Repair instructions





Applies to:

FEIN Dustex 25 L, FEIN Dustex 35 L, Turbo I, TURBO II with antistatic preparation

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Models described



1 Models described

These repair instructions describe how to repair the following models:

Model	Material number	
FEIN Dustex 25 L, Turbo I with antistatic preparation	9 20 35 2	
FEIN Dustex 35 L, Turbo II with antistatic preparation	9 20 36 2	

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Technical data



2 Technical data

Technical data

The complete technical data can be found in the operating instructions for the model.

Troubleshooting

Troubleshooting for all devices can be found in the FEIN electronic information system.

Specific test specifications and measured values

Up-to-date test data for all devices can be found in the FEIN electronic information system.

Special tools, lubricants and auxiliary substances

The special tools catalogue and the lubricants and container sizes available from FEIN can be found in the FEIN electronic information system.

Lists of spare parts

Lists of spare parts and exploded views are available online in our spare parts catalogue, which can be accessed via the FEIN website.

Connection diagram

The connection diagram can be found in the FEIN electronic information system.



Symbols used



3 Symbols used



Refers to measures for avoiding the risk of injuries.



ESD warning symbol to identify electrically sensitive components and parts.



Refers to information or instructions that should be followed. Non-observance can result in damage or malfunctions.



Read the operating instructions.



Indicates notes that provide information or instructions that may provide a better understanding and contribute to the more effective use of the product.



Part of the navigation interface.

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Notes and requirements



4 Notes and requirements

Please note

These instructions are only intended for persons with suitable technical training. It is assumed that the reader has mechanical and electrical training.

Only use original FEIN spare parts!



INFORMATION

Read the operating instructions for the product before carrying out any repair work.

Provisions

Please note that power tools may only be repaired, maintained and checked by a trained electrician, as improper repair can result in serious risks to the user.

Outside Germany, the regulations applicable in the relevant country must be observed.

The provisions set out in **DIN VDE 0701-0702** should be observed after repairs.

The relevant accident prevention regulations are to be observed during commissioning.

The German Equipment and Product Safety Act [ProdSG] applies for correct use.

Disclaimer

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Safety instructions



5 Safety instructions

5.1 Structure



SIGNAL WORD FOR THE DANGER CLASSIFICATION.

Type and source of the danger.

Possible consequences.

Measure that must be taken in order to avoid this danger.

5.2 Danger classification

Warning

This warning refers to a dangerous situation. If the situation is not avoided, this may result in severe injuries or death.



WARNING!

Type and source of the danger.

Possible consequences.

Measure that must be taken in order to avoid this danger.

Caution

This warning refers to a potentially dangerous situation. If the situation is not avoided, this may result in slight or minor injuries. This may also be used as a warning against material damage.



CAUTION!

Type and source of the danger.

Possible consequences.

Measure that must be taken in order to avoid this danger.

Please note

Indicates a potentially harmful situation. If this situation is not avoided, the product or an object in its environment could be damaged.



PLEASE NOTE:

Type and source of the danger.

Damage to the product or its environment.

Measure that must be taken in order to avoid this danger.

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Safety instructions



5.3 Information

Indicates notes that provide information or instructions that may provide a better understanding and contribute to the more effective use of the product.

(i)	INFORMATION
Tip	

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Tools, lubricants and auxiliary substances required



6 Tools, lubricants and auxiliary substances required

6.1 Standard tools

Torx T15 (Length 89 mm)

Torx T20 (Length: 89 mm; 152 mm)

Cross-head screwdriver PH1

Sleeve 5 mm inner diameter
Sleeve 70 mm inner diameter

Side-cutting pliers

Spanner 4 mm

Rubber hammer

6.2 Special tools

Assembly aid 64122121010

Pressure gauge 64108010010

6.3 Lubricants and auxiliary substances required

No lubricants and auxiliary substances are required for assembly the FEIN Dustex 25L/Turbo I and FEIN Dustex 35L/Turbo II machines.



Test and diagnostics options



7 Test and diagnostics options

Fault	Remedy
Suction turbine does not run	Switch on the appliance.
	Check the mains cable, plug, fuse, socket and fill level sensors
	Operating mode selector switch is set to 'Automatic Start/Stop'. Set the operating mode selector switch to the 'Vacuum' symbol and switch on the power tool that is connected to the socket.
	Check/replace the appliance switch. Check the socket.
	Check/replace the control board.
	Container is full in wet operation. Empty the container.
	Empty the container.
Suction turbine switches off	Switch off the suction and wait for five seconds. Switch back on after five seconds.
Suction turbine does not restart after emptying the container.	Clean the fill level sensors and the space between the fill level sensors with a brush.
Suction power drops	Remove the obstruction from the suction nozzle, pipe, hose or flat-fold filter.
	Change the disposal bag/dust bag.
	Install the filter cover correctly.
	Place the extractor top correctly and close locks.
	Check the suction system for leaks.
	Change the fleece filter bag.
	Change the flat filter.
	Check the vacuum with the pressure gauge on the tool collar. Vacuum minimum 200 mbar.
Dust escapes when vacuuming	Check that the flat-fold filter is inserted correctly.
	Change the flat-fold filter.
Automatic shut-down (wet extraction) does not respond	Clean the fill level sensors and the space between the fill level sensors with a brush.
	Automatic shutdown does not function with electrically non- conductive liquids or foam formation. Check the fill level regularly.

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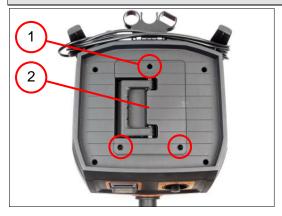


8 Disassembly

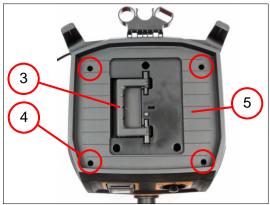
8.1 Removing the cover

Tools:

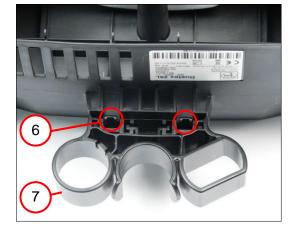
- Torx T20 Length: min. 152 mm
- Assembly aid



- 1. Unscrew the three screws (1).
- 2. Remove the cover (2).



- 3. Remove the handle (3).
- 4. Unscrew the four screws (4).
- 5. Remove the hood (5).



- 6. Lift up the two hooks (6).
- 7. Remove the holder (7).

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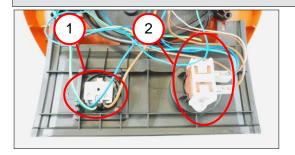
8.2 Removing the operating element

Steps that must be completed:

- Remove the cover

Tools:

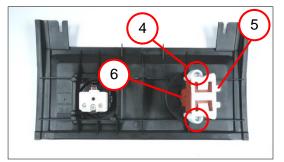
- Torx T15 (length: 89 mm)
- PH1 cross-head screwdriver
- Sleeve 70 mm inner diameter



- 1. Remove the cables (1).
- 2. Remove the plug (2).



- 3. Unscrew the two screws (3).
- 4. Remove the socket.



- 5. Unscrew the two screws (4).
- 6. Remove the holder (5).
- 7. Remove the switch (6).



8. Press out the rotary knob.



Note!

Damage to the operating element.

The operating element can be damaged by excessive force.

Press out the rotary knob carefully.

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8.3 Removing the electronics (FEIN Dustex 25 L; FEIN Dustex 35 L)

Steps that must be completed:

- Remove the cover
- Removing the operating element



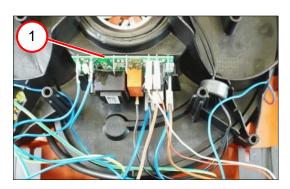
Note!

Damage from electrostatic charge.

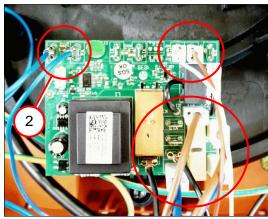
Failure to comply with the safety regulations for ESD protection may cause damage to the electronics.

Only perform assembly/disassembly work on electronics at a workstation with ESD protection.

1. Remove the electronics (1).



2. Remove the plug (2).



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8.4 Removing the electronics (Turbo I; Turbo II)



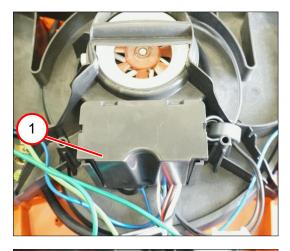
Note!

Damage from electrostatic charge.

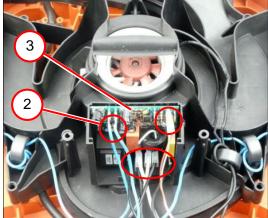
Failure to comply with the safety regulations for ESD protection may cause damage to the electronics.

Only perform assembly/disassembly work on electronics at a workstation with ESD protection.

1. Remove the cover (1).



- 2. Remove the plug (2).
- 3. Remove the electronics (3).

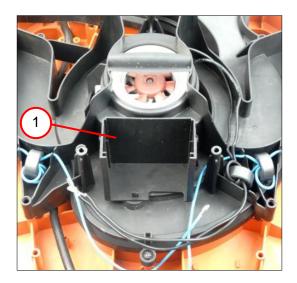


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8.4 Removing the electronics (Turbo I; Turbo II)



4. Remove the housing (1).

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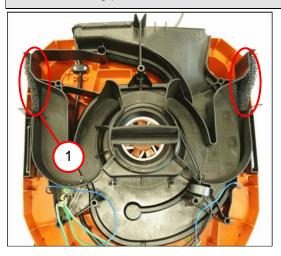
8.5 Removing the housing

Steps that must be completed:

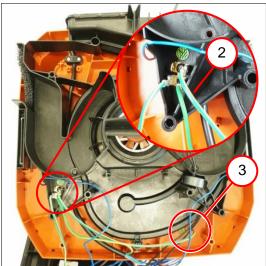
- Remove the cover
- Removing the electronics

Tools:

- Torx T15 Length: min. 89 mm
- Spanner 4 mm
- Side-cutting pliers



1. Remove the two filters (1).



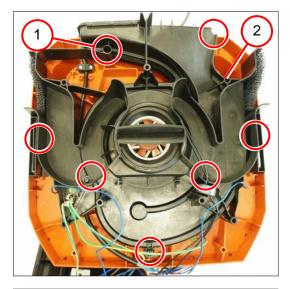
- 2. Remove the cables (2).
- 3. Remove the cable (3).







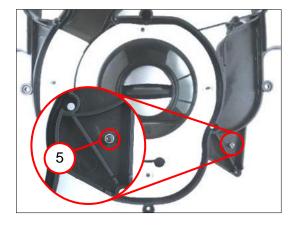
8.5 Removing the housing



- 4. Unscrew the seven screws (1).
- 5. Remove the housing (2).



- 6. Unscrew the M4x12 screw (3).
- 7. Remove the distributor (4).



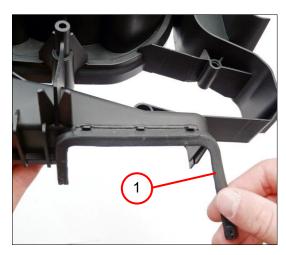
8. Remove the nut (5).



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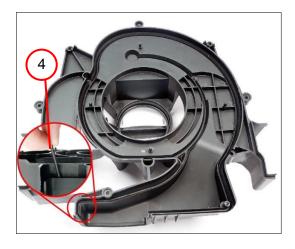
8.5 Removing the housing



9. Remove the seal (1).



- 10. remove the four lock washers (2).
- 11. Remove the seal (3).



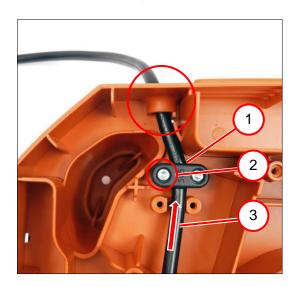
12. Remove the seal (4).

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8.6 Removing the mains cable (FEIN Dustex 25 L; FEIN Dustex 35 L)



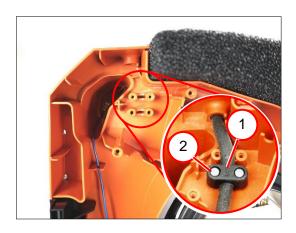
- 1. Unscrew the two screws (1).
- 2. Remove the clamp (2).
- 3. Remove the cable (3).

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8.7 Removing the mains cable (Turbo I; Turbo II)



- 1. Remove the clamp (1).
- 2. Unscrew the two screws (2).

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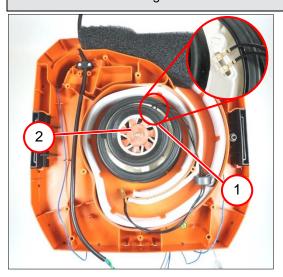




8.8 Removing the motor

Steps that must be completed:

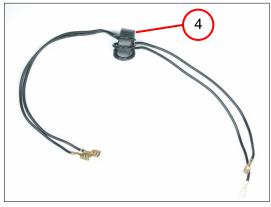
- Remove the cover
- Remove the electronics
- Remove the housing



- 1. Remove the two plugs (1).
- 2. Remove the motor (2).



3. Remove the motor bracket ring (3).



4. Remove the ferrite ring (4).

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8.8 Removing the motor



5. Remove the seal (1).



6. Remove the seal (2).

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8.9 Removing the base plate

Steps that must be completed:

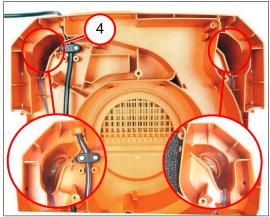
- Remove the cover
- Remove the electronics
- Remove the housing

Tools:

- Torx T15 (length: 89 mm)
- PH1 cross-head screwdriver



- 1. Remove the two lugs pressure pieces (1).
- 2. Remove the two inserts (2).
- 3. Remove the filter (3).

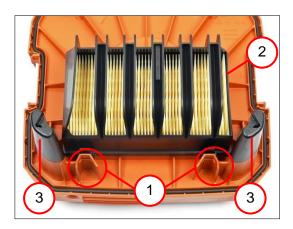


4. Unscrew the two sensors (4).





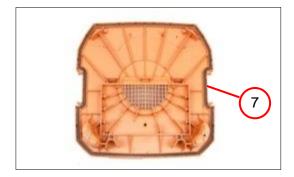
8.9 Removing the base plate



- 5. Open the clips (1).
- 6. Remove the housing with filter (2).
- 7. Remove the two holders (3).



- 8. Unscrew the M4x16 screw (4).
- 9. Remove the lock washer (5).
- 10. Remove the contact spring (6).



11. Remove the seal (7).

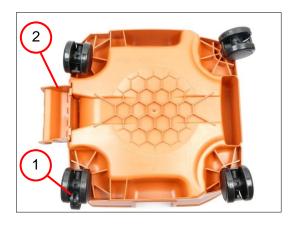
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Disassembly



8.10 Removing the container



- 1. Remove the four rollers (1).
- 2. Remove the holder (2).

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Assembly



9 Assembly

9.1 Fitting the container



- 1. Position the holder (1).
- 2. Fit the four rollers (2).

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Assembly



9.2 Fitting the earth contact

Tools:

- Sleeve 5 mm inner diameter
- Rubber hammer



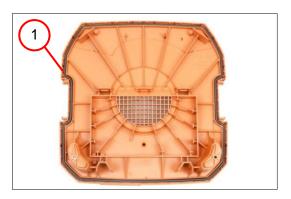
1. Position the earth contact (1).

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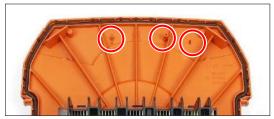




9.3 Fitting the base plate



1. Position the seal (1).

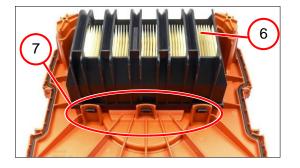


- 2. Position the contact spring (2).
- 3. Screw in the M4x16 mm screw (3).
- 4. Position the lock washer (4).



5

5. Position the filter (5).



6. Position the housing (6).



INFORMATION

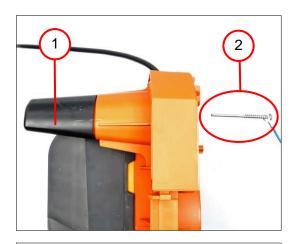
The clips (7) click audibly into place.

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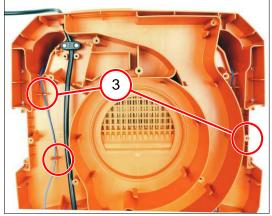




9.3 Fitting the base plate



- 7. Position the holder (1).
- 8. Screw in the sensor with cable (2).



9. Position the cable in the cable guides (3).



- 10. Position the two pressure pieces (4).
- 11. Position the two inserts (5).
- 12. Position the filter (6).

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9.4 Fitting the motor

Steps that must be completed:

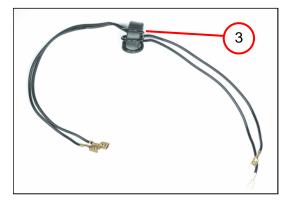
- Fit the base plate



1. Position the seal (1).



2. Position the seal (2).



3. Wrap the cable (3) around the ferrite ring twice.

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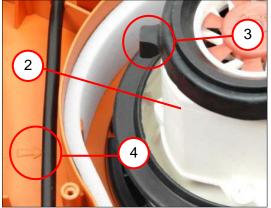




9.4 Fitting the motor



4. Position the motor bracket ring (1).

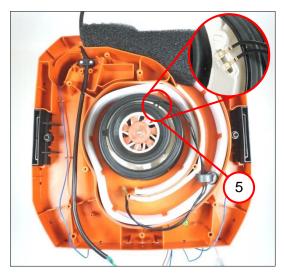


5. Position the motor (2).



INFORMATION

Align the recess (3) on the arrow (4).



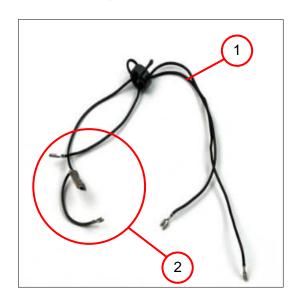
6. Connect the two cables (5).

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9.5 Fitting the mains cable (Turbo I; Turbo II)



1. Wrap the cable (1) around the ferrite ring twice.



2. Connect the two plugs (2).



INFORMATION

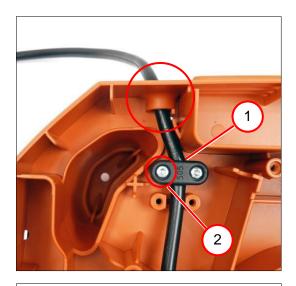
Ensure that the connection diagram is observed.

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9.6 Fitting the mains cable (FEIN Dustex 25 L; FEIN Dustex 35 L)



- 1. Position the cable.
- 2. Position the clamp (1).
- 3. Screw in the two screws (2).



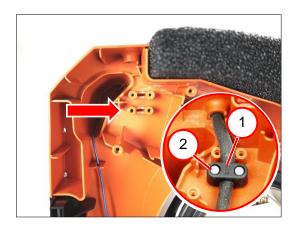
4. Place the cable in the guide.

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9.7 Fitting the mains cable (Turbo I; Turbo II)



- 1. Position the cable.
- 2. Position the clamp (1).



INFORMATION

Pay attention to the position of the clamping piece (1).

3. Screw in the two screws (2).



4. Place the cable in the guide.

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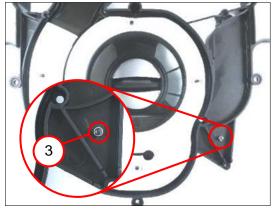
9.8 Fitting the housing

Tools:

- Torx T15 Length: min. 89 mm
- Spanner 4 mm



- 1. Position the distributor (1).
- 2. Screw in the M4x12 mm screw (2).



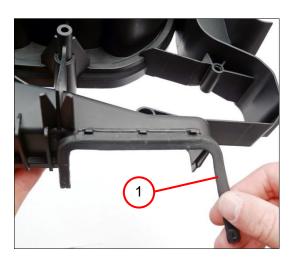
3. Screw in the nut (3).

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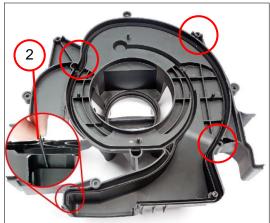




9.8 Fitting the housing



4. Position the seal (1).



5. Position the seal (2).



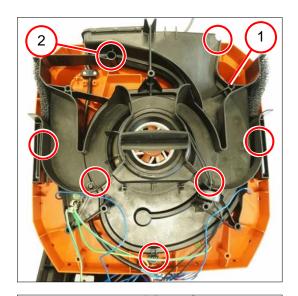
- 6. Position the insert (3).
- 7. Screw in the four lock washers (4).

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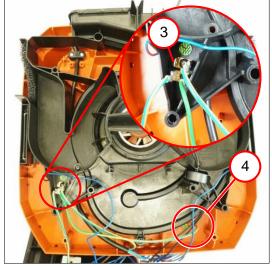




9.8 Fitting the housing



- 8. Position the housing (1).
- 9. Screw in the seven screws (2).



- 10. Insert the cable (3).
- 11. Insert the cable (4).



INFORMATION

Ensure that the connection diagram is observed.

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9.9 Fitting the electronics (FEIN Dustex 25 L; FEIN Dustex 35 L)

Steps that must be completed:

- Fit the base plate
- Fit the motor
- Fit the mains cable
- Fit the housing



Note!

Damage from electrostatic charge.

Failure to comply with the safety regulations for ESD protection may cause damage to the electronics.

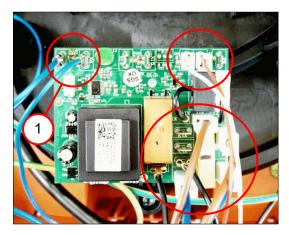
Only perform assembly/disassembly work on electronics at a workstation with ESD protection.

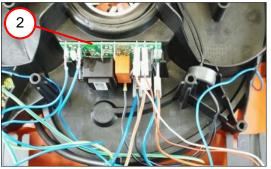
1. Connect the cables (1).



INFORMATION

Ensure that the connection diagram is observed.





2. Position the electronics (2).

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9.10 Fitting the electronics (Turbo I; Turbo II)

Steps that must be completed:

- Fit the base plate
- Fit the motor
- Fit the mains cable
- Fit the housing



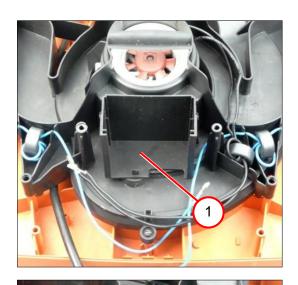
Note!

Damage from electrostatic charge.

Failure to comply with the safety regulations for ESD protection may cause damage to the electronics.

Only perform assembly/disassembly work on electronics at a workstation with ESD protection.

1. Position the housing (1).



2. Connect the cables (2).



INFORMATION

Ensure that the connection diagram is observed.

3. Insert the electronics (3).

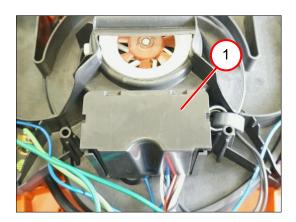


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9.10 Fitting the electronics (Turbo I; Turbo II)



4. Position the cover (1).

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9.11 Fitting the operating element

Steps that must be completed:

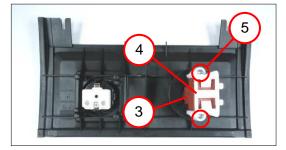
- Fit the housing
- Fit the mains cable
- Fit the motor
- Fit the base plate
- Assembling the electronics

Tools:

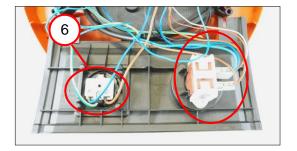
- Torx T15 (length: 89 mm)
- PH1 cross-head screwdriver



- 1. Position the socket.
- 2. Screw in the two screws (1).
- 3. Position the rotary knob (2).



- 4. Position the switch (3).
- 5. Position the holder (4).
- 6. Screw in the two screws (5).



7. Connect the cables (6).



INFORMATION

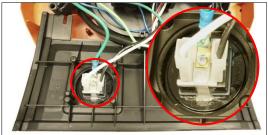
Ensure that the connection diagram is observed.

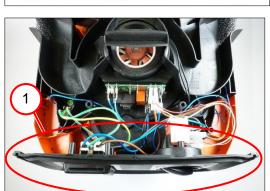
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9.11 Fitting the operating element





Applies to: Turbo I; Turbo II and 110/120 V

8. Connect the cables.



INFORMATION

Ensure that the connection diagram is observed.

9. Position the operating element (1).



INFORMATION

Pay attention to the cable guide.

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9.12 Fitting the cover

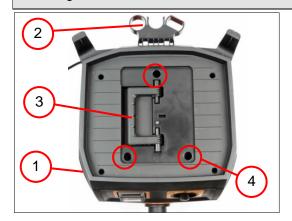
Steps that must be completed:

- Fit the housing
- Fit the mains cable
- Fit the motor
- Fit the base plate
- Fit the electronics
- Fit the operating element

Tools:

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 Torx T20 Length: min. 152 mm



- 1. Position the hood (1).
- 2. Fit the holder (2).
- 3. Position the handle (3).
- 4. Screw in the three screws (4).



5. Screw in the four screws (5).

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Inspection following repairs



10 Inspection following repairs

Machining surfaces (dust extractors)

Always: Visual inspection

Electrical safety test

Measure suction power (special tool 64108010010)

Test extraction → no dust should escape Check socket functionality (auto function)

Check container is leak tight

Antistatic mechanism installed Check earth cable

Filter cleaning system present: Check filter cleaning system

Intake flow monitoring present: Check intake flow monitoring

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