dark matter composites ltd

'H' Class Portable Electric Dust Extractor with Boom Arm

Product Code - DMP0120
USER MANUAL

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Registered in England & Wales No: 5395870

Contents

Specification

Festool electric powered dust extractor

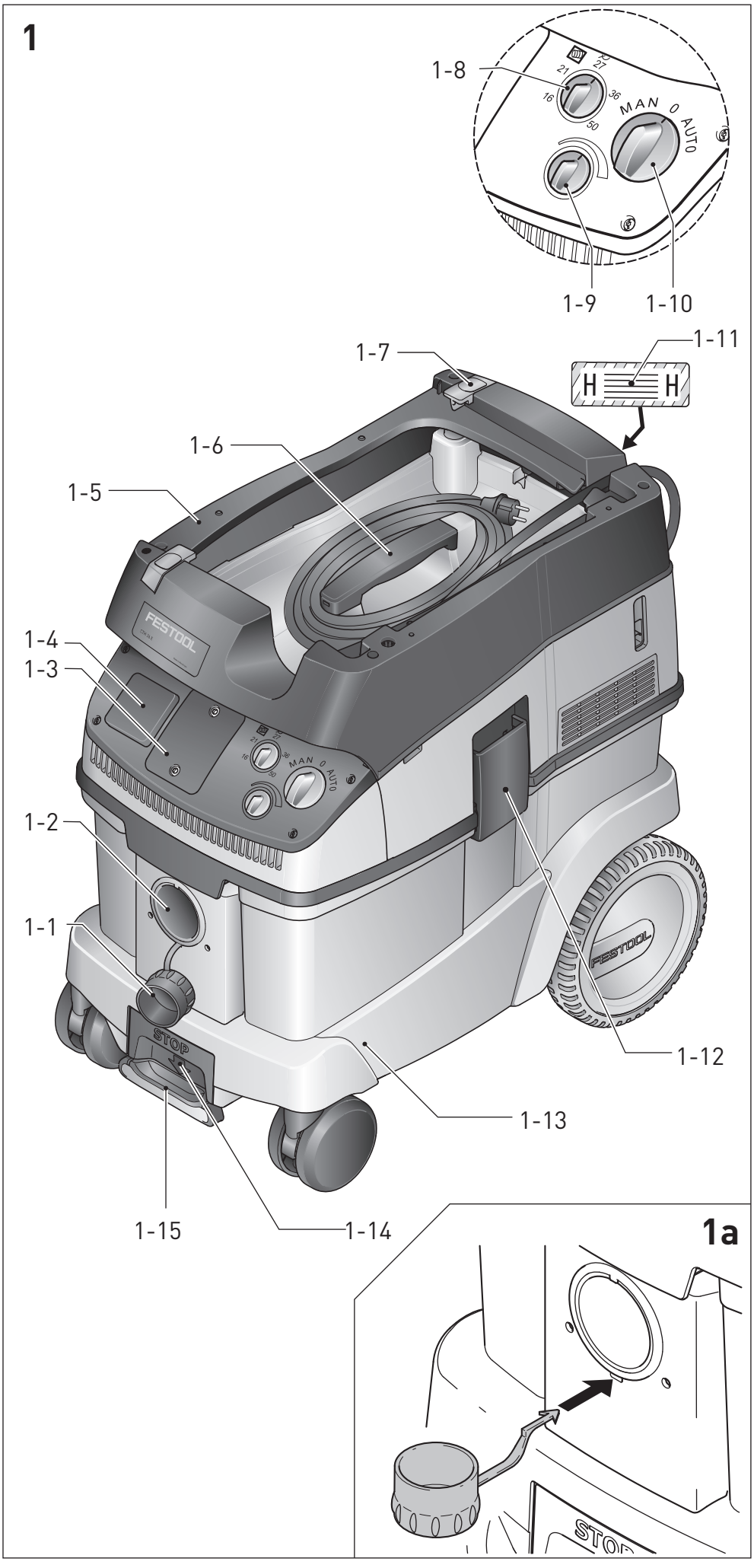
- Disposable 'H' class filter set providing the highest level of fine dust capture
- Self cleaning bag filter with 26 litre capacity
- Safety change bag filter
- Castor base, with stabilising legs & handle
- Variable vacuum control
- Audible low airflow alarm
- Electric and compressed air interconnect modules
- Manual and 'Auto Start' vacuum operation for electric and air tools
- Single boom arm assembly with hose carriers to support the weight of a hose above the work

- Two vacuum hose connections
- One 1800w electrical outlet with auto-start interconnection
- Two airline outlets with hi-flow safety vent couplings and auto-start interconnection
- Cable/hose storage tray
- One antistatic 3.5m hose
- One 6m coaxial (airline in vacuum) antistatic hose
- Airline hoses complete with hi-flow airline connectors and safety coupling at tool end (two stage vent type)
- Vacuum hoses complete with dust closures at tool end
- Suction brush
- 230v, 50Hz with either UK or EU plug/socket

Note that this extraction unit is configured specifically for use with our range of repair tools and air tools fitted with on-tool vacuum shrouds and matched vacuum and airline couplings.

This 'H' class extraction unit is suitable for the removal of the full range of composite materials, including:

- *conductive carbon fibre dust (provided that airborne carbon dust contamination is not present in the working environment)*
- *asbestos dust*
- *carcinogenic glass fibre dust*
- *and pathogenic dust*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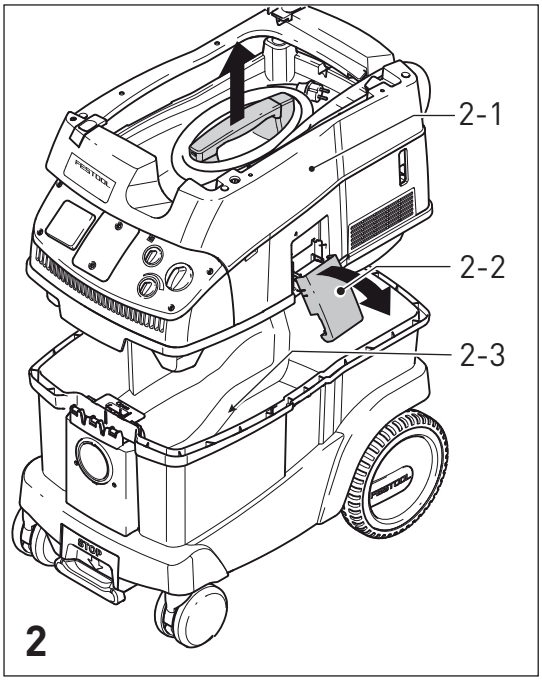

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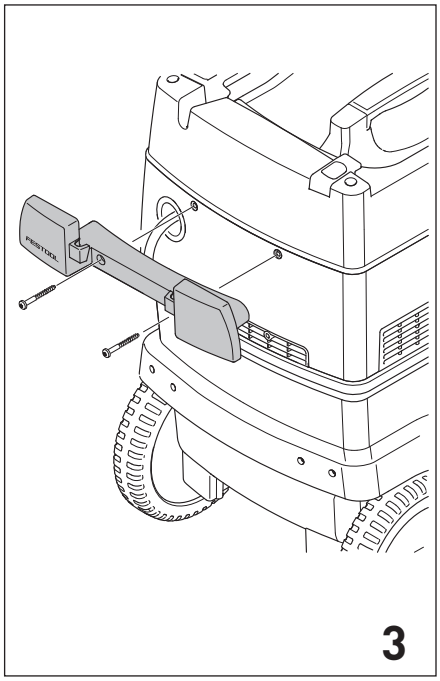

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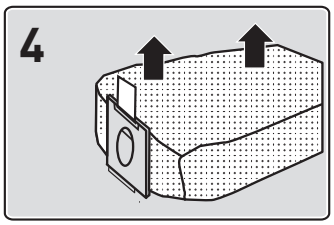

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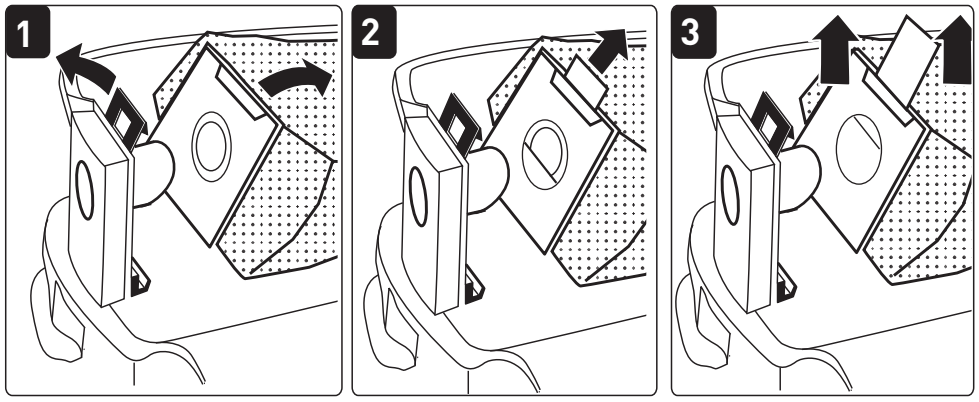

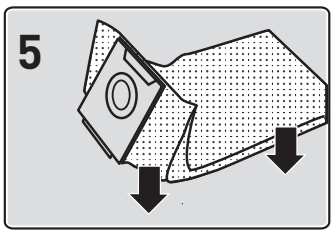

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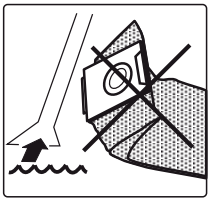

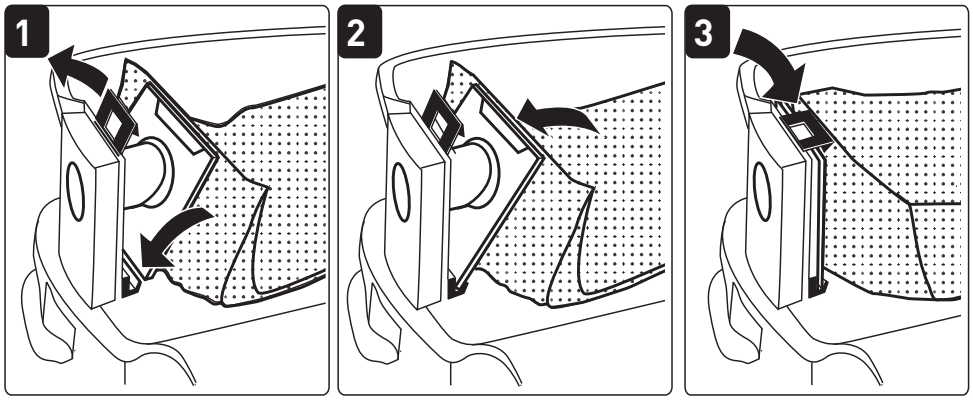

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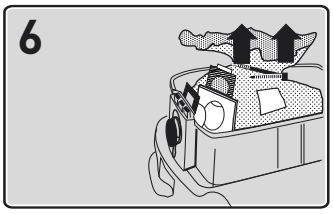

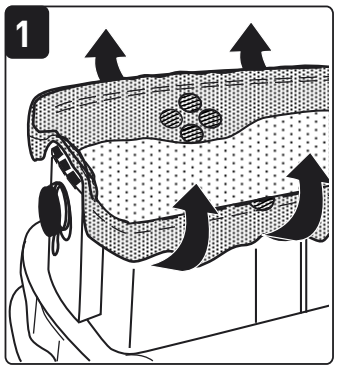

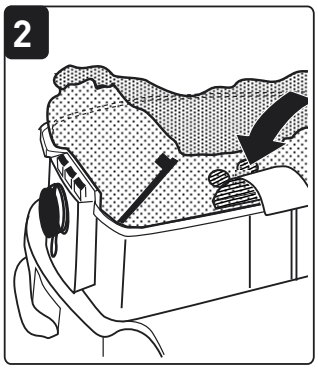

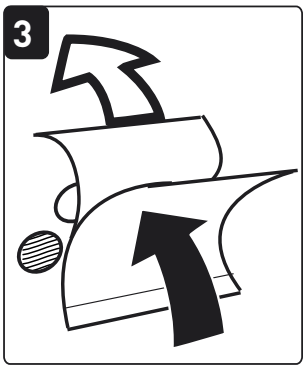

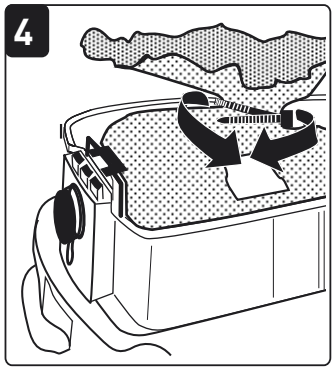

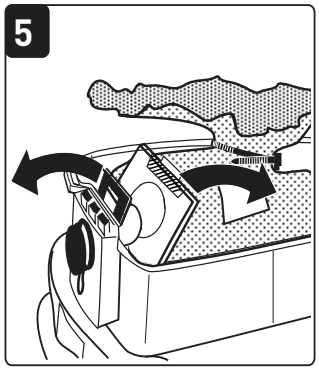

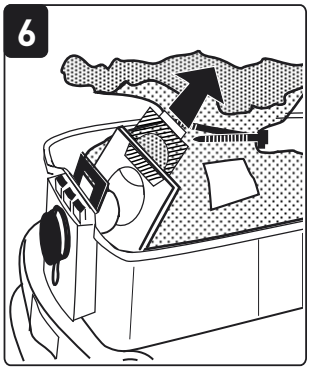

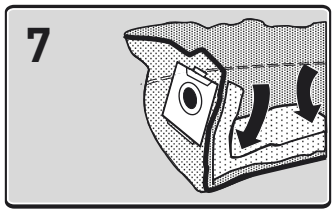

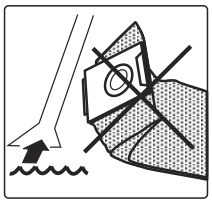

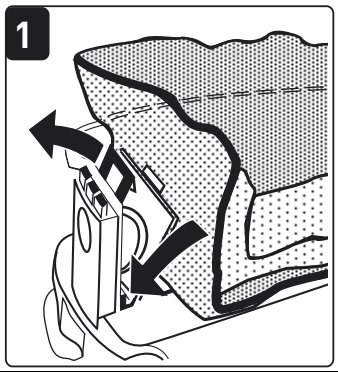

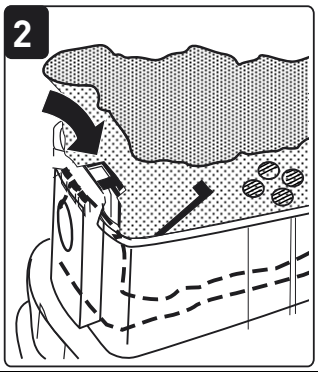

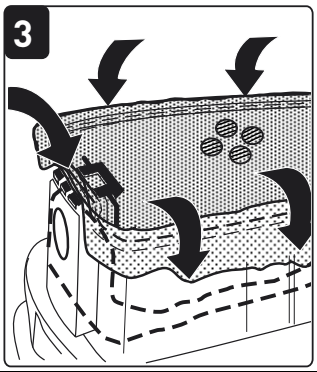

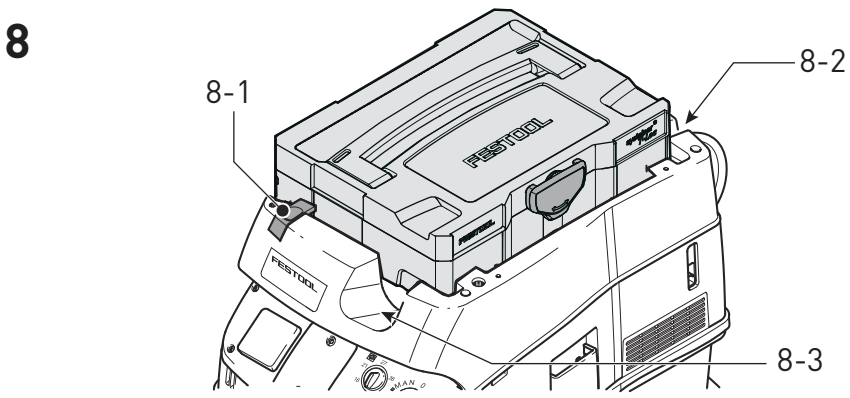

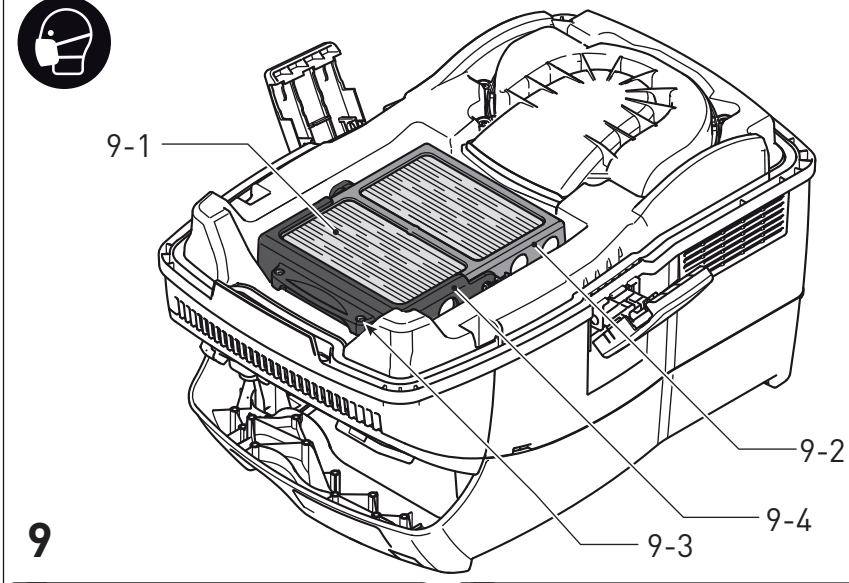

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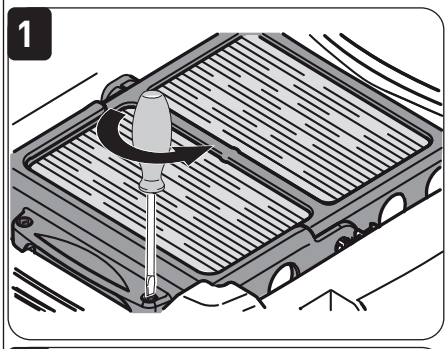

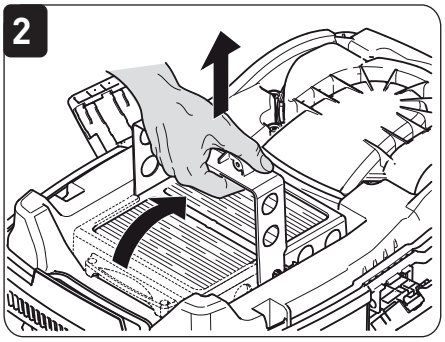

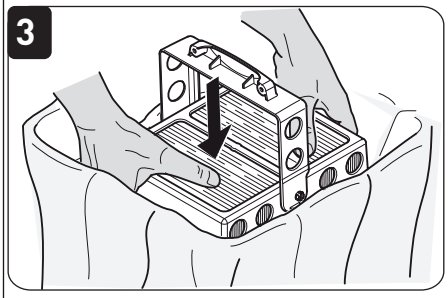

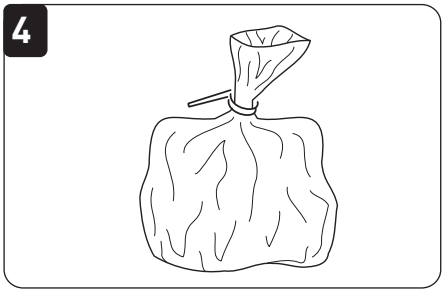

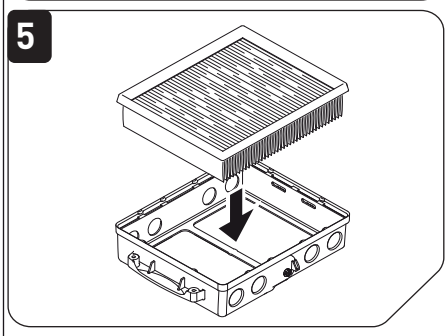

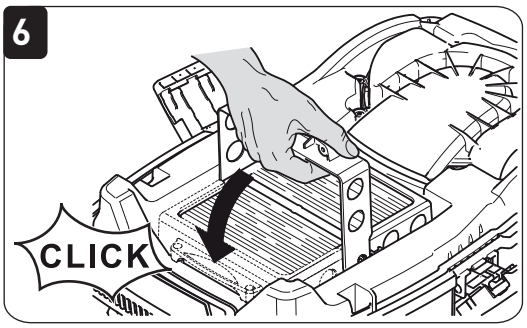

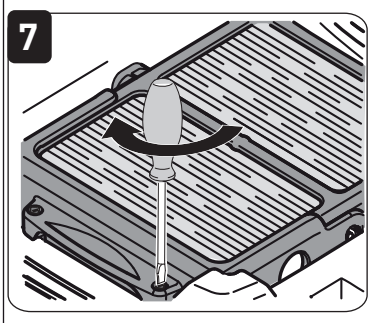

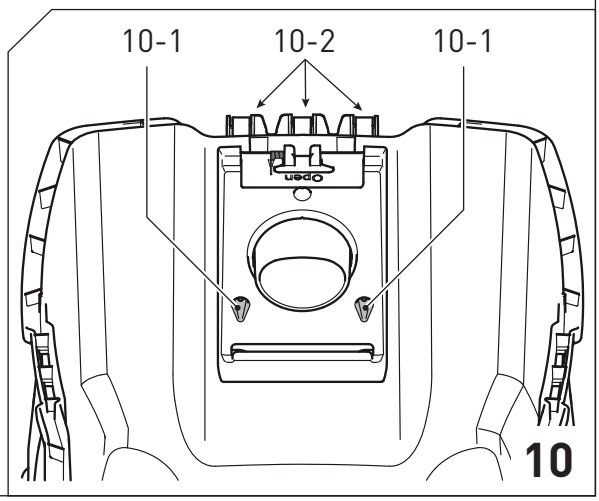

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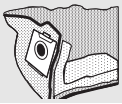
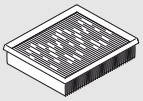
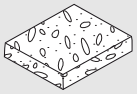
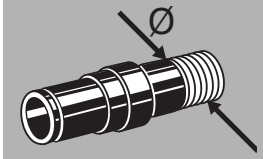
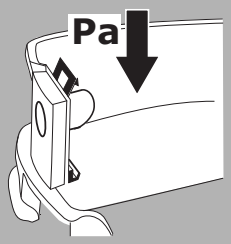
 FIS-CTH (3 x) (L, M, H[1])	497541	497542
 HF-CT H	498331	498331
  NF-CT	496169	496169

[1] EN 60335-2-69: Staubklasse - dust category - catégorie de poussières - clase de polvo - classe di polvere - stofklasse - dammklass - pölyluokitus - støvklasse - støvklasse - classe de poeiras - класс пыли - třída prachu - kategorii



	Volumenstrom mindestens **Volume flow of at least** **Débit au minimum** **Volumen de salida mínimo** **Portata min.** **Volumestroom minstens** **Volymström minst** **Tilavuusvirta vähintään** **Luftmængde mindst** **Volumstrøm minst** **Vazão mínima** **объёмный ток минимум** **Objemový proud minimálně** **Wielkość przepływu minimum**		**Unterdruck** **dépression** **Depressione** **Undertryck** **Undertryk** **Vácuo** **Podtlak**	**Vacuum** **Depresión** **Onderdruk** **Alipaine** **Undertrykk** **нижнее давление приблизительно** **Podciśnienie**
				
	[m^3/h]	[l/s]		[Pa]
16 mm	14,5	4,0	20400	10300
22 mm	24,9	6,9	20000	13800
27 mm/ IAS	41,2	11,5	19600	17400
36 mm "AC"	57,9	16,1	17300	15800
36 mm	73,2	20,3	16200	15300
50 mm	141,3	39,5	8800	7600

1 Safety instructions

1.1 General safety instructions

⚠ **WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this 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.

- This appliance must not be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge. **Children** need to be supervised to ensure they do not play with the appliance.
- **WARNING:** This device contains hazardous dust. Only specialists using suitable protective equipment in accordance with these operating instructions may perform emptying and maintenance tasks, including emptying the dust collection container. Never operate the device without the complete filtration system.
- Always use suitable protective equipment!
- If intact following a visual inspection, work in a dry environment according to instructions!
- **Risk of explosion and fire:Do not absorb:**
  - Sparks or hot dust;
  - Combustible or explosive materials (e.g. magnesium, aluminium, petrol, diluting agents – with the exception of wood);
  - Aggressive materials (e.g. acid, alkaline solutions, solvents);
  - Chemically reactive materials, which lead to the generation of heat, acids/bases, gases, etc. (e.g. reactive 2-component materials, aluminium and water).
- Observe all national safety regulations as well as the material manufacturer's specifications!
- Always use the socket on the machine for the purpose specified!
- Do not pull the plug from the socket by the cable.
- Check the plug and the cable regularly and should either become damaged, in order to avoid a hazard, have them replaced by an authorised after-sales service workshop.
- Do not lift or transport using a crane hook or lifting gear!

1.2 Extracting asbestos dust

After the extractor is used to extract asbestos dust in a sealed-off area, it can no longer be used in the white area. Exceptions are only permitted if the asbestos dust extractor has been completely decontaminated by an approved specialist. This must be recorded in writing and signed by the approved specialist.

Fixed filters may only be replaced in suitable areas (e.g. decontamination stations) by an approved specialist.

The applicable national regulations (for example TRGS 519) may contain further provisions that regulate or restrict the application

areas of the mobile dust extractor and which must be observed when extracting dust containing asbestos particles.

2 Technical data

Mobile dust extractors		
Power consumption		350 - 1000 W
Maximum appliance socket connected load	EU	2400 W
	CH, DK	1100 W
	GB 240 V/ 110 V	1800 W/ 500 W
Max. suction capacity (air), turbine [1]		234 m³/h (3900 l/min)
Max. vacuum, turbine [1]		24000 Pa
Filter surface area		6318 cm²
Suction hose		D 27 mm x 3,5 m-AS
Length of the net cable		7,5 m
Sound pressure level as per EN 60704-2-1 / Uncertainty K		71 dB(A) / 3 dB
Protection category		IP X4
Container capacity	CTH 26 E/a	26 l
	CTH 48 E/a	48 l
Dimensions L x W x H	CTH 26 E/a	630 x 365 x 540 mm
	CTH 48 E/a	740 x 406 x 1005 mm
Weight	CTH 26 E/a	13,9 kg
	CTH 48 E/a	18,8 kg

[1] The suction capacity and vacuum are dependent on the selected hose diameter. For more information please refer to page 6.

3 Symbols


Warning of general danger


Risk of electric shock


Read the Operating Instructions/Notes!


Wear a dust mask.


Do not throw in the household waste.


Warning contains asbestos

Socket with automatic switch-on unit

≤ 0,1 mg/m³ (dust class H)

The specified illustrations appear at the beginning of the Operating Instructions.

4 Intended use

The mobile dust extractor is suitable for the absorption and suction of dust which is hazardous to health with limit values corresponding to dust class 'H' in accordance with EN 60335-2-69, including wood and paint dust.

The mobile dust extractor is suitable for the absorption and suction of dust with carcinogenic and pathogenic particles, as well as asbestos dust.

The mobile dust extractor is designed to absorb water.

The mobile dust extractor is, in accordance with EN 60335-1 and EN 60335-2-69, suitable for increased demands for commercial use.


The user is liable for improper or non-intended use.

5 Machine features

[1-1] Sealing plug

[1-2] Intake opening

[1-3] Module slot

[1-4] Appliance socket

[1-5] Hose store
[1-6] Handle
[1-7] SysDoc
[1-8] Hose diameter setting
[1-9] Suction power adjuster
[1-10] Switch
[1-11] Warning sticker
[1-12] Locking clip
[1-13] Dust container
[1-15] Brake

6 Operation

WARNING

Unauthorised voltage or frequency!
Risk of accident

- ▶ The mains voltage and the frequency of the power source must correspond with the specifications on the machine's name plate.
- ▶ In North America, only Festool machines with the voltage specifications 120 V/60 Hz may be used.

6.1 Initial operation

- ▶ Open the locking clips **[2-2]** and remove the top section of the machine **[2-1]**.
- ▶ Remove the accessories from the dust container **[2-3]** and the packaging!
- ▶ Affix the accompanying sticker in your national language over the text field on the warning sign **[1-11]**.
- ▶ Insert the sealing plug **[1-1]** on the panel (see Fig. **[1a]**).
- ▶ Place a filter bag or safety filter bag in the dirt trap in accordance with statutory requirements (see Chapter 7.7, 7.8).
- ▶ Replace the top section **[2-1]** and close the locking clips **[2-2]**.
- ▶ Attach the cable holder to the rear of the mobile dust extractor (see Fig. **[3]**).
- ▶ Connect the suction hose to the machine.

6.2 Switch on/off

- ▶ Insert the plug into an earthed socket.

WARNING

Risk of injury from tools starting up unexpectedly

- ▶ Before setting the switch to the "AUTO" or "MAN" position, make sure that the connected tool is switched off.

The switch **[1-10]** serves as an on/off switch.

Switch position "0"
Appliance socket **[1-4]** is disconnected from the power, mobile dust extractor is switched off.

"MAN" switch position
Appliance socket **[1-4]** is connected to the power, the mobile dust extractor starts.

"Auto" switch position
Appliance socket **[1-4]** is connected to the power, the mobile dust extractor starts when the connected tool is switched on.

7 Settings

7.1 Adjusting the hose diameter

- ▶ Adjust the hose diameter adjuster **[1-8]** to match the diameter of the connected hose.
- ⓘ The monitoring devices will measure the air speed in the extractor hose correctly as a result (see chapter 7.9).

7.2 Connecting electric power tools

WARNING

Risk of injury

- ▶ Observe the maximum appliance socket connected load (see chapter "Technical data")
- ▶ Switch off the electric power tool.

- ▶ Connect the electric power tool to the appliance socket **[1-4]**.

7.3 Connecting pneumatic tools

WARNING

Risk of injury

- ▶ Switch off the air tool.

If the compressed air module **[1-3]** (496141) is installed, the automatic switch-on function of the mobile dust extractor also works in combination with pneumatic tools.

We also recommend installing the VE service unit (495886). The service unit filters and lubricates the compressed air and enables an adjustment of the air pressure. An IAS adapter (454757) is available to connect Festool pneumatic tools to the IAS system.

The operating pressure of the tool must be 6 bar for the automatic switch-on unit to function correctly.

7.4 Adjusting the suction power

▶ Use the rotary knob **[1-9]**.

7.5 Applying the brake

Folding out the black brake lever **[1-15]** prevents the mobile dust extractor from rolling. To achieve this, lift the front end of the mobile dust extractor slightly and push the black brake lever downwards until it latches into place. Push the green lever **[1-14]** again to release.

7.6 Temperature cut-out

A temperature cut-out switches the mobile dust extractor off when it reaches a critical temperature to prevent overheating.

▶ Switch off the mobile dust extractor, allow to cool for about 5 minutes then switch on again.

ⓘ Not possible to switch on: contact Festool service workshop.

7.7 Changing the filter bag (SC-FIS-CT26/48)

Removing the filter bag [4]

▶ Open the locking clips **[2-2]** and remove the top section of the machine **[2-1]**.

▶ Remove the filter bag.

▶ Dispose of the used filter bag in accordance with statutory regulations.

▶ Clean the dust container **[2-3]**.

Inserting the filter bag [5]

▶ Insert a new filter bag(SC-FIS-CT26/48) in the inlet port of the dust container and interlock it. **Important:** be aware that the locking engages.

ⓘ Make sure that the filter bag is not pinched between the top and bottom sections.

▶ Replace the top section **[2-1]** and close the locking clips **[2-2]**.

7.8 Changing the safety filter bag (FIS-CTH 26/48)

Always use the safety filter bag for absorbing Class H dust.

Removing the safety filter bag [6]

▶ Close off the extractor opening **[1-2]** using the sealing plug **[1-1]**.

▶ Open the locking clips **[2-2]** and remove the top section of the machine **[2-1]**.

▶ Knock the material of the plastic bag upwards and close the lateral openings with the adhesive tabs.

▶ Close the plastic bag around the filter bag using the cable ties supplied.

▶ Remove the safety filter bag

▶ Dispose of the used safety filter bag in accordance with statutory regulations.

▶ Clean the dust container **[2-3]**.

Inserting the safety filter bag [7]

▶ Insert a new safety filter bag (FIS-CTH 26/48) on the inlet nozzle of the container and lock in position. **Important:** Ensure the lock is snapped in.

▶ Place the plastic bag over the edge of the container. The lateral openings on the safety filter bag must be positioned inside the dirt trap.

Ensure the contacts are **[10-2]**free.

ⓘ Make sure that the filter bag is not pinched between the top and bottom sections.

▶ Replace the top section **[2-1]** and close the locking clips **[2-2]**.

7.9 Volumetric flow monitoring

An acoustic warning signal sounds if the air speed in the suction hose falls below 20 m/s.

Possible causes	Solution
Value set on the suction power adjuster **[1-9]** is too low.	Set the suction power adjuster to a higher value (see Chapter 7.4).
Rotary knob **[1-8]** not set to the correct hose diameter.	Set the knob to the correct hose diameter (see Chapter 7.1).
Suction hose blocked or kinked.	Remove blockage or kink.
Filter bag full.	Insert a new filter bag (see Chapter 7.7).
Dirty main filter.	Changing the main filter (see Chapter 9.1).
Monitoring electronics malfunction.	Send to a Festool service workshop for repair.
Wet extraction.	Functional reliability not affected, no actions required.

8 Working

8.1 Handling

Hose store: after finishing work, you can feed the suction hose through the recess **[8-3]** and place it in the hose store. You can do the same with the mains cable through the other recess **[8-2]**.

SysDoc Systainer attachment system: a Systainer can be attached to the storage area via the two slides **[8-1]**.

8.2 Extracting dry materials

CAUTION

Hazardous dust

Damage to the respiratory passage

- ▶ Always use a safety filter bag and an appropriate main filter when extracting hazardous materials.
- ▶ Do not use the machine if the volumetric flow monitoring function is inactive.

When extracting large quantities of oak or beech wood dust or dust that exceeds the permitted limit values, only extract from a single machine (electric or air tool).

Observe the following when extracting dust generated by operating electric power tools:

If the exhaust air is discharged back into the room, the **air renewal rate L** within the room must be sufficient. The volume of air discharged back into the room must not exceed 50% of the fresh air volume flow (room volume V_R x air renewal rate L_W). Observe all the relevant regional regulations.

Remember: A moist main filter clogs more quickly when extracting dry materials. Therefore, dry the main filter before extracting dust or replace the damp filter with a dry one.

8.3 Extracting fluids

WARNING

Hazardous dust

Damage to the respiratory passage

- ▶ Hazardous dust must never be taken in during wet extraction.

Before the absorption of liquids remove the filter bag or safety filter bag (see Chapter 7.7, 7.8). The use of a special wet filter is recommended.

The dust extractor stops automatically when the maximum level is reached.

CAUTION

Escaping foam and fluids

- ▶ Switch off the machine immediately and empty the dirt trap.

8.4 The antistatic system

Friction inside the extraction hose causes static electricity to develop during extraction. Operating personnel may receive unpleasant electric shocks while working. The mobile dust extractor is fitted with an antistatic system as standard to discharge any static electricity that may develop. However, always use the enclosed antistatic extraction hose.

8.5 After finishing work

Pull the plug from the socket when the machine is not in use and prior to maintenance and cleaning work.

- ▶ Switch off the mobile dust extractor and pull out the mains plug.
- ▶ Wind up the mains power cable.
- ▶ Empty the dirt trap.
- ▶ Close off the extractor opening **[1-2]** using the sealing plug **[1-1]**.

WARNING

Hazardous dust

Damage to the respiratory passage

- ▶ Wipe down the mobile dust extractor and clean all accessories thoroughly using the extractor (inside and out) before removing from the working area.
- ▶ Parts that you were not able to clean thoroughly must be sealed in an airtight plastic bag prior to transportation.
- ▶ Wear a dust mask!

The machine shall be stored indoors only.

- ▶ Place the mobile dust extractor in a dry room inaccessible to unauthorised users.

Observe for dust reduced transport:

- ▶ Ensure a secure fixation during transport.

Only transport the appliance with closed sealing plug.

9 Service and maintenance

WARNING

Risk of injury, electric shock

- ▶ Always disconnect the mains plug from the socket before performing maintenance work on the machine!
- ▶ All maintenance and repair work which requires the motor housing to be opened must only be carried out by an authorised service workshop.

Customer service and repair only through manufacturer or service workshops: Please find the nearest address at: www.festool.com/service

Only use original Festool spare parts! Order No. at: www.festool.com/service

Damaged safety devices and components must be repaired or replaced in a recognised specialist workshop, unless otherwise indicated in the operating manual.

Observe the following instructions:

- The manufacturer or an instructed person must perform a dust test at least once a year to determine whether the filter is damaged, the machine is sealed properly and the monitoring features are functioning correctly.
- In addition the machine filtration efficiency should be tested at least annually, or more frequently as may be specified by national requirements. The test method can be used to verify the machine's filter efficiency are specified in EN 60335-2-69 AA.22.201.2.. If the test fails, it shall be repeated with a new essential filter.
- Anything that cannot be cleaned must be discarded in impermeable bags. Observe applicable disposal regulations!
- For user servicing, the machine must be dismantled, cleaned and serviced, as far as is reasonably practicable, without causing risk to the maintenance staff and others. Suitable precautions include, decontamination before dismantling, provision from local filtered exhaust ventilation where the machine is dismantled, cleaning of the maintenance area and suitable personal protection.

Information for sending dust extractors to repair workshops

Observe the following instructions, which are designed to protect personnel in repair workshops and during transportation:

- ▶ Clean the machine thoroughly (inside and out).
- ▶ Remove the filter/disposal bag.
- ▶ Pack the machine in suitable airtight plastic bag.
- ▶ Attach a list of the hazardous substances that the machine has extracted on the outside of the airtight packaging.

9.1 Changing the filter element

WARNING

Dust raised during changing filter bag and main filter

- ▶ Wear a dust mask!
- ▶ If you are disposing of asbestos, wear disposable clothing.

WARNING

Risk of injury

- ▶ Do not reuse the essential filter element after removal out of the machine.

NOTE

Motor damage

- ▶ Never operate the extractor without a filter element fitted as the motor may become damaged.

- ▶ Open the locking clips **[2-2]** and remove the top section of the machine **[2-1]**.
- ▶ Turn the top section of the machine so that the main filter **[9-1]**is facing upwards (Fig.**[9]**).
- ▶ Remove the two safety bolts **[9-3]**on the lever **[9-4]**using a screwdriver.
- ▶ Fold over the lever **[9-4]** and remove the retainer **[9-2]**with the main filter.
- ▶ Insert the retainer with the main filter in the safety bag supplied.
- ▶ Remove the main filter from the retainer.
- ▶ Remove the retainer from the safety bag.
- ▶ Close and dispose of the safety bag in accordance with statutory regulations.

- ▶ Clean any dust deposits from the area behind the main filter.
- ▶ Insert a new main filter in the frame.
- ▶ Insert the retainer **[9-2]**with the main filter and fold over the lever **[9-4]** until it engages in position.
- ▶ Tighten the safety screws**[9-3]**.
- ▶ Replace the top section **[2-1]** and close the locking clips **[2-2]**.

9.2 Emptying the dust container

The dust container **[2-3]** can be emptied once the top section has been removed.

- ▶ After extracting fluids, clean the fill level sensors **[10-1]** regularly with a soft cloth and inspect for damage.

10 Accessories

The order numbers for the accessories and filters can be found in the Festool catalogue or on the Internet at "www.festool.com".

10.1 Modules

The following modules for upgrading the mobile dust extractor are available in the accessories programme. Modules must be fitted to the module slot **[1-3]** by an authorised service workshop:

- – Compressed air module,
- – Socket module with permanent power supply,
- – Socket module with automatic switch-on unit (not suitable for GB 110 V version),
- – Energy box module (EAA) for using the automatic switch-on unit on the EAA.

You can find more detailed information on the modules at "www.festool.com".

11 Environment

Do not dispose of the device in household waste! Recycle devices, accessories and packaging. Observe applicable national regulations.

EU only: In accordance with European Directive on waste electrical and electronic equipment and implementation in national law, used electric power tools must be collected separately and handed in for environmentally friendly recycling.

Information on REACh: www.festool.com/reach

12 EU Declaration of Conformity

Mobile dust extractor	Serial no.
CTH 26 E/a	496162, 498530, 498531
CTH 48 E/a	496163
Year of CE mark: 2010	

We declare under sole responsibility that this product complies with all the relevant requirements in the following directives, standards and normative documents:

2006/42/EC, 2004/108/EC (up to 19.04.2016), 2014/30/EU (from 20.04.2016), 2011/65/EU, EN 60335-1, EN 60335-2-69, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+Corrigendum 1997+A1:2001+A2:2008, EN 61000-3-2:2006+A1:2009+A2:2009, EN 61000-3-3:2013.

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2015-07-22

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Guidance For Working With Composite Dust

This advice applies specifically to the use of the DMP0120 portable extractor and is in addition to the Festool operating instructions provided within this manual.

This extraction unit is configured specifically for capturing dust generated from cured composite materials common during production, installation and maintenance. These include cutting, grinding, trimming, finishing and repair activities.

Dust generated from different work situations will create different risks and requires suitable precautions to be taken and control measures used. It is the users responsibility to fully risk assess the activity to determine the control measures required.

To assist in the risk assessment, we have provided some composite specific guidance below. The Health & Safety Executive's guidance document HSG258 covers local exhaust ventilation in detail and should also be referred to.

Dust Types

This 'H' class extraction unit is suitable for the removal of the full range of composite materials, including:

- conductive carbon fibre dust, *provided that airborne carbon dust contamination is not present in the working environment*
- asbestos dust
- carcinogenic glass fibre dust
- pathogenic dust

'Auto-start' Feature

This unit is fitted with both electrical and airline interconnects. When the unit on/off switch is set to 'AUTO' it automatically starts when electricity or air is drawn from the connections on the unit. We recommend the use of the interconnects and auto-start feature when working with electric/air tools and composite dust.

Adjusting Air Volume & Pressure

This unit is designed to work with tools fitted with dust capture shrouds.

Where dust capture shrouds are used, they should be designed specifically for the tool and arranged to project dust into the capture shroud. Dust generated from different tools with extraction shrouds have differing air volume and pressure requirements.

The air volume and pressure provided by this unit can be adjusted to suit individual tools, operations and users and can be tuned to provide the most effective dust capture.

At the rear of the extractor are two labels.

The first label identifies the extractor by model number and serial number.

The second label identifies the different minimum airflow volume and pressure for each hose diameter setting on the front control panel.

Small hose diameters can only move small volumes of air, but require high vacuum pressure to move the air through the restricted hose.

Large hose diameters can move much higher volumes of air, but do not require high pressure to move the air through unrestricted hoses.

Similarly, the same applies to tools fitted with extraction shrouds. Small restricted shrouds and fittings will require selection of a smaller hose setting, whereas large open shrouds will require selection of a large hose setting.

The suction power for each hose diameter setting can also be adjusted using the variable suction power adjuster knob.

The user will need to conduct trials on the extractor settings and use of the tools to ensure the most effective dust capture for different activities.

Dark Matter Composites also supply air tool kits that are fully compatible with this extraction unit and designed for working with composite materials. Each of the extracted air tool kits we supply has undergone trials and tests, to provide optimal dust removal (including dust free operations) when combined with this portable extraction.

Each kit is provided with unique guidance and recommended settings for use with this extraction unit.

Audible ‘Low Airflow’ Alarm

When there is insufficient airflow through the unit, the ‘low airflow’ alarm beeps every few seconds. In addition to the reasons stated in the Festool instructions, this can also indicate that the wrong settings have been selected for the tool currently connected to the unit.

Operator Training

Operators should be trained in the use of this extraction unit and any tools supplied with it. Dark Matter Composites can provide on-site training and advice on dust control, upon request.

Boom Arm Assembly

The boom arm is an overhead carrier for vacuum hoses, airlines and power cords to keep them above the work area. The boom arm may be installed facing toward the front or rear of the unit, depending on user preferences and work area setup.

The outriggers stabilise the vacuum to prevent it from tipping from the weight of the boom arm. They should be installed in the same direction (forward or rearward) that the boom arm will face.

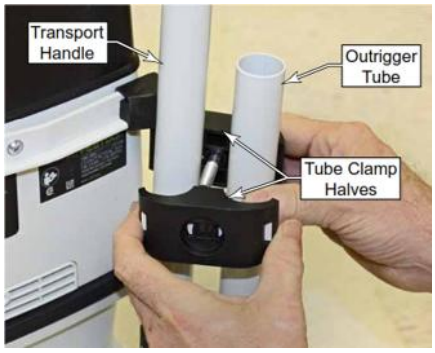
Forward Facing

Rearward Facing

1. Remove the thumbturns and bolts at the base of the outrigger tubes.

2. Loosen the tube clamps fixing each outrigger tube to the transport handle and rotate the outrigger tubes to the desired position.

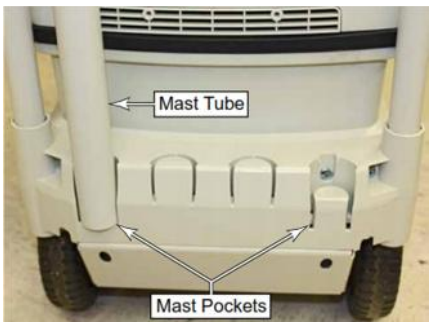
3. Fit the cross braces to the outrigger tubes using the thumbturns and bolts.



4. Slide the tube clamps as far to the top and bottom as they can move, and tighten the thumbscrews.

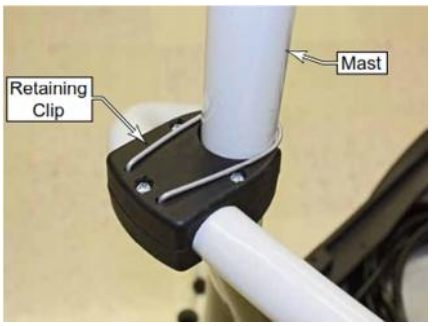
5. Ensure that the unit rolls freely with the outriggers almost touching the floor, but not scraping the floor.

6. Insert the mast into either the right or left mast pocket of the lower support bracket.

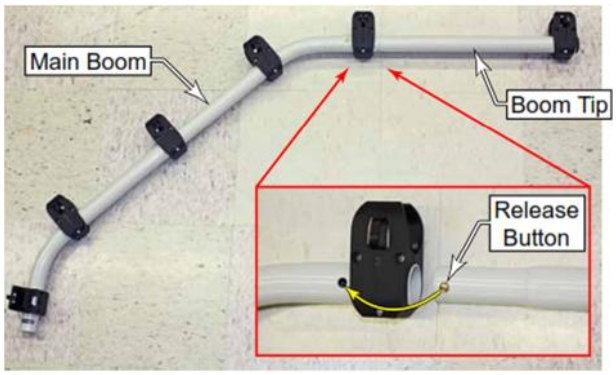


7. Snap the mast tube into the clamp on the handle so that the mast stands vertical.

8. Place the retaining clip around the mast tube and insert the two ends into the holes in the top of the mast clamp.



9. Press the release button, and insert the boom tip into the main boom until the release button snaps into the hole in the main boom.



10. Insert the boom pivot into the top of the mast. The limit screw should point to the right for a forward facing boom, or point to the left for a rearward facing boom. Note that the limit screw doesn't tighten against the boom even when fully inserted.

11. Secure the mast with the thumbscrew, washer and thumb nut.

12. Route the required vacuum hose along the boom arm by squeezing the hose to fit it between the jaws of the hose supports.

13. Air lines and electrical cords can be clipped into the small supports on the sides of each hose support.

14. Excess hose, airline or electrical cords can be coiled into the cable/hose storage tray on the top of the unit.

Spare Parts

Only use original filters with this extraction unit. The filters have been designed specifically to comply with the requirements of class H dust capture.

DMP0120-SP01
'H' Class Safety Change Filter Bag (pack of 3)

DMP0120-SP02
'H' Class Main Filter (single)

Optional Extras

DMP0120-SP03
1"/25mm ID Anti-static Vacuum Cuff & Closure
(a 1.25"/32mm ID cuff is included with DMP0120, which fits all the vacuum air tools we supply)

DMP0125
Workshop Vacuum Cleaning Kit

- 3.5m Anti-static suction hose
- Stainless steel curved hand tube
- Stainless steel extension tubes (set of 3)
- Aluminium castored floor nozzle with brush strips (370mm wide)
- Crevice Nozzle
- Brush Nozzle
- Storage case that clips to the top of the extraction unit

Dark Matter Composites Ltd provides world class training and consultancy services to the composites industry, at all levels and for all industry sectors.

We provide the most comprehensive range of training services that set the standard for composite training and are second to none.

Users of this tool kit may be interested in the following courses:
DMSC39, Use of DMC Composite Repair Equipment
DMSC57, Trimming, Finishing & Assembly of Composites
DMSC58, Composite Repair - Stage 1
DMSC59, Composite Repair - Stage 2

To complement our training services, we provide expert consultancy specialising in composite design and process solutions.

This extraction unit was developed as a process solution where we required equipment that provided the best form of on-tool extraction when preparing repair surfaces in an open workshop. We use this equipment ourselves and on our courses and now sell it as a worldwide dust extraction solution.

Our customers span all industry sectors, from SMEs to OEMs worldwide. In all our activities, we provide an open and honest service that is unbiased and has always exceeded our customers' expectations.

Please see our website for a full Customer list, testimonials, services, equipment and upcoming courses.

www.darkmattercomposites.com

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