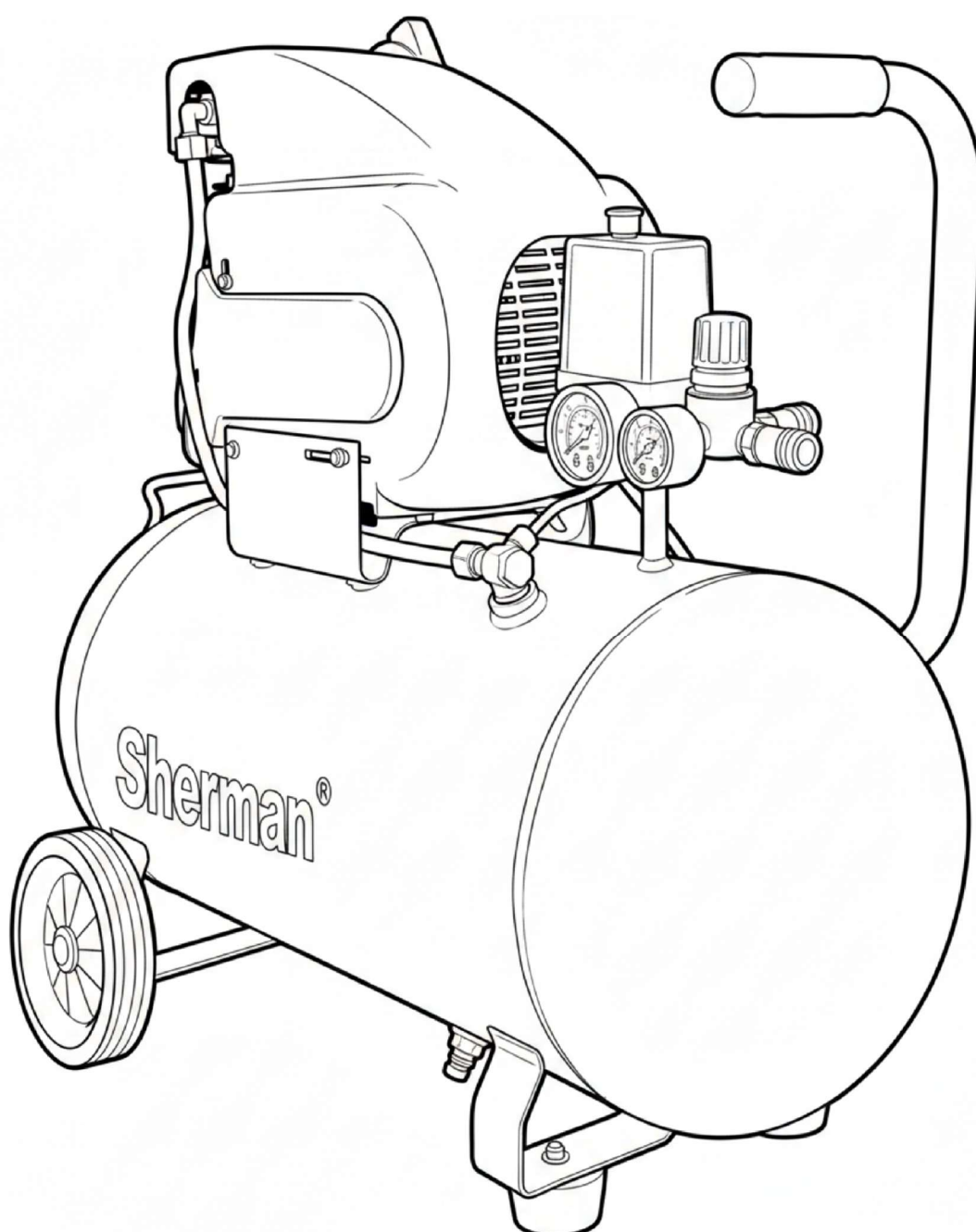


Sherman®

EN V1.3 8/25/26

USER MANUAL

AC420 / AC5020 PISTON COMPRESSOR



CE



ATTENTION!

Before installing and starting the appliance, please refer to this manual

1. GENERAL COMMENTS

The device can only be commissioned and operated after carefully reading these Operating Instructions. Improper use of the compressor may cause a risk to the health and life of users or third parties.

Due to the continuous technical development of the device, some of its functions may be modified and their operation may differ in detail from the descriptions in the manual. This is not a fault of the device, but the result of progress and continuous modification work of the device.

Damage to the device caused by improper operation will void your warranty rights.
Any modifications to the charger are prohibited and will void the warranty.

2. IDENTIFICATION DATA

The compressor identification data is shown on the nameplate attached to the compressor housing.

TECWELD Piotr Polak 41-943 Piekary Śląskie Ul. Szmaragdowa 21/3/6		Sherman[®]	
SPRĘŻARKA TŁOKOWA / AIR COMPRESSOR			
Type: ZB-2024		Model: AC2420	
Pojemność zbiornika / tank capacity:		24 l	
Zasilanie / Power supply:		AC230V 50Hz	
Moc silnika / Motor power:		3.2 KM 2.4 kW	
Prędkość obrotowa / Rotation speed:		2850 obr/min (RPM)	
Ciśnienie maksymalne / Max. pressure:		8 bar	
Wydajność / Air flow:		206 l/min	
Poziom hałasu / Noise level:		L _{WA} 92 dB	
Masa / Weight:		21.5 kg	
Rok produkcji / Year of production:		2025	
  		Nr seryjny / Serial No.	

TECWELD Piotr Polak
41-943 Piekary Śląskie
Ul. Szmaragdowa 21/3/6

Sherman®

SPRĘŻARKA TŁOKOWA / AIR COMPRESSOR

Type: ZB-2050

Model: AC5020

Pojemność zbiornika / tank capacity:

50 l

Zasilanie / Power supply:

AC230V 50Hz

Moc silnika / Motor power:

3,2 KM 2,4 kW

Prędkość obrotowa / Rotation speed:

2850 obr/min (RPM)

Ciśnienie maksymalne / Max. pressure:

8 bar

Wydajność / Air flow:

206 l/min

Poziom hałasu / Noise level:

L_{WA} 92 dB

Masa / Weight:

26 kg

Rok produkcji / Year of production:

2025



Nr seryjny /
Serial No.

3. GENERAL SAFETY RULES

When operating the compressor, the general health and safety regulations must be observed. When using the device, precautions should be taken when using it.

The most important elements used in a compressor to increase the level of safety during its use are:

- operation in automatic mode based on readings from pressure sensors,
- safety valve,
- Safety guards to protect the operator from dangerous machine components.

automatic operation controlled by the pressure switch

Any interference with the safety valve is prohibited!



In the event of a malfunction, disconnect the compressor from the power supply immediately. Any work on the device can only be carried out after stopping the machine, removing the plug from the power socket and relieving the air tank.

It is forbidden to operate the device with damaged or destroyed covers, damaged air tank, damaged electrical and pneumatic cables, or damaged compressor working parts

Before starting the device, you should:

- Check the condition of electrical and mechanical connections. Improper insulation of wires may result in electric shock,
- Place the compressor in a location that allows it to be easily operated.



It is forbidden to remove the external covers when the device is plugged in.

Any modifications to the compressor on your own are prohibited and may impair safety conditions. It is forbidden to operate the compressor in rooms with a risk of explosion or fire!

The hazards and general health and safety rules presented above do not exhaust the issue of occupational safety, as they do not take into account the specifics of the workplace. An important complement to them are workplace health and safety instructions as well as training and instructions provided by supervision employees.

4. OPERATING SAFETY



ATTENTION!

Before starting the compressor for the first time, pour oil into the compressor tank and replace the oil filler cap with a special vent cap.

Explanations of pictograms:

	Read the user manual
	Electric shock hazard
	The machine works in automatic mode. The compressor may turn on automatically
	Put on hearing protection
	Wear safety glasses
	Attention, hot surface
	No removal of covers



Prohibition of lubrication and maintenance of the machine in motion

Check the oil level before each start of the compressor.

Before each longer break, the pressure must be removed from the tank.

After each service work, make sure that the guards are in place and not damaged.

5. CLEANING, MAINTENANCE AND REPAIR SAFETY



ATTENTION!

When the compressor is not in use (maintenance, maintenance, or downtime), turn off the power, disconnect the power plug, and depressurize the air tank.

Regularly inspect the compressor for wear or damage to the equipment, electrical and pneumatic hoses.

Damaged components must be replaced immediately, do not operate the compressor with damaged components

Cleaning, all inspection, maintenance and repair work should be carried out after the power supply to the appliance has been disconnected.

6. DEVICE DESCRIPTION

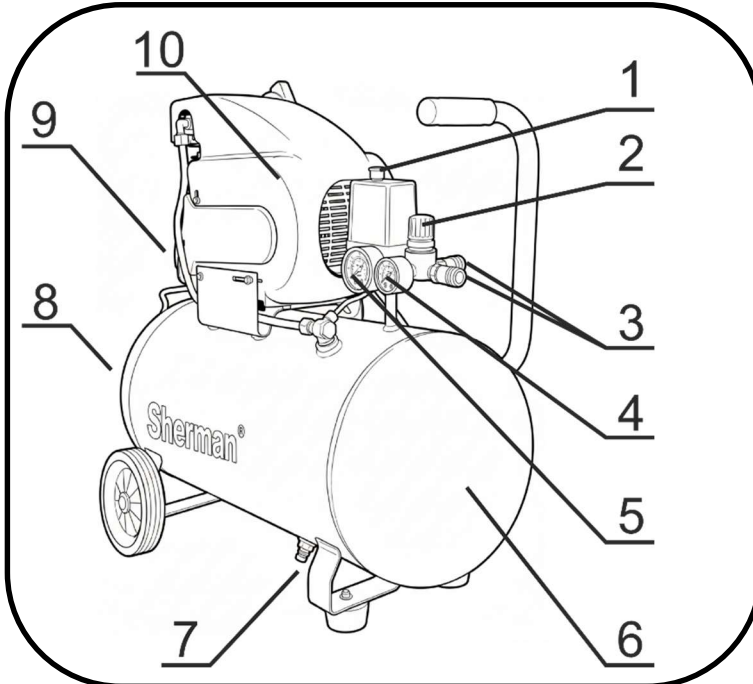
A piston compressor is used to store pressurized air to drive pneumatic tools and equipment, spray guns, inflate wheels, etc.

The compressor consists of a steel tank on which a piston compressor driven by an electric motor is placed.

7. SPECIFICATIONS

	AC2420	AC5020
Power supply	AC 230V 50Hz	AC 230V 50Hz
Rated power consumption	2.4 kW (3.2 hp)	2.4 kW (3.2 hp)
Maximum working pressure	8 bar	8 bar
Air Tank Capacity	24 l	50 l
Minimum operating temperature Tmin	-10 °C	-10 °C
Maximum operating temperature Tmax	+90 °C	+90 °C
Rotational speed	2850 rpm	2850 rpm
Performance	206 l/min	206 l/min
Operating mode	Automatic	Automatic
Sound power level	92 dB	92 dB
weight	21.5 kg	26 kg
Dimensions	580 x 250 x 580 mm	720 x 290 x 650 mm

8. CONSTRUCTION AND OPERATION



1. Main switch
2. Output pressure reducer
3. Air Outlet couplings
4. Working Pressure Gauge
5. Tank pressure gauge
6. Air Tank
7. Tank drain valve
8. Oil Level sight glass
9. Compressor
10. motor cover

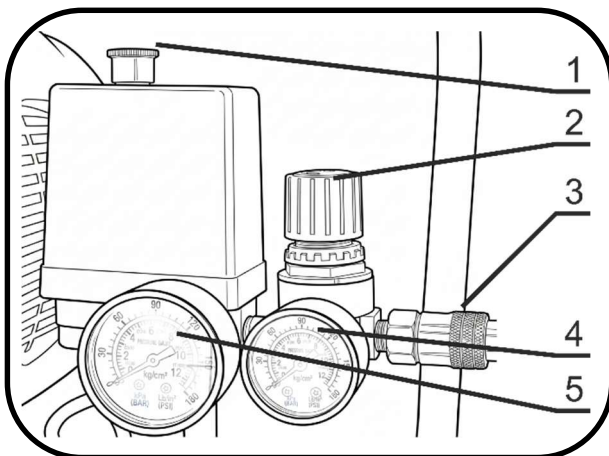
When the power is connected to the compressor, the appliance turns on with the red button (1) pulling it upwards. The working pressure is set using the pressure reducer knob (2). The compressor operates in automatic mode, switching on and off, according to the factory pressure settings.

9. CONTROLS

On top of the compressor, on the pressure switch housing, there is a main switch (1). Pulling the red button up starts the compressor.

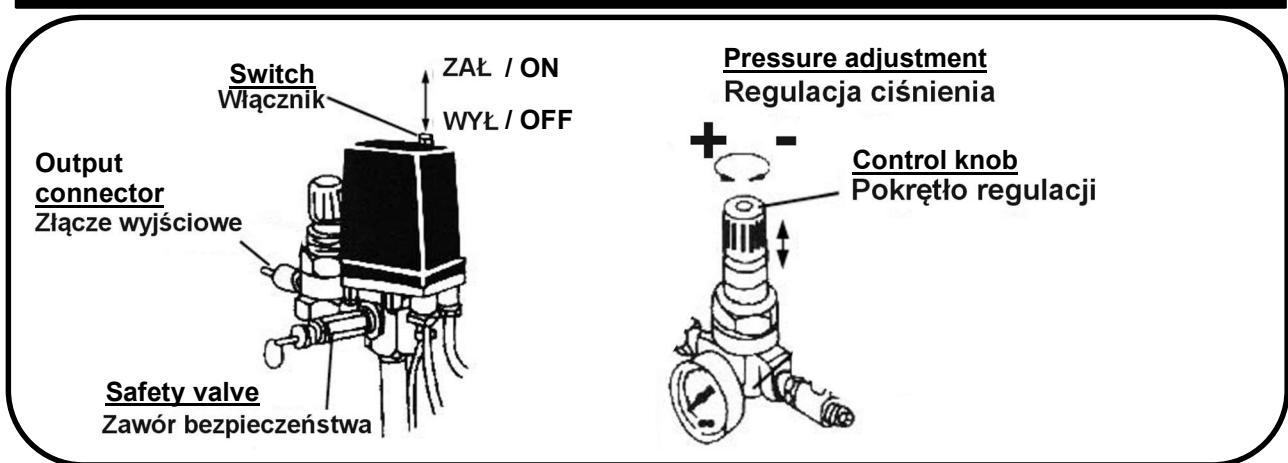
Pressing the button cuts off the power supply and immobilizes the compressor

Next to the pressure switch box, at the outlet to external devices, a compressed air pressure reducer is installed. The knob at the top of the reducer (2) is used to decrease or increase the output pressure. The setpoint value can be checked on the pressure gauge below (4).



1. Main switch
2. Pressure adjustment knob
3. Outlet Air Connector
4. Operating pressure indicator
5. Tank pressure indicator

On the other side of the compressor, below the pressure switch box, there is a safety valve with an eavesdropping pressure that protects the air tank from damage (explosion).



10. INSTALLATION AND COMMISSIONING

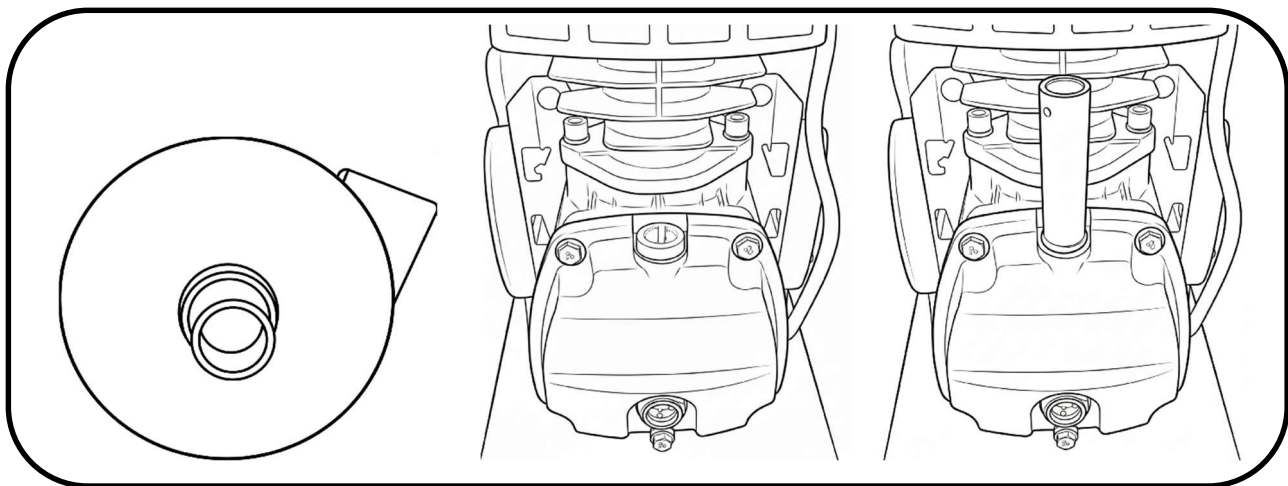


Before starting for the first time, install the transport wheels, install the air filter, pour oil into the compressor tank and replace the oil filler cap with a special plug with a vent

The compressor should be positioned in such a position as to ensure an even, horizontal surface) and an appropriate electrical installation. The room in which the compressor operates should be clean, free of dust and dust and have proper ventilation to provide sufficient air and dissipate heat generated during compressor operation. The compressor should be connected directly to the power source, the use of an extension cord should be avoided.

Before setting up the device, the travel wheels must be mounted on the rear axle.

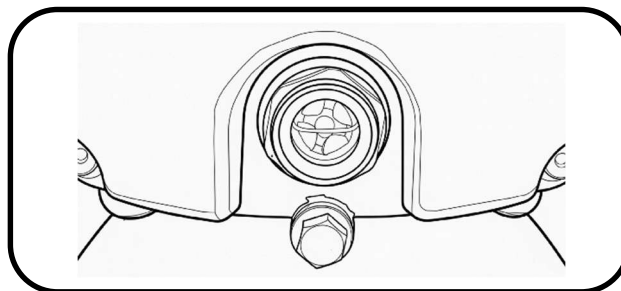
Install the air filter before starting it for the first time. Then remove the oil tank transport cap, pour the oil halfway up to the height of the oil level gauge window, and then install the target oil tank cap with vent, Only use LDAA 100 type piston compressor oil



Air filter

Transport plug

Work plug with vent



Oil level indicator

11. MAINTENANCE

Daily (or before each use)

Check the oil level: Make sure the oil level in the compressor crankcase is within the recommended range. Refill if necessary.

Remove condensation from the air tank. Open the drain valve at the bottom of the tank to remove condensed water. Water in the tank can cause corrosion and damage to both the tank and air tools.

Check the general condition: Look for visible damage, oil leaks, or abnormal sounds.

Weekly (or after about 10-20 hours of work)

Clean the air filter: Check and clean the air filter cartridge. If it is heavily soiled or damaged, replace it. A clean filter is the basis for efficient operation and protection of components. Check the connections for leaks: Listen for audible air leaks from hoses, fittings, or valves. You can use soapy water to detect minor leaks (bubbles will form).

Check the safety valve operation: Briefly pull on the safety valve ring to make sure it is working properly and is not blocked. Be sure to do this carefully and in a safe place, as the compressed air will escape for a while.

Monthly (or after about 50-100 working hours)

Change the oil. The frequency of change depends on the type of oil and operating conditions. Always use a dedicated oil for reciprocating compressors.

Check the mounting screws: Tighten all the screws securing the compressor components to make sure nothing is loose.

Quarterly / Every 3 months (or after about 200-300 hours of operation)

Replace the air filter: Regardless of the visual condition, regular replacement of the air filter is recommended.

Check check and expansion valves: Make sure they are working properly and are not contaminated.

Check the pressure valve (pressure switch): Make sure it turns the compressor on and off at the correct pressures.

Half a year / Annual (or after about 500-1000 working hours)

Comprehensive inspection: In addition to all of the above, consider a more detailed inspection or have it carried out by an authorized service provider.

Check the tank's condition: Look for signs of external corrosion.

Important Notes:

Oil type: Always use the oil recommended by the compressor manufacturer. Using the wrong oil can lead to serious damage.

Operating conditions: If the compressor is operated under harsh environments (high dust, high temperature, very intensive use), the maintenance schedule should be more stringent.

Always disconnect the power supply: Before performing any maintenance work, always make sure that the compressor is disconnected from the power supply and the tank is completely depressurized.

Recommended oil:

Type: LDAA100

Damage resulting from operating the compressor under improper conditions and failure to follow maintenance recommendations is not covered by warranty repairs.

12. SERVICE

In the event of malfunction, check the list of basic failures and try to fix them yourself before sending the compressor for service.



ATTENTION!

Any repairs to the appliance may only be carried out after disconnecting the plug from the power socket and relieving the air tank.

Symptoms	Cause	How to Remove
Compressor motor does not start or runs too slowly	Supply voltage too low	Check the supply voltage is correct; Check that the compressor is not powered by an extension cord and that the extension cord is not too long or has too small a conductor cross-section, which causes a voltage drop; Check that the plug is correctly placed in the socket
The motor overheats	Oil level too low	Top up the oil level
The compressor does not provide as much air as a new unit or turns on more often	In the reservoir there was a too much water condensation and oil	Depresurize the air tank and drain condensate from the tank
	Dirty air filter	Clean the air filter or replace it with a new one
Tank pressure drop	Uncontrolled leaks	Check the air system for leaks with soapy water. Seal leak sites or replace leaking components with new ones

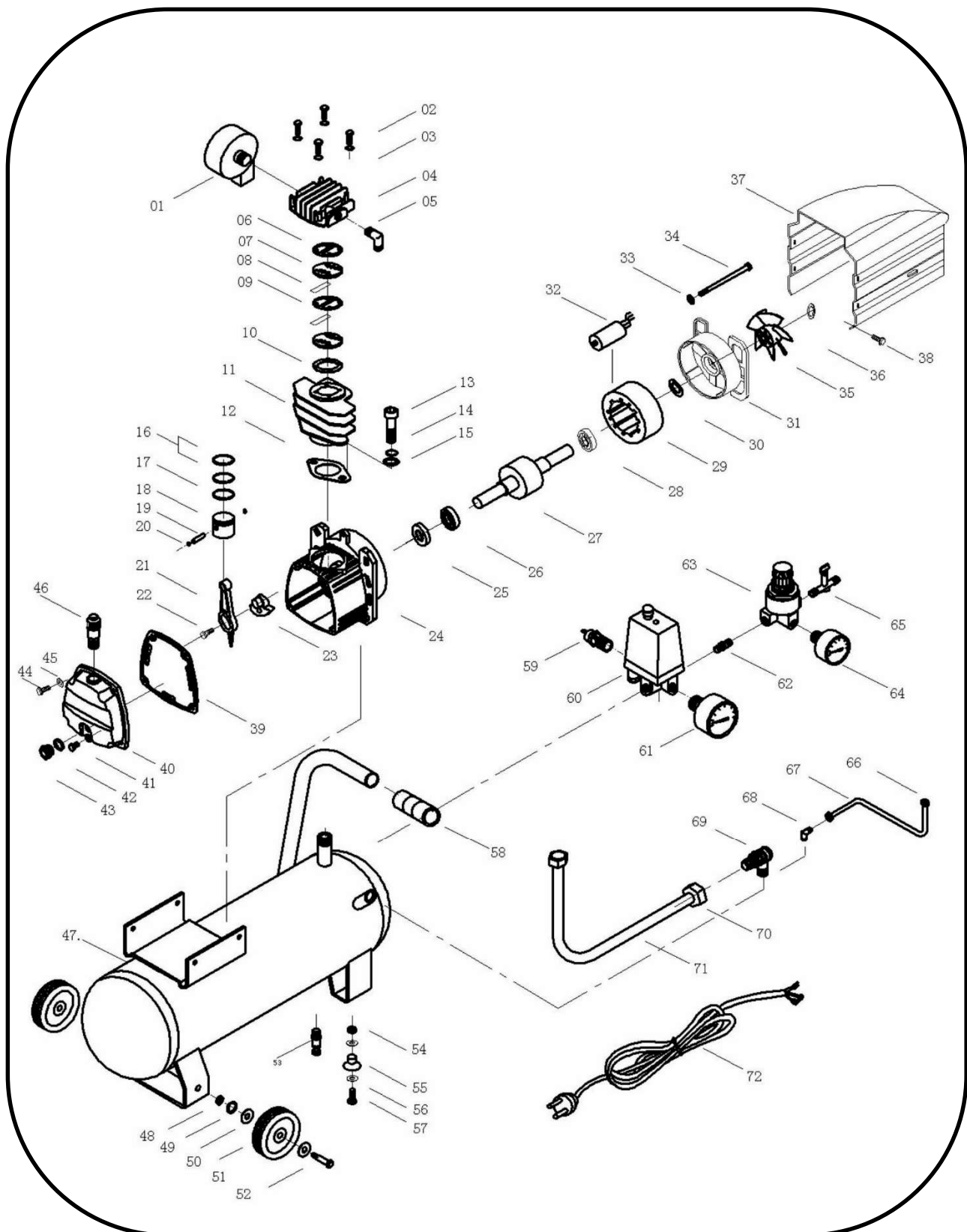
13. STORAGE

Store the appliance in an enclosed room, on a hard and level surface, protected from dust and moisture. Disconnect the compressor from the power supply for storage. The air tank should be relaxed. Before starting the compressor after a long period of storage, check steps must be performed

14. TRANSPORT

The compressor must be transported on external means of transport with a tarpaulin or in a container. During transport, the packaged device must be protected against movement and provided with the correct position

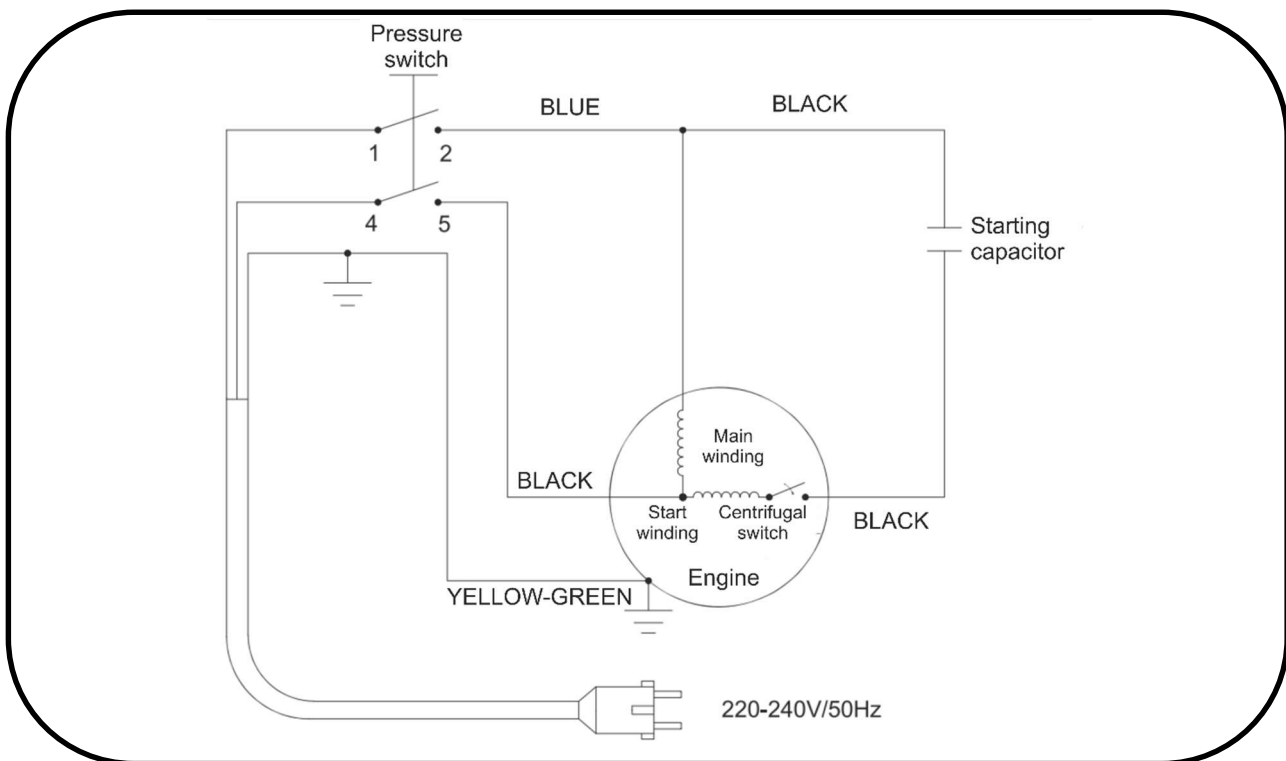
15. LIST OF SPARE PARTS



Sherman

1.	Air filter	37.	Pump cover
2.	Cylinder Cover Bolts	38.	Pump cover screw
3.	Spring washers	39.	Oil baffle
4.	Cylinder cover	40.	Crankcase cover
4.	Cylinder elbow	41.	Oil drain screw
6.	Cylinder cover washer	42.	Oil level indicator
7.	Valve plate	43.	Oil Level Gauge Gasket
8.	Valve block	44.	Crankcase cover bolt
9.	Aluminum washer	45.	Spring washer
10.	Top cylinder gasket	46.	Air vent
11.	Cylinder	47.	Air Tank
12.	Lower cylinder gasket	48.	Wheel Mounting Screw Nut
13.	Cylinder Screw	49.	Spring washer
14.	Spring washer	50.	Wheel Mounting Screw Washer
15.	Washer	51.	Wheel
16.	Piston Air Ring	52.	Wheel Bolt
17.	Piston Oil Ring	53.	Drain valve
18.	Piston	54.	Nut
19.	Piston pin	55.	Rubber mat
20.	Piston pin snap ring	56.	Spring washer
21.	Connecting rod	57.	Rubber mat screw
22.	Crankcase Bolt	58.	Rubber cover for transport handle
23.	Carrycot	59.	Safety Valve
24.	Crankcase	60.	Circuit breaker
25.	Oil seal	61.	Pressure gauge
26.	Crankcase Bearing	62.	Connector
27.	Rotor	63.	Pressure Reducer
28.	Rotor housing bearing	64.	Pressure gauge
29.	Stand	65.	Outlet Valve
30.	Wave Seal	66.	Drain pipe bolt
31.	Motor Bracket	67.	Drain pipe
32.	Condenser	68.	Drain pipe elbow
33.	Motor spring washer	69.	Valve
34.	Motor washer	70.	Outlet pipe screw
35.	Motor fan	71.	Outlet pipe
36.	Fan seating ring	72.	Power cord

16. ELECTRICAL DIAGRAM



17. WARRANTY

The warranty is granted for a period of 12 months for business entities, but excluding warranty claims, or 24 months for consumers from the date of sale.

The warranty will be respected upon presentation by the complainant of proof of purchase (invoice or receipt) and a warranty card with the product name, serial number, date of sale and stamped point of sale.

To order a warranty repair, you need to fill in the form on the www.tecweld.pl website in the SERVICE tab. On the basis of the notification, the device will be transported to the service by a courier company. Devices sent in any other way at TECWELD's expense will not be accepted!

The device sent for a complaint must be packed on a pallet and secured for transport. TECWELD is not responsible for damage to the compressor resulting during transport.



If you are going to dispose of this product, do not throw it away with ordinary household waste. According to the WEEE Directive (Directive 2012/19/EU) in force in the European Union, separate disposal methods must be used for used electrical and electronic equipment.

In Poland, in accordance with the provisions of the Act of 11 September 2015 on Waste Electrical and Electronic Equipment, it is prohibited to place waste equipment marked with the crossed-out bin symbol together with other waste.

The user who intends to dispose of this product is obliged to take the waste electrical and electronic equipment to a waste equipment collection point. Collection points are run, m.in., by wholesalers and retailers of this equipment and by municipal organizational units conducting waste collection activities.

The above statutory obligations have been introduced in order to reduce the amount of waste generated from waste electrical and electronic equipment and to ensure an appropriate level of collection, recovery and recycling of waste equipment. The correct implementation of these obligations is especially important when there are hazardous components in used equipment that have a particularly negative impact on the environment and human health.

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