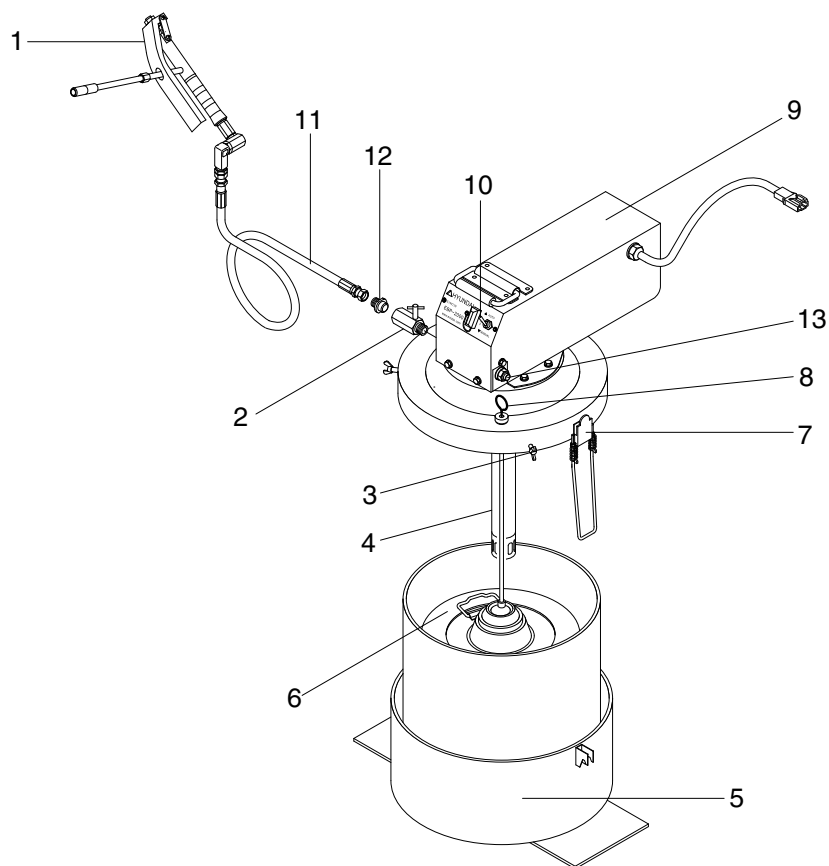


1. SEMI AUTO GREASE LUBRICATION SYSTEM

1) MAJOR COMPONENT



380LC8AG01

- | | |
|--------------------------|--------------------------------|
| 1 Grease gun | 8 Level gauge |
| 2 Inline check & airvent | 9 Grease pump |
| 3 Wing bolt | 10 Grease lubrication switch |
| 4 Piston & cylinder | 11 Grease hose |
| 5 Grease can holder | 12 Grease filter |
| 6 Follower plate | 13 Over pressure control valve |
| 7 Grease can clamp | |

· Specifications

Item	Specification
Input power	24VDC
RPM	60
Current	15 amp
Output volume	110.0 cc/min \pm 20%
Pressure	Max. 280 bar \pm 20%
Operating temperature	-35°C to 70°C (depending on the grease type)
Weight	15 kg
Filter	1st filter ; 1.0 mm, 2nd filter ; 0.2 mm
Grease can	20 liter
Grease hose	10 meter

2) PREPARATION FOR OPERATION

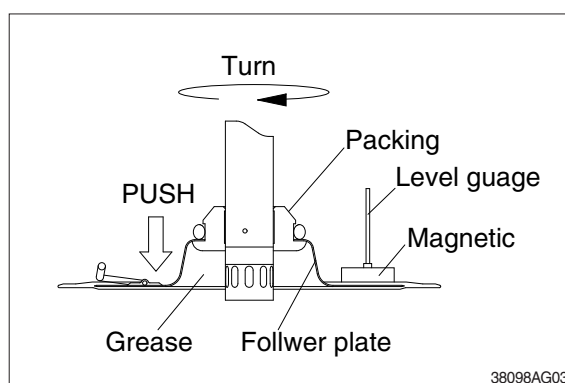
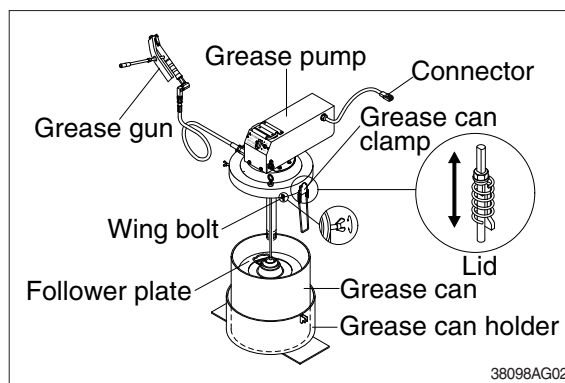
(1) Instruction

- ※ Place the unit on flat and stable place.
- ※ After you use the grease, please make sure to change it into new grease can.
- Never use it by filling the grease, for it becomes the cause of system failure.

- ① Loosen the wing bolts, clamp and remove the grease pump from the grease can.
- ② Remove the follower plate and level gauge.
- ③ Change a new grease can.
- ④ Place the follower plate on the grease can horizontally and push it down by rubbing it to left and right with hand until the grease comes out from the packing in the middle of the follower plate.

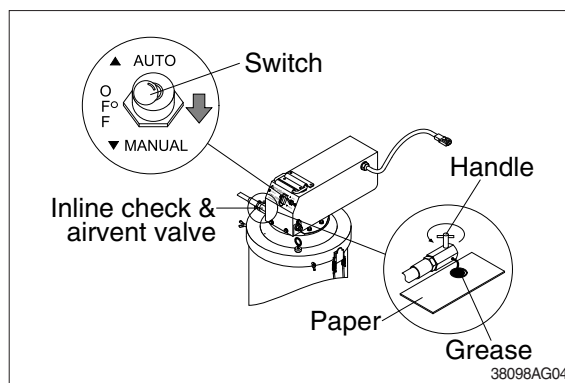
- ※ Take care not to allow sand and dust to adhere on the suction tube and follower plate of the pump.

- ⑤ Place the magnetic of level gauge on the follower plate.
- ⑥ Insert the grease pump into the center of grease follower plate.
- ⑦ Install the clamp tight (2EA) according the height of can and tighten the wing bolt (3EA).
- ⑧ Check the power connector.



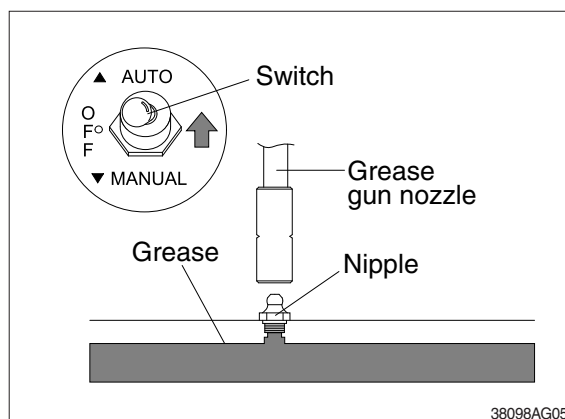
(2) Grease gun operation

- ① Switch on to the MANUAL.
- ② Open the inline check & airvent valve and operate the pump until grease will be discharged from a small hole under check valve.
- ③ After grease is discharged fully, close the valve handle.



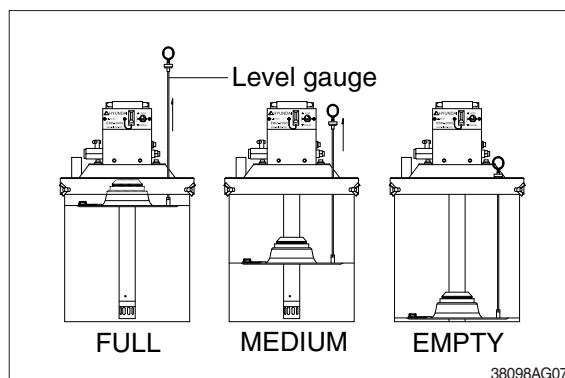
- ④ Switch on to the AUTO, take out grease gun and hose to the point where you want to lubricate and lubricate a grease to lube point after hold grease gun handle.
- ⑤ Rearrange the grease gun and hose after lubricate all lube points and keep it in the tool box.
- ⑥ Switch OFF.

- ※ It could be reducing a grease output volume after 30 minute running.
- ※ When you use pump lower than -10°C continuously, you should use a low temperature grease.
- ※ The grease mixed air is cloudy in white replace the new grease.



(3) Grease level check

- ① Hold the level gauge handle and make straight line between the gauge plate attached follower plate and gauge handle.
 - ② Check the length of the level gauge between gauge handle to the top of pump. The distance of gauge (wire rope) is indicated grease level.
 - ③ When grease level goes down to the empty the level gauge plate will be separated from the follower plate (It is attached with magnet). Replace the new grease can.
- ※ Pump will be pumping out a remaining grease for 3 minutes after the grease level indicated empty.



3) SAFETY INSTRUCTION AND MAINTENANCE

(1) Safety instruction

- ① Do not use silicon grease.
- ② Do not operate the grease gun with the discharge port facing to another person during machine operation at any case.
- ③ After the end of using pump, please be sure to shut off the power of this machine to release the internal pressure.
- ④ When replacing any port as maintenance, please be sure to stop the power to the machine.

(2) Maintenance

- ① If any leakage is found, replace seals leaked and also it is required to replace them once a year.
- ② Check whether pump could pump the accurate grease volume or not periodically.
- ③ Please clean grease filter if output volume is less than 25% of stroke volume. (110 cc/min)

4) TROUBLESHOOTING

Category	Applications	Service
Pump does not work	Electric cable is broken Pump is defective	Renew the electric cable and fuse Replace the pump
Pump is working but does not supply of lubrication	Grease low level Air packed in the grease can Air packed in the lube line Defective pump element Defective cam and piston Pipes are burst or leakage Defective over pressure valve	Replace the grease can Remove air packet using with follower plate Remove air packet using inline air vent handle Replace the pump element Replace the pump piston Renew the pipes Replace the over pressure valve
Could not either pump high pressure or accurate grease volume	Defective over pressure valve Defective seal in side pump Defective pump parts	Replace the over pressure valve Replace the pump seal Replace the pump parts
Reduced pump speed	Pump and grease pipes is blocked Low ambient temperature	Check and replace the grease pipes Replace the low temperature grease
Leakage of grease at the over pressure valve	Grease filter is blocked Grease pipes is blocked	Clean grease filter Clean grease pipes