



NT 70/1, 70/2, 70/3 Service Manual



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1 Preface

Good service work requires extensive and practice-oriented training as well as well-structured training materials. Hence we offer regular basic and advanced training programmes covering the entire product range for all service engineers. In addition to this, we also prepare service manuals for important appliances - these can be initially used as instruction guides and later on as reference guides. Apart from this, we also regular information about product enhancements and their servicing.

If you should require supplements, have corrections or questions regarding this document, please address these citing the following subject to:

international-service@de.kaercher.com

Subject:	Fall 109169
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The responsible product specialist will take care of your issue.

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2 Safety instructions

2.1 Symbols in the service manual

Danger

Immediate danger that can cause severe injury or even death.

Warning

Possible hazardous situation that could lead to severe injury or even death.

Caution

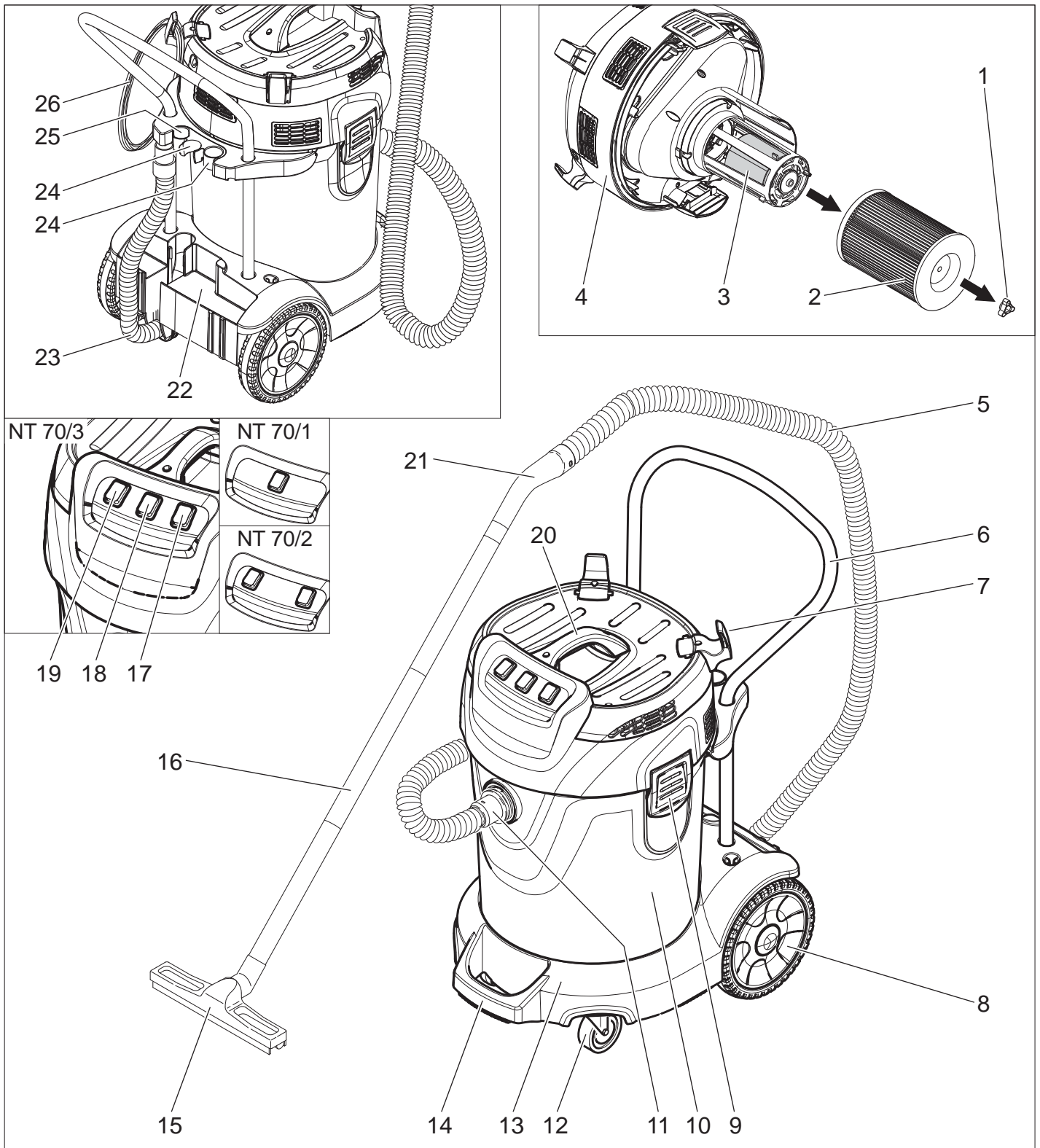
Possible hazardous situation that could lead to mild injury to persons or damage to property.

3 Technical Features

Structure:

- Storage surface for tools on the suction head.
- Storage for floor nozzle.
- Holder for suction tubes and crevice nozzle.
- Cable hooks for suction hose cable coiling system.
- Suction hose connection with bayonet system.
- Drain hose to drain liquids.
- Push handle
- Chassis as a stop protection.
- Tilt chassis (Tc only)
- Mechanical overflow protection
- In addition to the main filter, a filter bag may be used.

4 Parts of the system



- | | | | |
|----|--------------------------------|----|------------------------------------|
| 1 | Star screw | 14 | Chassis handle |
| 2 | Cartridge filter | 15 | Floor nozzle |
| 3 | Mechanical overflow protection | 16 | Suction pipe |
| 4 | Suction head | 17 | Appliance switch suction turbine 2 |
| 5 | Suction hose | 18 | Appliance switch suction turbine 1 |
| 6 | Push handle | 19 | Appliance switch suction turbine 3 |
| 7 | Cable hook | 20 | Carrying handle |
| 8 | Impeller | 21 | Bender |
| 9 | Suction head lock | 22 | Storage for floor nozzle |
| 10 | Dirt receptacle | 23 | Drain hose |
| 11 | Suction support | 24 | Holder for suction pipes |
| 12 | Steering roller | 25 | Holder for floor nozzle |
| 13 | Chassis | 26 | Power cord |

5 Basic settings and service procedures

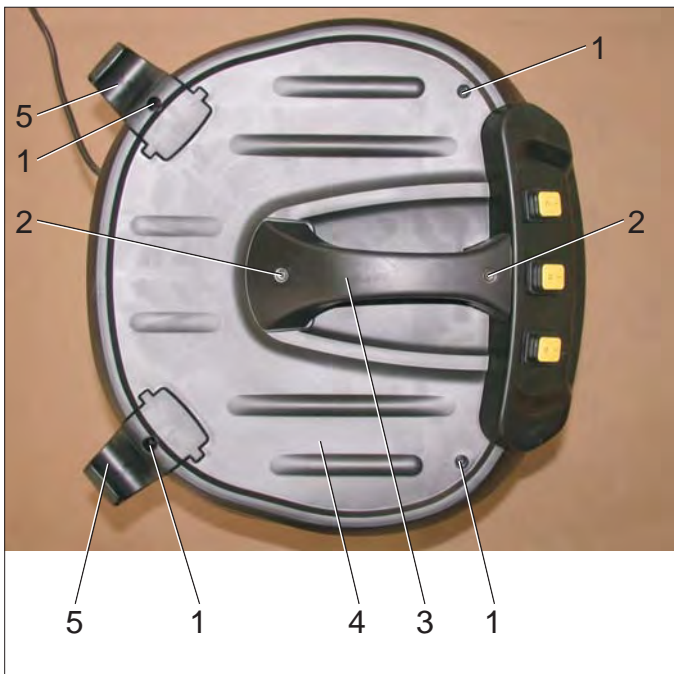
5.1 Replace cooling air and work air filter



- 1 Cooling air filter (exhaust)
- 2 Work air filter
- 3 Suction head

- ➔ Remove the grid of the cooling air filter with a screwdriver.
- ➔ Replace cooling air filter.
- ➔ Remove the grid of the work air filter with a screwdriver.
- ➔ Replace work air filter.

5.2 Remove the suction head cover



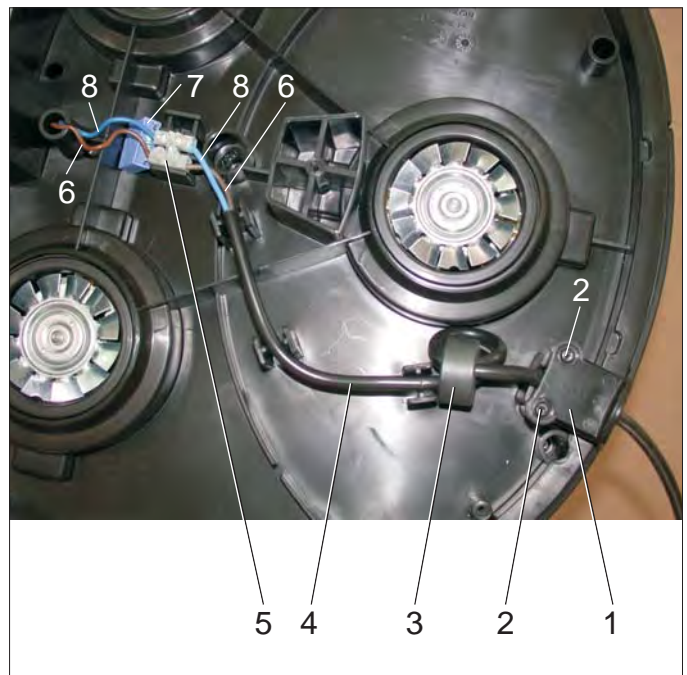
- 1 Fastening screws for cover
- 2 Fastening screw for carrying handle
- 3 Carrying handle
- 4 Cover
- 5 Cable hook

- ➔ Unscrew the fastening screws for the carrying handle.
- ➔ Remove the carrying handle.
- ➔ Unscrew the fastening screws for the cover.
- ➔ Remove cover.



- 1 Cover
- 2 Work air filter
- 3 Top of carrying handle
- 4 Bottom of carrying handle

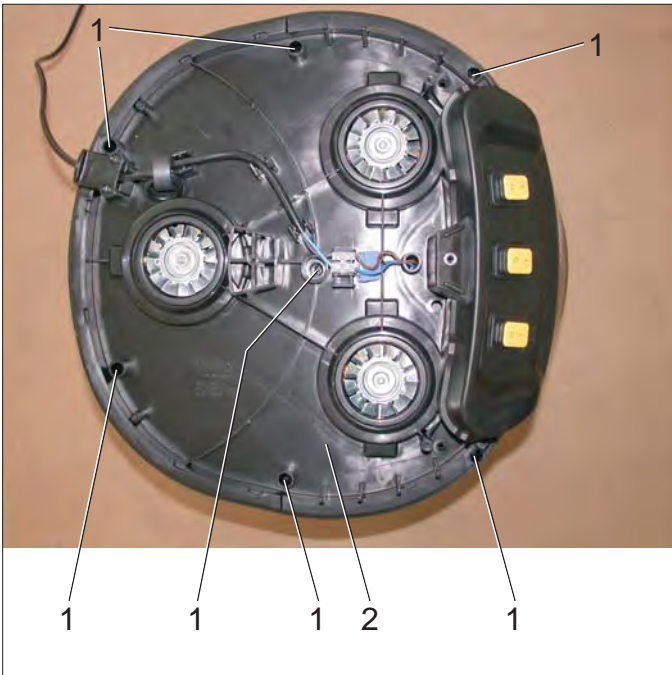
5.3 Replacing the mains cable



- 1 Clamp for mains cable
- 2 Fastening screws for clamp
- 3 Ferrit ring (anti-interference ring)
- 4 Power cord
- 5 Terminal strip
- 6 Phase
- 7 De-interference capacitor
- 8 Neutral conductor

- ➔ Remove the clamp for mains cable.
- ➔ Remove the phase and the zero conductor from the terminal strip.
- ➔ Remove the mains cable from the cable guide.
- ➔ Remove the ferrit ring (anti-interference ring).
- ➔ Install the new mains cable in reverse sequence.

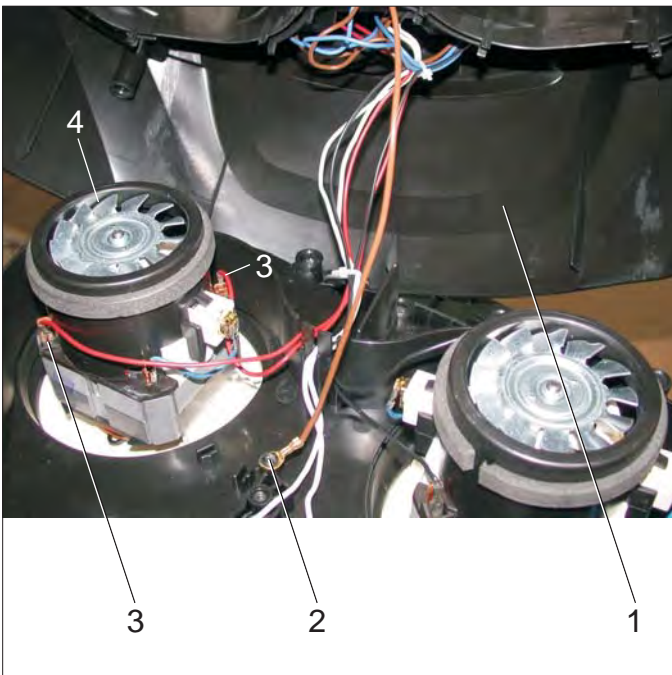
5.4 Remove the suction head hood



- 1 Fastening screws for hood
- 2 hood

→ Unscrew the fastening screws for the hood.
 → Remove the hood and carefully fold it to the side. Make sure that no cables are damaged.

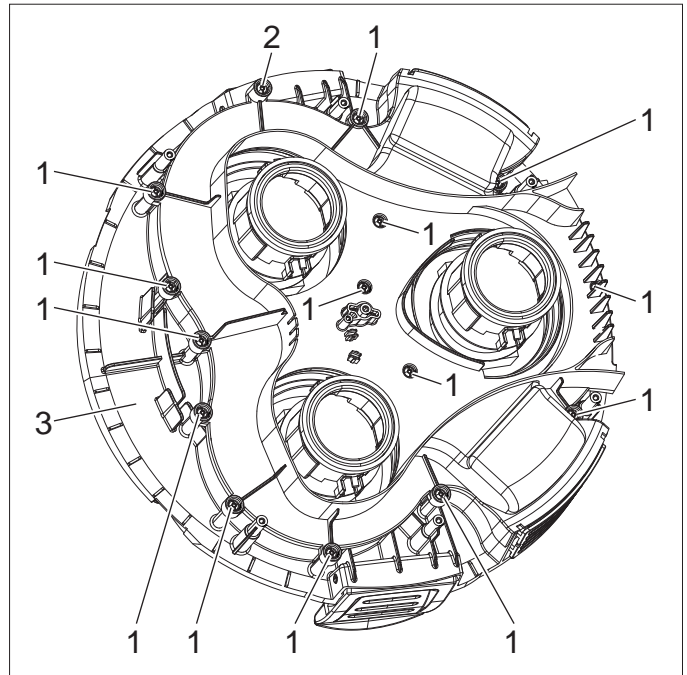
5.5 Remove the turbine casing



- 1 hood
- 2 Safety binders
- 3 Connection plug of the turbine
- 4 Suction turbine

Note: The data refers to the NT 70/3.

→ Pull the connection plug off the suction turbine.
 → Unscrew the safety binder.
 → Remove the hood.



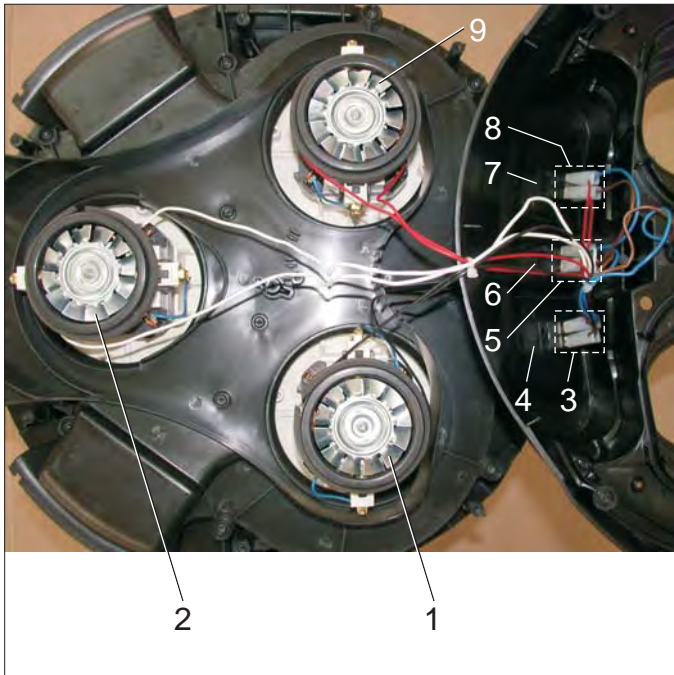
- 1 Fastening screws for turbine housing 5x35
- 2 Fastening screws for turbine housing 5x25
- 3 Turbine casing

→ Unscrew the fastening screws for the turbine casing.



→ Remove the turbine casing.

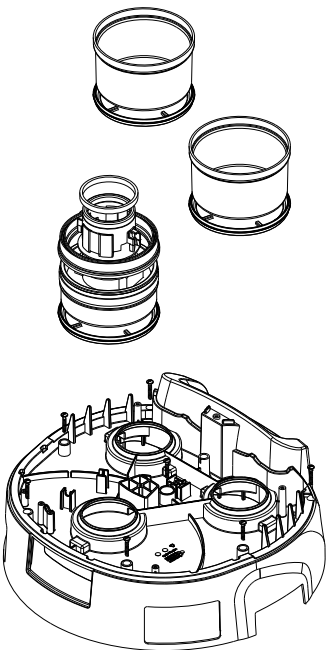
5.6 Replace appliance switch



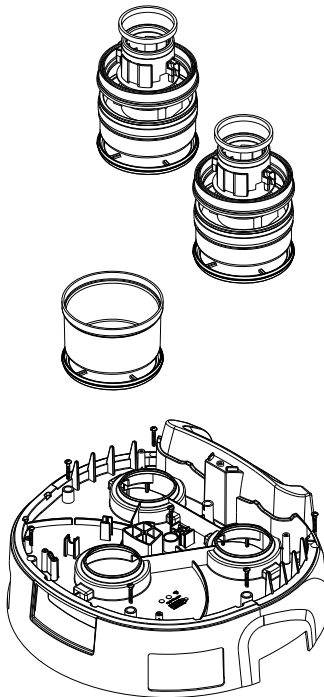
- 1 Suction turbine 3
 - 2 Suction turbine 1
 - 3 Connection plug to appliance switch suction turbine 3
 - 4 Appliance switch suction turbine 3
 - 5 Connection plug to appliance switch suction turbine 1
 - 6 Appliance switch suction turbine 1
 - 7 Appliance switch suction turbine 2
 - 8 Connection plug to appliance switch suction turbine 2
 - 9 Suction turbine 2
- ➔ Remove the connection plug of the defective appliance switch.
 - ➔ Replace defective appliance switch.
 - ➔ Refit the components in the reverse order.

5.7 Arrangement of the suction turbines

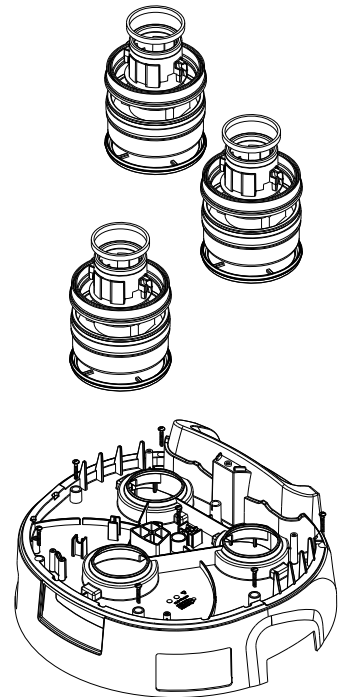
NT 70/1



NT 70/2



NT 70/3



5.8 Replacing the suction turbine

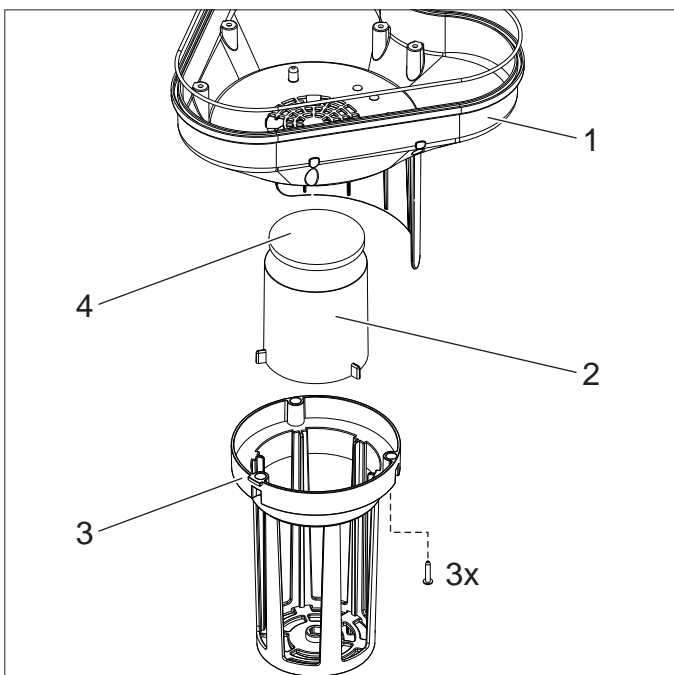


- 1 Work air filter
- 2 Suction turbine 2
- 3 Suction turbine 1
- 4 Turbine cover
- 5 Sound proofing
- 6 Turbine seal
- 7 Suction turbine 3

- ➔ Pull the connection plug off the turbine.
- ➔ Remove the suction turbine.
- ➔ Replace the turbine as well if necessary.
- ➔ Insert new suction turbine.
- ➔ Align the new suction turbine as per the marking arrows.
- ➔ Connect the connection plug of the turbine.

Note: During assembly, make sure that the turbine seals are not damaged by the turbine housing.

5.9 Replace the mechanical overflow safeguard

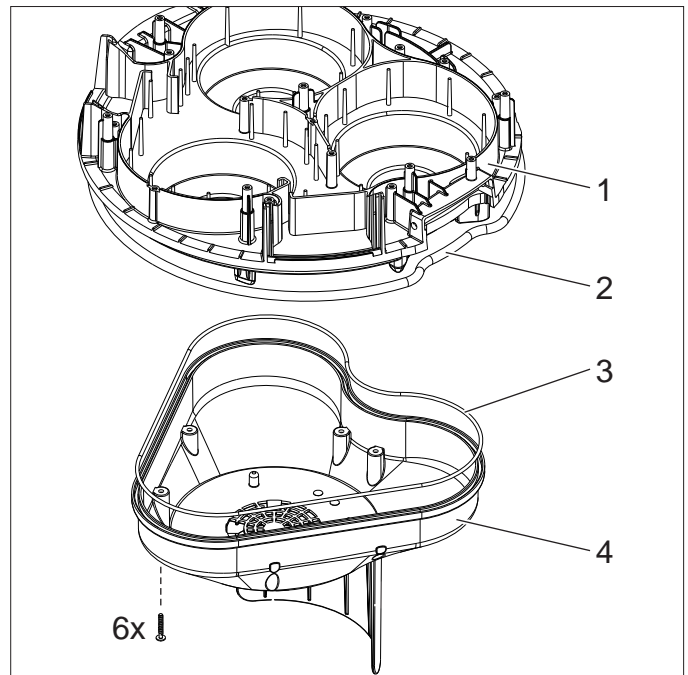


- 1 Air guidance
- 2 Mechanical overflow protection
- 3 Filter basket

4 Air guidance filter

- ➔ Unscrew the fastening screws of the filter basket.
- ➔ Remove the filter basket.
- ➔ Replace the mechanical overflow safeguard.
- ➔ Replace the air guidance filter as well if necessary.
- ➔ Refit the components in the reverse order.

5.10 Remove air guidance



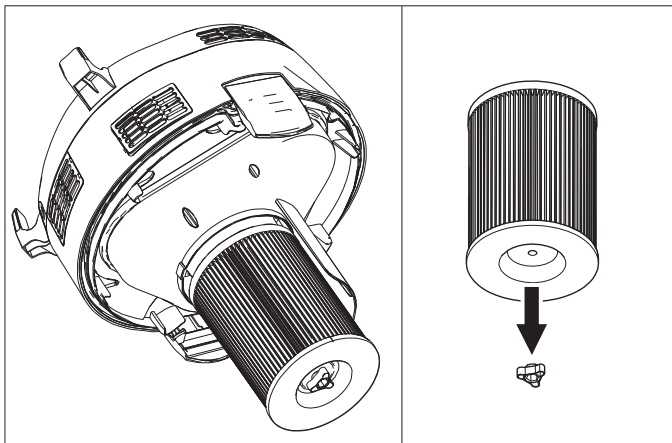
- 1 Base plate
- 2 Rubber foam string
- 3 Seal of the air guidance
- 4 Air guidance
- ➔ Unscrew the fastening screws of the air guidance.
- ➔ Replace seal.
- ➔ Replace the rubber foam string as well if necessary.
- ➔ Refit the components in the reverse order.

6 Maintenance and care

⚠ Warning

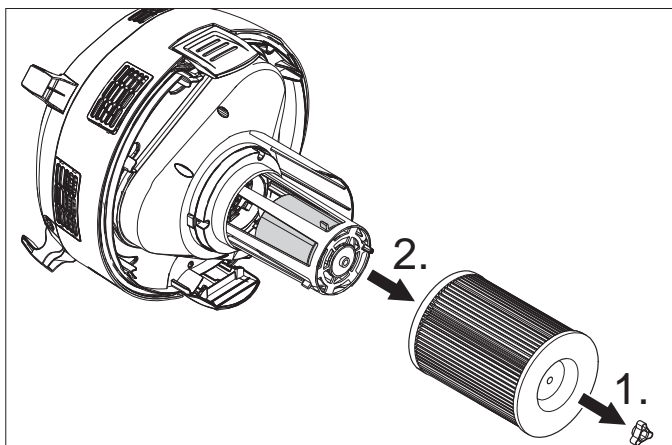
First remove the mains plug before doing any job on the vacuum cleaner.

6.1 Change cartridge filter



- Release and remove the suction head.
- Unscrew the star screw, pull out the cartridge filter and replace with a new one.
- Tighten the star screw.
- Insert and lock the suction head.

6.2 Cleaning the mechanical overflow safeguard



- Release and remove the suction head.
- Unscrew the star screw and pull out the cartridge filter.
- Clean the mechanical overflow safeguard
- Replace the cartridge filters.
- Tighten the star screw.
- Insert and lock the suction head.

7 Troubleshooting

7.1 Suction turbine does not run

- Check cables, plugs, fuse, socket and the mechanical overflow safeguard.
- Turn on the appliance.

7.2 Suction turbine turns off

- Empty the container.

7.3 Suction turbine does not start again after the container has been emptied

- Turn off the appliance and wait for 5 seconds, turn it on again after 5 seconds.

7.4 Suction capacity decreases

- Remove choking of suction nozzle, suction tube, suction hose, or cartridge filter.
- Replace the washer between the suction head and the container.
- Exchange the paper filter bag.
- Clean or replace the membrane filter (special accessory).
- Change cartridge filter.
- Check drain pipe for leaks.

7.5 Dust comes out while vacuuming

- Check the proper installation of the cartridge filter.
- Change cartridge filter.

7.6 Mechanical overflow safeguard (wet suction) does not function

- Check swimmer for easy accessibility; clean or replace as need be.

8 Technical specifications

Appliance type	Appliance no.:	Circuit diagram	Operating instructions	Spare parts list
NT 70/1 *EU, 220-240 V, 1~ 50/60 Hz	1.667-203.0	0.089-145.0	5.962-874.0	5.970-929.0
NT 70/2 *EU, 220-240 V, 1~ 50/60 Hz	1.667-204.0	0.089-145.0	5.962-874.0	5.970-929.0
NT 70/3 *EU, 220-240 V, 1~ 50/60 Hz	1.667-205.0	0.089-145.0	5.962-874.0	5.970-929.0
NT 70/2 Tc *EU, 220-240 V, 1~ 50/60 Hz	1.667-206.0	0.089-145.0	5.963-349.0	5.970-929.0
NT 70/2 Me Tc *EU, 220-240 V, 1~ 50/60 Hz	1.667-207.0	0.089-145.0	5.963-349.0	5.970-929.0
NT 70/3 Tc *EU, 220-240 V, 1~ 50/60 Hz	1.667-208.0	0.089-145.0	5.963-349.0	5.970-929.0
NT 70/3 Me Tc *EU, 220-240 V, 1~ 50/60 Hz	1.667-209.0	0.089-145.0	5.963-349.0	5.970-929.0
NT 70/2 Me *EU, 220-240 V, 1~ 50/60 Hz	1.667-210.0	0.089-145.0	5.962-874.0	5.970-929.0
NT 70/1 *AUS, 240 V, 1~ 50/60 Hz	1.667-213.0	0.089-145.0	5.962-874.0	5.970-929.0
NT 70/2 *AUS, 240 V, 1~ 50/60 Hz	1.667-216.0	0.089-145.0	5.962-874.0	5.970-929.0
NT 70/2 *GB, 220-240 V, 1~ 50/60 Hz	1.667-217.0	0.089-145.0	5.962-874.0	5.970-929.0
NT 70/2 *CH, 220-240 V, 1~ 50/60 Hz	1.667-221.0	0.089-145.0	5.962-874.0	5.970-929.0

The status of the attached circuit diagram represents the creation date of the service manual. This circuit diagram is not updated. When working on the device, please always use the current circuit diagram in Kärcher-Inside.

8.1 Special tools

There are no special tools necessary.

8.2 Tightening torques

No data.

