

# HTC D80

Huskvarna, 2023-01-04

# **Operator's manual, EN**

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Thank you for choosing a Husqvarna quality product. We hope that you will genuinely enjoy it.

Please note that the enclosed manual contains HTC Floor Systems references.

The Husqvarna Group is vouching for the quality of this product.

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Husqvarna AB SE-561 82 Huskvarna, Sweden



HTC D80

# **EC Declaration of Conformity**

We, **Husqvarna AB**, SE 561 82 Huskvarna, SWEDEN, Tel. +46 36 146500 declare on our sole responsibility that the product:

Description	Dust Extracor
Brand	HUSQVARNA
Type / Model	HTC D80
Identification	Serial numbers dating from 2022 and onwards

complies fully with the following EU directives and regulations:

Directive/Regulation	Description
2006/42/EC	"relating to machinery"
2014/30/EU	"relating to electromagnetic compatibility"
2014/53/EU	"relating to radio equipment"
2011/65/EU	"relating to restriction of hazardous substances"

and that the following standards and/or technical specifications are applied;

EN ISO 12100:2010 EN 60335-2-69:2012 EN 61000-6-2:2019 EN 61000-6-4:2019 ETSI EN 300 220-2V3.2.1 ETSI EN 301 489-3V2.3.0 EN IEC 63000:2018

Partille, 2023-01-04

Martin Huber

R&D Director, Concrete Surfaces & Floors Husqvarna AB, Construction Division

Responsible for technical documentation



# **UK Declaration of Conformity**

We, **Husqvarna AB**, SE 561 82 Huskvarna, SWEDEN, Tel. +46 36 146500 declare on our sole responsibility that the product:

Description	Dust Extractor
Brand	HUSQVARNA
Type / Model	HTC D80
Identification	Serial numbers dating from 2022 and onwards

complies fully with the following EU directives and regulations:

The Supply of Machinery (Safety) Regulations 2008 Electromagnetic Compability Regulations 2016 The Radio Equipment Regulations 2017 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

and that the following standards and/or technical specifications are applied;

EN ISO 12100:2010 EN 60335-2-69:2012 EN 61000-6-2:2019 EN 61000-6-4:2019 ETSI EN 300 220-2V3.2.1 ETSI EN 301 489-3V2.3.0 EN IEC 63000:2018

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# 1 Introduction

# 1.1 General Information

HTC D80 is a dust extractor with an integrated pre-separator which is best used together with all HTC's larger grinding machines in connection with dry grinding of stone and concrete floors, and in accordance with HTC's recommendations. HTC D80 is constructed with sock filters as the main filter and HEPA filter. The dust that is sucked up is collected in the sack system, under the pre-separator and vacuum cleaner, the so-called Longopac.

HTC D80 creates the preconditions for increased productivity. The integrated pre-separator relieves the filters, which means that the dust extractor's performance is maintained and provides more effective dust collection and increases the capacity of our grinding machines. The integrated pre-separator is also equipped with a bypass valve, thus creating the conditions for continuous operation.

Read the manual carefully so that you know how to use and maintain the dust extractor before using it. Contact your local retailer for further information. For contact information, see Contact Information at the start of the manual.

# 1.2 Responsibility

Even though every effort has been made to make this manual as complete and accurate as possible, we bear no responsibility for incorrect or missing information. HTC reserves the right to change descriptions in this manual without giving prior notice.

This manual is protected by the Copyright Act and no part of it may be copied or used in any other way without the written approval of HTC.

# 1.3 Manual

In addition to general functions, this manual contains information on areas of use and care of the dust extractor.

### 1.3.1 Safety instructions – Explanation of symbols

A number of symbols are used in the manual to highlight the most important sections, see below. It is important that you carefully read through the descriptions of the symbols in order to avoid the risk of both material damage and personal injury. There are other symbols indicating practical tips. These are to help you use the dust extractor in the easiest and most effective way.

The following symbols are used in the document to indicate where special attention is needed.



## Warning!

This symbol means **Warning!** and indicates a risk of personal injury or material damage in the event of incorrect use of the dust extractor. When you see this symbol, read the accompanying text extra carefully, and do nothing you are not sure about. This is for your own and other users' safety and to avoid damage to the dust extractor.



Note!

This symbol means **Note!** and indicates a potential risk of material damage in the event of incorrect use of the dust extractor. When you see this symbol, read the accompanying text extra carefully, and do nothing you are not sure about. This is to avoid damage to the dust extractor.



### Tip!

This symbol means **Tip!** and implies the inclusion of tips and advice on effective use of the machine or ways of reducing wear and tear to the dust extractor. When you see this symbol you should read the accompanying text to facilitate your work and prolong the service life of the dust extractor.

# 1.4 Transportation

Always ensure that the dust extractor is emptied of dust and other particles before it is transported, lifted or hoisted.

Always make sure that the dust extractor is securely anchored to its surroundings and that the wheel brake is in the locked position during transport to prevent it from moving during transport. Make sure that securing straps or other equipment used for anchoring during transport are tightened over non-moving parts, e.g. the dust extractor's chassis.

When lifting the machine, make sure you do so according to chapter Lifting the machine, page *11*.

When the dust extractor is to be hoisted, it must be securely anchored in the notches for secure lifting (pos 7Figure 3-2, page 9), which are found on both of the chassis' long sides. Make sure to pull with equal force, so the dust extractor doesn't twist and end up on its side, to prevent the dust extractor from tipping.

The swivelling wheel must be pointing forwards in the direction of travel.

# 1.5 On delivery

The following items are included in the delivery. Contact you retailer if anything is missing.

- Dust extractor with integrated pre-separator.
- Manual disc
- Suction hose with couplings
- Cleaning kit (hose, cleaning pipe and cleaning nozzle)
- Locking key for control cabinet
- Remote start (option)

# 1.6 Unpacking



### Warning!

Read carefully through the safety instructions and user manual before using the equipment.

- Check carefully to see if the packaging or the dust extractor has been damaged during delivery. If there is any sign of damage, contact your retailer and report it.
- Check that the delivery matches the order. If there are any discrepancies, contact your retailer.
- When lifting the machine, make sure you do so according to chapter Lifting the machine, page *11*.

# 1.7 Machine name plate



Figure 1-1. Machine name plate

- 1. Product number
- 2. Product weight

- 3. Rated power
- 4. Rated voltage
- 5. Enclosure
- 6. Rated current
- 7. Frequency
- 8. Maximum slope angle
- 9. Manufacturer
- 10. Scannable code
- 11. Production year
- 12. Model
- 13. Serial number

# 1.8 Handling and storage

The dust extractor should be stored in a heated, dry area when not in use. Otherwise it may be damaged by condensation and cold.

The dust extractor's dimensions and weight are given in chapter Technical data, page 50.



### Warning!

If handled carelessly, the dust extractor can overturn and cause both personal injury and damage to the equipment.

When lifting the machine, make sure you do so according to Lifting the machine, page *11*.

# 1.9 Noise



### Warning!

Always use hearing protection when using the dust extractor

This dust extractor is tested for noise in accordance with ISO 11202 and ISO 3741. For information on the sound pressure level and sound power level for each model, see the table in Chapter Technical data, page 50.

# 2 Safety

# 2.1 General Information

This chapter contains all the warnings and notes that have to be considered for the dust extractor.

# 2.2 Warnings



### Warning!

Read carefully through the safety instructions and user manual before using the equipment.



### Warning!

Always use hearing protection when using the dust extractor.



### Warning!

The dust extractor may only be used or repaired by personnel who have received the requisite theoretical and practical training and who have read the user manual.



### Warning!

Always use the dust extractor in an environment where there is no risk of explosion and fire. Familiarise yourself with and follow the relevant fire safety regulations when using the dust extractor.



### Warning!

Use protective equipment such as safety shoes, safety goggles, protective gloves, breathing mask and ear muffs.



### Warning!

During use, some surfaces on the dust extractor become very hot. Use protective gloves and let the dust extractor cool a little before you touch it.



### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.



### Warning!

During maintenance and repairs, the power to the dust extractor must be disconnected.



### Warning!

The dust extractor may only be used and moved on level surfaces. There is a risk for crush injuries, if it should start to roll.



### Warning!

Connect the dust extractor to an earth fault breaker.

2.3 Notes

### Note!

The dust extractor is best used together with HTC's grinding machines in connection with dry grinding of stone and concrete floors, and in accordance with HTC's recommendations.



### Note!

Only use original spare parts from HTC for the dust extractor. Otherwise neither the CE marking nor the warranty will be valid.



### Note!

For the CE marking to be valid, the instructions in this manual must be followed.



### Note!

The dust extractor should be stored in a dry, warm (above zero) location when not in use.



### Note!

If the dust extractor is stored in a cold location (below zero), it must be placed in a warm location (above zero) for at least two hours before use.

# 3 Machine description

# 3.1 General Information

HTC D80 is a dust extractor with an integrated pre-separator for industrial and building use intended for the dry vacuuming of dust particles, e.g. concrete, wood, stone etc. The dust extractor is equipped with a two-step filter, a sock filter as a main filter followed by a HEPA 13 filter. The suction system is equipped with a 3" Camlock female connector for quick, easy and safe connection of the suction hose between the grinding machine and dust extractor or other accessories that are to be used for dust collection.

The dust extractor is equipped with a pre-separator, where the majority of the dust is collected instead of being sucked into the actual vacuum cleaner. As a result, the vacuum cleaner has a lower load. The filters have a longer service life and the dust extractor maintains a higher performance, resulting in more effective dust collection for the grinding machines. To handle the collected dust, a sack system of the Longopac brand is used on the pre-separator and dust extractor.

The dust extractor can also be started/stopped using a remote control (option.

# 3.2 Pre-separator

The pre-separator, see pos 8 Figure 3-1, page 8, is of cyclone type and its task is to separate most of the dust from the airflow that passes the pre-separator on its way to the vacuum cleaner.

The pre-separator is equipped with a 3" Camlock female connector, see pos 9 Figure 3-1, page 8, for quick, easy and safe connection of the accessories that are to be used for dust collection.

The separated dust is collected in the volume under the pre-separator, where it can be emptied by dropping it into the Longopac by closing the sliding valve (Disengaging the pre-separator using the bypass valve, page 21) or turning off the vacuum (Starting and stopping the dust extractor, page 20).

To prevent the Longopac from being sucked into the pre-separator, it is equipped with a pair of dust covers that close during operation. These sit in the bottom of the pre-separator on a level with the Longopac holder (pos 1 Figure 3-3, page 10).

The pre-separator can be rotated by releasing the locking mechanism, see pos 6 Figure 3-1, page 8, and rotating it to one of its three positions (The positions for the pre-separator, page 16).

# 3.3 Dust extractor

When the air enters the vacuum tank (pos 2 Figure 3-1, page 8) the speed reduces, so the remaining dust in the airflow falls down into the Longopac. The airflow then passes a first filter step that consists of a number of sock filters that sit in the filter holder (pos 1 Figure 3-1, page 8).

To obtain a degree of cleanliness that complies with HEPA13, the airflow passes through 2 HEPA filters (pos 5 Figure 3-3, page 10) before it passes the side duct fan (pos 2 Figure 3-3, page 10) and streams out through the exhaust (pos 5 Figure 3-2, page 9). A hose can be connected to the exhaust to lead the exhaust air away, for example to reduce noise and any smells (Connection of hoses to the dust extractor, page 19).

To prevent the Longopac from being sucked into the vacuum cleaner, it is equipped with a pair of dust covers that close during operation. These sit in the bottom of the vacuum cleaner on a level with the Longopac holder (pos 3 Figure 3-1, page 8).

To prevent too great a negative pressure in the vacuum system, there is a negative pressure limit valve (pos 6 Figure 3-3, page 10) mounted in the HEPA filter holder (pos 7 Figure 3-3, page 10).



Figure 3-1. The front of the dust extractor

- 1. Upper cylinder section
- 2. Lower cylinder section
- 3. Longopac holder Vacuum
- 4. Collection plate for Longopac
- 5. Folding collection plate for Longopac
- 6. Latch pre-separator
- 7. Sliding valve, bypass
- 8. Integrated pre-separator
- 9. Inlet, Camlock female connector



*Figure 3-2. The back of the dust extractor* 

- 1. Valve
- 2. Handle
- 3. Control cabinet
- 4. Wheel brake
- 5. Outlet, ventilation hose connection (ø 160 mm)
- 6. Chassis
- 7. Notch for secure lifting
- 8. Sliding valve, suction

- 9. Hinge for lowering upper cylinder section
- 10. Handle, valve



Figure 3-3. Dust extractor side view with HEPA filter holder and electrical connection

- 1. Longopac holder pre-separator
- 2. Side duct fan
- 3. Inlet, electrical connection
- 4. Keypad start and stop
- 5. HEPA filter
- 6. Negative pressure limit valve
- 7. HEPA filter holder

# 3.5 Lifting the machine

When lifting the vacuum system, lifting straps are used that are fastened in the notches on the chassis, see Figure 3-4, page *11*. Only use straps approved for lifting equipment.



Figure 3-4. Lifting eyes

# 3.6 Wheel brake

To lock the back wheels, press the brake arm down with your foot, this keeps the wheels locked using spring power, see Figure 3-5, page *12*. To release the brake, do the opposite and lift the brake arm using your foot.



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# 3.7 Description of controls - Keypad

The illustrations show the keypad on the dust extractor and the keypad for remote start.



Figure 3-6. Keypad on the dust extractor

- 1. I (ON)- Start the dust extractor: Press the button to start the dust extractor.
- 2. **LED Light-** Tripped motor protection: When the light is illuminated, the dust extractor's motor protection has tripped. To reset the motor protection, see Resetting the motor protection, page *42*.
- 3. **O (OFF)-** Switch off the dust extractor: Press the button to switch off the dust extractor.

To start the dust extractor with the remote control (option), press the button marked with the number 1, and to switch it off, press the button marked with the number 2.



Figure 3-7. Keypad remote start

# 4 Usage

# 4.1 General Information

The following section describes the different positions for the dust extractor and how to change the Longopac. The section also deals with the operation of the dust extractor.



### Warning!

The dust extractor may only be used or repaired by personnel who have received the requisite theoretical and practical training and who have read the user manual.



### Warning!

Use protective equipment such as safety shoes, safety goggles, protective gloves, breathing mask and hearing protection.



### Warning!

The dust extractor may only be used and moved on level surfaces. There is a risk for crush injuries, if it should start to roll.



### Tip!

Check the minimum recommended cable area before using an extension cord. You will find the recommended cable area under Technical data, page 50.

# 4.2 The positions for the dust extractor

The dust extractor can be placed in two positions; transport position and service position (replacement of sock filter), see Figure 4-1, page *15* and Figure 4-2, page *16*.



### Warning!

If handled carelessly, the dust extractor can overturn and cause both personal injury and damage to the equipment.



### Note!

The HEPA filter holder must be removed before the dust extractor can be lowered to the service position, since the hose between the upper cylinder section and the HEPA filter holder will otherwise make this impossible.

### 4.2.1 The dust extractor's operating position

When the dust extractor is in use, it must be in the operating position, see Figure 4-1, page 15.



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Figure 4-1. Operating position

### 4.2.2 Lower the dust extractor to the service position

The dust extractor can be lowered to the service position by releasing the upper cylinder section from the lower cylinder section, see Figure 4-2, page *16*.

Start with the dust extractor in the operating position, see Figure 4-1, page 15. Then follow the instruction below:

- 1. Loosen the hose that sits on the bottom edge of the HEPA filter holder and runs down to the side duct fan from the HEPA filter holder.
- 2. Loosen all quick fasteners holding the upper and lower cylinder sections together, and then carefully tip the upper section towards the handle, see Figure 4-2, page *16*.



G000587

Figure 4-2. Lower to the service position



### Warning!

There is a risk for crush injuries when the dust extractor is lowered to the service position. Make sure your hands are not in the way when the upper cylinder sections tips against the handle.



### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.

# 4.3 The positions for the pre-separator

Pull out the pin to make it possible to rotate the pre-separator to different positions. Turn the pre-separator and release the pin to lock it in the desired position. The lowered operating positions for the pre-separator are use for handling a full Longopac on the collection plate (pos 5 Figure 3-1, page 8), stool or similar resting place.



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Figure 4-3. Locking pin for the pre-separator



Figure 4-4. Transport position



Figure 4-5. Operating position 1 pre-separator



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Figure 4-6. Operating position 2 pre-separator



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Figure 4-7. Folding collection plate for Longopac

# 4.4 Connection of hoses to the dust extractor

HTC D80 is equipped with a 3" Camlock femal connector, se pos 9 Figure 3-1, page 8, for quick, easy and safe connection of the suction hose between the grinding machine and dust extractor or other accessory that is to be used for dust collection. Camlock is a standardised quick release coupling that is used for various fluids.

To connect two camlock adaptors, push the male and female adaptors into each other and tighten both of the tensioning arms.

# 4.5 Installing extra ventilation hose

To improve the air while grinding, an extra ventilation hose can be installed on the dust extractor. This extra ventilation option should be used while grinding floors that give rise to toxic gases or if the room is very poorly ventilated.



Tip!

Only use the extra ventilation hose, which at the least must have ø 160 mm, when necessary, since the dust extractor's capacity is reduced when the hose is installed.



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Figure 4-8. Installation of extra ventilation hose

Note!

Place the free end of the ventilation hose outdoors by pulling it through a window or a door.

# 4.6 Starting and stopping the dust extractor



Check that all the sliding valves are in the open position.

- 1. Place the dust extractor where you want to start the vacuuming work.
- 2. Connect the dust extractor to the mains supply. Use cables suitable for the dust extractor (see minimum cable area in Technical data, page 50).
- 3. Start the dust extractor, by pressing button "I" or button "1" on the transmitter, if the dust extractor is equipped with the Remote Start option.

4. Stop the dust extractor, by pressing button "O" or button "2" on the transmitter, if the dust extractor is equipped with the Remote Start option.

For a more detailed description of the controls, see Description of controls - Keypad, page 12.

# 4.7 Disengaging the pre-separator using the bypass valve

The pre-separator (pos 8 Figure 3-1, page 8) is equipped with a bypass valve (pos 7 Figure 3-1, page 8). This valve makes it possible to use the dust extractor even during replacement of the Longopac on the pre-separator.

To close the bypass valve, pull the valve closed according to Figure 4-9, page 22. A closed bypass valve blocks the connection between the pre-separator's cyclone and the volume that stores the dust before it ends up in the Longopac. It will not then be possible to separate the dust with the pre-separator; instead it continues directly into the dust extractor.

When the valve is closed, there is normal pressure in the volume for the pre-separator's dust collection and the dust that has collected falls down into the Longopac. Should the Longopac be full of dust, it can now be replaced. If it is not full, the valve can be slid back according to Figure 4-10, page 22.

To continuing work, the bypass valve must be in its original position.



The bypass valve should not be closed for more than a short interval, because the risk of dust build-up and blockage in the pre-separator increases significantly.



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Figure 4-9. Close bypass valve



Figure 4-10. Open bypass valve

# 4.8 Manual cleaning of the filter using the slide gate



### Tip!

To ensure effective cleaning of the filter, all gaskets on the dust extractor should be checked to ensure that they are undamaged and that they seal tightly.

Manual filter cleaning means that the filter is cleaned manually when the dust extractor's capacity to take up dust reduces.

The slide gate is used to achieve negative pressure in the cylinder packet (position 1 and position 2 in Figure 3-1, page  $\delta$ ), in order to obtain as effective filter cleaning as possible.

1. Pull out the sliding valve to its end position, seeFigure 4-11, page 23. Then wait approx. 3 seconds.



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Figure 4-11. Sliding valve out

2. Quickly press the valve handle in towards the upper cylinder section, so the valve cover opens for about 1 second. Then release the handle, see Figure 4-12, page 23.



Figure 4-12. Filter cleaning

- 3. Wait a further 2-3 seconds, so a new negative pressure forms in the cylinder section.
- 4. Quickly press the valve handle in towards the upper cylinder section, so the valve cover opens for about 1 second. Then release the handle.
- 5. Repeat points 3-4 above as needed.

6. Push in the sliding valve, see Figure 4-13, page 24.



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Figure 4-13. Sliding valve in

# 4.9 Handling Longopac

The dust extractor is equipped with a sack system that makes it possible to minimise dust exposure when changing waste bags, the so-called Longopac. This sack system can be ordered. Please contact your HTC retailer.



### Warning!

Use protective equipment such as safety shoes, safety goggles, protective gloves, breathing mask and hearing protection.

# 4.9.1 Removing full Longopac

### 1.



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# Tip!

Pull out a new length of empty Longopac, down to the collection plate. This is to create the best conditions for the waste to fall into the Longopac.

### 4.9.2 Fitting Longopac

When fitting Longopac bags, it is recommended that the pre-separator be in the operating position, see Figure 4-1, page 15.





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6.




# 5 Maintenance

## 5.1 General Information

We recommend regular inspection of the dust extractor.



#### Warning!

During maintenance and repairs, the power to the dust extractor must be disconnected.



#### Warning!

Use protective equipment such as safety shoes, safety goggles, protective gloves, breathing mask and hearing protection.

## 5.2 Cleaning the dust extractor



#### Warning!

Do not rinse off the dust extractor, as moisture can penetrate to the electrical parts and damage the side duct fan.



#### Warning!

During maintenance and repairs, the power to the dust extractor must be disconnected.



#### Warning!

Use protective equipment such as safety shoes, safety goggles, protective gloves, breathing mask and hearing protection.

Always clean the dust extractor after use with a damp sponge or cloth. Only use water. Remove the filter from the dust extractor so it doesn't come into contact with the water.

## 5.3 Daily

#### 5.3.1 Check accessories

Check that accessories that connect to the dust extractor are undamaged and do not have any cracks or suchlike. In addition, make sure that the air can flow unobstructed, so there are no blockages or similar. Replace the hoses, if necessary.

#### 5.3.2 Check dust covers

Check that the dust covers in the dust extractor and pre-separator can move freely without jamming. Check that rubber cloth is undamaged; clean the surface if needed. Check that the dust covers seal against the seal surface on the cylinder wall.

#### 5.3.3 Check the sock filters



#### Warning!

If handled carelessly, the dust extractor can overturn and cause both personal injury and damage to the equipment.



#### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.

- 1. Start with the dust extractor in the operating position, see Figure 4-1, page 15.
- 2. Lower the dust extractor to the service position, see under Lower the dust extractor to the service position, page 15 for instructions on how to do this.



#### Warning!

There is a risk for crush injuries when the dust extractor is lowered to the service position. Make sure your hands are not in the way when the upper cylinder sections tips against the handle.

3. Shine a torch inside to see the filter.



#### Tip!

The surface of the filter should be dull. If the surface is shiny, the filter is clogged.



#### Tip!

If the sock filter cassette is dismantled (according to Replace sock filters, page 37), it can be seen whether it is dusty on the inside of the top section. In this case, one of the filters has failed or there is a leak somewhere else. The HEPA filter must be inspected if the sock filters exhibit dust leakage.

4. If the filter is clogged, the filter should be cleaned. For instructions on how to clean the filter, see under Manual cleaning of the filter using the slide gate, page 22. Carry out a further check of the sock filters, if necessary.

5. If the filter is torn or defective, it should be replaced. In this case, go to Replace sock filters, page *37* for further instructions. Otherwise, the filter should be fitted back in place.

## 5.4 Every week

#### Tip!

Suspected leaks can be checked for by carefully pulling a cloth, piece of paper or another light and pliable material over the area where it is suspected the leak is. If the material fastens due to suction, there is a leak in the area. It is also possible to increase the negative pressure by closing the sliding valve and thus increasing the sensitivity of this method.

#### 5.4.1 Check pre-separator

Remove the cover of the pre-separator. Inspect the wear on the rubber seal in the cover; replace if necessary. Check there is no unusual dust build-up in the cover or cone of the pre-separator; clean if necessary. Also check that there are no cracks or other leaks in either the cover or the pre-separator. Visually inspect that the sealing strip and seal surface on the cover and cone look good. Also check the bypass valve (see Check sliding valve bypass, page *36*) and the dust covers (see Check dust covers, page *32*).

#### 5.4.2 Check dust extractor

Lower the dust extractor to the service position (according to Lower the dust extractor to the service position, page 15). Check that there is no unusual dust build-up; clean if necessary. Inspect sock filters (according to Check the sock filters, page 32). Visually inspect that the sealing strips and seal surfaces on the upper and lower sections look good. Inspect filter raising valve (according to Check filter cleaning valve, page 36). Check that there are no cracks or other leaks in either the bottom section or the upper section.

#### 5.4.3 Check internal hoses

Check the internal hoses are undamaged and do not have any cracks or suchlike. In addition, make sure that the air can flow unobstructed, so there are no blockages or similar. Replace the hoses, if necessary.

#### 5.4.4 Check HEPA filters



#### Note!

When checking the HEPA filters, the dust extractor must be placed in the operating position.



### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.

- 1. Undo the quick-release holding the HEPA filter holder in position, see Figure 5-1, page *34*.
- 2.



G000606

Figure 5-1. Open HEPA filter holder

- 3. Lift out both HEPA filters, see Figure 5-2, page 35

Figure 5-2. Lift out the HEPA filters

4. Note how the filters fit into the dust separator.

# Tip!

An arrow on the HEPA filters indicates the correct orientation for installing the filters in the dust extractor so the flow will be in the right direction through the filters. The arrow must point away from the upper cylinder section on the suction system, because this is the dust extractor's flow direction.

- 5. Check whether the filters are dirty, discoloured or damaged.
- 6. If the filters are dirty, discoloured or damaged, they need replacing. In this case, go to Replace HEPA filters, page 37 for further instructions. Otherwise, the filters should be fitted back in place.
- 7. Check the gaskets on the HEPA filters. If the gaskets are damaged, the filters must be changed.

#### 5.4.5 Check for leaks

To obtain the maximum performance from your dust extractor, you should at regular intervals, or on the suspicion of leaks, check the entire vacuum system's air tightness. The greatest risk for leaks are by the Longopac, the Longopac holder's sealing strips, sliding valve, HEPA filters and negative pressure limit valve.

These checks are made when the vacuum system is running. It is also possible to increase the negative pressure in the vacuum system by closing the sliding valve and thus increase the sensitivity of these methods, so even small leaks can be detected.

Some leaks are audible. Usually, there is a whistling or roaring sound. Try placing a plastic bag or similar over the suspect area and see if the sound changes.



**Tip!** Suspected leaks can be checked for by carefully pulling a cloth, piece of paper or another light and pliable material over the area where it is suspected the leak is. If the material fastens due to suction, there is a leak in the area. It is also possible to increase the negative pressure by closing the sliding valve and thus increasing the sensitivity of this method.

If you have access to a smoke machine, you can see if the smoke is sucked in in places where the vacuum system should be airtight.

### 5.4.6 Check filter cleaning valve

Check the valve can move without jamming. Visually inspect that the sealing strip and sealing surface look good. This check can best be done in the service position (Lower the dust extractor to the service position, page 15).

### 5.4.7 Check sliding valve bypass

Check the sliding valve can move without jamming. In addition, visually check that there is no damage on the sliding valve's seal surfaces. Adjust the quick fasteners on the pre-separator if necessary.

## 5.4.8 Check sliding valve inlet dust extractor

Check the sliding valve can move without jamming. In addition, visually check that there is no damage on the sliding valve's seal surfaces.

#### 5.4.9 Check the side duct fan

- When required, vacuum clean any dust from visible parts of the side duct fan.
- Also listen to see if there is any jarring sound coming from the side duct fan.

## 5.5 Every six months (or 600 hours)

#### 5.5.1 Check the fastening of the bolts

• Check the fastening of all bolts and screws. Tighten if required.

### 5.6 Every year

#### 5.6.1 Replace sock filters



#### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.

The sock filter must be replaced annually; however, if the daily inspection of the sock filter shows that the filter should be replaced, this should be done according to Servicing the sock filter, page 40.

#### 5.6.2 Replace HEPA filters



#### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.

The HEPA filters must be changed once a year, but if the daily inspection shows that the HEPA filters needs changing, the following points must be done after steps 1 - 5 in Check HEPA filters, page 33.

- 1. Discard the defective HEPA filters.
- 2. Install the new HEPA filters. Take care that it is installed centrally in the HEPA filter holder and according to the arrow so the right side of the filters are turned upwards in the dust extractor.
- 3. Secure the HEPA filters, with the HEPA filter holder and both of its quick fasteners, to the lower filter holder's hooks.

# 6 Service

# 6.1 General Information

We recommend regular inspection of the dust extractor.



#### Warning!

During maintenance and repairs, the power to the dust extractor must be disconnected.



#### Warning!

Use protective equipment such as safety shoes, safety goggles, protective gloves, breathing mask and hearing protection.

## 6.2 Servicing the sock filter cassette



#### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.

To carry out service on the sock filter cassette, the dust extractor must first be placed in the service position according to Lower the dust extractor to the service position, page *15*. After this, the following points are performed:

- 1. Take hold of the sock filter cassette and turn it slightly anticlockwise, see Figure 6-1, page *39*.
- 2. Pull the whole cassette straight out, see Figure 6-1, page 39.



Figure 6-1. Change the sock filter cassette

- 3. Inspect the gaskets on the lower and upper cylinder section. In the case of damage, replace with new gaskets.
- 4. Clean the upper cylinder section, if it has leaked dust.
- 5. Check the sock filters according to Check the sock filters, page 32 and replace the sock filters that are damaged or used up according to Servicing the sock filter, page 40
- 6. Fix the new sock filter cassette in the bayonet fitting.
- 7. Check for damage to the HEPA filters which may have occurred if dust has leaked out of the sock filter cassette. For inspection of the HEPA filters, see section Check HEPA filters, page *33*.
- 8. Tip back the upper cylinder section and lock with the quick fasteners.

9. Replace the hose that sits on the bottom edge of the HEPA filter holder and runs down to the side duct fan on the HEPA filter holder.

## 6.3 Servicing the sock filter

The sock filter must be replaced annually; however, if the daily inspection of the sock filter shows that the filter should be replaced, the following points must be done:

1. Loosen the three appropriate screw joints (pos B in Figure 6-2, page 40) on the top of the sock filter cassette, so the top is released. The sock filters can now be unhooked.



Figure 6-2. Sock filter cassette

G000609

2. The filter is held in place by a quick fastener on the lower plate in the bottom of the sock filter cassette. Press the filter's outer edge towards the middle of the



filter, see Figure 6-3, page 40.

G000610

Figure 6-3. Releasing the filter

3. Rock/twist loose the whole sock filter.

- 4. Install a new sock filter. Check that the fastening in the top of the sock filter lies along the mounting ring to guarantee that the sock filter ends up in the right position and does not become twisted after assembly.
- 5. Make sure that the sock filter snaps into the lower plate's hole and seals properly, see Figure 6-3, page *40*.

## 6.4 Service of the HEPA filters



#### Warning!

The dust that is sucked up is harmful if inhaled. Follow local regulations and use breathing protection.

The HEPA filters must be changed once a year, but if the daily inspection shows that the HEPA filters needs changing, the following points must be done after steps 1 - 5 in Check HEPA filters, page 33.

- 1. Discard the defective HEPA filters.
- 2. Install the new HEPA filters. Take care to install them centrally in the HEPA filter holder. An arrow on the HEPA filters indicates the correct orientation for installing the filter in the dust extractor so the flow will be in the right direction through the filters. The arrow must point away from the upper cylinder section on the suction system, because this is the dust extractor's flow direction.
- 3. Secure the HEPA filters with the HEPA filter holder and its quick fasteners.

# 6.5 Control cabinet



Figure 6-4. Control cabinet



Note!

The dust extractor must not be connected to the mains supply when carrying out the points below.

#### 6.5.1 Resetting the motor protection

- 1. Cut the power to the dust extractor by pulling the plug out of the electrical socket, see Figure 3-3, page *10*.
- 2. Open the electrical cabinet.
- 3. Press the motor protection Reset button, see Figure 6-4, page 42.
- 4. Close the electrical cabinet.
- 5. Connect the dust extractor to the mains supply by plugging in the plug.
- 6. Try to start the dust extractor by pressing the "I" button on the dust extractor's keypad.

#### 6.5.2 Changing the fuse

- 1. Cut the power to the dust extractor by pulling the plug out of the electrical socket, see Figure 3-3, page *10*.
- 2. Open the electrical cabinet.
- 3. Raise the fuse holder, see position 3 in Figure 6-4, page 42.
- 4. Pull out the fuse holder, see position 4 in Figure 6-4, page 42.
- 5. Change the fuse.
- 6. Reassemble the fuse holder.
- 7. Lower the fuse holder.
- 8. Close the electrical cabinet.
- 9. Connect the dust extractor to the mains supply by plugging in the plug.
- 10. Try to start the dust extractor by pressing the "I" button on the dust extractor's keypad.

# 6.6 Remote start (option)

#### 6.6.1 Replacing battery in the transmitter

If the LED indicator on the transmitter indicates low battery voltage, replace the battery as soon as possible. Note that the battery must be replaced in an environment that is clean and without risk of static electricity.

The battery is changed as follows:

1. Open the battery case by screwing out the three screws on the back of the transmitter's case (see Figure 6-5, page 44).



Figure 6-5. Battery case

- 2. Carefully remove the back piece.
- 3. Remove the battery.

4. Put in new battery (see Figure 6-6, page 45 and Figure 6-7, page 45).



G000644

*Figure 6-6. The battery placed in the transmitter* 



G000645

Figure 6-7. The battery in its correct position

- 5. Close the back piece
- 6. Tighten the 3 screws with a Philips screwdriver PH00 (torque 0.14 Nm).
- 7. After changing the battery, the light emitting diode will shine yellow for 1 second followed by 1 or 2 green flashes.

#### 6.6.2 The receiver

The receiver has three different light emitting diode indicators that show information about the system (see Figure 6-8, page 46).

The indications are as follows:

- 1. Light emitting diode 5 Squelch: Indicates whether there is a radio signal for the actual frequency band or not.
- 2. Light emitting diode 6 Status: Indicates that the receiver has received information from an encoded transmitter.
- 3. Light emitting diode 7 Learn: Indicates whether the receiver is in the learn mode or not.



Figure 6-8. The receiver's connections and button

- 1. Connection to Relay 3
- 2. Connection to Relay 2
- 3. Connection to Relay 1
- 4. Power unit connection 12-24 V AC/DC
- 5. Learn/Erase button
- 6. Light emitting diode 5 Squelch
- 7. Light emitting diode 6 Status
- 8. Light emitting diode 7 Learn

#### 6.6.3 Basic configuration

- 1. Open the cover on the receiver by pressing in the heels on the sides, e.g. with a screwdriver or similar, and remove the cover.
- 2. Press the Learn/Erase button, until light emitting diode 7 shines. The Learn mode is activated for 10 seconds (as long as light emitting diode 7 shines). Press button 1 on the transmitter, if buttons 1-3 are to be used for activating relays in the receiver.
- 3. Light emitting diode 7 on the receiver blinks 3 times if the learn succeeded.

4. Assemble the receiver's cover by fitting the cover and bottom together and pressing them together; the heels on the sides lock into place.

To add further transmitters, repeat points 2-3.

#### 6.6.4 Erase all transmitters in the receiver

- 1. Open the cover on the receiver.
- 2. Press the Learn/Erase button, until light emitting diode 7 shines. The Learn mode is activated for 10 seconds. Figure 6-8, page *46*.
- Press the Learn/Erase button for 5 seconds (until light emitting diode 7 goes out). All transmitters are now erased from the receiver's memory. Figure 6-8, page 46.
- 4. Replace the receiver's cover.

## 6.7 Repairs

Any repairs that may be required must be carried out by an HTC Service Centre that has trained service personnel and uses HTC original parts and accessories. Contact your retailer if your machine requires servicing. For contact information, see Contact Information at the start of the manual.

## 6.8 Spare parts

To ensure rapid delivery of spare parts, always specify the model, the machine's serial number and the spare part number when ordering. Information on the model and serial number can be found on the machine's name plate.

Information on spare part numbers can be found in the machine's spare parts list which is available to read or print out from the accompanying digital media or HTC's website:

www.htc-floorsystems.com

Only original tools and original spare parts from HTC may be used. Otherwise neither the CE marking nor the warranty will be valid.

# 7 Faultfinding

This chapter describes some of the faults that may occur and how to deal with them. If the error cannot be corrected, or if errors arise other than those described here, contact your nearest retailer. See Contact Information at the front of the manual.

Symptoms	Cause/Action
The dust extractor will not start	<ul> <li>Check whether the light on the keypad is lit; this indicates that the motor protection has tripped.</li> <li>Check that the connection to the mains supply is correct.</li> <li>Check the fuses and earth fault breaker on the mains supply.</li> <li>Check that there is voltage on all phases.</li> <li>Check the dust extractor's fuses.</li> </ul>
The dust extractor stops after starting	<ul> <li>Can be due to something blocking the airflow. Check hoses, filters etc. (Maintenance, page <i>31</i>).</li> <li>Check the fuses and earth fault breaker on the mains supply.</li> <li>Check that there is voltage on all phases.</li> <li>Check the dust extractor's fuses.</li> </ul>
Poor performance	<ul> <li>Can be due to something blocking the airflow. Check hoses, filters etc. (Maintenance, page 31).</li> <li>Can be because the vacuum system is not airtight. Check seals, hoses, filters, valves, faulty Longopac, (Maintenance, page 31).</li> <li>Check that there is voltage on all phases.</li> </ul>
Poor filter cleaning	<ul> <li>The vacuum system leaks and for this reason does not build up sufficient negative pressure. See Poor performance above.</li> <li>The sliding valve isn't closed</li> </ul>

Symptoms	Cause/Action
Dirt in HEPA filters	<ul><li>Faulty sock filters.</li><li>Leak at filter cleaning valve or HEPA filter cover.</li><li>Old HEPA filter. Time for replacement?</li></ul>
Dust ends up in the vacuum system and not in the Pre-separator	<ul> <li>The bypass valve is closed</li> <li>The pre-separator is blocked by dust</li> <li>The vacuum system's performance is impaired, see Poor performance above. The pre-separator needs a certain air speed to function satisfactorily</li> <li>Very light dust particles The pre-separator needs a certain dust particle weight in order to separate them from the airflow.</li> </ul>
Longopac falls apart	<ul> <li>The dust covers are not sealing</li> <li>The dust covers are jamming</li> <li>Are there any sharp edges that the Longopac bags can come into contact with?</li> <li>Is there any earlier damage on the Longopac bags?</li> </ul>
The dust extractor cannot be controlled with the transmitter for remote start (option)	<ul> <li>Very rapid RED blinking Hardware fault; contact HTC.</li> <li>3 slow RED blinks or steady RED shine of the remote control indicate flat battery. Replace battery.</li> </ul>

# 8 Technical data

The tables and pictures below show the technical data and dimensions for the dust extractor.

		HTC D80 3 x 400 V		HTC D80
		3 X 400 V		3 x 460 V
Total machine weight	kg	260	lbs	573
Max. theoretical airflow	m³/h	700	cfm	490
Machine's initial airflow	m³/h	500	cfm	350
Max. vacuum machine	mbar	380	psi	5.5
Filter area, main filter	m <sup>2</sup>	3.5	Sqft	37
HEPA filter class		H13		H13
Filter area, Hepa 13 filter	m <sup>2</sup>	20,8	Sqft	20,8
Motor power	kW	7,5	HP	11.5
Voltage	W	3 x 400	W	3 x 460
Current	А	16,7	А	17,3
Recommended minimum cable area	mm <sup>2</sup>	2.5	in2	0.0039
Frequency	Hz	50	Hz	60
Storage temperature	°C	-30+50	°F	-22+122
Working temperature	°C	-5+40	°F	+23+140
Humidity	%	5-90	%	5-90
Sound pressure level, according to ISO 11202, measured using class 1 precision sound level meters.	dBA	75	dBA	75
Sound power level, according to ISO 3741, measured using class 1 precision sound level meters.	dBA	91,6	dBA	91,6
Transmitter frequency, remote start	MHz	869.8	MHz	869.8
Transmitter power, remote start	mW	5	mW	5



Figure 8-1. Height and length of the dust extractor, in the operating position, in millimetres



G000612

Figure 8-2. Width of the dust extractor in millimetres

# 9 Environment

HTC products are constructed mainly of recyclable metal and plastic. The main materials used are listed below.

Machine part	Material	Waste management			
Chassis					
Frame	Metal, powder-coated	Metal recycling			
Front wheels	Metal, plastic and rubber	Metal recycling			
Back wheels	Plastic and rubber	Combustible			
Dust extractor					
Cylinder	Metal, powder-coated	Metal recycling			
Longopac holder	Plastic, ABS	Plastic recycling/Combustible			
Cover	Metal, powder-coated	Metal recycling			
Camlock	Metal inc. aluminium	Metal recycling <sup>1)</sup>			
Rotation joint pre-separator	Plastic (nylon)	Plastic recycling/Combustible			
Hose	Plastic (PUR) and metal wire	Plastic recycling/Combustible			
HEPA filter Hepa 13	Metal, glass fibre reinforced paper and hot-melt adhesive	Metal recycling <sup>2</sup> )			
Pre-filter	Metal, polyester and hot-melt adhesive	Metal recycling <sup>2</sup> )			
Electrical system					
Cables	Copper conductors with Neoprene and PVC coating	Waste cable			
Motor	Metal: Steel, aluminium and copper	Electronic waste			
Electrical components	Metal and plastic	Electronic waste			

<sup>1)</sup> If possible, different metals should be separated.

<sup>2)</sup> If the filter contains any hazardous substance from the grinding dust, it must be treated as hazardous waste.

For recycling and scrapping of components, see the applicable national regulations for each country.  $\circ$ 

# 10 Warranty and CE marking

## 10.1 Warranty

This warranty only covers manufacturing defects. HTC bears no responsibility for damage that arises or occurs during transportation, unpacking or use. In no instance and under no circumstances shall the manufacturer be held responsible for damage and defects caused by incorrect use, corrosion or use outside the prescribed specifications. The manufacturer is not responsible for indirect damage or costs under any circumstances. For complete information on the manufacturer's warranty period, see HTC's current warranty terms.

Local distributors may have special warranty terms specified in their terms of sale, delivery and warranty. If there is any uncertainty regarding warranty terms, please contact your retailer.

# 10.2 CE marking

CE marking of a product guarantees its free movement within the EU area in accordance with EU regulations. CE marking also guarantees that the product fulfils various directives (the EMC Directive and other possible requirements in so-called directives for new procedures in accordance with these regulations). This machine carries the CE mark in accordance with the Low Voltage Directive (LVD), the Machinery Directive and the EMC Directive. The EMC Directive states that electronic equipment must not disturb its surroundings with electromagnetic interference and also that it must be immune to electromagnetic interference in its surroundings.

This machine is classified for use in environments such as heavy industry, light industry and, for certain machine types, even in homes. See the Manufacturer's Declaration of Conformity, which shows that the machine is harmonised with the EMC Directive.