Pro-Tech TOOLS

# Oil-free air compressor



## Instructions for use

**Translation of the original instructions**



**PROTECTIVE HEADPHONES MUST BE WORN**



**READ THE OPERATING INSTRUCTIONS CAREFULLY**



**WARNING AGAINST ELECTRIC SHOCK**



**HOT SURFACE WARNING**



**AN INDICATION THAT THE DEVICE MAY START WITHOUT WARNING**

# 1. INTRODU CTION

All activities related to routine and periodic maintenance have been taken into account in the preparation of these operating instructions.
using an electric compressor. For correct and optimal use of the compressor, it is necessary to read and carefully follow the instructions written here. It is recommended to keep the operating instructions in good condition in an easily accessible place near the compressor. The compressor may only be used by authorized, qualified and experienced persons. It is recommended not to carry out repairs or interventions unless specified in the manual. Any repairs that require the dismantling of certain parts of the compressor should be entrusted to an authorised service centre. V
To ensure the efficiency as well as the running time of the electric compressor, it is recommended to use original spare parts.

Compared with traditional belt-driven or direct-drive air compressor, our oil-free air compressor (hereinafter referred to as "air ") does not require lubricating oil and can provide a relatively clean air source with low noise, which is especially suitable in dental, animal husbandry,
medicine, fitness, chemical industry, scientific experiments and other high demanding fields. At the same time, it can be widely used in traditional repair and construction work, automobile repair in factories and other fields, such as air supply for pneumatic tools such as spray gun, air nailer, etc., air supply for vehicle brakes, air supply for instrumentation, etc.

Comparison with a conventional belt-driven or direct-drive compressor

Air compressors:

| | **Oil-free compressor** | **Oil compressor** |
|---|---|---|
| **Lubrication** | There is no need | Required |
| **Air/oil filter** | There is no need | Needed |
| **Air purity** | Above | Below |
| **Engine** | Higher performance | Lower efficiency |
| **Energy consumption** | Below | Above |
| **Noise** | Low, approximately 60-75 dB | High, approximately 90 dB |
| **Continuous operation** | Less restrictive | More restrictive |
| **Failure rate** | Smaller | Larger |
| **Operation at low temperatures** | Suitable | Not used |

## 2. OPERATION OF THE EQUIPMENT

The compressor must be used in well-ventilated areas at +5 / +35 °C, never in the presence of dust, acids, vapours, explosive and flammable gases.

The personnel operating the compressor must meet the minimum age requirements in accordance with the presumed laws of the country concerned, after a sufficient period of training and maintenance of the equipment. Use personal protective equipment and take all the precautions listed this manual. Take any other precautions that may become necessary due to the working conditions and location.

## 3. SAFETY

The following rules must be observed when using electromechanical equipment:

- Do not touch the appliance with bare feet, wet hands or feet

- do not pull the cord to disconnect it from the socket, or move the compressor (device)

- do not allow the device to be exposed to weather conditions (rain, sun, fog).

- do not allow inexperienced persons to use the compressor without proper supervision

- in case of damage or corrosion, do not perform any welding or mechanical operations on the tank, replace the tank according to its technical characteristics and in accordance with local regulations

- use the compressor for various purposes (pumping, air tools, painting, washing with or water-based agents, etc.) in accordance with knowledge and principles. To prevent damage to the compressor by other tools, keep a distance of at least 6 metres from the work area

- Compressed air produced by a compressor without any further treatment is not suitable for pharmaceutical, food or sanitary purposes. It is not suitable for filling containers under water. Working areas must be ventilated to dilute the pumped air.

- no connections to the pressure tank should be loosened, the tank should be emptied after operation

- do not carry out any activities that could the compressor first disconnecting it from the power outlet

- the working temperature should be between +5 °C and +35 °C

- Do not direct air or flammable liquids at the compressor

- do not place flammable substances near the compressor

- when the compressor is not in use, switch it to the "0" (off) position.

- Do not direct the air stream at people or animals.

- do not transport the compressor with the tank under pressure

- children and pets should be kept away from the working compressor

- the compressor is only used for compressing air and must not be used for other gases

- the equipment must not be used in explosive atmospheres

Particular care should be taken when the compressor is in as the motor, air discharge tube and one-way valve become hot and can cause serious burns if touched. Similarly, any moving
parts (drive roller and flywheel) can cause serious accidents.

## 4. INDIVIDUAL PROTECTIVE MEASURES

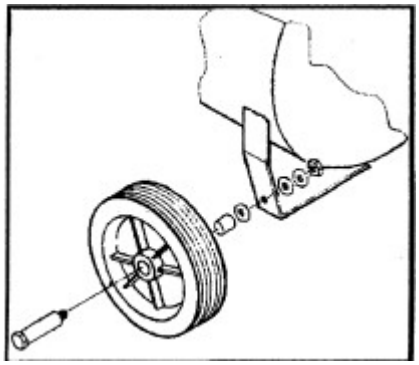
When working with compressed air, wear safety goggles to protect your eyes from foreign objects and the impact of the air stream. Protect your nose and mouth with a special mask when using the compressor for painting. In this case, do not work in enclosed rooms or near open flames. Make that there is sufficient air exchange in the room.

## 5. ACCOMMODATION

The compressor must be placed on a stable base at the same level as the operator, in any case check that the compressor lies perfectly on a level surface. If the compressor is fitted with installation feet, vibration damping pads should be placed between these and the floor. If the compressor must be installed above floor level (shelf or bracket), be sure to take into account its weight as well as the weight of the condensate, which is included in the weight of the tank.

**BIKE CONSTRUCTION**

Fit the wheels shown in Figure 1.



**CONNECTION TO THE MAINS**

1. This product is designed for use on a nominal 230 volt circuit and has a grounding plug. Ensure that the product is connected to an outlet with the same configuration as the plug. This product must be grounded. In the event of an electrical short circuit, earthing reduces the risk of electric shock by provides an escape cable for electric current. This product is equipped with a cable with a grounding conductor with a suitable grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.
2. If repair or replacement of the cable or plug is required, do not connect the ground wire to any flat insulation whose outer surface is terminal. The wire with green (with or without yellow stripes) is the ground wire.
3. Check with a qualified electrician, or if you do not fully understand the earthing instructions or if you are in doubt as to whether the product is correctly earthed. Do not modify the supplied plug; if it does not fit outlet, have a qualified electrician install the correct outlet.

# 6. TECHNICAL DATA

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| Model | Volume tanks | Power | Voltage/frequency | Flow | Maximum pressure | Protection class | Class insulation |
|---|---|---|---|---|---|---|---|
| KWU550-24L | 24l | 1200W | 230V/50Hz | 124-220L/min | 8 bar | IP23 | B |
| KWU750-50L | 50l | 1500W | 230V/50Hz | 145-290L/min | 8 bar | IP23 | B |
| KWU750*3-100L | 100l | 4500W | 230V/50Hz | 455-911L/min | 8 bar | IP23 | B |

## 7. TRANSPORT

**Pressure Switch - Auto/Switch** - In the AUTO position, it will automatically shut off when the tank pressure reaches the maximum preset compressor pressure. In the OFF position, the compressor does not operate. This switch should be in the OFF position when connecting or disconnecting the power cord from the electrical outlet, or when changing air tools. **Regulator** - The regulator controls the amount of air pressure released at the hose outlet. **Safety valve** - This valve automatically releases air if the pressure in the tank
exceeds the preset maximum.
**Discharge Tube** - This tube carries compressed air from the pump to the check valve. This tube gets very hot during use. To avoid the risk of serious burns, never touch
discharge tube..
**Check Valve** - A one-way valve that allows air to enter the tank but prevents the air in the tank flowing back to the compressor pump.
**Drain valve** -This valve is located at the bottom of the tank. Use this valve to drain moisture from the tank on a daily basis to reduce the risk of corrosion. Reduce the tank pressure below 10 psi and then drain moisture from the tank daily to prevent tank corrosion. Drain the moisture from the tank by opening the drain cock located under the tank.

**MAZANIE**

This is an oil-free product and does NOT require lubrication to operate.

**THE PROCEDURE FOR SWITCHING ON**

**Do not connect an air coupling or other tool to the open end of the hose until the start-up is complete and the unit is checked for proper operation.**

**IMPORTANT**: Do not turn on the compressor before reading the instructions may occur.

I. Turn the regulator fully to open the .

2. Turn the power switch to OFF and plug in the power cord.

3. Turn the switch to the AUTO position and allow the unit to run for 30 minutes to break the pump parts.

4. Turn the regulator knob fully . The compressor will adjust to the maximum preset pressure
and shut off.

5. Turn the regulator knob to release the air. The compressor will restart at the preset pressure.

6. Turn the controller knob to shut off the air supply and turn the switch to the off position.



7. Attach an air coupling or other tool to the open end of the hose. Switch on the regulator. In the AUTO position, the compressor pumps air into the tank. It will automatically shut off when the unit reaches the maximum preset pressure. In the OFF position, the pressure switch cannot operate and the compressor will not operate. When connecting or disconnecting the power cord from the electrical outlet, make sure that the
switch in the OFF position.

**HUMIDITY IN COMPRESSED AIR**

The moisture in the compressed air is formed into droplets as it exits the air compressor pump. When the humidity is high, or when the compressor is in continuous use for long periods of time, this moisture collects in the tank. When using a spray or sandblasting gun, this water will be drained from the tank through the hose and out of the gun as droplets mixed with the material being sprayed.

**IMPORTANT:** This condensation will cause water spots on the paint, especially when spraying non-waterborne paints. When sandblasting, it will sand and clog the gun, rendering it ineffective. A filter in the air line, placed as close to the gun as possible, will help remove this moisture.

**SAFETY VALVE**

**Do not remove or attempt to adjust the relief valve!**

You should check this valve occasionally under pressure by pulling the ring by hand. If air leaks when the ring is released or the valve is stuck and cannot be activated by the ring, you MUST replace it.

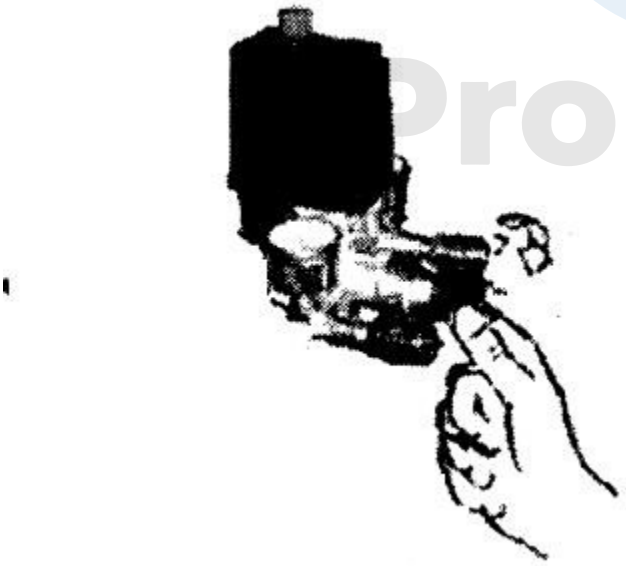
**REGULATOR KNOB**

1. This knob controls an air-operated tool or spray gun.

2. Turn clockwise to increase the air pressure at the outlet. When the desired pressure, secure the pressure with nuts.

3. Turn to reduce the air pressure at the outlet.

3. Turn fully to completely stop the air supply, then press the knob down.



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**TANK PRESSURE GAUGE**

The pressure gauge shows the pressure in the tank, which means that the compressor is correctly.

**MAINTENANCE**

**Disconnect the power source and then release all pressure from the system before attempting to install, service,**
**relocation, or carrying out any maintenance.**

Check the compressor frequently for visible problems and follow maintenance procedures each time the compressor is used.

1. Pull the ring on the relief valve and allow it to snap back into its normal position.
2. Turn off the compressor and release the pressure from the system. Drain the moisture from the tank by opening the drain cock under the tank.

3. Clean dust and debris from the engine, tank, air valves and pump cooling fins while the compressor is still OFF.

**PROTECTION AGAINST THERMAL OVERLOAD**

This compressor is equipped with thermal overload protection with automatic reset that shuts down the motor if it overheats. If the thermal overload protection frequently shuts down the motor, look for the following causes.

1. Low voltage.

2. Clogged air .

3. Lack of proper ventilation.

**If the thermal overload protection is activated, the motor must be allowed to run before starting cool. The motor will automatically restart without warning if left plugged into an electrical outlet and the unit is turned on.**

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**STORAGE**

1. When not in use, store the hose and compressor in a cool, dry place.

2. Drain the moisture from the tank.

3. Disconnect the hose and hang the open ends down to allow all the moisture to drain out.

**The air compressor** is a well-known device all over the world.

Series-produced compressors are the result of the work of experienced engineers who are involved in the entire production process, from design to assembly maintenance of the unit. The unit uses state-of-the-art thermodynamics and fluid analysis systems, enabling efficient operation. The mass-produced compressors have been subjected to time-consuming testing to be sure of their high quality.

**Air functions:**

1. The use of a special outlet system together with aluminium valves has resulted in a 10-30% higher air flow. The air flow elements have been enlarged. The operation of the unit has been improved and the noise level has also been reduced.

2. The compressor crankshaft and all rotating components of the unit are made of specially treated steel. The use of this type of steel has reduced the amount of vibration generated during operation of the unit and made all components stronger and more stable.

3. The cylinder head and other components were made from a premium, suitably treated alloy. The head was bolted on with four screws. The possibility of air leakage was virtually eliminated. The highest degree of air compression was achieved.

4. All attachments to the unit have been manufactured to be robust and not cause leaks.

5. The aerator is designed to be safe and reliable.

6. The piston of the device has been heat treated. Carbon treatment was applied to the piston pins.

7. A special damping system is used, which is efficient and quiet.

The machine meets even the most demanding customer expectations. When handled properly, the machine guarantees high-quality performance and a long service life.

**Choosing our air compressor is a decision will definitely have a positive impact on the quality of your work.**

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## 8. DISPOSAL OF THE APPLIANCE

When the compressor is no longer in operation, it should be disposed of in the same way as other industrial equipment. Do not dispose of used equipment, tools and parts in municipal waste containers.



**Electrical products must not be disposed of with household waste. They must be disposed of in designated recycling facilities. Contact your local authorities for information on the disposal of electrical appliances.**