

Operation Manual



Model: W2/W3/W4/W6/W20

Version :202005

(Please ready this operation manual carefully before use or maintenance)



I . Product Features

- 1, This product compare to oil air compressor, it is more convenient for use & maintenance. Oil type air compressor need to fill in oil before use, and it requires to change the Engine oil according the ambient temperature. If forgot to fill in oil, it will lead the broken of air compressor which caused by cylinder inflation. Using an oil compressor for a long time will produce carbon deposition in the cylinder block, and carbon deposition will enter the handpiece, oral or other instrument along with compressed air.
- 2, In dental treatment work, light curing, glass ionomer, porcelain, etc. have higher requirements for compressed air. If the compressed air contains oil molecules, the combination and firmness of light curing will not meet the standard, and the quality cannot be guaranteed. Ultimately affect the quality of treatment. The above phenomenon can also occur in other dental treatments such as glass ionization. In the process of porcelain teeth, due to the need for continuous air supply for a long time, the oil compressor is limited by its technology, and the output gas contains oil and cannot grow. Runs air supply for time, when the motor is overheated, it will stop automatically and need to be cooled for a long time before restarting, while the oil-free compressor can keep working for a long time without stopping, the compressed air produced without any oil, absolutely meet the treatment requirements .
3. During the use of the handpiece, due to the extremely high precision of the handpiece, the oil molecules and carbon deposits in the compressed air produced by the oil compressor have large particles and high viscosity, which will reduce the lifespan of the micro motor in the handpiece. The compressed air produced by an oil-free compressor is oil-free and carbon-free, and does not have the above-mentioned defects.
4. Since the compressed air produced by the oil-free compressor is clean & oil-free, blowing into the patient's mouth will not cause damage to the patient's health, while the oil compressor is the opposite, regardless of the health, environmental hygiene and health of patients with oral diseases. Environmental protection is extremely disadvantageous. At present, relevant national parties are paying more & more attention to the oil-free treatment of dental hospitals & private dental clinics, and have begun to formulate relevant laws & regulations. Therefore, oil-free compressors are the current air source of choice for the medical industry in terms of the use & maintenance of dental comprehensive treatment machines & dental handpieces, the service life of the equipment, or the environmental protection & patient health.

II. Technical Parameters

Parameter \ Model	W2	W3	W4	W6	W20
Voltage (V)	220	220	220	220	220
Power Frequency (Hz)	50	50	50	50	50
Rated Current (A)	3.8	6.8	7.7	11.5	38.6
Rated Watts (kw)	0.85	1.5	1.7	2.55	8.5
Start Pressure (MPa)	0.5	0.5	0.5	0.5	0.5
dBa (dB)	59-65	59-66	65-69	69-76	69-76
Tank Volume (L)	32	38	65	95	/
Weight (kg)	26.5	30	46.4	63.5	370
Dimension : L* W* H(mm)	460*460*770	460*460*770	880*430*730	1030*430*730	1360*520*1000
Available Qtys (pcs)	1-2	2-3	2-4	4-6	18-20

III. Spare Parts

1. After unpacking, please check whether the product is damaged during transportation. At the same time, check whether all parts on the packing list are complete. If there is any loss, please report it to the company dealer immediately.

2.

2. Spare parts & accessories: (Refer as pictures)

1.



2.



S/N	Name	Dimension	Qty	Remark
1	2/8 Inch quick coupling connector	6/8 Inch External thread	1pc	
2	Air tubing	Ø5X8mm	1pc	For Air exhausting use
3	Instruction manual		1pc	

IV. Work Principle & Precautions

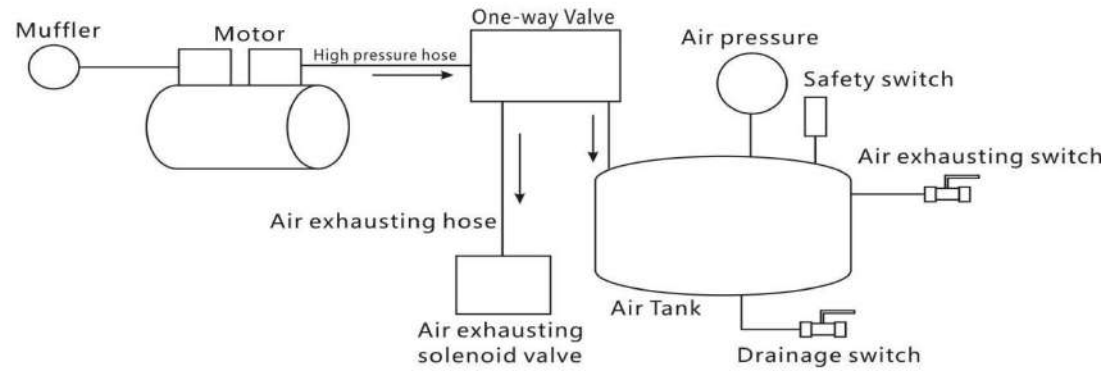
1. Place the air compressor on a flat and solid ground before use, and try to place it in a dry, well-ventilated, and less dusty place.
2. After checking that there are no abnormalities in the components of the air compressor, insert the power cord plug into the required power socket (the rated current of the power socket should not be less than 15A, and it must be well grounded). Start the compressor and the compressed air enters the air tank. The whole machine starts to work. When the pressure gauge indicates that the pressure reaches the rated maximum pressure (generally not more than 0.8Mpa), the compressor pressure controller will start to work, the compressor will automatically stop working, and the air in the pipeline from the check valve to the compressor head passes through the solenoid valve Discharge is to prepare for the next no-load start of the compressor. Therefore, it is normal for the air to be discharged from the lower end of the solenoid valve when the compressor is stopped.
3. Connect the valve nozzle of the air delivery valve to the pipeline of the dental comprehensive treatment machine, and open the air delivery valve to supply air to the equipment. When the pressure indicated by the pressure gauge drops below 0.5Mpa, the air compressor will automatically restart.
4. If the user's power supply voltage is abnormal (too high or too low), it cannot be used forcibly, and a power supply regulator must be added, otherwise the compressor motor will be damaged.
5. During use, due to the principle of compressed air, a small amount of water will condense in the air compressor tank, so it should be drained regularly, usually once a day or two. When draining, just open the drain valve under the air tank. Use the pressure in the gas storage tank to drain the water inside, and then close the valve.
6. During use, because there is dust in the air, the filter must be cleaned once a week. When cleaning, unplug the filter from the muffler, rinse it with clean water repeatedly, and dry it before use.
7. When the compressor air pressure does not reach the highest set pressure and it stops unexpectedly, it cannot be restarted immediately. It must wait 2 to 3 seconds for the solenoid valve to release pressure before restarting.
8. To ensure safety, it is strictly prohibited to touch any components on the air compressor when it is working.



V.Maintenance and Repair

1. The compressor is an oil-free air compressor. It is strictly forbidden to add any lubricating oil.
2. Regularly drain and clean the silencer filter.
3. If the compressor stops suddenly and cannot be restarted in a short period of time during the working process of the compressor (normal voltage), it may be because the compressor has been working for a long time and the motor is overheated. The motor thermal protector automatically cuts off the power to protect the motor. This situation is normal. When the temperature drops, the compressor will automatically start and continue to work.
4. The compressor cannot start normally. Please check whether the power supply is normal and whether the power plug is in good contact. If these are normal, it may be a malfunction of the compressor itself or the control system. If you cannot solve it by yourself, please contact our company for repair through the seller.
5. The compressor can start normally, but the pressure relief solenoid valve cannot be closed, and it has been emptied. It may be a failure of the pressure relief solenoid valve.
6. When the pressure in the compressor tank reaches the maximum set pressure, the compressor will automatically stop. However, the pressure relief hole of the solenoid valve still continues to vent and cannot be closed. It may be a failure of the one-way valve. At this time, turn off the power immediately and check the pressure switch for failure.
7. Compressor working pressure is above 0.8Mpa and still does not stop. At this time, turn off the power immediately and check the pressure switch failure.
8. The working pressure of the safety valve is 1.0Mpa. The working pressure of the safety valve has been adjusted before leaving the factory, and the user shall not adjust it without authorization. (If the pressure is above 0.5Mpa, it is a normal phenomenon that the safety valve has a weak leakage and does not affect the operation of the equipment.)

VI. Air Compress Work Diagram



VII. Electrical Diagram

