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SAFETY CAUTIONS

Please read this operation manual carefully before
installation and operation

This series are high pressure air compressor. It compresses atmosphere air go to pressure 20/30Mpa, 3000/4500psi, after be purified and separated by the filter and separa■. It discharge clean air accords to GB18435-2001 air quality standard.

It is widely be used for breathing of diving and fire fighting paintball PCP shooting and other high pressure industries by its reliability, portability and easy to use.

make sure the voltage in nameplate meets local power supply.

Make sure the lubricant has been put in before running

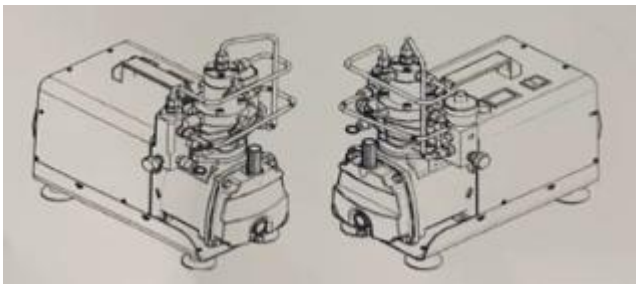
Make sure the pressure setting is under 4500psi（310bar）

There is potential danger of pipe burst or connecting fitting blow off under high pressure, please avoid body too near compressor when it running

For safety Don't leave compressor and always keep eyes to look at until it reach rated pressure whether it is automatic stop or manual stop

For safety, always keep eyes on it until it reaches rated pressure and needs to stop.

Double Check the lubricate oil has been put in before Running



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TECHNICAL DATA

YH-QB01 Portable electric driven HP air compressor

Charging Rate:40-50U/min; 1.5-1.8cfm

Working pressure:100-300bar, 1500-4500psi

No. of stage and cylinder:2

Electric motor : 220v 50hz/110v 60hz, single phase

Cooling : water cooled

Shout down : manual stop/automatic stop（for optional

Pressure indicate : Gauge

Filtration : water/oil separator

Lubricating oil : ISO VG46 or AW 46

Dimension : 360 X 200 X 380mm

Weight : 18kg

Noise : Less than 78 dB（A）

Air hose connection : 8mm quick connect fitting

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STRUCTURE

3.1 Main components

① power no/off

② temperature gauge

③ Siren

④ pressure gauge

⑤ water outlet

⑥ water inlet

⑦ Explosion-proof valve

⑧ breather /oil inject

⑨ Pressure relief valve

⑩ oil level gauge

⑪oil replace drain

⑫High pressure hose

⑬oil/ water Filter

⑭Quick connector

⑮intake air filter

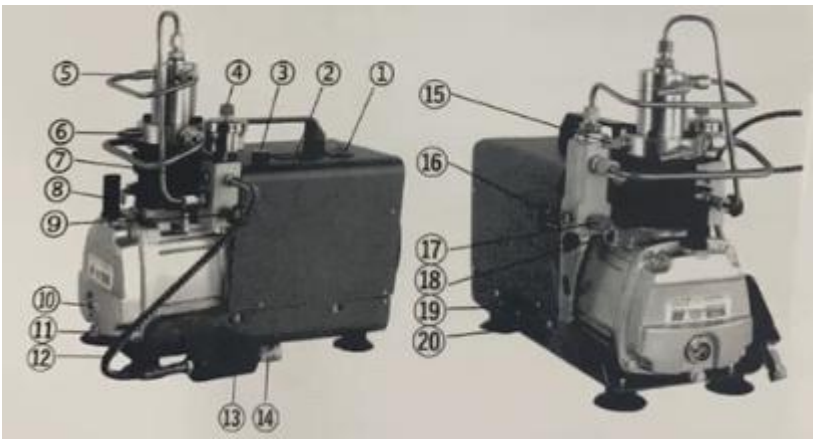
⑯drain valve

⑰1st Safety valve

⑱overload protection

⑲Power cord socket

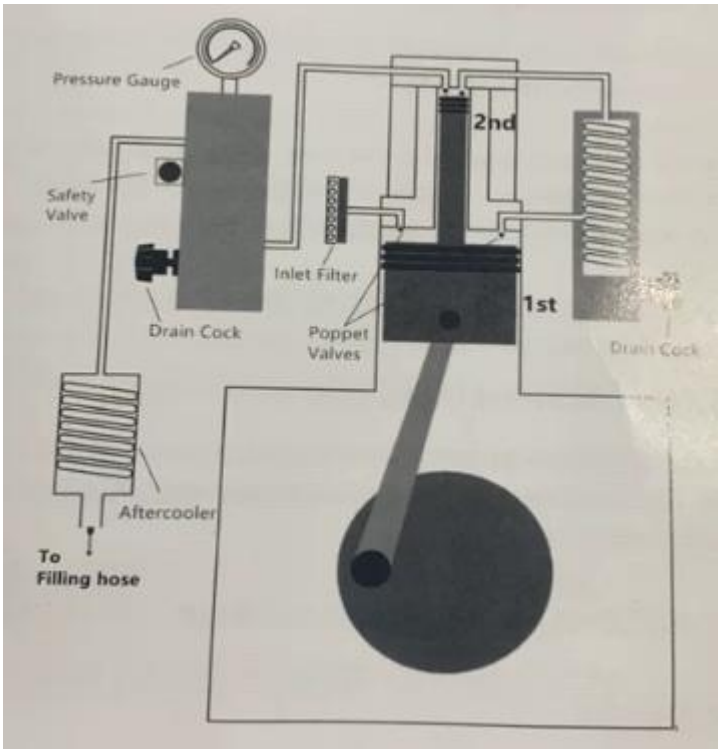
⑳Water pump power socket



3.2 Working process

Atmosphere air is compressed through two stage cylinder to reach 20Mpa/30Mpa, 3000/4500 psi. And the air is filtrated by oil and moisture separator before filling in tanks.

The condensate and oil are separate from air and drain from separator.



3.3 Pump block

The pump block unit is composed of crankcase, crankshaft, cylinder, piston intake and discharge valves, connect rod, bearing etc.

It is splash lubrication, direct driven by motor shaft, water cooled type

3.4 Gauge&safety valve

The pressure gauge is installed in final stage of the compressor to display discharge pressure.

The safety valve is installed at the place of discharge hole, if the discharge pressure is higher than preset value, the safety valve will open and release pressure.

Note : release valve will supply protect with more reliable and safety

3.5 Pressure switch（Auto stop version only）
The compressors are preset rated working pressure as per order require. The compressor will stop automatically when pressure reach rated pressure.

Note : don't try to adjust it if not get authorized

3.6 ON/OFF

Press ON/OFF button to turn on and turn off compress.

3.7 Drain valve
Open valve in separator and filter to drain moisture and oil from piping when finish tank filling every time

Note : make sure all drain valve are open when start Compressor

3.8 Cooling system
It is cooled by water, and water container is not included in compressor package.

Best temperature of cool water for working is between
50℃ to 70℃

Max working temperature is 75℃, when is reaches 75℃.
necessary to replace water or stop running the compressor.

The water in container should be no less than 20L/5 gallon, it works better with more water when cooling down.

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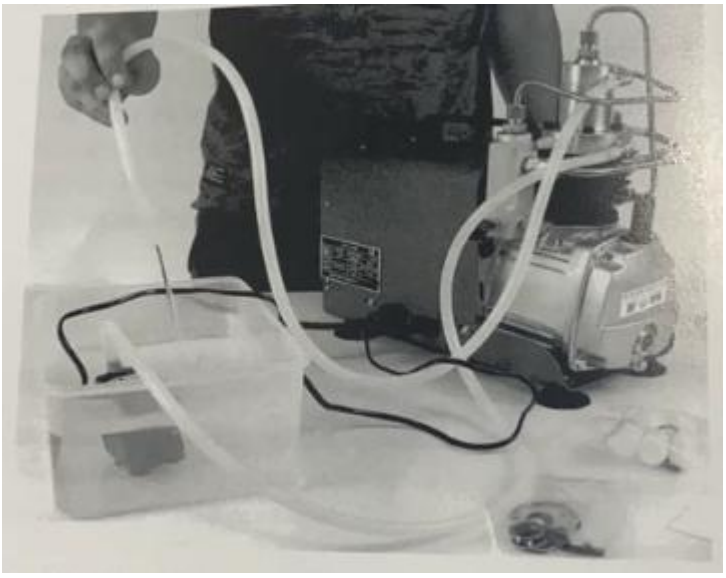
INSTALLATION AND OPERATION

4.1 Installation
Must use the compressor on the surface which is totally flat and dry. Put water in the container and place the water pump into the container with no less than 20L/5 gallon fresh water, the water pump has to be totally immersed in water, to make sure water flows smoothly.



4.2 Checking before operation
Checking

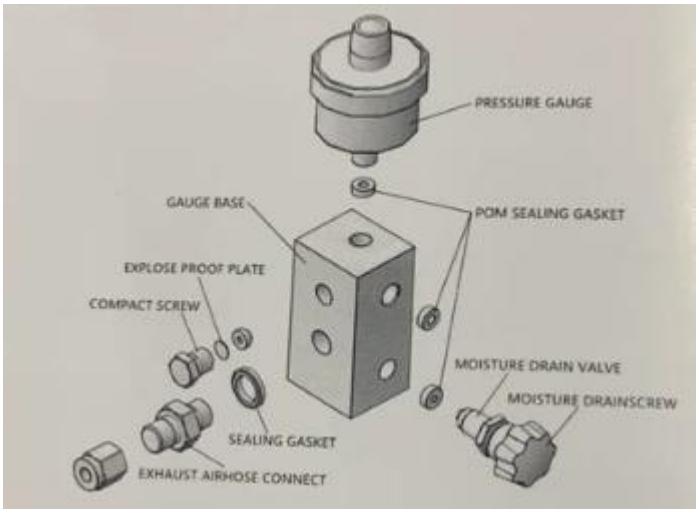
Make sure the voltage in nameplate meets local power supply.
Fill into lubricate oil to around middle place of oil glass.
Note : if the oil level is too high, air valves will easy
carbonize, if oil too low it will result in insufficient lubrication
and piston cylinder sticking
Install breather at oil filling port
Check connect fitting fasten strong and make sure no
Leakage

Check rotary direction of motor
Note : correct direction is cooling wind blow to ■
Trial running
Open the condensate drain valve to make compressor will start in no load.
closed the charging valve to begin a short time test running.
Turn on the compressor, after it runs in steady 3-5 mins

close condensate drain valve and the compressor begin to
pressurize, turn off compressor when it reach the rating

pressure

Caution : Longtime continually running is not suggested, because it may results in temperature-rising, parts damaged and the machine life shortened



Note : open the drain valves to release high pressure and condensate after every refill operation

4.3 Tank filling

Connect the air tank to compressor with flex hose

Open the condensate drain valve for no loading start

Turn on compressor.

Open the bleed valve, to make sure the pump get start with no load.Turn on the compressor, and turn the bleed valve off after it runs 30 seconds smoothly, then open the air-charging valve for filling.

When the pressure reaches the requirement, turn ■ the compressor and close the charging valve, then turn on the exhaust valve.

The compressor will stop automatically If it Is pressure setting version or the automatic stop version

（Setting method : The red knob above the rotary pressure gauge can make the setting pointer stay above the required number.）

Please shut down the power supply and close air-charging

valve if there's any emergency in air filling.

Note : advise the paintball tank no more than 3 liters

4500psi 30Mpa, fill big tank will cause compressor over time

running, normal continue run no more than 1 hour

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MAINTENANCE

General maintenance interval

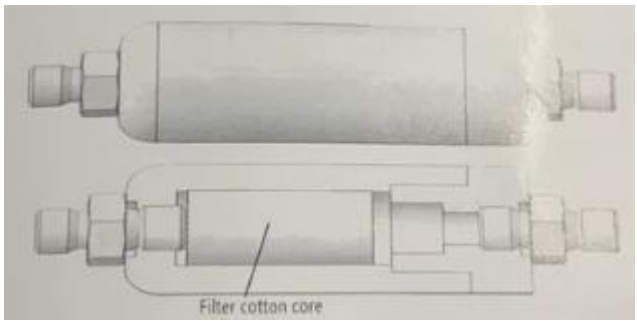
	Every Tine	50h	100h	annually
Lube Oil	△	◆	◆	◆
Air intake filter	△		◆	◆
Safety valve				◆
Air hose				◆

△ Check ◆replace

5.1 Lubricant oil
Oil level must be checked every time;
First time oil change : 50 hours, 0.5-0.6 liters
Regular oil change : 100 hours or annually

Lubricant oil features : ISO VG46, AW46
Warning : it is forbidden to mix different brand or ISO grade oil for lubricate, recommend MOBIL 827/829 or equivalent

5.2 Filtration for air
The better outlet air quality will be got if use extra purification,
filter elements must be highly efficient fibrous materials and must be replaced periodically.

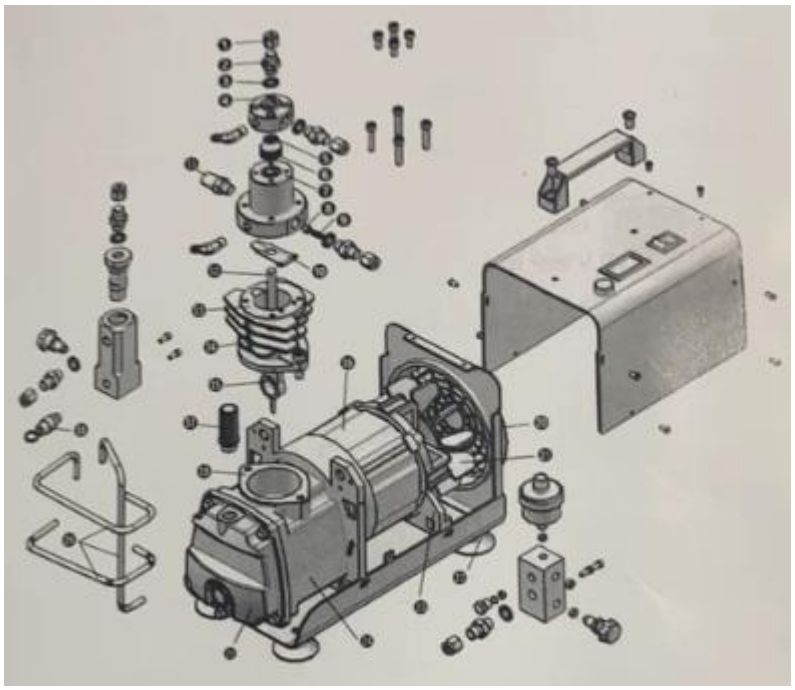


5.3 High pressure air hose
The air hose must be replaced regularly 1000 hours or
annually, bending radius does not exceed 250mm. With
8mm quick connector, connect directly to tank valve fitting.

5.4 Air filter
Us compressed air to blow air filter to clean dust. The air filter
must be changed every 100 working hours or annually.
Note : We would suggest to change filter every 50 hours if the compressor is used in dusty environment.

5.5 Condensate drain
Drain condensate after every refill, Open the drain screw to
drain out Normal condensate is milk white or brown white
with a little few resident oil,
If the condensate is in black or oil smell, check lube oil quality or change oil
5.6 Accessories come with
Water pump
Water pipe
Air filling hose
Breather
Spare parts kit

Spare parts list and drawing



1 screw nut
2 2nd stage discharge connect
3 Sealing washer
4 2nd stage cylinder head
5 2nd stage discharge valve
6 2nd stage valve base
7 2nd stage cylinder
8 1st stage discharge valve
9 discharge base spring
10 1st stage intake valve
11 intake air filter
12 2nd piston
13 up gasket upper
14 42mm cylinder
15 connecting rod
16 Motor stator

17 breather /oil inject
18 1st Safety valve
19 down gasket
20 Ventilation hood
21 Fan blade
22 Shock cushion foot
23 Motor bracket
24 Crankcase
25 Crankcase side cover
26 Heat dissipation catheter

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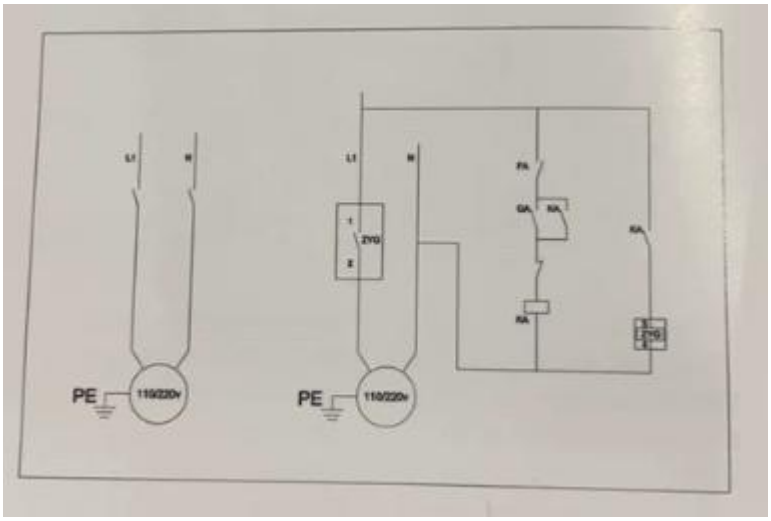
CIRCUIT DIAGRAM



Note : required 15AMP home breaker, do not use power strip
Panel with long power core

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TROUBLESHOOTING

FAULT	REASONS	SOLUTION
Can't start	1. motor breaker jump 2.Use power strip panel with long core 3. Inside pressure high	1. press motor reset button 2. Use the wall socket 3. Open drain valve to release
Over heat	1. wrong fan rotary direction 2. Bad ventilation 3. Long time running	1. Correct it 2. Correct it 3. No more than 1 hours continually work
Slow filling	1. fitting / gasket leak 2. Pistonring valve wear 3. Safety valve blow	1. tighten again 2. Replace 3. Replace
Can't turn round	1. piston locked 2. Bad lubricate	1. Replace 2. replace
Smoke	1. high oil temperature	1. stop and cool down
Noise and shake	1. connect bar/bearing damage 2. Belt loose 3. Not flat ground	1. Replace 2. tension belt 3. Correct it
Breather blow away	1. high pressure in crankcase	1. check each stage valve and repair