



# HP Designjet 3D Removal System

## User Guide

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HP shall not be liable for technical or editorial errors or omissions contained herein.

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# 1 Introduction

This manual provides the user with operating information on the HP Designjet 3D Removal System.

## How to use this guide

This User Guide is laid out in easy to follow sections which cover Set-up, Operation, Maintenance, and Troubleshooting. Read each section carefully so that you will get the best performance from your HP Designjet 3D Removal System.

## Learn more!

An electronic User Guide is available for the HP Designjet 3D Removal System. This guide provides information on the following topics:

- Troubleshooting information
- Important safety notices and regulatory information
- Information about the cleaning agent
- Detailed user instructions
- You can also find more information at HP's support website.
- You can also find legal and warranty information at the HP customer web site (<http://www.hp.com/go/3dprinter/knowledgecenter/>).

## Safety information

The following precautions ensure the proper use of the HP Designjet 3D Removal System and prevent the system from being damaged. Follow these precautions at all times.

- To avoid the risk of falling, the system must be placed on a flat and stable surface able to support 36 kg (80 lbs.).
- Use the power supply voltage specified on the nameplate. Avoid overloading the electrical outlet with multiple devices.
- Ensure the system is well-grounded. Failure to ground the system may result in electrical shock, fire and susceptibility to electromagnetic interference.
- Use only the power cord supplied. Do not damage, cut or repair the power cord. A damaged power cord has risk of fire and electric shock. Replace a damaged power cord with an approved power cord.
- Do not allow metal or liquids to touch the internal parts of the system. Doing so may cause damage, fire, electric shock or other serious hazards.
- Power off the system and disconnect the power cord from the power outlet in any of the following cases:
  - If there is smoke or an unusual smell coming from the system.
  - If the system is making an unusual noise not heard during normal operation.
  - A piece of metal or a liquid touches the internal parts of the system.
  - During an electrical (thunder/lightning) storm.
  - During a power failure.

## 2 Overview

The HP Designjet 3D Removal System is specifically developed to provide efficient removal of support material from models built with HP Designjet 3D printers.

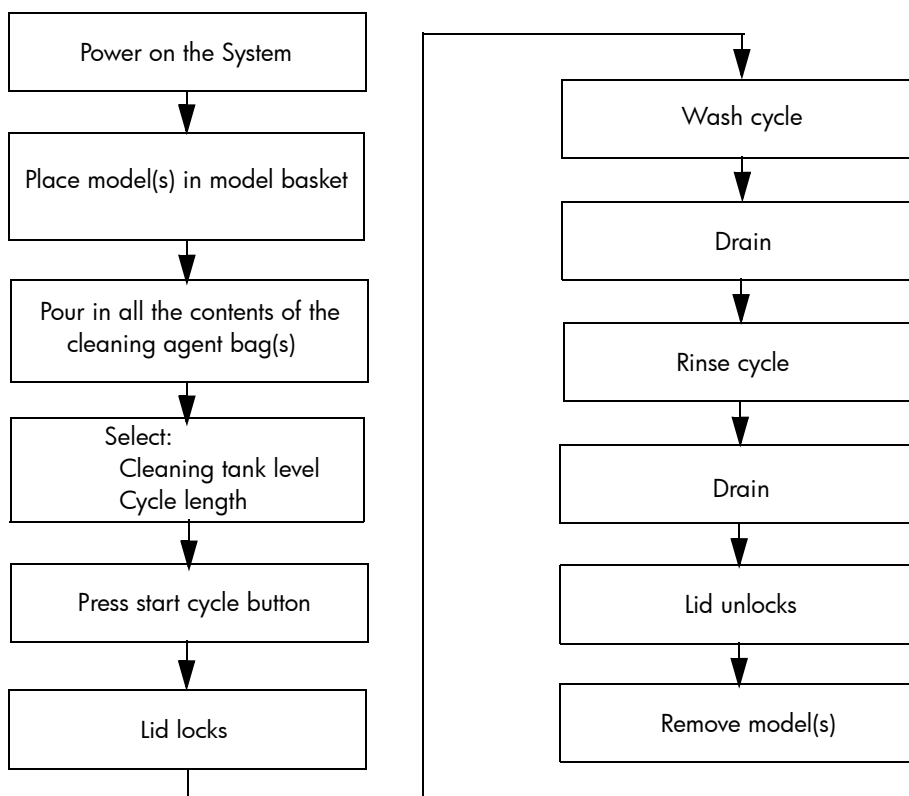
### How it works

The system removes support material by immersing models in a bath of water with a specific amount of cleaning agent bags added to the cleaning agent receptacle. The system heats and circulates solution around the models in the cleaning tank. The solution dissolves the support material without harming the underlying model material. Over time, depending on geometry and the amount of support material, all the support material is dissolved and the models are ready to be removed, dried and used for their intended purpose.

The system incorporates the following functions:

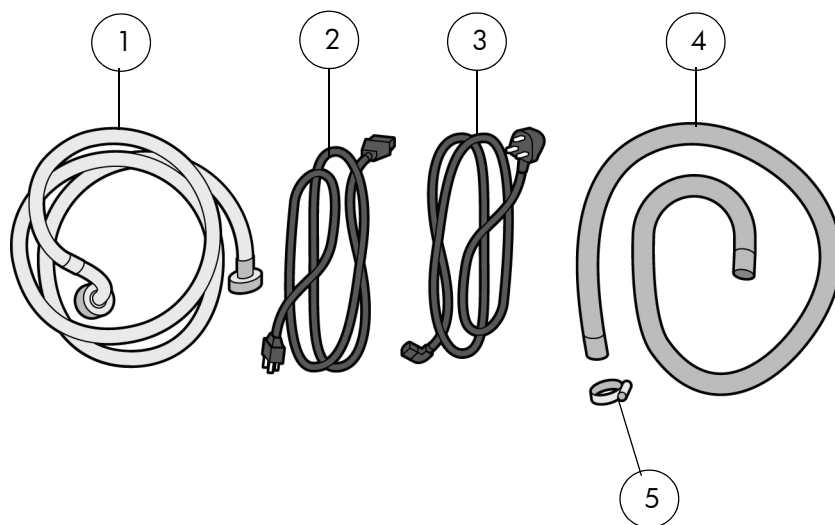
- Automatic water fill
- User selectable cleaning tank level (half or full)
- Automatic water drain
- Automatic timing device for user selectable short, medium, or long cycles
- Automatic lock/unlock before and after cycling
- Automatic rinse and drain cycle

**Figure 1 Sequence of Operation**



## Startup kit contents

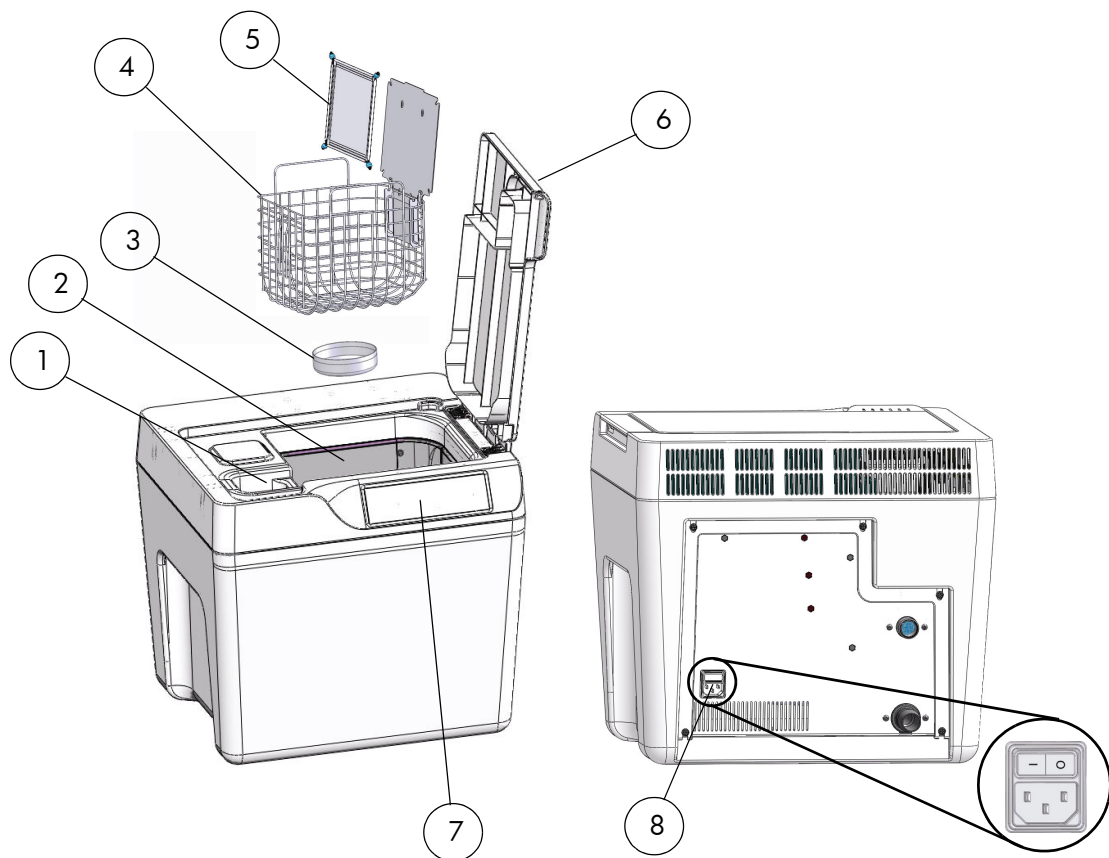
Figure 2 Startup Kit Contents



- 1 Inlet hose - 1.52 m (5 ft.)
- 2 Power cord Euro - 1.52 m (5 ft.)
- 3 Power cord UK - 1.52 m (5 ft.)
- 4 Drain hose - 1.52 m (5 ft.)
- 5 Hose clamp

## Major components

Figure 3 Major components

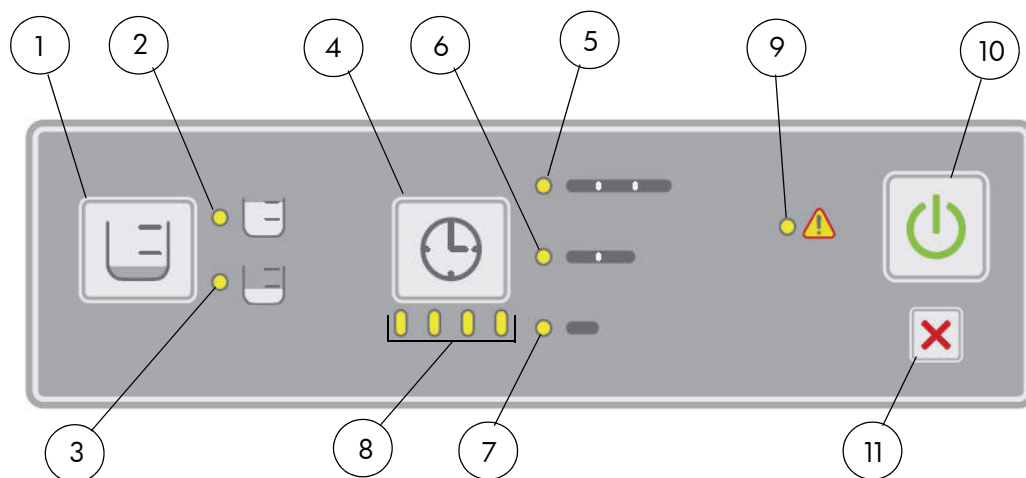


- 1 Cleaning Agent Receptacle
- 2 Cleaning Tank
- 3 Strainer
- 4 Model Basket
- 5 Model Bag
- 6 Lid
- 7 Control Panel
- 8 On/Off Switch and Power Cord Receptacle



## Control panel

Figure 4 Control Panel



- 1 Cleaning tank level button
- 2 Full cleaning tank level LED
- 3 Half cleaning tank level LED
- 4 Cycle length button
- 5 Long cycle length LED.
- 6 Medium cycle length LED.
- 7 Short cycle length LED.
- 8 Progress LEDs
- 9 Process error LED
- 10 Start cycle button
- 11 Cancel button

## 3 Setup

### Connecting the system

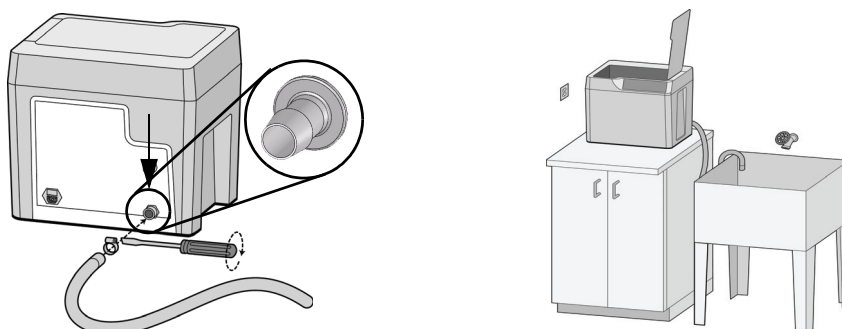
Make sure the following preparations of the physical site are met:

- The system must be placed on a flat and stable surface able to support 36 kg (80 lbs.) to avoid the risk of falling.
- The work area for unpacking the system should be 76.2 cm (30 in.) high, 76.39 cm (28.5 in.) wide and 69.95 cm (27 in.) deep.
- The system must be located at least 20 cm (8 in.) higher than the wastewater drain.
- The drain facility must accept a drain pH level between 6.5 and 10.0.
- The drain must accept a wastewater temperature of at least 75°C (167°F).
- The water source connection must have a 3/4 in. hose thread.
- The water source temperature must be  $\geq 15^{\circ}\text{C}$  (59°F).  
A hot water connection is highly recommended to speed up heating, but is not required.
- The water pressure must be between 0.5 bars and 10 bars (7.25 psi and 145 psi).
- The water source hardness should be  $\leq 300$  ppm.
- The grounded electrical outlet (220–240V~ 9A 50 Hz 1200W) must connect to either a Euro or a UK power cord plug provided and must be located within 2 m (5 ft.) of the system.
- The operating environmental temperature must be between 15°C to 30°C (59°F to 86°F).
- The operating environmental humidity must be between 20% to 80%, non condensing.
- Consult your area's requirements regarding the disposal of the HP Designjet 3D Removal System effluent prior to use. A permit or form of pre-treatment may be required in your area.

### Connect the drain hose

Make sure the drain hose is attached by pushing the end of the drain hose onto the barbed connection on the back panel of the system. Secure the hose with the hose clamp using a flat bladed screwdriver. Route the free end of the drain hose to the wastewater location. Make sure the system is at least 20 cm (8 in.) above the drain hose discharge and there are no kinks in the hose. The system relies on gravity to drain the wastewater from the cleaning tank.

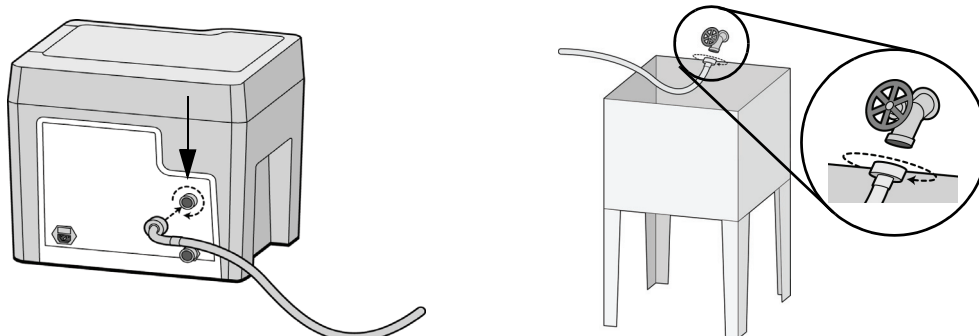
**Figure 5** Drain hose connections



## Connect the water hose

Screw on the end of the water supply hose to the back panel of the system. Securely tighten the fitting clockwise. Turn on the water and make sure there are no leaks.

**Figure 6** Water hose connections



## Plug in the system

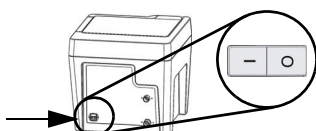
Securely plug one end of the supplied power cord into the receptacle at the back of the system and the other end of the power cord into a grounded receptacle. Only use the power cord provided.

## 4 Operation

### Cleaning Models

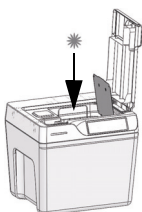
#### Power on the system

Power on the system using the On/Off switch above the power cord receptacle on the back of the system.



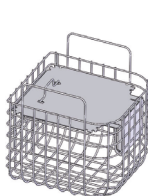
#### Add models

All models must be placed in the model basket and the model lid adjusted.

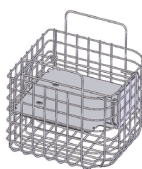
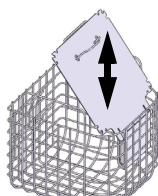


The model basket lid ensures the models remain submerged during the cleaning process. The lid can be adjusted to two heights.

- Use the upper lid position for larger models  $> 8.89$  cm (3.5 in.).
- Use the lower lid position for smaller size models  $\leq 8.89$  cm (3.5 in.).
- Many models may be cleaned at one time as long as they are submerged during the cleaning process with the model basket lid in either position.



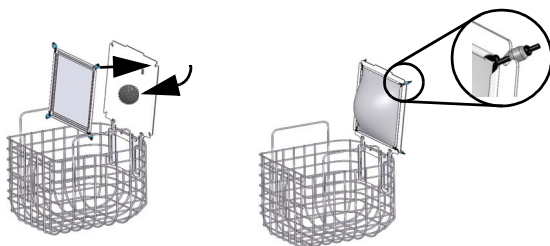
Upper Lid Position



Lower Lid Position

Delicate and flat models should be placed in the model bag on the model basket lid. When using the model bag, always select the lower lid position and do not add other models to the model basket.

- Delicate models have features with a cross sectional areas under 19 sq. mm (0.03 sq. in.).
- Flat models have large flat areas that are greater than 64 mm x 64 mm (2.5 in x 2.5 in) and less than 3 mm (1/8 in) thick).



## Cleaning tank level

Based on the model lid position, select either a full (upper lid position) or half (lower lid position) cleaning tank level by pressing the cleaning tank level button. A full cleaning tank level is approximately 15.14 L (4 gals.) and a half cleaning tank level is approximately 7.57 L (2 gals.).



## Cleaning agent bag(s)

Select the number of cleaning agent bag(s) to be used based on [Table 1](#) below.

**Table 1** Cleaning Tank Level and Cleaning Agent Bags

Cleaning Tank Level	Cleaning Agent Bag
Half cleaning tank level	1 cleaning agent bag
Full cleaning tank level	2 cleaning agent bags

**NOTE:** Do not use more than the specified amount of cleaning agent bags. Doing so will exceed pH levels for wastewater disposal.

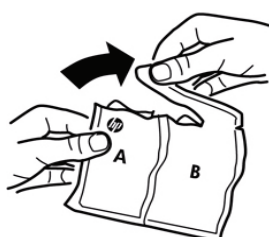
## Add cleaning agent bag

Follow the instructions below for adding the contents of the cleaning agent bag(s) to the cleaning agent receptacle.

1. Dry hands before opening the cleaning agent bag.



2. Open the cleaning agent bag as shown.



3. Empty all the contents of the specified number of cleaning agent bag into the cleaning agent receptacle as directed (see [Table 1](#)).

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**NOTE:** Do not use more than the specified amount of cleaning agent bags. Doing so will exceed pH levels for wastewater disposal.

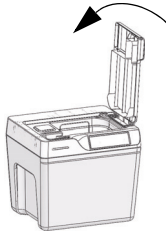
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4. Avoid handling the contents of the cleaning agent bag.

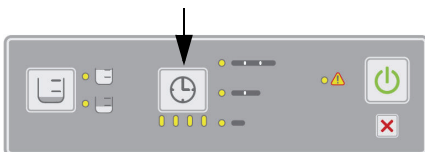


After adding all the contents of the cleaning agent bag(s), properly dispose of bag(s) and close the system lid.



## Cycle Length

Select one of the three cycle lengths by pressing the cycle length button.



Each press of the cycle length button increases from a short cycle to a medium cycle or to a long cycle length. Pressing the cycle length button once more returns to the short cycle length.

Table 2 should also be used as a general guideline for selecting cycle lengths for most models. There are some factors that cause the support removal process to take longer such as model geometry, small support filled crevices, small blind holes, or low water temperature coming into the system.

**Table 2 Cycle Length Settings**

Combined Build Times	Cycle Selection	Approximate Cycle Times
≤ 4 hrs.	Short	3 hrs.
4 to 12 hrs.	Medium	6 hrs.
> 12 hrs.	Long	12 hrs.

**NOTE:** When placing more than one model in the same cleaning cycle, use the combined build times of all the models to determine the correct cycle length setting. Combined build time means the sum of the individual build times of each model put into the model basket.

## Start cycle

When the proper cleaning tank level and cycle length are set, press the start cycle button. The system locks the lid and begins the process of filling the cleaning tank, heating the solution, and starts the cleaning of models inside the cleaning tank.



After the initial cleaning of the models, the system drains and then refills with clean water for a final rinse and drain cycle. When the cleaning cycle completes, the left-hand progress LED will turn from yellow to green and the lid unlocks.

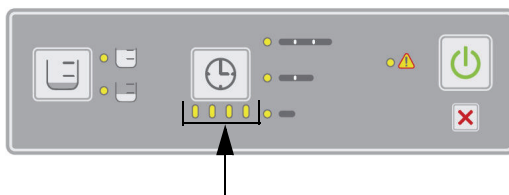
## Remove the models

Let the solution drain off of the models for a few minutes then remove the models, wash off any remaining solution and dry with a clean cloth or paper towel.

## Other information

### Progress LEDs

When the cleaning cycle is started, all the progress LEDs are illuminated in yellow. Each progress LED from right to left will turn off as the cycle time progresses. When the cleaning cycle is complete, the left-hand progress LED will turn from yellow to green.



Cycle complete

 A small diagram showing four LEDs. The first LED on the left is green, and the other three are yellow. This indicates the cycle is complete.

## Canceling the cleaning cycle

To cancel the cleaning cycle at anytime, press the cancel button on the control panel. The system will stop and drain the cleaning tank. Before the system completely turns off, the cleaning tank may refill with water for a final rinse (depending on where the system is in the cleaning cycle) and then drains again. After the cleaning tank has drained, the lid unlocks so the model basket can be removed. The drained solution cannot be reused. Models may not be fully cleaned if you cancel the operation.



## Process error LED

A flashing yellow process error LED indicates a warning. See [“Troubleshooting” on page 14](#) for details.

A red process error LED indicates that the system is experiencing a system error. See [“Troubleshooting” on page 14](#) for details.



## Turning the system off

Once the cleaning cycle is complete and the models have been removed, the system should be turned off by toggling the power switch on the back panel to the OFF position. If the system is not going to be used for an extended period of time, remove all models from the model basket, make sure the system is completely dry, and the power cord is disconnected from the power cord receptacle.



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## 5 Maintenance

### Inspecting and cleaning the strainer

The strainer at the bottom of the cleaning tank should be cleaned before every use of the system to maintain optimal system performance. Remove the strainer from the cleaning tank and rinse under water until the strainer is clean. Place the strainer back in the cleaning tank after cleaning.

### Cleaning

The system should be cleaned once a month or sooner as needed. Clean the exterior and the interior of the cleaning tank with mild soap and water using a sponge or cloth only. Hard to remove residue can be cleaned with isopropyl alcohol. Never immerse the system or use a spray nozzle or hose to clean it. Any liquid in the electronics area behind the back panel of the system may damage the system and void the warranty.

### Model bag

The model bag should be replaced after 40 cycles. Replace the bag if the elastic cord starts to droop or the bag shows signs of wear.

## 6 Troubleshooting



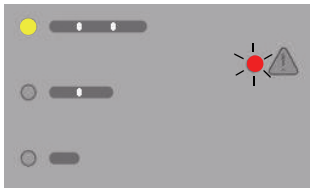
In the presence of unusual electromagnet phenomena, such as strong electromagnetic fields or severe electrical disturbances, the system might behave strangely, or even stop working. In this case, turn off the system, wait until the electromagnetic environment has returned to normal and then turn it on again. If you still experience problems, call Customer Service.

The HP Designjet 3D Removal System has been designed to allow the end user to resolve most operating problems. When a problem is encountered, read through this troubleshooting section. If a resolution is not found here, contact Customer Service.

### Troubleshooting

**Table 3 Troubleshooting**

Problem	Recommendation
No power	Verify that the power cord is securely plugged in.
	Verify that the power switch is in the ON position.
	Verify that AC power is present at the power outlet.
Water has not fully drained from the cleaning tank	Verify that the strainer and cleaning tank drain are not clogged.
	Verify that the drain hose is not clogged.
	Verify that there are no kinks in the drain hoses.
	Make sure the system is at least 20 cm (8 in.) above the drain hose discharge.
	Make sure that no section of the drain hose is higher than the system discharge.
	Verify that the power cord is securely plugged in.
	Verify that the power switch is in the ON position.
	Verify that AC power is present at the power outlet.

Problem	Recommendation
Models not clean	<p>Make sure all the contents of the specified number of cleaning agent bag(s) is used.</p> <p>Make sure the correct cleaning tank level is selected.</p> <p>Make sure the correct cycle length is selected.</p> <p>Repeat the cleaning cycle.</p> <p>Make sure the model basket is used to submerge models in the cleaning solution and the correct lid position is selected.</p>
The system is leaking	Verify that the inlet and drain hose connections are tight.
Yellow flashing process error LED	<p>Make sure the system lid is fully closed.</p> <p>If recovering from a power loss, press the cancel button.</p>
Red flashing process error LED with cycle length LEDs shown:	<p>Verify that the water is fully turned on.</p> <p>Power cycle the ON/Off switch at the back of the system to reset. Call Customer Service if the problem persists.</p>
	Verify that the drain hose is not clogged.
	Verify that there are no kinks in the drain hoses.
	Make sure the system is at least 20 cm (8 in.) above the drain hose discharge.
	Make sure that no section of the drain hose is higher than the system discharge.
Red flashing process error LED with cycle length LEDs other than shown above.	Power cycle the ON/Off switch at the back of the system to reset. Call Customer Service if the problem persists.

# 7 Support

## Introduction

HP Customer Care offers award-winning support to ensure you get the most from your HP Designjet Removal System, providing comprehensive, proven support expertise and new technologies to give you unique end-to-end support. Services include setup and installation, troubleshooting tools, warranty upgrades, repair and exchange services, phone and Web support, and self-maintenance services. To find out more about HP Customer Care, please visit us at:

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

or call us on the telephone, “Contact HP Support” on page 17.

To register your warranty:

<http://register.hp.com/>

## HP Professional Services

### Knowledge Center

Enjoy a world of dedicated services and resources to ensure you always get the best performance from your HP Designjet 3D products and solutions.

Join the HP community at the Knowledge Center for 24x7 access to:

- Multimedia tutorials.
- Step-by-step how-to guides.
- Technical support - online troubleshooting, customer care contacts and more.
- Workflows and detailed advice for completing various printing tasks from particular software applications.
- Forums for direct contact with the experts, both HP and your colleagues.
- Warranty tracking online, for your peace of mind.
- Latest product information - supplies, accessories, etc.
- Supplies Center for all you need to know about material.

The Knowledge Center can be found at the following locations, depending on your system:

- <http://www.hp.com/go/3dprinter/knowledgecenter/>.

By customizing your registration for the products you have purchased and your type of business, and by setting your communication preferences, you decide the information you need.

## HP Care Packs and Warranty Extensions

HP Care Packs and Warranty Extensions allow you to extend your system's warranty beyond the standard period.

They include remote support. On-site service is also provided if necessary, with two alternative response-time options.

- Next business day.
- Same business day, within four hours (may not be available in all countries).

For more information on HP Care Packs, please visit <http://www.hp.com/go/printservices/>.

## HP Installation

The HP Installation service unpacks, sets up and connects the system for you.

This is one of the HP Care Pack services; for more information, please visit <http://www.hp.com/go/printservices/>.

## Contact HP Support

HP Support is available to you by telephone. What to do before you call:

- Review the troubleshooting suggestions in this guide.
- If you call one of the Hewlett-Packard offices, please have the following information available to help us answer your questions more quickly:
  - The HP Designjet 3D Removal System you are using (the product number and the serial number, found on the label at the back of the system).

## Telephone number

Your HP Support telephone number is available on the Web: please visit <http://welcome.hp.com/>

## 8 System Specifications

### Physical specifications

Height	43.85 cm (17.25 in.)
Width	48.33 cm (18.24 in.)
Depth	43.18 cm (17.00 in.)
Weight	16.40 kg (36 lbs.)

### Facility specifications

Installation Location	Stable level surface capable of holding 36 kg (80 lbs.)
Power Requirements	A grounded electrical outlet (220–240V~ 9A 50 Hz 1200W) located within 2 M (5 ft.) of the system. Do not use an extension cord or a power strip, using these can possibly cause intermittent power issues.
Drain Requirements	The system must be located at least 20 cm (8 in.) higher than the wastewater drain. The drain facility must accept a drain pH level between 6.5 and 10.0. The drain must accept a wastewater temperature of at least 75°C (167°F).
Water Requirements	A connection to a water source with a 3/4 in. hose thread. The water source temperature should be $\geq 15^{\circ}\text{C}$ (59°F). The water pressure must be between 0.5 bars and 10 bars (7.25 psi and 145 psi). The water source hardness should be $\leq 300$ ppm.

### Power specifications

Source (nominal)	220–240V~ 9A 50 Hz 1200W
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### Ecological specifications

This product complies with European Union WEEE and RoHS Directives.

For the up-to-date ecological specifications of your HP Designjet 3D Removal System, please go to <http://www.hp.com/> and search for “ecological specifications”.

## Environmental specifications

Temperature range	15°C to 30°C (59°F to 86°F)
Relative humidity range	20% to 80%
Heat emission	2500 BTU/hr typical

## Acoustic specifications

Operating sound pressure at bystander	60 dB (A)
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## 9 Supplemental Information

### HP Designjet 3D Removal System

#### HP Limited Warranty Statement

HP Product	Limited Warranty Period
HP Designjet 3D Removal System	1 year

##### A. Extent of HP Limited Warranty

1. HP warrants to you, end-user customer, that the HP hardware products, accessories and supplies specified above will be free from defects in materials and workmanship under normal usage during the Limited Warranty Period specified above. The Limited Warranty Period starts on the date of purchase by you. Your dated sales or delivery receipt, showing the date of purchase of the product, is your proof of purchase date. You may be required to provide proof of purchase as a condition of receiving warranty service.
2. For software products, HP's Limited Warranty applies only to a failure to execute programming instructions for the Limited Warranty Period specified above, due to defects in material, and workmanship when properly installed and used on the device designated by HP. HP further warrants that HP owned standard software will substantially conform to specifications. HP does not warrant that software will operate in hardware and software combinations selected by you, or meet requirements specified by you.
3. HP does not warrant that the operation of any product will be uninterrupted or error free.
4. HP's Limited Warranty covers only those defects that arise as a result of normal use of the HP products, and does not cover any other problems, including those that arise as result of:
  - a. Improper or inadequate maintenance or calibration;
  - b. Accessories, software, interfacing, paper, parts, ink or supplies not provided or supported by HP;
  - c. Operation outside the product's specifications;
  - d. Improper site preparation or maintenance; or
  - e. Unauthorized modification or misuse.

Routine system maintenance operations in the HP Designjet 3D Removal System, such as cleaning and preventive maintenance services (including parts contained in any preventive maintenance kit and HP service engineer visits), are not covered by HP's Limited Warranty.

5. For HP Designjet 3D Removal System, the use of a refilled or non-original HP consumable product (cleaning agent bag) does not affect either HP's Limited Warranty to you or any HP support contract with you. However, if the system failure or damage is attributable to the use of a non-HP consumable product, HP will charge its standard time and materials charges to service the system for the particular failure or damage.
6. If HP or a HP authorized service provider receives, during the applicable warranty period, notice of a defect in any product covered by this HP's Limited Warranty, HP shall, at its option, either repair or replace the defective product which proves to be defective.



- 7. Customer self-repair warranty service.** HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.

- 8.** Should HP elect to replace or repair the defective product or part onsite, such products will be serviced at the end-user customer's facility at no charge only within designated local service travel areas. Outside designated local service travel areas, warranty services will be performed at the end-user customer's facility only upon prior agreement; you may be required to pay travel expenses and other applicable expenses for such services. Contact your local HP authorized service provider for details on local travel areas.
- 9.** You will make all reasonable efforts to support and cooperate with HP or a HP authorized service provider in resolving the problem remotely, for example, starting and executing self tests or diagnostic programs, providing all necessary information, or performing basic remedial activities upon HP's or a HP authorized service provider request.
- 10.** If HP is unable to repair or replace, as applicable, a defective product which is covered by this Limited Warranty, HP shall, within a reasonable time after being notified of the defect, refund the residual value of the product. The residual value will be the purchase price paid to HP or HP Authorized Reseller minus depreciation and amortization.
- 11.** HP shall have no obligation to replace or refund until you return the defective components, parts, supplies or hardware product to HP, including its associated documentation. All components, parts, supplies or hardware products, removed under this Limited Warranty become the property of HP. Notwithstanding the above mentioned, HP may waive the requirement for you to return the defective product.
- 12.** Unless otherwise stated, and to the extent permitted by local law, HP products may be manufactured using new materials or new and used materials equivalent to new in performance and reliability. HP may repair or replace products (i) with equivalent products to the products being repaired or replaced but which may have been subject to prior use; or (ii) with an equivalent product to an original product that has been discontinued.
- 13.** This Limited Warranty is valid in any country/region where HP or its authorized providers offer warranty services and HP has marketed the HP product covered by this Limited Warranty. However, warranty service availability and response time may vary from country/region to country/region. HP will not alter form, fit, or function of the product to make it operate in a country for which it was never intended to function for legal or regulatory reasons. This HP Limited Warranty is subject to all applicable laws and regulations including US and other national export and import laws and regulations.
- 14.** Contracts for additional services may be available for any authorized HP service facility where the listed HP product is distributed by HP or an authorized importer.

15. You are responsible for the security of your proprietary and confidential information and for maintaining a procedure external to the system for reconstruction of lost, or altered files, data, or programs. HP IS NOT RESPONSIBLE FOR DAMAGE TO OR LOSS OF ANY FILES, STORED BY YOU ON THE SYSTEM'S HARD DISK OR OTHER STORAGE DEVICES. HP IS NOT RESPONSIBLE FOR THE RECOVERY OF LOST FILES OR DATA.

**B. Limitation of warranty**

TO THE EXTENT ALLOWED BY LOCAL LAW, NEITHER HP NOR ITS THIRD PARTY SUPPLIERS MAKE ANY OTHER WARRANTY OR CONDITION OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

**C. Limitations of liability**

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS LIMITED WARRANTY ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR LOST OF DATA, DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING ANY LOSS OF PROFITS OR SAVINGS), WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

**D. Local law**

1. This Limited Warranty gives you specific legal rights. You may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world. You are advised to consult applicable state, province, or national laws for full determination of your rights.
2. To the extent that this Warranty Statement is inconsistent with local law, this Warranty Statement shall be deemed modified to be consistent with such local law. THE WARRANTY TERMS CONTAINED IN THIS LIMITED WARRANTY, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT, OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Rev. 05/09

## Declaration of conformity

According to ISO/IEC 17050-1 and EN 17050-1


Declaration of conformity number	BCLAA-0904
Supplier's name:	Hewlett-Packard Company
Supplier's address:	Cami de Can Grasells, 1-21 08174 Sant Cugat del Vallès Barcelona, Spain

declares that the product

Product name and model:	HP Designjet 3D Removal System
Regulatory Model Number(1):	BCLAA-0904
Product options:	All

conforms to the following product specifications

Safety:	IEC 61010-1:2001 (2nd Edition)/ EN 61010-1:2001 CAN/CSA-C22.2 No. 61010-1-04 /UL 61010-1:2004 (2nd Edition)
EMC:	EN 61000-6-4:2007 / IEC 61000-6-4:2006 EN 61000-3-2:2006 / IEC 61000-3-2:2005 EN 61000-3-3:1995 + A1:2001 / IEC 61000-3-3:1994 + A1:2001 EN 61000-6-2: 2005/ IEC 61000-6-2:2005 FCC Title 47 CFR, Part 15 Class A

The product herewith complies with the requirements of the Low-Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EEC, the Machinery Directive 2006/42/EC, and carries the  marking accordingly. In addition, it complies with the WEEE Directive 2002/96/EC and RoHS Directive 2002/95/EC.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

### Additional information

The product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports; this number should not be confused with the marketing name or the product numbers.

### Local contacts for regulatory topics only

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

EMEA contact: Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Böblingen, Germany.

USA contact: Hewlett-Packard Company, Corporate Product Regulations Manager, 3000 Hanover Street, Palo Alto, CA 94304, USA. Phone: (650) 857 1501.

# Regulatory and Environmental Information

## Regulatory Model Identification Number

For regulatory identification purposes, your product is assigned a Regulatory Model Number. The Regulatory Model Number for your product is BCLAA-0904. This regulatory number should not be confused with the marketing name (such as HP Designjet 3D Removal System) or product numbers (such as Z####X, where Z and X are any single letter and # is any number).

## EMC Class A Warning



### WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## FCC Statements (U.S.A.)

The U.S. Federal Communications Commission (in 47 cfr 15.105) has specified that the following notices be brought to the attention of users of this product.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Shielded cables:** Use of shielded data cables is required to comply with the Class A limits of Part 15 of the FCC Rules.

Caution: Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by the Hewlett-Packard Company may cause harmful interference and void the FCC authorization to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

## Canada Electromagnetic compatibility (EMC)

### Normes de sécurité (Canada)

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe **A** prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

### DOC statement (Canada)

This digital apparatus does not exceed the Class **A** limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

## Canada Safety Statement



This product has been tested to the requirements of CAN/CSA-C22.2 No. 61010-1, second edition, including Amendment 1, or a later version of the same standard incorporating the same level of testing requirements.

## MSDS (Material Safety Data Sheet)

You can obtain current Material Safety Data Sheets for the HP Designjet 3D Removal Cleaning Agent Bag used in the system by mailing a request to this address: Hewlett-Packard Customer Information Center, 19310 Pruneridge Avenue, Dept. MSDS, Cupertino, CA 95014, U.S.A.

There is also a Web page: <http://www.hp.com/hpinfo/globalcitizenship/environment/products/msds-specs.html>

## Disposal of waste equipment by users in private households in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

## Chemical Substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at:

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

## Eco-Tips

HP is committed to helping customers reduce their environmental footprint. HP has provided the Eco-Tips below to help you focus on ways to assess and reduce the impact of your printing choices. In addition to specific features in this product, please visit the HP Eco Solutions website for more information on HP's environmental initiatives.

<http://www.hp.com/hpinfo/globalcitizenship/environment/>

## Environmental product stewardship program

Hewlett-Packard is committed to providing quality products in an environmentally sound manner. Design for recycling has been incorporated into this product. The number of materials has been kept to a minimum while ensuring proper functionality and reliability. Dissimilar materials have been designed to separate easily. Fasteners and other connections are easy to locate, access and remove using common tools. High priority parts have been designed to access quickly for efficient disassembly and repair. For more information, visit HP's Commitment to the Environment website at:

<http://www.hp.com/hpinfo/globalcitizenship/environment/>

## Recycling Program

HP offers an increasing number of product return and recycling programs in many countries/regions, and partners with some of the largest electronics recycling centers throughout the world. HP conserves resources by reselling some of its most popular products.

For more information regarding recycling of HP products, please visit:

<http://www.hp.com/hpinfo/globalcitizenship/environment/recycle/>

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# Glossary

## Glossary of terms

### Cleaning agent bag

A package containing the chemical substances used to activate dissolving support material from models produced with HP Designjet 3D printers.

### Cycle length

The time required for one complete cleaning cycle. Users may choose between short, medium, or long cycle lengths.

### Model bag

A flexible mesh device used to hold models securely in place within the Model Basket. Used for delicate or flat parts.

### Model basket

An open grid metal container used to hold models during the support removal process. Allows for circulation of water and cleaning agent to facilitate support removal from models produced with HP Designjet 3D printers.

### Strainer

A filter to prevent larger pieces of waste materials from passing into the drain outlet.

### Tank Level/Tank Load

The amount of water added to the HP Designjet 3D Removal System to fully submerge the models being cleaned. Users may choose either Half or Full tank levels.