)
- voltage problems

Lubricant cartridge is empty:

Please replace the empty lubricant cartridge with an original Sololube cartridge. Each time the cartridge is changed, the battery must be changed too. Before changing the cartridge, please turn the spindle back into its original position by hand and then follow the instructions on page 3 => "Position the pressure plate".

Back pressure too high:

The drive unit stops when the pressure increases to > 7.5 bar. Sololube displays a fault (LED flashes red).

Cause: The lubricating point could be blocked, the hose is too long and/or the grease is too stiff.

Battery voltage too low:

Please replace the battery. Only use original Sololube batteries. Change them with each new lubricant cartridge!

Technical data

	Sololube Basic	Sololube Xtra150	Sololube Xtra250
drive	electromechanical (reusable)		
operating pressure	max. 7.5 bar / 110 psi		
setting	1-12 months		
lubricant volume	150 ml	150 ml	250 ml
dispensing time	see chart p. 8		
lubricant	grease (NLGI 2) and oil		
operating temperature	-20°C to +60°C		
power supply	6.0 V (Li battery) or 24VDC adapter		
weight (without lubricant)	incl. battery ~ 542 g incl. adapter ~ 563 g		~ 700 g
weight (incl. lubricant)	incl. battery ~ 692 g incl. adapter ~ 714 g		~ 925 g
dimensions H x Ø	16.6 x 8.9 cm		19.6 x 10.25 cm
function control	LED red	LED green & red	

24VDC adapter

In addition to classic battery operation, the SOLOLUBE lubricant dispenser is also available with external 24V power supply.



Sololubes which are already in use can be retro-fitted anytime.

Notes

- When connecting this unit to AC/DC power, please make sure that the power supply meets the technical requirements of this product.
- After switching to the adapter, Sololube will no longer comply with the UL explosion-proof certification specifications.
- If any subsequent changes are made to the runtime setting, the power supply must always be disconnected for at least 15 seconds before changing the DIP positions.

Installation of adapter

- Unscrew Sololube cap
- Attach 24V adapter
- Screw on 24V adapter
- Attach dust cover
- Connect the connection cable



Technical data of adapter

input	24 VDC
output	5.7 VDC
power output	12W
IP rating	IP 65
cable length	1 m

Further notes

- Before using Sololube, please ensure that the grease ducts in the bearing or in the bearing housing are entirely filled. Please use a grease gun to grease both the lubricating point and any grease ducts before starting up the Sololube lubricator.

- Connection lines (6mm internal diameter) may not be longer than 2.5m. Avoid line resistances and constrictions.

- Sololube may only be used to supply one lubricating point.

- The user has to check the function of the Sololube regularly.

Proper, trouble-free functioning of the Sololube Basic, Xtra150 and Xtra250 lubricators is only ensured by using the recommended lubricants of the original Sololube accessories product range and by following the assembly, installation, operating and maintenance instructions. Failure to follow with these instructions releases Gruetzner GmbH from any liability whatsoever.

Use of any lubricant requested and/or provided by the customer but not yet tested for compatibility with the Sololube lubricating system is done at the customer's risk and responsibility.

The products are subjected to very stringent production controls and fulfil our own factory specifications; however, due to the large number of influencing factors, we are unable to provide any warranty for their reliability in each individual case.

We therefore explicitly recommend that you perform practical tests.

All liability excluded.

DIP switch setting for lubrication cycle

setting month	DIP switch	hours dispensing cycle	lubricant/cycle (ml)		lubricant/day (ml)		lubricant/week (ml)		lubricant/month (ml)	
			150	250	150	250	150	250	150	250
1	1	2	5,00	250	8,33	250	250	250	250	250
2	2	4	2,50	0,694	4,16	0,694	17,50	58,33	150	125
3	1+2	6	1,67	0,463	2,77	0,463	11,67	35,00	75	83,33
4	4	8	1,25	0,347	2,08	0,347	8,75	26,67	50	62,50
5	1+4	10	1,00	0,274	1,66	0,274	7,00	21,66	30	50
6	2+4	12	0,83	0,217	1,38	0,217	5,83	17,50	25	41,66
7	1+2+4	14	0,63	0,167	1,19	0,167	5,00	14,58	21,43	35,71
8	8	16	0,56	0,130	1,04	0,130	4,38	13,15	18,75	31,25
9	1+8	18	0,50	0,104	0,92	0,104	3,89	11,66	16,67	27,77
10	2+8	20	0,50	0,094	0,83	0,094	3,50	10,66	15	25
11	1+2+8	22	0,45	0,083	0,75	0,083	3,18	9,55	13,64	22,72
12	4+8	24	0,42	0,074	0,69	0,074	2,92	8,76	12,50	20,83



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