scheppach HC51V Compressor Instruction Manual

Contents

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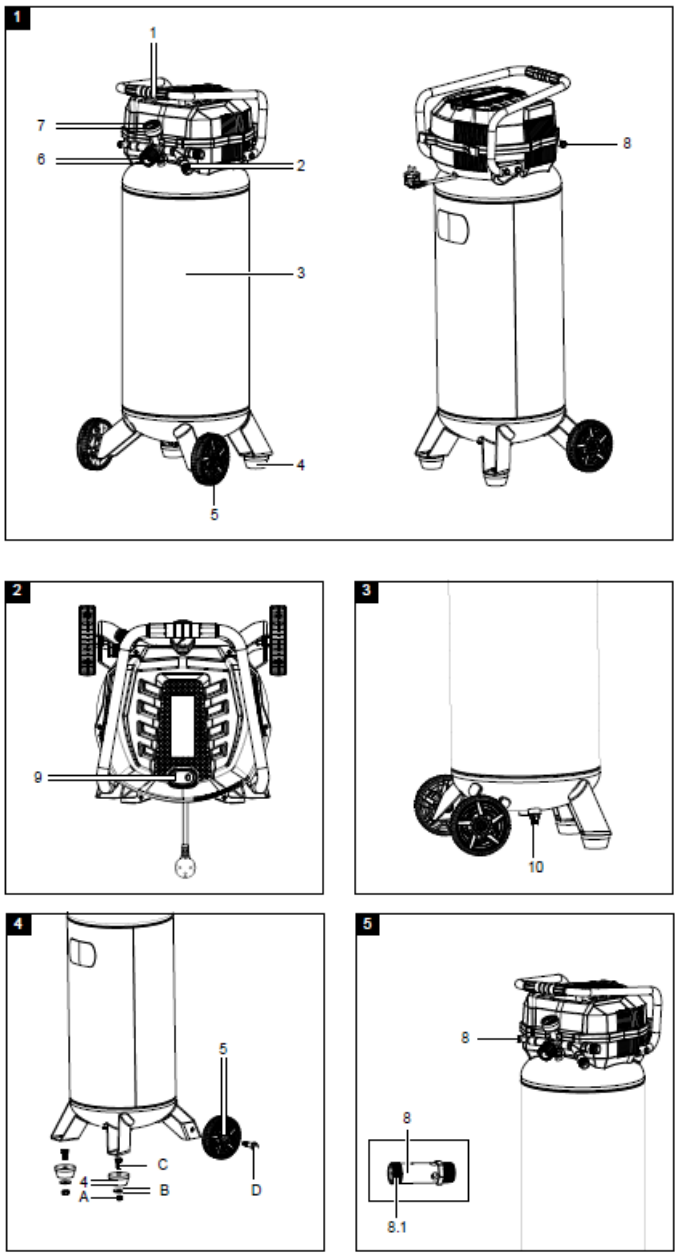
Instruction



Introduction

Dear Customer
We hope your new tool brings you much enjoyment and success.
Note:
In accordance with the applicable product liability laws, the manufacturer of this device assumes no liability for damage to the device or caused by the device arising from:

- Improper handling,
- Non-compliance with the operating manual,
- Repairs carried out by third parties, unauthorised specialists.
- Installing and replacing non-original spare parts
- Application other than specified
- Failure of the electrical system in the event of the electrical regulations and VDE provisions 0100, DIN 13 / VDE0113 not being observed

Please consider:

Read through the complete text in the operating manual before installing and commissioning the device. The operating manual is intended to help the user to become familiar with the machine and take advantage of its application possibilities in accordance with the recommendations.
The operating manual includes important instructions for safe, proper and economic operation of the device, for avoiding danger, for minimising repair costs and downtimes, and for increasing the reliability and extending the service life of the device.
In addition to the safety instructions in this operating manual, you must also observe the regulations applicable to the operation of the device in your country.
Keep the operating manual package with the machine at all times and store it in a plastic cover to protect it from dirt and moisture. They must be read and careful-ly observed by all operating personnel before starting the work.
The device may only be used by personnel who have been trained to use it and who have been instructed with respect to the associated hazards.
The required minimum age must be observed. In addition to the safety instructions in this operating manual and the separate regulations of your country, the generally recognised technical rules relating to the operation of such machines must also be observed.
We accept no liability for accidents or damage that occur due to a failure to observe this manual and the safety instructions.

Device description (Fig. 1)

1. Transport handle
2. Quick coupling
3. Pressure vessel
4. Supporting foot
5. Wheel
6. Pressure regulator
7. Manometer
8. Safety valve
9. On/off switch
10. Drain screw for condensate

- A. Nut
- B. Washer
- C. Hexagon screw
- D. Wheel bolt

Scope of delivery

- 1x compressor
- 2x feet (4)
- 2x wheels (5)
- 2x nuts (A)
- 2x washers (B)
- 2x Hexagon screw (C)
- 2x wheel bolt (D)
- Operating manual

Proper use

The compressor is used to generate compressed air
for pneumatically powered tools that can be operated with an air rate of up to 109 l/min. (e.g. tyre inflaters, air blow guns, paint spray guns).
Due to the limited air flow rate, it is not possible to op-erate tools with a very high compressed air consumption (e.g. orbital sanders, straight grinders and impact screwdriver). The machine may only be used in the intended manner. Any use beyond this is improper. The user/operator, not the manufacturer, is responsible for damages or inju-ries of any type resulting from this.
The device may only be operated by persons who are aged 16 and above. An exception to this is use by minors if the use takes place as part of occupational training in order to gain proficiency under the supervision of an instructor.
Please observe that our equipment was not designed with the intention of use for commercial or industrial purposes. We assume no guarantee if the equipment is used in commercial or industrial applications, or for equivalent work.

General safety information

Power tools
WARNING – Read all safety instructions, instruc-tions, illustrations and technical data for this electric tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.
The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.
Work area safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords in-crease the risk of electric shock.
- If you work with a power tool outdoors, only use extension cables that are also suitable for outdoor use. Using an extension cable suitable for outdoor use reduces the risk of an electric shock. Only use approved and appropriately iden-tified extension cables for use outdoors. Only use cable reels in the unrolled state.
- If operating a power tool in a damp location is unavoidable, use a residual current circuit breaker with a trigger current of 30 mA or less to protect the power supply. Use of an RCD re-duces the risk of electric shock.

Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power

tool while you are tired or under the influence of drugs, alcohol or med-ication. A moment of carelessness when using electrical tools can result in serious injuries.

- Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts. Rubber gloves and anti-slip footwear are recommended when working outdoors. Tie long hair back in a hair net.
- If dust extraction and collection devices can be mounted, make sure that they are connect-ed and used properly. Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

Power tool use and care

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that can-not be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjust-ments, changing accessories, or storing pow-er tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of chil-dren and do not allow persons unfamiliar with the power tool or these instructions to oper-ate the power tool. Power tools are dangerous in the hands of untrained users. Unused power tools should be stored in a dry, elevated or closed loca-tion out of the reach of children.
- Maintain power tools and accessories. Check whether moving parts function properly and do not get stuck and whether parts are broken or are damaged and thus adversely affect the electric tool function. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Safety instructions for compressors

Attention!
The following basic safety measures must be observed when using this compressor for protection against electric shock, and the risk of injury and fire. Read and observe these instructions before using the device.
Safe work.

1. Take care of your tools
    - Keep your compressor clean in order to work well and safely.
    - Follow the maintenance instructions.
    - Check the connection cable of the power tool reg-ularly and have it replaced by a recognised spe-cialist when damaged.
    - Check extension cables regularly and replace them when damaged.
2. Pull the connector out of the socket
    - When the power tool is not in use or prior to main-tenance and when replacing tools such as saw blades, bits, milling heads.
3. Check the power tool for potential damage
    - Protective devices or other parts with minor dam-age must be carefully inspected to ensure that they function correctly and as intended prior to continued use of the power tool.
    - Check whether the moving parts function fault-lessly and do not jam or whether parts are dam-aged. All parts must be correctly mounted and all conditions must be fulfilled to ensure fault-free operation of the power tool.
    - Damaged protective devices and parts must be properly repaired or replaced by a recognised workshop, insofar as nothing different is specified in the operating manual.
    - Do not use any faulty or damaged connection cables.
4. Attention!
    - For your own safety, only use accessories and additional equipment that are indicated in the operating manual or have been recommended or indicated by the manufacturer. Use of other tools or accessories that those recommended in the operating manual or in the catalogue could rep-resent a personal danger to you.
5. Replacing the connection line
    - If the connection line is damaged, it must be re-placed by the manufacturer or an electrician to avoid danger. There is a risk of electric shock.
6. Inflating tyres
    - Directly after inflating tyres, check the pressure with a suitable pressure gauge, for example at your filling station.
7. Street-legal compressors in construction site operation
    - Ensure that all hoses and fixtures are suitable for the maximum permissible working pressure of the compressor.
8. Set-up location
    - Only set up the compressor on a flat surface.
    - Starting the motor is forbidden if the temperature is below 0°C.

- Do not touch the hot components of the compres-sor.
- It is recommended to equip the feed hoses with a safety cable in cases where the pressure is above 7 bar, e.g. using a wire cable.
- Avoid over-stressing the piping system by using flexible hose connections to prevent kinking.
- Do not tilt the compressor more than 30° from the vertical.

Additional safety instructions

Do not operate the compressor in the rain.
When used in combination with spraying accessories (e.g. paint spray gun), keep the spray equipment away from the device when filling and do not spray towards the compressor. Observe the corresponding operating manuals of the respective compressed air tools / compressed air attachments!
The following general instructions must also be ob-served:
Safety instructions for working with compressed air and blasting guns

- Ensure there is sufficient distance to the product, at least 2.50 m, and keep the compressed air tools /compressed air attachments away from the com-pressor during operation.
- The compressor pump and lines can become very hot during operation. Touching these parts will burn you.
- The air which is sucked in by the compressor must be kept free of impurities that could cause fires or explosions in the compressor pump.
- When releasing the hose coupling, hold the hose coupling piece with your hand. This way, you can protect yourself against injury from the rebounding hose.
- Wear safety goggles when working with the blow-out pistol. Foreign objects or blown off parts can easily cause injuries.
- Wear safety goggles and a respirator when working with the compressed air pistol. Dusts are harmful to health! Foreign objects or blown off parts can easily cause injuries.
- Do not blow at people with the blow-out pistol and do not clean clothes while being worn. Risk of injury!

Safety instructions when using spraying attachments (e.g. paint sprayers):

1. Keep the spray attachment away from the com-pressor when filling so that no liquid comes into contact with the compressor.
2. Never spray in the direction of the compressor when using the spraying attachments (e.g. paint sprayers). Moisture can lead to electrical hazards!
3. Do not process any paints or solvents with a flash point below 55° C. Risk of explosion!
4. Do not heat up paints or solvents. Risk of explosion!
5. If hazardous liquids are processed, wear protective filter units (face guards). Also, adhere to the safety information provided by the manufacturers of such liquids.
6. The details and designations of the Ordinance on Hazardous Substances, which are displayed on the outer packaging of the processed material, must be observed. Additional protective measures are to be undertaken if necessary, particularly the wearing of suitable clothing and masks.
7. Do not smoke during the spraying process and/or in the work area. Risk of explosion! Paint vapours are easily combustible.
8. Never set up or operate the equipment in the vicini-ty of a fire place, open lights or sparking machines.
9. Do not store or eat food and drink in the work area. Paint vapours are harmful to your health.

10. The work area must exceed 30 m³ and sufficient ventilation must be ensured during spraying and drying.
11. Do not spray against the wind. Always adhere to the regulations of the local police authority when spraying combustible or hazardous materials.
12. Do not process media such as white spirit, butyl alcohol and methylene chloride with the PVC pres-sure hose. These media will destroy the pressure hose.
13. The work area must be separated from the com-pressor so that it cannot come into direct contact with the working medium.

Operation of pressure vessels

- Anyone who operates a pressure vessel must keep this in good working order, operate and monitor it correctly, perform the necessary maintenance and servicing works immediately and implement safety measures as required according to the circumstances.
- The regulatory authority can instruct necessary monitoring measures in individual cases.
- A pressure vessel must not be operated if it exhibits a defect that poses a danger to personnel or third parties.
- Check the pressure vessel for rust and damage each time before use. The compressor shall not be operated if the pressure vessel is damaged or rusty. If you discover damage, please contact the custom-er service workshop.

Warning!
This power tool generates an electromagnetic field dur-ing operation. This field can impair active or passive medical implants under certain conditions. In order to prevent the risk of serious or deadly injuries, we recommend that persons with medical implants consult with their physician and the manufacturer of the medical implant prior to operating the power tool. Keep these safety instructions in a safe place.

Residual risks
The machine has been built according to the state-of- the-art and the recognised technical safety requirements. However, individual residual risks can arise during operation.

- Health hazard due to electrical power, with the use of improper electrical connection cables.
- Furthermore, despite all precautions having been met, some non-obvious residual risks may still re-main.
- Residual risks can be minimised if the “Safety infor-mation” and the “Proper use” together with the oper-ating manual as a whole are observed.
- Avoid accidental starting of the machine: the oper-ating button may not be pressed when inserting the plug in an outlet. Use the tool that is recommended in this operating manual. This is how to ensure that your machine provides optimum performance.
- Keep your hands away from the work area, when the machine is in operation.

Technical data

- Mains connection 230 V~ 50 Hz
- Motor power 1500 W
- Operating mode S3 25%*
- Compressor speed 17500 min-1
- Pressure vessel capacity approx. 50 l
- Operating pressure max. 10 bar

- Theo. intake capacity approx. 220 l/min
- Theo. Power output approx. 109 l/min
- Protection category IP 30
- Device weight 23.8 kg
- Max. altitude (above mean sea level) 1000 m

Technical changes reserved!
*S3 15% = periodical intermediate duty with a duty cycle of 15% (1.5 min based on a 10 minute period)

Noise and vibration
Warning: Noise can have serious effects on your health. If the machine noise exceeds 85 dB (A), please wear suitable hearing protection.

Noise data
The noise levels have been determined in accordance with EN ISO 3744:1995.

- The specified total vibration value and the specified noise emission value have been measured in accordance with a standardized test procedure and can be used to compare one power tool with another.
- The specified total vibration value and the specified noise emission value can also be used for an initial estimation of the exposure.

warning:

- The vibration and noise emission values can vary from the specified values during the actual use of the power tool, depending on the type and the manner in which the power tool is used, and in particular the type of workpiece being processed.
- It is necessary to define safety measures to protect the operator which are based on an estimate of vibration exposure during the actual operating conditions (for this, all parts of the operating cycle have to be considered, e.g. times during which the power tool is switched off and times during which it is switched on but runs in no-load mode).

Unpacking

- Open the packaging and carefully remove the de-vice.
- Remove the packaging material, as well as the pack-aging and transport safety devices (if present).
- Check whether the scope of delivery is complete.
- Check the device and accessory parts for transport damage. In the event of complaints the carrier must be informed immediately. Later claims will not be recognized.
- If possible, keep the packaging until the expiry of the warranty period.
- Familiarize yourself with the product by means of the operating instructions before using for the first time.
- With accessories as well as wearing parts and re-placement parts use only original parts. Replace-ment parts can be obtained from your dealer.
- When ordering please provide our article number as well as type and year of manufacture for your equipment.

WARNING!

The device and the packaging material are not children’s toys! Do not let children play with plas-tic bags, films or small parts! There is a danger of choking or suffocating!

Before commissioning

- Before connecting the machine, make certain that the data on the type plate matches with the mains power data.
- Check the device for transport damage. Report any damage immediately to the transport company which was used to deliver the compressor.
- Install the compressor near the point of consumption.
- Avoid long air lines and supply lines (extension cables).
- Make sure that the intake air is dry and free of dust.
- Do not install the compressor in a damp or wet room.
- Operate the compressor only in suitable areas (well ventilated, ambient temperature +5°C to 40°C). There must be no dust, acids, vapours, explosive gases or inflammable gases in the room.
- The compressor is designed to be used in dry rooms. It is prohibited to use the compressor in are-as where work is conducted with sprayed water.
- The compressor may only be used outdoor briefly when the ambient conditions are dry.
- The compressor must always be kept dry and must not be left outdoors after work is complete.

Attachment and operation

Attention!
Always make sure the device is fully assembled before commissioning!

Fitting the wheels (fig. 4)

- Feed the wheel bolt (D) through the hole in the wheel (5).
- Feed the wheel bolt (D) through the hole in the wheel linkage.
- Fasten the wheel (5) with the wheel bolt (D). If nec-essary use a combination spanner for this (not in-cluded in the scope of delivery).
- Repeat the steps with the other tyre (5).

Mains connection

- The compressor is equipped with a mains cable with protective contact plug. This can be connected to any 230 V~ / 50 Hz protective contact socket, with fuse protection of at least 16 A.
- Before commissioning, ensure that the mains volt-age matches with the operating voltage and the ma-chine’s power rating on the type plate.
- Long supply cables, extensions, cable reels, etc. cause a drop in voltage and can impede motor start-up.
- In the case of temperatures below +5°C, motor start-ing can be endangered by sluggishness.

Attention!
The compressed air hose is flung away depending on the pressure present in the compressor.
In order to prevent injury, hold the compressed air hose tightly immediately after the quick-coupling (2) when disassembling.

Electrical connection

The electrical motor installed is connected and ready
for operation. The connection complies with the applicable VDE and DIN provisions. The customer‘s mains connection as well as the extension cable used must also comply with these regulations.
When working with spray attachments and during temporary use outdoors, the device must be connected to a residual current circuit breaker with a trigger current of 30 mA or less.
Damaged electrical connection cable
The insulation on electrical connection cables is often damaged. This may have the following causes:

- Pressure points, where connection cables are passed through windows or doors.
- Kinks where the connection cable has been improperly fastened or routed.
- Places where the connection cables have been cut due to being driven over.
- Insulation damage due to being ripped out of the wall outlet.
- Cracks due to the insulation ageing.

  Such damaged electrical connection cables must not be used and are life-threatening due to the insulation damage.

Check the electrical connection cables for damage regularly. Ensure that the connection cables are dis-connected from electrical power when checking for damage.
Electrical connection cables must comply with the ap-plicable VDE and DIN provisions. Only use connection cables of the same designation.
The printing of the type designation on the connection cable is mandatory.
Safety information for replacing damaged or defective mains connection cables

Connection type Y
If the mains connection cable of this device is damaged, it must be replaced by the manufacturer, their service department or a similarly qualified person to avoid dangers.
AC motor

- The mains voltage must be 230 V~
- Extension cables up to 25 m long must have a cross-section of 1.5 square millimetres.

Connections and repair work on the electrical equipment may only be carried out by electricians.
Please provide the following information in the event of any enquiries:

- Type of current for the motor
- Data of machine type plate
- Data of motor type plate

Cleaning, maintenance and storage and ordering spare parts

Attention!
Pull out the mains plug before carrying out any clean-ing and maintenance work! Risk of injury from electric shock!

Attention!
Wait until the equipment has cooled down completely!
Danger of burning!

Attention!
Always depressurise the equipment before carrying out any cleaning and maintenance work! Risk of injury!

Cleaning

- Keep the device as free of dust and dirt as possible. Rub the device clean with a clean cloth or blow it off with compressed air at low pressure.
- We recommend that you clean the device directly after every use.
- Clean the device at regular intervals using a damp cloth and a little soft soap. Do not use any cleaning products or solvents; they could attack the plastic parts of the device. Make sure that no water can penetrate the device interior.
- The hose and injection tools must be disconnected from the compressor before cleaning. The com-pressor must not be cleaned with water, solvents or similar.

Maintaining the pressure vessel (fig. 3)

Attention!
To ensure a long service life for the pressure vessel (3), drain off the condensate after each use by opening the drain screw (10).
Release the vessel pressure beforehand. Open the drain screw (10) by turning it counterclock- wise (when looking at the screw from the bottom of the compressor) so that the condensate can be completely drained out of the pressure vessel (3). In order to drain the condensation water completely out of the pressure vessel (3), it must be tilted slightly to the side so that the drain screw (10) is the lowest point. Then close the drain screw (10) again (turn it clock-wise). Check the pressure vessel (3) for rust and dam-age each time before use. The compressor shall not be operated if the pressure vessel (3) is damaged or rusty. If you discover damage, please contact the customer service workshop. The condensate from the pressure vessel may contain oil residue. Dispose of the condensate in an environmentally-friendly way at the appropriate collection point.

Safety valve (fig. 1/5)

The safety valve (8) is set to the maximum permissible pressure of the pressure vessel (3). It is not allowed the remove or change the safety valve (8).
In order for the safety valve (8) to function properly when needed, it must be actuated every 30 operating hours and at least 3 times a year.
Turn the drain nut (8.1) anti-clockwise to open the safe- ty valve (8) drain.
The safety valve (8) now audibly lets out air. Then turn the drain nut (8.1) clockwise again to tighten.

Storage

Attention!
Pull out the mains plug and ventilate the equip-ment and all connected pneumatic tools. Store the compressor in such a way that it cannot be used by unauthorised persons.

Attention!
Store the compressor only in a dry location which is not accessible to unauthorised persons. Always store upright, never tilted!

Releasing overpressure
Release overpressure in the compressor by switching off the compressor and using up the compressed air still in the pressure vessel (3), e.g. with a compressed air tool running at idle or with an air blow gun.

Transport (fig. 1)

The compressor can be tilted it up by means of the
transport handle (1) so that it can be transported on the wheels (5).

Ordering spare parts

Please provide the following information when ordering spare parts;

- Device type
- Device article number

Service information

With this product, it is necessary to note that the follow-ing parts are subject to natural or usage-related wear, or that the following parts are required as consuma-bles.

Wearing parts*:clutch
* may not be included in the scope of supply! Spare parts and accessories can be obtained from our service centre. To do this, scan the QR code on the cover page.

Disposal and recycling

The device is supplied in packaging to avoid transport damages. This packaging is raw material and can thus be used again or can be
reintegrated into the raw material cycle. The device and its accessories are made of different materials, such as metals and plastics. Take defective components to special waste disposal sites. Check with your specialist dealer or municipal administration! Old devices must not be disposed of with house-hold waste! This symbol indicates that this product must not be disposed of together with domestic waste in compliance with the Directive (2012/19/EU) pertaining to waste electrical and electronic equipment (WEEE). This product must be handed over at the intended collection point. This can be done, for example, by returning it when purchasing a similar product or delivering it to an authorised collection point for the recycling of old electrical and electronic devices. Improper handling of waste equipment may have negative consequences for the environment and human health due to potentially hazardous substances that are often contained in electrical and electronic equipment. By properly disposing of this product, you are also contributing to the effective use of natural re- sources. You can obtain information on collection points for waste equipment from your municipal administration, public waste disposal authority, an authorized body for the disposal of waste electrical and electronic equipment or your waste disposal company.

Troubleshooting

Fault	Possible cause	Remedy
	Mains voltage is not available.	Check the cable, mains plug, fuse and soc ket.

The compressor does not start .	Mains voltage is too low.	Make sure that the extension cable is not t oo long. Use an extension cable with large enough wires.
	Outside temperature is too low.	Never operate with an outside temperatur e of below 0° C.
	Motor is overheated.	Allow the motor to cool down. If necessary , remedy the cause of the overheating.
The compressor starts but the re is no pressure.	Non-return valve leaking	Replace the non-return valve.
	The seals are damaged.	Check the seals and have any damaged s eals replaced by a service centre.
	The drain screw for condensate l eaks.	Tighten the screw by hand. Check the seal on the screw and replace if necessary.
The compressor starts, pressu re is shown on the pressure g auge, but the tools do not start .	The hose connections have a lea k.	Check the compressed air hose and tools and replace if necessary.
	A quick coupling has a leak.	Check quick coupling, replace if necessary.
	Insufficient pressure set on the pressure regulator.	Increase the set pressure with the pressur e regulator.

Documents / Resources

	scheppach HC51V Compressor [pdf] Instruction Manual HC51V Compressor, HC51V, Compressor

References

- scheppach | scheppach
- Kontakt & Service | scheppach | scheppach