B-001322EN

LUXON

Operation Manual

D300 series Silent type

High Pressure Air Compressor

GMC D300/T4.0/T5.5/T7.5-SILENT

Foreword

This operation manual provides installation guidance, safe operation, maintenance and repair instruction with illustrated parts breakdown.

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Manual: 1.4

Compressor type: High pressure compressor for breathing air or/and industrial gases compression

Manufacturer: ZHEJIANG LUXON COMPRESSORS CO.,LTD

Warning

1. The breathing air compressor production is strict adherence to the quality standards, ignoring operation and maintenance procedures, can cause serious injury or death. We strongly recommend that you read this manual carefully before using the compressor, and strictly enforced. Machine damage due to violation of operating instructions caused, will not be included in the product warranty.

2. The compressor is manufactured according to the highest technical standards and safety standards. However, the operator and third parties can still cause harm or result in damage to machinery and other equipment during operation. So the machine can only be manufactured with this manual compression of the gas, as its other use is strictly prohibited.

3. All work on the compressor must be at a complete standstill state, no pressure and cut off the power of the state to do the next procedures.

4. Do not use any medium harmful for breathing to clean compressor parts.

5. Do not braze or weld pressure piping or/and tubing, do not attempt to bolt or modify the structure or configuration of any component or subcomponent of this compressor while under pressure.

Contents

Chapter I Summary

1.1 Design and work principle

The compressor has the following major components:

- Block
- Driver
- Housing assembly and electronic control box
- Filter assembly
- Auto condensate drain
- Filling device

Working principle in details, see Chapter VIII of the manual.

1.2 Warranty

LUXON products provide two years warranty, the warranty period from the date of delivery of the products. During the warranty period, LUXON provide product repair or/and replacement parts. LUXON does not cover any other losses due to the replacement costs of parts problems arising.

You must be in accordance with the contents of the manual, the compressor regular and irregular maintenance. Failure to follow up the guidance of the maintenance manual for machine maintenance, or in the absence of contact LUXON of unauthorized disassembly of the compressor, the consequences may cause LUXON not assume responsibility for warranty. At the same time, failure and damage caused by an unauthorized operator, LUXON assumes no warranty responsibility. LUXON uses its compressor spare parts, which have been qualified design and processing. Compressor warranty from the date of delivery and least one year. Customer should note: machine problems found within two months, must be reported to the presence of a flaws and faults to LUXON; otherwise LUXON will not provide warranty service.

Warranty covers only comply with the manual instructions, and regular maintenance of the compressor. The warranty does not cover damage or failure due to incorrect use of the compressor, placed outdoors because of exposure to atmospheric agents (e.g. moderate rain) or damage during transport caused. Material wears and requires periodic replacement and maintenance parts are not covered by the warranty, customers need to buy these materials. LUXON machine without authorization to be modified, the terms of this service automatically lapse. Because of the design, manufacturing flaws or defects on the material caused by the compressor maintenance and replacement costs covered by LUXON. Transportation costs, consumable materials fee covered by the customer.

If the warranty work must be carried out at the customer site, LUXON personnel travel expenses and accommodation costs shall be met by the customer, regarding of whether the service is determined to be covered by warranty. Declaration by the customer's machine failure does not necessarily covered by the warranty. Under warranty, repair or/and replacement provided by LUXON, does not automatically extend the warranty period. In the case of the warranty coverage does not mean LUXON will be compensated. For other direct or indirect losses arising due to compressor failure, LUXON is not responsible, unless there is gross negligence of the relevant evidence.

1.3 Type Approval

All parts are LUXON COMPRESSORS LTD specifies to use. ISO9000 certification is provided by TüV SüD institutions.

For your safety and that of the machine, use only genuine LUXON parts to ensure compliance with

these specifications and to ensure the smooth operation of the compressor.

1.4 LUXON After sales service

If you have any questions regarding technical maintenance and repair, please contact our service LUXON COMPRESSORS LTD

Add: Unit 2, Building 5, No. 505 Xingguo Road, Tangqi Town, Linping District, Hangzhou City, Zhejiang, China (Office)

NO52-8, JINTANG NORTH ROAD, EAST DISTRICT, WENLING CITY, ZHEJIANG, CHINA (Factory)

E-mail: info@luxoncompressors.com

Website: www.LuxonCompressors.com

Chapter II Technical Data

2.1 Basic information of the compressor

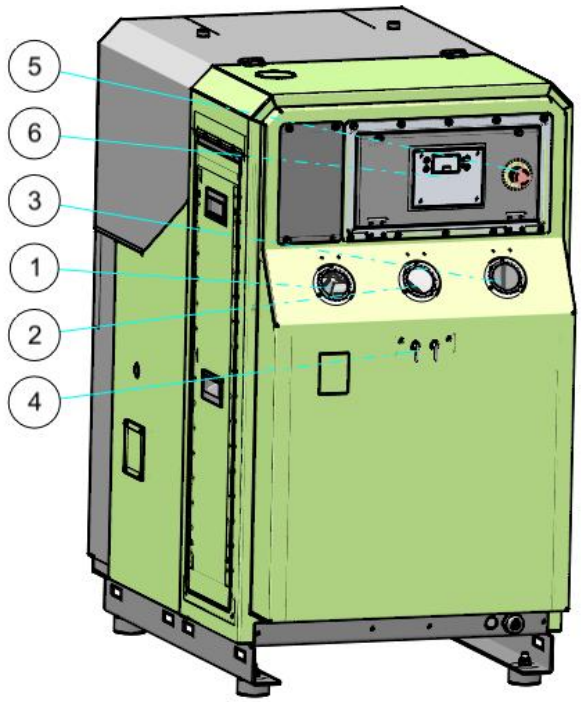
LUXON company manufactures compressors and air breathing apparatus are mainly used for filling cylinders (filling).

High-pressure compressor for breathing air and industrial gases.

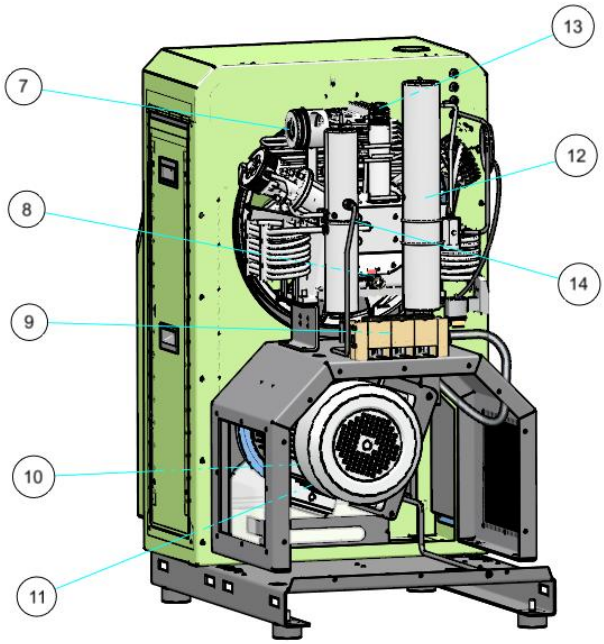
2.2 Machine model and technical data

Booking number	G02B-D18L-Q1**		
Model	GMC D300/T4.0-SILENT	GMC D300/T5.5-SILENT	GMC D300/T7.5-SILENT
Type	Air cooling, oil lubricated, silent compressor		
Drive	4.0KW Three-phase electric motor	5.5KW Three-phase electric motor	7.5KW Three-phase electric motor
Capacity(L/min)	215L/min	265L/min	300L/min
Max.Pressure	330 bar		
Speed(r/min)	1180	1400	1650
Number of stages	3		
Bore 1st stage(mm)	95		
Bore 2nd stage(mm)	38		
Bore 3rd stage(mm)	14		
Stroke(mm)	40		
Medium	air		
Lubrication	Splash		
Oil capacity(L)	1.5		
Air inlet temperature	+5 ~ +45 ℃		
Filter capacity	500m^3 at 20℃		
IP protection level(motor)	IP54		
Noise(dB)	≤80		
L*W*H(mm)	682*1005*1210		
Weight(kg)	239	249	254

2.3 Compressor structure



1-1st stage pressure gauge
2-2nd stage pressure gauge
3-3rd stage pressure gauge
4-Air outlet
5- Emergency stop button
6-βController



7-Inter filter system 8-Oil drain ball valve 9-Triple pneumatic drain valve 10-Condensate collection tank 11-Electric motor 12-Filter 13-Oil filler cap 14-Gas-liquid separator

Chapter III Safety Regulations

3.1 Note and warming labels

May cause injury to persons (including important content of technical and operational safety), will be marked with the following symbols to emphasize:

This symbol is in order to prevent damage to the machine and its accessories set.

Warning: hot surfaces, do not touch; do not touch the cylinder, top pressure cylinder, and between the cylinder tube.

Warning: high voltage, high voltage may endanger life. Operation of electrical components and equipment maintenance, must be performed by a qualified electrician. Or, according to the power regulation performed under the guidance and supervision of a qualified electrician.

Note: make sure the direction of rotation of the machine, after starting the machine, carefully observe and determine the direction of rotation of the compressor with the same arrow.

3.2 Basic safety guidelines

Authorization of operation

1. This machine is manufactured based on the most advanced technology and existing security technology specified by the manufacturer, but still may cause injury to the life of operator or a third person, may result in direct economic losses of machinery and other equipment.

2. Only operate the machine when perfect technical and safety condition. If found any problems or/and anomalies, should be corrected immediately.

3. The machine is designed exclusively for producing compressed air and technical gases for breathing purposes. Any other application or use is prohibited. The manufacturer is not responsible for damages and economic loss caused by other uses or applications. The operator will have to be authorized to use the machine, and follow instructions, appropriate testing and maintenance.

Management department

1. The operation manual should be placed near the compressor position.

2. In addition to this, please comply with environmental protection and prevent the risk of general regulations. These include contact with dangerous goods and personal protective equipment worn.

3. Additional instructions must develop monitoring and management, such as: the organization of work, production, and employment and other personnel.

4. The staff of the operation of this machine, before starting work, must carefully read this manual, particularly the chapter on operational safety. It's too late if the work has begun. (Particularly for temporary staff, such as maintenance personnel) must be on temporary staff supervision.

5. The operator should not have untied hair, jewelry or loose clothing that may be caught by the machine.

6. Wear personal protective equipment (including hard hat, safety goggles, ear protection, jumpsuit, etc) while operating this machine.

7.Pay attention to the safety instructions and symbols indicated on the machine and within this manual.

8. All safety and hazard markers must clearly and completely marked on the machine.

9. Without supplier's agree, the machine cannot make any changes, including: installation of safety valve and changes, as well as welding gas cylinders and piping.

10. Compressor parts quality must comply with the manufacturer's technical requirements of all the original parts quality assurance.

11. Do not change operating procedures of the compressor built-in computer program.

12. All piping must be detailed and comprehensive examined on a regular basis by the operator, including visual inspection and pressure testing. Even found no safety issues also need to check regularly.

13. The schedule periodic inspection regulations, and regular inspection specified in the operating manual, must be observed.

14. The workplace should be properly equipped, well lit and adequately ventilated based on the operational, maintenance and repair requirements of the compressor.

15. Know the location and operation of the nearest firefighting equipment and escape procedures.

Basic qualifications and responsibilities

1. Must be operated by a trusted operator.

2.Only hire trained, responsible personnel responsible for the operation, maintenance and repair of the machine.

3. Develop work responsibilities for machine operator. In addition, the operator shall introduce to a third party regarding the risk of the machine.

4. Just being trained, or the new operator, must work under the guidance of an experienced operator.

5. Install or operate electrical equipment must be carried out by a qualified electrician, electrician or under the guidance of conduct in accordance with electrical regulations.

6. The high-pressure pipes must be installed in accordance with the relevant regulations carried out by a qualified person.

Safety measurements for operation

1. If there are safety problems, cannot do any operation.

2. Must comply with all safety requirements and safe operation under all protection and safety facilities in good working condition.

3. Check the machine at least once a day its external circumstances, if unusual circumstances found, should be reported immediately to the relevant departments and personnel, switch off the machine, if necessary, put it is in a safe state.

4. If unusual circumstances found, for safety, immediately shut down, and immediately corrected anomalies.

5. According to the operational procedures doing associated switching program.

6. In accordance with rules prescribed time, regular adjustment, testing, maintenance (including replacement parts and equipment); all work must be performed by qualified personnel.

7. When making unregularly work or/and maintenance work, the operator must notify and inform compressor management.

8. When operating work-related, such as changes in production lines, changes and adjustment of safety devices, such as: inspection, repair and maintenance, please note that switching program rules and safety guidelines indication.

9. Make sure the place tidy when doing maintenance works.

10. If the machine is turned off completely for repair and maintenance work, in order to avoid start accidentally of the compressor, turn off the main switch and remove the key, or put a label on the main switch.

11.When using a crane to lift the compressor and/or accessories, please do so within the crane's indicated capacity and be aware of safety issues.

12.Only allow qualified personnel for crane operation.

13. When servicing the height of the compressor section, please pay attention to the safety and use high-altitude table; do not climb on the machine.

14. Before doing repair or/and maintenance work, clearing oil, fuel, and protection from the machine, especially on the wire, screws interfaces, do not use strong liquid cleaners with a lint-free cloth to clean enough.

15. Before using the cleaner to clean the machine, or the use of detergents for the operation and safety, all the openings are closed, so there will be no water infiltration, especially electric motors, electronic control box.

16. When cleaning the compressor room, make sure the fire alarm and sprinkler system temperature sensor does not touch the hot cleaning fluid, to prevent accidental starting the fire sprinkler system.

17. After the cleaning is completed, check the pressure pipe leaks, the connector is loose, damaged, such events should be immediately corrected.

18. It should be tight on all maintenance loose screws.

19. If for maintenance needs and the security device removed, must replace immediately when the work is completed.

20. It is important for safety and environmental disposal of old parts and consumables.

Particularly dangerous aspects:

1. Use the corresponding operating current fuse, the power supply if unforeseen circumstances arise, it should immediately stop.

2. When using a motor-driven compressor for operation, must according to electrical regulations that carried out by a qualified technician under the guidance and supervision of a qualified technician.

3. When need to check, repair and maintenance of parts, the main power supply must be interrupted. Split out parts must check first whether have the charge, if any, should be grounded immediately , short circuit, or/and insulated from live parts.

4. The electrical part of the machine must be regularly checked, in case of an adverse, must be corrected immediately.

5. When servicing live parts, use insulated tools and arrange an employee responsible for controlling the overall system power switch.

6. Can only be carried out on a special note of component welding, burning and grinding work, otherwise fire or explosion may occur.

7. Before start welding, pre-combustion and milling work, clean up the dust around the machine, and flammable materials, ensure good ventilation.

8. If you work in a small room, please refer to the safety guidelines in this chapter.

9. The people only have some knowledge and experience of the pneumatic equipment, can operate pneumatic equipment.

10.Check regularly for all pressure lines, hoses, screws connectors, leaks or/and obvious damages. Replace damaged parts immediately. High pressure leaks could cause injury or fire.

11. Before carry out maintenance work for the system and pipeline, pressure must be relief.

12. The pressure line must be installed by a qualified person. Connectors must not be confused. Connectors, pipe length and quality, must comply with the appropriate technical requirements.

13.In accordance with legal requirements, installation of soundproofing device.

14. The operators need to wear earplugs.

15. With regard to lube, grease and other chemical substances, please refer to the relevant safety regulations.

16. Only arrange enough horsepower's .crane and qualified personnel to handle cargo handling, carrying fixed compressor only.

17. Even if the machine will move a short distance, all the external power supply must be disconnected before operating the machines, according to the provisions of the power supply connected.

Notes on the pressure vessel dangerous

1. Never under stressful situations, attempting to open or loosen pressure vessel or piping cover, be

sure to relieve pressure. Never exceed the working pressure of the pressure vessel.

2. Absolutely not part of the pressure vessel heated to above the operating pressure.

3. Replace the pressure vessel, package must be replaced. Affected by the pressure of the individual components, it cannot be considered separately purchased parts. Because all the pressure vessel components, as a whole are tested, the certificate is issued for the entire container.

4. After the cleaning is completed, all seal and cover are being removed.

Special attention should be, depending on the work of the pressure vessel, we will be categorized as: static and dynamic load container.

Static load container

Static load pressure vessels are always at a stable working pressure with small pressure fluctuations – This kind of pressure vessel is able to be used until the time of regular pressure testing. Any safety related issues must be disclosed.

Dynamic load container

Dynamic load pressure vessels work under continuous pressure fluctuations ranging from atmospheric pressure to the maximum working pressure. The certification and operation manual for these pressure vessels indicate that these pressure vessels are able to withstand changes in pressure. The working hours of these pressure vessels are also available.

These pressure vessels are subjected to dynamic load, the change from one working pressure to another is referred to as a change in load. A cycle consists of two changes in load. From these vessels' technical data one can find cycle times based on working pressure fluctuations. An internal inspection must be carried out when usable cycle times reaches the half mark to ensure safe operation. The pressure vessel must be scrapped and replaced once the maximum usage cycle time is reached.

Regularly inspect internal and external surfaces of the pressure vessel for any signs of rust or corrosion. Pay special attention to the second hand equipment, especially when we have no clear clue of its previous record.

Operation

For each compressor, must provide operation manual, and the manual must being reached by hands of the operators and maintenance personnel. If the pressure of the gas can be isolated in certain segments of the turned off compressor, may result in a risk factor at the certain segments under the influence of heating pressure, it must be taken to ensure that the relief the pressure immediately after isolation zone; except already equipped the elimination of dangerous pressure device.

The cylinders have to be evacuated as soon as possible, and filled cylinders and tanks should have used as soon as possible. Evacuated or gas-filled cylinders and tanks may not be placed clog at local outlet passage. It is strictly prohibited to put cylinder or tanks in various types of corridors and stairs areas.

Chapter IV Instructions

4.1 Equipment Installation

Operation preparation

All compressors delivered to the customer have been installed and tested properly, it should be no any problem to do operation, but note the following:

1. Before the first operation, please read detailed rules on manual. to ensure that every person has a clear understanding to all control systems of operation of the compressor, particularly for understanding of the safety regulations.

2. Start using the machine or/and would put the machine up more than two years, it must replace compressor oil, if used mineral oil, replaced once every year.

3. Described in Section 4.3, every time before operating, check the lubricant and proceed maintenance in accordance with Section 5.3.

4. Before every operation, check all systems are normal, if found any problems, immediately shut down, check the reason or/and notify maintenance department.

Placement

 This machine is not resistant to salt water. Spray the compressor with a rust preventative agent when operating in a high salinity environment.

 Keep machine away from flammable materials, in case the cylinder is opened, or when the operation of the machine, please do not smoke.

 Do not use compressors powered by gas or diesel internal combustion engines indoors.

Outdoor installation location

1. The compressor is placed in the designated area and check the level.

2. Take the fresh air for the gasoline engine-driven compressor operation is very important; the machine will be placed downwind, so that the exhaust gas can be blown away.

3. If the wind changes, change the placement of the machine immediately.

4. When the machine is running, do not start any car nearby.

5. Cannot operate the machine in the vicinity of

fire(flammable gas!).

Indoor installation location

1. Make sure the area is ventilated well for placing compressor, no dust, no explosion, corrosion or fire hazard.

2. Similarly, the exhaust air and air ingested by the compressor must not be contaminated by exhaust or toxic fumes (eg. smoke, volatile gases, etc.)

3.If possible, install the compressor in a place with direct exposure to fresh air.

4. Make sure there is adequate exhaust outlet.

5. When machine is installed in a small room, and lack of natural ventilation, artificial ventilation must be installed.

6.Air conditioning or forced air ventilation is required for cooling if the ambient temperature exceeds 45°C (110°F) while the machine is in operation.

7. Make sure the compressor set position at least 1 meter away from the wall, from the ceiling at least 1.5 m, this will ensure a normal operation of the compressor, cooling equipment properly.

8. Make sure that the compressor set area

lighting in good condition, and the various components of the labels are clearly visible.

4.2 Electrical installation

Installation of electrical equipment to comply with the following article:

1. Meet the local power company's regulations.

2. Only electrician can make arrangements for electrical devices and connections.

3. Check if it is correspond to the voltage and frequency of the grid with the voltage and frequency of the motor.

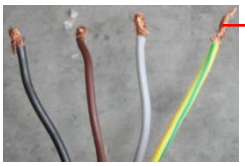
4. For not connected via a plug device, but the device is to be equipped with permanently, installed a main switch on each pole with minimum contact gap of 3mm.

5. Check immediately after starting the rotational direction coincides with the direction of the arrow on the device.

6. If you are replacing the power cable, only use the same type of cable!

Connect the power supply

1. D series compressor is a three-phase motor-driven compressor, power cord for four-wire: one Ground wire, three Fire Wire.



2. Check whether the data on the technical data of the compressor match the power, especially rated voltage and current.
3. The power supply must have a valid ground, check ground resistance must consistent with the compressor protection / operation requirements.

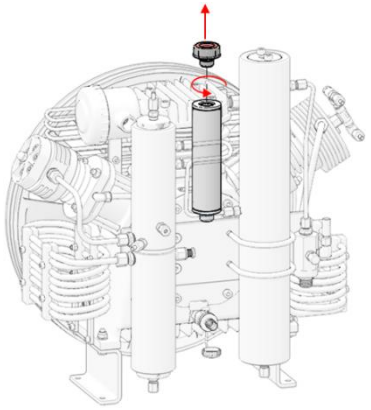
4.3 Add the oil and check the oil level

All piston, cylinder, master pieces, connecting rod bearings are using a splash lubrication.

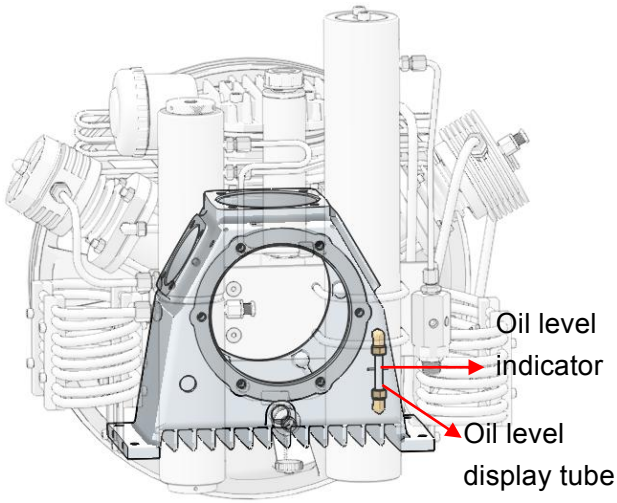
When compressor is delivered, the machine is not filled with oil. Bottled lubricant placed in the box.

Filling capacity (L)	2
Recommended oil	CE 750

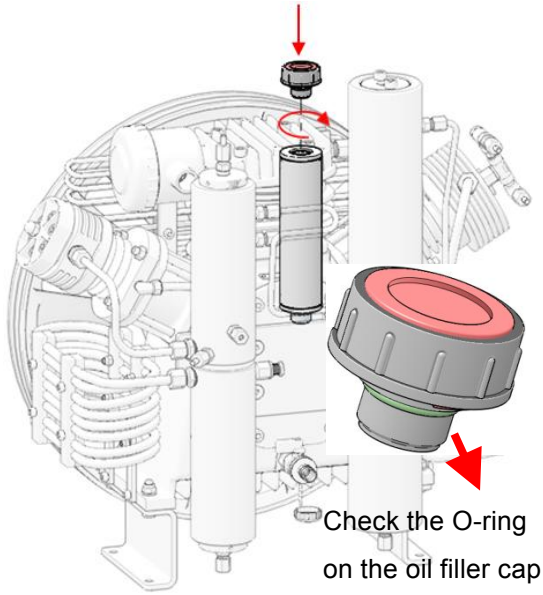
1. Remove the oil filler cap and refill the compressor using a funnel. (Use only recommended specialty lubricant. Do not overfill.)



2. Check the oil level through the oil level display tube.



3. Check the O-ring on the oil filler cap and install it to the oil filler.



Check the O-ring on the oil filler cap.

Check oil level

1. Check the oil level in the compressor through the oil level indicator tube.
2. Before the compressor operating every day, you must check the oil level.

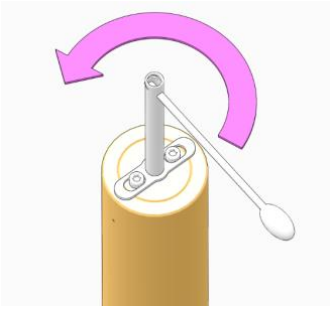
4.4 Installing the filter cartridge

Final filter housing needs to load a filter cartridge containing activated carbon molecular sieve to ensure breathing air quality.
Compressor delivery, there is no filter cartridge in filter housing; the filter cartridge should be loaded correctly before use compressor.

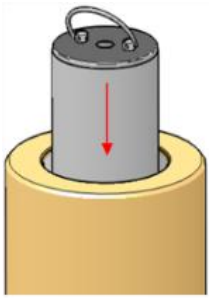
Install the filter cartridge steps

1. Open the left door behind the compressor.

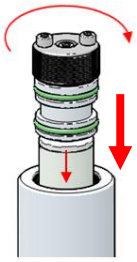
2. Rotate counterclockwise with a special tool to remove the top cover of the filter cartridge. (Make sure there is no pressure in the filter).



3. Unpack the new filter cartridge, put it into the filter housing, and ensure the filter cartridge has been pushed to the desired position.

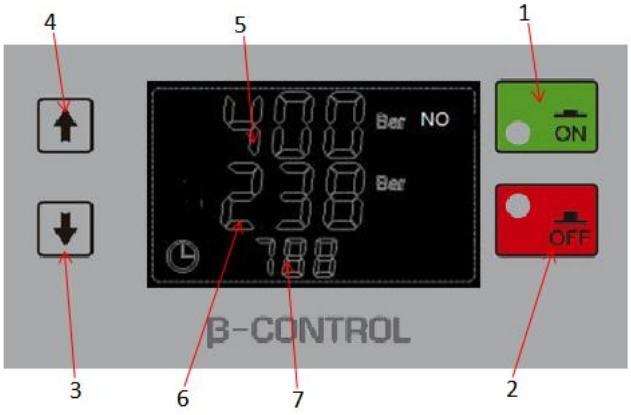


3. After cleaning the filter housing cap, apply lubricating grease to the thread and sealing rings,



4.5 β Controller

Main Interface

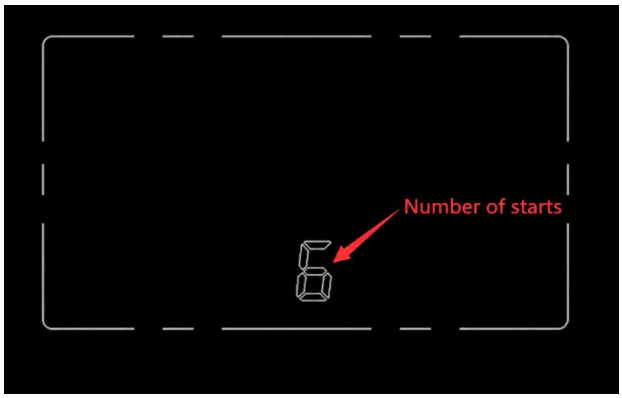


1- **"ON" Button:** When the machine is stopped, press this button to start the machine. If the current air pressure is greater than or equal to the set pressure, the machine will not start.
2- **"OFF" Button:** When the machine is running, press this button to stop the machine. When the machine is stopped, press and hold this button for **5 seconds** to enter Setting Mode.
3- **"↓" Button:** Press once to enter the Maintenance Page.

4- **"↑" Button:** Press once to enter the Settings Page.
5- **Shutdown Pressure:** Displays the set shutdown pressure.
6- **Air Pressure:** Displays the current air pressure.
7- **Operating Time:** Displays the machine operating time.

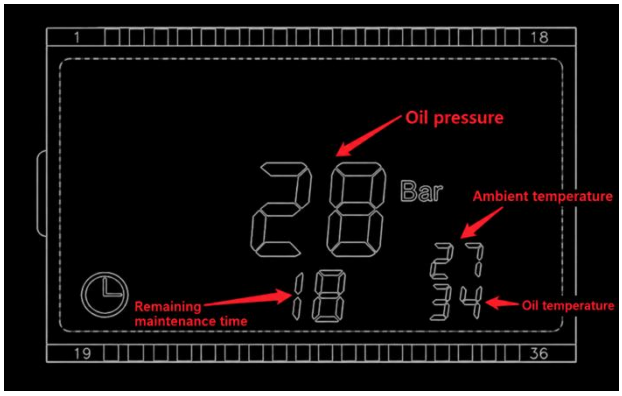
β Controller – View the Number of Starts

Press and hold the "↑" + "↓" + "OFF" keys for 3 seconds to view the number of starts.



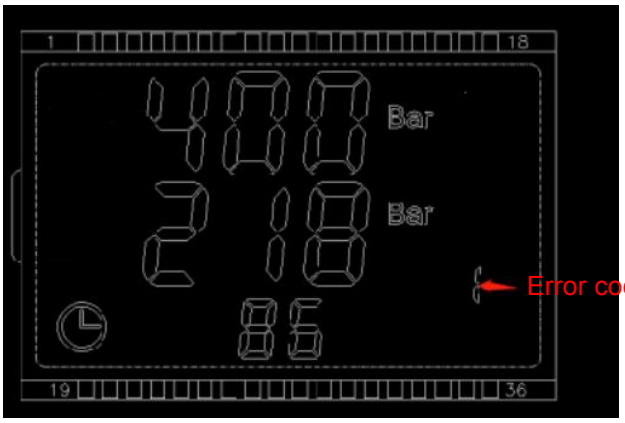
β Controller Maintenance Page

Maintenance Time Display (Countdown): Displays the remaining maintenance time, current ambient temperature, current oil pressure, and current oil temperature.
Briefly press the "↓" button to view the maintenance page. Briefly press the "↓" button again to exit. If no operation is performed for **10 seconds**, the controller will automatically exit this page.



β Controller Error Codes

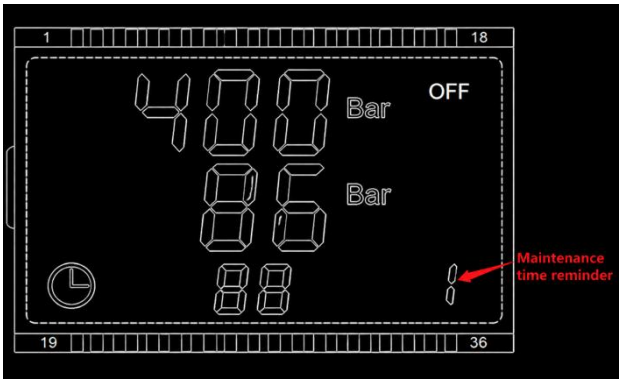
① Error Code "0" Flashing — Humidity Controller Alarm
② Error Code "1" Flashing — High Ambient Temperature Alarm



③ Error Code "2" — Reserved Alarm
④ Error Code "3" — Emergency Stop Alarm
⑤ Error Code "4" — Reserved Alarm
⑥ Error Code "5" — Oil Temperature Alarm
⑦ Error Code "6" — Reserved Alarm
⑧ Error Code "7" — Phase Loss Alarm
⑨ Error Code "8" — Incorrect Phase Sequence Alarm

β Controller Maintenance Reminder:

① Reminder "1" Flashing — Replace the Activated Carbon Filter Cartridge

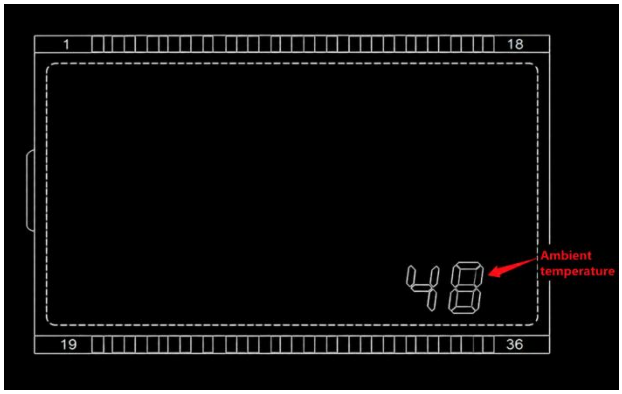


② Reminder "2" Flashing — Check and Clean the Oil-Water Separator
③ Reminder "3" Flashing — Replace the Belt
④ Reminder "4" Flashing — Drain the Condensate Collection Tank

⑤ Reminder “5” Flashing — Check the Air Intake Filter

β Controller Set Value Display Page:

To view the set temperature and shutdown pressure, briefly press the “↑” button. Briefly press the “↑” button again to exit. If no operation is performed for 10 seconds, the controller will automatically exit this page.



β Controller Parameter Settings:

Entering Setting Mode: With the controller in the stopped state, press and hold the “OFF” button for 5 seconds to enter Setting Mode. Briefly press the “ON” button to switch between setting pages.

Index	Parameter Setting
1	Stop pressure setting range: [0–450 bar]; default: 200 bar
2	Ambient-temperature alarm setting range: [1–55°C]; default: 45°C
3	Oil-temperature alarm setting range: [1–100°C]; default: 45°C
4	Oil-pressure high alarm setting range: [0–25 bar]; default: 5 bar
5	Oil-pressure low alarm setting range: [0–5 bar]; default: 0 bar (the high alarm limit must be greater than the low alarm limit)
6	Activated-carbon filter replacement interval: [0–995 h]; default: 0 hours (no reminder)
7	Oil-water separator inspection and cleaning interval: [0–995 h]; default: 0 hours (no reminder)
8	Belt replacement interval: [0–995 h]; default: 0 hours (no reminder)
9	Wastewater container cleaning interval: [0–995 h]; default: 0 hours (no reminder)
10	Air-intake filter replacement interval: [0–995 h]; default: 0 hours (no reminder)

① **Set the Compressor Shutdown Pressure:** Use the “↑” and “↓” buttons to adjust the pressure. Briefly press “↑” or “↓” to increase or decrease the maximum pressure by **1 bar**. Press and hold “↑” or “↓” to increase or decrease the maximum pressure by **10 bar**.

② **Set the Ambient Temperature:** Use the “↑” and “↓” buttons to adjust the temperature. Briefly press “↑” or “↓” to increase or decrease the temperature by **1°C**. Press and hold “↑” or “↓” to increase or decrease the temperature by **5°C**.

③ **Set the Oil Temperature:** Use the “↑” and “↓” buttons to adjust the oil temperature. Briefly press “↑” or “↓” to increase or decrease the temperature by **1°C**. Press and hold “↑” or “↓” to increase or decrease the temperature by **5°C**.

④ **Set the Oil Pressure:** Use the “↑” and “↓” buttons to adjust the pressure. Briefly press “↑” or “↓” to increase or decrease the pressure by **1 bar**. Press and hold “↑” or “↓” to increase or decrease the pressure by **5 bar**.

⑤ **Set the Maintenance Interval:** Use the “↑” and “↓” buttons to adjust the maintenance interval. Briefly press “↑” or “↓” to increase or decrease the interval by **1 hour**. Press and hold “↑” or “↓” to increase or decrease the interval by **5 hours**.

Minimum Pressure Setting:

With the controller in the stopped state, press and hold the “↓” and “OFF” buttons simultaneously for **5 seconds** to enter Setting Mode. Briefly press the “ON” button to switch between setting pages.

Index	Parameter Setting
00	Disable Automatic Start Mode

01	Enable Automatic Start Mode

① **Set the Low-Pressure Mode:** Press the "↑" button to set the value to **1**, or press the "↓" button to set the value to **0**.

② **Set the Low-Pressure Value:** Use the "↑" and "↓" buttons to adjust the pressure. Briefly press "↑" or "↓" to increase or decrease the minimum pressure by **1 bar**. Press and hold "↑" or "↓" to increase or decrease the minimum pressure by **10 bar**.

Restore Factory Settings:

Operation: With the controller in the stopped state, press and hold the "↑" and "↓" buttons simultaneously for **5 seconds**. When all segments of the LCD screen light up, the factory default settings will be restored.

a) Default maximum pressure: **200 bar**
b) Default alarm temperature: **45°C**
c) Default maintenance interval: **25 hours**
d) Clear the accumulated operating time
e) Default low-pressure mode: **Mode 0**
f) Default minimum pressure: **0 bar**
g) Activated carbon filter replacement reminder: **0**
h) Oil-water separator inspection and cleaning reminder: **0**
i) Belt replacement reminder: **0**
j) Condensate collection bottle reminder: **0**

4.6 To fill carbon fiber cylinder

⚠ Ensure fresh air without toxic gases, exhaust gas, or volatile gases.

⚠ Only fill cylinders meet the following requirements:

1. The cylinders used for filling must be regularly inspected through the national security department.
2. Label affixed to the tested pressure cylinders effectively.
3. There are a certain residual pressure in the cylinders (not completely empty).
4. Cylinders and valves were not damaged or corroded.
5. No water or dirt inside the cylinder.
6. Breathing air must be dry. Moisture in the air can cause corrosion inside the machine and freeze pressure reducers, which it may cause serious injury or/and even death.

Purging carbon dioxide

The atmosphere has a carbon dioxide content of 350-400 ppm. Carbon dioxide is absorbed by the media and can accumulate within the filter cartridge. The absorbed carbon dioxide may be released after stopping the compressor.

To flush accumulated carbon dioxide, run the compressor with the inflation valve or inflation vent valve open for one to two minutes before connecting or filling the first cylinder.

Check safety valve before the first filling

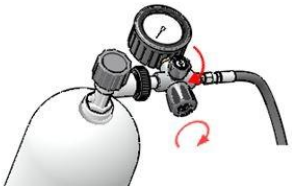
Before the first filling, check final stage's safety valve and the filling connector is compatible with the operating pressure.

Operation: Close all valves, power, start the compressor. Start the compressor, pressure gauge valve will remain open after the pressure is beginning to show a change in pressure (starting at about 1 minute). Pressure will continue to rise until the safety valve vent gas. If there is no safety valve vent gas while compressor exceeds the working pressure, manually turn off the compressor (compressor stop button is pressed), and contact with technical personnel.

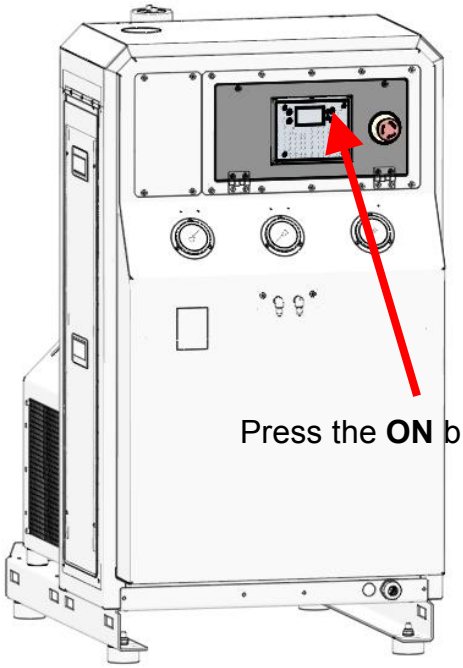
The main procedure to fill cylinders

1. Connect the filling valve(available options) to the cylinder.

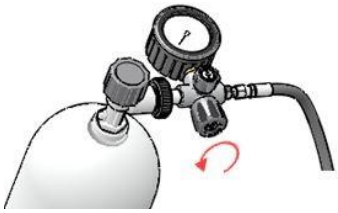
2. Close the filling valve.



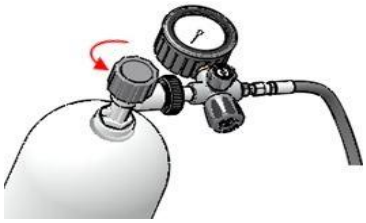
3. Pull up the emergency stop button then push the ON button.



4. Open the filling valve.



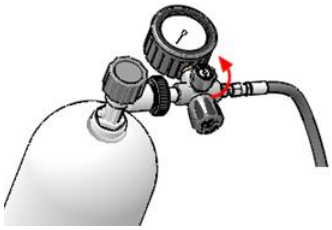
5. Open the cylinder valve



6. When reaches the set working pressure, disconnect the power, turn off the compressor.

7. Press the emergency stop button, turn the power switch to OFF and turn off the compressor.

8. Open release valve on the filling knob, excess gas in the pipe discharged.



9. Rotate the filling valve on the cylinder to remove the cylinder.

4.7 Test compressed air quality

You can use a portable air quality detector to monitor air quality at compressor outlet, the similar instrument also can be used. Following respective presentations on portable compressed air quality detector:

1- adapter valve 2- pressure reducing valve- 3- test tube tubing 4- cutter can be inserted four detector tube measurement device 5-timer 6- test tube 7- suitcase Portable

Air quality detector has the following advantages:

1. Use a portable air quality detector, which can monitor the CO, CO2, H2O and synthetic oil effectively

2. Can be connected directly to the compressor or gas cylinders;

3. Can monitor & test gas quality at site directly.

According to EN 12021 requirements, test breathing air quality;

Test Procedure:

1. Clean exhaust port.

2. Connect pressure reducer valve to the exhaust valve.

3. Place the monitor tube inserted into the measuring device.

4. Turn on the air supply, while pinch stopwatch.

5.When the detection reaches a predetermined time, turn off air supply.

6. Remove the tube monitor, reads the value and recorded.

International breathing compressed air quality standards

Registration number	Normal pressure (Bar)	Water mg/m3	Oil mg/m3	CO ppm(v) {ml/m3}	CO2 ppm(v) {ml/m3}
EN 12021	40-200(Compressed air container)	<50	<0.5	<15	<500
	>200(Compressed air container)	<35	<0.5	<15	<500
	<300(air compressor)	<25	<0.5	<15	<500

Chapter V Maintenance instructions

5.1 Maintenance record

We recommend that all maintenance work is recorded in the service record book, the date and the work carried out so as to avoid expensive repair costs result in forgetting of the maintenance work. If you need to claim during the maintenance period, can also prove a regular basis maintenance work has nothing to do with the damage caused by maintenance. For this reason, we provide the appropriate care and form to you, please truthfully fill in, and signed and dated.

5.2 Maintenance guidance

 Before any work, be sure to turn off the machine, and fully relieve the pressure of the entire system.

 Definitely do not use welding or forging for repairing pressure pipe.

 Often apply spray leak agent (non-corrosive) at connectors to check for leaks, repair all leaks.

 Use only original parts to do maintenance.

 According to the manufacturer's instructions, and maintenance of the motor.

 According to relevant regulations, disposal used cartridges properly.

5.3 Lubricants

Type of lubricants

It is very important to use correct oil for proper maintenance of the compressor in accordance with the different uses of the compressor. Following requirements need to be considered:

1. Less precipitate.

2. No carbon deposition phenomenon, especially in the valve.

3. Good anti-corrosion properties.

4. Physical, or on toxicology, is suitable for breathing.

Because of the thermal load reason, only high-quality lubricating oil can be used. We recommend that you only use the recommended lubricants.

Lubricant and maintenance frequency

Check the oil level before each use;

The new machines run 25 hours after the first oil change;

After running 75 hours, the second oil change;

After running for 250 hours, the third oil change;

After every 250 operating hours change oil once;

Without considering cumulative run time, we recommend change oil at every 12 months.

Lubricant replacement Precautions

 In order to prevent serious damage to the compressor, when replacing lubricant, the compressor must be strictly observed and obey following commands:

1. Only add or replace the same type lubricant.

2. When machine is hot,oil disposal in fully

3. Check whether valves, cooling pipes, oil-water separators, filtration systems, and all gas piping have deposits.

If you find a precipitate, refer to the following steps:

1. Replace or clean the valve, cooling pipes of sediment, filtration systems, and the entire gas pipeline.

2. Inject new oil into the compressor.

3.The extent of approximately 100 hours, check oil contaminated and, if necessary, replaces the oil once again.

Check the replacement time of lubricating oil

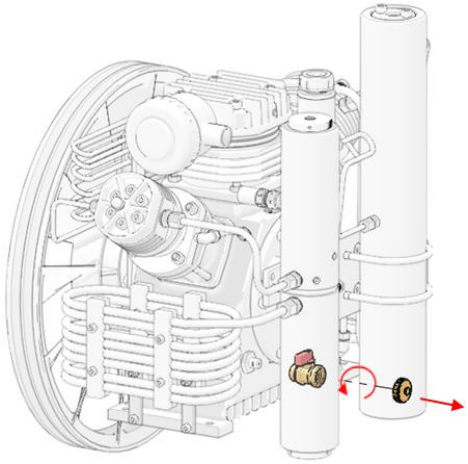
When the low oil level alarm indicator on operation panel lights up the compressor needs to be refueled.

Lubricant replacement procedure:

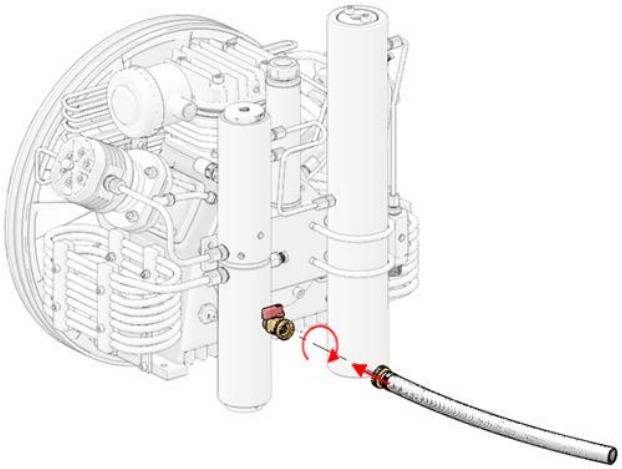
Each oil change needs about 2 liters of CE750 lubricants.

1. Start compressor to run 5 minutes, heating oil, turn off the compressor.

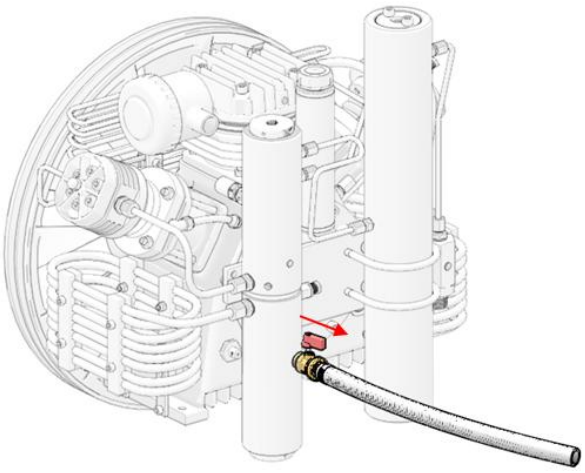
2. Rotate to remove oil drain plug.



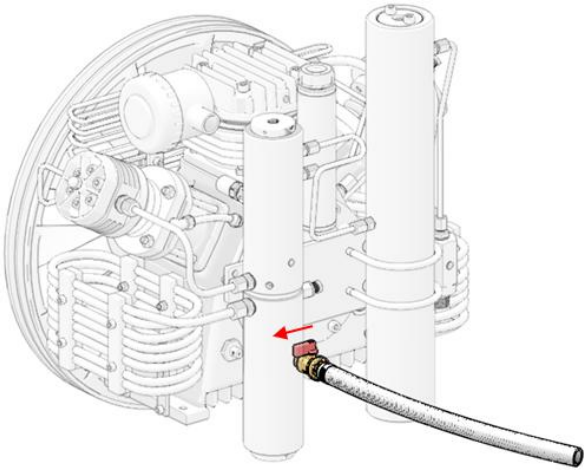
3. Connect to a dedicated drain hose, put a suitable container at the other end of the tubing.



4. Turn the drain ball valve to the marked position and drain the oil completely.

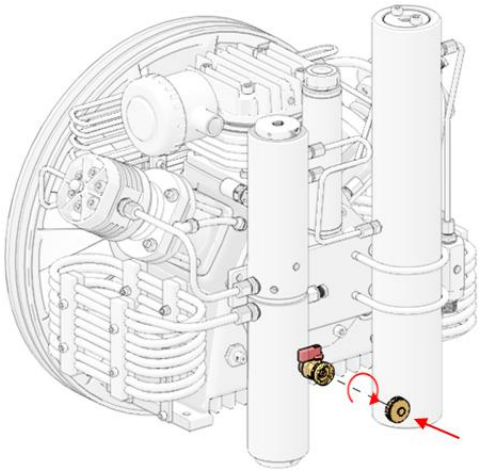


5. Rotate to close the oil drain valve.

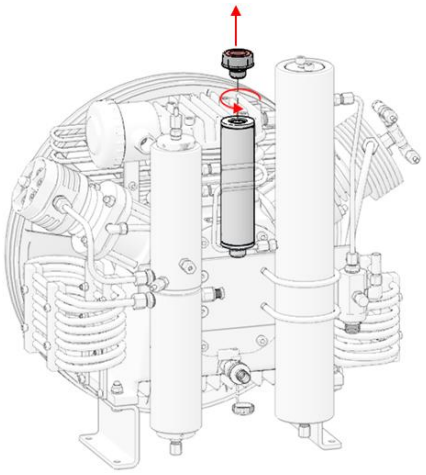


6. Disconnect the oil drain hose.

7. Reinstall the oil drain plug and tighten it.

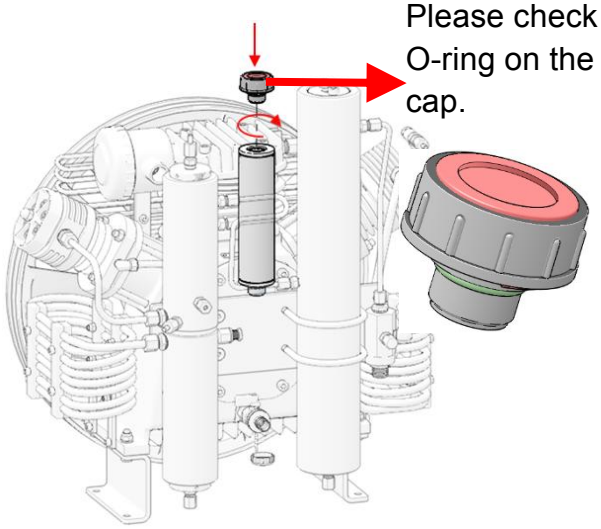


8. Remove the oil filler cap and refill the compressor using a funnel. (Use only recommended specialty lubricant. Do not overfill.)



9. Check oil level through the Oil level display tube.

10. Check the O-ring on the Oil filler cap, install it to the cap.



5.4 Filtration System

O-ring safety hole

O-ring safety holes prevent pressurization when no O-rings or O-rings are ruptured.

⚠ No O-ring or O-ring rupture does not produce high pressure!

No O-ring or O-ring rupture vent on the seal is not on the air to escape into the atmosphere, not the formation of high pressure, so as to ensure that unfiltered air will not be supplied to the gas consumption of the device.

The quality of the O-ring on the filter can be checked by means of a vent. If even if the filter is still installed on the air leakage from the vent, it is not broken O-ring is installed damaged. Remove the filter element for inspection and replace the filter element or O-ring if necessary.

Filter cartridge type and life

Cartridge includes a molecular sieve and activated carbon.

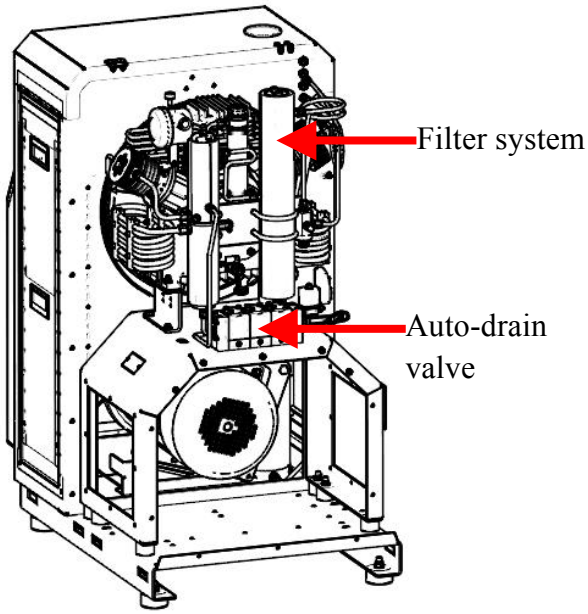
- Filter cartridge model: G11B-HL22-FD20
- The intake air temperature was 20 ° C; it can handle air 500m3.
- After activated carbon filters' production, immediately vacuum-packed, shelf life of two years.

⚠ Prior to the actual use, it is strictly prohibited to remove spare cartridge from its vacuum bag. Otherwise, the high sensitivity of the filling material will absorb moisture from the ambient air, and slowly saturated and cannot be used anymore.

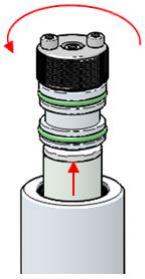
⚠ G11B-HL22-FD20 filter cartridge, at the intake air temperature is 20°C, can handle air 500m3 . The effect and filter life will vary depend on air humidity, ambient temperature and other factors. It is necessary to check compressed air quality, in order to determine whether need to replace the filter cartridge.

Replace the filter cartridge procedures

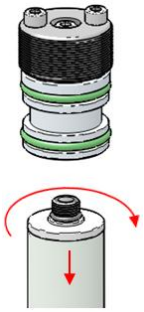
1. Turn off the compressor, release the all air in filter housing(Open the manual/automatic drain valve directly to release pressure). When no more air is leaking from the drain valve, the filter is completely released.



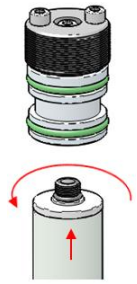
2. Remove the top cover of the filter cartridge by rotating it (make sure that the filter cartridge is fully depressurized) and remove the cartridge.



3. Rotate the filter element and remove it.



4. Remove the new filter cartridge and insert it into the filter AY21-F130 inner cover.



5. After cleaning the filter AY21-F130, clean the thread and seal with grease, refit the filter cartridge, and tighten.

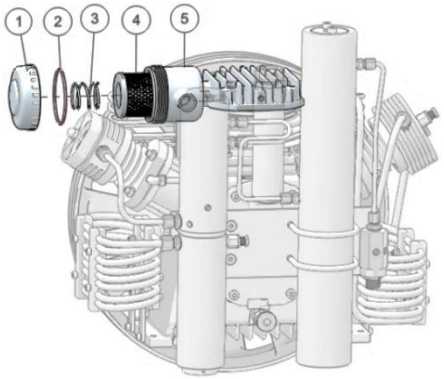
Used filters should be dealt with strictly in accordance with local regulations.

The filter can filter water, oil, and hydrocarbons, but can not filter out toxic gases.

5.5 Intake air filter

Brief description

You can use a kind of pore filter device to filter intake air.



1- Air filter cap 2- OR-74*2.6

3- Cylindrical compression spring-39*2*35

4- Inlet filter-65*68

5- Cylinder head-9500 with intake filter housing

Once the intake air filter is contaminated, it will cause clogging of the intake, the compressor valves will be damaged, the compressor cannot be pure air compressor and may cause dangerous due to overheating.

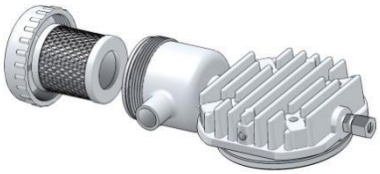
You can use compressed air to clean the filter. Damaged air inlet filter should be replaced immediately.

Intake filter maintenance frequency

1. Every 5 hours run, check the intake filter, if there is dust, the filter can be rotated 90 degrees and then use again, the rotation must be replaced after three times;
2. Every 125 hours operation, replace the intake air filter cartridge.

Air intake filter maintenance frequency

1. Turn the air cleaner end cap counterclockwise.
2.Remove the cylinder compression spring-39 * 2 * 35 and the inlet filter -65 * 68.
3. Clean the cylinder head -9500.
4. The new filter into the cylinder head-9500 (note the direction of the filter when installed consistent with the icon).

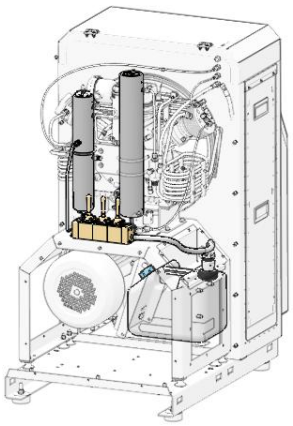


5. Insert the cylinder compression spring -39 * 2 * 35 and tighten the air filter cover.

5.6 Oil and water separator

Brief description

The oil-water separator is installed on the compressor after the third stage. It is designed to remove water and oil formed by the cooling of the compressed medium after compression and to remove it. In order to remove the dirty contaminants, also comes with a copper filter.



Oil/water separator maintenance frequency

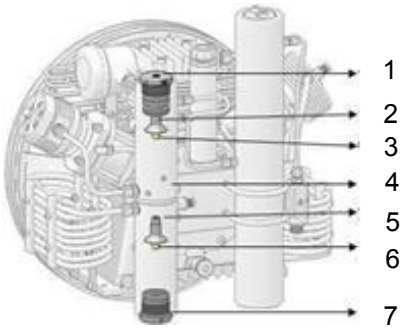
Following Oil/water separator maintenance work is needed:

- Clean and inspect the oil-water separator

Every 100running hours.

- Replace the sintered filter element every 1000 Running hours.

Clean and check the oil and water separator and replace copper filter



1- Gas-liquid separator-APD0 top cover
2- Separation cap 3- Copper Filter-R1 / 4
4- Gas-Liquid Separator-APD0 housing
5- Separation cap 6- Copper Filter-R1 / 4
7- Gas-Liquid Separator-APD0 Bottom Cover

1. Rotate counterclockwise to remove the Gas-liquid separator-APD0 top cover. Remove the Copper filter-R1 / 4 from the top cover.
2. Rotate counterclockwise to remove the Gas-liquid separator-APD0 bottom cover.
3. Use a socket wrench to remove the Copper filter -R1 / 4

4. Clean the two Copper filters -R1 / 4, the best way is to use hot soapy water, and compressed air to be dried.

5.7 Back pressure valve

Brief Description

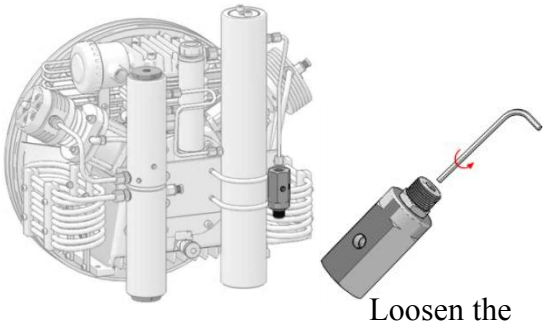
The back pressure valve is installed at the outlet of the filter and ensures that there is some pressure in the filtration system at the beginning of air flow for stabilization to reach the best filtration effects. It also guaranteed the appropriate working environment for the final cylinder.

The back pressure valve is factory set at 120±10 bar.

Maintenance

The back pressure valve is factory set in accordance with requirements and generally does not need regular maintenance and readjustment.

If the back pressure valve needs to be adjusted, loosen the lock nut and adjust bolt to the required pressure by using an appropriate hex wrench.



Loosen the lock nut

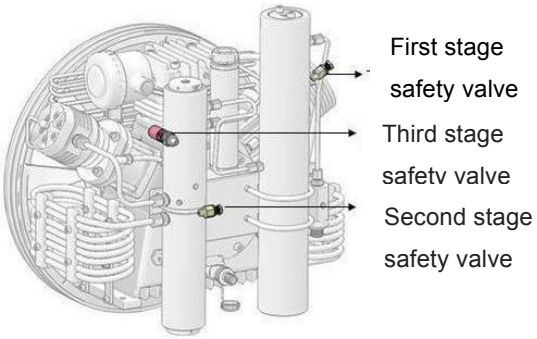
Counterclockwise = increase pressure;

Clockwise = reduce pressure;

5.8 Safety valve

Brief description

LUXON COMPRESSORS Each stage is equipped with a safety (relief) valve. The safety valve ensures that the pressure in each stage of the compressor does not exceed its rated limits. The final stage safety valve controls the maximum working pressure of the compressor, which can be set during commissioning.



Factory setting of safety valve:

First stage: 8Bar

Second stage: 40Bar

Third stage: 225Bar or 330Bar

Safety valve maintenance frequency

Safety valve maintenance need to do following work:

Use before each time, check the safety valve if it is leaking;

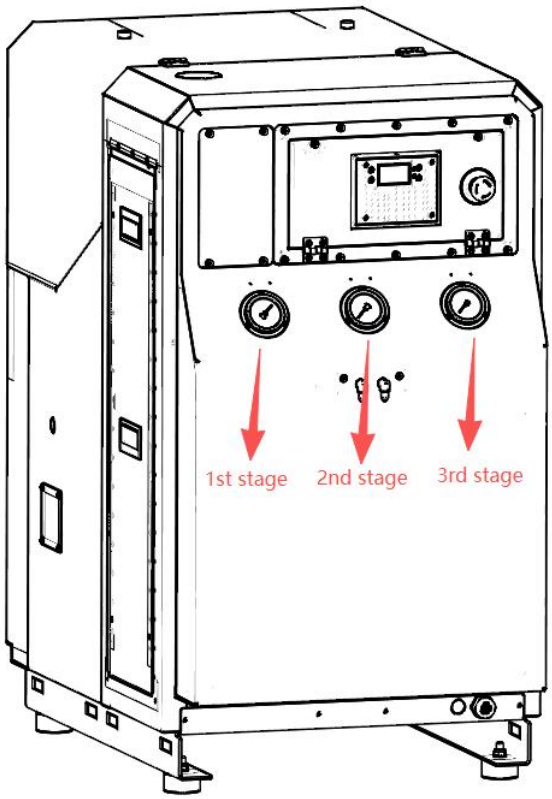
Every year, or when it is necessary, check relief pressure of the final safety valve.

Check relief pressure of the final safety valve

In case all valves closed, pressure of the compressor to the final safety valve began to leak, you can see on the pressure gauge for relief pressure if the pressure exceeds the set 10%, the safety valve need to be replaced.

5.9 Pressure gauge

Brief Introduction



Icon had a red mark on the pressure gauge at the final stage, pointed out the value of the maximum working pressure.

Pressure gauge maintenance frequency

The following maintenance work for the pressure gauge is needed:

- New machine running 25 hours later, check the pressure gauge;
- Every year or/and when necessary, check the pressure gauge.

Check pressure gauge

1. Check the pressure gauge in the absence of pressure is zero.
2. If the pressure exceeds the pressure gauge that, but corresponds to the safety valve not to discharge, or point out that pressure is too low. In order to ensure the normal operation, it is necessary to inspect the pressure gauge.
3. In the availability of small error is normal and can be ignored. If great accuracy when required to readjust the pressure gauge, or returned to the manufacturer for repair.

5.10 Valve

Brief introduction

The valve plate is a very important component of the compressor that is subjected to wear. The quality and performance of the valve plate directly impacts the compressor performance. The operation of the valve plate is made from the medium. The intake valve opens when air flows into the cylinder and closes at the beginning of the compression stroke.

General description for checking and replacement of valve plate

Replace valve plate must be replacing as an entire set

1. Note the order of installation
2. Inspect every component of the valve. Replace the valve if any damage is observed.
3. Valve cover screws must be tightened with a torque wrench. For additional information, (refer to the section 7.2 Torque value).
4. Inspect and clean between the valve and the valve head.
5. Do not use sharp tools to clean the valves. Immerse/soak the valve plate in special cleaning solution and clean carefully with a soft brush. Rinse and dry thoroughly before reassembly.
6. Only use gaskets and O-rings that are good condition.
7. Shut down the compressor 30 minutes after restarting, cool down to the environmental temperature and re-tighten screws and nuts of the valve. Otherwise, the valve may be as loose due to gaskets.
8. When all the installation work completed, stirring the pulley manually, check that all parts are properly installed.

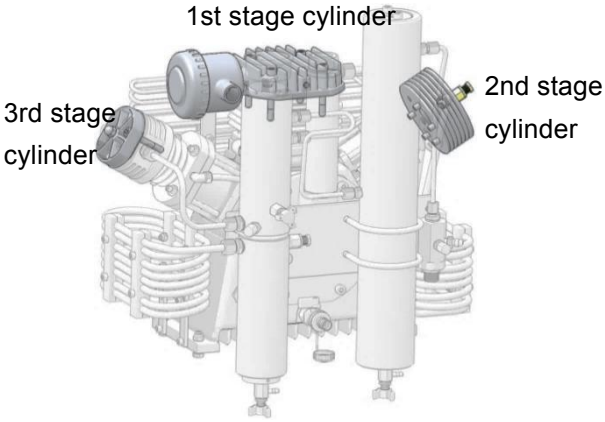
Valve plate maintenance frequency

- After the first 25 hours of operation, tighten fixing screws on the valve top cover;
- Every 500 operating hours, it is necessary to remove the valve and check;

Every 2000 operating hours or 2 years, replace the valve to avoid fatigue damage.

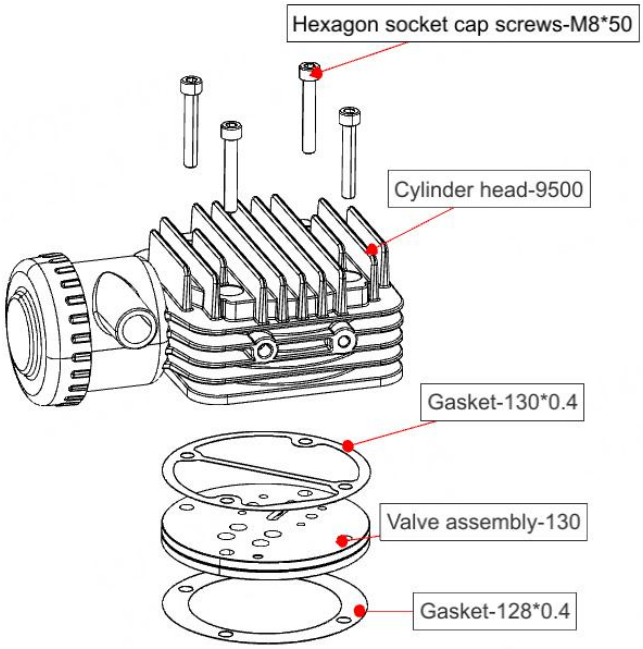
Tighten fixing screws on the valve top cover

Use torque wrench (refer to section 7.2: torque values) tighten the fixing screws on the valve top covers of 1st, 2nd, 3rd stages.



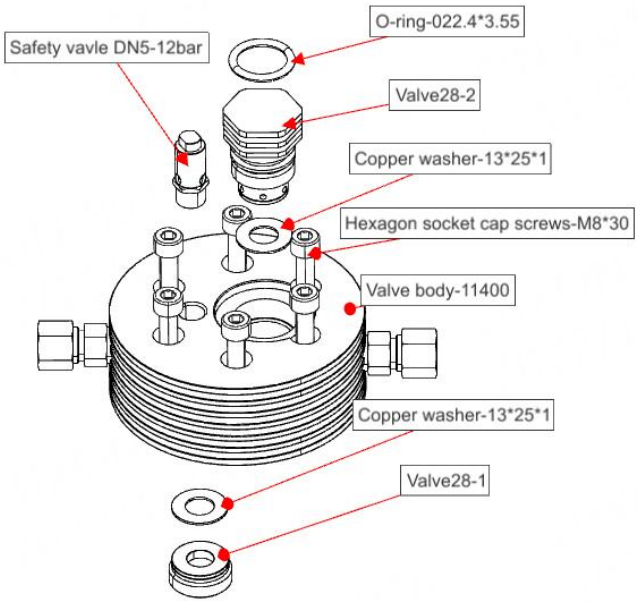
Check and replace valve

Check and replace the first stage valve



1. Loosen the cap nut of the condenser tube on the Cylinder head-9500 and loosen the condenser tube.
2. Loosen cylinder head-9500 on the hexagonal head screws-M8 * 50, loosen cylinder head-9500. Remove the Gasket -130 * 0.4, Valve assembly-130, and the gasket -128 * 0.4.
3. When reinstalling, pay attention to the installation sequence and installation direction.

Check and replace the second stage valve

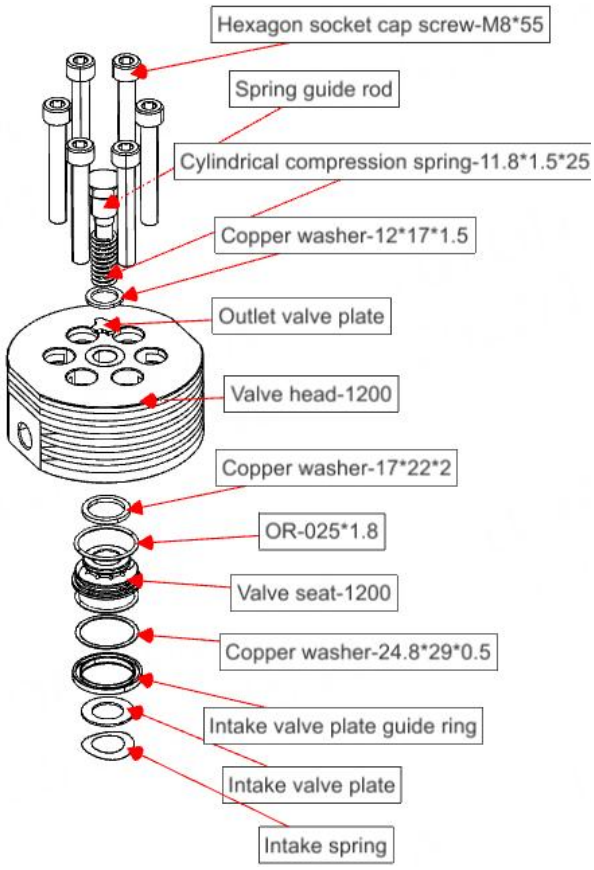


1. Loosen the cap nut on the condensate tube of the valve body -11400 and release the condenser tube.
2. Loosen the hexagon socket cap screw-M8*30 on the valve body -11400 and release the Valve body -11400.
3. Loosen the valve 28-2 with an open-end wrench.
4. Remove the valve 28-2, OR-22.4 * 3.55 and the copper washer -13 * 25 * 1.
5. Loosen the valve 28-1 with a pointed nose pliers.
6. Remove the gas valve 28-1 and the copper washer -13 * 25 * 1.
7. Loosen the Safety valve-DN5-12bar with an

open-end wrench.

8. When reinstalling, pay attention to the order in which the components are installed.

Check and replace the third stage valve



1. Loosen the cap nuts on the cooling pipe of valve head-1200, and loosen the cooling pipe.

2. Loosen 6 hexagon socket cap screws-M8*55 on valve head-1200 to remove valve head-1200.

3. Remove intake spring, intake valve plate, intake valve guide ring, copper washer-24.8*29*0.5, valve seat-1200, 2 o-ring-025*1.8 and copper washer-17*22*2.

4. Use a wrench to loosen spring guide rod. Remove cylindrical compression spring-11.8*1.5*25, copper washer- 12*17*1.5 and outlet valve plate.

5. When reinstalling, pay attention to the installation order and direction of each component.

5.11 Inflation valve

The inflation valve maintenance frequency

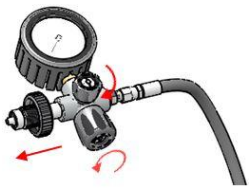
Every time before use inflation valve, visually check the inflation hoses for damage, and threaded connections is in intact;

25 hours after the first operation, check the inflation valve function and air tightness.

Check the inflation valve for leakage

1. Check the Inflation valve tightness: First turn off (close) the vent knob and turn on (open) the inflation valve main switch knob to the filling cylinders, use soapy water to inspect for leaks.

2. Check inflation valve's filling function: Turn off (close) release knob, turn on (open) the inflation valve main switch knob to fill the inflation valve and test for air discharge in the direction of the arrow as shown below. If has air spewed out, means the inflatable valve's function is properly, if hasn't air spewed out, need to check and repair.



3. Inspecting the inflation valve vent function: Turn on the relief valve to fill the inflation valve and inspect if air discharges from the vent. If has air spewed out, means the inflatable valve's function is properly, if hasn't air spewed out, need to check and repair.

5.12 Cooling pipe and fittings

The frequency of inspecting the cooling pipes and fittings

After run the new machine runs for 25 hours, inspect the cooling pipes and fittings for air leakages.

Inspect the air leakages of cooling pipes and fittings

After starting the compressor, spray the leaking agents (non-corrosive, like soapy water) on the cooling pipes and fittings, the appearance of bubbles indicates leak. It's normal if no leakages.

5.13 Compressor drive system

Brief Introduction

Compressor drive system includes: belt, three-phase asynchronous motor and electric control system.

Starter motor or use the electric control system to start compressor to work, the following components are necessary: the main switch and fuse, both must be installed by the customer.
Circuit diagram for compressor internal control, refer to Appendix.

Belt

Compressor is driven by the drive motor through the belt. The motor mounted on the machine base and adjusted for proper belt tension in order to drive the compressor.
Compressor unit is driven by electric motor through v-belts, and it is necessary to check the v-belt tensioning and wear periodically.

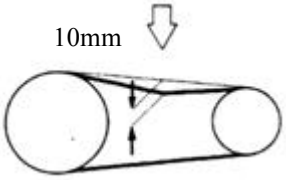
Belt maintenance frequency

Re-adjust belt tension after the first 25 hours running time;
Inspect the belt for damage or/and wear after every 125 running hours.

Check the belt tension and wear

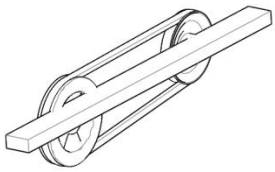
Improper belt tension and pulley alignment will cause premature wear of the belt.

The ideal belt tension is the minimal tension at full load without sliding. Measure the belt tension by applying pressure to the belt between the two pulleys with your thumbs. Deflection of 10mm indicates moderate tension.



Adjust the belt tension degree

1. Slightly loosen the motor mounting nut.
2. Adjust motor position until the correct belt tension level is reached.
3. Tighten motor mount nut.
4. Run the motor for about five minutes. Stop the motor and inspect the V-belt tension. Readjust if necessary.
5. After adjusting the tension and tightening the motor mount nuts, verify that the two pulleys are in a straight line by putting a ruler against the compressor pulley and the motor pulley. The ruler should simultaneously touch both sides of each pulley.



Motor

Except external cleaning, the drive motor does not need any other maintenance. Some motor bearings have to be lubricated according to its models. Please comply with the provisions stated on the motor. For the safety sake, all live parts must have protective covers.

Gasoline engine

Gasoline engine maintenance with reference to the gasoline engine manual.

5.14 Cooling system

The cylinders, intermediate and final cooling pipe of the compressor are all air-cooled.

For this reason, the gravity of compressor at the crankshaft end, a cooling fan is mounted on the side of the crankshaft of the motor pulley and extracts cooling air from surroundings through the fan cover.

Cooling system does not require regular maintenance.

Chapter VI Re-enable the compressor

6.1 Generous state

If the compressor will not be used within the next six months, you must follow these instructions to save: Ensure that the compressor placed in a dry, dust-free room, covered only with a compressor plastic sheeting, plastic sheeting and make sure that does not fall Precipitate. However, it should always open plastic sheeting, and cleans the machine. If you cannot follow the above instructions, or compressor needs to store more than two years, please contact the supplier.


Compressor is intolerance with salt water, if not active, please put it in a dry place.

6.2 Storage preparation

Prior to collection of the compressor, the compressor is started and maintained at the set working pressure for 10 minutes, and then do the following:

- Check all your pipes, filters, valves (includes safety valves), whether there is a leak.
- Tighten all connector locations.
- All of 10 minutes after the gas valve or compressor air outlet opening, under the minimum working pressure, let the compressor work for 5 minutes.
- After these 5 minutes, stop the machine, drain the condensate separator within the sediments, removal of the system pressure, and close the gas valve.
- Open the filter and screw apply lubricating paste.
- Ensure that the filter in the filter, this is to ensure that the Save program, oil does not enter the gas pipeline.
- Remove the inlet filter from valve head and pipe.
- Cooling compressor.

6.3 Store Compressor

- Start the compressor, at the time of the compressor running, injecting into a small amount of compressor oil from the valve head of the intake valve. Do not let the compressor over heat; make the compressor oil to maintain its viscosity.
- Compressor off.
- Close all valves.
- On the air inlet cover a dust cover.

6.4 Store motors

Referring to the motor manual to store motor

6.5 Save the gasoline engine

Save the gasoline engine with reference to the gasoline engine manual.

6.6 Preventive & maintenance during storage period

In accordance with the following procedure, start the compressor once every six months:

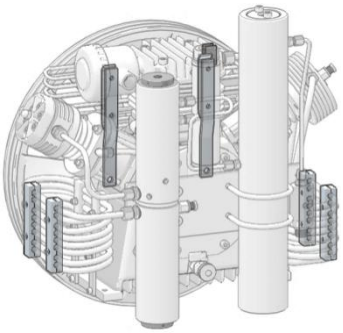
- Open the inlet dust cover, install the intake filter.
- Open the filling valve or outlet valve, allowing the compressor running for 10 minutes. Or, let the pressure gauge achieving the correct pressure.
- Turn off the compressor
- Open condensate drain valve, drain the condensation and again close the condensation drain valve.
- In accordance with the chapter "store the compressor" section, follow up the compressor store procedures.

6.7 Replacing compressor lubricants

- After long time storage, compressor and engine oil have be in the old age, you must let them go and replaced in every two years.
- These times are stored when the compressor in accordance with procedures to store, and to develop in accordance with the retention period crankcase seal the case.
- After replaced lube oil, start the compressor and the engine; work at an appropriate time limited period.
- At every 6 months, you start the compressor; note that the compressor is lubricated properly.

6.8 Check items after a period of time storage

- Check the inflation valve function and air tightness (refer Section 5.11).
- Check and clean the air intake filter (refer section 5.5).
- Check and clean filter cartridge (refer section 5.4).
- Check the belt tension and wear (refer Section 5.13).
- Check the air leakage of the cooling tube and fittings (refer section 5.12).
- Check the condenser holder is tightened.



- Check the pressure gauge without pressure whether returned to zero (refer Section 5.9).
- Tighten the valve cover fixing screw (refer Section 5.10).

6.9 Re-start the compressor

After the compressor is stored for some time, take the following steps:

- Open the air inlet dust cover, install intake filter.
- Check the compressor oil level.
- In accordance with the instructions manual related to motor.
- Check engine. in accordance with the relevant instructions to check gasoline engine.
- Open the filter, replace the last stage filter.
- Check the V-belt, replace it if necessary.
- Check the label on the filling hose is clear and visible, replace it if necessary.
- Open filling valve, run compressor for about 10 minutes.
- Closed filling valve, make the compressor increasing the pressure.
- Check the safety valve if it is installed correctly.
- Check all connections and piping tightness.

All above steps are carried out and appropriate treatment, the compressor can be put into use.

Chapter VII Maintenance & repair instructions

7.1 Generous state

Preventive maintenance is usually included replacement valves, gaskets, sealing rings, as well as repair and maintenance work.

The compressor may be handled in a certain degree of maintenance work; however, it must be made by a certain experience and technical personnel, and note the following:

1. Cannot repair the crankshaft and bearings.

2. The safety valve cannot be repaired, but you can replace them as a whole part.

If there are repairs or maintenance issues, please contact our technical service department.

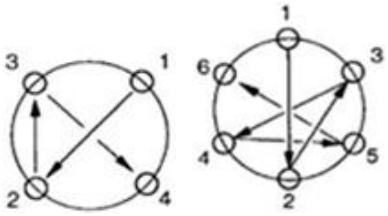
7.2 Tightening torque and order

⚠ Unless specifically specified, or be using the torque values in the table below. All valves head should screws with a torque wrench to tighten! The values given are also valid for fattening bolts when reassembling to replace the self-locking nuts.

Screw bolt	Screw thread	Maximum torque value
Her head and socket head	M6	10Nm (7 Ft. Lbs.)
Hex head and socket head	M8	25Nm (18 Ft. Lbs.)
Hex head and socket head	M10	45Nm (32 Ft. Lbs.)
Hex head and socket head	M12	75Nm (53 Ft. Lbs.)
Hex head and socket head	M14	120Nm (85 Ft. Lbs.)
Hex head and socket head	M16	200Nm (141 Ft. Lbs.)
Pipe connection (union)		Hand tighten the ring than +1/2 Hand tighten 1/2 turn more

Screw installation sequence

In order to illustrate in the figure, with all the force tighten the valve and the cylinder head screws or nuts.



Be sure to tighten all parts in the cold without pressure conditions.

7.3 Maintenance Considerations

1. O-ring grease or vaseline white grease lubrication.
2. No seals or seal copper gasket seal using thread sealant 704 can be used with raw materials if necessary.
3. The assembly process to keep the parts clean.
4. Moving parts, assembled by hand after toggle, ensure its smooth rotation or movement.

5. Install the valve to ensure the valve formation.

7.4 After completion of repair work and maintenance items

1. Check the inflation valve function and tightness (see Section 5.11).
2. Check and clean the air intake filters (see section 5.5).
3. Check and clean the filter element (see section 5.4).
4. Check the tension and wear the belt (see Section 5.11).
5. Check the tightness of the cooling tube and joints (see Section 5.12).
6. Check that the condenser tube holder is tight.
7. Check the pressure gauge without pressure whether zero (see Section 5.9).
8. Fixing screws on the valve cover (see 5.10).

7.5 FAQs and treatment method

Symptom	Cause Analysis	Treatment Methods
Unable to start	Circuit problem occurs	Check the fuses, electrical connection, wire connectors, power supply and determine the parameters to match the motor
	Check the voltage if it is too low	Contact the electricity sector
	Check the power plug if it is in good contact	Connect the power supply
	Whether hand can move fan	If not, contact your supplier
	Is the power phase right	Rapid shutdown, and check the power
	The power line is too long or too thin	Use the appropriate cable
	Are motor damage	Contact supplier
Deviation from the operation of the motor	Belt damage	change
Cannot be filled to the rated pressure	Connection leak	Tighten, clean or replace
	Check whether the safety valve does not reach the calibration pressure began to exhaust	Re-adjustment
	Check each interface pipeline	Tighten, clean or replace
	Check filling valve leaks	The interface is correct
	Check the air intake filter is	change
	Internal machine fault	Contact supplier
	Pressure gauge malfunction or not accuracy	Replace the pressure gauge
	Drain valve	Clean or replace
Compressor excessive vibration	V-belt loose	Check the belt tension, re-tighten the belt
	Compressor cylinders and / or	Tighten or replace
	Fixed foot wear	change
	Uneven ground	Adjust the placement of the compressor
Compressor overheating	Intake filter clogging	Clean or replace
	Ambient temperature is too high	Adjust the ambient temperature or shorten a single machine running time
	The cooling air intake / exhaust inadequate	Reduce or increase the length of the diameter
Compressor overheating	Intake filter clogging	Clean or replace
	Ambient temperature is too high	Adjust the ambient temperature or shorten a single machine running time

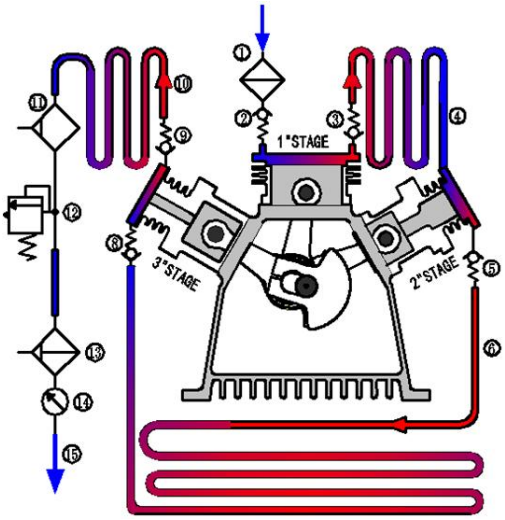
	The cooling air intake / exhaust inadequate	Reduce or increase the length of the diameter
Leakage of safety valve	Next stage's suction / pressure valve problems	Clean and / or replace
	Next stage's filter clogging	Replace
	Safety valve leak	Replace the (non-modified)
Contaminated gas	Molecular sieve needs to be replaced	Replace
	Use incorrect lubricant	Use only recommended lubricants
	Chosen the wrong filter	Replacing the correct filter
	Cylinder / piston wear	Replace
The low volume	Suction / pressure valve	Clean and / or replace
	Cylinder / piston wear	Change
	V-belt slide	Re-tensioning
Filling too slow	Check whether the safety valve does not reach the calibration	Readjustment
	Check each pipeline connection leaks	Tighten, clean or replace
	Check the filling valve leaks	The connection is correct/tight
	Internal machine fault	change
	Pressure gauge malfunction or inaccuracy	Replace the pressure gauge
	Whether the belt is too loose	Tighten belts
Excessive wear belts	Improper belt tension	readjust
	Pulleys off-axis	readjust
Air has oil smell	Filter cartridge inside saturated	Change filter
	Using inappropriate lubricants	Replacement of qualified oil
oil consumption too much	Piston rings, piston or cylinder liner damage	Replace damaged parts
	Intake filter clogging	Change filter
	Compressor too hot	Improve cooling system
Air leakage from the safety vent filter	No filter	Install filter
	Has filter there are security holes filter leak	Check / replace the O-rings

NOTE: FAQs and handling gasoline engine and three-phase asynchronous motor gasoline reference manual.

Chapter VIII Appendix

8.1 Compressor Works

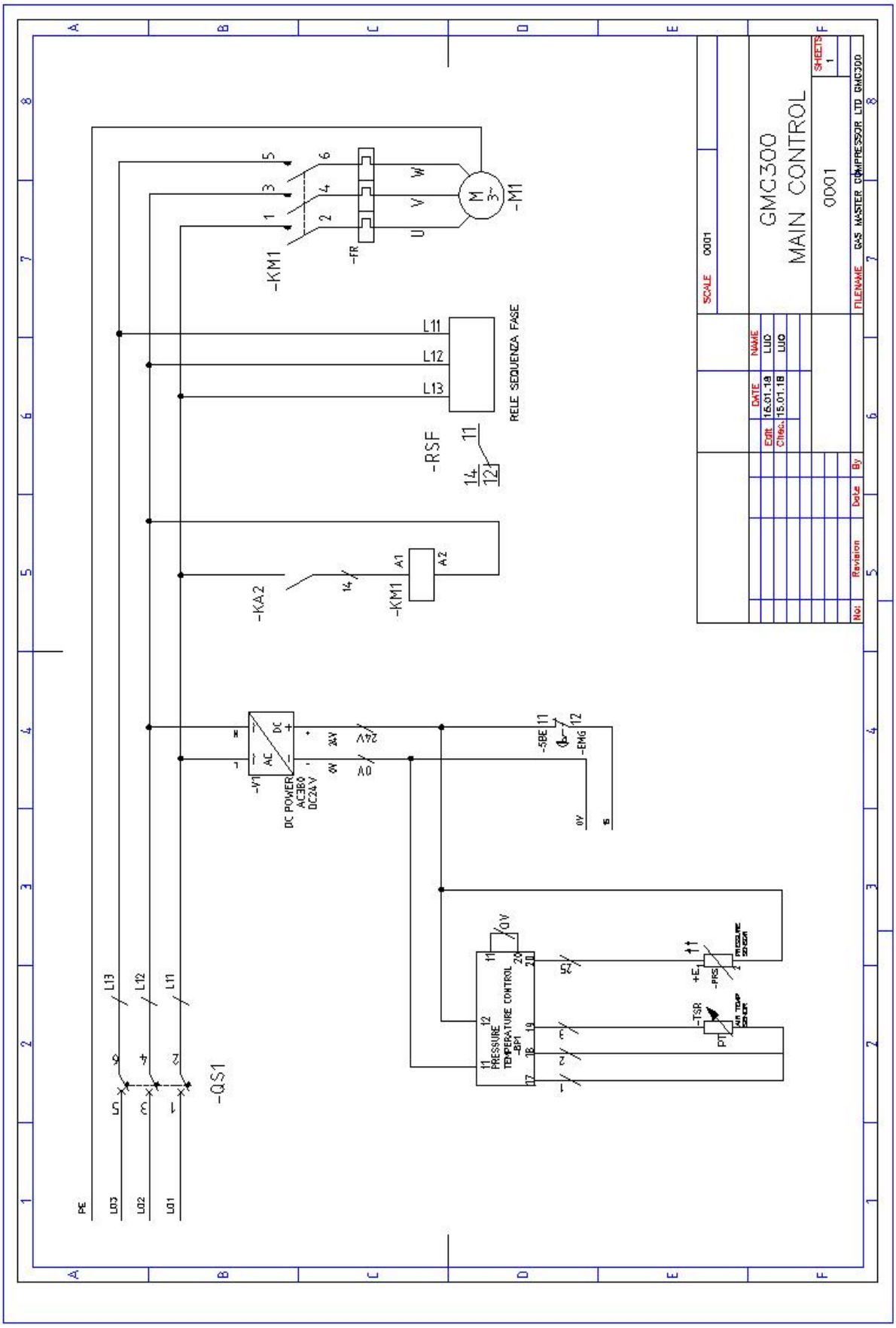
The D series compressors are a three-stage compressed air compressor with three separate cylinders with oil splash lubrication, air cooling.

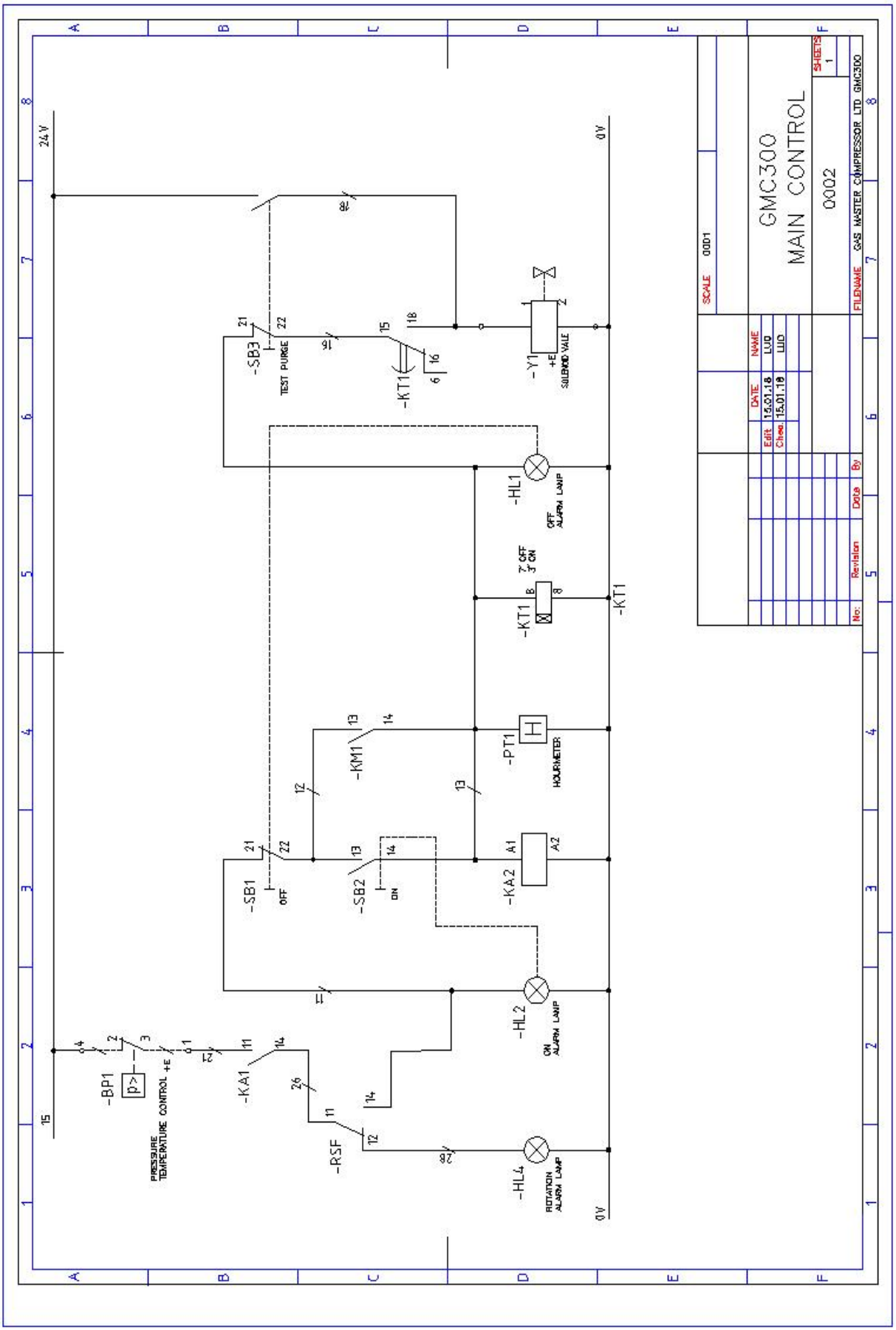


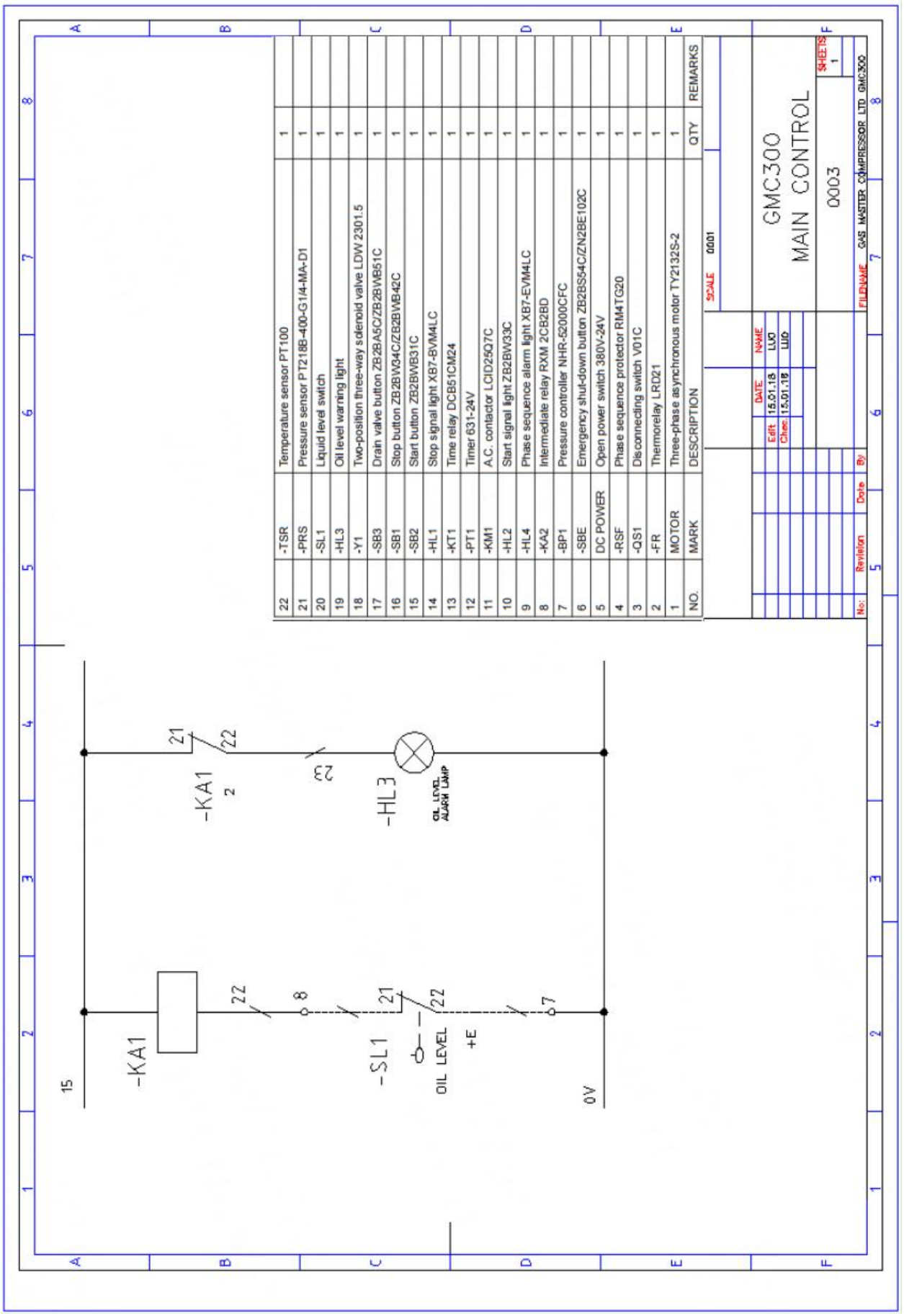
The air is filtered by the air filter and then compressed into the first-stage cylinder by the air inlet valve of the first-stage cylinder to the pressure of 5 bar. Compressed by a cylinder, from the ③ a cylinder exhaust valve into the ④ a condenser, the cooling of the gas into the secondary cylinder again pressurized to 30BAR. Compressed gas through the ⑤ two cylinder exhaust valve into the ⑥ secondary condenser, from ⑧ tertiary intake valve into the three-cylinder, directly to the compressed air to the required pressure (225 or 300BAR). (13) the activated carbon molecular sieve filter, the filtered pure air (13), and the purified air is filtered through the air inlet pipe, Through the hose discharge.

12. Safety valve 14. Pressure gauge 15. Connection tub

8.2 Circuit diagram



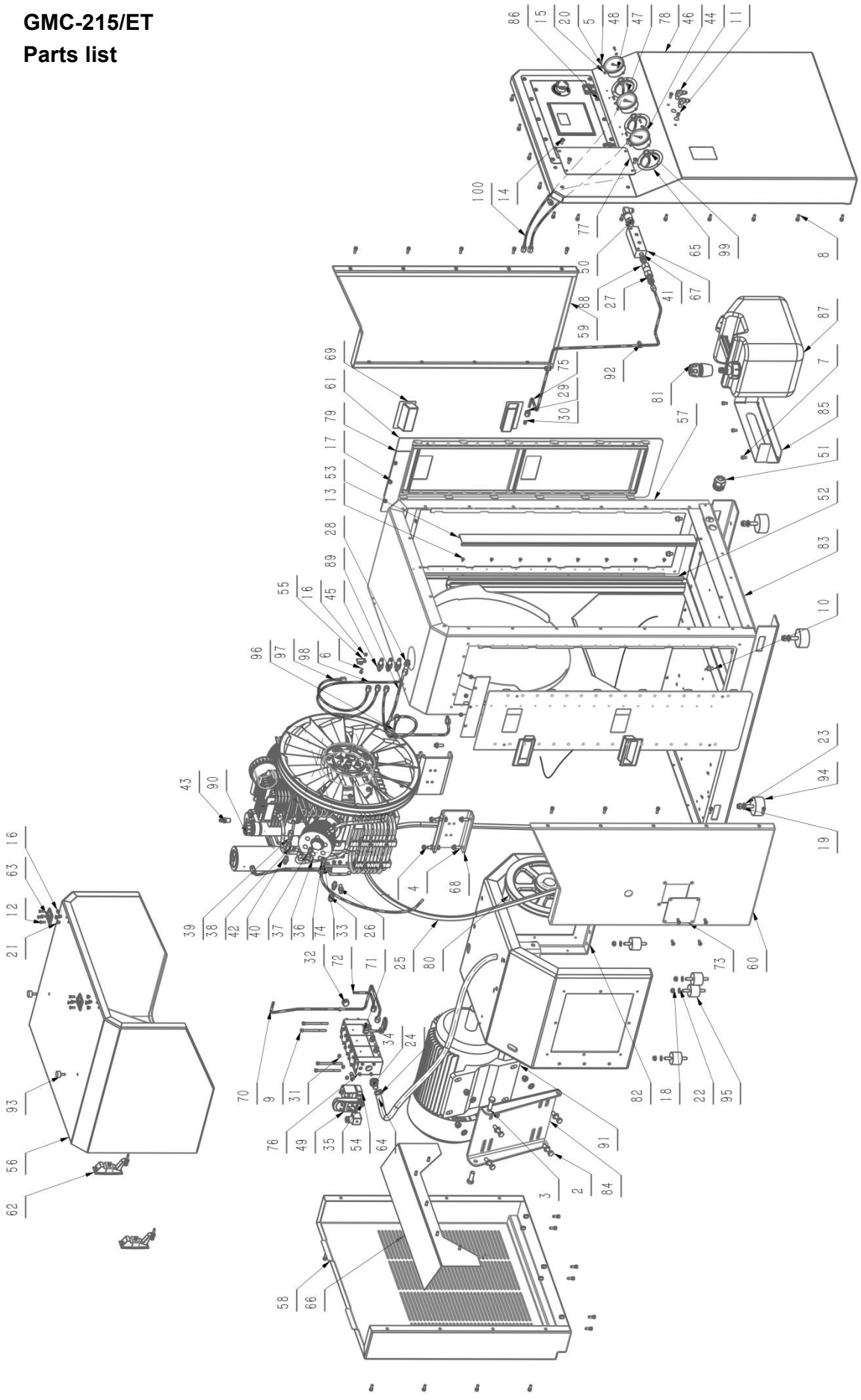

GMC300
MAIN CONTROL
0002
SCALE 0001
SHEETS 1
FILENAME GAS MASTER COMPRESSOR LTD GMC300
DATE NAME
Edit 15.01.18 LUO
Chec 15.01.18 LUO
No: Revision Date By
24 V
0V
-SB3
TEST PURGE
-KT1
-Y1
SOLENOID VALE
-HL1
OFF ALARM LAMP
-KT1
-KM1
-PT1
HOURMETER
-SB1
OFF
-SB2
ON
-KA2
-HL2
ON ALARM LAMP
-BP1
PRESSURE TEMPERATURE CONTROL +E
-KA1
-RSF
-HL4
ROTATION ALARM LAMP



NO.	MARK	DESCRIPTION	QTY	REMARKS
22	-TSR	Temperature sensor PT100	1	
21	-PRS	Pressure sensor PT218B-400-G1/4-MA-D1	1	
20	-SL1	Liquid level switch	1	
19	-HL3	Oil level warning light	1	
18	-Y1	Two-position three-way solenoid valve LDW 2301.5	1	
17	-SB3	Drain valve button ZB2BA5C/ZB2BWB51C	1	
16	-SB1	Stop button ZB2BW34C/ZB2BWB42C	1	
15	-SB2	Start button ZB2BWB31C	1	
14	-HL1	Stop signal light XB7-BVM4LC	1	
13	-KT1	Time relay DCB51CM24	1	
12	-PT1	Timer 631-24V	1	
11	-KM1	A.C. contactor LCID25Q7C	1	
10	-HL2	Start signal light ZB2BW33C	1	
9	-HL4	Phase sequence alarm light XB7-EVM4LC	1	
8	-KA2	Intermediate relay RXM 2CB2BD	1	
7	-BP1	Pressure controller NHR-52000CFC	1	
6	-SBE	Emergency shut-down button ZB2BS54C/ZN2BE102C	1	
5	DC POWER	Open power switch 380V-24V	1	
4	-RSF	Phase sequence protector RM4TG20	1	
3	-QS1	Disconneding switch V01C	1	
2	-FR	Thermorelay LRD21	1	
1	MOTOR	Three-phase asynchronous motor TY2132S-2	1	

8.3 Parts List

GMC-215/ET
Parts list

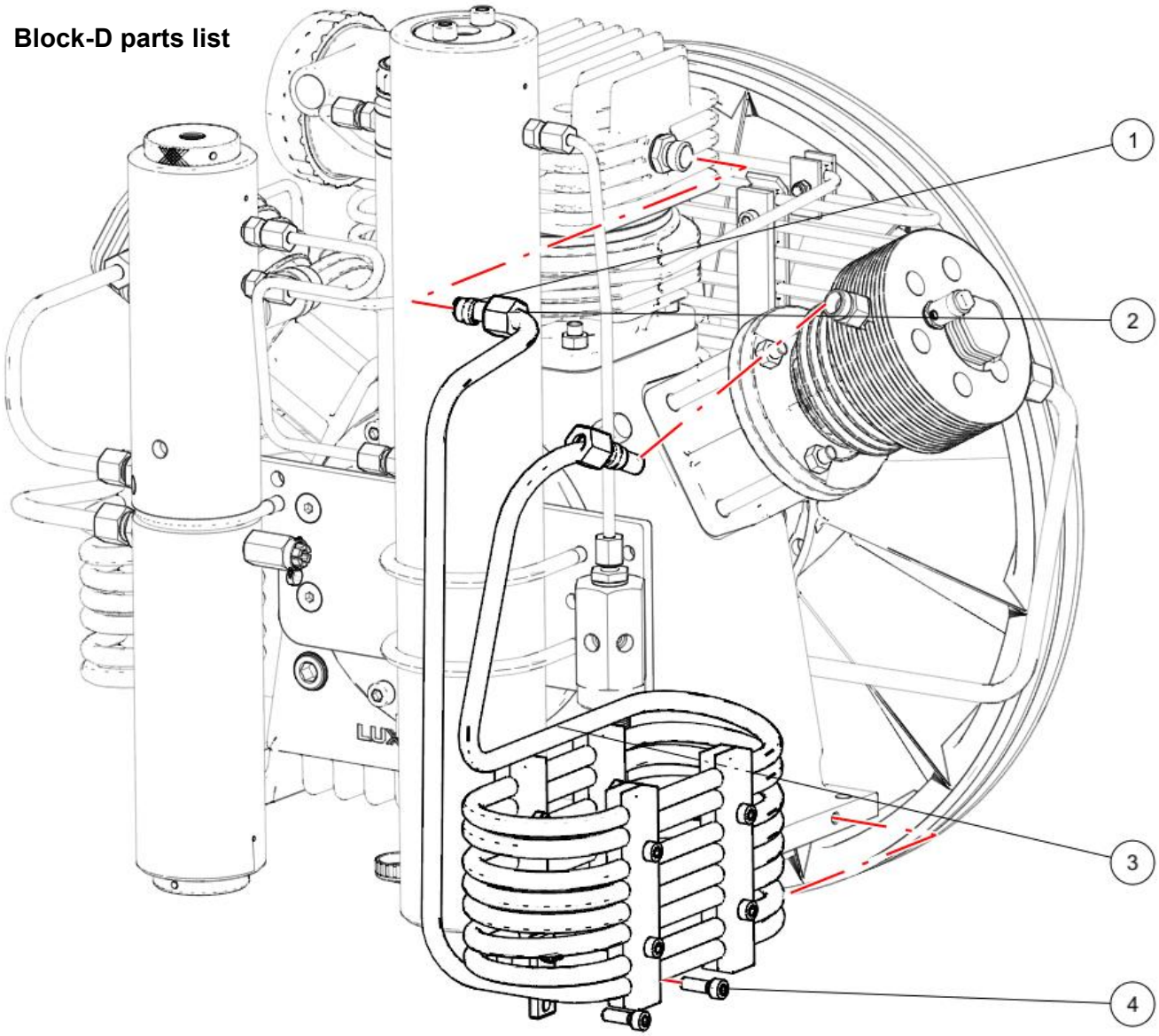


NO.	Booking number	Description
1	B01B-0800-S035	Bolt GB/T 5783 M8X35 A2-70
2	B01B-1000-S040	Bolt GB/T 5783 M10*40 A2-70
3	B01B-1200-S035	Bolt GB/T 5783 M12*35 A2-70
4	B01G-0800-S020	Hexagon bolt GB/T 16674.1 M8X20 A2-70
5	B02A-0300-S010	Hexagon socket head cap screw-M3*10
6	B02A-0500-S012	Hexagon socket head cap screw-M5*12
7	B02A-0600-S010	Hexagon socket head cap screw-M6*10
8	B02A-0600-S016	Hexagon socket head cap screw-M6*16
9	B02A-0600-S080	Hexagon socket head cap screw-M6*80
10	B02A-0800-S012	Hexagon socket head cap screw-M8*12
11	B02B-0600-S016	Hexagon socket button head screw-M6×16
12	B02I-0500-S016	Countersunk flat head screw-M5*16
13	B02J-0400-S006	Screw-M4*6
14	B02Q-0600-S016	Hexagon socket head cap screw-M6*16
15	B04C-0300-S005	Stainless steel lock nut-M3
16	B04C-0500-S008	Lock nut-M5
17	B04C-0600-S010	Lock nut-M6
18	B04C-0800-T013	Lock nut GB/T 889.1 M8
19	B04C-1000-T017	Lock nut GB/T 889.1 M10
20	B05A-0300-S007	Plain Washer-M3
21	B05A-0500-S011	Plain Washer-M5
22	B05A-0800-S016	Plain Washer GB/T 97.1 8 A2
23	B05A-1000-S020	Plain Washer GB/T 97.1 10 A2
24	B10A-0000-S019	Hose Clamp-D13-19
25	B15V-01PA-2082	V belt-SPA-2082
26	B27A-0106-0112	Connector-R1/8-6
27	B27A-0106-4212	Connecto-G1/4-6
28	B27A-0506-0012	Connector-6
29	B27B-1406-0012	Tube nut-6
30	B27C-0106-0000	Ferrule-6
31	B28B-0000-0100	Hollow hex plug-R1/8
32	B28B-0000-0400	Hollow hex plug-R1/2
33	B28D-0000-7100	Hex socket pipe plug-7/16UNF
34	B29A-0016-4400	Pagoda joint - external teeth G1/2-16
35	B29D-0006-0100	Quick connector R1/8-6
36	B29E-0006-0100	Elbow quick connector R1/8-6*4
37	B30A-1100-0000	Tee connector-RC1/8
38	B30B-0101-0000	Joint-R1/8
39	B30B-0142-0000	Adapter R1/8-G1/4
40	B30B-0201-0000	Adapter R1/4-R1/8
41	B30B-4242-0000	Joint-G1/4
42	B30C-0171-0000	Flare Fitting R1/8-7/16UNF
43	B30C-0271-0000	Flare Fitting R1/4-7/16UNF
44	B30D-0171-0000	Elbow flare fitting

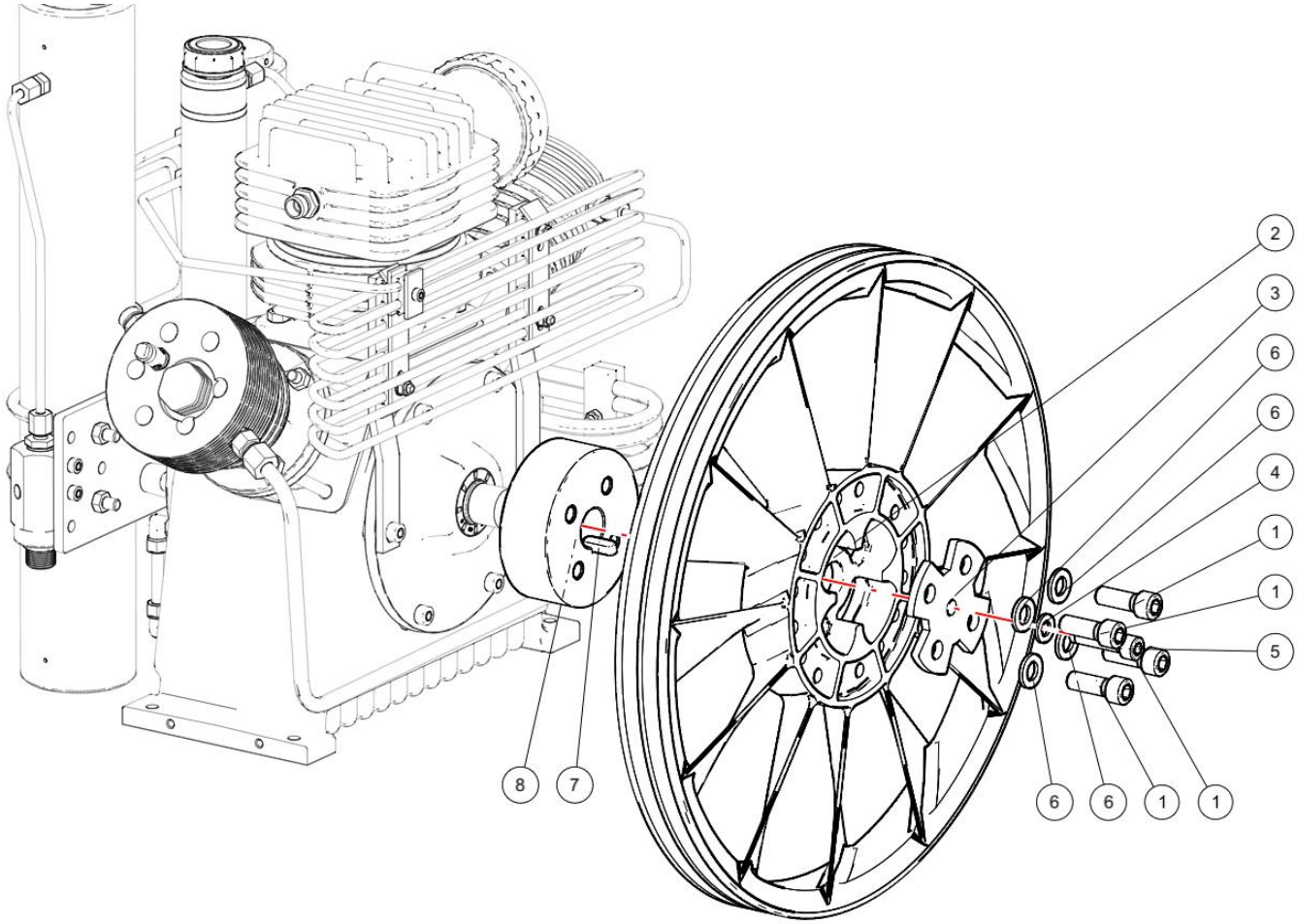
NO.	Booking number	Description
45	B30F-7171-7100	Connector-7/16UNF
46	B40A-2101-0016	Pressure gauge-16bar
47	B40A-2101-0100	Pressure gauge-100bar
48	B40A-2101-0400	WIKA pressure gauge-400bar
49	D10A-2000-0240	Timer MIC-N24-240V
50	D12A-1000-0400	Pressure transmitter-40MPa
51	D22M-6250-A000	Cable lock head-M25
52	D26C-A804-0800	Line groove-40*40*800
53	D26G-B801-0800	Line groove cover-40*800
54	D38B-1225-0001	Solenoid valve-24V-25bar
55	G02A-C06I-0168	Wire saddle-6J-S
56	G02A-D18I-0005	Back door
57	G02A-D18I-0009	Front frame
58	G02A-D18I-0010	Air intake
59	G02A-D18I-0011	Right plate
60	G02A-D18I-0012	Left plate
61	G02A-D18I-0015	Door
62	G02A-D18I-0024	Housing lock
63	G02A-D18I-0025	Door hinge-40*40
64	G02A-D18I-0029	Drain pipe
65	G02A-D18I-0030	Pressure gauge fixing ring-62*85
66	G02A-D18I-0031	Windy guide board
67	G02A-D18I-0044	Vent block-2
68	G02A-D18I-0045	Block support
69	G02A-D18I-0047	Plastic snatch-100*50
70	G02A-D18I-0049	Drain pipe 3
71	G02A-D18I-0050	Drain pipe 2
72	G02A-D18I-0051	Drain pipe 1
73	G02A-D18I-0052	Small plate
74	G02A-D18I-0061	Translucent tube 6*1*650
75	G02A-D18I-0199	Air outlet pipe 2
76	G02A-D18I-0200	Drain valve assembly
77	G02A-D18I-0289	Instruction panel
78	G02A-D18I-0290	Front panel
79	G02A-D18L-0128	Door top baffle
80	G02A-E18I-0049	V belt pulley SPA-38X280-1
81	G02A-E18I-0052	Condensation tank fitting
82	G02A-E18I-0060	Compressor block seat
83	G02A-E18I-0061	Bottom plate
84	G02A-E18I-0062	Electric motor seat
85	G02A-E18I-0066	Tank baffle
86	G02C-D16I-0021	Control box-7.5KW
87	G02C-E18I-0008	Condensation tank
88	G05B-VD12-A300	Check valve

NO.	Booking number	Description
89	G07A-D18I-0060	Air outlet pipe 1
90	G07B-D18S-A330	Block-D3
91	G08B-M533-R075	Three-phase asynchronous motor-7.5KW
92	T01R-0106-0000	Rubber hose clamp-6
93	T02A-2010-0650	Antivibration-Φ20*10-M6
94	T02A-6030-1060	Antivibration Φ60*30-M10-A65
95	T02B-4030-0850	Antivibration Φ40*30-M8-A50
96	T04A-0101-0200	High pressure hose-5*200(7/16UNF)
97	T04A-0101-0800	High pressure hose-5*800(7/16UNF)
98	T04A-0101-1200	High pressure hose-5*1200(7/16UNF)
99	T04A-0102-0500	High pressure hose-5*500(7/16UNF-G1/4)
100	T04A-0102-0900	High pressure hose-5*900(7/16UNF-G1/4)

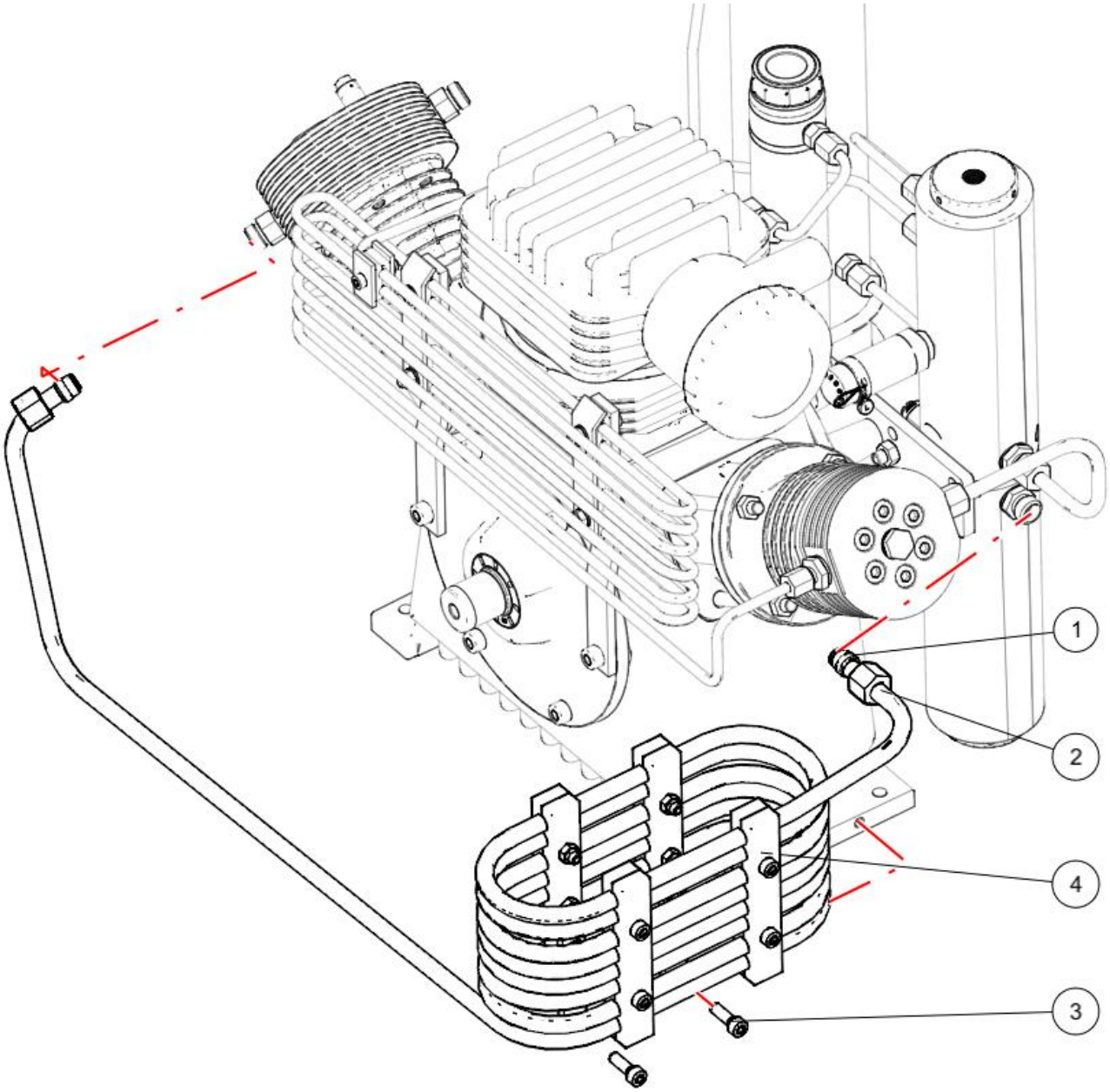
Block-D parts list



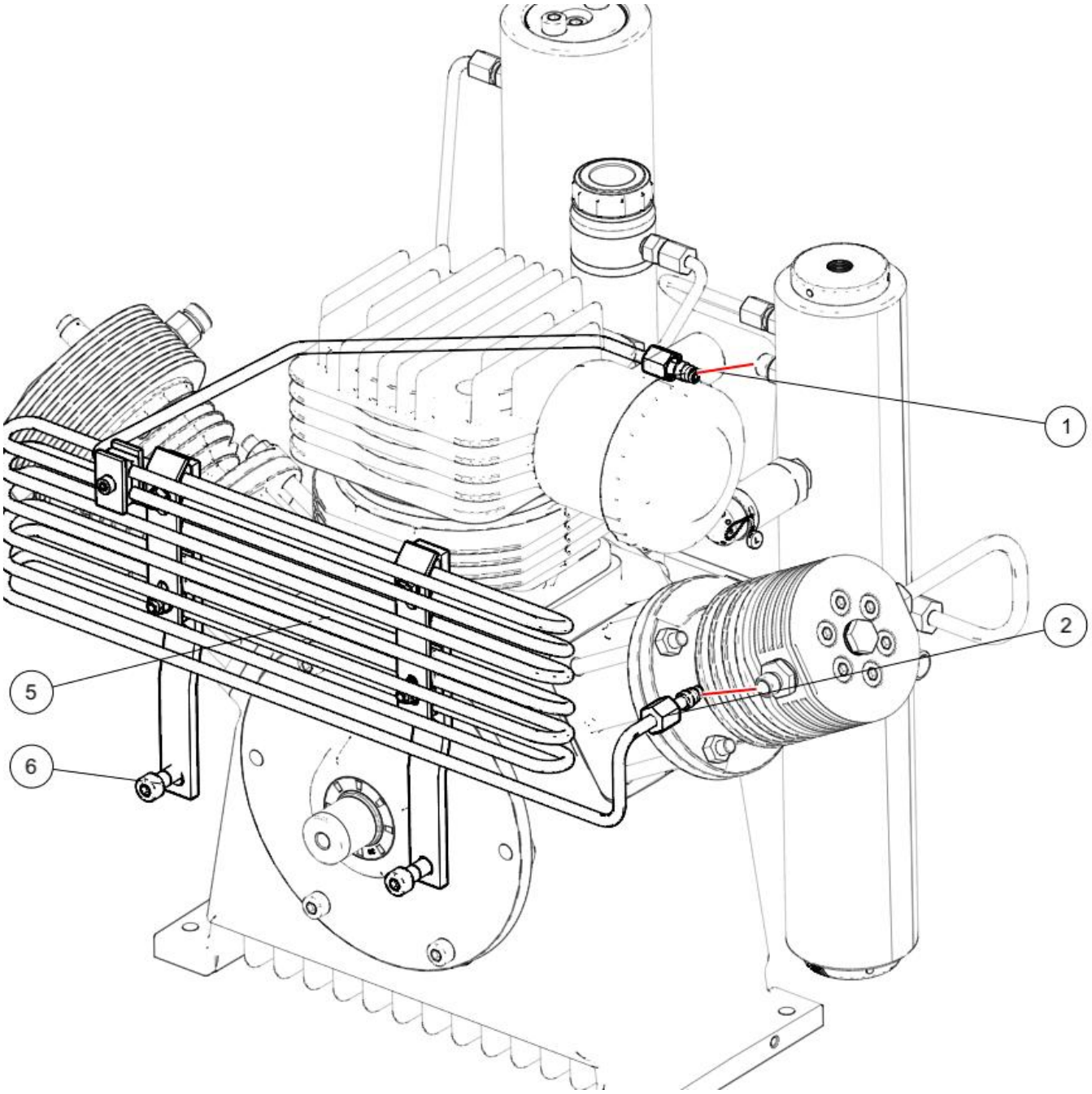
NO.	P/N	DESCRIPTION
1	B27C-0110-0000	Tube ring GB/T 3764 L10
2	B27B-1910-0016	Tube nut-10
3	G07C-D18L-0003	Cooling pipe 12-10mm assembly
4	B02A-0600-S020	Hexagon socket head cap screws-M6*20



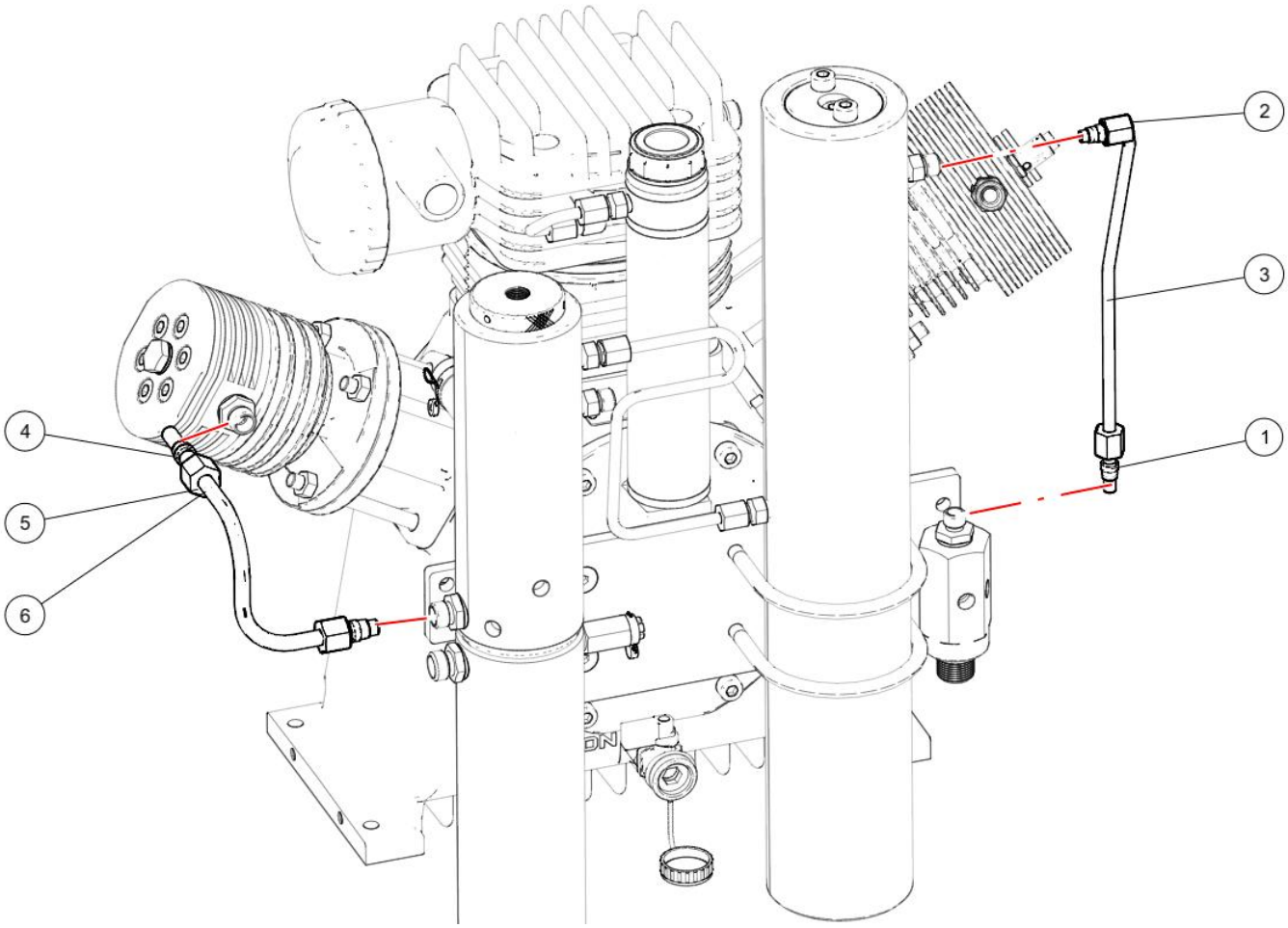
NO.	P/N	DESCRIPTION
1	B02A-1200-S035	Hexagon socket head cap screws-M12*35
2	G07A-E18L-0059	Fan-470
3	G07A-E18L-0060	Fan holding plate
4	B05A-1000-S020	Plain washer GB/T 97.1 10 A2
5	B02A-1000-S045	Hexagon socket head cap screws-M10*45
6	B05A-1200-S024	Plain washer GB/T 97.1 12 A2
7	B07B-0800-T025	Flat key-8*25
8	G07A-E18L-0065	Fan connector-112*40



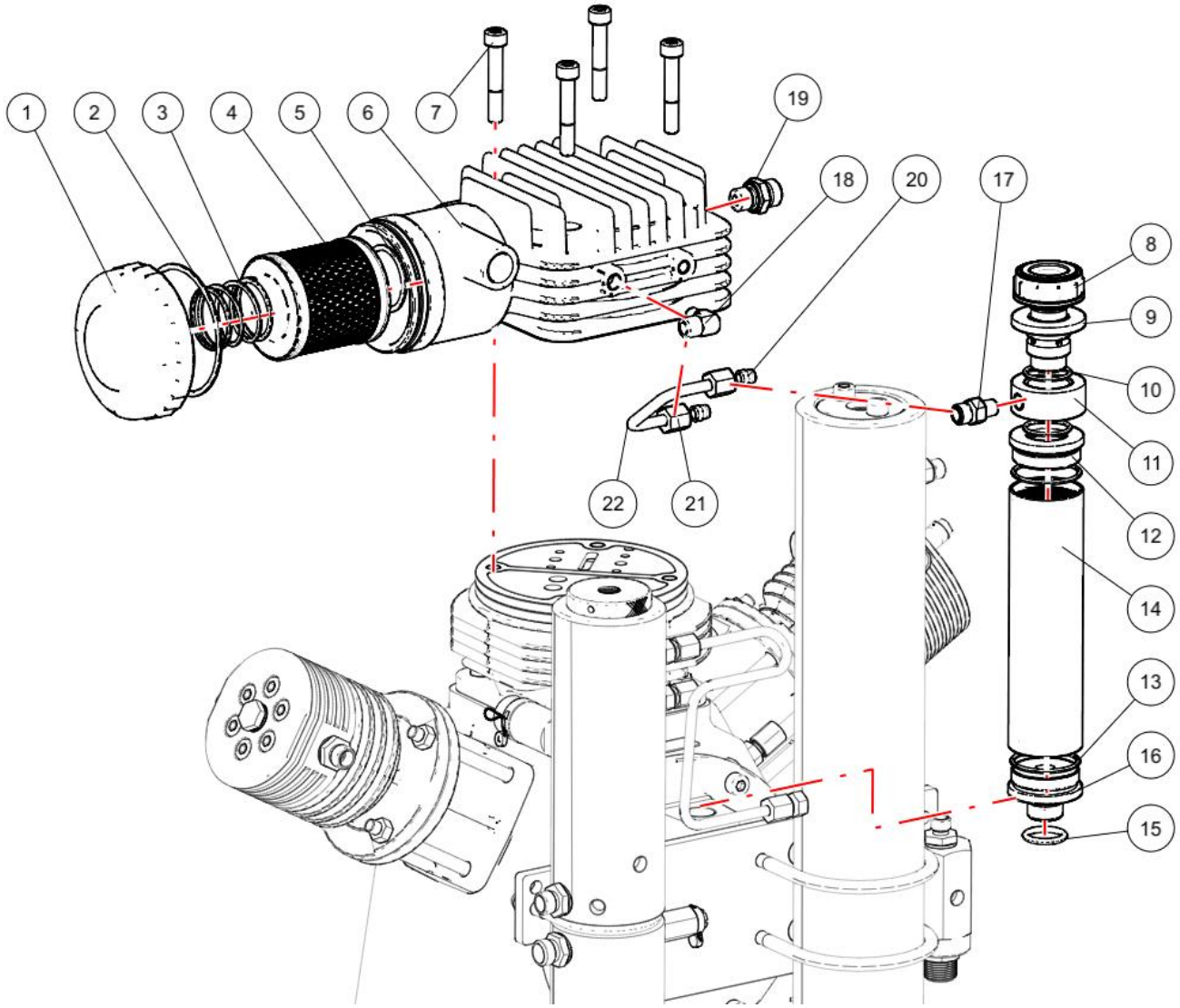
NO.	P/N	DESCRIPTION
1	B27C-0110-0000	Tube ring GB/T 3764 L10
2	B27B-1910-0016	Tube nut-10
3	B02A-0600-S020	Hexagon socket head cap screws-M6*20
4	G07C-D18L-0004	Cooling pipe 2P-10mm



NO.	P/N	DESCRIPTION
1	B27C-0106-0000	Tube ring-6
2	B27B-1406-0012	Tube nut-6
3	B27C-0110-0000	Tube ring GB/T 3764 L10
4	B27B-1910-0016	Tube nut-10
5	G07C-D18L-0002	Cooling pipe 3G-6mm assembly
6	B02A-0800-S025	Hexagon socket head cap screws-M8*25

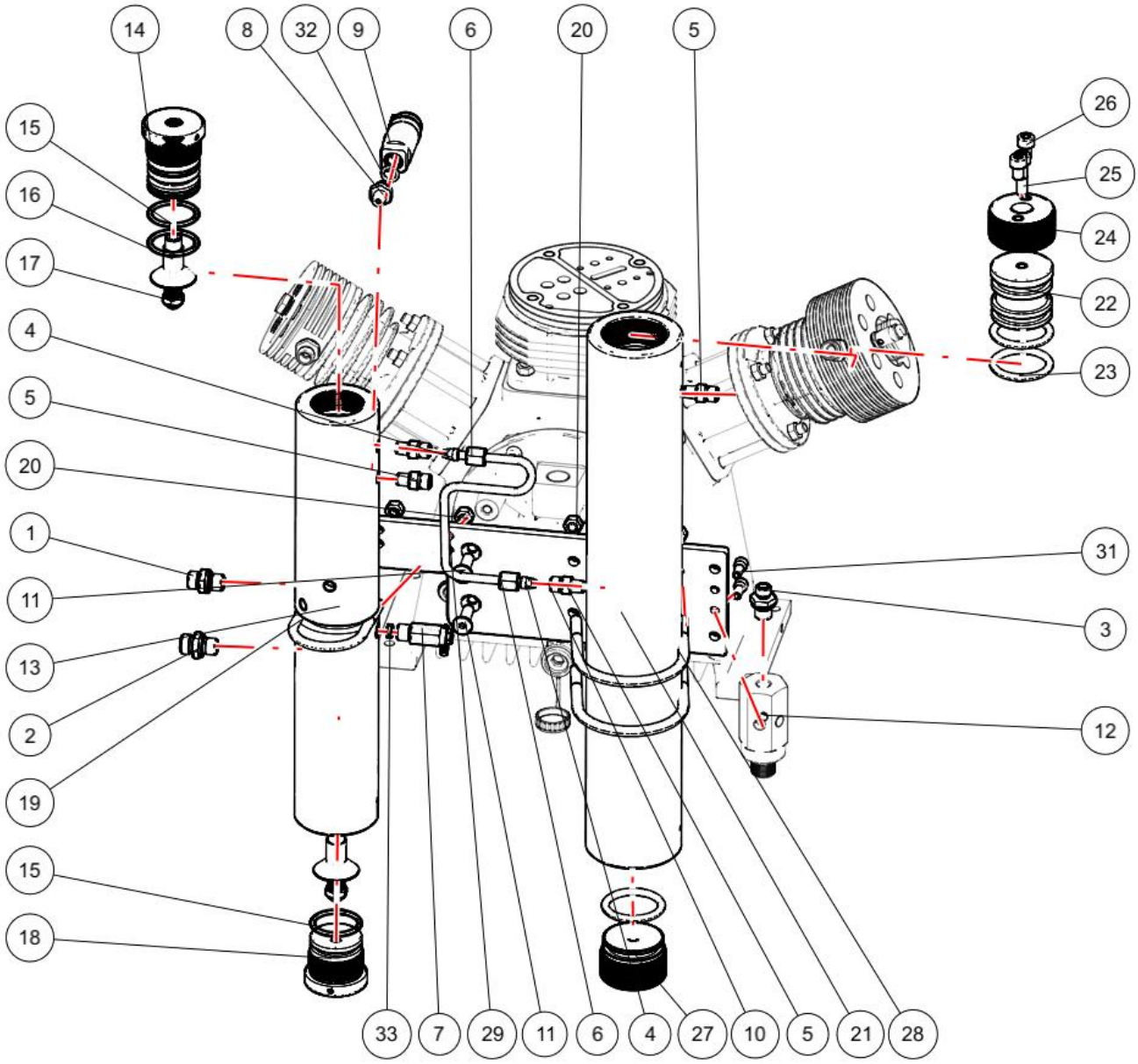


NO.	P/N	DESCRIPTION
1	B27C-0106-0000	Tube ring-6
2	B27B-1406-0012	Tube nut-6
3	G07A-D18L-0022	Cooling pipe GX-6mm
4	B27C-0108-0000	Tube ring GB/T 3764 L8
5	B27B-1708-0014	Tube nut-8
6	G07A-D18L-0021	Cooling pipe P3-8mm



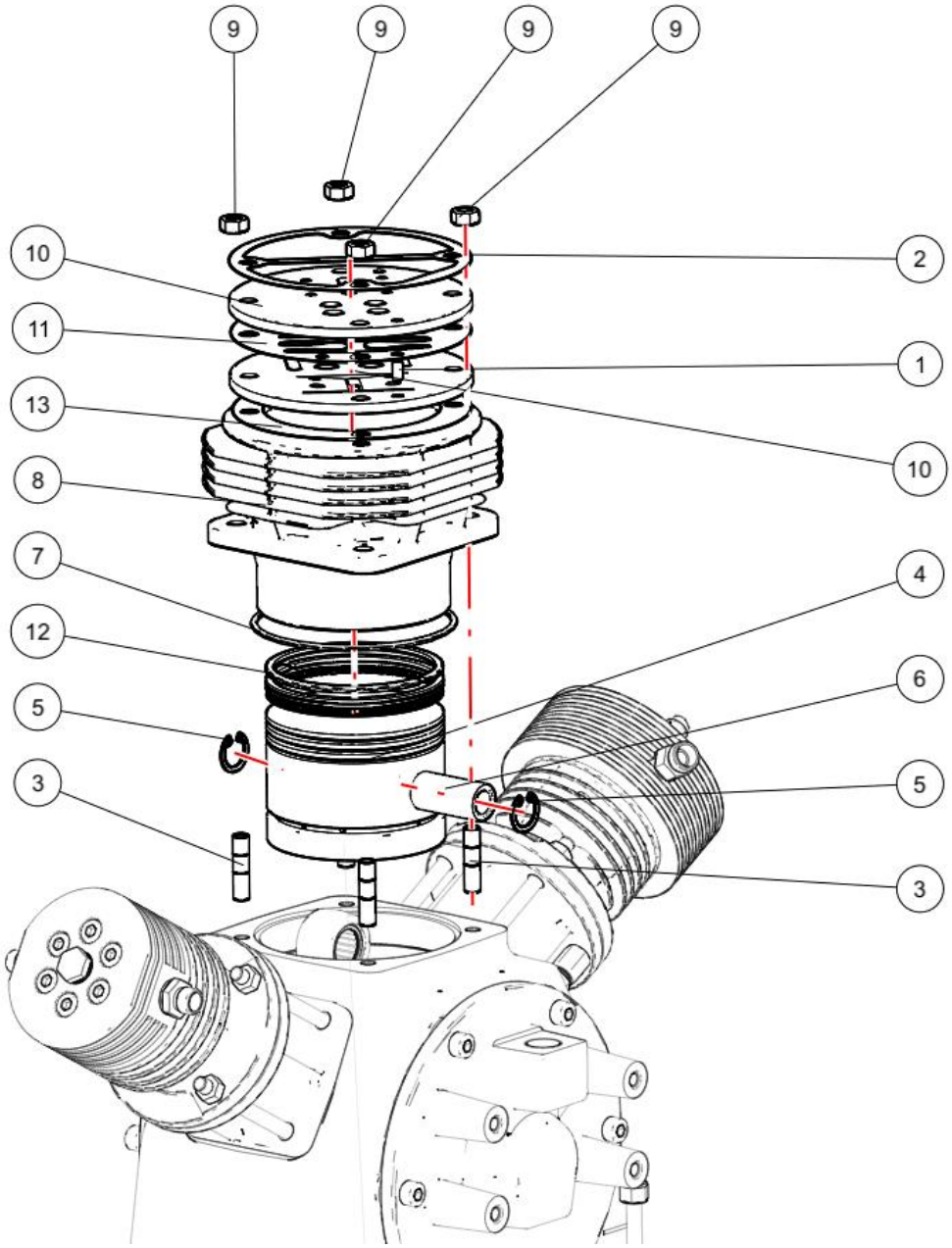
NO.	P/N	DESCRIPTION
1	G07A-D18L-0027	Intake filter end cover
2	B20A-0740-F726	OR-74*2.6
3	B26A-3920-S035	Spring-39*2*35
4	B50A-KL21-0300	Intake filter-65*68
5	B20A-0360-N726	OR-036*2.6
6	G07A-D18S-0001	Valve head-9500
7	B02A-0800-S050	Hexagon socket head cap screws-M8*50
8	G02C-D18L-0001	Oil filling cover assembly
9	G07A-D18L-0031	Connection
10	B20A-0250-F918	OR-025*1.8
11	G07A-D18L-0032	Connection seat
12	G07A-D18L-0016	Oil filling
13	B20A-0390-F718	OR-039×1.8
14	G07A-D18L-0017	Oil filling main body
15	B20A-0210-N730	OR-021*3
16	G07A-E18L-0040	Joint
17	B27A-0106-0112	Connection-R1/8-6

18	B27A-0206-0112	Elbow connection-R1/8-6
19	B27A-0110-4216	Connection-G1/4-10
20	B27C-0106-0000	Tube ring-6
21	B27B-1406-0012	Tube nut-6
22	G07A-D18L-0033	Air return pipe

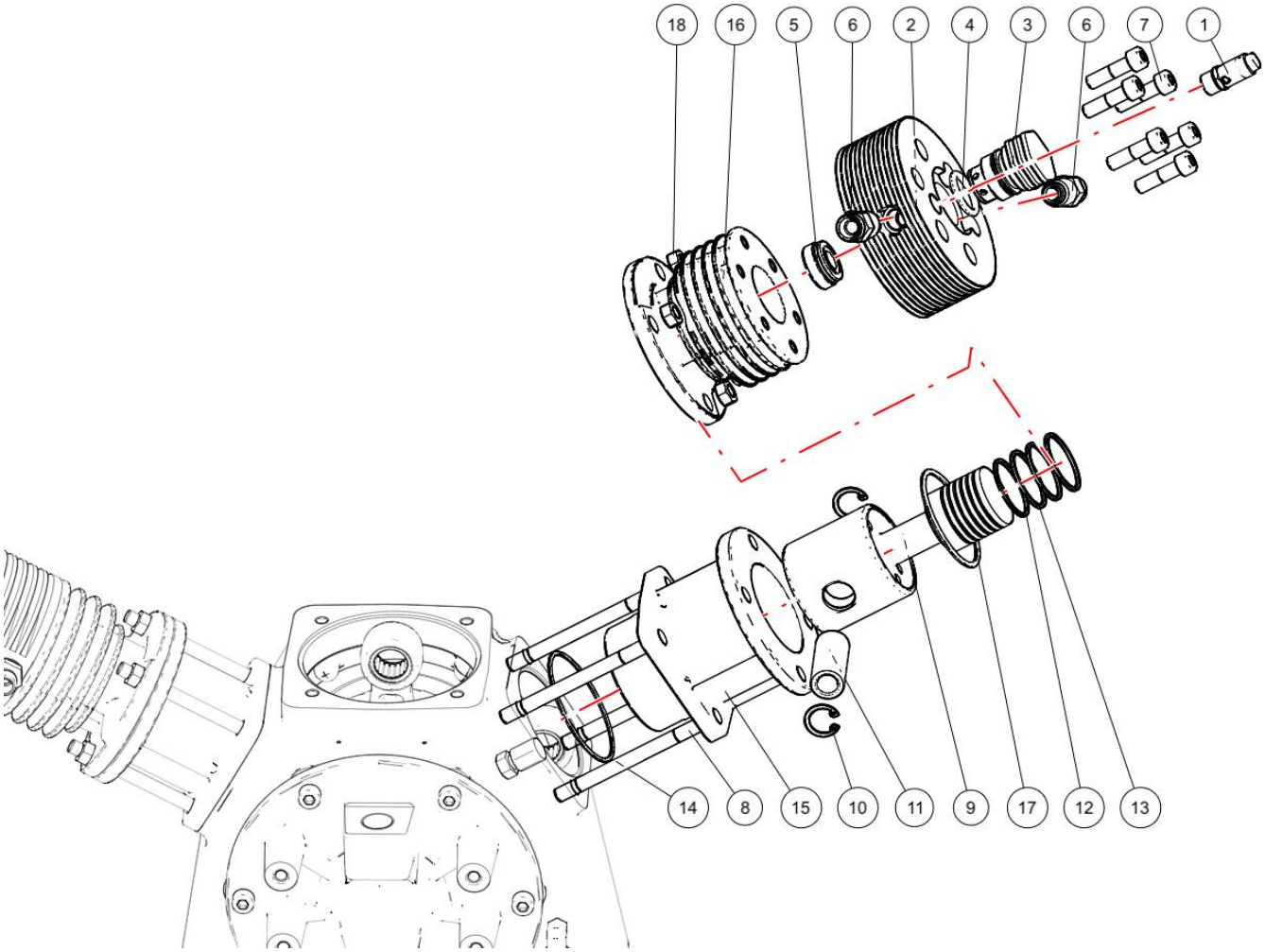


NO.	P/N	DESCRIPTION
1	B27A-0108-4214	Connection-G1/4-8
2	B27A-0110-4216	Connection-G1/4-10
3	B27A-0106-4212	Connection-G1/4-6
4	B27C-0106-0000	Tube ring-6
5	B27A-0106-0112	Connection-R1/8-6
6	B27B-1406-0012	Tube nut-6
7	G05B-VP52-C070	Safety valve DN3.5-70bar
8	B30E-8101-0000	Connection M12-R1/8
9	G05B-VP51-E315	Safety valve DN5-315bar
10	G07A-D18L-0025	Filter holding plate
11	B02C-0800-S030	Hexagon socket countersunk head screw-M8*30
12	G05B-VP61-B300	Pressure maintenance valve-B300
13	G10A-APD0-0003	Separator-APD0 main body
14	G10A-APD0-0002	Separator-APD0 cap

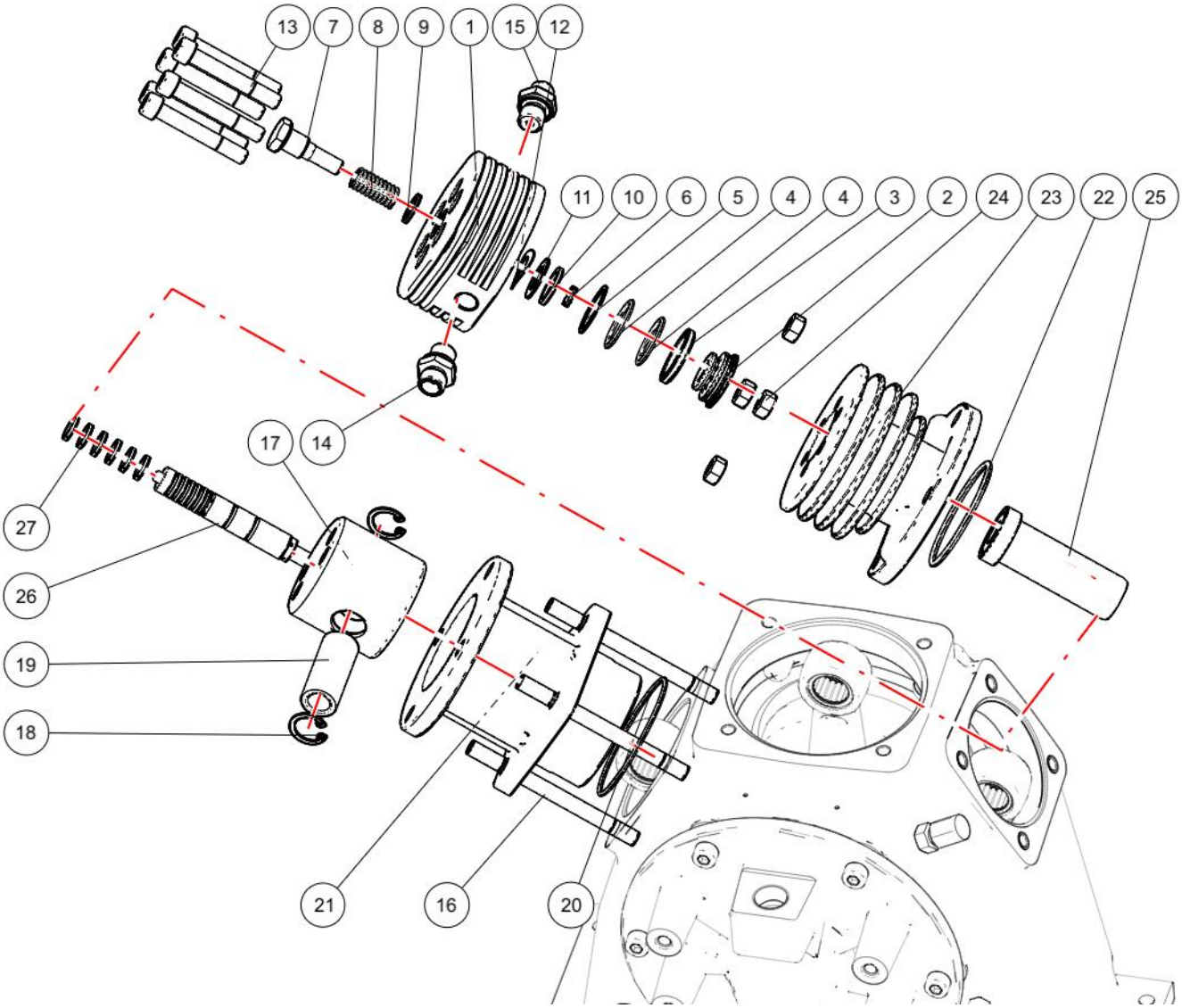
NO.	P/N	DESCRIPTION
15	B20A-0365-H936	OR-36.5*3.55
16	G10A-AP10-0004	Separation cap
17	B22A-0000-S002	Stainless steel filter silencer-G1/4
18	G10A-APD0-0001	Separator-APD0 bottom
19	B01A-0800-S060	U-type bolt-60
20	B04A-0800-S014	Hex nut-M8
21	G10A-AY21-0004	AY21-F130 housing
22	G10A-AY21-0002	Filter AY21-F130 inner cap
23	B20A-0425-H953	OR-42.5*5.3
24	G10A-AY21-0001	Filter AY21-F130 upper cap
25	B02A-0800-S030	Hexagon socket head cap screws-M8*30
26	B02A-0800-S012	Screw-M8*12
27	G10A-AY21-0003	Filter AY21-F130 bottom cover
28	B01A-0800-S090	U-type bolt-90
29	G07A-D18L-0023	Cooling pipe PG-6mm
30	G07A-D18L-0022	Cooling pipe GX-6mm
31	B02A-0600-S016	Screw-M6*16
32	B20A-0110-H918	OR-011.0*1.8
33	G02A-E18I-0240	Copper washer-5*11*3



NO.	P/N	DESCRIPTION
1	B06B-1000-T050	Pin-5*10
2	G07A-E18L-0069	Gasket-130*0.4
3	B03B-0800-S035	Stud-M8*35
4	G07A-E18L-0071	Piston-9500
5	B08C-1000-T020	Circlip-20
6	G07A-E18L-0081	Piston pin-20*78
7	B20A-1000-F726	OR-100.0*2.6
8	G07A-E18L-0068	Cylinder-9500
9	B04A-0800-S014	Hex nut-M8
10	G05A-VB01-0001	Valve plate-130X6
11	G05B-VB01-0002	Valve sheet-130
12	G07C-E18L-0008	Piston ring-95
13	G07A-E18L-0070	Gasket-128*0.4

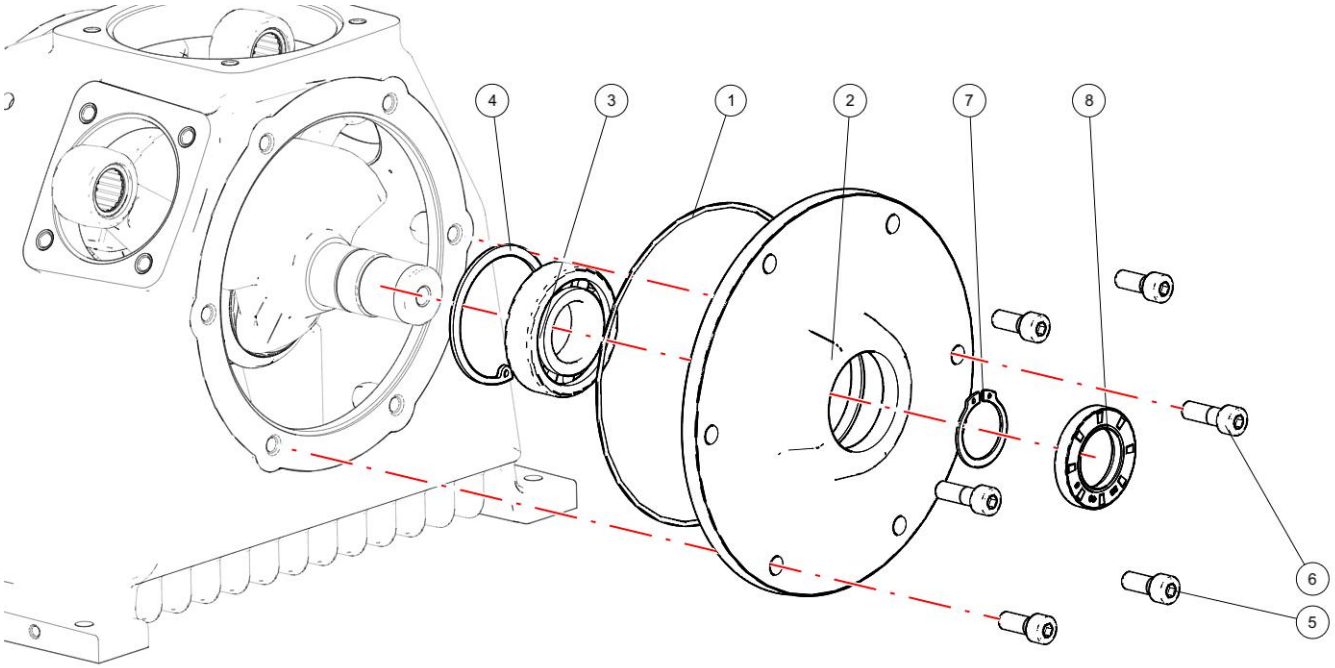


NO.	P/N	DESCRIPTION
1	G05B-VP52-G012	Safety valve DN9-12bar
2	G07A-D18L-0019	Valve head-11400
3	G05B-VB22-D070	Valve 28-2
4	B20A-0224-F735	OR-022.4*3.55
5	G05B-VB12-D070	Valve 28-1
6	B27A-0610-4216	Connection-G1/4-10
7	B02A-0800-S030	Hexagon socket head cap screws-M8*30
8	B03B-0800-S105	Stud-M8*105
9	G07A-E18L-0080	Piston-6001
10	B08C-1000-T020	Circlip-20
11	G07A-E18L-0067	Piston pin-20*48
12	G07A-E18L-0064	Piston ring-38*1.5(with step)
13	G07A-E18L-0063	Piston ring-38*1.5(without step)
14	B20A-0700-N718	OR-070*1.8
15	G07A-E18L-0073	Cylinder-6002
16	G07A-E18L-0079	Cylinder-3801
17	B20A-0600-F726	OR-060*2.6
18	B04A-0800-S014	Hex nut-M8

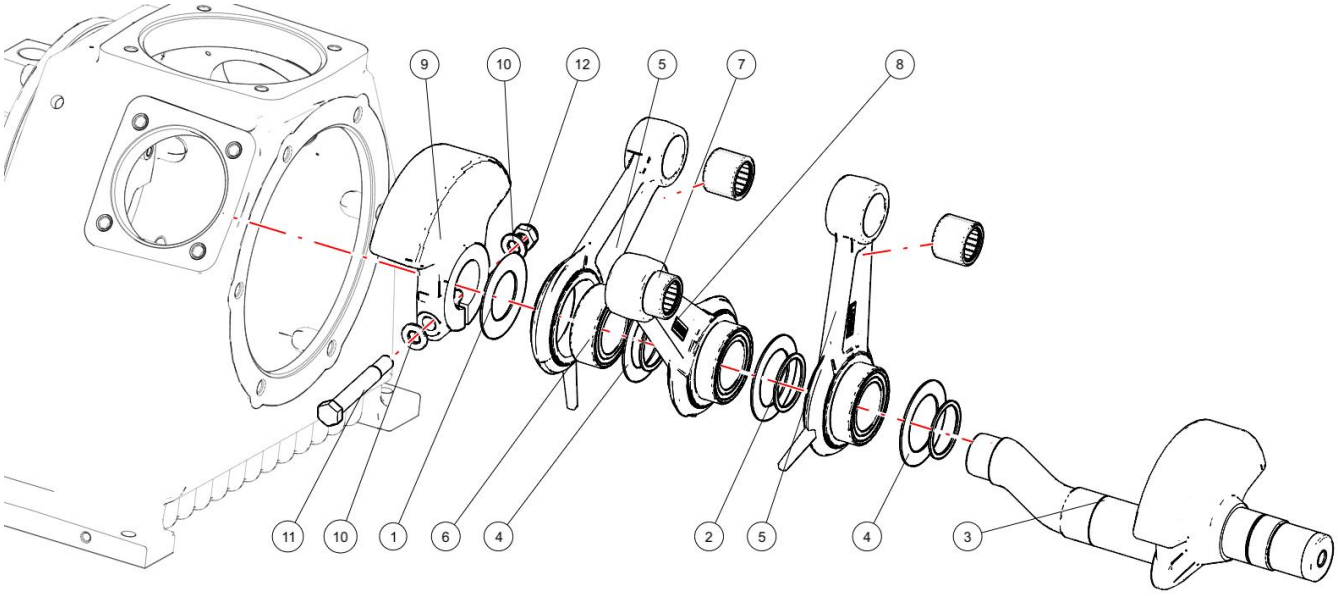


NO.	P/N	DESCRIPTION
1	G07A-D18L-0034	Valve cover-1200
2	G05A-VB03-0009	Valve seat-1200
3	G05A-VB03-0001	Inlet valve guide ring
4	B20A-0250-F918	OR-025*1.8
5	G05A-VB03-0002	Copper washer-24.8*29*0.5
6	G05A-VB03-0003	Outlet valve plate
7	G05A-VB03-0004	Spring guide rod
8	B26A-1215-S025	Spring--11.8*1.5*25
9	G05A-VB03-0005	Copper washer-12*17*1.5
10	G05A-VB03-0006	Copper washer-17*22*2
11	G05A-VB03-0007	Inlet valve plate
12	G05A-VB03-0008	Inlet valve spring
13	B02A-0800-S055	Hexagon socket head cap screws-M8*55
14	B27A-0108-4214	Connection-G1/4-8
15	B27A-0106-4212	Connection-G1/4-6
16	B03B-0800-S105	Stud-M8*105
17	G07A-E18L-0074	Piston-6002

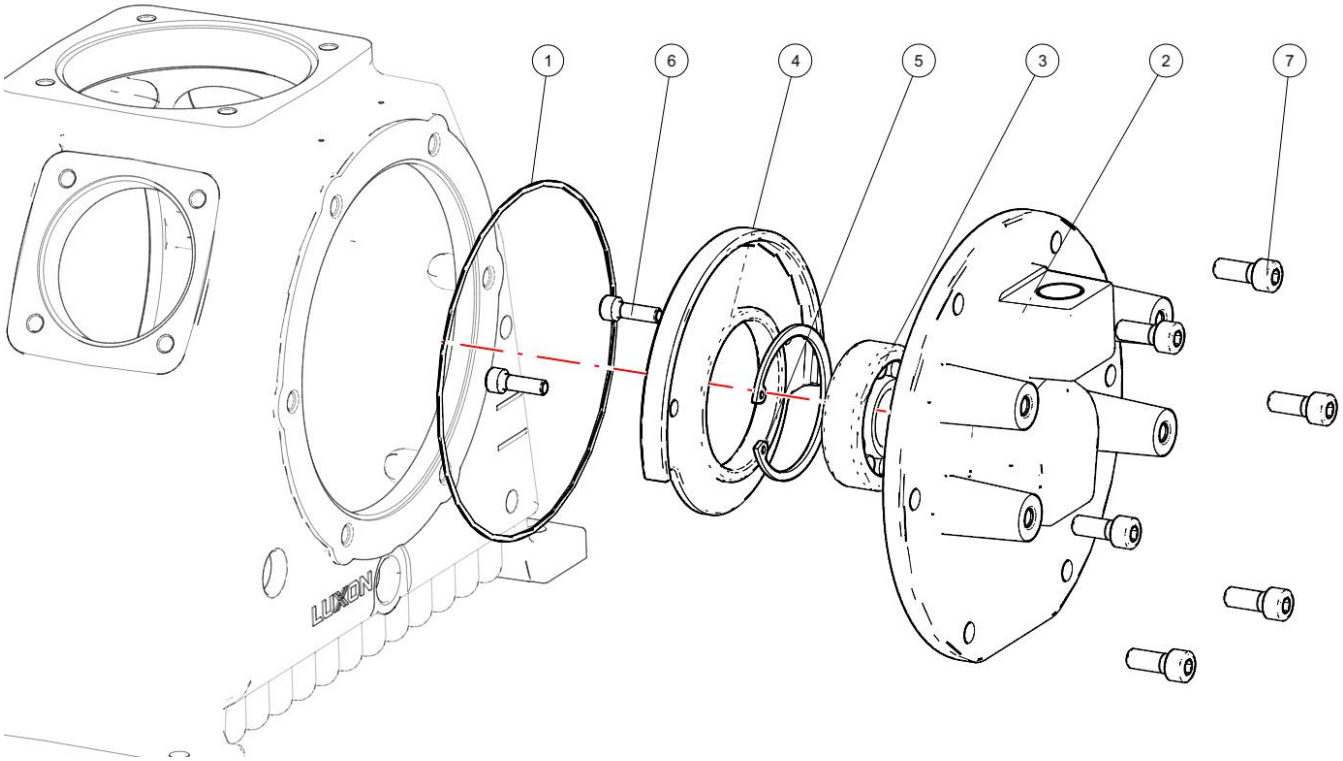
NO.	P/N	DESCRIPTION
18	B08C-1000-T020	Circlip-20
19	G07A-E18L-0067	Piston pin-20*48
20	B20A-0700-N718	OR-070*1.8
21	G07A-E18L-0073	Cylinder-6002
22	B20A-0600-F726	OR-060*2.6
23	G07A-E18L-0072	Cylinder-2500
24	B04A-0800-S014	Hex nut-M8
25	G07A-E18L-0076	Cylinder-1400



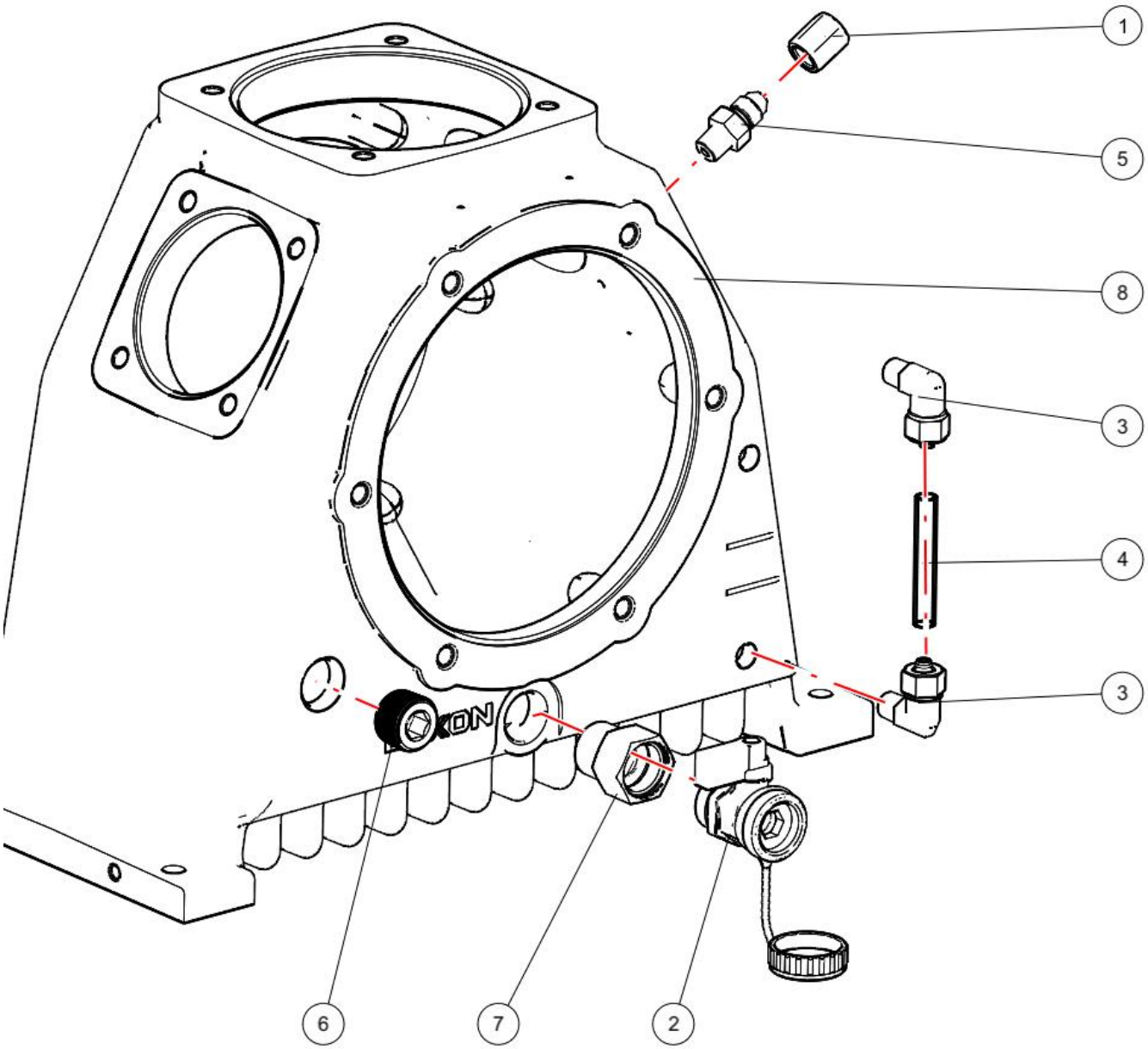
NO.	P/N	DESCRIPTION
1	B20A-1460-N718	OR-146.0*1.8
2	G07A-E18L-0009	Front cover
3	B25B-5030-0062	Bearing-NUP206
4	B08C-2000-T062	Circlip-62*2
5	B02A-0800-S020	Hexagon socket head cap screws-M8*20
6	B02A-0800-S025	Hexagon socket head cap screws-M8*25
7	B08D-1200-T030	Circlip-30
8	B21B-030S-N048	Oil seal 30*48*8



NO.	P/N	DESCRIPTION
1	G07A-E18L-0091	Conrod spacer-30*52*1
2	G07A-E18L-0120	Bearing spacer-30*35*1
3	G07A-E18L-0061	Crankshaft
4	G07A-E18L-0066	Conrod spacer-35*52*1
5	G07A-E18L-0013	Conrod(with noodle)
6	B25C-3030-0047	Bearing-NAO304716
7	B25C-1020-0026	Needle bearing-HK202620
8	G07A-E18L-0004	Conrod
9	G07A-E18L-0062	Counterweight
10	B05A-0800-S016	Flat washer GB/T 97.1 8 A2
11	B01E-0800-T065	Bolt-M8*65
12	B04C-0800-T013	Lock nut GB/T 889.1 M8



NO.	P/N	DESCRIPTION
1	B20A-1460-N718	OR-146.0*1.8
2	G07A-E18L-0007	Crankcase back cover
3	B25B-2025-0062	Bearing-NU305
4	G07A-E18L-0008	Oil baffle plate
5	B08C-2000-T062	Circlip-62*2
6	B02A-0600-S020	Hexagon socket head cap screws-M6*20
7	B02A-0800-S020	Hexagon socket head cap screws-M8*20



NO.	P/N	DESCRIPTION
1	B28D-0000-7100	Hollow hex plug-7/16UNF
2	G07C-E18L-0021	Valve-G1/2
3	B29E-0008-0100	Elbow connection R1/8-8
4	G07A-D18L-0024	Oil level display tube
5	B30C-0171-0000	Connection R1/8-7/16UNF
6	B28B-0000-0400	Hollow hex plug-R1/2
7	G07A-E18L-0043	Drain ball valve adapter
8	G07A-D18L-0020	Crankcase

8.4 Usage record

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

Date	Running time/h	Operating condition

8.5 Maintenance Record Form

 Change the filter cartridge filter time

G11B-HL22-FD20filter the intake air temperature was 20 ° C, it can handle air 500m^3, the effect of air humidity and ambient temperature and other factors, filter cartridge filter life will vary, so the need to add ground View archive air, air quality, in order to determine whether to replace the filter cartridge. (So this item is not listed in the maintenance of records in the table) .

 Check the inlet filter time

Intake filters affected by the environment, the extent of contamination may be different, so this item is not listed in the maintenance of records in the table. (Check every 5 hours to clean the air intake filter).

 Driver

Motor gasoline and maintenance in accordance with the relevant instructions executed, this item is not listed in the maintenance of records in the table.

Operation hours	Maintenance item	Signature	Date	Remark
	Oil change (refer to section 5.3)			
	Check the function and air tightness of the filling valve (refer to Section			
	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
	Check the air tightness of cooling pipes and fittings (see section 5.12)			
	Inspect pressure gauge (refer to section 5.9)			
25th Hour	Tighten valve cover screw (refer to section 5.10)			
75th hour	Oil change (refer to section 5.3)			
100th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
125th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
200th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
	Oil change (refer to section 5.3)			
250th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
300th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
375th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
400th hour	Clean and inspect oil-water separator (see section 5.6)			

Operation hours	Maintenance item	Signature	Date	Remark
	Check valve (refer to section 5.10)			
	Replace inlet filter (refer to section 5.5)			
	Oil change (refer to section 5.3)			
	Clean and inspect oil-water separator (see section 5.6)			
500th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
600th hour	Clean and inspect oil-water separator (see section 5.6)			
	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
625th hour	Replace inlet filter (refer to section 5.5)			
700th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
	Oil change (refer to section 5.3)			
750th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
800th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
875th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
900th hour	Clean and inspect oil-water separator (see section 5.6)			
	Check valve (refer to section 5.10)			
	Replace inlet filter (refer to section 5.5)			
	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
	Replace copper filter (refer to section 5.6)			
	Oil change (refer to section 5.3)			
1000th hour	Clean and inspect oil-water separator (see section 5.6)			
	Check the final discharge pressure of the relief valve (refer to section 5.8)			
First years	Check the pressure gauge (refer to section 5.9)			
1100th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
1125th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
1200th hour	Clean and inspect oil-water separator (see section 5.6)			

Operation hours	Maintenance item	Signature	Date	Remark
	Replace inlet filter (refer to section 5.5)			
	Oil change (refer to section 5.3)			
1250th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
1300th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
1375th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
1400th hour	Clean and inspect oil-water separator (see section 5.6)			
	Clean and inspect oil-water separator (see section 5.6)			
	Check valve (refer to section 5.10)			
	Oil change (refer to section 5.3)			
	Replace inlet filter (refer to section 5.5)			
1500th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
1600th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
1625th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
1700th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
	Oil change (refer to section 5.3)			
1750th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
1800th hour	Clean and inspect oil-water separator (see section 5.6)			
	Replace inlet filter (refer to section 5.5)			
1875th hour	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
1900th hour	Clean and inspect oil-water separator (see section 5.6)			
	Clean and inspect oil-water separator (see section 5.6)			
	Oil change (refer to section 5.3)			
	Inspect belt tension and check for wear/abrasion (refer to section 5.13)			
	Check valve (refer to section 5.10)			
	Replace copper filter (refer to section 5.6)			
2000th hour	Replace inlet filter (refer to section 5.5)			
	Check the pressure gauge (refer to section 5.8)			
Second years	Check the pressure gauge (refer to section 5.9)			

8.6 Maintenance record

Date	Problem	Solution	Replacement parts	Maintenance personnel

Date	Problem	Solution	Replacement parts	Maintenance personnel

Date	Problem	Solution	Replacement parts	Maintenance personnel

Date	Problem	Solution	Replacement parts	Maintenance personnel

LUXON®
COMPRESSORS

LUXON can customize compressors and systems exclusively for you according to your requirements.

LUXON reserves the right to upgrade products or modify their appearance for quality improvement purposes.

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