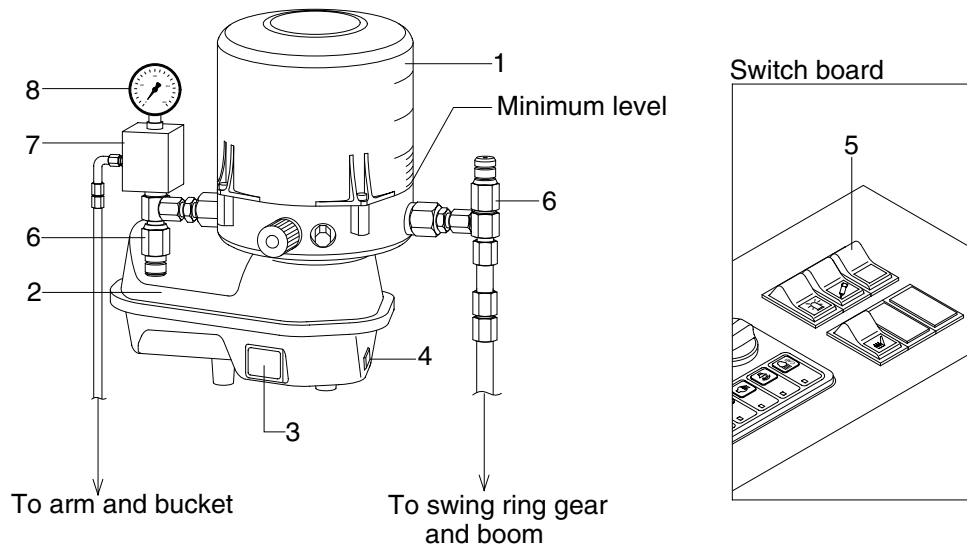


6. CENTRAL GREASE LUBRICATION SYSTEM

1) MAJOR COMPONENT

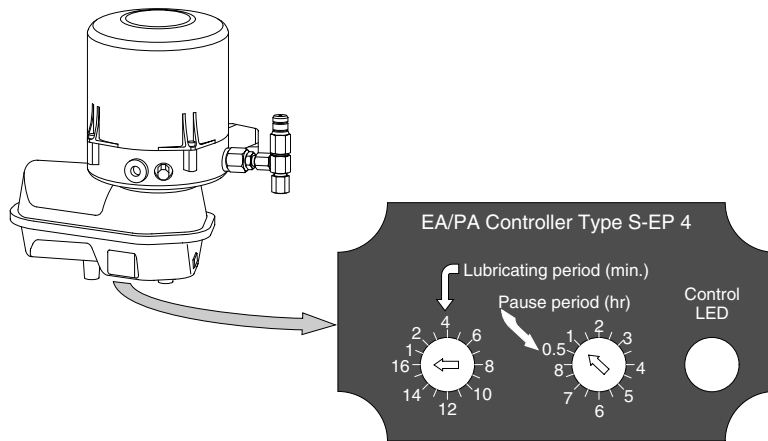


- 1 Grease tank
- 2 Grease pump
- 3 Control unit
- 4 Push button

- 5 Central grease lubrication switch
(Refer to the page 3-15)
- 6 Pump element
- 7 Relief valve
- 8 Pressure indicator

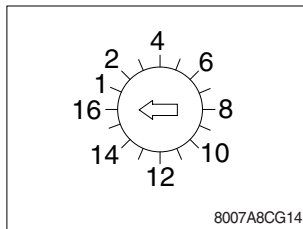
8007A8CG13

2) ELECTRONIC CONTROL UNIT



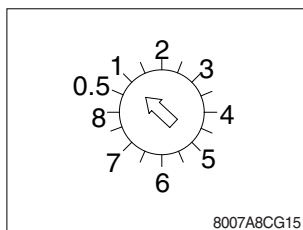
8007A8CG18

(1) Lubricating period setting dial



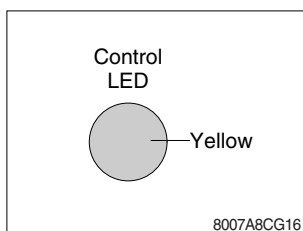
- ① This dial use to set the greasing period from 1 to 16 minutes.
- ② Default period is 16 minutes.
- ※ **Use a minus(-) screw driver to change settings.**

(2) Pause period setting dial



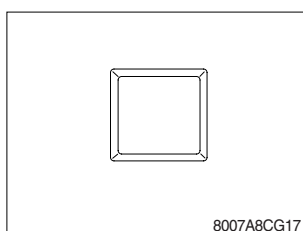
- ① This dial is use to set the pause period from 0.5 to 8 hours.
- ② Default period is one hour.

(3) Control LED



- ① This LED indicates operating status of the central grease lubrication system.
- ② Turn the starting switch ON, the LED will light up for 1.5 seconds.
- ③ During the central grease lubrication system is operated, it will blink at 0.5 second intervals.
- ④ When the lubrication system is failed, the LED is light up continuously.

3) Push button



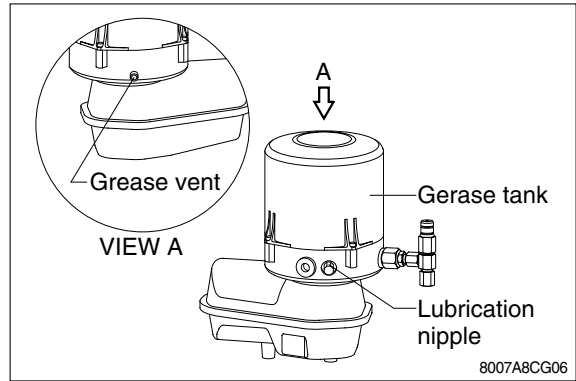
- ① This button use to operate the central grease lubrication system.
- ② Pushing the button, the central grease lubrication system is operated for 16 minutes once.

4) FILLING THE GREASE TANK

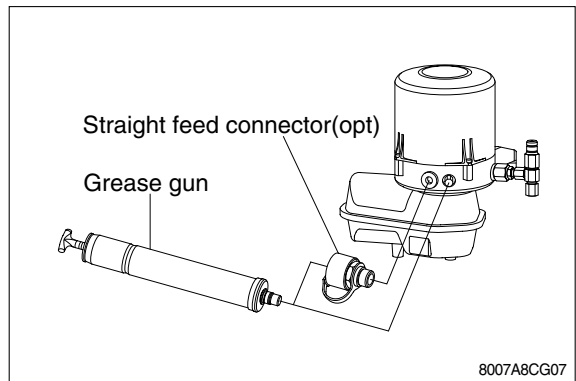
(1) Standard filling via lubrication nipple with manual or pneumatic grease gun.

※ **Lubricate the grease until it flows out to the grease vent.**

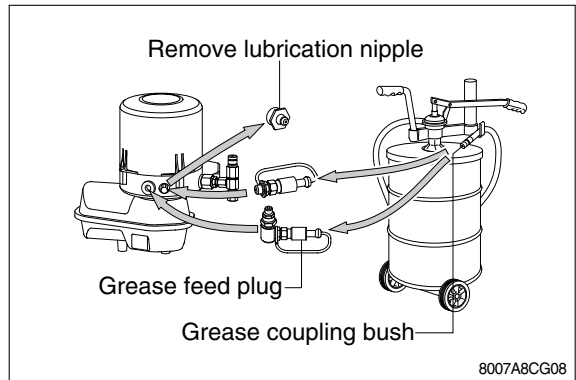
· Capacity : 8kg (18.6lb)



(2) Manual hand grease gun.



(3) Pneumatic grease pump (option).



5) REPAIR INSTRUCTIONS

(1) Case of system blockage

- ① A creased or clogged lubricant pipe
- ② Grease points overfilled or clogged by lubricant
- ③ Lubricant not suitable for central lubrication system
- ④ Distributor outlet closed
- ⑤ Blocked distributor

(2) Message signalling a blockage

The system pressure is exceeded (265kgf/cm^2), a blockage may exist in the system and will be signalled by one of the followings.

- ① The pressure indicator at grease pump.
- ② The pressure indicator at secondary distributor.

(3) Repair of a distributor when blocked:

- ① Remove the main distributor from the system, nothing the sequence of removal.
- ② Remove the plugscrews from the piston holes and move the pistons to and fro (don't expel them); re-insert the plug-screws.
- ③ If the main distributor is not blocked, do the secondary distributor as above mentioned.
- ④ Push the piston of the blocked distributor outside and check the drilling and the piston surface for scratches and deficiencies.
- ⑤ Renew the distributor affected by serious deficiencies.

※ **Pistons are not interchangeable for main and secondary distributor.**

※ **Deposits of hardened grease detected at pistons and drillings of distributor must be eliminated by washing and blowing. The drillings in distributor must be free of residues of grease. This should be checked by use of some thin wire.**

※ **Hardening of grease indicates that the lubricant being used is not suitable for the central grease lubrication system. Ask for advice by the supplier of the lubricant. After having checked both distributor, re-assemble the distributor complying with the sequence noted down previously. In order to preclude jamming of pistons, tighten the plug-screws to the specified tightening torque.**

· Tightening torque : $1.2\text{kgf} \cdot \text{m}$ ($8.7\text{lbf} \cdot \text{ft}$)

- ① Check the distributor for correct operation, using oil or grease.
- ② Install the distributor in the system.
- ③ Start the machine and check it for correct operating pressure (150kgf/cm^2).

※ **The repair work has to be done under maximum cleanliness.**

6) TROUBLESHOOTING

Trouble	Cause	Service
Pump does not work.	Defective electronic control unit. Electric cable is broken. Pump is defective.	Replace the control unit. Renew the electric cable. Replace the pump.
Pump is working, but does not supply of lubrication.	Air in the feed piston filling. Grease level dropped below minimum level. Defective pump element.	Bleed the pump. Refill the grease tank. Replace the pump element.
No grease at all points of lubrication.	Pump does not work. Inoperative time is too long or period of lubrication is too short. System is blocked.	Refer to "Pump does not work". Reduce the inoperative time or increase the period of lubrication. Refer to "Excessive pressure (above 265kgf/cm ²) of the pressure indicator".
No grease at some points of lubrication.	Some pipes are burst or leakage. Leakage at screwed unions.	Renew the pipes. Retighten or renew the screwed union.
No grease at one point of lubrication.	The lubrication pipe is burst or leakage. Leakage at screwed unions.	Renew the pipe. Retighten or renew the screwed union.
Reduced pump speed.	High pressure in the system. Low ambient temperature.	Check the system / bearing points. Not a defective (1 or 2 intermediate lubrication cycles may be useful).
Excessive pressure (above 265kgf/cm ²) of the pressure indicator.	Excessive pressure in the system. Progressive distributor is blocked. System is blocked. Defective valve spring.	Check the system. Replace the distributor. Repair clogged / seized greasing points. Replace the pressure relief valve.
Signal of the LED.	The LED of control unit is light up continuously.	Check electrical system and control unit.