



# HP Jet Fusion 5200 Series 3D Automatic Unpacking Station

## Product Documentation User Guide

### **SUMMARY**

How to use your product.

# Legal information

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Edition 3

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## Safety notice

Read and follow the operating and safety instructions before turning on the equipment.

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# Table of contents

<b>1 Welcome to your MJF system</b>	<b>1</b>
Documentation	1
Product usage requirements	1
Process description	2
<b>2 Safety precautions</b>	<b>3</b>
General safety guidelines	3
Final parts/builds	4
Explosion hazard	4
Electric-shock hazard	5
Heat hazard	6
Fire hazard	6
Mechanical hazard	7
Chemical hazard	7
Ventilation	8
Air conditioning	8
Sound pressure level	9
Natural cooling unit transport hazard	9
Personal protective equipment	9
Use of tools	9
Warnings and cautions	10
Warning labels	10
Emergency stop button	12
<b>3 Main components</b>	<b>13</b>
Unpacking station	13
Front panel	14
Software	16
<b>4 Power on and off</b>	<b>19</b>
Turn on the unpacking station	19
<b>5 Networking</b>	<b>21</b>
Connectivity and remote monitoring requirements	21
Configuration	22
<b>6 Unpack the build</b>	<b>23</b>

Unpacking from the natural cooling unit.....	23
Default unpacking profiles.....	29
Add and modify unpacking profiles.....	29
<b>7 Hardware maintenance.....</b>	<b>33</b>
Safety precautions.....	33
General cleaning instructions.....	33
Maintenance resources.....	34
Unpacking-station maintenance.....	38
<b>8 Ordering information.....</b>	<b>59</b>
<b>9 When you need help.....</b>	<b>60</b>
Request support.....	60
Customer Self-Repair.....	60
Service information.....	60
Obtaining the diagnostic package.....	61
<b>Index.....</b>	<b>62</b>

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# 1 Welcome to your MJF system

The automatic unpacking station forms a part of your whole Multi Jet Fusion system.

## Documentation

Full documentation for your product is available on the Web.

The following documents are available:

- Site preparation guide
- Introduction information
- User guide (this document)
- Legal information
- Limited warranty
- Declaration of conformity
- *HP SmartStream 3D Command Center User Guide*

These documents can be downloaded from the HP website at <http://www.hp.com/go/jetfusion3D5200AutomaticUnpackingStation/manuals>.

## Product usage requirements

The products, services, and consumables are provided subject to various conditions.

The conditions are as follows:

- The customer agrees to use only HP Branded Consumables and HP Certified Materials in the 3D HP printer product, and understands that use of any consumables other than HP consumables may cause serious product functionality and/or safety issues, including, but not limited to those outlined in the user guide. The customer agrees not to use the product and/or consumables for uses not permitted by US, EU, and/or other applicable law.
- The customer agrees not to use the product and/or consumables for the development, design, manufacture, or production of nuclear weapons, missiles, chemical or biological weapons, and/or explosives of any kind.
- The customer agrees to comply with the connectivity requirement outlined below.
- The customer may use firmware embedded in the product only to enable the product to function in accordance with its published specifications.
- The customer agrees to comply with the user guide.
- Products, services, and/or technical data provided under these terms are for the customer's internal use and not intended for further resale.

## Process description

A summary of the process of using the unpacking station.

1. After cooling, the natural cooling unit is removed from the shelf by means of a forklift, and fixed onto the holder of the unpacking station.
2. After the slicing blade has been manually opened, the entire contents (material and parts) are transferred to the unpacking station.
3. A perforated platform moves down and picks up the entire print job.
4. The natural cooling unit is removed and the build chamber is sealed tightly by the top lid.
5. The platform is set in vibration by the vibration motors, and the material is blown off the printed parts by air nozzles.
6. Below the platform, the loose material is collected and removed by a vacuum pump. The material enters the external tank through the material trap.
7. The part ejection unit, which is a pneumatically operated slider, pushes the clean parts into the unloading box after opening the unloading door.

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## 2 Safety precautions

Before using the unpacking station, read the following safety precautions and operating instructions to make sure you can use it safely.

You are expected to have the appropriate technical training and experience necessary to be aware of hazards to which you may be exposed while performing a task, and to take appropriate measures to minimize the risks to yourself and to others.

Perform the recommended maintenance and cleaning tasks to ensure the correct and safe operation of the product.

Operations must be supervised at all times.

The product is stationary and should be located in a restricted-access area, for authorized personnel only.

Unauthorized people without appropriate training do not know the hazards in the work area. Therefore:

- Keep unauthorized people away from the work area.
- When in doubt, approach the people and take them out of the work area.
- Take a break from work as long as unauthorized people remain in the work area.

### General safety guidelines

Turn off all equipment, using the branch circuit breakers located in the building's Power Distribution Unit (PDU), and call your service representative in any of the following cases:

- The power cord is damaged.
- The product has been damaged by an impact.
- Liquid has entered the product.
- There is smoke or an unusual smell coming from the product.
- Fuses have blown.
- The product is not operating normally.
- There is any mechanical or enclosure damage.

Turn off all equipment using the branch circuit breakers in either of the following cases:

- During a thunderstorm
- During a power failure

Operate the product only within the specified ranges of operating temperature and humidity. See the site preparation guide, which can be downloaded from <http://www.hp.com/go/jetfusion3d5200AutomaticUnpackingStation/manuals/>.

The unpacking area in which the product is installed should be free from liquid spillage and environmental condensation.

Ensure that there is no condensation inside the product before turning it on.

Ensure that there is adequate lighting in the workplace.

Ensure that the work area is cleaned regularly, including the area 0.5 m below the product and the external tank.

Secure the main switch against unauthorized reconnection when servicing.

Take special care with zones marked with warning labels.

Use HP-certified and HP-branded material only. Do not use unauthorized third-party material.

In case of unexpected malfunction, anomaly, ESD (ElectroStatic Discharges), or electromagnetic interference, press the emergency stop button and disconnect the product. If the problem persists, contact your service representative.

## Final parts/builds

The customer assumes all risk relating to or arising from the 3D printed parts.

The customer is solely responsible for evaluating the suitability and compliance with applicable regulations of the products and/or 3D printed parts for any use, especially for uses (including but not limited to medical/dental, food contact, automotive, heavy industry, and consumer products) that are regulated by US, EU, and other applicable governments.

## Explosion hazard

Take precautions to avoid the risk of explosion.

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**⚠ WARNING!** Dust clouds can form explosive mixtures with air. Take precautionary measures against static charges, and keep away from sources of ignition.

**NOTICE:** The equipment is not intended for hazardous locations or ATEX classified zones: ordinary locations only.

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To avoid the risk of explosion, take the following precautions:

- Smoking, candles, welding, and open flames should be forbidden close to the equipment or material storage area.
- The equipment should be cleaned regularly, inside and outside, with an explosion-proof vacuum cleaner to avoid dust accumulation. Do not sweep the dust or try to remove it with a compressed-air gun.
- An explosion-proof vacuum cleaner is required for cleaning (because of combustible dust). Take measures to mitigate material spillage and avoid potential ignition sources such as ESD (ElectroStatic Discharges), flames, and sparks. Do not smoke nearby.
- The product and accessories should be properly grounded at mains outlets only; do not manipulate internal bonding. If static discharges or electrical sparks are noticed, stop operation, disconnect the product, and contact your service representative.



- Use HP-certified and HP-branded material and agents only. Do not use unauthorized third-party material or third-party agents.
- HP recommends the use of HP accessories for unpacking 3D parts. If other methods are used, read the following notes:
  - Dust clouds generated during handling and/or storage can form explosive mixtures with air. Dust explosion characteristics vary with the particle size, particle shape, moisture content, contaminants, and other variables.
  - Check that all equipment is properly grounded and installed to satisfy electrical classification requirements. As with any dry material, pouring this material or allowing it to fall freely or be conveyed through chutes or pipes can accumulate and generate electrostatic sparks, potentially causing ignition of the material itself, or of any flammable materials which may come into contact with the material or its container.
- Material storage, handling, and disposal as per local laws. Follow your Environmental Health and Safety processes and procedures. For further information, see the Safety Data Sheets (SDS), which you can find at <http://www.hp.com/go/msds>.
- Do not place the product in a hazardous location area, keep it separated from other equipment that could create a combustible dust cloud during its operation.
- Auxiliary post-processing equipment, such as for sand blasting, must be suitable for combustible dust.
- Stop operation immediately if sparks or material spillages are seen, and call your HP service representative before continuing.
- All personnel, when handling combustible dust, should be free from static electricity by means of using conductive or dissipative footwear and clothing, and conductive flooring.
- Users and operators should be trained for explosive atmospheres and associated hazards during cleaning operations, according to local laws and company requirements.
- Use static earthing clamps to connect an external tank to an earthing point.

## Electric-shock hazard

Take precautions to avoid the risk of electric shock.

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**⚠ WARNING!** The internal circuits inside the e-cabinet and unpacking station operate at hazardous voltages capable of causing death or serious personal injury.

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Turn off the equipment using the branch circuit breakers located in the building's Power Distribution Unit (PDU) before servicing. The equipment must be connected to earth at mains outlets only.

To avoid the risk of electric shock:

- Do not attempt to dismantle the internal circuit enclosures, unpacking station, or e-cabinet except during hardware maintenance tasks. In that case, follow the instructions strictly.
- Do not remove or open any other closed system covers or plugs.
- Do not insert objects through slots in the equipment.

- Test the functionality of the Residual Current Circuit Breakers (RCCBs) every year.



**NOTE:** A blown fuse may indicate malfunctioning electrical circuits within the equipment. Call your service representative (see [When you need help on page 60](#)), and do not attempt to replace the fuse yourself.

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## Heat hazard

The vacuum-pump accessible parts may reach high temperatures and can cause burns if touched.

To avoid personal injury, take the following precautions:

- Take special care when accessing the maintenance area. Let the product cool down before you open the covers.
- Take special care with zones marked with warning labels.
- Do not place objects inside the product while operating.
- Do not cover enclosures while operating.
- Remember to let the product cool down before performing some maintenance operations.

## Fire hazard

The vacuum and vibration subsystems of the unpacking station operate at high temperatures. Call your service representative if the built-in Residual Current Circuit Breaker (Ground Fault Circuit Interrupter) is repeatedly tripped.

To avoid the risk of fire, take the following precautions:

- Use the power supply voltage specified on the nameplate.
- Connect the power cord to a dedicated line, protected by a branch circuit breaker according to the information detailed in the site preparation guide.
- Do not insert objects through slots in the product.
- Take care not to spill liquid on the product. After cleaning, make sure all components are dry before using the product again.
- Do not use aerosol products that contain flammable gases inside or around the unpacking station. Do not operate it in an explosive atmosphere.
- Do not block or cover the openings of the product.
- Do not attempt to modify the e-cabinet or enclosures.
- Proper maintenance and genuine HP consumables are required to ensure that the product operates safely as designed. The use of non-HP consumables may present a risk of fire.
- Take special care with zones marked with warning labels.
- Do not place objects covering top cover, enclosures, or air ventilation.
- Do not leave tools or other materials inside the product after maintenance or servicing.

Suitable materials for fire-fighting include carbon dioxide, water spray, dry chemicals, or foam.

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**⚠ CAUTION:** Do not use a jet of water, as it could scatter and spread the fire.

**⚠ WARNING!** Depending on the material used, some unhealthy substances can be released into the air in case of incidental fire. Wear self-contained pressure-demand breathing apparatus and full protective gear. Your EHS specialist should consult the Safety Data Sheet (SDS) about each material, available at <http://www.hp.com/go/msds>, and advise on the appropriate measures for your location.

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## Mechanical hazard

The unpacking station has moving parts that could cause injury.

To avoid personal injury, take the following precautions when working close to the product:

- Keep your clothing and all parts of your body away from moving parts.
- Avoid wearing necklaces, bracelets, and other hanging objects.
- If your hair is long, try to secure it so that it will not fall into the product.
- Take care that sleeves or gloves do not get caught in moving parts.
- Avoid standing close to the fans.
- Do not operate the product with covers bypassed.
- Replace defective components or repair them. Use only original spare and wear parts.
- Take care when opening and closing the top lid. There is a risk of trapping your hands.
- Handle the external tank with care. Only trained personnel should operate the system.
- Take care during the process of unloading parts and when performing maintenance in the platform area with the unloading door open. There is a risk of cutting your fingers.
- To ensure stability and prevent overturning, the unpacking station should be set up on a flat surface and fixed in place by the screw-out feet.

## Chemical hazard

Sufficient ventilation needs to be provided to ensure that potential airborne exposure to chemical substances is adequately controlled.

See the Safety Data Sheets available at <http://www.hp.com/go/msds> to identify the chemical ingredients of your consumables (material and agents). Consult your usual air conditioning or EHS specialist for advice on the appropriate measures for your location.

Use HP-certified material and agents only. Do not use unauthorized third-party material or third-party agents.

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**⚠ WARNING!** Hazardous substances could be released when processing material and using natural cooling units. For this reason, ensure that you have at least the minimum recommended ventilation in the room (see the site preparation guide).

⚠ **WARNING!** Hazardous substances—in the form of Volatile Organic Compounds (VOC) from agents—could condense on surfaces. To avoid the risk of chemical contact, wear personal protective equipment (see [Personal protective equipment on page 9](#)).

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## Ventilation

Ensure that the room in which the system is installed meets local environmental, health, and safety (EHS) guidelines and regulations.

Fresh air ventilation is needed to avoid exposure to health hazards, and to maintain comfort levels. For a more prescriptive approach to adequate ventilation, you could consult as guidance the latest edition of the ANSI/ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) document *Ventilation for Acceptable Indoor Air Quality*.

Adequate ventilation needs to be provided to ensure that potential airborne exposure to materials and agents is adequately controlled according to their Safety Data Sheets. Consult the Safety Data Sheets available at <http://www.hp.com/go/msds> to identify chemical ingredients of your consumables (material and agents), and adequate ventilation, in section 8 of the SDS “Appropriate engineering controls”.

Airborne materials can be readily identified and quantified by using established indoor air-quality testing protocols. HP performs these assessments during the development phase for all products.

Take into account that personal protective equipment should be selected specifically for the workplace, depending on the concentration and quantity of hazardous substances. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment, in accordance with local regulations.

## Air conditioning

In addition to fresh air ventilation to avoid health hazards, consider also maintaining workplace ambient levels by providing suitable climatic operating conditions to avoid operator discomfort and equipment malfunction.

As with all equipment installations, to maintain ambient comfort levels, air conditioning in the work area should take into account that the equipment produces heat. Typically, the unpacking station's power dissipation is 2.0 kW (6.8 kBTU/h).

Air conditioning should meet local environmental, health, and safety (EHS) guidelines and regulations. Follow these instructions carefully when designing the air-conditioning installation and placing the unpacking station in the room:

- The air-conditioning units should not blow air directly onto the unpacking station.
- The air-conditioning splits/diffusers should be placed at least 2 meters away from the unpacking station's surfaces and covers.
- The air-conditioning splits/diffusers should be rotational, avoiding direct flows and laminar flows. The air from the air-conditioning system should be properly mixed with the existing air in the room before reaching the unpacking station, and should not flow directly onto its surface.
- If you have a humidifier, do not place it next to the unpacking station, to avoid excessively high humidity in the air inlets.

## Sound pressure level

Declared dual-number noise-emission values in accordance with ISO 4871, corresponding to the worst bystander position, located at the rear of the unpacking station, measured according to ISO 11202 during the unpacking process.

- L<sub>pA</sub> = 78 dB(A), measured during unpacking
- K<sub>pA</sub> = 4 dB

Hearing protection may be required as per local laws; consult your EHS specialist.

## Natural cooling unit transport hazard

Special care must be taken to avoid personal injury when moving the natural cooling unit.

- Always wear personal protective equipment, including boots and gloves.
- Steer the trolley used to transport the natural cooling unit using the handle only.
- Move the natural cooling unit over smooth, flat surfaces without steps.
- Move with care and avoid shocks during transport, which could spill the material.
- Lock the front casters when not moving the natural cooling unit. Remember to unlock them before moving it.

If moving the natural cooling unit between different rooms, bear in mind that it should be kept in constant environmental conditions.

## Personal protective equipment

Personal protective equipment is used to protect you from harm when your working environment is hazardous in some way.

HP recommends the following equipment, which may be used for material handling, unpacking parts, and certain maintenance and cleaning tasks:

- A pair of heat-resistant gloves per person, flexible and resistant up to 200°C (392°F) with an irregular gripping surface
- Chemical protection gloves for use when removing condensation
- Conductive or electrostatic-dissipative footwear and clothing
- Mask to exclude vapors of organic compounds
- Mask or goggles if the environment is dusty
- Hearing protection if necessary

## Use of tools

Tools are not normally required, except for some maintenance tasks.

- **Users:** Daily operations including unpacking-station settings, unpacking, and daily checks. No tool is required.
- **Maintenance personnel:** Hardware maintenance tasks and replacement of Customer Self-Replaceable (CSR) parts may require a screwdriver, as described in [Hardware maintenance on page 33](#).

**WARNING!** Use appropriate tools (anti-spark, for example) in hazardous locations or ATEX classified zones.

**NOTE:** During installation, the designated personnel receive training for the safe operation and maintenance of the product. The product should not be used without this training.

## Warnings and cautions

Warning and caution symbols are used in this manual to ensure the proper use of the product and to prevent it from being damaged. Follow the instructions marked with these symbols.

**WARNING!** Failure to follow the guidelines marked with this symbol could result in serious personal injury or death.

**CAUTION:** Failure to follow the guidelines marked with this symbol could result in minor personal injury or damage to the product.

## Warning labels

You will find these labels on parts of the unpacking station.

**Table 2-1** Warning labels







Label	Explanation
 <p>For service personnel only</p>	<p><b>Electric shock hazard</b></p> <p>Vacuum pump and vibration subsystems operate at hazardous voltages. Disconnect power before servicing.</p> <p><b>Before starting</b></p> <p>Read and follow the operating and safety instructions before turning on the unpacking station.</p>
	<p>Risk of burns. Let the unpacking station cool down before accessing internal parts.</p>

Table 2-1 Warning labels (continued)

Label	Explanation
	<p>You are required to wear gloves when handling material, and when performing maintenance and cleaning tasks. Chemical protection gloves are suitable, and should be tested according to EN 374.</p> <ul style="list-style-type: none"> <li>• Glove material: NBR (nitrile rubber)</li> <li>• Thickness &gt; 0.11 mm (0.0043 in)</li> <li>• Breakthrough time &gt; 480 minutes (permeation leave 6)</li> </ul> <p>You are recommended to wear a pair of heat-resistant gloves per person when unpacking parts. The temperature can be up to 200°C (392°F), depending on the material being processed.</p>
	<p>You are recommended to wear a safety mask when replacing filters.</p>
	<p>You are required to wear tightly fitting safety goggles:</p> <ul style="list-style-type: none"> <li>• When replacing filters</li> <li>• For maintenance and cleaning tasks</li> </ul>
 	<p><b>WARNING!</b> Dust clouds can form explosive mixtures with air. Take precautionary measures against static charges, and keep away from sources of ignition.</p> <p>No smoking, matches, or open flames close to equipment or material storage area.</p>
	<p>An explosion-protected vacuum cleaner certified for collection of combustible dust is required for cleaning.</p> <p>Take measures to mitigate material spillage and avoid potential ignition sources such as ESD (ElectroStatic Discharges), flames, and sparks. Do not smoke nearby.</p> <p>Disposal as per local laws.</p>
 <p data-bbox="277 1759 692 1791">For maintenance and service personnel only</p>	<p>Electric shock hazard. Disconnect power before servicing. Vacuum pump and vibration subsystems, and electrical cabinets, operate at hazardous voltage.</p>

**Table 2-1 Warning labels (continued)**

Label	Explanation
	Risk of cutting your fingers. Keep away from moving parts.
	Risk of crushing. Keep your hands out of moving parts.
 <p data-bbox="252 926 667 951">For maintenance and service personnel only</p>	Hazardous moving part. Keep away from moving parts, locking hooks, and pistons.
	Identifies the Protective Earth (PE) terminal for qualified electricians, and bonding terminals for maintenance/service personnel only. An earth connection is essential before connecting to the supply.

## Emergency stop button

There is an emergency stop button on the unpacking station. If an emergency occurs, simply push the emergency stop button to stop all processes.

The vacuum system, the motors, and the platform are halted. A system message is displayed.

Ensure that the emergency stop button is released before restarting the unpacking station.

For safety reasons, access to the unpacking zone is not permitted while unpacking is in progress. Let the unpacking station cool down before touching anything inside it.

To stop the unpacking station completely, turn it off.

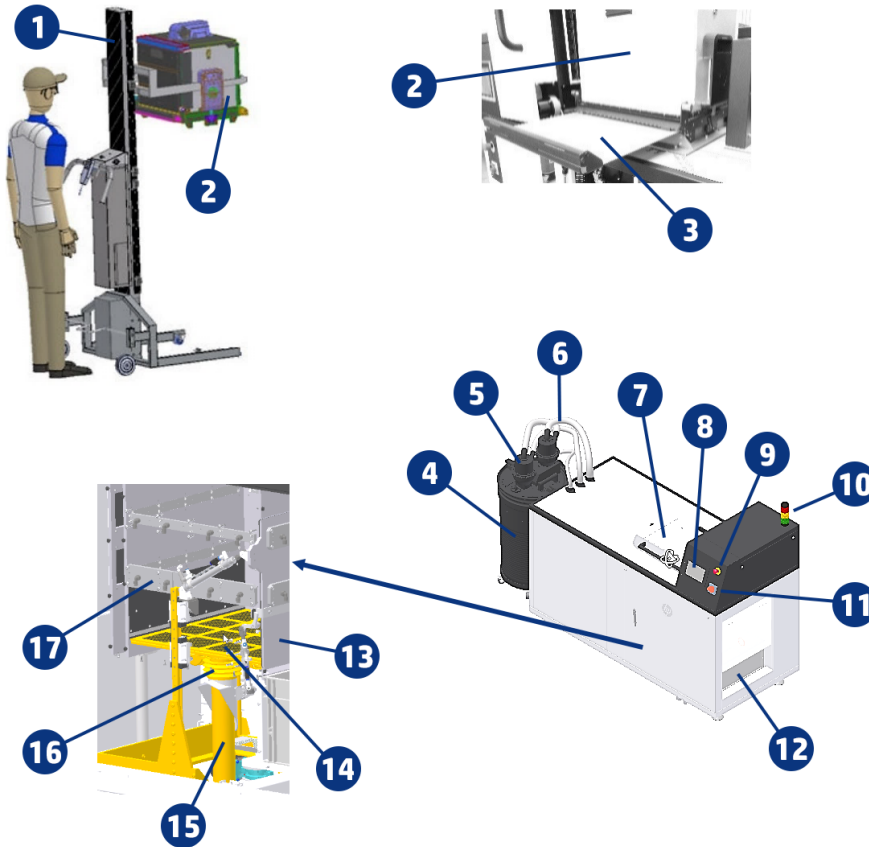


# 3 Main components

These are the main components of the unpacking station.

## Unpacking station

These are the main hardware components of the unpacking station.



- 1. Forklift
- 2. Natural cooling unit
- 3. Slicing blade
- 4. External tank
- 5. Material trap
- 6. Material hoses
- 7. Top lid
- 8. Front panel

9. Emergency stop button
10. Semaphore
11. Main switch
12. Unloading area and unloading box
13. Unloading door
14. Build platform
15. Housing for pneumatic cylinders
16. Vibrator motors
17. Air-nozzle bar

## Front panel

The front panel is a touch-sensitive screen with a graphical user interface.

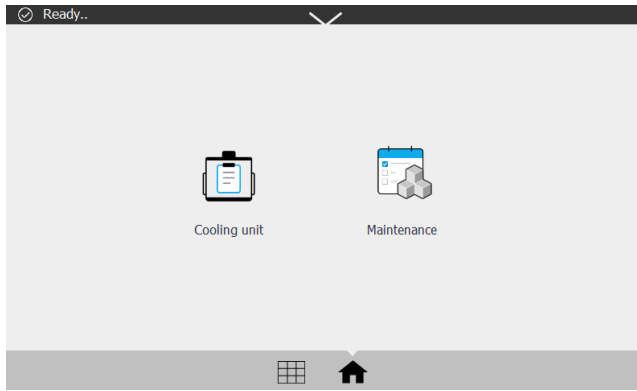
The front panel gives you complete control of your unpacking station: from the front panel, you can view information about the device, change device settings, monitor device status, and perform tasks such as unpacking a build. The front panel displays alerts (warning and error messages) when necessary.



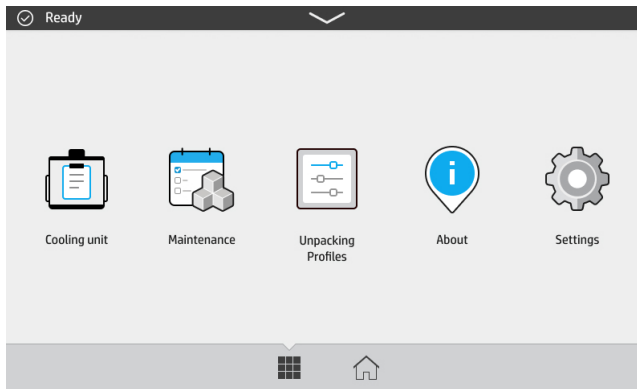
### Home screens

There are two top-level screens that you can move between by sliding your finger across the screen, or tapping the appropriate button at the bottom of the screen:

- The main screen provides direct access to the most important functions.



- The all-app screen displays a list of all available apps.



## Status center

At the top of the front panel is the status center, which can be expanded by swiping down from the top.

It is visible on almost all screens, except when an action is taking place. In the status center, you can see the status of the unpacking station, and can directly cancel its status (for example, unpacking) and alerts.

## Change system options


You can change various unpacking station options from the front panel.

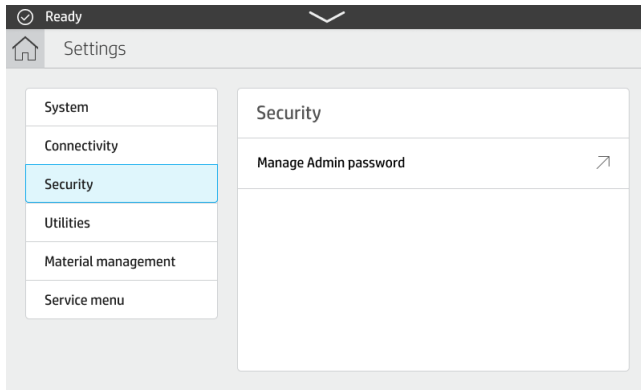
Tap the **Settings** icon , then **System**.

- **Date and time options** to view or set the unpacking station's date and time.
- **Unit selection** to change the units of measurement in the front-panel display. Select **English** or **Metric**. By default, units are set to **Metric**.

## Set the administrator password

You can set the administrator password from the front panel.

Tap the **Settings** icon , then **Security > Manage Admin password**, and enter the password. If a password has already been set, you will need to give the old password in order to set a new one.



The administrator password must be given in order to change printer settings.

## Software

HP software for your unpacking station is available from the Web.

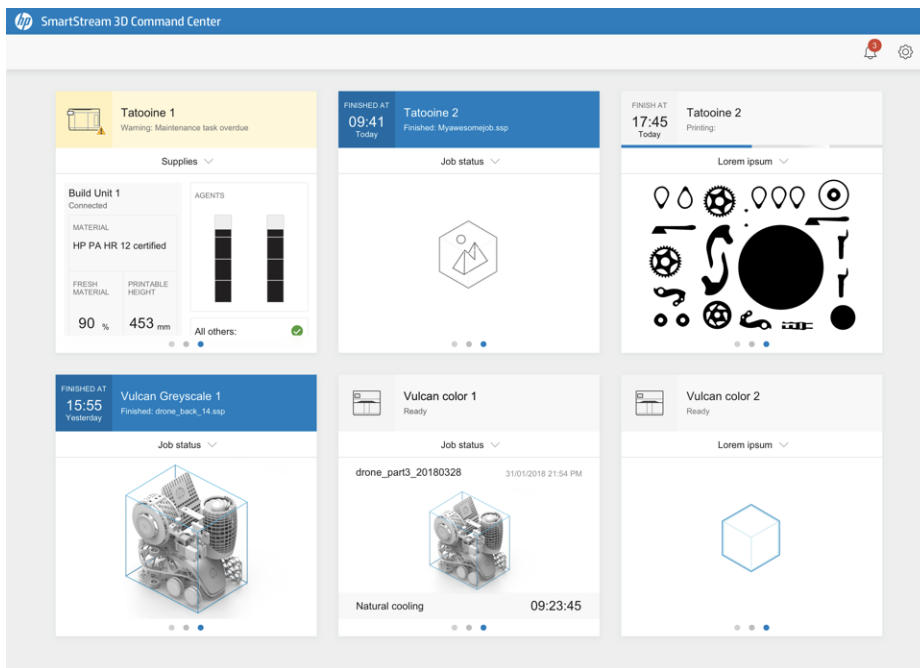
The software can be downloaded from the HP website at <http://www.hp.com/go/jetfusion3D5200AutomaticUnpackingStation/software>.

## HP SmartStream 3D Command Center

Each device is represented by a card that summarizes the most important information about the device. By default, the device status information is shown.



**NOTE:** The CC password is already predefined and cannot be changed. The CC password is admin



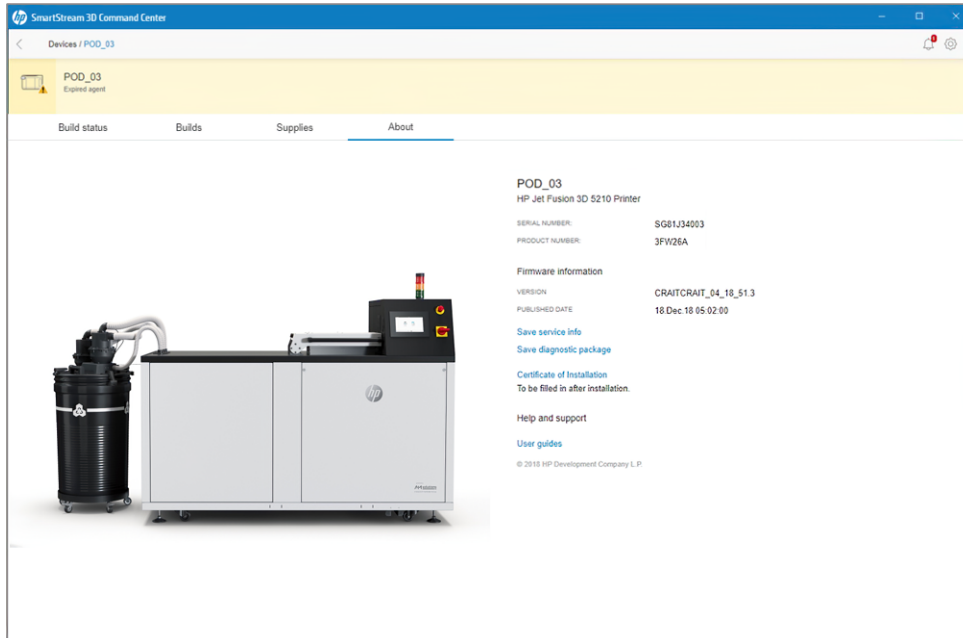
The upper part of the card shows the following information:

- Icon that helps to identify the type of device
- Name of the device chosen by the user who registered it in Command Center
- Current status of the device

You can use the drop-down menu to view information on builds and supplies.

Click the card for more detailed information about the device.

**Figure 3-1** The About tab



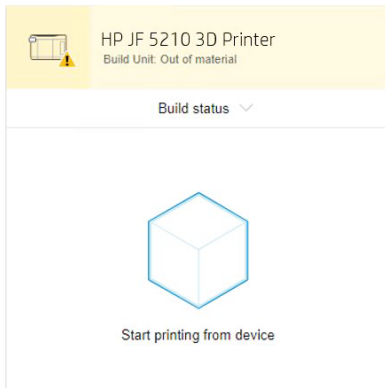
Click **Back** or the breadcrumb to go back to the monitoring overview area.

## Device alerts

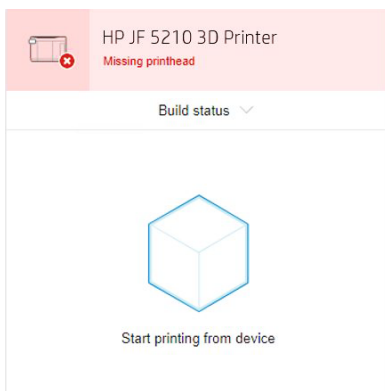
The following steps provide the complete procedure for this topic.

Cards may display warnings or errors, which may override the printer status, depending on their importance, which is determined by the printer.

- **Warnings** are about non-urgent issues, such as a maintenance routine. A warning about a particular component is displayed on the icon representing that component.



- **Errors** are about urgent issues that could stop the printer from starting a job, such as a broken lamp. An error about a particular component is displayed on the icon representing that component.



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## 4 Power on and off

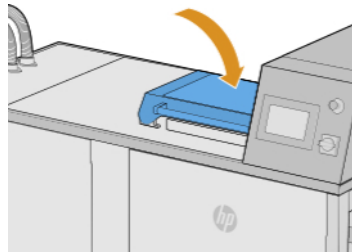
Operate the equipment only within the specified ranges of operating temperature and humidity (see the site preparation guide).

If the equipment or supplies are exposed to conditions outside the environmental operating range, wait at least 4 hours for everything to reach environmental operating conditions before turning on the equipment.

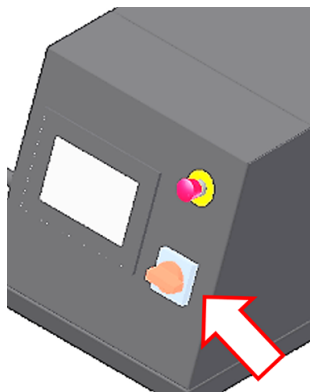
### Turn on the unpacking station

Prepare for turning on, turn the switch, then tap the front panel.

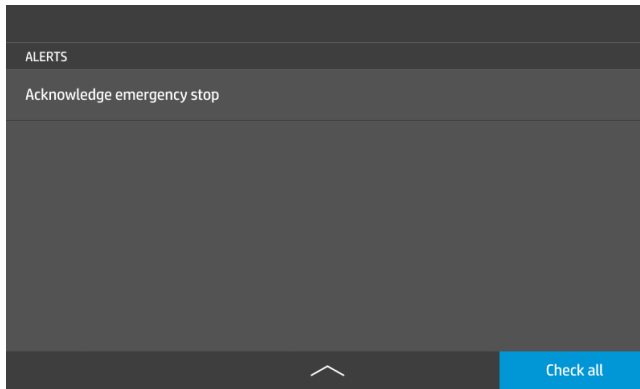
1. Make sure the product is ready to be turned on.
  - Emergency stop button should not be pressed.
  - Top lid should be closed.



- Nobody should be touching the product.
2. Start the unpacking station by rotating the main switch.



3. Go to the front panel and tap the **Check all** button.





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# 5 Networking

The unpacking station provides a single RJ-45 port for a network connection.

In order to meet Class B specifications, the use of shielded I/O cables is required. For optimal performance, you are recommended to use Cat 5/5e or Cat 6 cabling and gigabit-capable local network equipment.

A correct network setup is required to operate the unpacking station, as all communication with printing and management software happens through the network.

## Connectivity and remote monitoring requirements

In order to operate the unpacking station, there are some connectivity requirements.

### Definitions

- **Product(s)** means the HP-branded unpacking station and any related HP-branded accessories, as well as any accompanying HP-branded 3D software, listed in the customer order and excluding consumables or services.
- **Site Preparation Guide** means the site preparation guide for the Product that has been provided to the customer by HP or HP authorized personnel (either online or in paper form) in advance of the sale of the Product.
- **Customer Computer** means the computer, as further specified in the Site Preparation Guide, provided by the customer at the customer's sole expense, which will be hosting the required HP 3D software necessary to manage the Product(s).
- **Customer Machine Data** means data collected from the customer's Product that may include, but is not limited to the following: Product usage data; Product production data; Product system events; Product maintenance and calibration history; Product model number; Product serial number; Product firmware version; Product IP address; sensors activity; build ID; build duration; and/or print mode. Customer Machine Data does not include: design files, parts files, job names, job contents, part geometries, thermal maps, user names or part names.

### Requirements

- The customer will allow HP to install the required HP 3D software on the Customer Computer, keep the Customer Computer connected to the Product, and keep such HP 3D software running on the Customer Computer at all times.
- The customer will provide, at the customer's sole expense, HP 3D software connectivity to the HP secure cloud via permanent Internet connection through an HP-approved communications channel and will ensure such connectivity at all times as further specified in the Site Preparation Guide. The customer is responsible for restoring connectivity in a commercially reasonable timely manner in the event of unforeseen interruptions.
- THE CUSTOMER AGREES THAT FAILURE TO MAINTAIN THE PRODUCT'S CONNECTION TO THE HP CLOUD AS SPECIFIED IN THE SITE PREPARATION GUIDE WILL RESULT IN LIMITED OR NO PRODUCT FUNCTIONALITY AND LIMITED SERVICE LEVEL.

- Products may collect Customer Machine Data. The customer grants HP and/or an HP authorized agent permission to remotely access, via the HP 3D software, the Customer Machine Data from Products. The Customer Machine Data will be used by HP and/or an HP authorized agent for the purpose of providing remote support, enabling enhanced diagnostics, preventive maintenance, software updating, calculating supplies and consumables usage and statistics, and evaluating improvements to HP's products and offerings in the future. In addition, the Customer Machine Data will help HP determine how Products are being used, which product features are used the most, and to calculate various aggregate Product usage statistics.
- HP and/or HP authorized agents respect your privacy, are committed to protecting Customer Machine Data, and will take reasonable precautions to prevent unauthorized access or disclosure and ensure the appropriate use of Customer Machine Data. In the event that some data may be categorized as individual level data, HP and/or HP authorized agents will maintain the privacy of any such data, as well as all data collected, in accordance with the HP Privacy Statement (<http://www.hp.com/go/privacy>) and the Personal Data Rights Notice (<http://welcome.hp.com/country/privacy/privacynotice>) where applicable.

## Configuration

To access the network settings, tap the Settings icon on the front panel.

### Hostname

You can assign a customized hostname to the unpacking station.

If the network infrastructure supports it, the unpacking station will attempt to register the hostname to the DNS service, making it possible to address the unpacking station using the hostname rather than the IP address.

Similarly, you can assign the domain suffix, to define the unpacking station's fully qualified domain name.

### IPv4 configuration

You can select whether the unpacking station should try to discover automatically the IPv4 network settings using the DHCP protocol, or whether you want to configure them manually.

These settings include:

- **IP address:** The unique Internet Protocol address assigned to the unpacking station.
- **Subnet mask:** The mask corresponding to the unpacking station's IP address.
- **Default gateway:** The IP address of the network gateway.
- **DNS configuration method:** Whether DNS servers should be assigned by DHCP service or manually.
- **Primary and secondary DNS servers:** The IP addresses of the DNS servers.


### Link speed

The embedded network controller supports connection to IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet, and 802.3ab 1000Base-T Gigabit Ethernet compliant networks. When connected and powered on, the unpacking station auto-negotiates with your network to operate with a link speed of 10, 100, or 1000 Mbps, and to communicate using full- or half-duplex mode.

However, you can manually configure the link using the front panel, or through other configuration tools once network communication is established.

## 6 Unpack the build

This is the primary function of the unpacking station.

 **NOTE:** A new bounding box is available for use when extracting the job to the Natural Cooling Unit.


If it is desired to print a bounding box to protect the parts in the job, the default bounding box might not be the optimal one for use with the AUS due to the presence of the side walls, which could affect the performance of the air nozzle routine and prevent appropriate cleaning.

For unpacking jobs inside a Natural Cooling Unit with the best possible bounding box, optimized for the HP Jet Fusion 5200 Series 3D Automatic Unpacking Station, please make sure that the following setting is enabled in your printer:

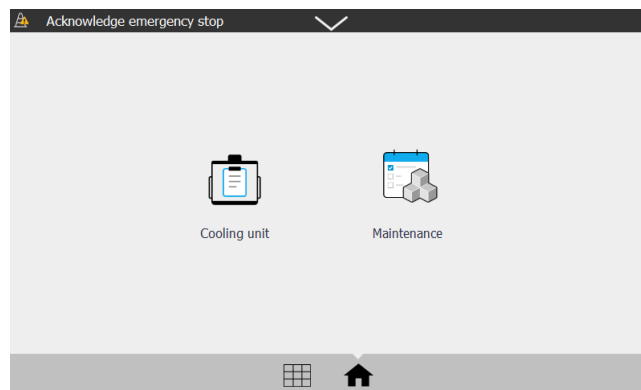
Go to **Utilities > Process Configuration > Automatic unpacking station > Enable material** and press **UP** or **DOWN** to enable the new bounding box for all materials or just for one material.


### Unpacking from the natural cooling unit

How to unpack a build from the cooling unit.

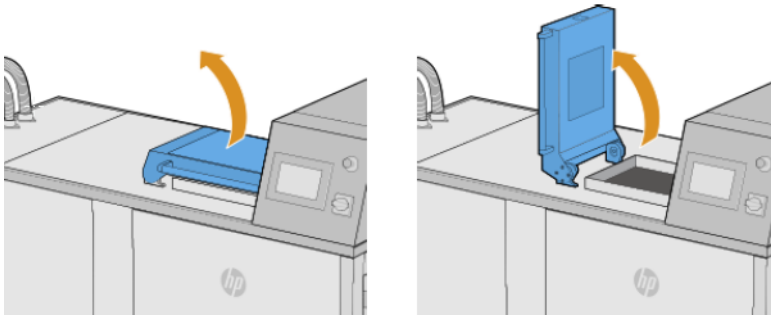
 **NOTE:** The natural cooling unit is an accessory. See [Ordering information on page 59](#).

1. If the front panel prompts you to unlock the emergency stop button, tap **OK**.
  - a. Tap the down-arrow in the center of the top bar.



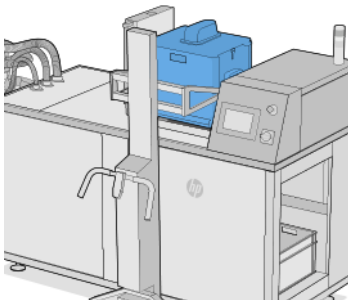
- b. Tap **Check all**.
2. Tap the **Cooling unit** icon .

3. Open the top lid.



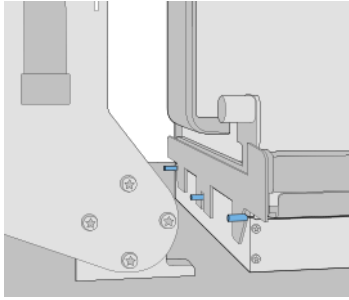
4. Use the forklift to place the natural cooling unit on top of the unpacking station.


Ensure that the right foot of the forklift goes into the guide rail under the unpacking station as far as it can. In this way you prevent possible damage and achieve precise positioning of the cooling unit above the shaft.



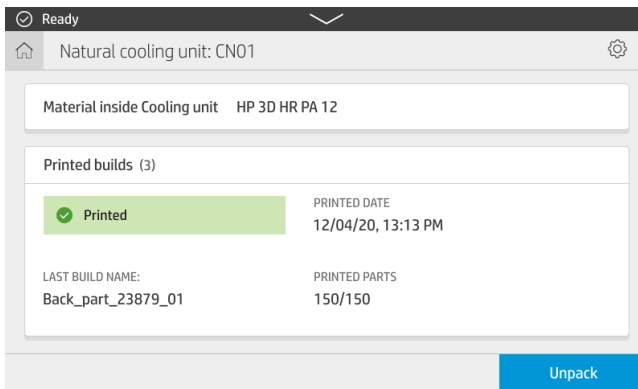
5. Remove the forklift.

6. Make sure the natural cooling unit is locked in the unpacking position.

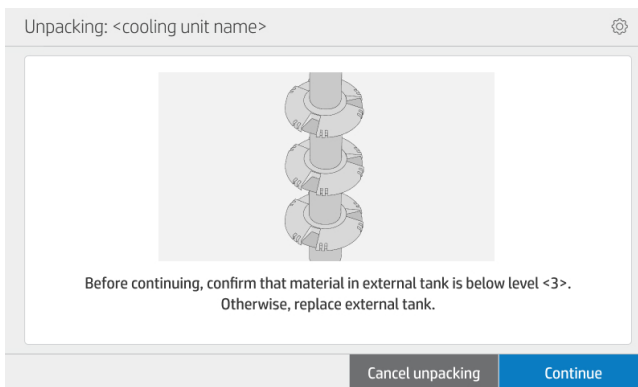


 **NOTE:** Do not remove the slicing blade or anything else until the front panel prompts you to do so.

7. Once the build unit has been detected by the unpacking station, tap the **Unpack** button on the front panel.



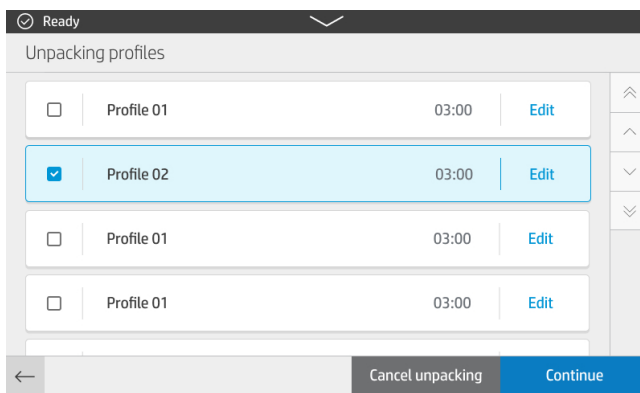
8. When prompted by the front panel, check the level of material in the external tank.



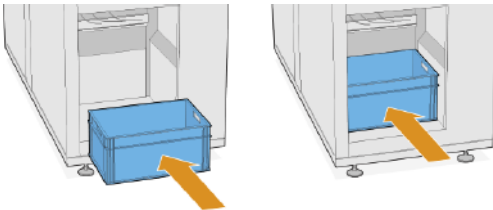
**Figure 6-1** The numbers in the external tank indicate the material level.



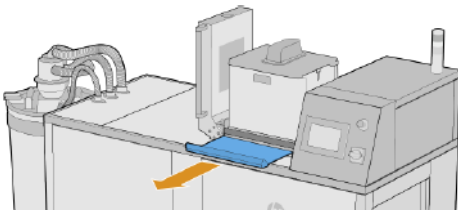
9. Select the unpacking profile (the names may differ from those shown here) and tap **Continue**.



10. Make sure there is an empty box to collect the parts after unpacking them.



11. Tap **Continue** to move to the next step.
12. Remove the slicing blade.

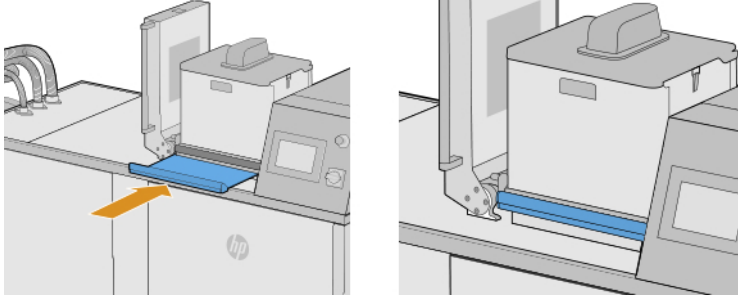


13. Tap **Continue** to move to the next step. The process will start.

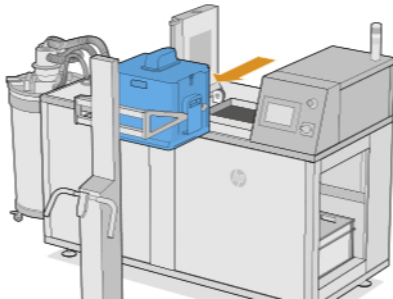
## Extracting parts

Please wait

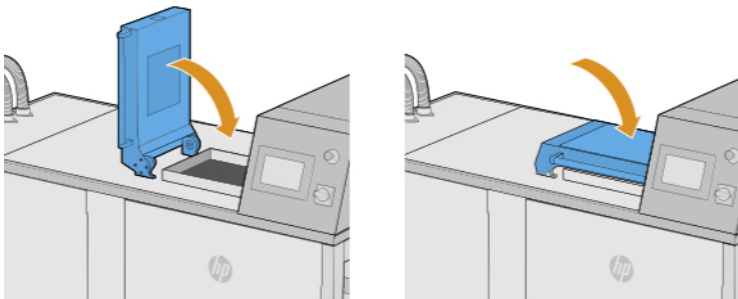
14. Open the flap of the natural cooling unit and reinsert the slicing blade.  
Check that the blade is fully inserted, to avoid spills.



15. Tap **Continue** to move to the next step.
16. Use the forklift to remove the natural cooling unit.



17. When prompted by the front panel, close the top lid.



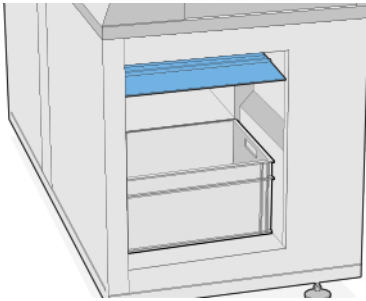
**⚠ WARNING!** When closing the top lid, don't push down on the lid; leave it to lower until fully closed. The top lid assembly includes a damper that regulates the closing speed and force automatically. When the top lid is pushed instead of left to close by itself, the damper's inner valve could get damaged due to excess pressured and may require a replacement.

18. The unpacking process continues.

## Unpacking parts

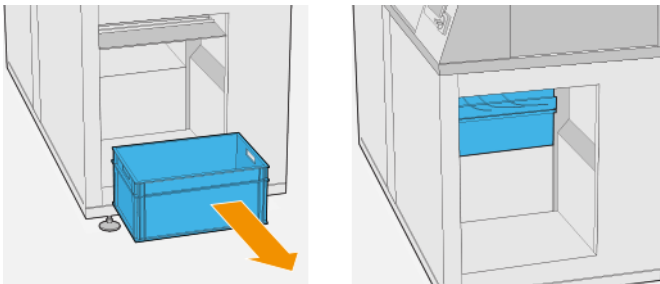
<Profile 02>  
<xx> minutes left

19. When unpacking has finished, tap **Open unloading door**.



20. The parts are ejected into the box.

21. When prompted by the front panel, remove the box with the parts.



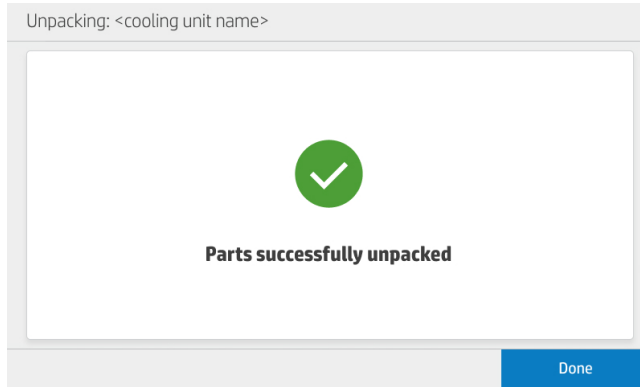
22. Tap **Close the unloading door**.

## Closing unloading door

Please wait



23. Tap **Done**.



## Default unpacking profiles

The various parameters used to unpack a job are saved in unpacking profiles.

By default, two different unpacking recipes are available:

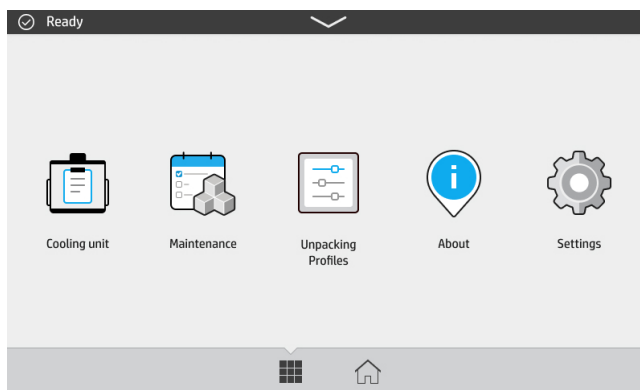
- **Balanced:** This profile offers a good compromise between duration (20 min) and cleanliness of heterogeneous jobs. It is recommended by HP to ensure productivity and uptime of the AUS.
- **Soft:** This profile has been designed for use with jobs containing fragile parts or which are prone to breakage, and therefore is suitable for applications or jobs where the level of cleanliness takes a back seat, but is still considerable. It would be suitable for brushes, for example.

However, depending on the application and the desired outcome, it is possible to create up to 10 recipes in total, counting the two that are already predefined.


## Add and modify unpacking profiles

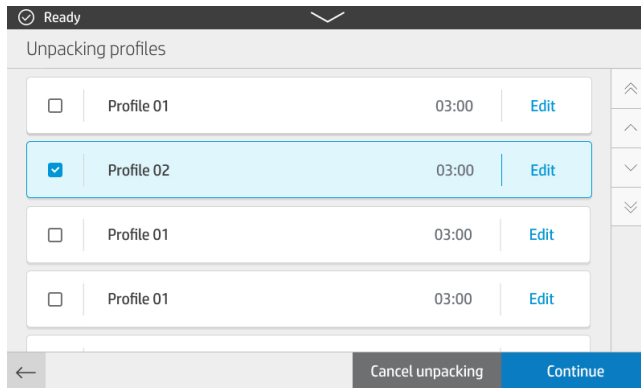
Follow this procedure to modify or add new profiles.

1. At the front panel, tap the **Unpacking profiles** icon .

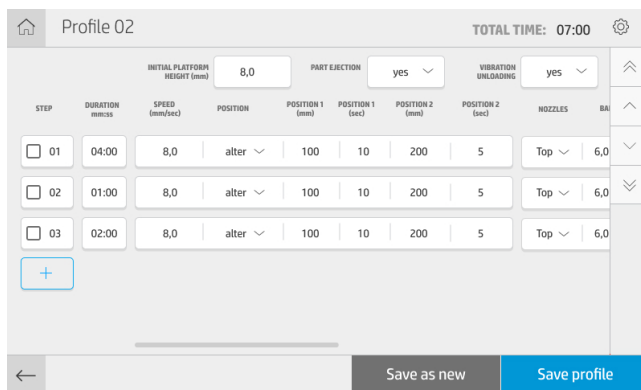


2. Select the profile you want to edit and tap **Edit**.

If you do not see **Edit** on the screen, you need to enable profile editing. Go back and tap the **Settings** icon , then **Utilities > Process configuration > Unpacking profiles > Enable profile modification**. Then return to step 1.



3. The process is divided into layers. For each layer, the following parameters can be changed:



## Build platform

- Duration: Duration of the step

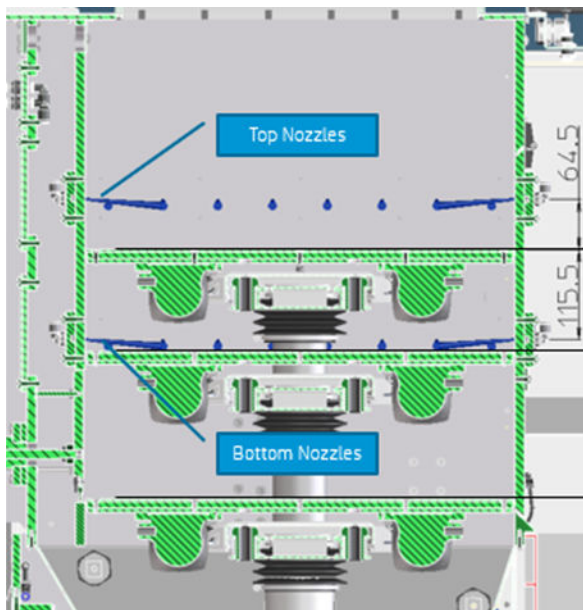
 **NOTE:** Recommended minimum time of Step 01 is 480s to ensure good performance of the unpacking profile.

- Initial height: same definition but also referring to the image in the next page where the positions are explained
- Part ejection: Enables and disables the part to be pushed out of the machine after the unpack. When not selected, the parts need to be removed from the chamber manually.
- Vibration unloading: Enables and disables platform vibration during unloading.
- Piling parts: Enables and disables the option to accumulate all the parts near the unloading door, using the nozzles to move the parts towards that area. Useful to facilitate the unloading of the parts with the pusher or manually.
- Speed: Platform movement speed

- Position: Platform moves between two set points (Alter) or is fixed at one point (Static)



Below there is a schematic of the nozzle's disposition and the different platform positions:



Top nozzles: 64,5mm above position '0' of platform  
Bottom nozzles: 115,5 below position '0' of platform

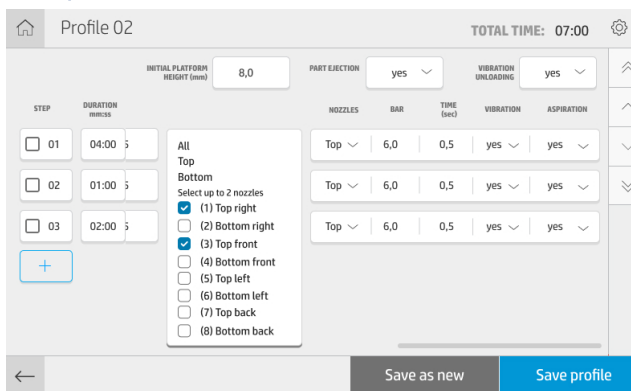
Position '0' of platform

Position '130' of platform  
*Minimum recommended position in alternate job to let a full height job (380mm) fit inside the chamber*


Position '290' of platform

- Position 1, Position 2: Positions of the platform measured in mm from the top, and seconds that the platform stays in each position

### AIR system

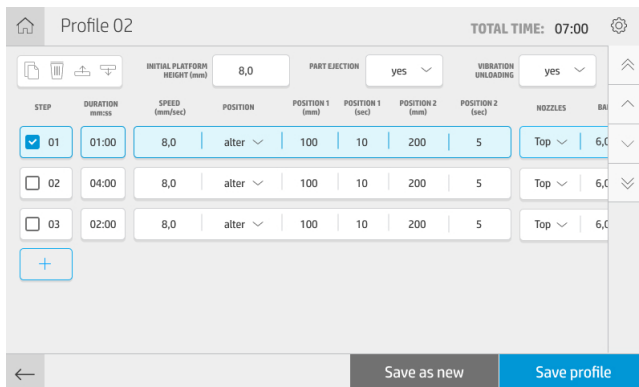


- **Nozzles:** Air nozzles that are activated during the layer. Which nozzles are to be activated depends on the job height and platform's position. For example: Typically for small/medium size plots and for a movement between positions 130 and 290, the bottom nozzles are enough.

 **NOTE:** Blowing is not allowed in the 1st step of any recipe to prevent overpressure due to the amount of powder present at the beginning of the unpack.

- **Bar:** Air pressure
- **Time:** Amount of time that each group of nozzles is activated (only one group of nozzles can work at a given time)
- **Vibration:** Enables and disables vibrator motors
- **Aspiration:** Enables and disables vacuum pump

Additionally, new steps can be added by pressing the + button. You can select one or more steps and duplicate them, delete them, or change their order.



After modifying the desired parameters, you can create a new profile by tapping **Save as new**, or modify the current profile by tapping **Save profile**.

---

# 7 Hardware maintenance

The unpacking station needs some attention from time to time to maintain its performance.

- 
- ⚠ WARNING!** Hardware maintenance may be performed by trained personnel only. At installation time, the designated personnel receive training for safe operation and maintenance of the unpacking station. No-one should use the product without this training.
- 

## Safety precautions

Read and follow the safety precautions in this guide to make sure you use the equipment safely.

See [Safety precautions on page 3](#).

You are expected to have the appropriate technical training and experience necessary to be aware of hazards to which you may be exposed in performing a task, and to take appropriate measures to minimize the risks to yourself and to others.

- 
- ⚠ CAUTION:** Carry out prescribed adjustment, maintenance, and inspection work according to schedule.
- 

Installation is permitted by HP authorised personnel only. The product should be switched off, the power supply and the compressed air supply interrupted and secured against unintentional restart. Installation should be carried out in accordance with the relevant drawings and circuit diagrams in the installation guide.

Check components with limited lifetimes regularly, and replace them if necessary.

The product should be set up on a flat surface and fixed in place by the screw-out feet.

## General cleaning instructions

For general cleaning, a lint-free cloth dampened with distilled water is recommended. After cleaning, let the cleaned part dry or use a fresh cloth to dry it completely.

Do not spray fluids directly onto the product. Spray the fluid onto the cloth used for cleaning.

To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent, or a general-purpose industrial cleaner (such as the Simple Green industrial cleaner). Remove any remaining soap foam with a dry cloth.


For glass surfaces, use a soft, lint-free cloth lightly moistened with a non-abrasive glass cleaner or with a general-purpose glass cleaner (such as the Simple Green glass cleaner). Remove any remaining soap foam with a lint-free cloth dampened with distilled water, and dry it with a dry cloth to prevent spotting.

- 
- ⚠ WARNING!** Avoid sparks and open flames. Smoking is expressly prohibited in the vicinity of the unpacking station.
- ⚠ WARNING!** Make sure to use adequate personal protective equipment. See [Personal protective equipment on page 9](#) and [Warning labels on page 10](#).

- ⚠ **WARNING!** Secure the main power switch so that it cannot be turned on by accident or without authorization.
- ⚠ **CAUTION:** Do not use abrasives, acetone, benzene, sodium hydroxide, or carbon tetrachloride on the glass: they can damage it. Do not place or spray liquid directly on the glass, as the liquid might seep under the glass and damage the device.

You can use a canister of compressed air to remove dust from electronic/electrical parts.

- ⚠ **CAUTION:** Do not use water-based cleaners for parts with electrical contacts: such cleaners may damage electrical circuits.
- ⚠ **CAUTION:** Do not use wax, alcohol, benzene, thinner, ammonia-based cleaners, or other chemical detergents, to prevent damage to the product or the environment.

 **NOTE:** The use of cleaner products is regulated in some locations. Ensure that your cleaner follows federal, state, and local regulations.

## Maintenance resources

Some resources are provided by HP, and some simple tools are recommended but not provided.

### Maintenance kits

These kits provide replacement parts that you may need from time to time.

**Table 7-1 Maintenance kits**

Name	How to order	Part number
HP Jet Fusion 5200/4200 Series 3D Processing Station Vacuum Pump Filter	Through the usual channel	8VJ68A
HP Jet Fusion 5200 Series 3D Automatic Unpacking Station E-cabinet Fan Filter	Through the usual channel	2X0E1A
HP Jet Fusion 5200 Series 3D Automatic Unpacking Station Pneumatic Filter	Through the usual channel	2X0E2A
HP Jet Fusion 5200 Series 3D Automatic Unpacking Station Top Lid Filter	Through the usual channel	2X0E3A

### Preventive maintenance

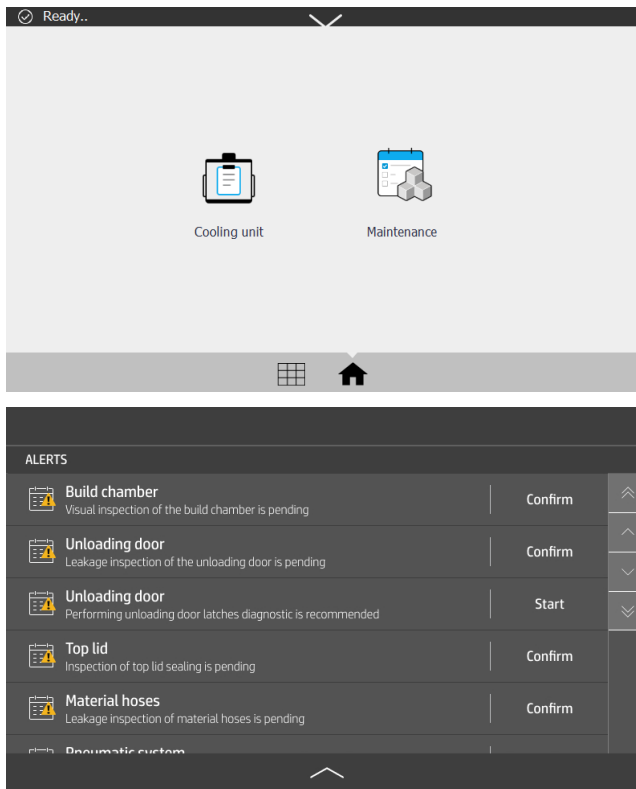
The purpose of scheduled preventive maintenance is to perform regular maintenance checks as required, in order to prevent possible failures from occurring and ensure good performance throughout the life of the product.

For each scheduled preventive maintenance action, there is an internal life counter in the firmware that counts a variable related to the suggested frequency of the checks.

When the internal life counter reaches the limit for a preventive maintenance action (set according to testing and development), an alert is displayed in the Notification center on the Front panel.


## Check for alerts through the front-panel status center

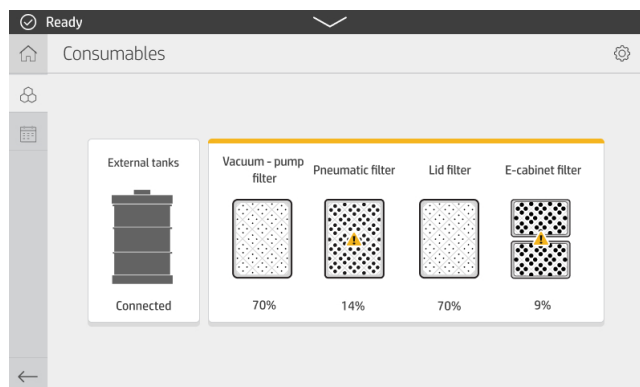
Any alert concerning the unpacking station preventive maintenances is displayed at the top of the front panel in the status center, which can be expanded by swiping down from the top.



## Check filter life

You can use the front panel to check the estimated remaining lifetime of the filters.

- On the home screen, tap the **Maintenance** icon .



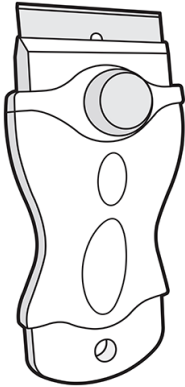
## Maintenance tools recommended but not provided

The following tools may be useful when performing maintenance tasks on the unpacking station.

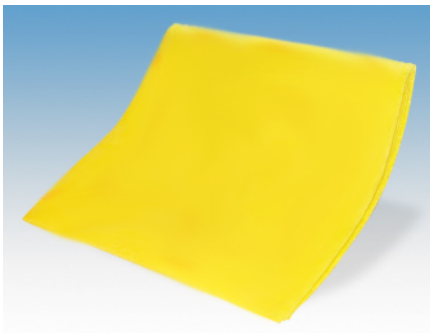
- Spiral scourer, for some cleaning operations

Use a scourer that does not scratch glass; test it on a corner if in doubt.

- Razor scraper



- Absorbent all-purpose cloth, for cleaning covers and general cleaning

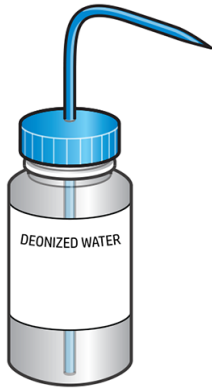


- Lint-free cloth or all-cotton cloth, for cleaning covers and general cleaning




- General-purpose industrial cleaner (such as Simple Green industrial cleaner), for general cleaning
- Deionized water, for general cleaning





- Explosion-protected vacuum cleaner certified for collection of combustible dust, with nozzle accessories for general cleaning (crevice and soft brush nozzles highly recommended)



-  **NOTE:** The equipment should be cleaned regularly with the vacuum cleaner, inside and outside, to prevent dust and condensation from accumulating. Do not sweep the dust or try to remove it with a compressed-air gun.

Take measures to mitigate material spillage and avoid potential ignition sources such as ESD (ElectroStatic Discharges), flames, and sparks. Do not smoke nearby.

- Flashlight, for general use



- Folding steps, for general use



- Flat screwdriver



- Torx screwdriver



## Unpacking-station maintenance

The environment of the unpacking station should be kept clean.

The floor around the system, especially the workplace, should be cleaned daily.

The space below the sieve platform should be checked weekly for material deposits and cleaned if necessary.


## Maintenance schedule

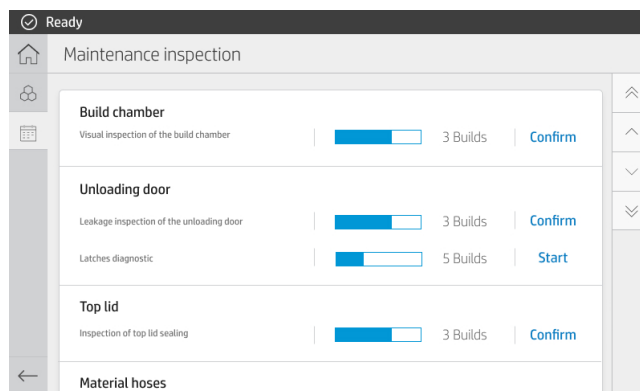
Various maintenance operations should be carried out periodically.

Turn off the unpacking station before performing any maintenance.

**Table 7-2** Frequency of maintenance operations

Maintenance task	Daily	50 jobs	200 jobs
<a href="#">Clean the exterior of the unpacking station on page 39</a>	■		
<b>Top cover</b>			
<a href="#">Clean the top lid filter on page 41</a>	■		
<a href="#">Check the seal of the top lid on page 41</a>		■	
<a href="#">Check the top lid clamp on page 42</a>			■
<b>Build chamber</b>			
<a href="#">Check the build chamber on page 42</a>			■
<a href="#">Check the electric cylinder on page 44</a>			■
<a href="#">Clean the space below the platform on page 45</a>			■
<b>Unloading door</b>			
<a href="#">Check the unloading door and clean the seal on page 48</a>		■	
<a href="#">Check the unloading-door clamps on page 49</a>			■
<b>Material hoses</b>			
<a href="#">Check the material hoses on page 50</a>		■	
<b>Pneumatic system</b>			
<a href="#">Check the pneumatic system on page 50</a>			■

After performing the 50-job and 200-hour inspections and maintenance activities, tap the **Maintenance** icon  on the front panel, then tap **Confirm** to confirm that maintenance has been done.



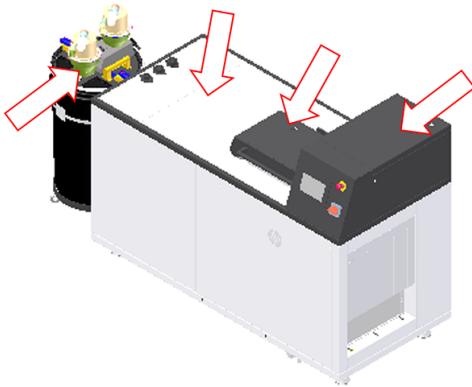
## Clean the exterior of the unpacking station

This general cleaning should be done daily.

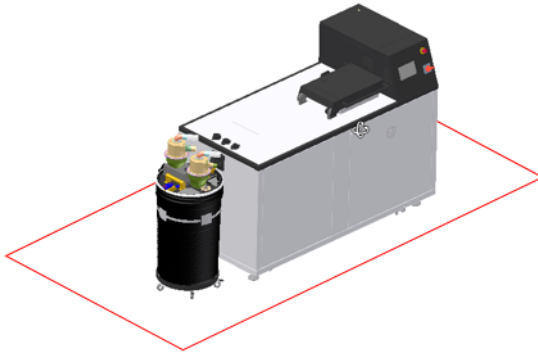
**Table 7-3** Advisory labels

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
					
For more safety information, see <a href="#">Safety precautions on page 3</a>					

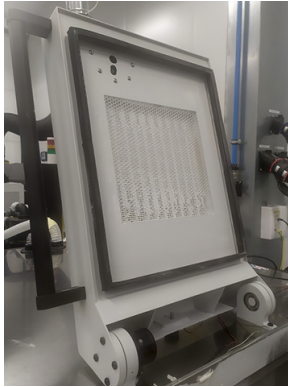
1. Remove all dust deposits on the surface of the unpacking station and the external tank, using an explosion-protected vacuum cleaner.



2. Clean the floor under the unpacking station and the external tank, and up to about 0.5 m (20 in) around the equipment.



3. Unlock the top lid from the front panel, open the lid, and clean the seal with a damp, lint-free cloth.



4. After cleaning, wait for all components to dry before closing and locking the top lid.

## Clean the top lid filter



Clean the filter grid.

1. Unlock the top lid from the front panel and open the lid.
2. Open the filter grid protection, which is attached with a magnet to the bottom of the top lid.
3. Vacuum the filter's grid.
4. Close the filter grid protection and close the top lid.

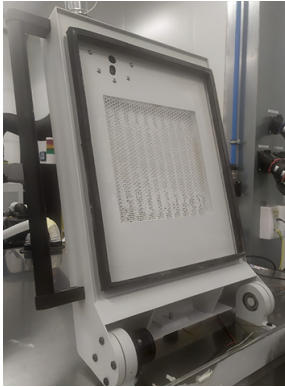
## Check the seal of the top lid

Check the seal every 50 jobs.

Table 7-4 Advisory labels

Risk of cutting your fingers	Crush hazard
	
For more safety information, see <a href="#">Safety precautions on page 3</a>	

1. Check that the seal around the top lid is not damaged.






2. Close the top lid, and check that the lid is sealing the top of the unpacking station effectively.

## Check the top lid clamp

Check the top lid clamp every 200 jobs.

**Table 7-5** Advisory labels

Risk of cutting your fingers	Crush hazard	Hazardous moving part
		
For more safety information, see <a href="#">Safety precautions on page 3</a>		

1. On the front panel, tap the **Settings** icon , then **Utilities > Maintenance > Doors and covers > Top cover**.
2. Lock and unlock the top lid from the front panel, confirming that both operations work correctly.

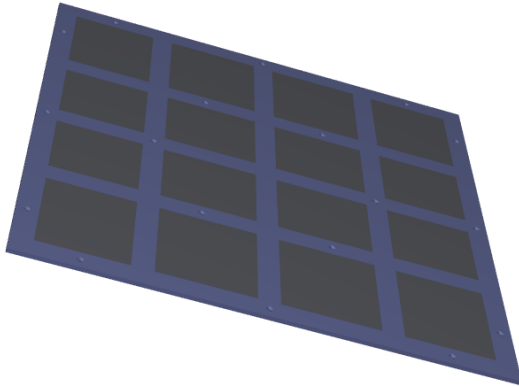
## Check the build chamber

Check the build chamber every 200 jobs.

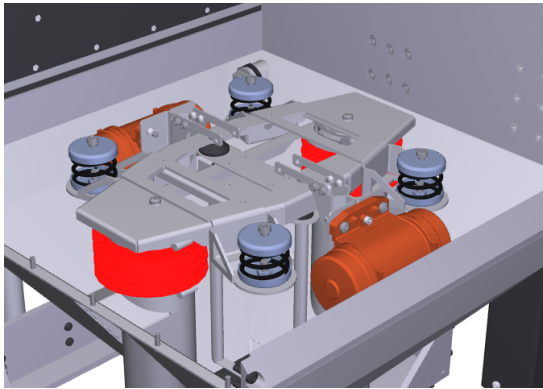
**Table 7-6** Advisory labels

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
					
For more safety information, see <a href="#">Safety precautions on page 3</a>					

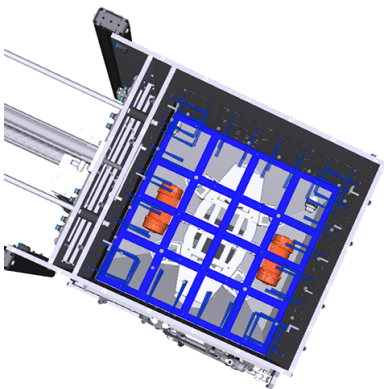
1. Use the front panel to open the top lid and the unloading door (see [Clean the space below the platform on page 45](#)).
2. Check the build platform for external damage: breaks, blockages, or horizontal misalignment.



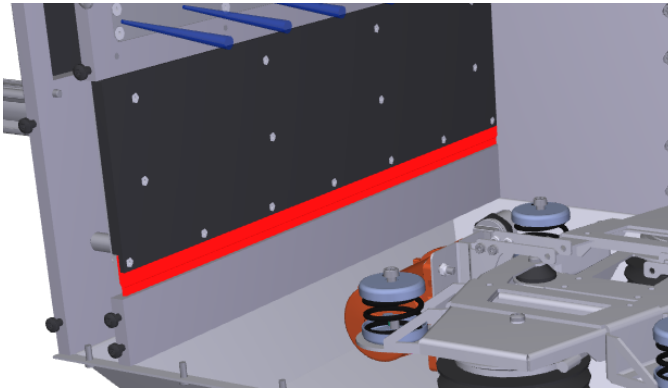
3. Check for cracks in the bellows under the platform.



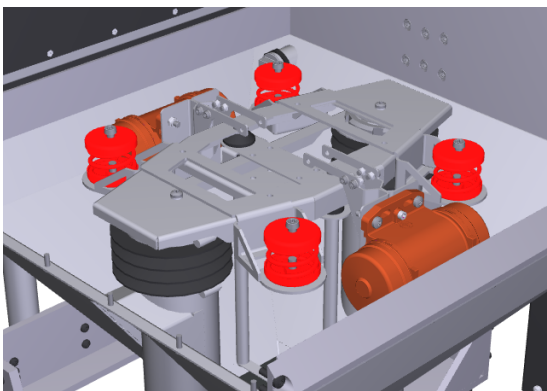
4. Check whether unpacked parts or remnants of unpacked parts have remained on the platform or have fallen through the side of the chamber.



5. Check that the unloading brush is undamaged.



6. Check that the springs under the platform are undamaged.



## Check the electric cylinder

Check the electric cylinder every 200 jobs.

**Table 7-7** Advisory labels

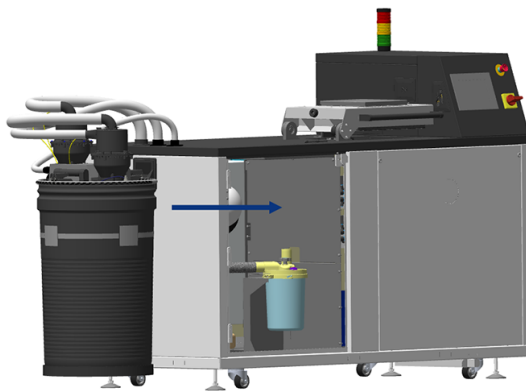
Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
For more safety information, see <a href="#">Safety precautions on page 3</a>					



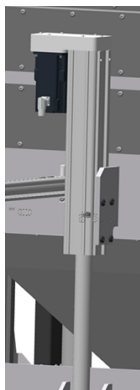
1. Open the vacuum-pump filter door.



2. Remove the upper right cover by removing nine screws.



3. Check that there are no lubricant leaks along the cylinder.
4. Check that the surface of the cylinder is undamaged.




## Clean the space below the platform

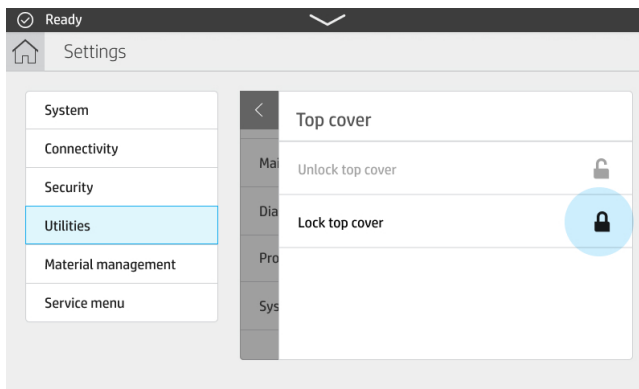
Clean the space below the platform every 200 jobs.

You will need to access the area under the platform to perform weekly maintenance, and when parts fall under it.

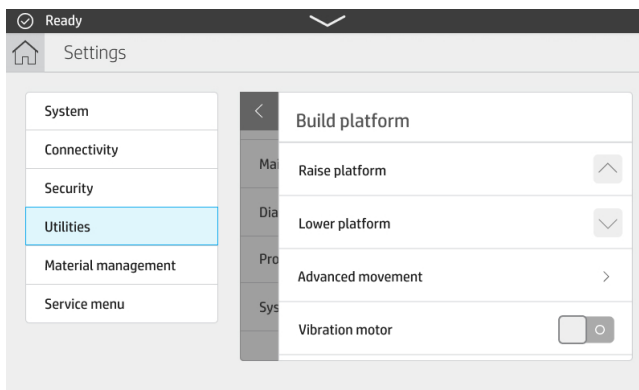
**Table 7-8 Advisory labels**

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
					
For more safety information, see <a href="#">Safety precautions on page 3</a>					

1. On the front panel, tap the **Settings** icon , then **Utilities** > **Maintenance** > **Doors and covers** > **Top cover**.
2. Close the top lid, then tap **Lock top cover** on the front panel.

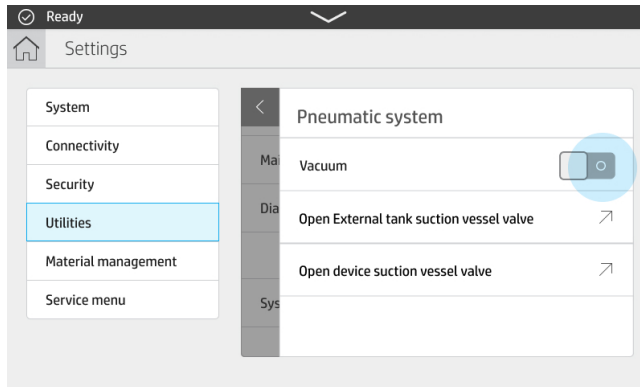


3. Tap **Utilities** > **Maintenance** > **Build platform** > **Raise platform**.

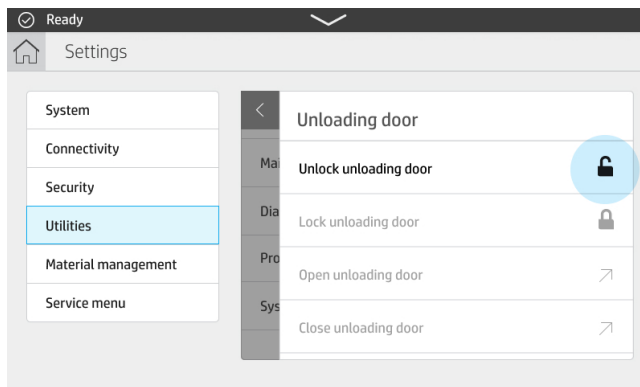


Go to **Maintenance** > **Pneumatic system** > Close the external tank material trap valve and activate the vacuum..

4. Tap **Utilities > Maintenance > Pneumatic system > Vacuum**.




5. Tap **Utilities > Maintenance > Pneumatic system > Vacuum**, and activate the aspiration by switching the vacuum to I.



6. Tap **Open unloading door**.
7. Completely clean the area below the platform, including the walls and any other places where material accumulates.



8. Clean the bottom area.
9. Remove the grid and clean the area below it.

 **IMPORTANT:** In units with the powder clogging control assembly SRV, take care not to remove the tube. Do not carry out the cleaning if there is no powder under the grid.



- Clean the grid, then put it back.

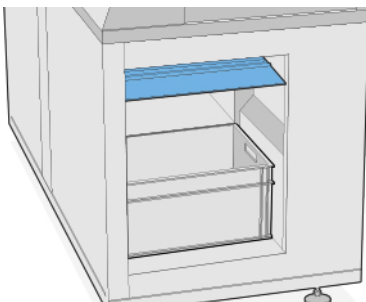
## Check the unloading door and clean the seal

Check the unloading door and clean its seal every 50 jobs.

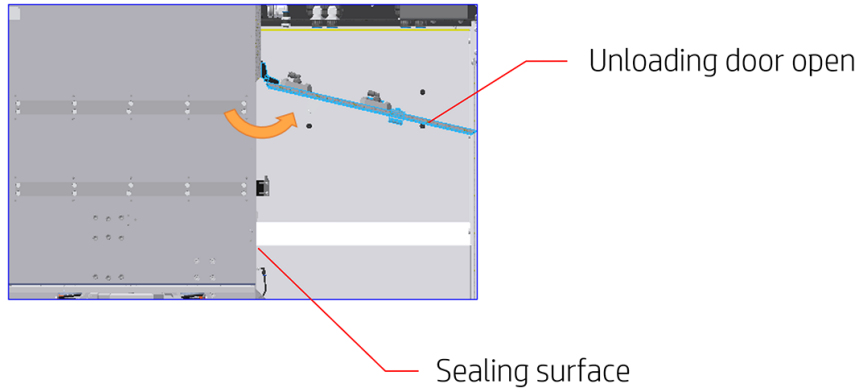
**Table 7-9** Advisory labels

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
					
For more safety information, see <a href="#">Safety precautions on page 3</a>					

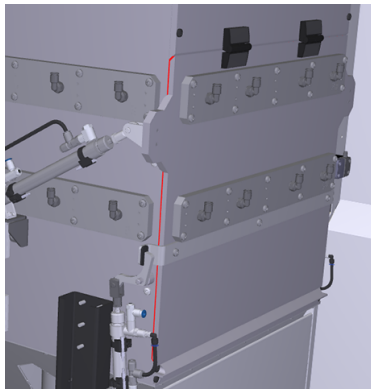
- Using the front panel, lower the platform, then unlock and open the unloading door.
- Locate the unloading door in the unloading area.



3. Use an explosion-protected vacuum cleaner to remove dust from the unloading area.

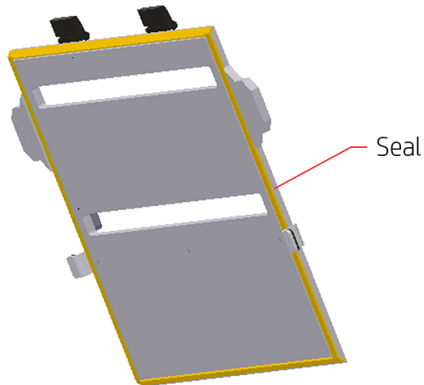


4. Check the unloading door for leaks.



5. Clean the unloading door seal with a damp, lint-free cloth.

The seal is on the inside of the unloading door, marked here in yellow.



6. After cleaning, ensure that all components are dry before using the unpacking station.

## Check the unloading-door clamps

Check the unloading door clamps every 200 jobs.

**Table 7-10** Advisory labels

Risk of cutting your fingers	Crush hazard	Hazardous moving part
		
For more safety information, see <a href="#">Safety precautions on page 3</a>		

1. Use the front panel to unlock the unloading door (see [Clean the space below the platform on page 45](#)).
2. Open the unloading door.
3. Close it.
4. Lock it.

## Check the material hoses

Check the material hoses every 50 jobs.

**Table 7-11** Advisory labels



Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
					
For more safety information, see <a href="#">Safety precautions on page 3</a>					

1. Check that there are no holes or obviously worn spots in the hoses.
2. Check that the hose connections do not leak.

## Check the pneumatic system

Check the pneumatic system every 200 jobs.

**Table 7-12** Advisory labels

Wear gloves	Risk of burns
	
For more safety information, see <a href="#">Safety precautions on page 3</a>	

1. Open the vacuum pump filter door.



2. Rotate the black compressed-air stopcock to cut the air supply.

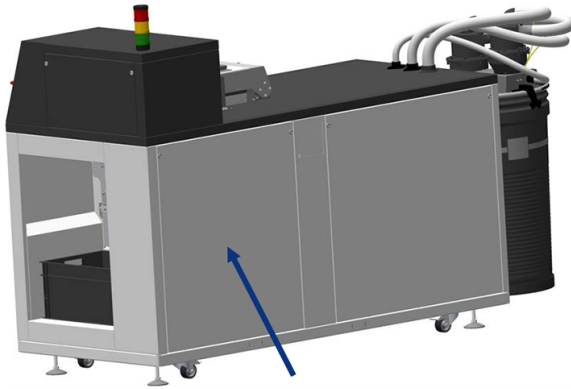


3. Remove the water deposit and filter case, and empty the water separator deposit.



4. Check all air tubes for leaks, bent areas, or other defects that might prevent the air from passing through. Also check that the connectors do not leak. You can inspect the tubes visually and also listen for escaping air while the unpacking station is working.
5. Put back the water deposit and filter case.
6. Turn the air supply back on by rotating the stopcock.
7. Close the door.

8. Open the pneumatic system door at the rear of the unpacking station.



9. Check the air tubes for leaks, bent areas, and other defects.


## Replace the top-lid filter

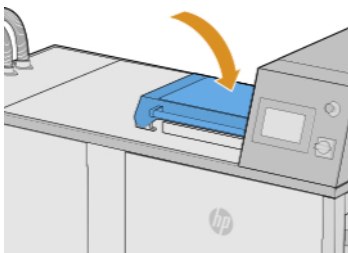
Remove the filter element, then insert a new one.

Table 7-13 Advisory labels

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
					

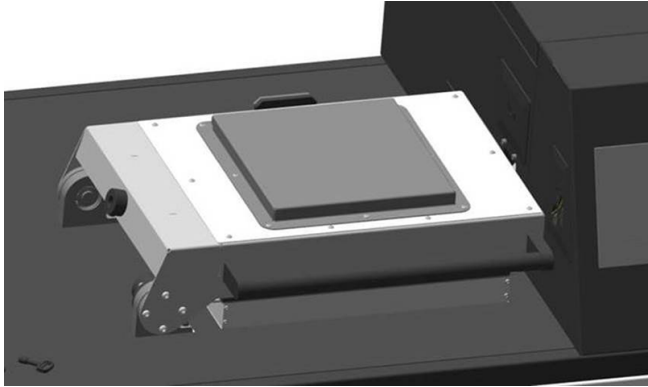
For more safety information, see [Safety precautions on page 3](#)

1. Tap the **Maintenance** icon  on the front panel, select the filter, and tap **Replace**.
2. Ensure that the top lid is closed.

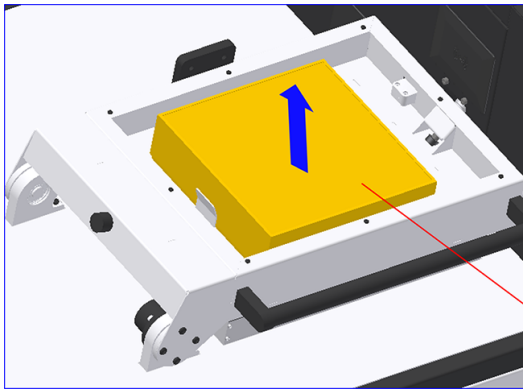




- Remove the ten screws from the filter cover (shown in white below).



- Remove the filter cover, then remove the filter element.



Filter element


- Clean the housing with compressed air.
- Insert the new filter element, then put back the filter cover.
- Put back the ten filter-cover screws.

## Replace the pneumatic filter

Remove the water deposit and filter case, and replace the filter.

Table 7-14 Advisory labels

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of burns	Crush hazard	Hazardous moving part
For more safety information, see <a href="#">Safety precautions on page 3</a>					

- Tap the **Maintenance** icon  on the front panel, select the filter, and tap **Replace**.

2. Open the vacuum-pump filter door.



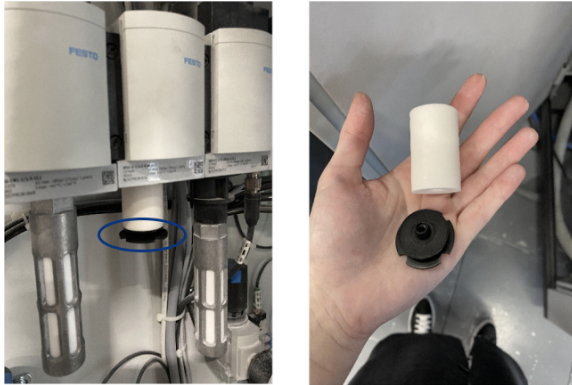
3. Rotate the black compressed-air stopcock to cut the air supply.



4. Remove the water deposit and filter case.



5. Unscrew the filter lid on the bottom of the filter, and replace the filter.










6. Put back the water deposit.
7. Turn the air supply back on by rotating the stopcock.
8. Close the vacuum pump filter door.

## Replace the vacuum-pump filter

Remove the filter and replace it with a new one.

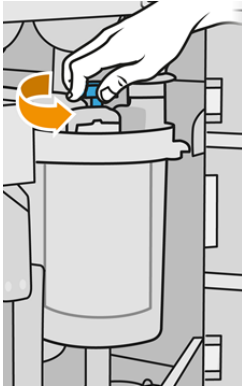
Table 7-15 Advisory labels

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of burns	Crush hazard	Hazardous moving part
					
For more safety information, see <a href="#">Safety precautions on page 3</a>					

1. Tap the **Maintenance** icon  on the front panel, select the filter, and tap **Replace**.
2. Open the vacuum-pump filter door.



3. Completely unscrew the knob to release the filter.



4. Rotate the container clockwise to release it.

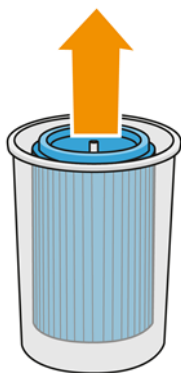
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**⚠ CAUTION:** Be careful with the sensor when removing the container. Damage to the sensors can cause a sieve malfunction.

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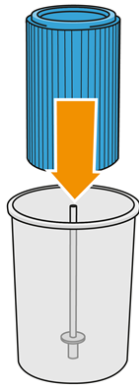
5. Remove the filter and dispose of it according to local regulations.



6. Clean the inside of the container with an explosion-protected vacuum cleaner.



7. Insert the new filter between the container and the central tube, with the closed end at the top and the open end at the bottom.



8. Rotate the container anti-clockwise.

**⚠ CAUTION:** Be careful with the sensor. Damage to the sensors can cause a sieve malfunction.




9. **IMPORTANT:** Tighten the knob to lock the container and filter.
10. Close the door.

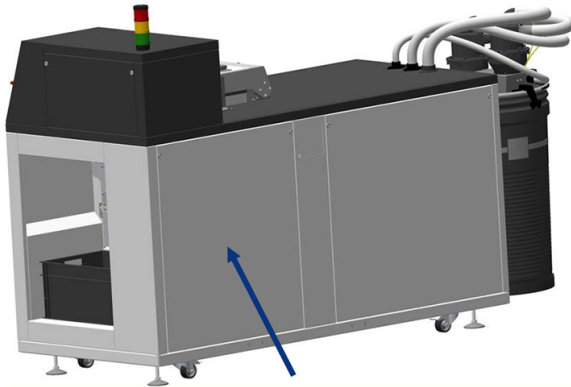
## Replace the e-cabinet fan filters

Unclip the covers and replace the filters.

Table 7-16 Advisory labels

Wear gloves	Explosion-proof vacuum cleaner	No open flames close to equipment	Risk of cutting your fingers	Crush hazard	Hazardous moving part
					
For more safety information, see <a href="#">Safety precautions on page 3</a>					

1. Tap the **Maintenance** icon  on the front panel, select the filter, and tap **Replace**.
2. Remove the pneumatic-system door.



3. Locate the two filters on the left side, at the top and bottom.



4. Unclip each cover and replace each filter.
5. Clip each cover back into place.
6. Put back the pneumatic-system door.

---

## 8 Ordering information

This chapter lists the available accessories, and their part numbers, at the time of writing.

Contact your service representative and check that what you want is available in your area and for your model.

**Table 8-1** Ordering information

Part number	Name
2M7W6A	HP Jet Fusion 5200 Series 3D Automatic External Tank
4QG10A	HP Jet Fusion 5200 3D Natural Cooling Unit
8VJ68A	HP Jet Fusion 5200/4200 Series 3D Vacuum Pump Filter
2X0E1A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station E-cabinet Fan Filter
2X0E2A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station Pneumatic Filter
2X0E3A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station Top Lid Filter

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## 9 When you need help

This chapter provides guidance regarding support requests, customer self-repair procedures, service information, and how to obtain the diagnostic package.

### Request support

Support is provided by your service representative: usually from the company from which you bought the product.

If this is not the case, contact HP Support on the Web:

<http://www.hp.com/go/jetfusion3D5200AutomaticUnpackingStation/support/>

Before calling your service representative, prepare for the call as follows:

- Review the troubleshooting suggestions in this guide.
- Review your software documentation, if relevant.
- Check that you have the following information ready:
  - The product and serial numbers of the unpacking station you are using
  - The error code displayed on the front panel, if any
  - The name and version number of your software
  - If you have a print-quality problem, the name and product number of the material that you were using

### Customer Self-Repair

HP's Customer Self-Repair program offers our customers the fastest service under either warranty or contract. It enables HP to ship replacement parts directly to you (the end user) so that you can replace them. Using this program, you can replace parts at your own convenience.

#### Convenient and easy to use

- Your service representative will diagnose and assess whether a replacement part is required to address a defective hardware component.

For more information about Customer Self-Repair, see the HP website at

<http://www.hp.com/go/selfrepair/>.

### Service information

The Command Center can produce, on request, a list of many aspects of your product's current status, some of which may be useful to a service engineer trying to fix a problem.



# Obtaining the diagnostic package

HP's Automatic Unpacking Station (AUS) keeps an internal log of its own actions. When a system error occurs, the diagnostic package may help to find the cause and the solution. By default, whenever it restarts, the AUS deletes the current log and starts a new one, in order to avoid using a lot of hard disk space.

There are two ways of retrieving the information:

- From the front panel with a USB flash drive
- From the HP SmartStream 3D Command Center

When the information has been obtained, it should be attached to the escalation.

## Front panel USB method

This method works only with a standard USB flash drive (without a flash drive, use the Command center method). The USB method has the advantage of working with very minimal machine functionality: just the AUS OS and the USB connection. It can work without connectivity and the front panel.

1. Take a standard USB flash drive, formatted as FAT32.
2. Create an empty file in the USB flash drive (right-click, **New > Text Document**) and name it **pdipu\_enable\_sessionsX.log** (where X is the number of sessions to be retrieved, e.g: pdipu\_enable\_sessions10.log will retrieve the last 10 sessions). These sessions will be encrypted.
3. Insert the USB in the slot available behind the left front door of the AUS.
4. HP's Automatic Unpacking Station (AUS) might require up to 10 min to load all the sessions onto the USB. These sessions will be encrypted and will require HP's intervention to retrieve the logs containing the information.

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# Index

- A**
  - administrator password 15
  - alerts 15
- B**
  - build chamber, check 42
- C**
  - cautions 10
  - Command Center 16
  - CSR 60
  - customer self-repair 60
- D**
  - documentation 1
- E**
  - e-cabinet fan filters, replace 57
  - electric cylinder, check 44
  - emergency stop button 12
  - exterior, clean 39
- F**
  - filter life, check 35
  - front panel 14
  - front panel option
    - unit selection 15
  - front-panel options
    - date and time options 15
- H**
  - help 60
  - hostname 22
- L**
  - labels, warning 10
- M**
  - maintenance 33
    - kits 34
    - tools 35
    - unpacking station 38
  - maintenance schedule 38
  - manuals 1
  - material hoses, check 50
- N**
  - networking 21
- O**
  - obtaining the diagnostic package 61
  - options, system 15
  - order accessories 59
- P**
  - part numbers 59
  - password
    - administrator 15
  - platform, clean below 45
  - pneumatic filter, replace 53
  - pneumatic system, check 50
  - power on/off 19
- S**
  - safety labels 10
  - service information 60
  - SmartStream 3D
    - Command Center 16
  - software 16
  - status center 15
  - support 60
  - system options 15
- T**
  - top-lid clamp, check 42
  - top-lid filter, replace 52
  - top-lid seal, check 41
  - turn on 19
- U**
  - unloading door clamps, check 49
  - unloading door, check 48
  - unpacking 23
  - unpacking profile
    - default 29
    - modify 29
  - unpacking station
    - components 13
  - unpacking-station
    - maintenance 38
- V**
  - vacuum-pump filter, replace 55
- W**
  - warning labels 10
  - warnings 10