

TTV 4500 / TTV 4500 HP / TTV 7000

EN

ORIGINAL INSTRUCTIONS
AXIAL FAN



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Notes regarding the instructions

Symbols



Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



Caution

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note

This signal word indicates important information (e.g. material damage), but does not indicate hazards.



Info

Information marked with this symbol helps you to carry out your tasks quickly and safely.



Follow the manual

Information marked with this symbol indicates that the instructions must be observed.

You can download the current version of the instructions and the EU declaration of conformity via the following link:

TTV 4500



<https://hub.trotec.com/?id=42498>

TTV 4500 HP



<https://hub.trotec.com/?id=42499>

TTV 7000



<https://hub.trotec.com/?id=42500>



Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in aggressive atmosphere.
- Only put up the device in an upright, stable position on firm ground.
- Observe a minimum distance of 3 m between walls, objects and the suction side.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- Never insert any objects or limbs into the device.
- Do not cover or transport the device during operation.
- Do not sit on the device.
- This appliance is not a toy! Keep away from children and animals. Do not leave the device unattended during operation.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- The electrical connection must correspond to the specifications in chapter Technical data.
- Insert the mains plug into a properly secured mains socket.

- Observe the technical data when selecting extensions to the power cable. Completely unroll the extension cable. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Defective power cables pose a serious health risk!
- When positioning the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical data chapter.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that there are no loose items or dirt located in the immediate surroundings of air inlet and air outlet.
- Protect yourself and your environment from whirled up parts.
- Improper installation can lead to a fire, electric shock or severe personal injury.

Intended use

Use the device for ventilation, air circulation, dust extraction or air transport whilst adhering to the technical data and the safety instructions.

The device was designed for the generation of a powerful, large-volume air circulation, e.g. for the accelerated drying of buildings and rooms. The fan can be operated in combination with different accessories.

Improper use

The device is not suited for installation in fluids or on flooded or boggy grounds.

Any unauthorised changes, modifications or alterations to the device are forbidden.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when using high-performance fans.
- have read and understood the instructions, especially the Safety chapter.

Residual risks



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!
Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Warning

The device is not a toy and does not belong in the hands of children.



Warning

Risk of suffocation!
Do not leave the packaging lying around. Children may use it as a dangerous toy.



Caution

Risk of injury due to parts being whirled up by the strong air current.
Before switching the device on, make sure that there are no loose parts (clothing, hair etc.) located near the air inlet or outlet!



Caution

Keep a minimum distance of 3 m to the suction side of the device!

Note

Do not use abrasive cleaners or solvents to clean the device.

Information about the device

Device description

The axial fans TTV 4500 / TTV 4500 HP / TTV 7000 were designed for a very high air flow; the TTV 4500 HP was additionally designed for particularly high air pressure even over long air transport distances.

The device is rated with IP55 type of protection and is thus suitable for application both inside rooms and outdoors.

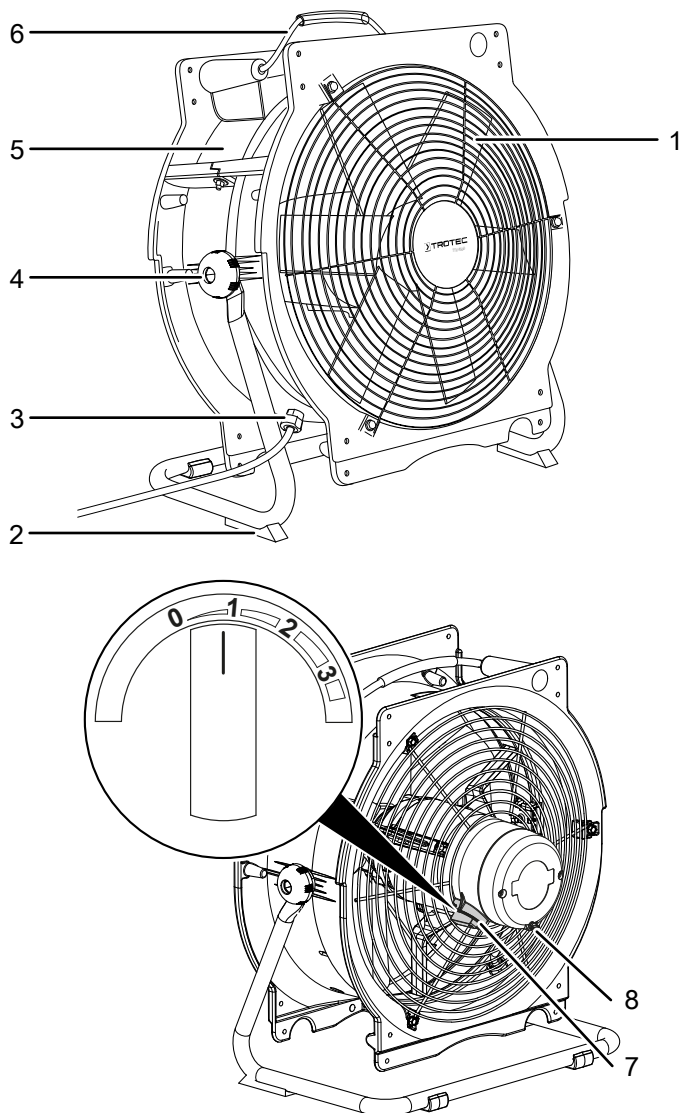
The fan speed can be set to one of 3 stages.

Depending on the type, the devices can be expanded with a range of accessories. For example, one or two hose adapters may be used for connecting air transport hoses and/or dust bags. Furthermore, some device sizes allow the connection of a combination distributor e. g. for air distribution with up to eight hoses.

Behaviour in the event of an emergency

1. In an emergency, disconnect the device from the mains feed-in: Switch the device off and disconnect it from the mains.
2. Remove persons from the danger area.
3. Do not reconnect a defective device to the mains.

Device depiction



No.	Designation
1	Air outlet
2	Foot (lockable)
3	Power cable with Schuko plug
4	Locking screw
5	Housing
6	Transport loop
7	<i>Fan stage</i> selection switch
8	Condensate plug

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

Before transporting the device, observe the following:

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- To make the device easier to transport, it is fitted with a transport loop.
- Do not use the power cable to drag the device.

After transporting the device, observe the following:

- Set up the device in an upright position after transport.

Storage

When the device is not being used, observe the following storage conditions:

- Dry and protected from frost and heat
- In an upright position where it is protected from dust and direct sunlight
- With a cover to protect it from invasive dust, if necessary
- stackable: up to 3 devices may be stacked on top of one another



Info

Do not take the devices into operation when stacked. Stacking rules out an efficient usage of the devices.

Assembly and start-up

Scope of delivery

- 1 x Device
- 1 x Manual

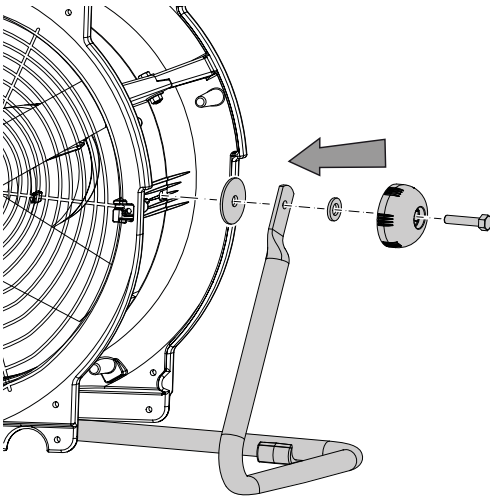
Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

Assembly

Mounting the foot

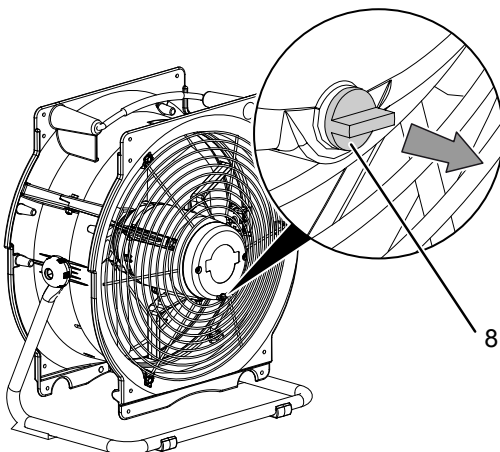
1. Attach the foot, the locking screws and the washers as indicated in the figure:



Removing the condensate plug

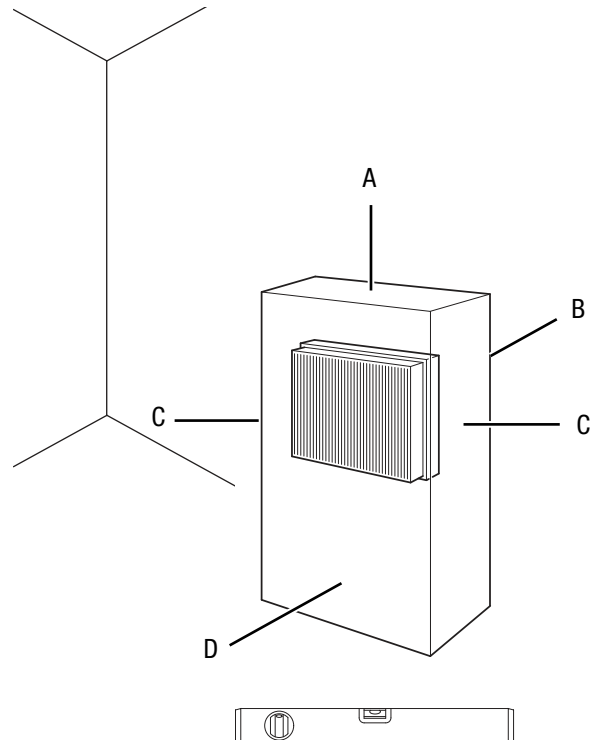
The condensate plug, which is located at the lowest point of the motor, must be removed before start-up. Store the condensate plug safely as it must be removed for cleaning and maintenance work.

1. Remove the condensate plug.



Start-up

When positioning the device, observe the minimum distance from walls or other objects as described in the chapter Technical data.

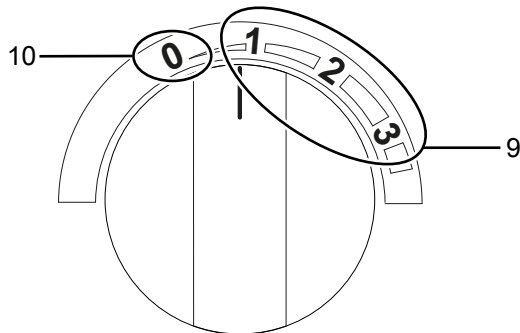


- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Only put up the device in an upright, stable position on firm ground.
- Make sure the device is only placed on firm, dry and vibration-free ground.
- When positioning the device, keep a sufficient distance to heat sources.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that extension cables are completely unrolled.
- Insert the mains plug into a properly secured mains socket.

Operation

Operating elements

TTV 4500 / TTV 4500 HP / TTV 7000



No.	Designation	Meaning
9	Fan stage selection switch	Setting the fan speed:
	1	stage 1 = low
	2	stage 2 = medium
	3	stage 3 = high
10	Stage 0	Device switched off

Switching the device on

- ✓ The device has been completely installed as described in the Assembly and start-up chapter.
- 1. Switch the device on by turning the *fan stage* selection switch (9) to the desired position.

Shutdown



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

1. Switch the device off by turning the *fan stage* selection switch (9) to the 0 position.
2. Hold onto the mains plug while pulling the power cable out of the socket.
3. Clean the device according to the Maintenance chapter.
4. Store the device according to the Storage chapter.

Available accessories



Warning

Only use accessories and additional equipment specified in the instructions.
Using insertion tools or accessories other than those specified in the instructions may cause a risk of injury.

TTV 4500 / TTV 4500 HP

Designation	Article number
Hose adapter	6.100.005.010
Combination distributor	6.100.005.011
Dust bag class M, length: 3 m	7.160.000.110
Dust bag class M, length: 5 m	7.160.000.112
Air transport hose Tronect SP-T, length: 7.6 m	6.100.001.214
Air transport hose Tronect TF-L, length: 5 m	6.100.001.115
Universal lashing strap	6.100.001.995

TTV 7000

Designation	Article number
Hose adapter	6.100.005.020
Dust bag class M, length: 5 m	7.160.000.112
Air transport hose Tronect SP-T, length: 7.6 m	6.100.001.217
Universal lashing strap	6.100.001.995

Errors and faults

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

The fan is not running:

- Check whether the device is switched on.
- Check the power connection.
- Check the power cable and mains plug for damages.
- Check the on-site fusing.

The fan operates only for a brief period, then switches off:

- Check whether the protective grid at the air inlet is obstructed in some way. If applicable, remove foreign objects.
- The motor bearing might be damaged. Please contact the customer service.

The motor or fan is noisy or runs unevenly:

- The fan is soiled. Clean the fan according to the Maintenance chapter.
- The fan or the blower unit is damaged. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.
- The motor bearing might be damaged. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.

The fan produces grinding noises:

- The fan blades are dirty or foreign objects are located in the rotation range of the fan. Clean the fan blades or the blower unit according to the Maintenance chapter.
- The fan blades might be damaged. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.

The device vibrates heavily:

- Check the floor space of the fan. Position the device on a level and firm surface.
- Check the screwed connections, particularly between blower unit and foot. If necessary, retighten the screws.
- Check the fan blades for dirt and clean them if required.
- There might be an imbalance in the fan blades. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.

The fan changes its position during operation:

- Check the locking screws at the foot for tight fit and retighten them if necessary.

The air flow rate is low:

- Check whether the protective grid is blocked and clean it if required.

Note

Wait for at least 3 minutes after maintenance and repair work. Only then switch the device back on.

Your device still does not operate correctly after these checks?

Please contact the customer service. If necessary, bring the device to an authorised specialist electrical company or to Trotec for repair.

Maintenance**Activities required before starting maintenance****Warning of electrical voltage**

Do not touch the mains plug with wet or damp hands.

- Switch the device off.
- Always be mindful of atypical sounds and consult a specialist dealer if in doubt.
- Hold onto the mains plug while pulling the power cable out of the mains socket.

**Warning of electrical voltage**

Tasks which require the housing to be opened must only be carried out by authorised specialist companies or by Trotec.

Cleaning the housing

Clean the housing with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Cleaning the fan and device interior**Warning**

Risk of injury caused by ejected compressed air upon activation of the compressed air supply.

Hold the compressed-air hose away from your body. Pointing the compressed-air hose at another person is prohibited.

- Check fan and protective grid for perfect condition before and after each application.
- Clean the fan after each operation.
- Use compressed air to remove particles, lint, dust and dirt from motor, fan wheel and protective grid. Do not in any event use a high-pressure cleaner to clean the fan.
- Other than that, the device does not require maintenance.

Technical annex

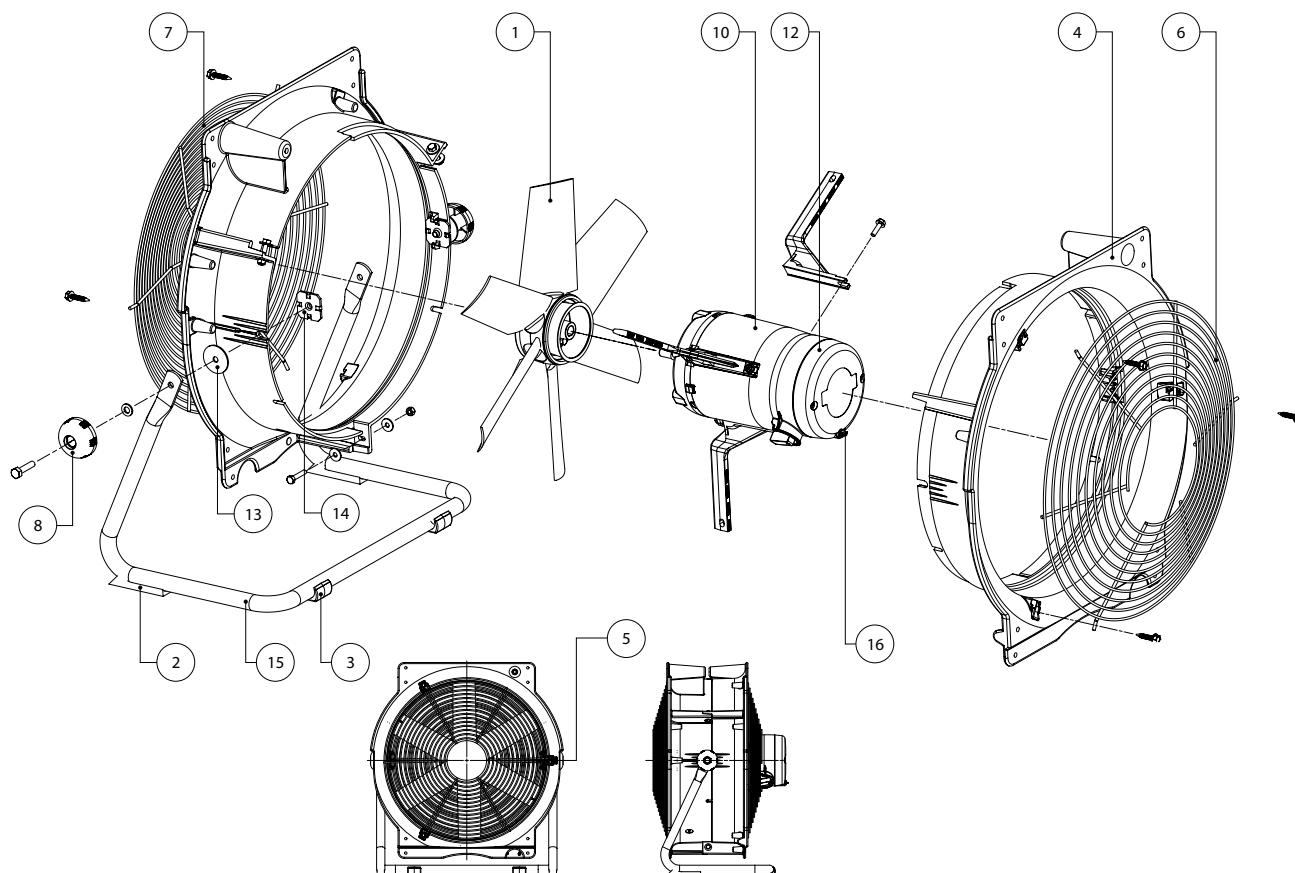
Technical data

Parameter	Value		
Model	TTV 4500	TTV 4500 HP	TTV 7000
Article number	1.510.000.010	1.510.000.012	1.510.000.030
Air volume stage 1	2,300 m³/h	2,000 m³/h	3,800 m³/h
Air volume stage 2	3,450 m³/h	3,000 m³/h	5,600 m³/h
Air volume stage 3	5,300 m³/h	4,500 m³/h	8,500 m³/h
Nominal air volume	3,350 m³/h @ 80 Pa	2,850 m³/h @ 160 Pa	4,800 m³/h @ 100 Pa
Air current	blowing out/sucking in	blowing out/sucking in	blowing out/sucking in
Air discharge velocity	11 m/s (39.6 km/h)	9 m/s (32.4 km/h)	11 m/s (39.6 km/h)
Discharge distance	50 m	60 m	65 m
Max. air pressure	80 Pa	160 Pa	100 Pa
Max. transport medium temperature	45 °C	45 °C	45 °C
Mains connection	1 / N / PE ~ 230 V / 50 Hz (1.1 A)	1 / N / PE ~ 230 V / 50 Hz (1.4 A)	1 / N / PE ~ 230 V / 50 Hz (1.8 A)
Power consumption	0.25 kW	0.33 kW	0.41 kW
Fusing	10 A	10 A	10 A
Type of protection	IP 55	IP 55	IP 55
Max. sound level (distance 3 m)	53 dB(A)	64 dB(A)	58 dB(A)
Mobility	portable/stackable	portable/stackable	portable/stackable
Hose connection with hose adapter* and/or combination distributor**	450 mm * **/ 8 x 100 mm**	450 mm * **/ 8 x 100 mm**	560 mm */ -
Permissible surrounding conditions	- 25 °C to + 40 °C	- 25 °C to + 40 °C	- 25 °C to + 40 °C
Dimensions (length x width x depth)	358 x 515 x 520 (mm)	358 x 515 x 520 (mm)	365 x 620 x 620 (mm)
Minimum distance to walls and other objects	top (A): 0.5 m rear / suction side (B): 3.0 m sides (C): 0.5 m front (D): 0.5 m	0.5 m 3.0 m 0.5 m 0.5 m	0.5 m 3.0 m 0.5 m 0.5 m
Weight	14.5 kg	15.5 kg	18.5 kg

Exploded assembly drawing TTV 4500 / TTV 4500 HP

Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.


Spare parts list TTV 4500 / TTV 4500 HP

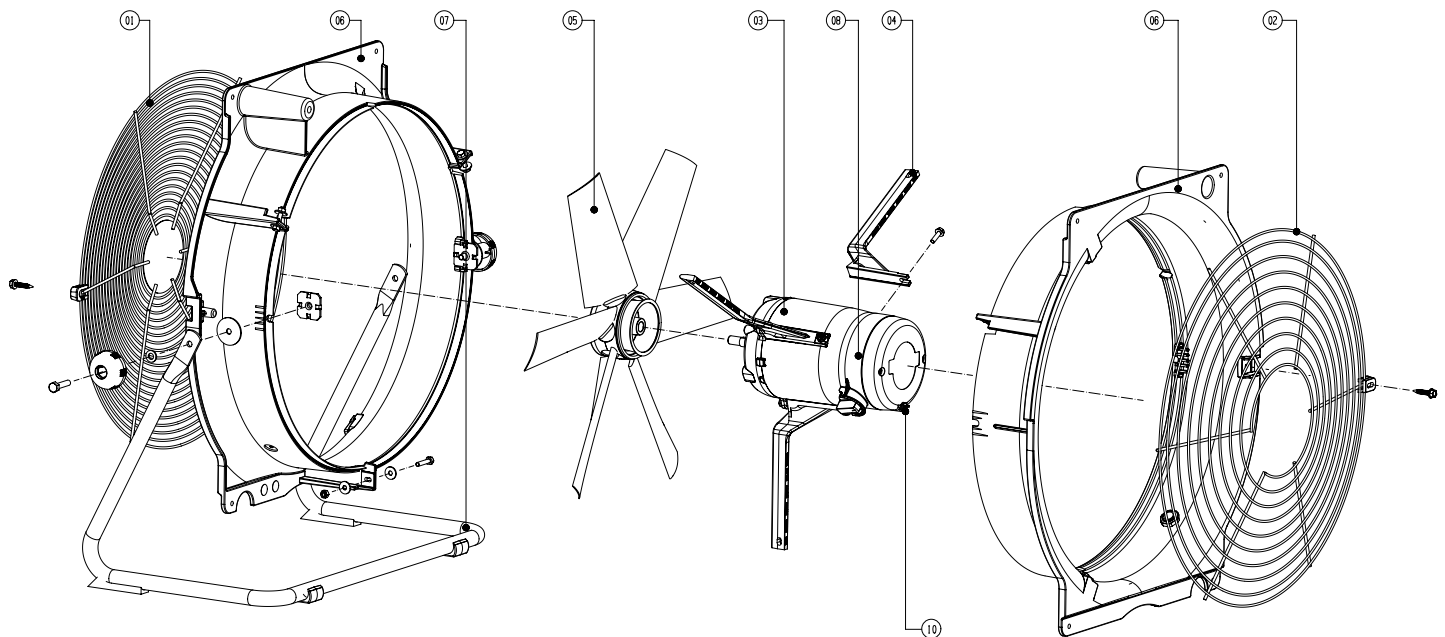
No.	Spare part	Article number
01	fan rotor TTV4500	7.310.000.634
02	rubber feet back TTV4500	7.300.001.246
03	rubber feet front TTV4500	7.300.001.245
04	housing TTV4500/HP	7.310.000.936
05	safety clamp grid BVVP0023 TTV-series	7.310.000.642
06	safety grid airoutlet TTV4500	7.242.000.639
07	safety grid airinlet TTV4500	7.242.000.638
08	fixing knob TTV-series	7.310.000.710
09	condensator 6µF motor TTV	7.140.000.357
10	motor 4E40 TTV4500	7.110.000.635
11	connector assembly kit TTV-series	7.320.001.271
12	switch TTV4500	7.130.000.628
13	rubber washer TTV 4500	7.330.001.155
14	plastic washer TTV 4500	7.310.001.154
15	tube feet TTV4500	7.240.000.937
16	condense plug	7.300.001.248

Exploded assembly drawing TTV 7000



Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.



Spare parts list TTV 7000

No.	Spare part	Article number
01	wire guard impeller side	7.242.000.646
02	wire guard motor side	7.242.000.645
03	motor	7.110.000.637
04	bracket	*)
05	impeller	7.310.000.633
06	housing (set, 2 pieces)	7310000939 (Fan) + 7310000938 (Motor)
07	frame	7.240.000.939
08	controller (under cap)	*)
10	condense plug	7.300.001.248

*) on request

Disposal



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. For further return options provided by us please refer to our website <https://de.trotec.com/shop/>.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

Declaration of conformity

The text below sets out the contents of the declaration of conformity. The signed declaration of conformity can be found at <https://hub.trotec.com/?id=42498>.

Declaration of conformity

in accordance with the EC Machinery Directive 2006/42/EC, Annex II, Part 1, Section A

Herewith, we – Trotec GmbH– declare that the machinery designated below was developed, constructed and produced in compliance with the requirements of the EC Machinery Directive in the version 2006/42/EC.

Product model / product: TTV 4500, TTV 4500 HP, TTV 7000

Product type: axial fan

Year of manufacture as of: 2020

Relevant EU directives:

- 2011/65/EU: 01/07/ 2011
- 2012/19/EU: 24/07/2012
- 2014/30/EU: 29/03/2014

Applied harmonised standards:

- EN ISO 11201:2010
- EN ISO 11203:2009
- EN ISO 11204:2010
- EN ISO 13732-1:2008
- EN ISO 12100:2010
- EN ISO 13857:2008
- EN 349:1993/A1:2008
- EN ISO 14120:2015
- EN 60204-1:2018

- EN 61000-6-2:2005/AC:2005
- EN 61000-6-4:2007/A1:2011
- EN 61800-3:2004/A1:2012
- EN 50581:2012

Applied national standards and technical specifications:

- Regulation (EU) No 327/2011
- ISO/TR 14121-2:2012
- EN ISO 13857:2019
- EN ISO 13854:2019
- EN IEC 61000-6-2:2019
- EN IEC 61000-6-4:2019
- EN IEC 61800-3:2018
- EN IEC 63000:2018
- ISO 5801:2017
- EN ISO 12499:2008
- ISO 13348:2007
- ISO 9001:2015

Manufacturer and name of the authorised representative of the technical documentation:

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Place and date of issue:

Heinsberg, 13.12.2018

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