

VEVOR®

VEVOR®

E-mail: CustomerService@vevor.com

OIL-FREE AIR COMPRESSOR
USER MANUAL

VEVOR®

OIL-FREE AIR COMPRESSOR

Instruction Manual



High flow supply



Oil-free



Low noise



Low vibration



Low temperature rise



High pressure



High speed silenced motor



Four protection

NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:



CustomerService@vevor.com

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there is any technology or software updates on our product.

IMPORTANT SAFETY INSTRUCTION

This manual contains important instructions for operating this product. For your safety, and the safety of others, be sure to read this manual thoroughly before operating the product. Thank you for choosing the VEVOR oil-free air compressor. Please contact us if you have any questions.

- ◆The machine should be stored in a dry and ventilated room, and strictly avoid to close to perishable, flammable and chemical substances! The storage period should not exceed two years from the date of leaving the factory, if it exceeds the storage period. Check and maintain before use, or make a test if needed!
- ◆The machine is strictly forbidden to collide, placed steadily when using it, and it must be prevented from tilting and upside-down during transportation to avoid malfunction!
- ◆Try to avoid using it in an environment where the temperature is too high, the air is dirty, dusty, oily fuel and exhaust gas pollution. Use in these environment may cause damage to the machine.
- ◆Before connecting to the working power supply, make sure that the machine is turned off, and the power supply voltage shall not be lower than or higher than 10% of the rated working voltage of the machine!
- ◆Do not touch the high temperature area of the machine while the machine is working! For example, the cylinder head, check valve and other components. If maintenance is required, please turn off the machine, disconnect the power supply, and wait for the machine to cool down to prevent burns!
- ◆The machine has strict requirements of the power cable. Please refer to the specification sheet of this manual for details. The power cable should not be too long to prevent excessive voltage drop and affect the performance of the machine.
- ◆The recommended environment temperature should be 0-37℃. Too low or too high temperature may affect the performance of the machine.
- ◆Before use, confirm whether the safety valve is effective, pull up the safety valve to check whether it can easily vent. After checking, press the safety valve to make sure it has been reset.
- ◆During use, avoid the machine air outlet and the equipment connected to the air outlet from directly facing the operator or other personnel to prevent possible potential hazards and injury to the human body.

Advantages of VEVOR :

Designed by Italian team, with elegant and modern industrial style appearance; Inheriting the high standards and high quality of the VEVOR brand for 25 years; China's National High-tech enterprise, focusing on innovation and R&D in pneumatic field.

INTRODUCTION

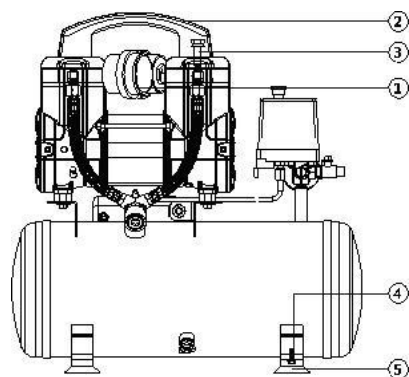
Compared with traditional belt drive or direct drive air compressor, our oil-free air compressor (hereinafter referred to as air compressor) do not require lubricating oil and can provide a relatively clean air source with low noise, which is especially suitable for dentistry, breeding, medicine, fitness, beauty, chemical industry, scientific experiments and other high-demand fields. At the same time, it can also be widely used in traditional home improvement, auto repair, factories and other fields, such as air supply for pneumatic tools, like spray gun, air nailer etc, air supply for vehicle brakes, air supply for tooling equipment, etc.

Comparison with traditional belt drive or direct drive air compressors:

Items	Oil free air compressor	Direct drive or Belt-drive
Lubrication	No, without maintenance cost	Yes, higher maintenance cost
Oil/water filter	No need	Need
Cleanliness of air	Higher	Lower
Motor	Higher efficiency	Lower efficiency
Energy Consumption	Lower	Higher
Noise	Soft, low, around 75db	Harsh, high, around 90db
continuously working	Less restrictive	More restrictive
Failure rate	Lower	Higher
Low temperature working	Applicable	Not applicable, risk of emulsification

Note: The above data comes from the manufacturer's laboratory

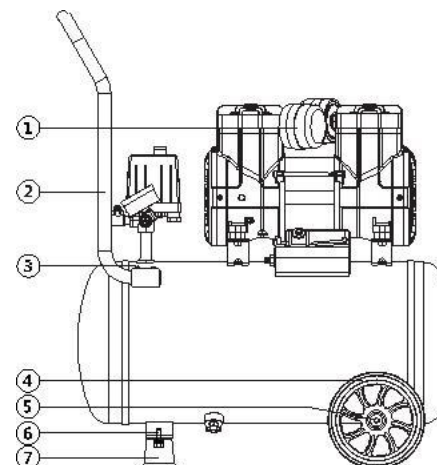
PACKAGE CONTENTS & ASSEMBLY



Applicable Model: 2-900F8

Handle type machine

No.	Parts	Qty
1	Air filter	2
2	Handle	1
3	Screw	2
4	Bolt	4
5	Cushion foot	4



Applicable Model:
2-900F18 / 2-1450F / 2-1800F35

Pull rod type

No.	Parts	Qty
1	Air filter	2
2	Pull rod	1
3	Screw	4
4	Wheel	2
5	Axle	2
6	Bolt	1
7	Cushion foot	1

ASSEMBLY

Applicable Model: 2-900F8

1. Wheel (Pic.A)

Pass the screws through the casters and the holes of the bottom bracket of the fuselage in turn, tighten the lock nut.

2. Cushion foot (Pic.B)

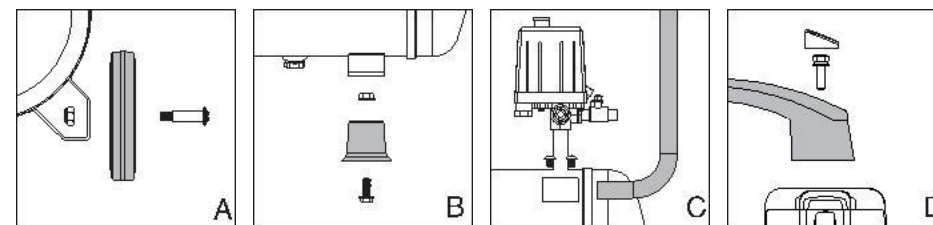
Screw cushion foot into the screw hole of the machine, and tighten the nut to fix it.

3. Pull rod (Pic.C)

Slide the pull rod to the holder and tighten the nut to fix it.

4. handle (Pic.D)

Fix the handle to the piston cover with nut.



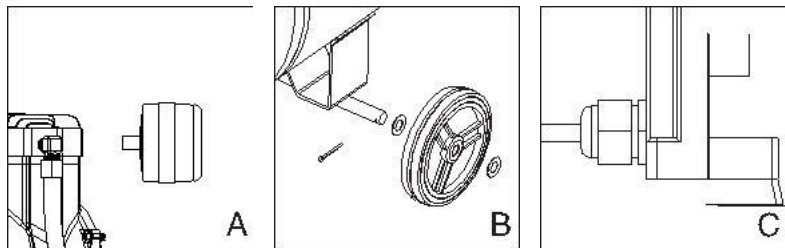
Applicable Model: 2-900F18 / 2-1450F / 2-1800F35

1. Install the air filter (pic. A)

2. Install the wheel (pic. B)

3. Install the power cable (pic. C)

Warning: the specification of the power cord must be no less than the requirements on the back cover of this manual.



OPERATION

Applicable Model: 2-900F8

1.safety valve(Pic.E):

Safety valve (1) is mainly used to keep the air pressure stable. When the air pressure exceeds 10 bar (15 bar for high-pressure models), it will automatically release the pressure to protect the safety of users. Caveat! The safety valve cannot be used to deflate. Frequent pulling out of the safety valve can easily damage the safety valve.

2. Pressure gauge (Pic. E):

The air compressor is automatically controlled by pressure switch during normal operation. When the pressure reaches the maximum value, it will automatically stop, and when the pressure drops to the starting pressure, it will automatically start. The working pressure of the air pressure switch has been adjusted before leaving the factory and cannot be changed at will during use. The pressure is displayed by the pressure gauge (2).

3. Power connection:

Plug in the plug and turn on the power (power must be grounded). Note: The air compressor should not be placed too far away from the power source (within 10 meters), so as not to reduce the voltage of the motor.

4.Pressure switch (Pic. F)

Vertical switch: Pull up the switch button to turn on, and press the button to turn off. Horizontal switch: Turn the switch to AUTO to turn it on; turn the switch to OFF to shut down.

5.Air outlet(Pic.E)

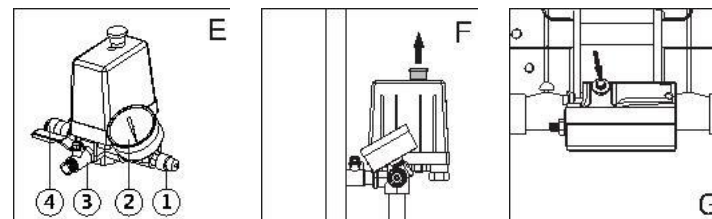
1. The ball valve (3) can be used directly.
2. before using the quick connector (4) make sure there is no pressure in the air tank.

6.Movement

Before moving the compressor, make sure that the switch is off and the power cord plug is unplugged from the socket. Grasp the handle, lift the air compressor, move the air compressor to the desired position, lower the handle, and ensure that the air compressor is on a flat ground. Note: Make sure your feet stand firm and seek help if necessary.

7.Overload protection(Pic.G)

This product is equipped with an overload protection device. When the working voltage is too low or too high, or working environment is with high ambient temperature, the motor is overheated, the machine will automatically cut off the power supply to protect the motor. After that, the user need to turn off the power switch first, wait for 3-10 minutes and then press the red reset button (depending on the cooling condition), then turn it on, the machine can be used normally, if the button is reset, it still does not work normally Wait for 30 minutes or more, and then start the motor after it has cooled down completely.



Applicable Model: 2-900F18 / 2-1450F / 2-1800F35

1.safety valve (Pic.D):

Safety valve (1) is mainly used to keep the air pressure stable. When the air pressure exceeds 10 bar (15 bar for high-pressure models), it will automatically release the pressure to protect the safety of users.caveat! The safety valve cannot be used to deflate. Frequent pulling out of the safety valve can easily damage the safety valve.

2. Pressure gauge (Pic. D):

The air compressor is automatically controlled by pressure switch during normal operation. When the pressure reaches the maximum value, it will automatically stop, and when the pressure drops to the starting pressure, it will automatically start. The working pressure of the air pressure switch has been adjusted before leaving the factory and cannot be changed at will during use. The pressure is displayed by the pressure gauge (2).

3. Power connection (Pic. E.F):

- (1) The specifications of the air switch connected must be more than 50% higher than the rated current of the air compressor.
- (2) The air compressor has a standard grounding device, connect the ground wire before use. Note: The length of the power cord shall not longer than 10 meters,If you need to extend it, please use a power cord with a higher diameter.

4.Pressure switch (Pic. D):

Pull up the switch to turn on, lower the switch to turn off.

5.Air outlet (Pic. D):

- (1)The ball valve (4) can be used directly.
- (2) before using the quick connector (3) make sure there is no pressure in the air tank.

6. Movement

Before moving the compressor, make sure that the switch is off and the power cord plug is unplugged from the socket. Grasp the handle, lift the air compressor, move the air compressor to the desired position, lower the handle, and ensure that the air compressor is on a flat ground.

Note: Make sure your feet stand firm and seek help if necessary

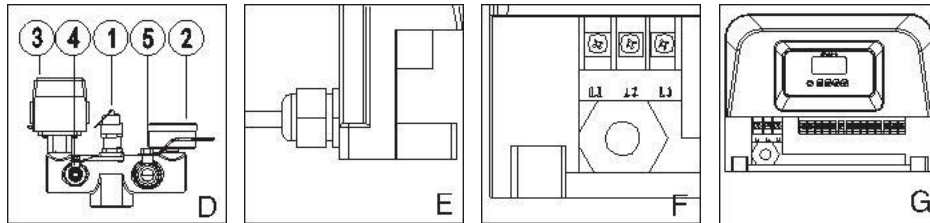
7. Control box (pic.G)

(1). Each motor has an independent control switch. When it is started normally, motors will start in sequence with a delay of 4 seconds. The user can also set the number of working motors according to actual work requirements.

(2). Phase sequence correction, if the electric control box displays "999" after the power is turned on, but it does not work normally: it is because the power input line is connected incorrectly, and the motor is in phase sequence protection state to avoid motor reversal, and the wiring sequence needs to be re-adjusted for normal use.

(3) Over-voltage and under-voltage protection

The air compressor will automatically cut off the power to protect the motor due to the high or low input voltage. The user needs to make sure that the voltage is normal and then restart the machine. Warning! Please use the air compressor in a suitable environment!



MAINTENANCE

Before any maintenance or repair work, you must cut off the power supply and ensure that the air tank is pressure-free, otherwise it is very easy to cause injury!!

1. Please clean and maintain the machine regularly.
2. If the power cord is damaged, in order to avoid danger, it must be replaced by the manufacturer's maintenance department or qualified person.
3. Open the drain valve to drain the water daily or after every use. When draining, the pressure in the air tank should be less than 1 bar.
4. Check whether the safety valve is sensitive every week, pull out the safety valve to check whether it can be easily exhausted, and it can be reset immediately after pressing it.
5. It is recommended that remove the filter element of the air filter and clean it with clean high-pressure air every 200 hours of use, replace the filter element of the air filter every 500 hours of use, and replace the cylinder and piston ring every 2000 hours of use. The details can be adjusted according to the actual use.

6. The air tank shall be subjected to a pressure test every two years, and the internal and external surfaces shall be inspected once a year. When there is severe rust, severe bruising or failed to pass the pressure test, the air tank shall be replaced.

7. In case of severe machine vibration, please pay attention to whether you need to replace the shock pad.

Precautions for maintenance:

(1) Before disassembling the machine, cut off the power supply, wait for the machine to cool down and ensure that the air tank is pressure-free.

(2) During the maintenance process, the fasteners should be tightened, if any damage is found, they should be replaced with new ones.

(3) when the maintenance is over, after re-installation, the fan should be rotated to check for abnormalities

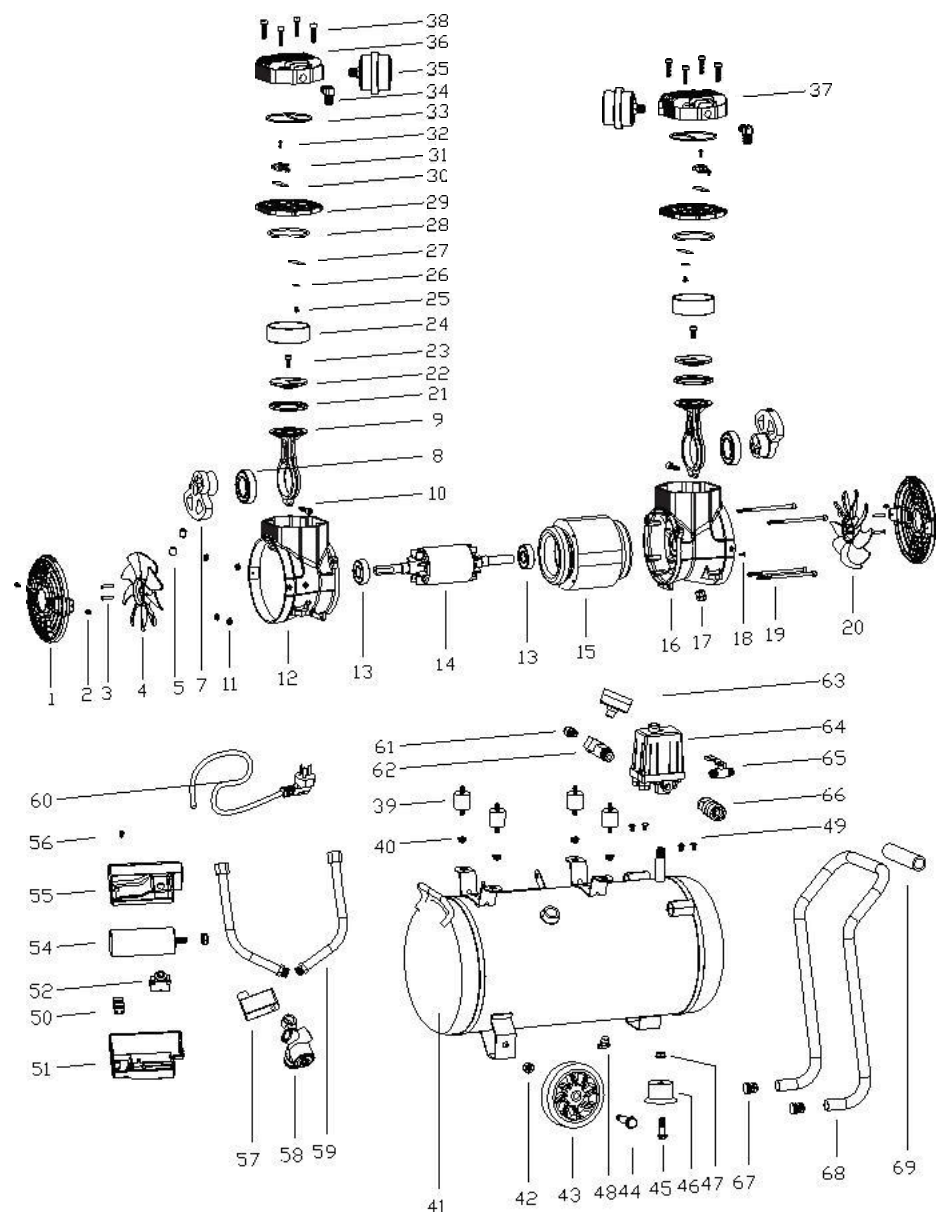
(Note: The left and right fan blow inward when the motor rotates.)

TROUBLE SHOOTING

Warning: Before any maintenance or repair work, you must cut off the power supply and ensure that the air tank is pressure-free, otherwise it is very easy to cause injury!

Problem	Possible cause	Solution
The motor does not start and without any noise	No Power supply	Check the plug and the power supply
	Pressure switch is off	turn on the pressure switch
	Under overload protection	Press the red reset button to start after the machine cooled down
	Pressure switch faulty	Replace the pressure switch
	Stator faulty	Replace the stator
The motor does not start or starts slowly,with a humming noise	Low voltage supply	Place the air compressor in a well-ventilated place
	Short circuit or open circuit of motor coiling	Contact Auarita or dealer
	Check valve or pressure switch faulty	Contact Auarita or dealer
The overload protector cuts off the power repeatedly	Low voltage supply	Check the input voltage, can not 10% lower than the rated voltage
	Poor ventilation, too high temperature	Check the input voltage, can not 10% lower than the rated voltage
	Wrong installation of fan	Check the fan and install it in the correct direction
Pressure drops in the tank	Air leaks at connections	Check each connection,tighten leaky connection
	Drain valve is open or loose	Tighten the drain valve
	Air leaks at check valve	Remove and clean, if still not work, Replace the check valve
The exhaust gas has a high humidity	A lot of water in the tank	Drain the water in the tank
	The working environment with too high humidity	Move the air compressor to a place with low humidity,or use an oil-water separator
The motor does not stop	Pressure switch faulty	Replace the pressure switch
	Air leakage, can not reach the max pressure	Check and tighten the leaky connection
Machine with High vibration	Loose fasteners	Check and tighten
	The internal parts of the air compressor are aging or damaged	Replace foot or shock pad
	Cushion foot or shock pad damaged	Replace aging or damaged parts
Can not reach the max working pressure	Drain valve is open or loose	Tighten the drain valve
	Air filter blocked	Clean or replace the filter element
	Air leakage	Check and tighten
	Poor valve function or foreign matter or air leakage	Clean or replace
	Excessive wear of piston rings	Replace the piston ring

EXPLODED VIEW & PARTS LIST



No.	Parts	Qty	No.	Parts	Qty
1	Fan cover	2	36	Left cylinder cover	2
2	Screw	4	37	Right cylinder cover	1
3	Screw	2	38	Screw	1
4	Left fan	1	39	Shock pad	8
5	Set screw	2	40	Screw	4
6	Set screw	2	41	Air tank	1
7	Crank	2	42	nut	1
8	Bearing	2	43	Wheel	2
9	Connecting rod	2	44	axle	2
10	Screw	2	45	Bolt	1
11	Nut	4	46	Cushion foot	1
12	Crank case	1	47	Nut	1
13	Bearing	2	48	Drain valve	1
14	Rotor	1	49	Lock nut for handle	4
15	Stator		50	Terminal block	1
16	Crank case		51	Bottom cover for capacitor	1
17	Strain Relief Bushing	1	52	Overload protection	1
18	Ground screw	1	53	Nut for capacitor case	1
19	Screw	4	54	Capacitor	1
20	Right fan	1	55	Upper cover for capacitor	1
21	Piston ring	2	56	Screw	1
22	Pressure plate	2	57	Solenoid valve	1
23	Screw	2	58	Check valve	1
24	Cylinder	2	59	High pressure pipe	2
25	Screw	2	60	Power cord and plug	1
26	Metal strengthen sheet	2	61	Safety valve	1
27	Air valve	2	62	Connector	1
28	Cylinder obturating ring	2	63	Pressure gauge	1
29	Valve plate	2	64	Pressure switch	1
30	Air valve	2	65	Ball valve	1
31	Limited block	2	66	Quick connector	1
32	Screw	2	67	End cap	2
33	Obturating ring	2	68	Handle	1
34	Elbow	2	69	Foam sleeve	1
35	Air filter	2			

PRODUCT SPECIFICATIONS

Series	Sales area	Model	Voltage Frequency	Air flow @8bar L/min	Max pressure Bar	Power kW	Tank volume L	Noise dB	Power cord mm ²	Motor speed rpm
Oil-free series	United States, Canada	2-900F8	120V~ 60Hz	65	8	0.9	8	75	1.5	3400
		2-900F18		65	8	0.9	18	75	1.5	3400
		2-1450F24		95	8	1.45	24	75	2.5	3400
	The European Union	2-900F8	220-240V~ 50Hz	65	8	0.9	8	72	0.75	2800
		2-900F18		65	8	0.9	18	72	0.75	2800
		2-1450F24		95	8	1.45	24	72	1	2800
		2-1800F35		140	8	1.8	35	76	1.5	2800



Dispose:

This product is subject to the provision of European Directive 2012/19/EC. The symbol showing a wheeled bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste, but must be taken to a collection point for recycling electrical and electronic devices.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference ;
2. This device must accept any interference received, including interference that may cause undesired operation.

Manufacturer address: Shui'an Industrial Zone, Ruoheng, Wenling, Zhejiang, China.

EC

REP

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