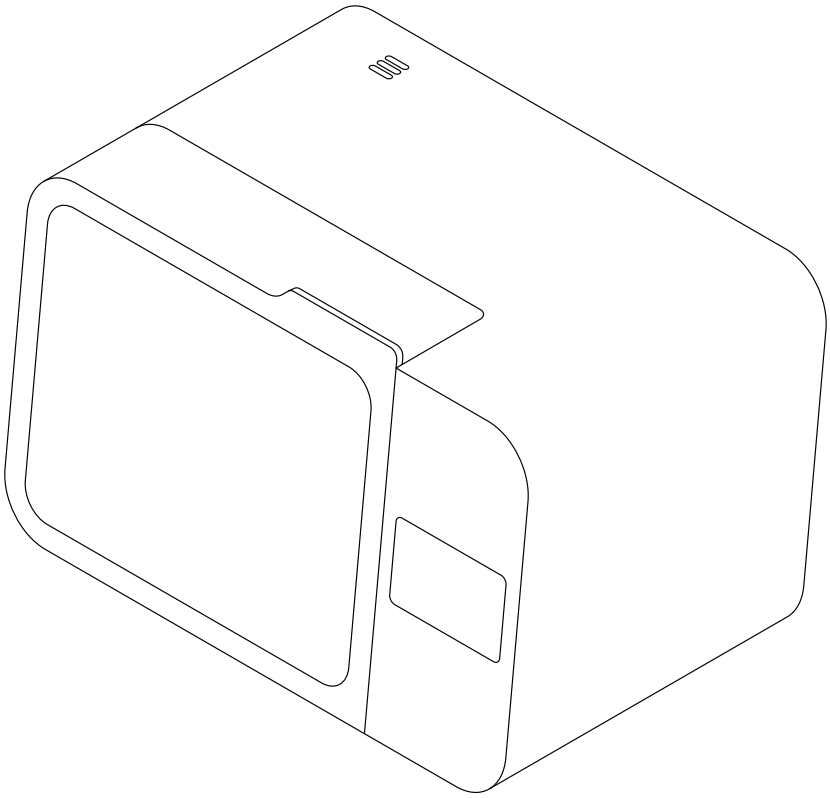
Manual

Stratasys ProLight™
UV Curing Box



stratasys

Installation and Usage Instructions

Stratasys ProLight™ UV Curing Box

Large-format desktop 3D printing post-cure chamber

Original English instructions
Read this manual carefully and keep it for future reference.
September 2024
REV 01

stratasys

1 Table of Contents

Read and understand this manual and its safety instructions before using the Stratasys ProLight. Failure to do so can result in serious injury or death.

DISCLAIMER

Stratasys has made every effort to make these instructions as clear, complete, and correct as possible. The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation, and testing of the products with respect to the relevant specific application or use thereof. Neither Stratasys nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information that is contained herein. Notify us if you have any suggestions for improvements or amendments or have found errors in this publication.

support.stratasys.com/en/Contact-Us

TRADEMARKS

All product names, logos, and brands are property of their respective owners. All company, product, and service names used in this manual are for identification purposes only. Use of these names, logos, or brands does not imply endorsement.

DOCUMENT REVISIONS

Date	Version	Document changes
Sept 2024	REV 01	Initial publication

1 Preface

Congratulations on purchasing the Stratasys ProLight. On behalf of the Stratasys team, we thank you for your purchase.
The Stratasys ProLight is a large-format 3D printing post-cure chamber. Post-curing printed parts in the Stratasys ProLight strengthens them with heat and 450 nm light and brings them to their optimal mechanical properties. Post-curing is also a required step in workflows using Stratasys dental or medical resins to make biocompatible parts.
This manual explains how to set up, use, and properly maintain the Stratasys ProLight and provides design guidance for optimizing print results.
The manual is intended for anyone who is installing, operating, maintaining, or otherwise interacting with the Stratasys ProLight. Supervise young or inexperienced users to ensure enjoyable and safe operation.

1.1 Read and retain instructions

Read and understand this manual and its safety instructions before using the Stratasys ProLight. Failure to do so can result in serious injury or death. Keep all safety information and instructions for future reference and provide them to subsequent users of the product. Follow all instructions to avoid fire, explosions, electric shocks, or other hazards that may result in damage to property and/or severe or fatal injuries. The Stratasys ProLight shall only be used by persons who have fully read and understand the contents of this manual. Ensure that each person who uses the Stratasys ProLight has read these warnings and instructions and follows them. Stratasys is not liable for cases of material damage or personal injury caused by incorrect handling or non-compliance with the safety instructions. In such cases, the warranty will be voided.

1.2 Obtaining documentation and information

Visit **support.stratasys.com/en/Contact-Us** to:

- Access the latest version of all Stratasys product documentation.
- Contact Stratasys support to request documentation, manuals, repair guides, and technical information.
- Submit any comments and positive or negative feedback. We value comments from our customers.
- Request additional training.

1.2.1 Support and service

Retain a record of the original purchase to request warranty services. Service options depend on the status of the specific product's warranty. Include the serial number of the product when contacting Stratasys support or a **support representative** for product support. For products purchased from authorized resellers, contact the original service provider for assistance before contacting Stratasys support at https://support.stratasys.com/en/Contact-Us. The nine-digit serial number is on the back panel of the machine.
Service providers of Stratasys products also provide support and service. To the extent that Stratasys or a support representative offers other or extended warranties, the terms of the separate offer may apply.

For any support or service requests, including product information, technical assistance, or assistance with instructions, contact Stratasys support at https://support.stratasys.com/en/Contact-Us:

1.2.2 Warranty

This product is protected under warranty. Stratasys offers a warranty for all Stratasys-branded hardware. Unless otherwise expressly stated, the **Terms of Service**, including the **Warranty**, constitute the entire agreement between you and Stratasys with respect to the **Service** and any product you purchase from Stratasys and supersedes all prior or contemporaneous communications, proposals, and agreements, whether electronic, oral, or written, between you and Stratasys.

2 Introduction

2.1 Intended use

The Stratasys ProLight post-cures 3D printed parts with a combination of heat and light. The final performance characteristics of cured photopolymer resin may vary according to your compliance with the instructions for use, application, operating conditions, material combined with, end use, or other factors.

NOTICE

In some cases, the additive manufacturing process may inherently result in variable performance characteristics between manufacturing runs or within a specific part. Such variances may not be apparent and may result in unexpected defects in additively fabricated parts.

WARNING

You shall independently verify the suitability of additive manufacturing, the Stratasys ProLight, and any specific designs or materials employed for the application and intended purpose before use. In no event shall Stratasys be liable for any loss, death, or bodily injury that you suffer, or that you cause to any third party, in connection with your use of Stratasys products. To the fullest extent legally permitted Stratasys EXPRESSLY DISCLAIMS ANY IMPLIED OR EXPLICIT WARRANTY OF FITNESS for a particular usage, the particular nature and circumstances of said usage being unforeseen and unforeseeable to Stratasys.

WARNING

The ProLight™ UV Curing Box is not a medical device. The ProLight™ UV Curing Box may be used in many applications, but Stratasys makes no claims as to the safety or effectiveness of any specific uses of the ProLight™ UV Curing Box.

WARNING

Do not modify. The Stratasys ProLight is intended for use as-is. Modifying the machine without explicit approval and directions from Stratasys or a support representative will void your warranty, and could potentially damage the machine and cause bodily harm.

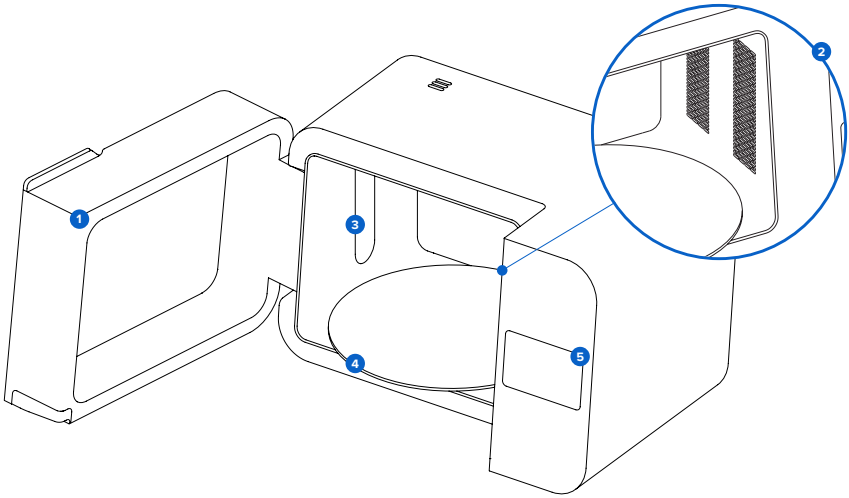
2.2 Technical specifications

Parameter	Unit
Unit	Stratasys ProLight
Installation surface	Benchtop unit
Minimum dimensions for convenient access (W × D × H)	90 × 85 × 55 cm 35.5 × 33.5 × 21.7 in
Product dimensions (W × D × H)	69 × 54 × 44.5 cm 27.2 × 21.3 × 17.5 in
Product weight	24 kg 53 lb
Turntable diameter	39.5 cm 15.6 in
Curing volume	Cylinder 39.5 cm in diameter and 32 cm tall Cylinder 15.6 in in diameter and 12.6 in tall
Operating environment	18–28 ºC 64–82 ºF
Power requirements	**Input (NA):** 100–120 VAC, 50–60 Hz, 15 A max **Input (EU):** 220–240 VAC, 50–60 Hz, 8 A max
Maximum post-cure temperature	80 ºC 176 ºF
Light source	45 multi-directional 450 nm LEDs
UV LED electrical power	70 W
UV LED radiant power (total)	36 W
Connectivity	**Wi-Fi:** 2.4 GHz **Ethernet:** 100 Mbit **USB:** 2.0
Wi-Fi connectivity	**Protocol:** IEEE 802.11 b/g/n **Frequency:** 2.4 GHz **Supported security:** WPA/WPA2
Ethernet connectivity	RJ-45 Ethernet (10BASE-T/100BASE-TX) LAN port Connect with a shielded Ethernet cable (not included): minimum Cat5, or Cat5e or Cat6.
USB connectivity	USB (rev 2.0) B port with a USB A-B cable
Sound emission	Does not exceed 79.5 dB(A).
Unit control	Interactive touchscreen
Alerts	Touchscreen alerts

2.3 Product components

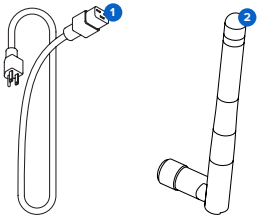
For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

2.3.1 Stratasys ProLight



1. **Door:** Double walls insulate the post-cure chamber and the internal surfaces reflect light.
2. **Heaters:** Two 500 W heating modules heat the post-cure chamber up to 80 °C (176 °F).
3. **LEDs:** An array of 450 nm LEDs help to post-cure parts.
4. **Turntable:** Rotating plate ensures balanced post-curing across all exposed surfaces.
5. **Touchscreen:** The LCD capacitive touch user interface displays post-cure cycle information, settings, and error messages.

2.3.2 Additional package components



1. **Power cable:** Provides power to the Stratasys ProLight.
2. **Wi-Fi antenna:** Allows the machine to connect to a network via Wi-Fi.

2.4 User interface

For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

The Stratasys ProLight display is a touchscreen interface. The touchscreen displays post-cure information (time, temperature, and selected material), settings, and error messages. The touchscreen serves as the user interface for the machine.

The home screen displays the preheating time and temperature, post-cure time and temperature, current resin, device status, and serial number.
The following screens and options are accessible via the home screen on the Stratasys ProLight display:

Settings	Connectivity Update Firmware Connect to Dashboard Onboarding Machine Sounds Turntable Spinning Reboot
Select Preheat Time and Temperature	Select a preheat time and temperature.
Select Post-Curing Time and Temperature	Select a post-curing time and temperature.
Select Resin Version	Select a resin version.
Recently Used	Select or create a custom resin profile.
Start	Start a post-cure cycle.

3 Safety

Read and understand this manual and its safety instructions before using the Form Cure L. Failure to do so can result in serious injury or death.

Supervise young or inexperienced users to ensure enjoyable and safe operation.
These instructions contain warnings and safety information, as explained below:

DANGER indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.

WARNING indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

CAUTION indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

NOTICE indicates information considered important, but not hazard-related.

DANGER: Isopropyl alcohol is a flammable chemical.

ENVIRONMENTAL HAZARD: Uncured photopolymer resin is classified as hazardous to aquatic life.

CAUTION: Do not touch hot surfaces.

MANDATORY ACTION: Refer to instruction manual/booklet.

MANDATORY ACTION: Grounding required.

MANDATORY ACTION: Disconnect before carrying out maintenance or repair.

MANDATORY ACTION: Wear eye protection.

MANDATORY ACTION: Wear thermal-insulating silicone gloves when handling hot build chambers.

3.1 Component and subsystem safety

3.1.1 General

The Stratasys ProLight is a professional appliance that includes electronic components. As

with any such appliance:

- Do not operate the device with a damaged cord or plug.
- Ensure reliable grounding before connecting the device to power.
- Always disconnect power before cleaning.
- Only use well-maintained equipment.
- Operate on a clear and level surface.

Do not touch hot surfaces. The Stratasys ProLight contains two 500 W heaters to help ensure parts are strong after post-curing. While the heater and fan designs limit overheating and the heater is insulated to contain heat, surfaces of the Stratasys ProLight and printed parts may be hot during and after use.

Like any heating appliance, a fire may occur if the Stratasys ProLight maintains extended contact with flammable materials, such as walls or curtains. Keep the Stratasys ProLight away from walls and curtains. Keep the area surrounding the turntable clean, and only post-cure parts that have been completely dried. Accumulation of cured material creates the possibility of malfunction.

The Stratasys ProLight uses heat as well as 450 nm light to post-cure 3D printed parts. The door includes an interlock system that is designed to automatically pause heating and extinguish the cure lights when the door is open.

3.1.2 Resin

Resin and solvents may cause skin irritation or an allergic skin reaction. Wear gloves when handling liquid resin, liquid solvent, or resin-coated surfaces. Wash skin with plenty of soap and water. Do not use alcohol or other solvents to remove resin from skin.

Consult the safety data sheet (SDS) as the primary source of information to understand safety and handling of Stratasys resins. Respect Stratasys resin like any household chemical. Follow standard chemical safety procedures and Stratasys resin handling instructions. In general, Stratasys resin is not approved for use with food, drink, or medical applications on the human body. Refer to the safety data sheet (SDS) for each specific resin as well as **support.stratasys.com/en/Contact-Us** for more detail.

3.1.3 Optical radiation

This equipment has been tested and found to be exempt from classification pursuant to IEC 62471.

3.1.4 Radio interference

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to CFR Title 47, Part 15 of FCC Rules. These limits are designed to provide reasonable

protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, 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.

Changes or modifications to this product not authorized by Stratasys could void the electromagnetic compatibility (EMC) and wireless compliance and negate your authority to operate the product.

This product has demonstrated EMC compliance under conditions that included the use of compliant peripheral devices and shielded cables between system components. It is important that you use compliant peripheral devices and shielded cables between system components to reduce the possibility of causing interference to radios, televisions, and other electronic devices.

3.1.5 Isopropyl alcohol

DANGER

Isopropyl alcohol is a flammable chemical. Keep away from ignition sources, including open flames, sparks or concentrated sources of heat. Allow any printed part cleaned with isopropyl alcohol to dry completely before post-curing.

NOTICE

Stratasys does not manufacture isopropyl alcohol. Consult the chemical manufacturer or supplier for detailed safety information. Carefully follow the safety instructions provided with the isopropyl alcohol that you purchase. Isopropyl alcohol can be flammable, even explosive, and should be kept away from heat, fire, or sparks. Any containers holding isopropyl alcohol should be kept closed or covered when not in use. We also recommend that you wear protective gloves and have good ventilation when working with isopropyl alcohol.

3.1.6 Tripropylene glycol monomethyl ether (TPM)

NOTICE

Stratasys does not manufacture tripropylene glycol monomethyl ether. Consult the chemical manufacturer or supplier for detailed safety information. Carefully follow the safety instructions provided with the tripropylene glycol monomethyl ether you purchase. We also recommend that you wear protective gloves when working with tripropylene glycol monomethyl ether.

3.2 Personal protective equipment (PPE)

Safe operation of the Stratasys ProLight can be achieved by using the following equipment:

- Non-reactive nitrile gloves
- Safety glasses

WARNING

Resin and solvents may cause skin irritation or an allergic skin reaction. Wear gloves when handling liquid resin, liquid solvent, or resin-coated surfaces. Wash skin with plenty of soap and water.

Some methods of support removal may cause small pieces of supports to break away. Beware of flying debris. Wear eye protection and gloves to protect the skin and eyes.

3.3 Specification of tools to be used

The Stratasys ProLight shall only be used with supplied accessories and additional tools recommended by Stratasys or a support representative. Third-party accessories and materials may cause damage. Refer to sections **3.2 Personal protective equipment (PPE)** and **6.1 Tools and supplies for more information**.

Purchase additional supplies:

- Apron
- General purpose cleaner (e.g., glass cleaner)
- Low-fiber paper towels
- Non-reactive nitrile gloves
- Safety glasses
- Shoe covers

3.4 Sensitive components

The Stratasys ProLight has multiple components that are vulnerable to permanent damage if not periodically inspected and properly maintained. Using any tools, cleaning agents, or methods not mentioned in this manual may result in permanent damage to these components.

- LED modules
  The Stratasys ProLight uses three LED modules to expose printed parts to a mix of 450 nm light during post-curing. Refer to section **6.4.2 Maintaining the light diffusers** for more information.
- Heater modules
  The Stratasys ProLight uses two heater modules to heat the post-cure chamber and printed parts during post-curing. Refer to section **8 Disassembly and repair** for more information.
- Turntable
  The Stratasys ProLight uses a glass turntable that rotates throughout the post-cure cycle, ensuring that printed parts are evenly exposed to light and heat. Refer to section **6.3.1 Maintaining the turntable** for more information.

3.5 Emergency and exceptional situations

Stratasys has made every effort to provide updated safety data sheets (SDS) for every resin product, in accordance with the latest government guidelines. Always consult the safety data sheet (SDS) as the primary source of information to understand safety and handling of Stratasys materials and required accessories.

3.5.1 Chemical spills

Prepare for a possible chemical spill of flammable materials, such as isopropyl alcohol. Your spill response procedure should contain the following:

- A listing of personal protective equipment (PPE), safety equipment, and cleanup materials required for spill cleanup and an explanation of their proper use.
- Appropriate evacuation zones and procedures.
- Availability of fire suppression equipment.
- Disposal of containers for spill cleanup materials.
- The first aid procedures that might be required.

3.5.2 Fire

Do not use water to extinguish an electrical fire. Dousing an electrical fire with water increases the risk of electrocution, and may cause the fire to spread by allowing electricity to conduct across additional flammable surfaces.

If a localized fire develops either inside or outside of the machine, immediately take the following actions.

If the fire is inside the device:

1. Immediately disconnect the machine from its power source.
2. If the door of the Stratasys ProLight is open, close its door if possible.
   - If a part inside the Stratasys ProLight is on fire, do not close its door. Place a fire blanket over the unit.
3. Use an ABC fire extinguisher to cover the affected area generously.

If the fire is too large to control:

4. Immediately leave the area and close the door of the room behind you.
5. Evacuate the building according to your organization's emergency protocols.
6. Call emergency services once you have reached a safe distance from the fire.

3.5.3 Isopropyl alcohol (IPA)

When handling isopropyl alcohol, always consult the safety data sheet (SDS) from the isopropyl alcohol supplier as the primary source of information. Handle isopropyl alcohol with gloves in a well-ventilated area. Keep away from heat, sparks, and open flame. Isopropyl alcohol evaporates rapidly, so keep the wash bucket and bottles closed whenever possible.

3.5.4 Resin

Never ingest resin in liquid or solid form. If swallowed, immediately call a poison center or medical professional. Contact Chemtrec at +1 800 424 9300 for global 24-hour emergency assistance.

Promptly clean and inspect the device after a resin spill to minimize any cosmetic or functional damage to the machine. If you have experienced an accidental resin spill, document the problem with photos and clean the device as best as possible. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a

support representative as soon as possible.

4 Preparation and setup

4.1 Location and environs

Prepare a space to install and operate the Stratasys ProLight and house the necessary accessories and consumables.

To prepare the workspace:

- Ensure that the workspace meets the following requirements:
  - Dry, indoor location
  - Maximum altitude of 2000 m (6561.7 ft)
  - Low ambient humidity
  - Mains supply voltage fluctuations ≤ 10%
  - Pollution degree of intended environment: 2
- Operate the device in a well-ventilated room with a temperature of 18–28 °C (64–82 °F).
- Position the device so that it is easy to operate the power switch of the unit.
- Dedicate a power outlet and circuit to the device capable of delivering 1 A of current.

4.2 Power and networking

For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

The Stratasys ProLight requires reliable grounding. The power cable used with the device must be grounded. Do not use an inadequately-rated power cable with the Stratasys ProLight.
Verify that the power cable is suitable for your location. If not, purchase a cable locally.

For remotely monitoring the device, ensure it maintains a constant connection to a secured network. Refer to section **4.6 Setting up a network connection** for more information.

4.3 Unboxing the machine

For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

Prior to unboxing, ensure that the suitable workspace has been prepared according to section **4.1 Location and environs**.

4.3.1 Receiving

Shipping dimensions	Shipping weight	Product dimensions	Product weight
84.8 × 59.2 × 55.2 cm 33.4 × 23.3 × 21.7 in	32 kg 70 lb	69 × 54 × 44.5 cm 27.2 × 21.3 × 17.5 in	24 kg 53 lb

4.3.2 Unboxing

The custom packaging the Stratasys ProLight arrives with is specially designed to protect the machine during shipping. During unboxing, inspect the product for any damage or missing items. In the case of damage or missing items, contact Stratasys support at https://support.

stratasys.com/en/Contact-Us or a support representative.

To unbox the machine:

1. Position the packaging near the designated location, leaving enough room for two people to comfortably maneuver throughout the area. Stand the packaging upright to ensure it is level.
2. Lift the outer cardboard box off of the lower carrier tray.
3. Remove the foam inserts from the top of the machine.
4. Use the provided handles on the carrying slings to lift the machine out of its carrier tray.
5. Carefully move the machine onto its workspace.

If you need to readjust the Stratasys ProLight, use the carrying slings to pick the machine back up. Do not pick up the Stratasys ProLight without the carrying slings.

6. Tilt each side of the machine up slightly to remove the carrying slings.
7. Open the door.
8. Remove the turntable from the upper packing foam. Place the turntable on its mount.
9. Close the door.

Keep the original packaging for transportation or shipping.

4.4 Accessing the serial number

The serial number is a unique identifier used to track the history of manufacturing, sales, and repair. The nine-digit serial number for the Stratasys ProLight is located on the back of the unit.

4.5 Installing the machine

For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems.

After selecting a location, connect the device to a power source and install the Wi-Fi antenna before turning on the device.

4.5.1 Connecting the cables

Plug the included power cable into the power port on the back of the unit and connect the power cable to a dedicated circuit.

For Ethernet, connect the machine to your LAN. Refer to section **4.6 Setting up a network connection** for more information.

4.5.2 Installing the Wi-Fi antenna

Install the Wi-Fi antenna to connect the machine to a wireless network.

To install the Wi-Fi antenna, screw the Wi-Fi antenna onto the jack on the back of the unit.

4.5.3 Turning on

To turn on the machine:

1. Plug the included power cable into the power port on the back of the unit and connect the power cable to a dedicated circuit.
2. Flip the breaker switch on the back of the unit to the **ON** position to turn on the machine.
3. As the Stratasys ProLight initializes, the Stratasys logo with a progress bar appears on the touchscreen, followed by the onboarding process. Follow the on-screen prompts to finish setting up the machine.

To turn off the machine, refer to section **5.5.2 Turning off**.

4.6 Setting up a network connection

Connect the machine to a secure network via Wi-Fi or Ethernet, providing it internet access for remote monitoring and receiving firmware updates. The device can connect directly to a computer with a USB cable.

4.6.1 Connecting with Wi-Fi

The device has built-in Wi-Fi (IEEE 802.11 b/g/n) that supports WPA/WPA2 security. Use the touchscreen to configure a wireless network connection.

To connect with Wi-Fi:

1. Tap the wrench icon on the home screen. The **Settings** screen appears.
2. Tap **Connectivity > Wi-Fi**. The **Wi-Fi** screen appears.
3. Toggle **Use Wi-Fi** to **ON**. The toggle turns blue.
4. Tap the desired wireless network.
5. If prompted, enter your network password and tap the checkmark to confirm.

4.6.2 Connecting with Ethernet

The rear of the unit is equipped with a RJ-45 Ethernet (10BASE-T/100BASE-TX) 100 Mbit LAN Port. Use a shielded Ethernet cable (not included): minimum Cat5, or Cat5e or Cat6.

To connect with Ethernet:

1. Plug one end of the Ethernet cable into the Ethernet port on the back of the unit.
2. Connect the other end of the Ethernet cable to your LAN.

4.6.3 Connecting with a manual IP configuration

When connected to an active Ethernet connection or available wireless network, the device can be configured with a static IP address. Use the touchscreen to configure a manual IP connection.

To connect with Wi-Fi or Ethernet using a manual IP configuration:

1. With an established Ethernet or available Wi-Fi connection, tap the wrench icon on the home screen. The **Settings** screen appears.
2. Tap **Connectivity**. The **Connectivity** screen appears.

- For Wi-Fi networks, tap Wi-Fi, then the desired wireless network. A new screen appears. Tap the Manual IP button in the lower-left corner. The Manual IP Settings screen appears.
- For Ethernet connections, tap Ethernet. The Manual IP Settings screen appears.

3. Toggle **Use Manual IP** to **ON**. The toggle turns blue.
4. Enter the appropriate **IP Address, Subnet Mask, Default Gateway**, and **Name Server**.

4.6.4 Connecting with USB

Use the included USB cable for connecting a computer directly to the machine.

To connect with USB:

1. Plug one end of the USB cable into the USB port on the back of the unit.
2. Connect the other end of the USB cable to a computer's USB port.

4.7 Updating firmware

Stratasys regularly releases updated firmware to fix bugs and improve functionality.

To update the firmware:

1. The machine may automatically recognize that you have sent a firmware update. Tap

Continue on the touchscreen to finish the installation.

2. If you are not prompted to **Continue**, continue the firmware update manually. Tap **Settings > System > Firmware Update**.
3. After the firmware update installs, confirm the system restart on the touchscreen or wait 30 seconds for an automatic restart.

4.8 Transporting the machine

For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems.

Refer to section **4.3.1 Receiving** for product weight and dimensions. Keep the packaging for transportation or shipping.

The complete packaging kit consists of:

- 1 outer carton, cardboard
- 1 carrier tray, cardboard
- 1 carrier tray insert, foam
- 1 upper insert, foam
- 2 carrying slings, cardboard

4.8.1 Preparing for transportation

Before repackaging, remove the glass turntable and place it in the accessories box. Ensure the post-cure chamber as well as the outer shells are clean and dry.

The Stratasys ProLight is a heavy object. A two person lift is required to prevent injury and avoid damage to the machine. Always use the included cardboard slings when moving the device.

Do not ship the machine without removing and fully securing the turntable. The turntable is made of glass and can break during transit.

To prepare the machine:

1. Always remove the turntable and any printed parts before moving or packaging the machine.
2. Wipe residual liquid resin and solvent from the post-curing chamber and other internal components.

Do not ship the machine with any liquid resin or solvent inside. Liquids left inside the machine can leak during transit, which may result in additional fees, void the warranty, or present a safety hazard.

Do not ship the Stratasys ProLight with any loose items stored inside the machine. Loose

items can shift during transit and damage sensitive components, which may result in additional fees or void the warranty.

NOTICE

When shipping a machine to Stratasys or a support representative for replacement or repair, the power cable and other accessories should not be shipped and will not be returned after service. Original packaging is required for warranty service. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for unique guidance on shipping requirements.

4.8.2 Packaging

NOTICE

Thoroughly read and follow the instructions to properly package the machine. Skipping any of the following steps may result in shipping damage and void the warranty.

To package the machine:

1. If you have previously collapsed the machine's outer cardboard carton, start by reassembling and securely taping the box.
2. Tilt one side of the machine up and slide a carrying sling underneath. Repeat with a second sling under the other side of the machine.
3. Place the foam carrier tray insert into the cardboard carrier tray.
4. Use the provided handles on the carrying slings to lift the machine into its carrier tray.

CAUTION

Lifting hazard: The Stratasys ProLight is a heavy object. A two-person lift is required to prevent injury and avoid damage to the machine.

5. Place the two foam inserts on the top edges of the machine.
6. Lower the outer box onto the machine.
7. Seal each edge of the opening with adhesive packing tape.

5 Usage

5.1 Operational environment

- Ventilation: No specific requirements
- Temperature: 18–28 °C (64–82 °F)
- Power:
  - Dedicated power outlet and circuit capable of delivering 8 A of current (for 220–240 VAC circuits) or 15 A (for 100–120 VAC circuits)
  - Easy access to the power switch of the device
- Location: Dry, indoor
- Altitude: Maximum 2000 m (6561.7 ft)
- Humidity: Low ambient humidity
- Mains supply voltage fluctuations: ≤ 10%
- Pollution degree of intended environment: 2

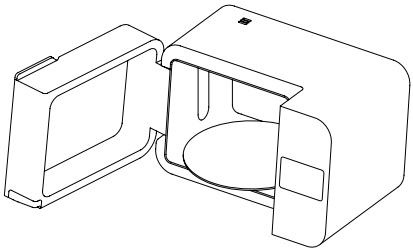
5.2 Post-curing printed parts

Many resin types require post-curing to achieve their optimal mechanical properties or as a step in producing a biocompatible printed part. The Stratasys ProLight helps ensure consistent post-curing by rotating printed parts during the post-cure cycle and exposing the part to light from all directions. For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems.

5.2.1 Inserting washed and dried printed parts

Fully dry all printed parts after washing. Check all internal and external surfaces, because curing non-dried parts may trap solvent inside the part, prevent parts from strengthening, and affect quality. Once parts are dry:

- Open the door.
- Distribute parts on the round turntable. Place parts with the most even spacing possible to allow light and heat to reach all areas.
- Gently close the door.



CAUTION

The Stratasys ProLight contains two heaters that heat inserted parts during post-curing. Take care when inserting and removing parts from the Stratasys ProLight, because the turntable may be hot.

5.2.2 Setting the time and temperature

The Stratasys ProLight has presets for each resin type that you can select through the touchscreen. When Stratasys releases new resins, new resin formulations, or new layer thicknesses, update the firmware on your Stratasys ProLight for the new presets.

To set the post-cure time and temperature based on resin type:

1. Tap **Cure**. The **Resin Profile** menu appears.
2. Select the appropriate material profile on the touchscreen. If the resin has multiple versions or post-curing profiles, tap the desired version or profile.
3. Tap **Done** to confirm your selection.
4. Tap **Start**.

Depending on the size of your printed parts and their geometry, you may need to adjust the recommended post-cure settings.

To manually set the post-cure time and temperature:

5. Tap **Cure**. The **Resin Profile** menu appears.
6. Tap **Custom**. The **Custom Cure** screen appears.
7. Select the desired time and temperature on the touchscreen.
8. Tap **Done** to confirm your selection.
9. Tap **Start**.

To save a custom post-curing profile for later use:

10. Tap **Cure**. The **Resin Profile** menu appears.
11. Tap **Create Custom Resin Profile**. The **Custom Resin Profile** screen appears.
12. Set each parameter of the custom post-curing profile.

Tap **Profile Name** to set a name for the profile.

Tap **Cure Temperature** to set the target temperature to which the Stratasys ProLight will heat the printed parts.

Tap **Cure Time** to set the duration of the post-cure cycle.

13. Tap **Save** to confirm your selection.
14. Tap **Start**.

The Stratasys ProLight heats to the selected temperature first. The LEDs activate and the timer starts once the heaters have reached the target temperature. Once a post-cure cycle has started, use the touchscreen or open the door to pause the post-curing cycle.

To adjust the post-cure settings:

15. Adjust the time or temperature on the touchscreen.
16. Tap **Start**.

NOTICE

The printed part must be in the Stratasys ProLight while it preheats. If the part is not placed inside the device until preheating is complete, the part may crack.

5.2.3 Collecting printed parts

When the post-curing cycle completes, the LEDs and heaters turn off. Open the door and remove parts.

CAUTION

The Stratasys ProLight contains two heaters that heat inserted parts during post-curing. Take care when inserting and removing parts from the Stratasys ProLight, because the turntable may be hot.

5.2.4 Additional finishing steps

Please refer to the best practices of the materials and the IFU - Instructions for Use (for

TrueDent Materials).

5.3 Considerations for specific geometries

Please refer to the best practices of the materials and the IFU (TrueDent Materials).

5.4 Time and temperature settings

For the best results, use the recommended time and temperature settings tested specifically for use with the Stratasys ProLight. For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

Each material's print settings are designed and refined to print parts successfully at optimal speeds. Additional post-curing further improves the functional properties of the materials. Post-curing exposes parts to light and heat and strengthens crosslinks in the polymer structure, improving strength, stiffness, and temperature resistance. Due to the increased number of bonds, the material becomes more tightly packed and will shrink slightly. Each material's print settings are designed to account for the expected shrinkage during printing and post-curing.

Although using a higher temperature for post-curing results in a shorter post-cure cycle, a higher temperature setting may also cause some materials to warp, depending on the part geometry and features.

5.5 Managing the machine

Between post-cure cycles, perform maintenance, track the machine's history or turn the machine off. For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

5.5.1 Turning off

The Stratasys ProLight is designed to remain powered on when not in use. Flip the breaker switch on the back of the unit to the **OFF** position to turn off the machine completely and conserve power. When moving or storing the machine, unplug the unit from its power source in addition to flipping the breaker switch

6 Maintenance

To maintain the most efficient and long-lasting machine, ensure regular conservation. Stratasys provides instructions to advise in installing, operating, and maintaining the machine. The Stratasys ProLight shall only be maintained by a qualified and trained person. Unauthorized disassembly or repair procedures may damage the machine.
There are two groups of maintenance procedures: regular, which should be done after every use, and intermittent maintenance, which only needs to be done occasionally. Please keep a log detailing when each intermittent maintenance procedure was last performed.
For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

Tampering with or disassembling the device prior to disconnecting the power cable and waiting at least five minutes can subject users to potentially fatal electrical hazards. When removing the exterior paneling, disconnect the machine from its power source before maintenance.

Wear personal protective equipment (PPE) when performing maintenance tasks. Use tools only as described.

- Stratasys provides instructions to advise skilled and unskilled persons in installing, operating, and maintaining the Stratasys ProLight. The Stratasys ProLight shall only be maintained by a qualified and trained person.
- Do not open the Stratasys ProLight and/or investigate internal components unless under the guidance of Stratasys support or a support representative. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for any additional guidance.
- Unauthorized disassembly or repair procedures may damage the machine and void the warranty.

6.1 Tools and supplies

Only use tools, chemicals, or procedures to maintain the Stratasys ProLight that are outlined in this manual, by prompts on the touchscreen, and on https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.
Do not use any tools, chemicals, or unapproved procedures with the Stratasys ProLight unless otherwise instructed to do so by Stratasys or a support representative.

- General purpose cleaner (e.g., glass cleaner) and/or soapy water
  - For cleaning the outer shells and display.
- Isopropyl alcohol (IPA), 90% or higher
  - For cleaning the work surface and tools.
- Low-fiber paper towels
  - For cleaning the work surface and tools.

- For wiping residue grease, resin, or solvent.
- Non-abrasive microfiber cloth
  - For cleaning the outer shells and display.

6.2 Inspection and maintenance

6.2.1 Before each use

Inspect	Refer to	Section
Installation environment	Location and environs	4.1
Turntable	Maintaining the turntable	6.3.1
Parts to be post-cured	Considerations for specific geometries Drying parts and keeping equipment clean	5.3 6.3.2

6.2.2 Periodic maintenance

Inspect	Refer to	Section
Interior surfaces	Maintaining interior surfaces	6.4.1
Light diffusers	Maintaining the light diffusers	6.4.2
Door	Maintaining the door	6.4.3
Touchscreen	Maintaining the touchscreen	6.4.4

6.3 Tasks between uses

Over time, debris or contaminants may collect in the Stratasys ProLight or on its internal surfaces, particularly if printed parts are not fully dried before post-curing. In order to preserve the reliability of the Stratasys ProLight, it is important to regularly inspect and clean its various components and assemblies.

6.3.1 Maintaining the turntable

The Stratasys ProLight relies on the turntable's rotation to expose part surfaces to even amounts of light and heat. The turntable must have sufficient clearance to continue rotating.

To maintain the turntable:

- Periodically lift the turntable to inspect underneath it for small pieces of cured resin. Remove particles of cured resin from above and below the turntable to ensure the turntable can rotate without interruption.
- Clean the turntable and the surface underneath as needed.
- Use isopropyl alcohol to clean the turntable or the base if necessary, and allow isopropyl alcohol to fully evaporate before starting a post-cure cycle.

6.3.2 Drying parts and keeping equipment clean

Completely wash and dry all parts before post-curing in the Stratasys ProLight. Do not operate the Stratasys ProLight with uncured resin, partially cured resin, or other liquids on the turntable.

6.4 Periodic maintenance

The Stratasys ProLight requires regular maintenance and care. The standard cycle for the

following procedures is every one to three months of use.

Task	Frequency	Refer to	Section
Interior surfaces	Monthly	Maintaining interior surfaces	6.4.1
Light diffusers	Monthly	Maintaining the light diffusers	6.4.2
Door	Every three months	Maintaining the door	6.4.3
Touchscreen	Every three months	Maintaining the touchscreen	6.4.4

6.4.1 Maintaining interior surfaces

The internal surfaces of the Stratasys ProLight are covered in a reflective coating that reflects the light from the LEDs and ensures that parts post-cure evenly. If the reflective coating is damaged or covered, parts may not post-cure properly.

Visually inspect the internal surfaces of the Stratasys ProLight for traces of resin, cracks, or other damage.

Resin will harden during post-curing. Cured resin blocks light and must be removed. If parts are washed but not fully dry before post-curing, certain washing solvents, such as tripropylene monomethyl ether, may evaporate and form deposits on the interior surfaces of the Stratasys ProLight.

These deposits cloud the reflective coating and prevent parts from post-curing properly. Clean the reflective coating as needed. Use isopropyl alcohol to clean the reflective coating and allow isopropyl alcohol to fully evaporate before starting a post-cure cycle.

6.4.2 Maintaining the light diffusers

The 450 nm LEDs in the Stratasys ProLight are covered by frosted light diffusing panels. These light diffusers spread the light from the LEDs and ensure that parts post-cure evenly. If the light diffusers are damaged or covered, parts may not post-cure properly.

Visually inspect the light diffusers for traces of resin, cracks, or other damage. Resin will harden during the post-curing.

Cured resin blocks light and must be removed. If parts are washed but not fully dry before post-curing, certain part washing solvents, such as tripropylene monomethyl ether, may evaporate and form deposits on the interior surfaces of the Stratasys ProLight.

These deposits will coat the light diffusers and prevent parts from post-curing properly. Clean the light diffusers as needed. Use isopropyl alcohol to clean the light diffusers and allow isopropyl alcohol to fully evaporate before starting a post-cure cycle.

6.4.3 Maintaining the door

Visually inspect the door for traces of resin, cracks, or other damage. Clean the door with a non-abrasive microfiber cloth and soapy water or a general purpose cleaner, such as glass cleaner.

6.4.4 Maintaining the touchscreen

Visually inspect the touchscreen for any traces of resin. Check that the touchscreen responds to inputs. Clean the touchscreen with a non-abrasive microfiber cloth and a general purpose cleaner, such as glass cleaner.

6.5 Intermittent maintenance

Task	Frequency	Refer to	Section
Update the firmware	When indicated by Stratasys	Updating firmware	4.7

7 Troubleshooting

For detailed guidance and visual assistance, visit **support.stratasys.com/en/Contact-Us**.

7.1 Collecting diagnostic logs

The Stratasys ProLight maintains diagnostic logs to provide detailed information about the machine that may expedite issue investigation. After experiencing any error or unusual behavior on the Stratasys ProLight, include the diagnostic logs with other relevant observations and details when contacting Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative The options for sharing diagnostic logs vary depending on the machine's connection type.

7.2 Performing a factory reset

NOTICE

A factory reset erases diagnostic information and custom settings, including networked connections. Do not perform a factory reset before contacting Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative. The stored diagnostic information may be helpful to a support representative to assist with troubleshooting.

7.3 Troubleshooting errors or abnormal activity

In the case of errors or abnormal activity with the Stratasys ProLight, reference the following errors, causes, and proposed solutions. Complete the initial troubleshooting steps and carefully document all results. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for additional guidance.

7.3.1 Resolving abnormal functions

Error	Cause	Solution
The display does not turn on.	• Power failure or a faulty electrical connection	• Disconnect and reconnect the power. • Plug the power cable into a different outlet.
The touchscreen is unresponsive.	• Faulty or damaged touchscreen	• Disconnect and reconnect the power. • Replace the touchscreen.
The door does not fully close.	• The turntable is not mounted properly • The printed parts inserted into the Stratasys ProLight are blocking the door	• Remove and reseat the turntable on its mount. • Adjust the position and orientation of the printed parts on the turntable.
The 450 nm LEDs do not turn on.	• Power failure or a faulty electrical connection	• Disconnect and reconnect the power. • Plug the power cable into a different outlet.

Error	Cause	Solution
The 450 nm LEDs do not turn on.	• The Stratasys ProLight has not reached its target temperature • Power failure or a faulty electrical connection	• Wait for the machine to reach its target temperature. • Disconnect and reconnect the power. • Plug the power cable into a different outlet.
The heaters do not reach the target temperature.	• Abnormal display behavior • Environmental conditions • Faulty or damaged heater	• Disconnect and reconnect the power. • Ensure that the operating environment is in the recommended temperature range. • Check that the heater fan is spinning. • Check and compare the internal temperature readings from both heater modules.
The turntable does not turn.	• Turntable is obstructed • Turntable is not fully seated • Turntable gear has separated from the turntable • Faulty or damaged motor assembly	• Ensure that no cured resin or printed parts are blocking the turntable. Reorient large prints as necessary. • Reseat the turntable on its mount. • Check that the gear on the bottom of the turntable is firmly adhered to the turntable. • Check that the rollers underneath the turntable turn smoothly. • Replace the motor assembly.
Parts are undercured or do not have desired mechanical properties.	• Expired resin • Part was washed but not fully dried before post-curing	• Check the expected lifetime of the resin used for the print. • Fully dry all solvent off of parts before post-curing.
Post-cured parts have tacky or sticky surfaces.	• Part was not washed before post-curing • Part was washed but not fully dried before post-curing	• Wash liquid resin off of printed parts before postcuring. • Fully dry all solvent off of parts before post-curing.

7.3.2 Resolving errors

If errors persist after following these steps, contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for additional guidance.

Error	Cause	Solution
The device is currently active.	The Stratasys ProLight attempted to start a post-curing cycle while a cycle was already in progress.	Disconnect and reconnect the power.
The device state is currently invalid.	Firmware error	Disconnect and reconnect the power.
The device's duty cycle is currently invalid.	Firmware error	Disconnect and reconnect the power.

Error	Cause	Solution
The call to DBus failed.	Firmware error	Disconnect and reconnect the power.
The reply to the DBus was invalid.	Firmware error	Disconnect and reconnect the power.
The fan control failed.	Firmware error	Disconnect and reconnect the power.
The timer has expired.	The Stratasys ProLight is not receiving temperature data.	Disconnect and reconnect the power.
Temperature fault occurred.	The Stratasys ProLight thermistor reported an error.	• Disconnect and reconnect the power. • Disconnect the power. Remove the Stratasys ProLight top shell and check that the thermistor wiring is secure. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for more information.
The LED brightness encountered an error.	The Stratasys ProLight encountered an error while setting the brightness of the LEDs.	• Disconnect and reconnect the power. • Disconnect the power. Unscrew each of the three LED modules (accessible from within the post-cure chamber) and check that their wiring is secure. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for more information.
The set limit failed.	The Stratasys ProLight encountered an error while setting the current temperature limit.	• Disconnect and reconnect the power. • Disconnect the power. Unscrew each of the three LED modules (accessible from within the post-cure chamber) and check that their wiring is secure. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for more information.
The set duty cycle failed.	The Stratasys ProLight encountered an error while setting the brightness of the LEDs.	• Disconnect and reconnect the power. • Disconnect the power. Unscrew each of the three LED modules (accessible from within the post-cure chamber) and check that their wiring is secure. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for more information.
The door is open. Please close.	The door is open while the Stratasys ProLight is trying to begin a cycle.	Close the Stratasys ProLight door.

Error	Cause	Solution
The device failed to reach the required temperature.	The Stratasys ProLight did not reach its target temperature within 30 minutes.	Disconnect the power. Remove the Stratasys ProLight top shell and check that the thermistor and heater module wiring is secure. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative for more information.
An error occurred with the device's turntable.	The turntable was unable to move properly due to an issue with the motor driver or the motor command.	Disconnect and reconnect the power.
An unknown error occurred	Other/unspecified cause	Disconnect and reconnect the power.

8 Disassembly and repair

All steps that involve opening the machine and/or investigating internal components should be done by skilled persons under the guidance of Stratasys support or a support representative. Any damage resulting from attempting disassembly and/or repair without prior authorization from Stratasys support or a support representative is not covered by warranty. When removing the exterior paneling, disconnect the machine from its power source before maintenance.

8.1 Tasks

Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative to receive repair instructions and authorization, including how to disassemble or remove the exterior paneling.

Task	Frequency
Replacing the LED modules	The LEDs have stopped functioning or behave erratically.
Replacing the heaters	The heater modules have stopped functioning or behave erratically.

Any other maintenance or repair tasks not listed in section **6 Maintenance** requires servicing the machine. Contact Stratasys support at https://support.stratasys.com/en/Contact-Us or a support representative to request service or an RMA (short for "return to manufacturer authorization").

9 Recycling and disposal

For detailed guidance and visual assistance, visit https://support.stratasys.com/en/Printers/Cleaning-Systems/ProLight.

9.1 Disposal of electronic components

The symbol on the product, the accessories, or packaging indicates that this device shall not be treated as nor disposed of with household waste. When you decide to dispose of this product, do so in accordance with environmental laws and guidelines. Dispose of the device via a collection point for the recycling of waste electrical and electronic equipment. By disposing of the device in the proper manner, you help avoid possible hazards for the environment and public health that could otherwise be caused by improper treatment of waste equipment. The recycling of materials contributes to the conservation of natural resources. Therefore do not dispose of your old electrical and electronic equipment with the unsorted municipal waste.

9.2 Disposal of packaging waste

The packaging is made of cardboard and plastic-based materials. Dispose of packaging through waste and recycling facilities. By disposing of the packaging waste in the proper manner, you help avoid possible hazards for the environment and public health.

NOTICE

The original packaging is designed to be kept and reused for transporting or shipping the machine for service. Save the complete packaging including any inserts for your convenience.

10 Index

11 Glossary

Term	Meaning
Display	The display shows status, time, temperature, and options for configuring the Stratasys ProLight.
Display ribbon cable	A flat, flexible cable connects the display assembly to the motherboard.
Door	The hinged door allows access to the Stratasys ProLight turntable. Double walls insulate the cure chamber and internal surfaces reflect light.
Ethernet port	The Stratasys ProLight can connect to a network via Ethernet. The port is connected to the motherboard and can be accessed from the back of the machine.
Fans	There are seven fans in the Stratasys ProLight. Two fans blow hot air from the heater modules into the post-cure chamber. One fan exhausts air from the post-cure chamber. Four fans bring in outside air to cool the LEDs and other electronics.
Heater	Two 500 W heater modules heat the chamber up to 176 °F / 80 °C.
Interlock magnets	The interlock sensor detects these magnets to determine when the door is closed. This safety mechanism disables the heater, LEDs, and turntable when the door is open.
LEDs	45 multi-directional 450 nm LEDs help to post-cure parts and illuminate the turntable. The LEDs are contained in three LED modules: one on the top of the post-cure chamber, one on the left, and one beneath the turntable.
Light diffusers	Diffusers on each LED module ensure that the parts in the post-cure chamber are evenly bathed in light.
Motherboard	The motherboard is the main circuitry through which all systems in the Stratasys ProLight communicate.
Motor assembly	The motor assembly rotates the turntable during the post-cure cycle.
Post-cure chamber	The main chamber of the Stratasys ProLight, where parts are placed to be post-cured with light and heat.
Power cable	Provides power to the Stratasys ProLight.
Turntable	A rotating plate ensures balanced post-curing across all exposed part surfaces. The turntable is made of glass, allowing light to reach all surfaces of printed parts in the Stratasys ProLight.
USB port	The Stratasys ProLight can connect to a computer via USB. The port is connected to the motherboard and can be accessed from the back of the machine.

Original English instructions
September 2024

Term	Meaning
Wi-Fi antenna	The Wi-Fi antenna enables the machine's wireless connectivity.

12 Product compliance

The Stratasys ProLight complies with the following electronics and safety standards:

ETL	CE
UL 61010-1:2012 CSA C22.2 No. 61010-1-12:2012 UL 61010-2-010:2019 CSA C22.2 No. 61010-2-010:2019	Machinery Directive 2006/42/EC Radio Equipment Directive 2014/53/EU RoHS Directive 2011/65/EU EMC Directive 2014/30/EU

Other
FCC IEC 61010-1:2010 IEC 61010-1:2010/AMD1:2016 IEC 61010-2-010:2019 IEC 62471:2006

STRATASYS CUSTOMER SUPPORT GUIDES

Replacing the Stratasys ProLight display assembly

September 2024 | **support.stratasys.com**

stratasys

The Stratasys ProLight has a touchscreen on its front shell. The touchscreen is the primary means of interacting with and controlling the machine, so a broken or malfunctioning touchscreen can prevent the Stratasys ProLight from being used normally.

Use this guide to remove and replace the Stratasys ProLight display assembly.

Required Supplies:

- Replacement display assembly (provided by Stratasys Support)
- Replacement ribbon cable (provided by Stratasys Support)
- 2.5 mm hex key
- 1.5 mm hex key
- 5.5 mm wrench
- Nitrile gloves

Estimated time: 20 minutes

DANGER: Read and follow all safety instructions and warnings in the operator manual. Replacement with incorrect parts can lead to burns, shock, fire, or explosion. Dispose of all parts in accordance with local regulations.

Preparing the workspace

OVERVIEW: *Prepare the Stratasys ProLight and a dust-free workspace for replacing the display assembly.*

STEP 1: UNPLUG THE NETWORKING CABLES

Disconnect the Ethernet and USB cables from the unit.

STEP 2: UNPLUG THE MACHINE

Disconnect the power cable before continuing with maintenance. Do not perform maintenance on the machine while it is connected to power. Wait five minutes after disconnecting the machine from power before proceeding. If the machine was recently in use, the heater modules will be warm. Wait at least two hours for the heaters to cool.

DANGER: Performing maintenance on the machine while it is plugged in increases the risk of electric shock. Never remove the panels of the machine while it is plugged in. Never reconnect the machine to power while the panels are uninstalled.

Removing the top shell

OVERVIEW: *Remove the top shell of the machine.*

NOTICE: The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the machine by using a grounding strap or touching a grounded piece of metal.

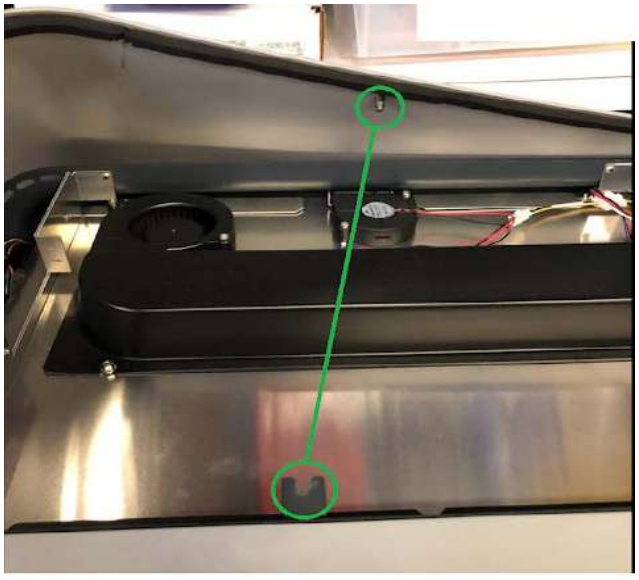
STEP 1: UNSCREW THE RIGHT TOP SHELL SCREWS

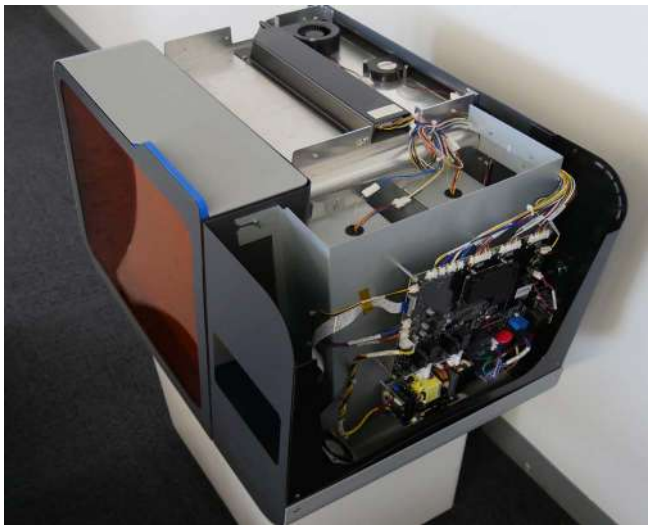
Use a 2.5 mm hex key to unscrew the two screws on the right side of the top shell. Set the screws aside.

STEP 2: UNSCREW THE LEFT TOP SHELL SCREWS

Use a 2.5 mm hex key to unscrew the four screws on the left side of the top shell. Set the screws aside.

STEP 3: REMOVE THE TOP SHELL





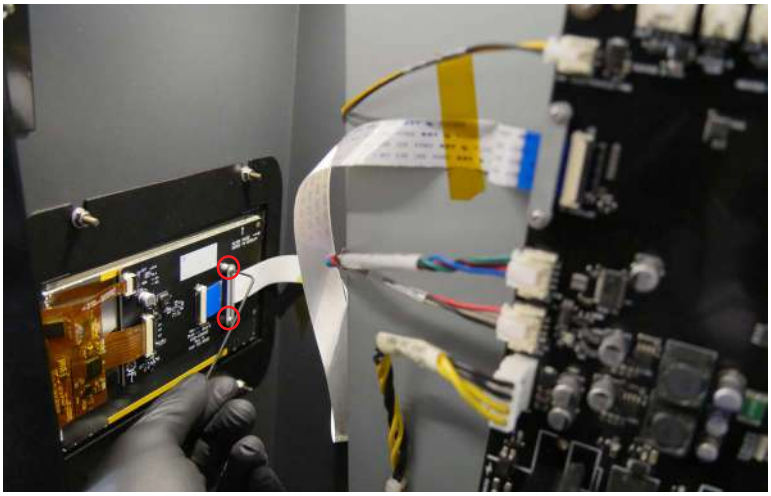
Push the cover towards the back of the Stratasys ProLight to unlatch, then fully remove the cover by lifting it upwards. Set the cover aside.

Removing the display assembly

OVERVIEW: *Remove the display assembly by disconnecting it from the ribbon cable.*

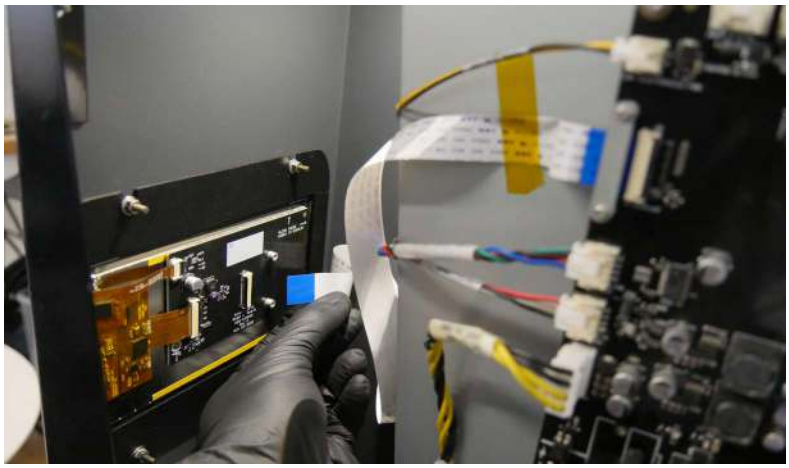
> **NOTICE:** The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the machine by using a grounding strap or touching a grounded piece of metal.

STEP 1: UNSCREW THE RIBBON CABLE RETENTION CLIP



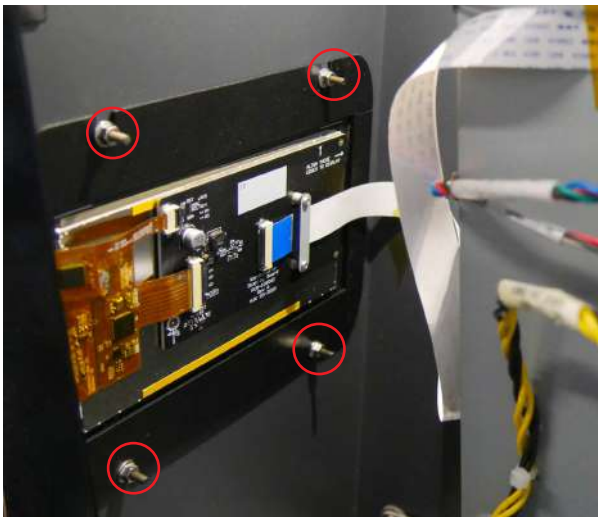
Use a 1.5 mm hex key to unscrew the two screws securing the ribbon cable retention clip to the display assembly. Set the screws and the clip aside.

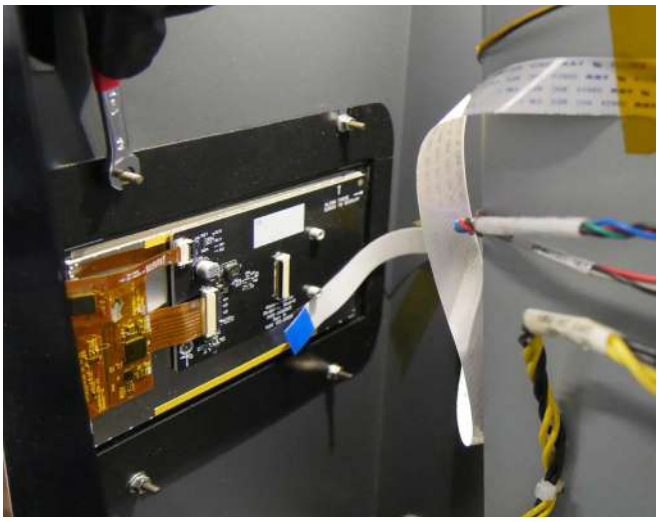
STEP 2: REMOVE THE RIBBON CABLE



The display ribbon cable is secured to its connector with a latch. Lift the latch away from the display assembly to free the display ribbon cable. The latch is unlocked when it is perpendicular to the display assembly. Once the latch is in the vertical position, the latch is unlocked and the ribbon cable can be disconnected. Take note of the original orientation of the ribbon cable.

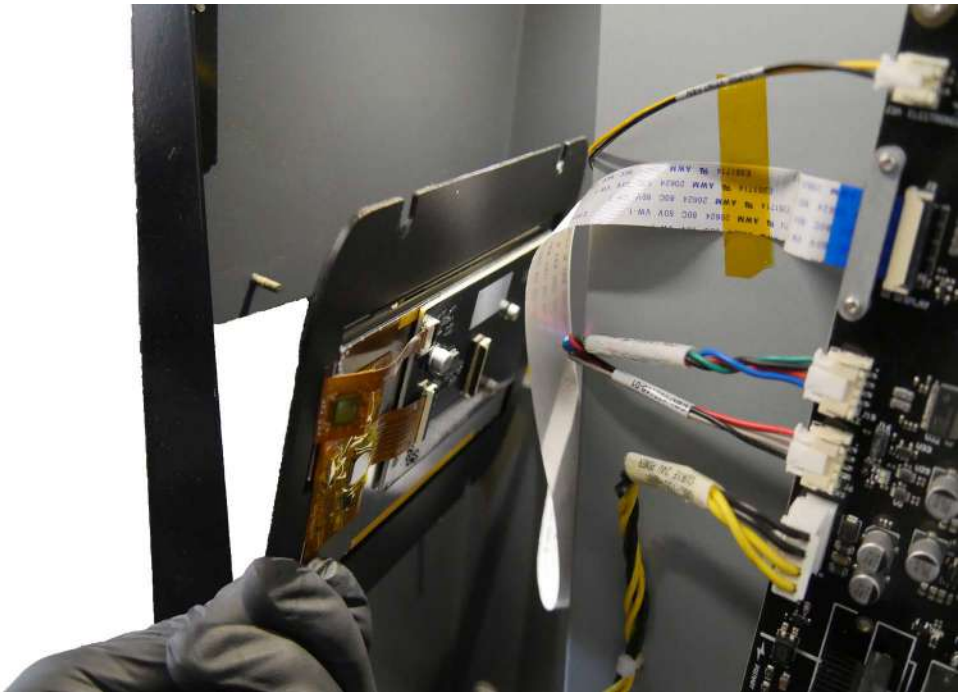
STEP 3: REMOVE THE DISPLAY ASSEMBLY HEX NUTS





Use a 5.5 mm wrench to remove the four hex nuts securing the display assembly to the Stratasys ProLight. Set the hex nuts aside.

STEP 4: REMOVE THE DISPLAY ASSEMBLY

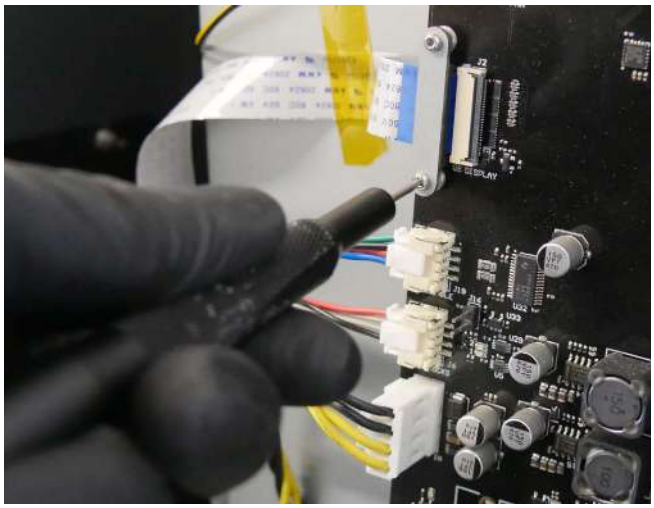


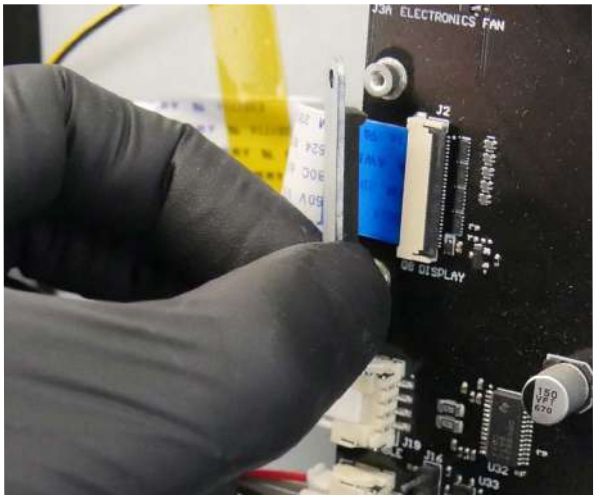
After removing the hex nuts, gently pull the display assembly out of the Stratasys ProLight. Set the display assembly aside.

Replacing the ribbon cable (optional)

OVERVIEW: *If instructed by Stratasys Support or if the ribbon cable is damaged, replace the ribbon cable.*

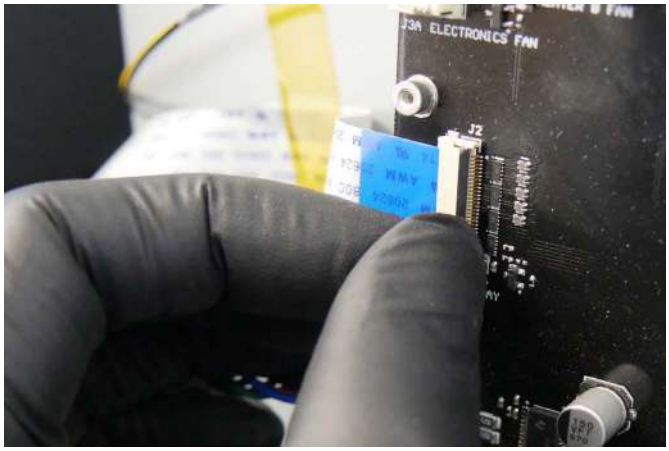
STEP 1: UNSCREW THE RIBBON CABLE RETENTION CLIP FROM THE MOTHERBOARD

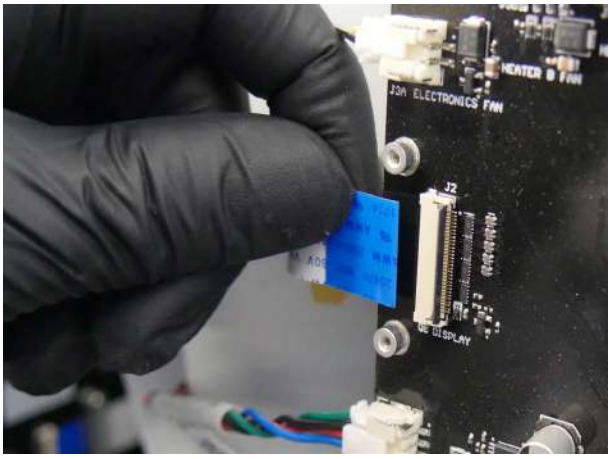




Use a 1.5 m hex key to unscrew and remove the two 1.5 mm screws holding the ribbon cable retention clip to the Form Wash L motherboard. Set the screws and the clip aside.

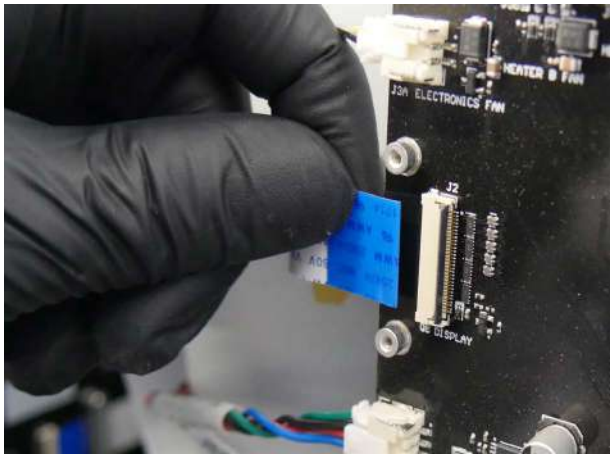
STEP 2: REMOVE THE RIBBON CABLE FROM THE MOTHERBOARD

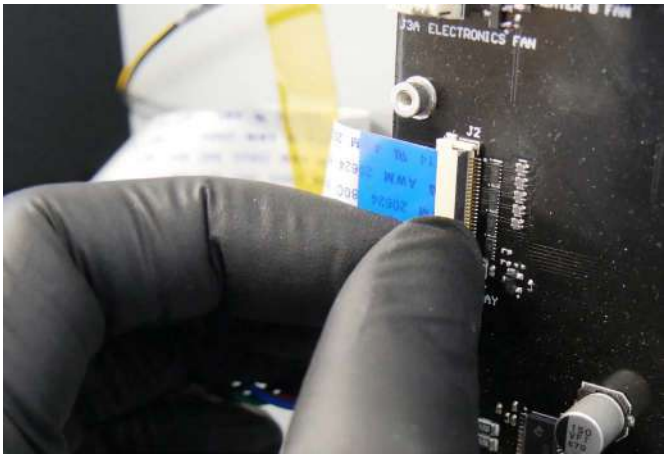




The display ribbon cable is secured to its connector with a latch. Lift the latch away from the display assembly to free the display ribbon cable. The latch is unlocked when it is perpendicular to the display assembly. Once the latch is in the vertical position, the latch is unlocked and the ribbon cable can be disconnected. Take note of the original orientation of the ribbon cable. Set the ribbon cable aside.

STEP 3: CONNECT THE REPLACEMENT RIBBON CABLE TO THE MOTHERBOARD

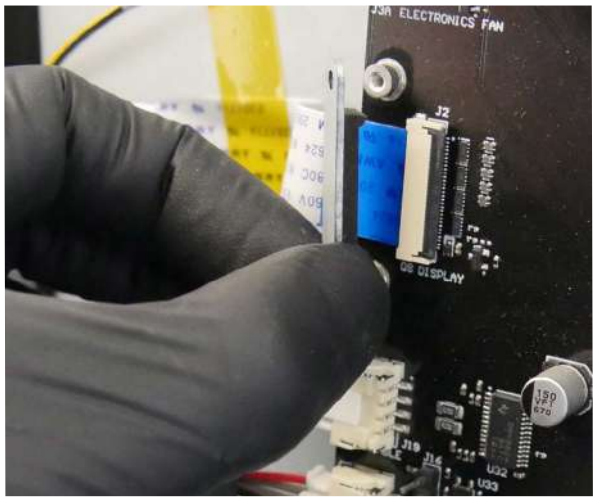


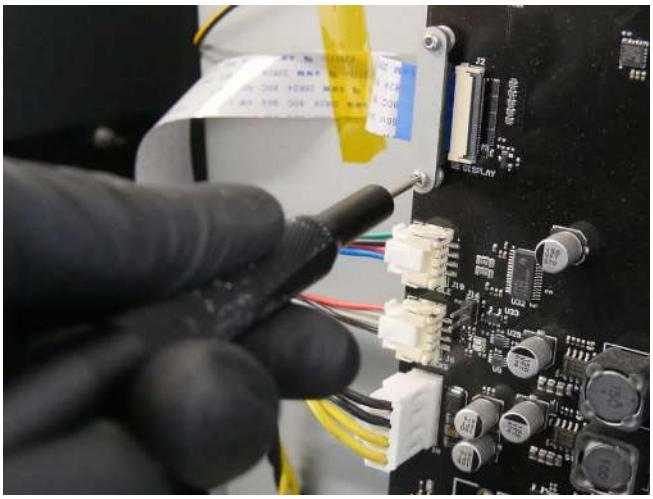


Insert the display ribbon cable back into the connector on the motherboard, orienting the exposed contacts on the ribbon cable as they were previously positioned. Ensure that the ribbon cable is not twisted or folded.

Rotate the latch towards the display assembly to lock the display ribbon cable in place. The latch is locked when it is parallel to the motherboard.

STEP 4: INSTALL THE RIBBON CABLE RETENTION CLIP



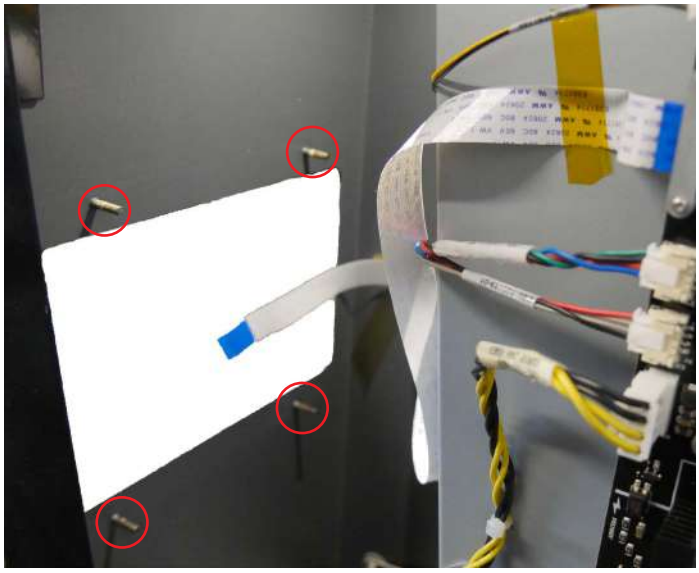


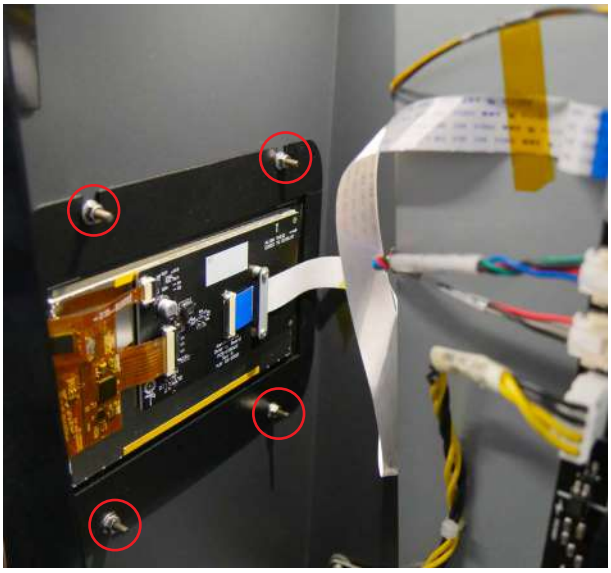
Align the display ribbon cable retention clip with its mounting points on the motherboard, ensuring that it holds the ribbon cable flat against the motherboard. Insert one 1.5 mm hex screw into each of the two screw holes in the retention clip. Use a 1.5 mm hex key to secure the screws holding the ribbon cable retention clip to the machine's frame. Tighten both screws until snug.

Installing the new display assembly

OVERVIEW: *Connect the new display assembly to the ribbon cable to install the new display assembly.*

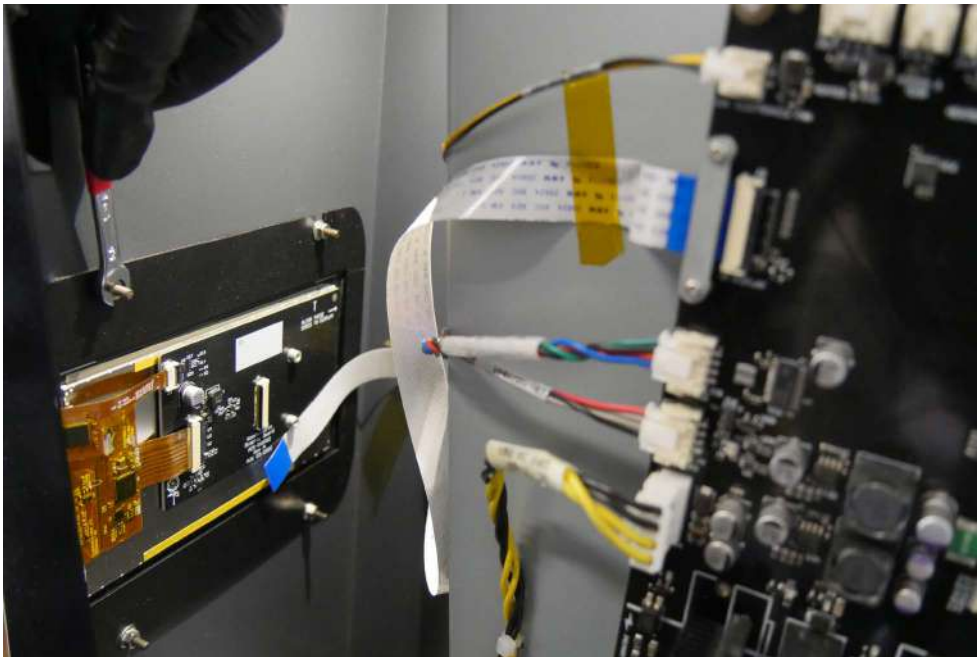
STEP 1: INSERT THE DISPLAY ASSEMBLY





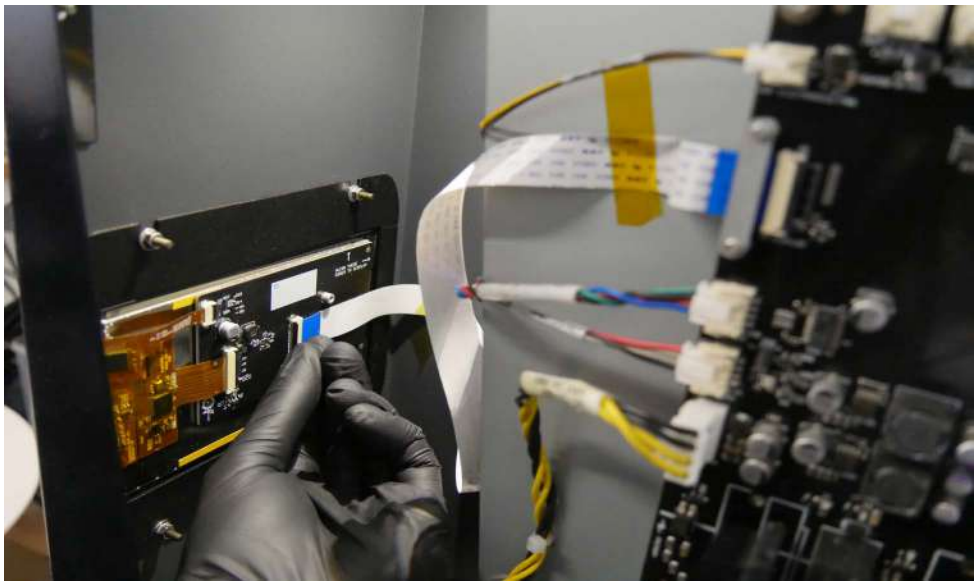
Insert the new display assembly into the Stratasys ProLight by aligning the slots in the display assembly with the four screws inside the Stratasys ProLight's cavity.

STEP 2: SECURE THE DISPLAY ASSEMBLY



Thread one 5.5 mm nut onto each of the screw posts. Tighten the nuts with a 5.5 mm wrench until snug.

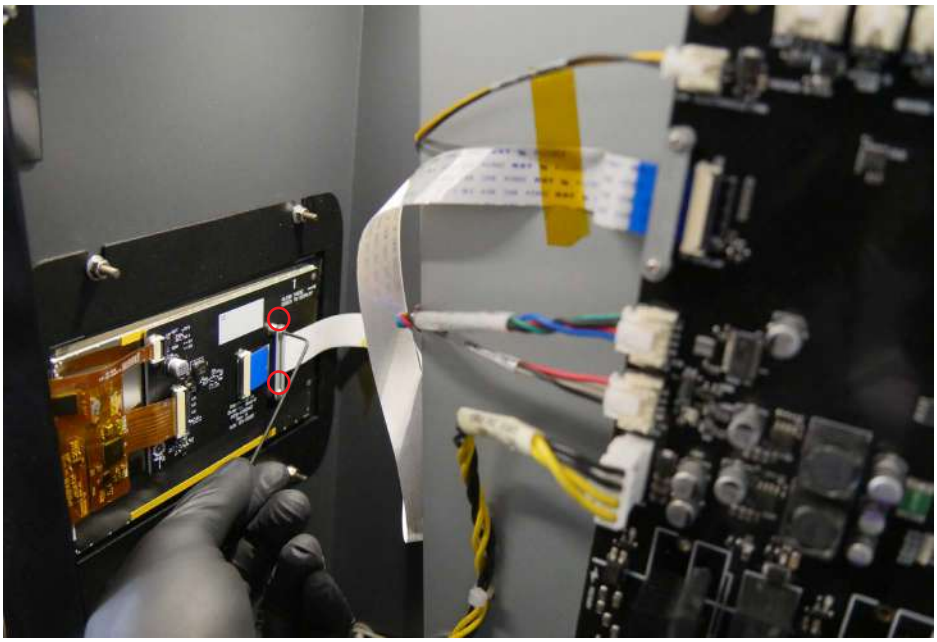
STEP 3: CONNECT THE RIBBON CABLE TO THE DISPLAY ASSEMBLY



Insert the display ribbon cable into the connector on the new display assembly, orienting the exposed contacts on the ribbon cable as they were on the old display assembly. Ensure that the ribbon cable is not twisted or folded.

Rotate the latch towards the display assembly to lock the display ribbon cable in place. The latch is locked when it is parallel to the display assembly.

STEP 4: INSTALL THE RIBBON CABLE RETENTION CLIP

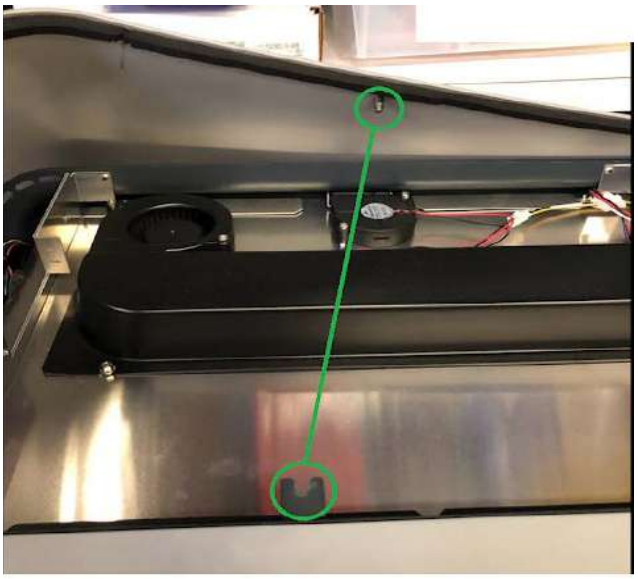


Align the display ribbon cable retention clip with its mounting points on the display assembly, ensuring that it holds the ribbon cable flat against the display assembly. Insert one 1.5 mm hex screw into each of the two screw holes in the retention clip. Tighten the screws with the 1.5 mm hex key until finger tight.

Reinstalling the top shell

OVERVIEW: *After installing the replacement display assembly, reinstall the top shell.*

STEP 1: REINSTALL THE TOP SHELL



Lower the top shell onto the Stratasys ProLight. Make sure you do not pinch any wires between the shell and the frame of the machine. Slide the top shell towards the front of the machine to hook it into place.

Take care to align the two screw holes on the machine's right side and the four screws on the machine's left side in the top shell with the corresponding screw holes in the machine's frame.

STEP 2: SECURE THE RIGHT TOP SHELL SCREWS

Use a 2.5 mm hex key to reinstall the two screws on the right side of the top shell. Tighten until snug.

STEP 3: SECURE THE LEFT TOP SHELL SCREWS

Use a 2.5 mm hex key to reinstall the four screws on the left side of the top shell. Tighten until snug.

Finalizing the repair

OVERVIEW: *After replacing the display assembly, power on the machine and perform final checks.*

STEP 1: PLUG IN THE NETWORKING CABLES
Connect the Ethernet and USB cables to the unit.

STEP 2: POWER ON THE MACHINE
Connect the power cable to the Stratasys ProLight and the power supply. Flip the breaker switch on the back of the unit to the **ON** position to turn on the machine.

STEP 3: TEST THE REPAIR
Monitor the machine as it powers on and check that the display functions normally. Test a variety of inputs, such as changing settings or starting a post-cure cycle. Contact Stratasys Support to share the results of the procedure.

STRATASYS CUSTOMER SUPPORT GUIDES

Replacing the Stratasys ProLight door

September 2024 | **support.stratasys.com**

stratasys

Required Supplies:

- Replacement door (provided by Stratasys Support)
- 2.5 mm hex driver
- Nitrile gloves

Estimated time: 15 minutes (additional time may be required to allow the heater to cool if the machine was recently in use)

The Stratasys ProLight has a door that helps insulate the machine and contain the light from the LED modules. If the door is damaged, the Stratasys ProLight may not reach or maintain its target temperature. If the door cannot fully close, the machine does not allow you to start a post-curing cycle.

Use this guide to remove and replace the Stratasys ProLight door.

> **DANGER:** Read and follow all safety instructions and warnings in the operator manual. Replacement with incorrect parts can lead to burns, shock, fire, or explosion. Dispose of all parts in accordance with local regulations.

Preparing the workspace

OVERVIEW: *Prepare the Stratasys ProLight and a dust-free workspace for replacing the Stratasys ProLight door.*

STEP 1: PREPARE THE WORKSPACE

Clear a workspace around your machine. Ensure that the workspace is well-ventilated and free of dust.

STEP 2: UNPLUG THE MACHINE

Disconnect the power cable before continuing with maintenance. Do not perform maintenance on the machine while it is connected to power. Wait five minutes after disconnecting the machine from power before proceeding. If the machine was recently in use, the post-cure chamber will be warm. Wait at least two hours for the chamber to cool.

> **DANGER:** Performing maintenance on the machine while it is plugged in increases the risk of electric shock. Never remove the machine's shells while it is plugged in. Never reconnect the machine to power while the shells are uninstalled.

Removing the top shell

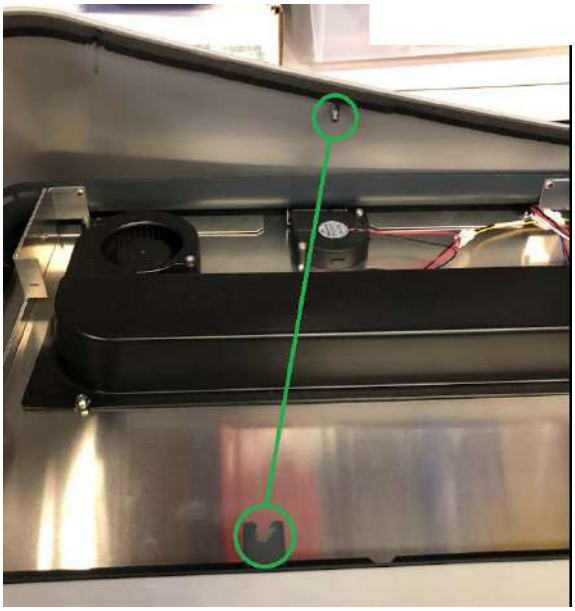
OVERVIEW: *Unscrew and remove the top shell to access the door hinge screws.*

> **NOTICE:** The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the printer by using a grounding strap or touching a grounded piece of metal.

STEP 1: UNSCREW THE TOP SHELL RETENTION SCREWS

The top shell is secured to the frame of the machine with six hex screws. When facing the front of the Stratasys ProLight, two screws are located on the right side and four are located on the left. Use a 2.5 mm hex driver to unscrew and remove the screws.

STEP 2: REMOVE THE TOP SHELL



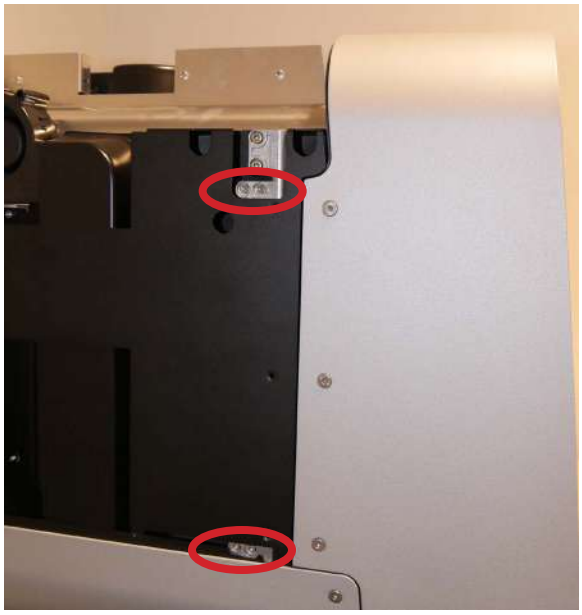
Slide the top shell towards the back of the machine to unhook it from the frame. Lift the top shell away from the machine and set it to the side.

Removing the door

OVERVIEW: *Unscrew and uninstall the Stratasys ProLight door.*

STEP 1: UNSCREW THE DOOR HINGE SCREWS

The Stratasys ProLight door is mounted to the machine's frame with two hinges on the left side of the unit. Using a 2.5 mm hex driver, unscrew and remove the four screws securing the door to its hinges. Set the screws aside.



STEP 2: UNINSTALL THE STRATASYS PROLIGHT DOOR

Pull the door directly away from the Stratasys ProLight to separate it from the machine.

Installing the new door

OVERVIEW: *Mount and secure the new Stratasys ProLight door.*

STEP 1: ALIGN THE REPLACEMENT DOOR

Slide the replacement door into place. Ensure that the front face of the door is flush with the front of the unit and that the left edge of the door is flush against the frame.

STEP 2: RECONNECT THE FAN CABLE

Thread one cap head screw into each of the four hinge screw holes. Use a 2.5 mm hex drive to tighten the screws until finger tight.

Reinstalling the top shell

OVERVIEW: *Reinstall and secure the top shell after performing any other maintenance procedures.*

STEP 1: REINSTALL THE TOP SHELL

Lower the top shell onto the Stratasys ProLight. Make sure you do not pinch any wires between the shell and the frame of the machine. Slide the top shell towards the front of the machine to hook it into place. Check that the screw holes in the top shell line up with the corresponding screw holes in the frame of the machine.

STEP 2: SECURE THE TOP SHELL

Thread one 2.5 mm hex screw into each of the six screw holes in the top shell. Using a 2.5 mm hex driver, tighten the screws until finger tight.

Finalizing the repair

OVERVIEW: *After reinstalling the shell, power on the machine and perform final checks.*

STEP 1: POWER ON THE MACHINE

Connect the power cable to the Stratasys ProLight and the power supply. Flip the breaker switch on the back of the unit to the **ON** position to turn on the machine.

STEP 2: TEST THE REPAIR

Start a post-cure cycle to test the replacement door. Monitor the Stratasys ProLight to ensure that the post-cure cycle runs normally. Contact Stratasys Support to share the results of the procedure.

STRATASYS CUSTOMER SUPPORT GUIDES

Replacing the Stratasys ProLight heater modules

April 2022 | **support.stratasys.com**

stratasys

Required Supplies:

- Replacement heater module (provided by Stratasys Support)
- 2.5 mm hex driver
- 5.5 mm socket driver
- Nitrile gloves

Estimated time: 30 minutes (additional time may be required to allow the heater to cool if the machine was recently in use)

The Stratasys ProLight has two heater modules that heat printed parts during post-curing. If either heater module is malfunctioning or broken, printed parts may not post-cure properly and may not reach their optimal mechanical properties.

Use this guide to remove and replace the Stratasys ProLight heater modules.

> **DANGER:** Read and follow all safety instructions and warnings in the operator manual. Replacement with incorrect parts can lead to burns, shock, fire, or explosion. Dispose of all parts in accordance with local regulations.

Preparing the workspace

OVERVIEW: *Prepare the Stratasys ProLight and a dust-free workspace for replacing the heater modules.*

STEP 1: PREPARE THE WORKSPACE

Clear a workspace around your machine. Ensure that the workspace is well-ventilated and free of dust.

STEP 2: UNPLUG THE MACHINE

Disconnect the power cable from the machine before continuing with maintenance. Do not perform maintenance on the machine while it is connected to power. Wait five minutes after disconnecting the mahcine from power before proceeding. If the machine was recently in use, the heater modules will be warm. Wait at least two hours for the heaters to cool.

DANGER: Performing maintenance on the machine while it is plugged in increases the risk of electric shock. Never remove the machine's shells while it is plugged in. Never reconnect the machine to power while the shells are uninstalled.

Removing the top shell

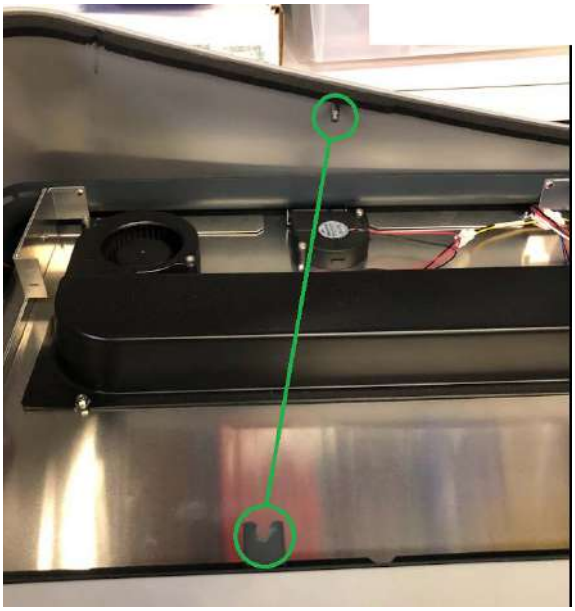
OVERVIEW: *Unscrew and remove the top shell from the Stratasys ProLight to access the heater modules.*

NOTICE: The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the printer by using a grounding strap or touching a grounded piece of metal.

STEP 1: UNSCREW THE TOP SHELL RETENTION SCREWS

The top shell is secured to the frame of the machine with six hex screws. When facing the front of the Stratasys ProLight, two screws are located on the right side and four are located on the left. Use a 2.5 mm hex driver to unscrew and remove the screws.

STEP 2: REMOVE THE TOP SHELL

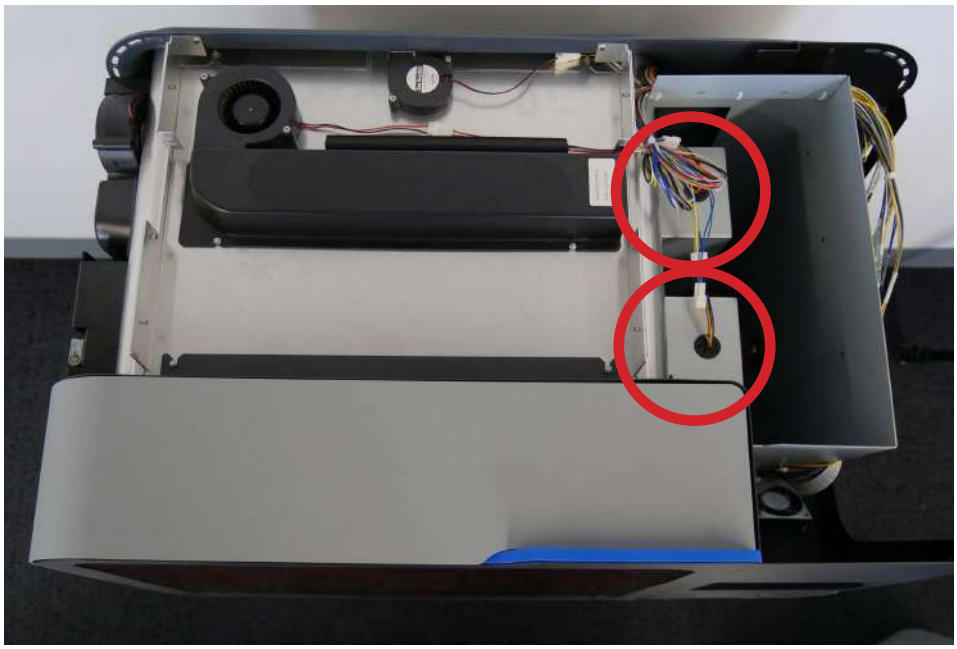


Slide the top shell towards the back of the machine to unhook it from the frame. Lift the top shell away from the machine and set it to the side.

Removing the heater module

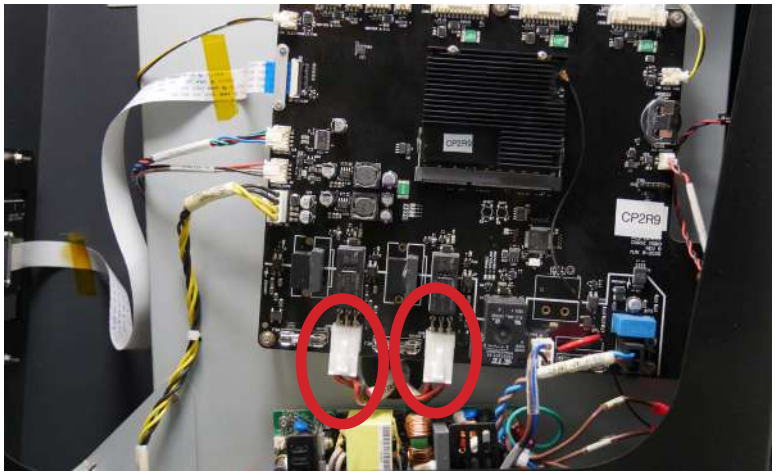
OVERVIEW: *Unscrew, unplug, and uninstall the heater module that is being replaced.*

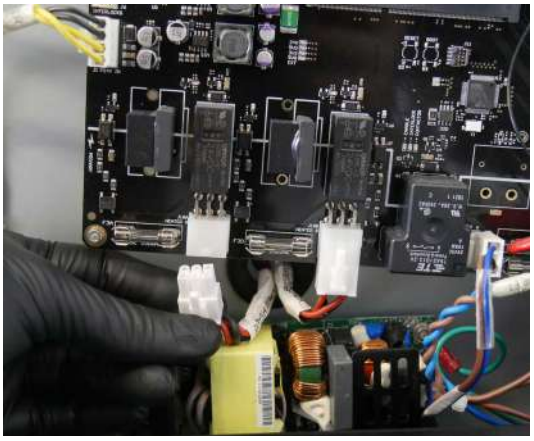
STEP 1: LOCATE THE HEATER MODULES



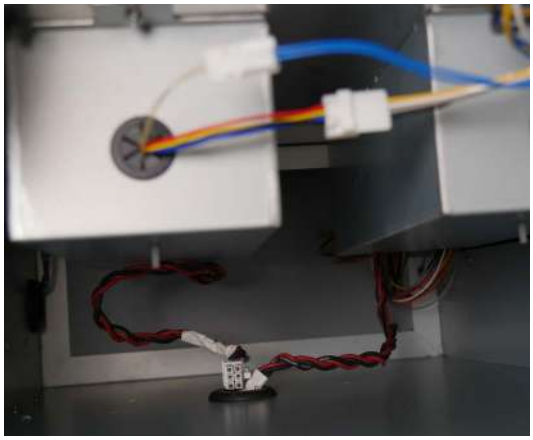
Locate the heater modules, positioned on the right side of the machine when looking at the Stratasys ProLight door. The heater modules are two rectangular boxes attached to the right side of the cure chamber. Take note of which heater is being replaced: the front heater is mounted closer to the Stratasys ProLight door, while the rear heater is mounted closer to the back of the machine.

STEP 2: DISCONNECT THE HEATER MODULE FROM THE MOTHERBOARD



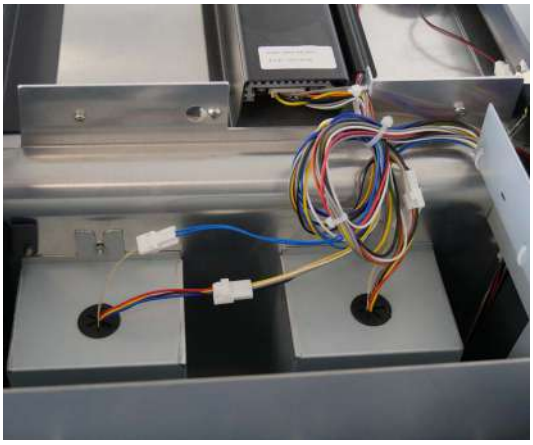


Grip the connector for the heater your are replacing and disconnect it from the motherboard. Do not pull on the wires themselves.



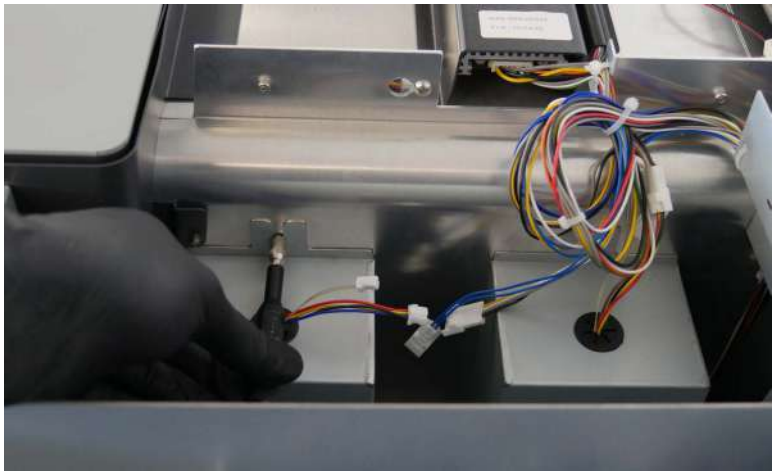
Thread the wires through the grommet in the wall below the motherboard.

STEP 3: DISCONNECT THE THERMISTOR AND FAN CABLES



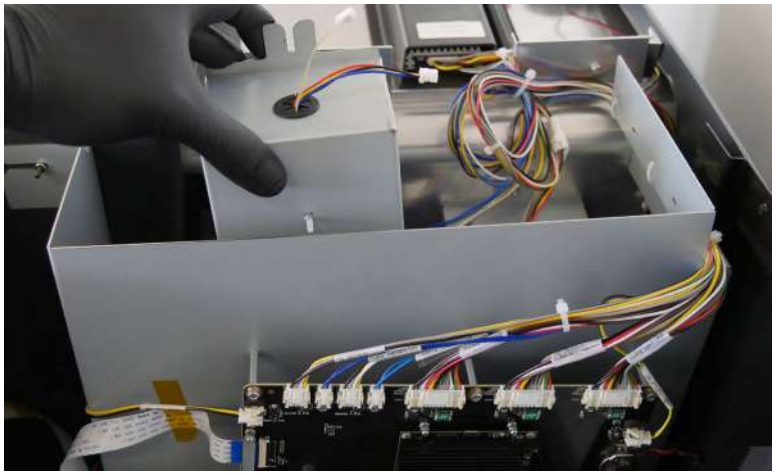
Unplug the 2-pin cable for the thermistor (blue) and the 3-pin cable for the heater module fan (red, white, and black). When disconnecting the cables, grip the connectors and separate them from one another. Do not pull on the wires themselves.

STEP 4: REMOVE THE HEATER MODULE RETENTION NUT



The heater modules are each secured by a single nut at the top of the module. For the heater module you are replacing, use the 5.5 mm socket driver to loosen and remove the nut.

STEP 5: REMOVE THE HEATER MODULE



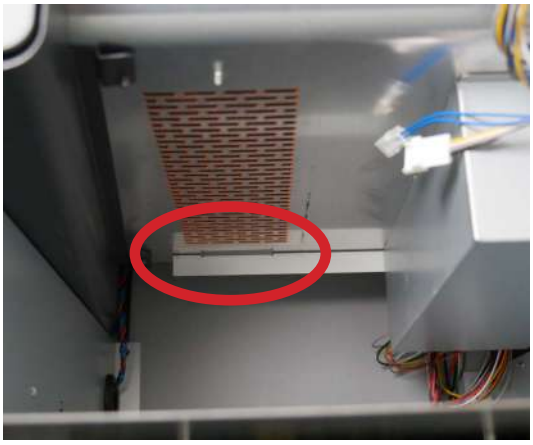
Lift the heater module out of the Stratasys ProLight and set it aside.

STEP 6: REMOVE THE OTHER HEATER MODULE (OPTIONAL)
If you are replacing both heater modules, repeat steps 1–5 for the other heater module.

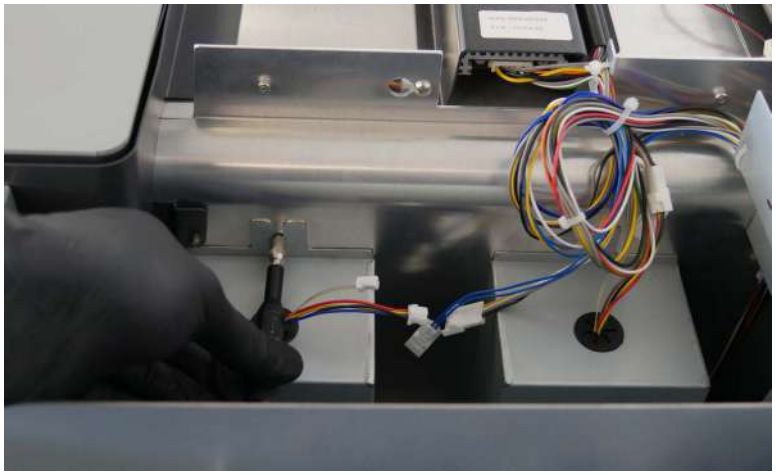
Installing the new heater module

OVERVIEW: *Mount and secure the new heater module.*

STEP 1: MOUNT AND SECURE THE REPLACEMENT HEATER MODULE

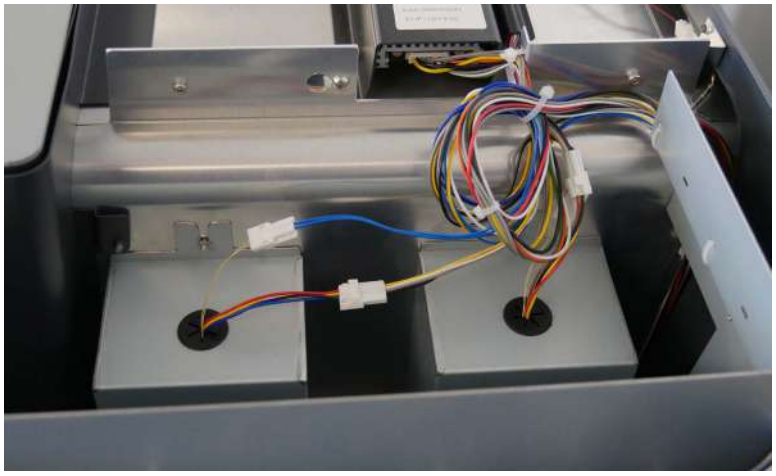


Position the replacement heater module on its mounting surface, aligning the tab at the bottom of the module with the slot in the mounting bracket. Lower the heater module into place.



Reinstall the retention nut and tighten it with the 5.5 mm socket driver until finger tight. When installed correctly, the rear heater assembly shroud sits flush against the cure chamber wall.

STEP 2: RECONNECT THE THERMISTOR AND FAN CABLES



Reconnect the thermistor cable and fan cable. The connectors will only plug into each other properly in the correct orientation. Be careful not to bend the pins in the connectors.

STEP 3: RECONNECT THE MOTHERBOARD CABLE

Thread the remaining heater module cable back through the grommet underneath the motherboard and connect it to the appropriate heater module plug. The connectors will only plug into the motherboard properly in the correct orientation. Be careful not to bend the pins in the connector.

STEP 4: INSTALL THE OTHER REPLACEMENT HEATER MODULE (OPTIONAL)

If you are replacing both heater modules, repeat steps 1–3 for the other heater module.

Reinstalling the top shell

OVERVIEW: *After performing any other maintenance procedures, reinstall and secure the top shell.*

STEP 1: REINSTALL THE TOP SHELL

Lower the top shell onto the Stratasys ProLight. Make sure you do not pinch any wires between the shell and the frame of the machine. Slide the top shell towards the front of the machine to hook it into place. Check that the screw holes in the top shell line up with the corresponding screw holes in the frame of the machine.

STEP 2: SECURE THE TOP SHELL

Thread one 2.5 mm hex screw into each of the six screw holes in the top shell. Using a 2.5 mm hex driver, tighten the screws until finger tight.

Finalizing the repair

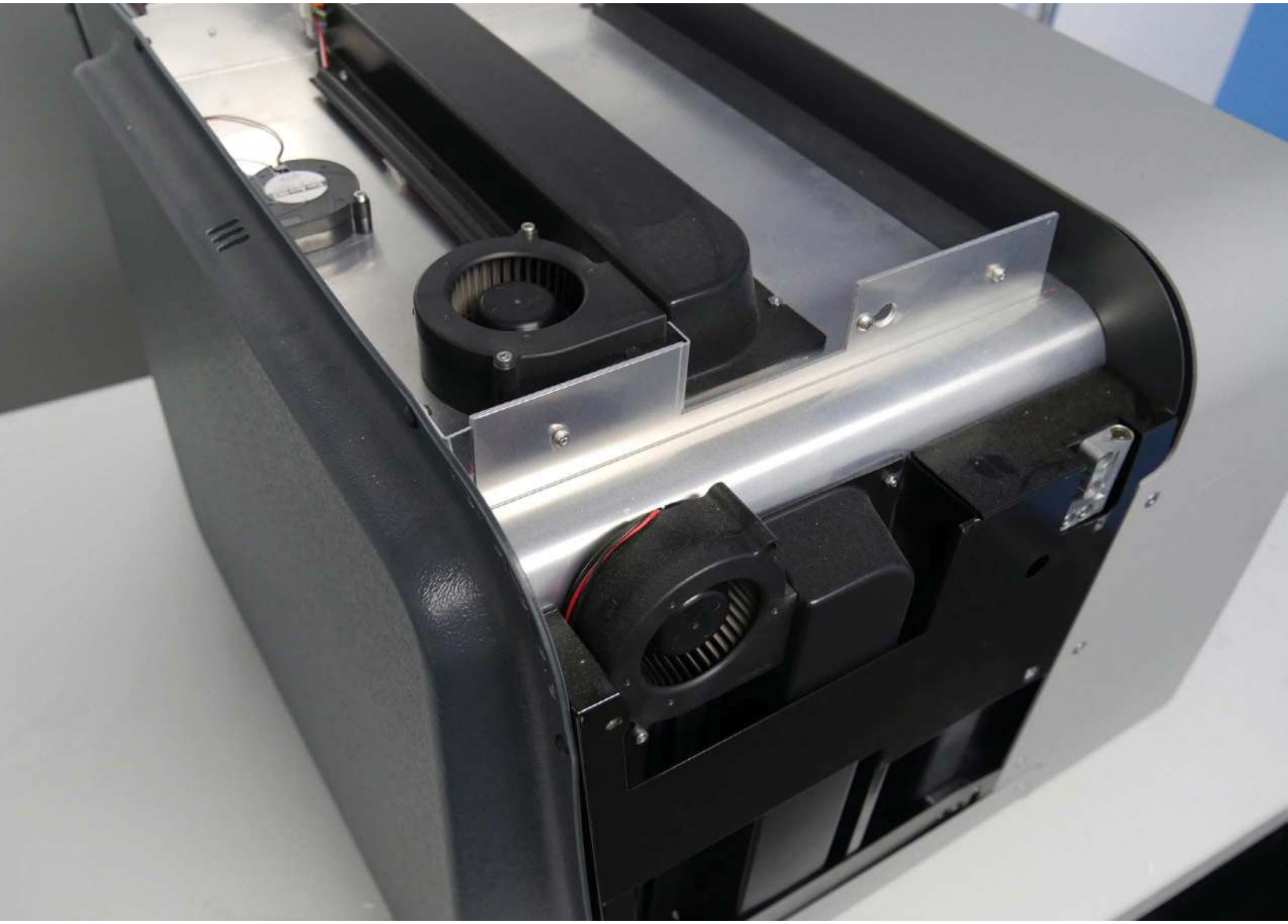
OVERVIEW: *After reinstalling the top shell, power on the machine and perform final checks.*

STEP 1: POWER ON THE MACHINE

Connect the power cable to the Stratasys ProLight and the power supply. Flip the breaker switch on the back of the unit to the **ON** position to turn on the machine.

STEP 2: TEST THE REPAIR

Start a post-cure cycle to test the replacement heater modules. Monitor the Stratasys ProLight to ensure it heats up properly. Contact Stratasys Support to share the results of the procedure.



STRATASYS CUSTOMER SUPPORT GUIDES

Replacing a Stratasys ProLight LED module cooling fan

September 2024 | **support.stratasys.com**

stratasys

Required Supplies:

- Replacement LED module cooling fan (provided by Stratasys Support)
- 2.5 mm hex driver
- Nitrile gloves

Estimated time: 30 minutes (additional time may be required to allow the heater to cool if the machine was recently in use)

The Stratasys ProLight has three LED modules that expose printed parts to light during post-curing. Each LED module is cooled by a fan. If any of the LED module cooling fans are malfunctioning or broken, printed parts may not post-cure properly and may not reach their optimal mechanical properties.

Use this guide to remove and replace the Stratasys ProLight LED module cooling fans.

> **DANGER:** Read and follow all safety instructions and warnings in the operator manual. Replacement with incorrect parts can lead to burns, shock, fire, or explosion. Dispose of all parts in accordance with local regulations.

Preparing the workspace

OVERVIEW: *Prepare the Stratasys ProLight and a dust-free workspace for replacing the LED module cooling fan.*

STEP 1: PREPARE THE WORKSPACE

Clear a workspace around your machine. Ensure that the workspace is well-ventilated and free of dust.

STEP 2: UNPLUG THE MACHINE

Disconnect the power cable before continuing with maintenance. Do not perform maintenance on the machine while it is connected to power. Wait five minutes after disconnecting the machine from power before proceeding. If the machine was recently in use, the post-cure chamber will be warm. Wait at least two hours for the chamber to cool.

DANGER: Performing maintenance on the machine while it is plugged in increases the risk of electric shock. Never remove the machine's shells while it is plugged in. Never reconnect the machine to power while the shells are uninstalled.

Removing the top shell (top and left LED module cooling fans)

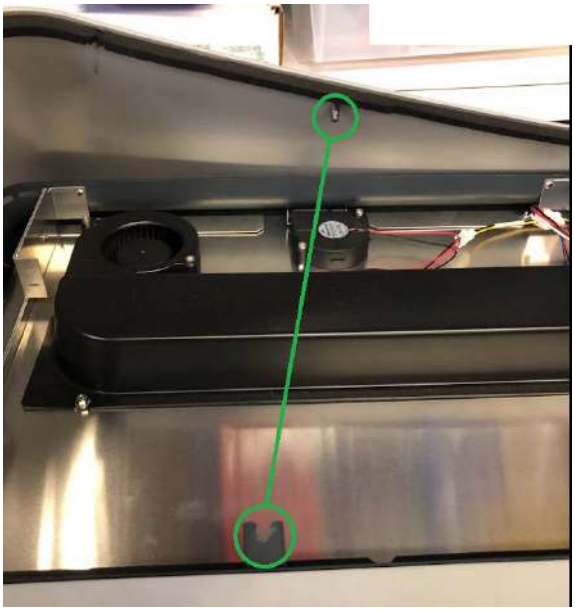
OVERVIEW: *If you are replacing the cooling fan for the top or left LED module, unscrew and remove the top shell.*

NOTICE: The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the printer by using a grounding strap or touching a grounded piece of metal.

STEP 1: UNSCREW THE TOP SHELL RETENTION SCREWS

The top shell is secured to the frame of the machine with six hex screws. When facing the front of the Stratasys ProLight, two screws are located on the right side and four are located on the left. Use a 2.5 mm hex driver to unscrew and remove the screws.

STEP 2: REMOVE THE TOP SHELL



Slide the top shell towards the back of the machine to unhook it from the frame. Lift the top shell away from the machine and set it to the side.

Removing the bottom shell (bottom LED module cooling fan)

OVERVIEW: *If you are replacing the cooling fan for the bottom LED module, unscrew and remove the bottom shell.*

> **NOTICE:** The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the printer by using a grounding strap or touching a grounded piece of metal.

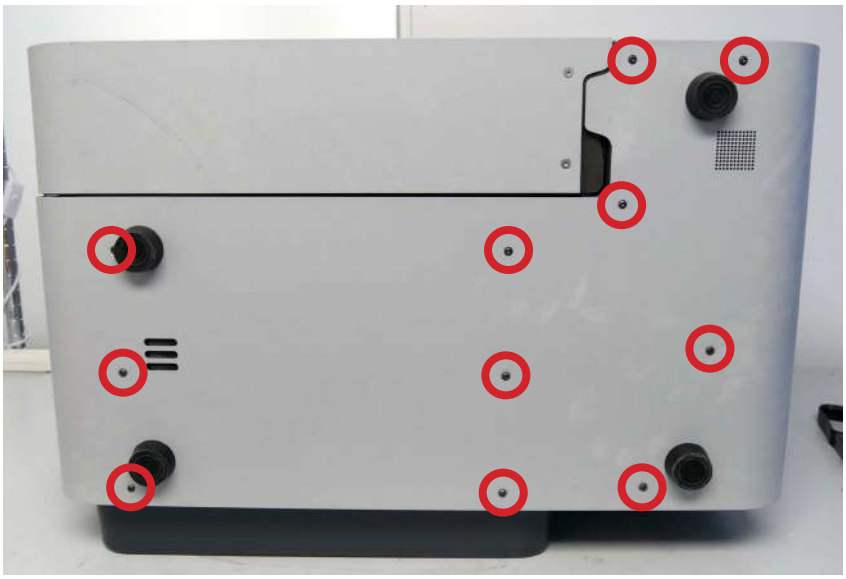
STEP 1: REMOVE THE TURNTABLE

Open the Stratasys ProLight door. Lift the turntable out of the machine and set it aside. Close the Stratasys ProLight door.

> **NOTICE:** The Stratasys ProLight turntable is made of glass. Handle with care.

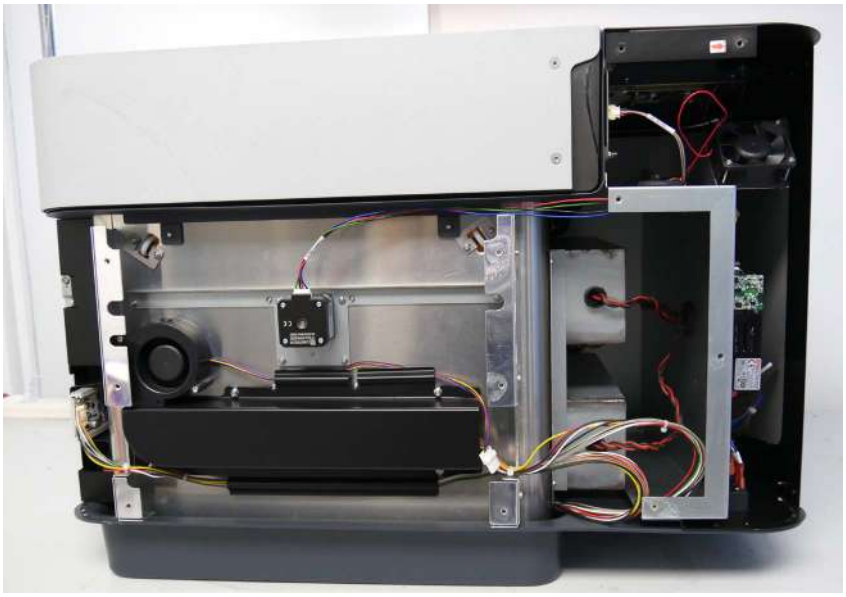
STEP 2: UNSCREW THE BOTTOM SHELL RETENTION SCREWS

The bottom shell is secured to the frame of the machine with 15 hex screws. When facing the front of the Stratasys ProLight, two screws are located on the right side, two screws are located on the left side, and 11 screws are located on the bottom.



Carefully tilt the machine away from you and place it on its back. Use a 2.5 mm hex driver to unscrew and remove the screws.

STEP 3: REMOVE THE BOTTOM SHELL

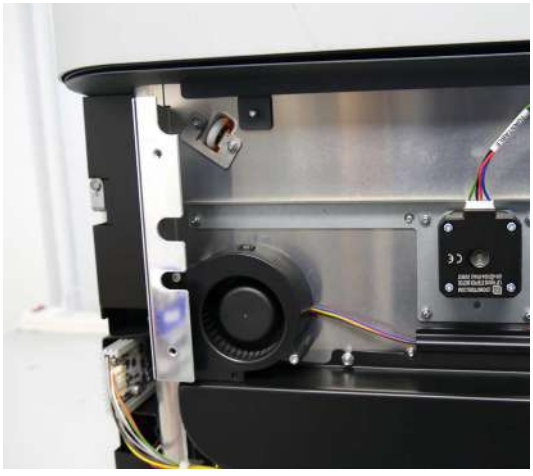


Lift the bottom shell away from the machine and set it to the side.

Removing the LED module cooling fan

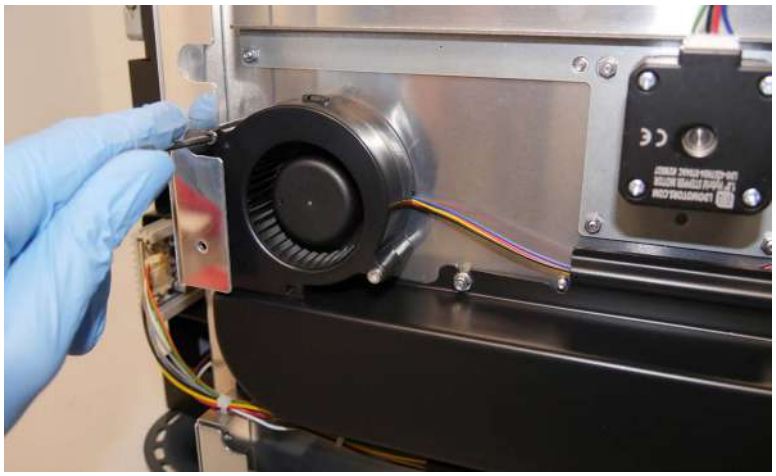
OVERVIEW: *Unscrew, unplug, and uninstall the LED module cooling fan that is being replaced.*

STEP 1: LOCATE THE LED MODULE COOLING FAN



The LED module cooling fan is a round blower fan, positioned at one end of the corresponding LED module. Locate the LED module cooling fan you are replacing.

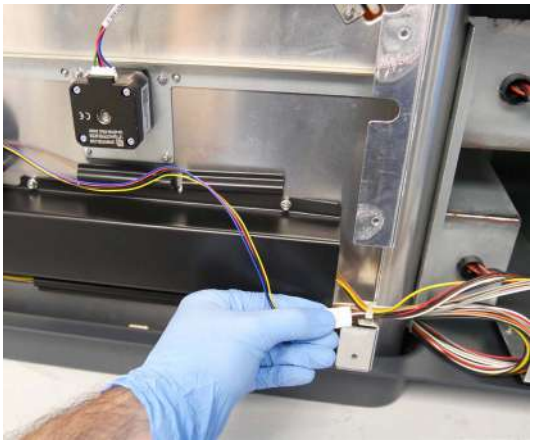
STEP 2: REMOVE THE LED MODULE COOLING FAN RETENTION SCREWS

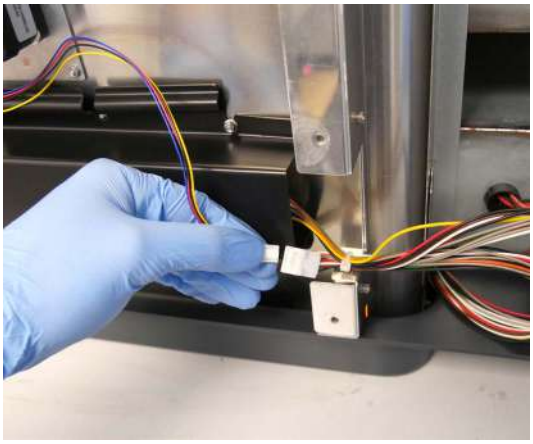


The top and bottom LED module cooling fans are each secured by two screws. The left fan is secured by a single screw. For the cooling fan you are replacing, use a 2.5 mm hex driver to loosen and remove the screw or screws.

STEP 3: DISCONNECT THE FAN CABLE

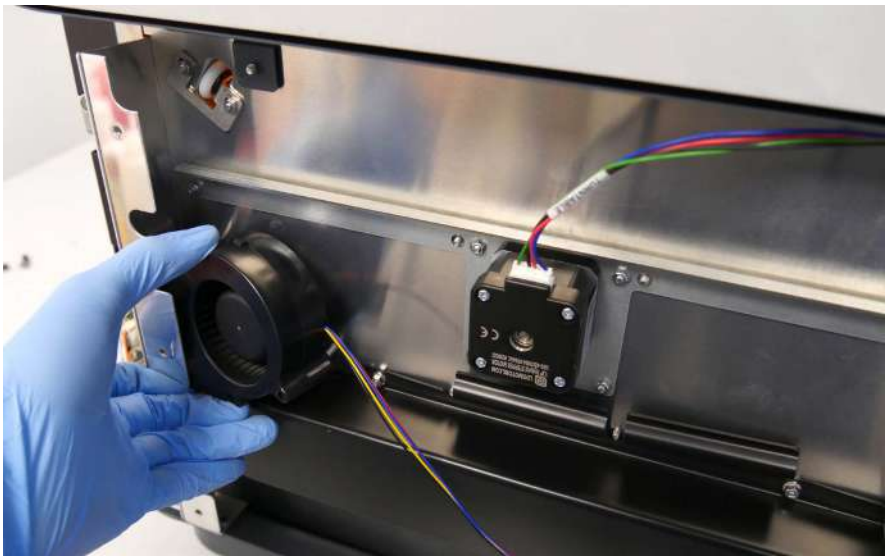
Follow the wires from the LED module cooling fan and locate the fan cable plug. The top and bottom LED module cooling fan wiring is routed through a cable management channel. You may need to slide the wires out of the channel to access the plug.





Press the latch on the fan cable plug, grip the connectors, and separate them from one another. Do not pull on the wires themselves.

STEP 4: REMOVE THE LED MODULE COOLING FAN



Note the orientation of the cooling fan for future reference. Lift the fan out of the Stratasys ProLight and set it aside.

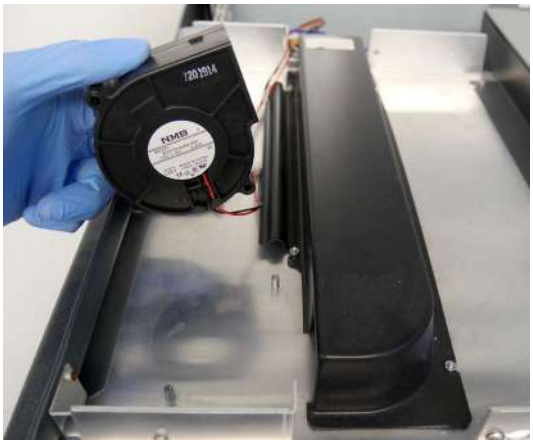
STEP 5: REMOVE ADDITIONAL LED MODULE COOLING FANS (OPTIONAL)

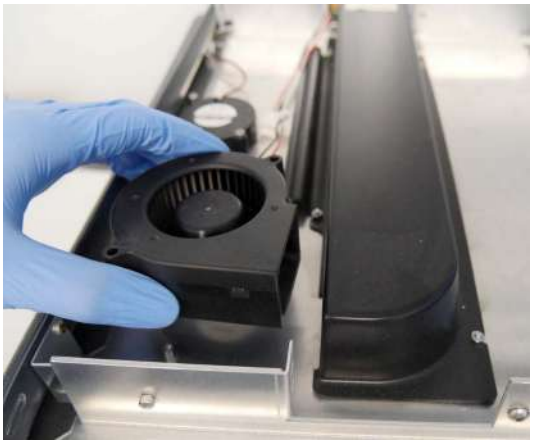
If you are replacing more than one LED module cooling fan, repeat steps 1–4.

Installing the new LED module cooling fan

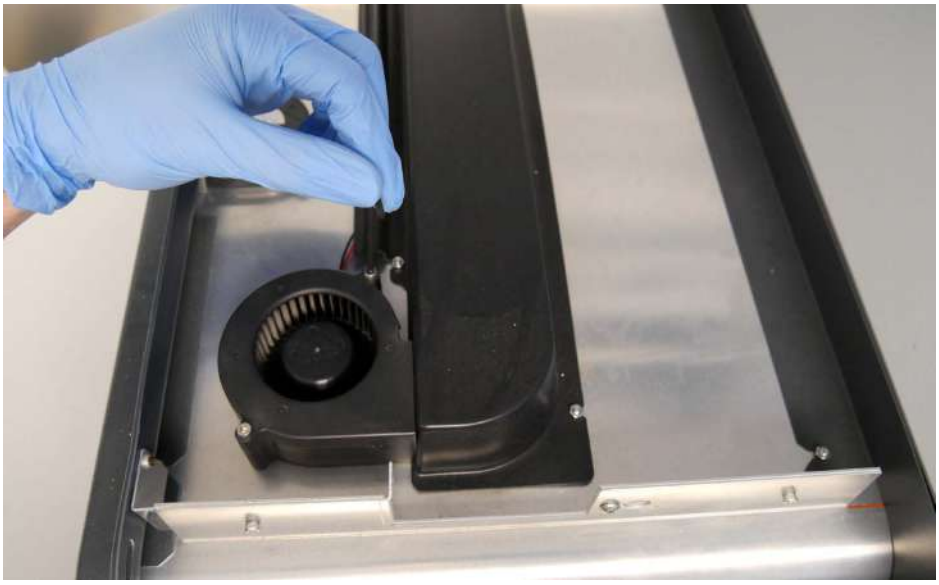
OVERVIEW: *Mount and secure the new cooling fan.*

STEP 1: MOUNT AND SECURE THE REPLACEMENT COOLING FAN



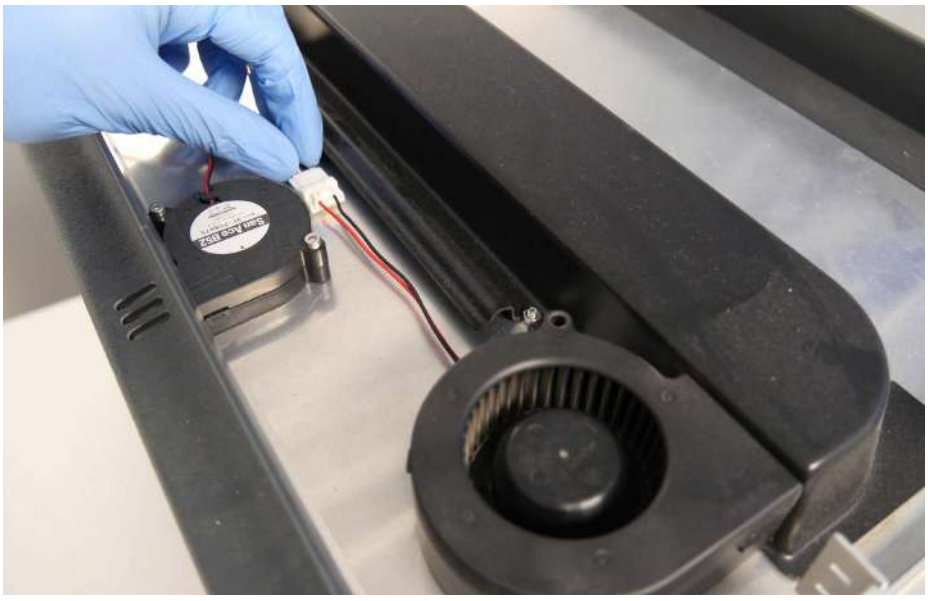


Position the replacement cooling fan on its mounting surface, aligning the screw holes in the fan with the posts on the machine's frame. Lower the cooling fan into place, ensuring that the label on the fan faces the machine's frame, the screw holes in the fan sit over the posts, and the fan outlet aligns with the opening in the LED module.



Reinstall the retention screw or screws and tighten with a 2.5 mm hex driver until finger tight.

STEP 2: RECONNECT THE FAN CABLE



Reconnect the fan cable. The connectors will only plug into each other properly in the correct orientation. Be careful not to bend the pins in the connectors.

STEP 3: INSTALL ADDITIONAL LED MODULE COOLING FANS (OPTIONAL)

If you are replacing more than one LED module cooling fan, repeat steps 1–2.

Reinstalling the top shell (top and left LED module cooling fans)

OVERVIEW: *If you replaced the cooling fan for the top or left LED module, reinstall and secure the top shell after performing any other maintenance procedures.*

STEP 1: REINSTALL THE TOP SHELL

Lower the top shell onto the Stratasys ProLight. Make sure you do not pinch any wires between the shell and the frame of the machine. Slide the top shell towards the front of the machine to hook it into place. Check that the screw holes in the top shell line up with the corresponding screw holes in the frame of the machine.

STEP 2: SECURE THE TOP SHELL

Thread one 2.5 mm hex screw into each of the six screw holes in the top shell. Using a 2.5 mm hex driver, tighten the screws until finger tight.

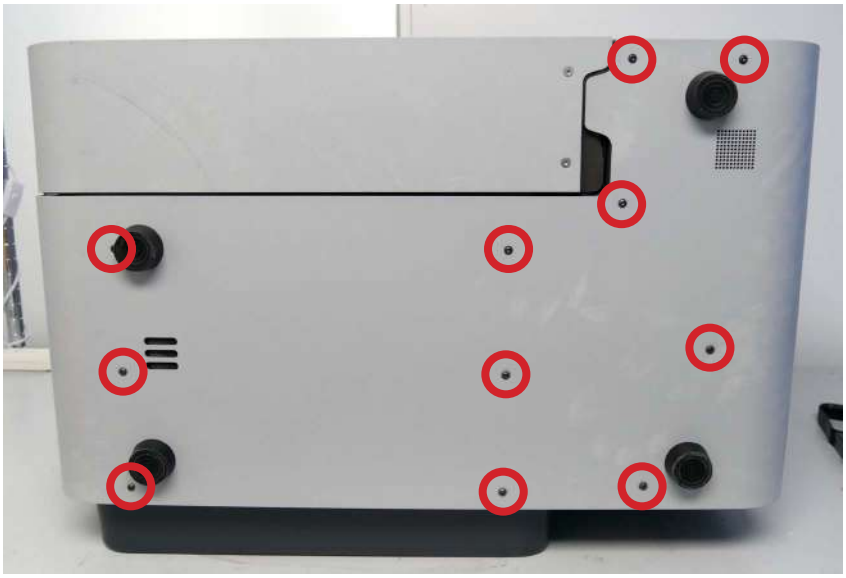
Reinstalling the bottom shell (bottom LED module cooling fan)

OVERVIEW: *If you replaced the cooling fan for the bottom LED module, reinstall and secure the bottom shell after performing any other maintenance procedures.*

STEP 1: REINSTALL THE BOTTOM SHELL

Lower the bottom shell onto the Stratasys ProLight. Make sure you do not pinch any wires between the shell and the frame of the machine. Check that the screw holes in the bottom shell line up with the corresponding screw holes in the frame of the machine.

STEP 2: SECURE THE BOTTOM SHELL



Thread one 2.5 mm flat head hex screw into each of the screw holes in the left and right side of the bottom shell. Thread one 2.5 mm button head hex screw into each of the screw holes in the bottom of the machine. Using a 2.5 mm hex driver, tighten the screws until finger tight.

STEP 3: REINSTALL THE TURNTABLE

Open the Stratasys ProLight door. Place the turntable onto its mount. Close the Stratasys ProLight door.

> **NOTICE:** The Stratasys ProLight turntable is made of glass. Handle with care.

Finalizing the repair

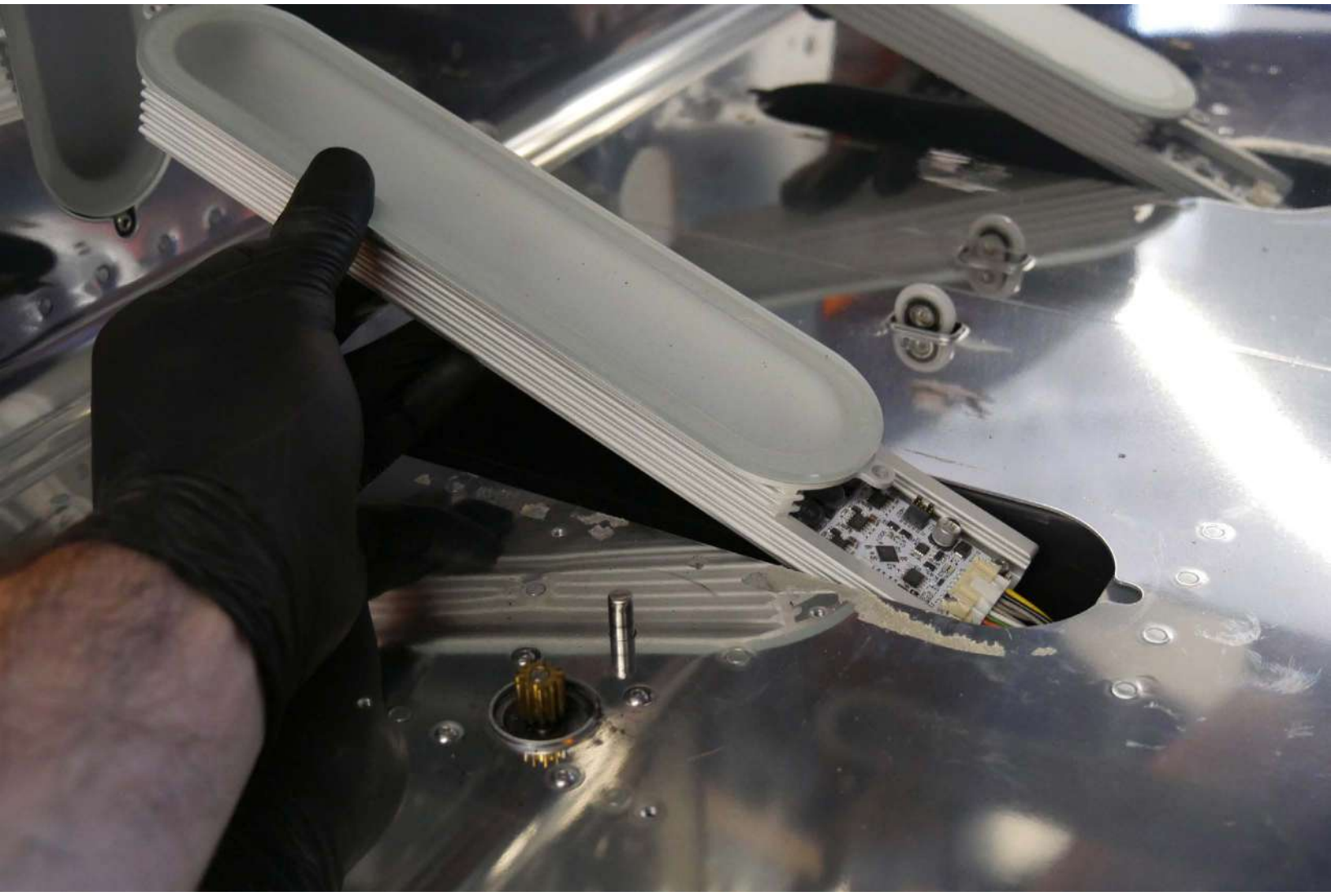
OVERVIEW: *After reinstalling the shell, power on the machine and perform final checks.*

STEP 1: POWER ON THE MACHINE

Connect the power cable to the Stratasys ProLight and the power supply. Flip the breaker switch on the back of the unit to the **ON** position to turn on the machine.

STEP 2: TEST THE REPAIR

Start a post-cure cycle to test the replacement LED module cooling fan. Monitor the Stratasys ProLight to ensure that the post-cure cycle runs normally. Contact Stratasys Support to share the results of the procedure.



STRATASYS CUSTOMER SUPPORT GUIDES

Replacing the Stratasys ProLight LED modules

September 2024 | **support.statasys.com**

Required Supplies:

- Replacement LED module (provided by Stratasys Support)
- Replacement LED module sticker (provided by Stratasys Support)
- 2.5 mm hex driver
- Nitrile gloves

Estimated time: 15 minutes (additional time may be required to allow the post-cure chamber to cool if the machine was recently in use)

The Stratasys ProLight has three LED modules that expose printed parts to light during post-curing. If any of the LED modules are malfunctioning or broken, printed parts may not post-cure properly and may not reach their optimal mechanical properties.

Use this guide to remove and replace the Stratasys ProLight LED modules.

> **DANGER:** Read and follow all safety instructions and warnings in the operator manual. Replacement with incorrect parts can lead to burns, shock, fire, or explosion. Dispose of all parts in accordance with local regulations.

Preparing the workspace

OVERVIEW: *Prepare the Stratasys ProLight and a dust-free workspace for replacing the LED modules.*

STEP 1: PREPARE THE WORKSPACE

Clear a workspace around your machine. Ensure that the workspace is well-ventilated and free of dust.

STEP 2: CLEAN THE CURE CHAMBER

> **WARNING:** Resin may cause skin irritation or an allergic skin reaction. Wear gloves when handling liquid resin or resin-coated surfaces. Wash skin with plenty of soap and water.

Open the Stratasys ProLight door. Clean any resin that may have pooled or cured in the post-cure chamber with paper towels. Dampen the paper towels with isopropyl alcohol if necessary to fully remove the resin.

DANGER: Fire hazard. IPA is flammable. Keep containers closed, and keep out of the reach of children. Allow IPA to fully evaporate before starting a post-cure cycle.

STEP 3: UNPLUG THE MACHINE

Disconnect the power cable before continuing with maintenance. Do not perform maintenance on the machine while it is connected to power. Wait five minutes after disconnecting the machine from power before proceeding. If the machine was recently in use, the post-cure chamber will be warm. Wait at least two hours for the chamber to cool.

DANGER: Performing maintenance on the machine while it is plugged in increases the risk of electric shock. Never remove the machine's shells while it is plugged in. Never reconnect the machine to power while the shells are uninstalled.

STEP 4: REMOVE THE TURNTABLE

Lift the turntable out of the machine and set it aside.

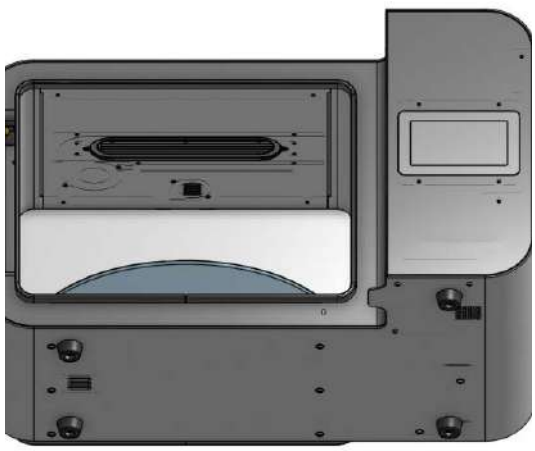
NOTICE: The Stratasys ProLight turntable is made of glass. Handle with care.

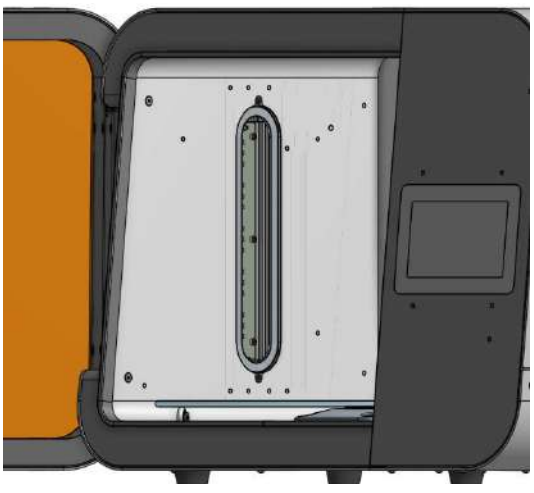
Removing the LED module

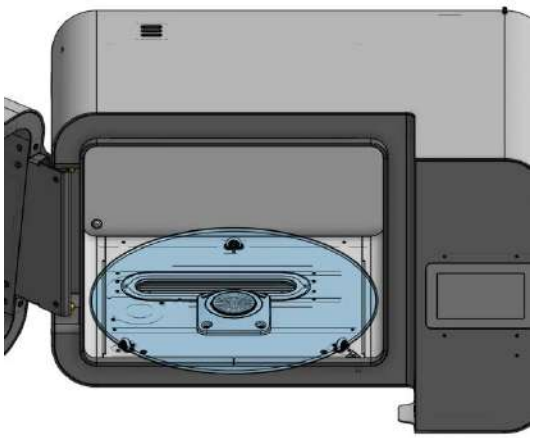
OVERVIEW: *Unscrew, unplug, and uninstall the LED module that is being replaced.*

NOTICE: The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the printer by using a grounding strap or touching a grounded piece of metal.

STEP 1: LOCATE THE LED MODULES

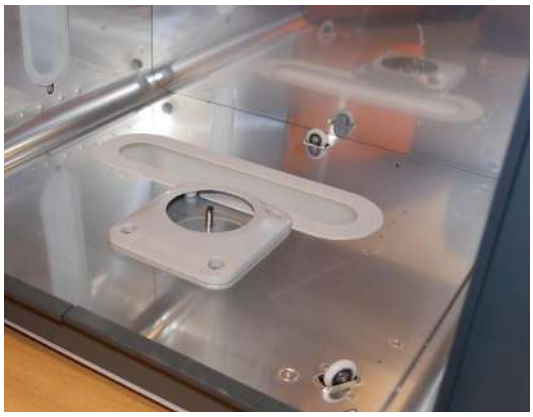






Open the Stratasys ProLight door and locate the LED module you are replacing. The Stratasys ProLight has three oval LED modules: one on the top of the post-cure chamber, one on the left wall of the chamber, and one on the bottom of the chamber underneath the turntable.

STEP 2: REMOVE THE TURNTABLE SHROUD (BOTTOM LED MODULE ONLY)

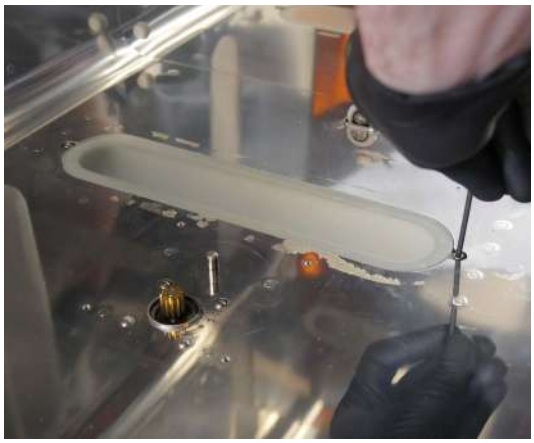


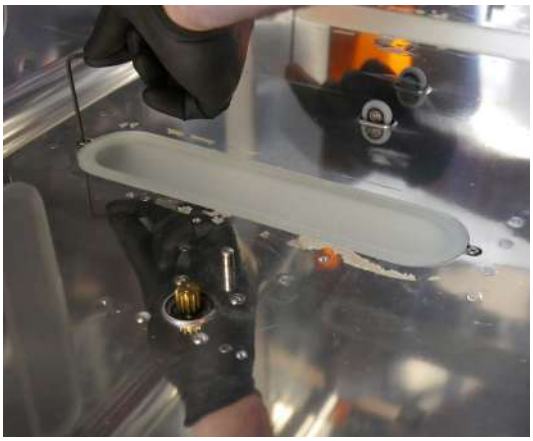
The turntable shroud is a rectangular cover that surrounds the turntable mount. If you are replacing the bottom LED module, remove the turntable shroud before proceeding. Using the 2.5 mm hex driver, loosen and remove the four screws securing the turntable shroud to the Stratasys ProLight. Lift the turntable shroud out of the machine and set it aside.

STEP 3: REMOVE THE LED MODULE STICKER (BOTTOM LED MODULE ONLY)

The lip of the bottom LED module is covered by a sticker. This sticker prevents any uncured resin or other liquids from dripping down past the sides of the LED module. If you are replacing the bottom LED module, remove the sticker before proceeding.

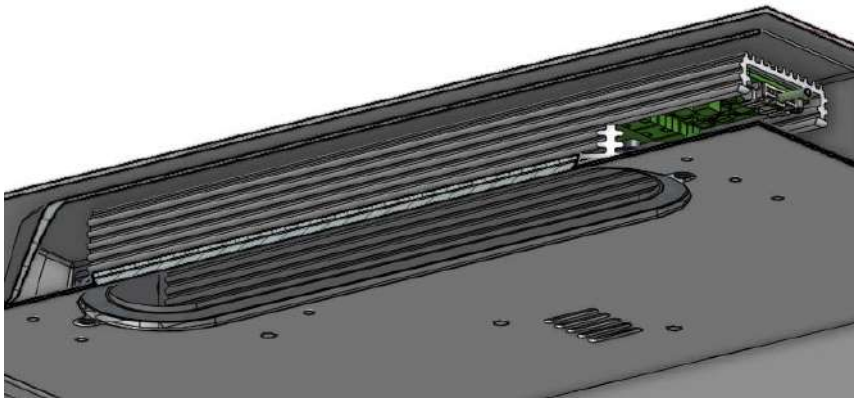
STEP 4: UNSCREW THE LED MODULE SCREWS

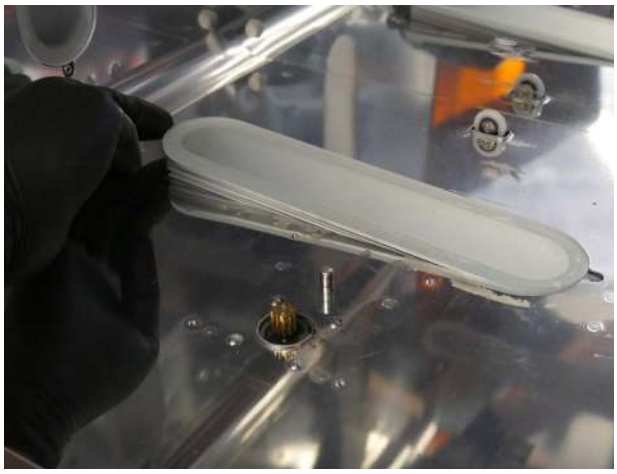




Each LED module is secured by two screws, one on each end. Using the 2.5 mm hex driver, loosen and remove the two screws. If you are replacing the top or left-hand LED module, support the module to keep it from shifting or falling. Set the screws aside.

STEP 5: DISCONNECT THE LED MODULE CABLE

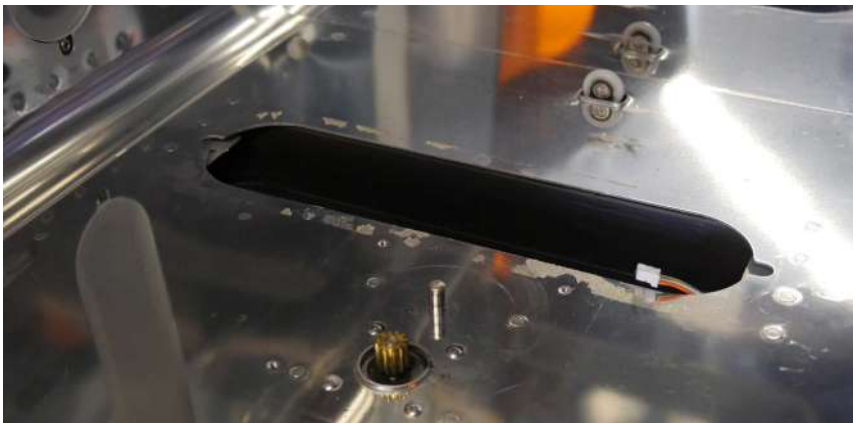




Tilt the LED module away from the body of the Stratasys ProLight. Note that a portion of the LED module extends behind the wall of the post-cure chamber. Do not pull the LED module directly away from the chamber wall.

Unplug the LED module cable. When disconnecting the cable, grip the connector, press in on the tab, and separate it from the LED module. Do not pull on the wires themselves.

STEP 6: REMOVE THE LED MODULE



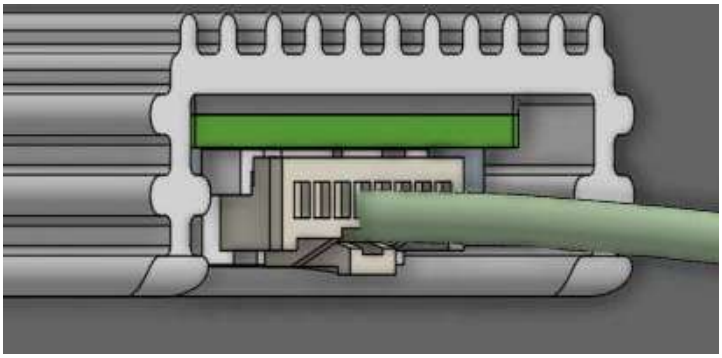
STEP 7: REMOVE THE OTHER LED MODULES (OPTIONAL)

Repeat steps 1–6 for any other LED modules you are replacing.

Installing the new LED module

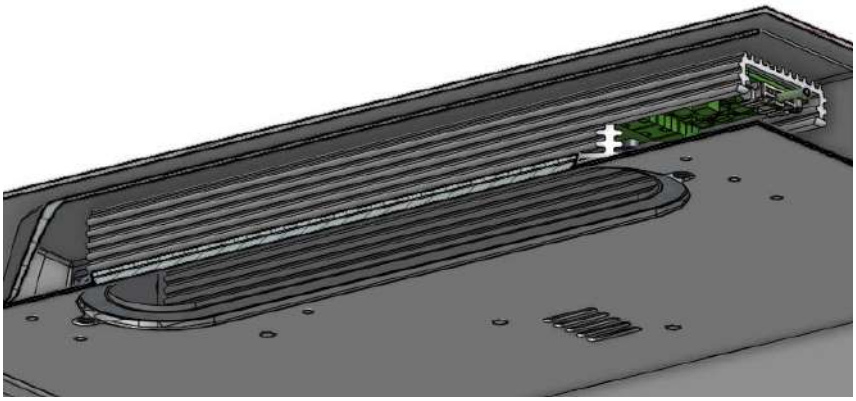
OVERVIEW: *Mount and secure the new LED module.*

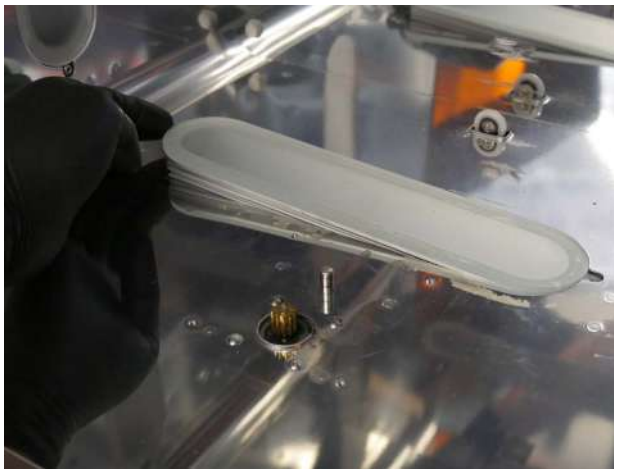
STEP 1: RECONNECT THE LED MODULE CABLE



Reconnect the LED module cable. The connector will only plug into the module properly in the correct orientation. Be careful not to bend the pins in the connector.

STEP 2: MOUNT AND SECURE THE REPLACEMENT LED MODULE





Tilt the LED module back into place. Ensure that the LED module cable is not pinched between the module and the post-cure chamber wall. Thread the two screws into their respective holes. Use the 2.5 mm hex drive to tighten both screws until finger tight.

STEP 3: APPLY THE REPLACEMENT LED MODULE STICKER (BOTTOM LED MODULE ONLY)

If you have replaced the bottom LED module, apply the replacement sticker around the edge of the module.

STEP 4: REINSTALL THE TURNTABLE SHROUD (BOTTOM LED MODULE ONLY)

If you have replaced the bottom LED module, reinstall the turntable shroud. Thread the four screws into their screw holes and tighten with the 2.5 mm hex driver until finger tight.

Finalizing the repair

OVERVIEW: *After installing the replacement LED modules, power on the machine and perform final checks.*

STEP 1: INSERT THE TURNTABLE

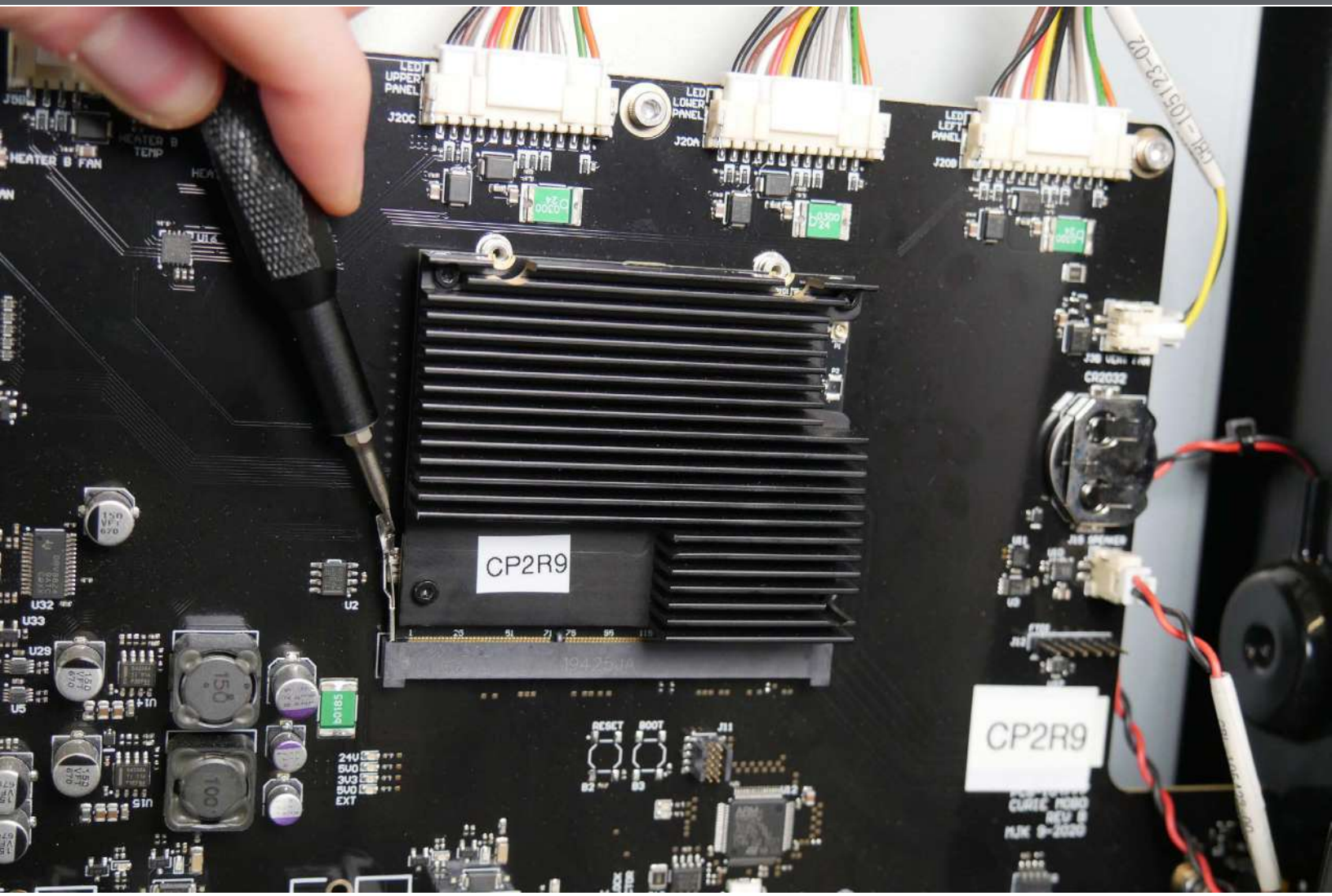
Place the turntable back on its mount.

STEP 2: POWER ON THE MACHINE

Close the Stratasys ProLight door. Connect the power cable to the Stratasys ProLight and the power supply. Flip the breaker switch on the back of the unit to the **ON** position to turn on the machine.

STEP 3: TEST THE REPAIR

Start a post-cure cycle to test the replacement LED modules. Monitor the Stratasys ProLight to ensure it lights up properly. Contact Stratasys Support to share the results of the procedure.



STRATASYS CUSTOMER SUPPORT GUIDES

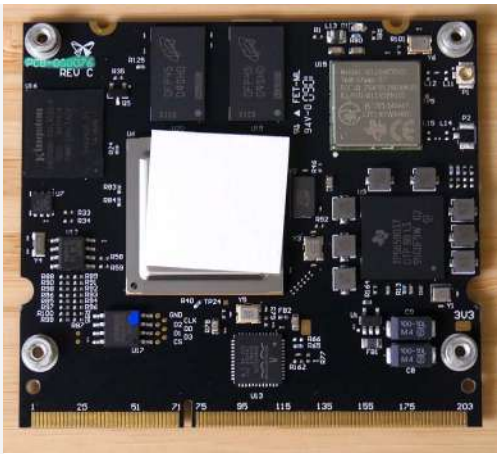
Removing Wi-Fi hardware (Stratasys ProLight)

September 2024 | **support.stratasys.com**

Required Supplies:

- 1.3 mm hex driver
- 1.5 mm hex driver
- 2.5 mm hex driver
- Tweezers and/or a small flat-blade screwdriver
- Hot rework tweezersor other appropriate SMD soldering equipment
- Nitrile gloves

Estimated time: 45–60 minutes



The Stratasys ProLight has Wi-Fi functionality for receiving firmware updates and uploading log files. Wi-Fi can be turned off via the machine's touchscreen, but depending on your organization's security requirements, you may need to physically remove the Wi-Fi hardware before using the device. This hardware includes a component on the system on a module (SOM) plugged into the motherboard as well as a Wi-Fi antenna plugged into the SOM.

> **NOTICE:** Performing this procedure voids the machine's warranty.

Use this guide to remove all Wi-Fi hardware from the Stratasys ProLight.

> **DANGER:** Read and follow all safety instructions and warnings in the operator manual. Replacement with incorrect parts can lead to burns, shock, fire, or explosion. Dispose of all parts in accordance with local regulations.

Preparing the workspace

OVERVIEW: *Prepare the Stratasys ProLight and a dust-free workspace for removing all Wi-Fi hardware.*

STEP 1: PREPARE THE WORKSPACE

Clear a workspace around your machine. Ensure that the workspace is well-ventilated and free of dust.

STEP 2: UNPLUG THE MACHINE

Disconnect the power cable from the machine before continuing with maintenance. Do not perform maintenance on the machine while it is connected to power. Wait five minutes after disconnecting the mahcine from power before proceeding.

> **DANGER:** Performing maintenance on the machine while it is plugged in increases the risk of electric shock. Never remove the machine's shells while it is plugged in. Never reconnect the machine to power while the shells are uninstalled.

Removing the top shell

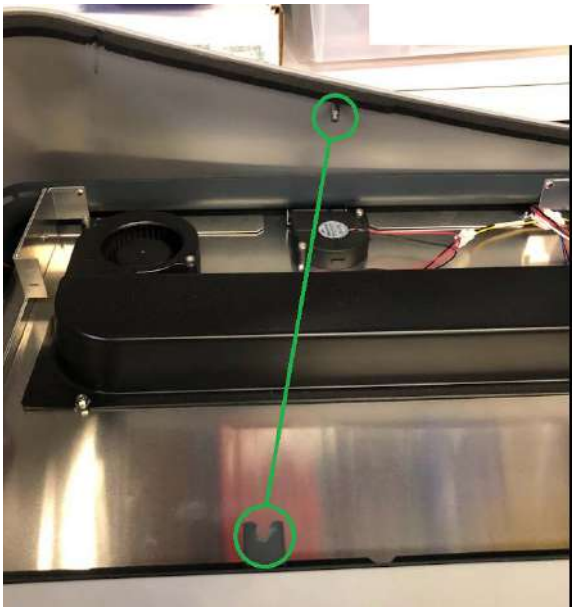
OVERVIEW: *Unscrew and remove the top shell from the Stratasys ProLight to access the motherboard and SOM.*

> **NOTICE:** The Stratasys ProLight contains sensitive electronic components. Ground yourself before touching any electronics in the printer by using a grounding strap or touching a grounded piece of metal.

STEP 1: UNSCREW THE TOP SHELL RETENTION SCREWS

The top shell is secured to the frame of the machine with six hex screws. When facing the front of the Stratasys ProLight, two screws are located on the right side and four are located on the left. Use a 2.5 mm hex driver to unscrew and remove the screws.

STEP 2: REMOVE THE TOP SHELL

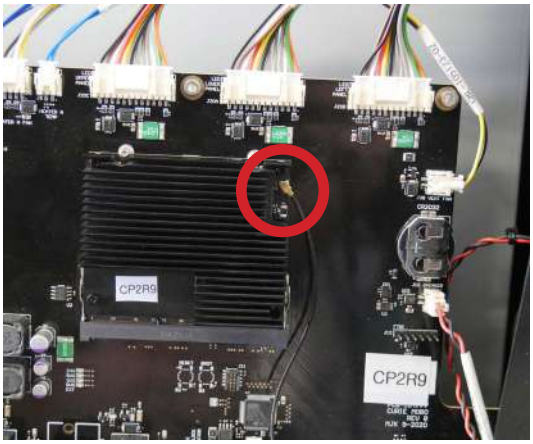


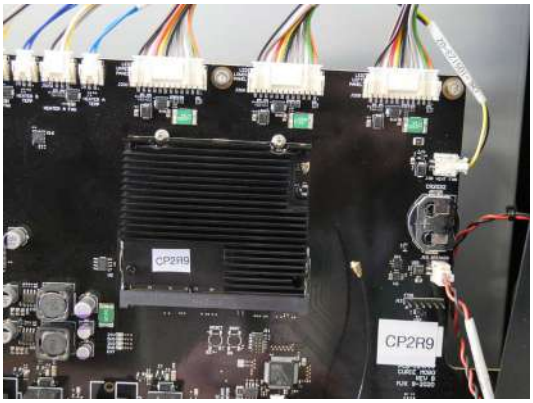
Slide the top shell towards the back of the machine to unhook it from the frame. Lift the top shell away from the machine and set it to the side.

Disconnecting the Wi-Fi antenna

OVERVIEW: *Unplug the Wi-Fi antenna from the SOM.*

STEP 1: DISCONNECT THE WI-FI ANTENNA FROM THE SOM



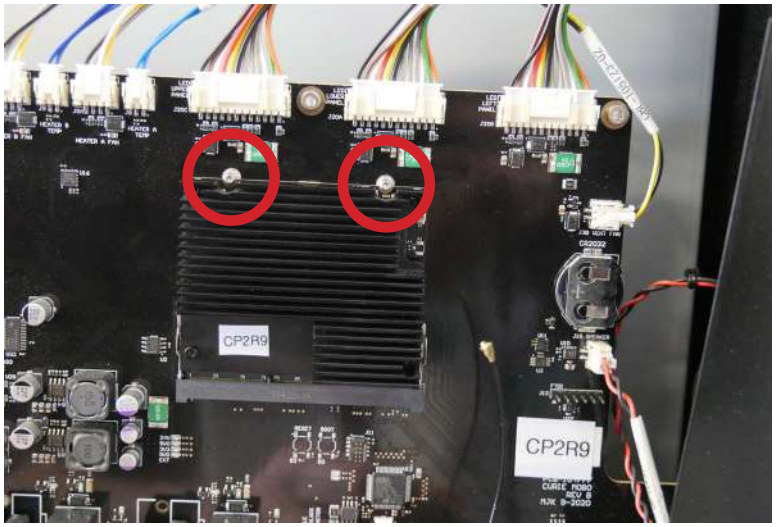


The Wi-Fi antenna is plugged into the SOM at the top-right corner of the board. The connector is accessible through a cutout in the heatsink. Grip the antenna's connector by its housing and disconnect it from the SOM. Do not pull on the antenna itself.

Removing the SOM

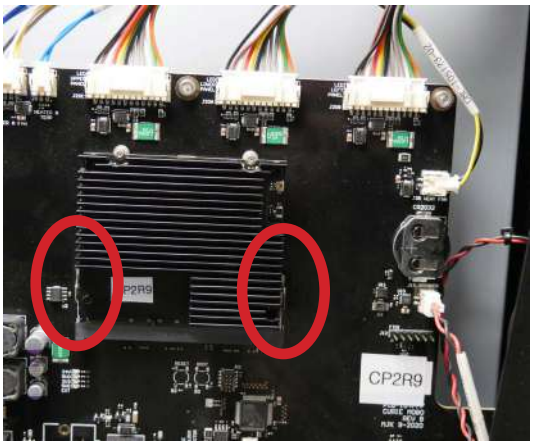
OVERVIEW: *Unplug and remove the SOM.*

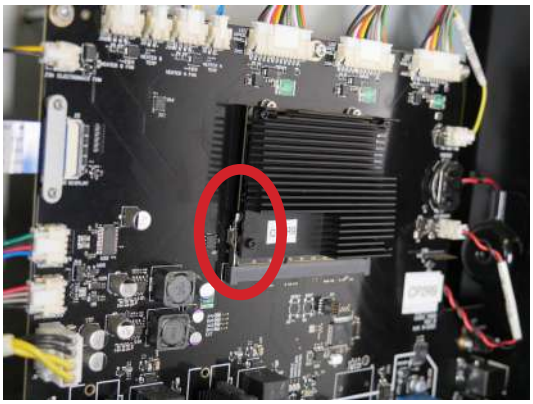
STEP 1: UNSCREW THE SOM RETENTION SCREWS



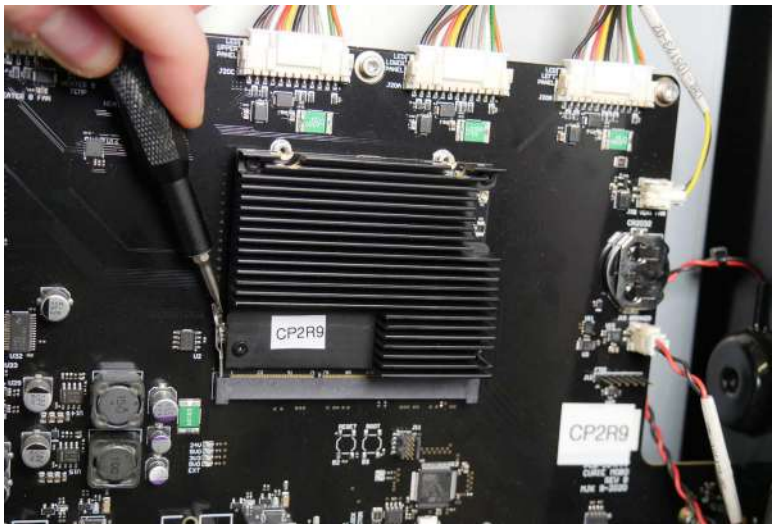
The SOM is plugged into the motherboard and secured with two screws on the top side of the module. Using a 1.3 mm hex driver, loosen and remove two SOM retention screws. Set the screws aside.

STEP 2: UNLATCH THE SOM



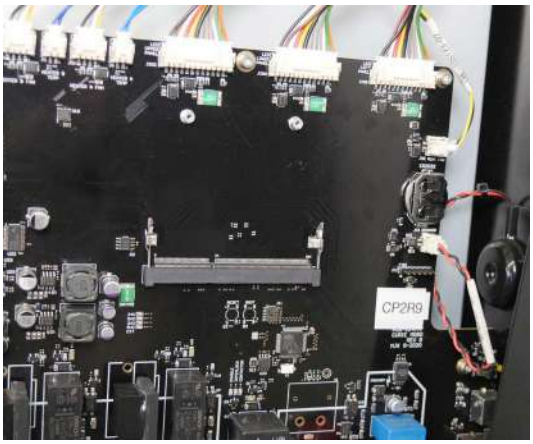


The SOM is additionally secured via two latches: one on the left side of the board and one on the right.



Using fingernails or a small flat-blade screwdriver, open the two latches securing the SOM into its socket. The SOM may tilt forward once you have opened both latches.

STEP 3: REMOVE THE SOM



Lift the SOM up from the edge opposite its connector and carefully pull it free from the socket. Place the SOM on a static-free surface.

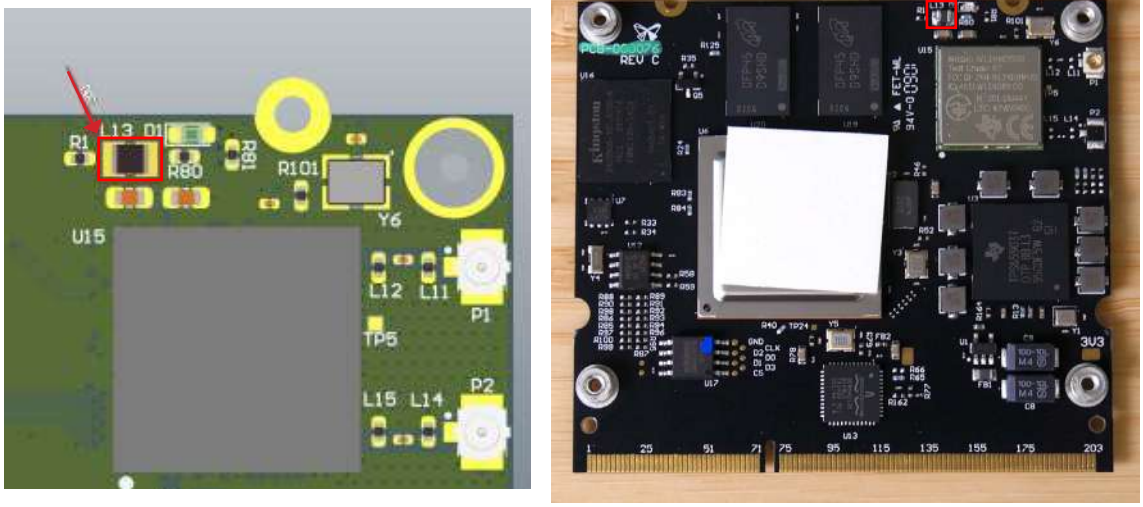
Modifying the SOM

OVERVIEW: *After removing the SOM from the machine, remove component L13.*

STEP 1: UNSCREW AND REMOVE THE HEATSINK

Using a 1.5 mm hex hex driver, unscrew and remove the four screws securing the heatsink to the SOM. Set the screws aside. Remove the heatsink and set it aside.

STEP 2: REMOVE COMPONENT L13



Using hot tweezers or other appropriate SMD soldering equipment, remove component L13 from the SOM. If you plan to reverse this procedure in the future, save component L13 for later reuse.

Reinstalling the SOM

OVERVIEW: *After modifying the SOM, reinstall the heatsink and reconnect the SOM to the motherboard.*

STEP 1: REINSTALL THE HEATSINK

Reinstall the heatsink onto the SOM, making sure the thermal pad on the bottom of the heatsink covers the processor (the largest chip on the board, labeled U6). Ensure that the cutout on the edge of the heatsink allows access to the Wi-Fi antenna port and that the screw holes in the heatsink align with the holes in the SOM.

Insert one heatsink retention screw into each of the four screw holes in the heatsink. Using a 1.5 mm hex driver, tighten the four screws until finger tight. Do not overtighten.

STEP 2: REINSTALL AND SECURE THE SOM

Insert the SOM into its socket on the motherboard. Close the two latches. Insert one SOM retention screw into both of the screw holes on the left-hand edge of the SOM. Using a 1.3 mm hex driver, tighten the two screws until finger tight. Do not overtighten.

Secure the loose Wi-Fi antenna

OVERVIEW: *Secure the Wi-Fi antenna within the printer to ensure it remains undamaged.*

STEP 1: SECURE THE WI-FI ANTENNA

Bundle up the end of the cable that was previously connected to the SOM. Cover the connector with insulating tape so it cannot short out any parts in the machine. Tuck the bundled end of the cable into the machine such that it will not be damaged when you reinstall the top shell. As an alternative, remove the antenna from the machine completely. If you plan to reverse this procedure in the future, save the antenna for later reuse.

Reinstalling the top shell

OVERVIEW: *Reinstall and secure the top shell.*

STEP 1: REINSTALL THE TOP SHELL

Lower the top shell onto the Stratasys ProLight. Make sure you do not pinch any wires between the shell and the frame of the machine. Slide the top shell towards the front of the machine to hook it into place. Check that the screw holes in the top shell line up with the corresponding screw holes in the frame of the machine.

STEP 2: SECURE THE TOP SHELL

Thread one 2.5 mm hex screw into each of the six screw holes in the top shell. Using a 2.5 mm hex driver, tighten the screws until finger tight.

Finalizing the procedure

OVERVIEW: *After removing all Wi-Fi hardware from the Stratasys ProLight, power on the machine and perform final checks.*

STEP 1: POWER ON THE MACHINE

Connect the power cable to the Stratasys ProLight and the power supply. The machine initializes. Test the machine to ensure that it operates normally (with the exception of Wi-Fi connectivity).