



Oil Free Air Compressor

Model: RA01,RA02,RA03,RA04,RA06,RA08

USER'S MANUAL

Foshan Roson Medical Instruments Co., Ltd.

1.Usage

ROSON oil free air compressor consists of compressor,air tank, pressure switch, solenoid valve,check valve,safety valve and hoses...etc. It provides clean and dry compressed air to meet the high-quality air requirements for medical, pharmaceutical, food, etc.

2.Safety note

- (1) Do not touch the motor when it was not cooled.
- (2) Do not leave inflammable objects near the compressor.
- (3) Do not use it for excessive time periods.
- (4) Keep hose/cable away from heat and sharp edges.
- (5) Do not run the compressor in damp conditions.
- (6) Do not make any changes on air tank.
- (7) Disconnect the power plug before starting maintaining.
- (8) Use recommended high-pressure hoses,fittings and couplings.

3.Specifications

Model	Support units	Power (W)	Air tank (L)	L/min (0.4Mpa)	Noise dB(A)
RA08	8	3360	128	320	70
RA06	6	2520	90	240	70
RA04	4	1680	60	160	70
RA03	3	1100	60	120	65
RA02	2	840	32	80	70
RA01	1	550	32	60	65

4.Transportation and storage

It should be transported and stored in following condition:

- (1) Temperature:-40℃~55℃

- (2) Relative humidity: $\leq 95\%$
- (3) Atmosphere pressure: 500Hpa-1060Hpa

5.Installation

- (1) It should be positioned in the room with temperature of 5-40°C and relative humidity not greater than 80%. Surrounding area should be clean, dry, free of corrosive gas, well ventilated and indirect sunlight.
- (2) Check accessories according to the packing list.
- (3) Fix the rubber pads on tank base by nuts.
- (4) Install the air filter and ensure there is an adequate airflow around inlet.
- (5) Connect air supply pipe with the quick coupling.
- (6) Check if drain valve is off and pressure switch is at the position of "off"(switch off position)
- (7) Ensure the main power supply corresponds to the power rating and voltage on the label before connecting power.

6.Testing

- (1) Close drain valve and air outlet ball valve,turn on the pressure switch then air compressor will start working immediately,presure will gradually increase.The pressure switch will turn off automatically when the pressure up to 8bar. At the same time the solenoid valve activated for releasing the rest air from cylinder.
- (2) The pressure switch will turn on automatically when the pressure lower then 5bar,air compressor re-start,presure increase again.
- (3) Turn the operation handle for pressure switch to "off" position (switch off position), then pull out the power plug. Testing is completed.

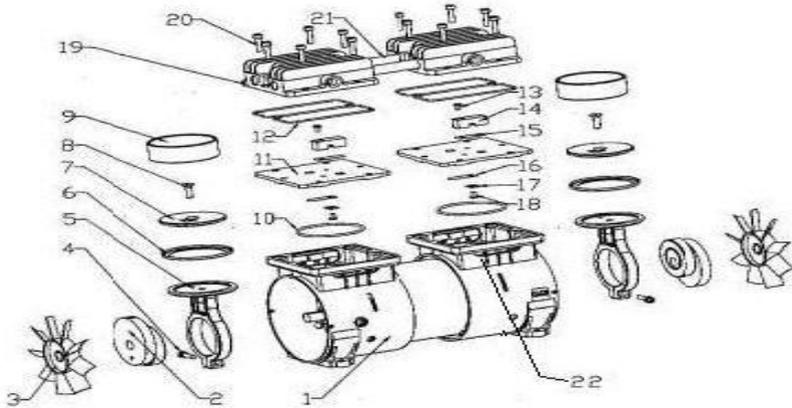
7.Maintenance

- (1). Separating water from air tank: put the drain hose into a container, gradually open the drain valve then water will go inside container. After that close the drain valve tightly to ensure no leakage.
- (2). Clean air filter: open the air filter cap, take out the filter, clean it by compressed air or water.
- (3) Regulating pressure switch: open the pressure switch cover, turn left or right the setting screw for setting higher or lower activating pressure.

8.Fault analysis guidance

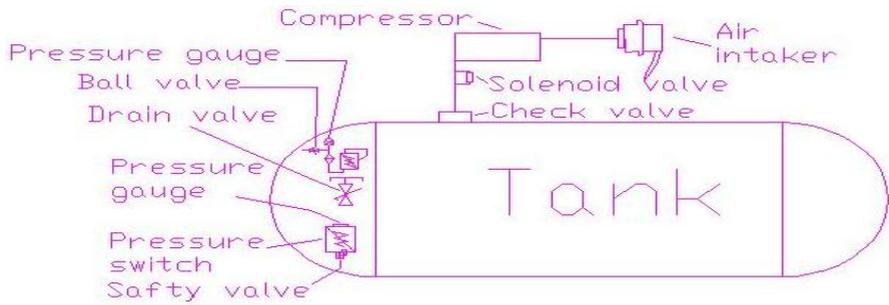
Reason Problem	Lower pressure	Higher noise	Motor doesn't work	Air leakage
Pressure switch broken	✓		✓	
Capacitor broken			✓	
Safety valve broken	✓			✓
Drain valve leaking				✓
Air outlet valve broken	✓			✓
Piston ring broken		✓		
Aluminium cover cracked		✓		
Solenoid valve broken			✓	
Check valve broken		✓		
Air filter loosen		✓		
Screw loosen		✓		
Air inlet or outlet valve damaged		✓		

9. Structure of compressor

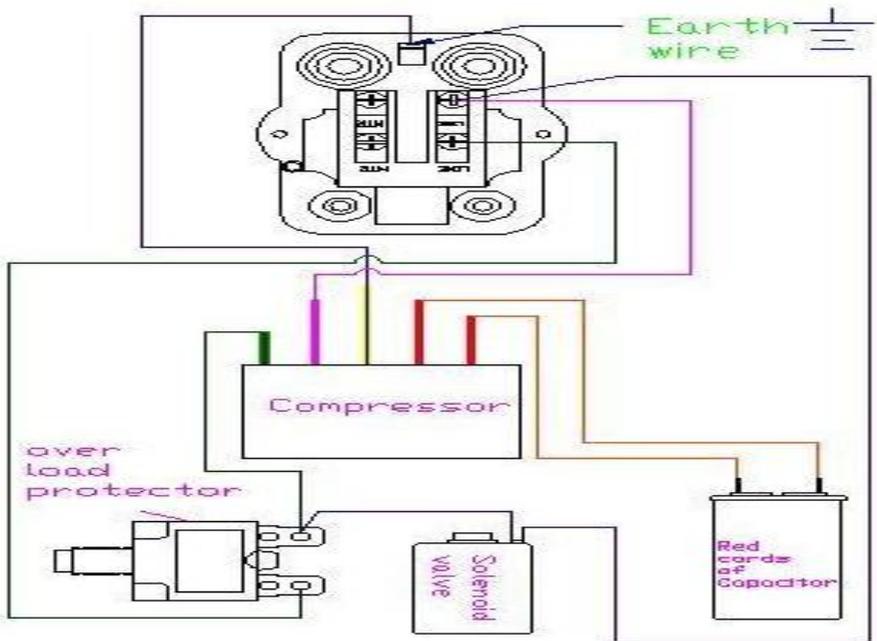


1 Aluminum shell	9 Cylinder Jacket	17 Valve gasket
2 Eccentric wheel units	10 Gasket of cylinder jacket	18 Screw of valve
3 Fan	11 Plate valve	19 Cylinder head
4 Connecting rod screw	12 Gasket of cylinder Head	20 Screw of cylinder head
5 Connecting rod	13 Screw of plate valve	21 Connecting pipe
6 Piston ring	14 Fix plate	22 Aluminium cover
7 Plate	15 Air outlet valve	
8 Screw of plate	16 Air inlet valve	

10. Air line diagram



11. Circuit diagram



Foshan Roson Medical Instruments Co., Ltd.

Add: No.9,Henggui Middle Road,Lianhe Industrial Zone,
Luocun,Nanhai,Foshan,Guangdong province,China

Tell: 0086 757 86407037

Web.: www.fsroson.com

Email:sales001@fsroson.com