Loctite® Focused UV Flood Lamp
UV Flood Curing System
Item Number 1113131
1 Please Observe The Following

1.1 Emphasized Sections

⚠️ Warning!
Refers to safety regulations and requires safety measures that protect the operator or other persons from injury or danger to life.

❗️ Caution!
Emphasizes what must be done or avoided so that the unit or other property is not damaged.

⊞️ Notice:
Gives recommendations for better handling of the unit during operation or adjustment as well as for service activities.

1.2 For Your Safety

⚠️ IMPORTANT! DO NOT OPERATE THE UNIT BEFORE READING THIS SECTION.

The Loctite® Focused UV Flood Lamp is a source of long wavelength ultraviolet light used to cure light sensitive products. It is safe when installed and used properly. The following guidelines should be followed at all times to ensure protection from the ultraviolet light.

1. UV protective glasses with side shields should be worn when working with and around the lamp system. Glasses should meet ANSI Z87.1 certification.

2. Potentially exposed skin should be covered. Long sleeves and protective gloves should be worn when placing and removing parts from under the lamp.

3. Never look directly at the output from the lamp or directly into the lamp/reflecter.

UV safety is the responsibility of the user, especially when operating the Focused UV Flood Lamp in a non-standard configuration. When in doubt about UV safety, consult a Loctite technical specialist at 1-800-LOCTITE (562-8483).
1.3 Items supplied

Head lamp Assembly  
Power Cord  
UV Protective Eyewear  
Cotton Gloves  
Operators Manual  
Reusable Shipping Box and Foam Packaging

Carefully unpack the Loctite® Focused UV Flood Lamp and examine the items contained in the carton. Inspect the unit for any damage that might have occurred in transit. If such damage has occurred, notify the carrier immediately. Claims for damage must be made by the consignee to the carrier and should be reported to the manufacturer.

2 Description

2.1 Operation

The Loctite® Focused UV Flood Lamp is designed for use in a wide range of bonding, potting, tacking and sealing applications. Because of its reliability and simplicity, it is well suited for most production operations.

The system irradiates medium power, long wave, and ultraviolet light over a 4 x 4 inch work area. It is a self-contained portable 400W UV flood lamp. The lamp head houses the arc lamp and sockets, reflector, cooling fan, and solid-state power supply with integrated igniter. The unit has a top mounted handle, and threaded inserts for hard or fixed mounting. The unit ships complete and ready for use. An optional sheet metal headrest is available, which allows safe placement of the hot lamp on a tabletop.

This Focused UV Flood Lamp can be used in a stationary or fixed position. There are (2) mounting holes on the topside of the unit that can be used to affix the head Lamp Assembly to a Bracket. The holes are 6/32 with 0.3” depth.

The unit will feature constant lamp power regulation, with 120 VAC line operation. The unit is compatible with 2 different spectrum lamp types, allowing for use in applications requiring UVA, UVB, or visible curing. The power supply includes the following protection circuitry: Inrush current limit, line voltage surge protection, output short circuit & open circuit protection, and over temperature shutdown.
2 Description (continued)

2.2 System Components

Lamp Head Assembly

Full power and Standby switch

Power plug and On switch

Optional: Headrest Assembly
3 Technical Data

3.1 Specifications

Loctite Model: Focused UV Flood Lamp
Loctite Item Number: 1113131
Electrical Power Required: 120 VAC, 60 Hz single phase
Lamp Type: 400 Watt Metal Halide
(Visible and UV enhanced)
Unit Dimensions
L x W x H (inches): 7.6" x 4.5" x 8.1"
Power Supply Weight: 4.5 Pounds

4 Installation

Before using the tool for the first time check it carefully for signs of external damage. If any shipping damage is found DO NOT USE THE UNIT - return it to your supplier immediately.

4.1 Unpacking and Inspection

Carefully remove the system from its shipping carton and inspect it for any signs of damage. Any damage should be reported immediately to the carrier. Refer to the list of supplied parts, and compare to the contents. Report any missing parts promptly to the Loctite® customer service department at 1-800-LOCTITE (562-8483).

4.2 Installation and Start-up

The Loctite® Focused UV Flood Lamp will arrive completely assembled. All that is required is to plug the unit to a 120 VAC outlet. The system should be positioned to allow at least 6 inches clearance around the cradle and unit housing for adequate ventilation.

The unit must be installed and operated in a manner that insures proper cooling. Ambient operating temperature range: 50 to 104F.
The unit should not be enclosed in any way that restricts free air flow through the housing.

Note: Internal temperature cutoff at the circuit board is approximately 150F.

Failure to maintain the recommended operating conditions may result in damage to the unit. Damage caused by failure to maintain the stated conditions will not be covered under the Henkel warranty.

⚠️ Be sure to wear UV protective glasses at all times while operating the system. A pair is supplied with the unit. To energize the system, turn the power switch on and allow 5 minutes for the lamp to reach full power. To maximize lamp life, the unit should be kept under power without frequent on / off cycling. Whenever the Head Lamp Assembly is not being utilized for curing, the Operation Mode switch should be in STANDBY. Flip the switch to USE mode when performing a curing operation.

The lamp should be allowed to operate a minimum of 15 minutes before turning the system off. Once off, a minimum of 5 minutes cooling time is required before restarting. The position of the reflector / lamp housing is adjustable up or down to control the amount of UV light irradiated onto the part and product. The position and exposure time required to complete the curing process must be determined initially.

⚠️ Always place the unit in a safe place that can handle the heat of the unit (whether fully ON or in Standby mode) or on the optional Headrest when not in use. Do not place on paper, cardboard, plastic or other surfaces that may melt, heat up and ignite due to high heat.
5 Operation

5.1 Controls and Operation

The Focused UV Flood Lamp is easy to use and requires only that the power switch be switched on for the system to be ready to operate.

Allow the unit to warm up for approximately 5 minutes before using in a curing operation. When ready to use, grab the unit by the handle, and flip the Standby switch to the Use position. Whenever the lamp Head Assembly needs to be put down (not used), place it in a properly designated location or on the Headrest Assembly and turn the Operation Mode switch to Standby.

The Standby position, reduces the Lamp’s output power by about half. This mode reduces the output power and prevents overheating of the unit when not in use.

Wait for at least 15 minutes of ON operation before shutting the unit OFF. And wait at least 5 minutes before restarting (allow to cool).

This unit can be used in a fixed or stationary manner as well by mounting it to a bracket. It has 2 mounting holes at the topside of the Head Lamp Assembly. Ensure to place the operation mode in Standby mode when not performing curing operations.

The amount of UV energy delivered to the part is controlled by the distance between the bond area and the lamp / irradiator, and the time of exposure. The time required for curing can be minimized by setting the bottom edge of the irradiator housing two to three inches above the bond area. Increasing the distance will result in increased cure times. The area of the part to be cured should be centered underneath the irradiator / lamp assembly.

UV lamps also emit heat energy that is usually insignificant, however, if heat sensitive parts are being processed, a sample part should be tested by exposing it to a cure cycle. It may be necessary to move the part farther from the lamp and increase the cure time. The UV power should be monitored regularly using a radiometer. A reading should be taken when the new lamp is first ignited so subsequent changes in the UV output can be identified. Measurements should be made using the same type of radiometer and preferably the exact same instrument, if possible.
6 Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Corrective Action/Possible Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp does not light, power switch does not light, and fans do not start.</td>
<td>Make sure the system is plugged in.</td>
</tr>
<tr>
<td>Lamp does not light, power switch lights, fans are running.</td>
<td>Lamp is defective or not installed properly.</td>
</tr>
<tr>
<td></td>
<td>Lamp is at end of its life.</td>
</tr>
<tr>
<td>UV Output is low. (Radiometer Reading)</td>
<td>Check radiometer accuracy, calibration.</td>
</tr>
<tr>
<td></td>
<td>Lamp is at end of its life.</td>
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<tr>
<td></td>
<td>Lamp needs to be cleaned.</td>
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<tr>
<td></td>
<td>Reflector needs to be cleaned.</td>
</tr>
<tr>
<td>Poor or slow cure results.</td>
<td>UV output is low (see above).</td>
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<tr>
<td></td>
<td>Product is not compatible with the lamp type.</td>
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<tr>
<td></td>
<td>Position the lamp closer to the part.</td>
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</tbody>
</table>

7 Care and Maintenance

7.1 For Your Safety

⚠️ Unplug the power cord from the wall outlet and disconnect it from unit before any maintenance is attempted. When performing maintenance, wait for the unit to cool off.

🔍 Reflector

Clean the aluminum reflector every four months or as required.

The reflector is accessed by removing the lamp. Use Isopropyl alcohol and a clean, soft cloth to clean both the reflector and glass.

🔍 Lamp and Sockets

Inspect the lamp sockets when installing a new lamp and replace if corroded. Heat generated by poor connections can reduce lamp life. Lamp should be replaced as required. It is recommended that the lamp output be monitored regularly with a radiometer to insure that the product is being completely cured. The Loctite® UV V Light Radiometer 1265282 or UV A/B Light Radiometer Dosimeter can be used to monitor performance.
As an alternative, regular inspection of the cured product may provide an indirect and less accurate measure of lamp function. If a radiometer is not used to track lamp life, the lamp should be replaced at least after every 1,000 hours of operation.

Replace the lamp only after the lamp has cooled. Unplug the unit, when removing the lamp. Do not handle the lamp with bare fingers

Do this only after the lamp has cooled and the system is unplugged. When handling the lamp, use cotton gloves or a soft cloth. Grasp the ends of the lamp, near the socket, to remove it. Inspect the new quartz lamp envelope for cleanliness. If necessary, clean the lamp with isopropyl alcohol and a soft cloth. Insert the new lamp into the sockets, grasping it only at the ends.

IT IS EXTREMELY IMPORTANT TO AVOID TOUCHING (WITH YOUR HAND) THE REFLECTOR SURFACES AND THE ILLUMINATED PORTION OF THE LAMP, AS CONTAMINANTS FROM YOUR SKIN WILL CAUSE OXIDATION OF REFLECTORS AND UNWANTED REFRACTION OF LIGHT THROUGH THE CONTAMINATED PORTION OF THE LAMP.

WHEN POSSIBLE, COTTON (WHITE) INSPECTION GLOVES SHOULD BE USED IN HANDLING THE LAMPS AND REFLECTORS.

FOR CLEANING, USE DAMPENED SOFT LINT-FREE WIPING TOWELS.

DAMPING SOLUTIONS SUCH AS ISOPROPYL ALCOHOL OR EQUIVALENT SHOULD BE USED AS THE CLEANING SOLUTION.

NOTE: NEVER USE ABRASIVE CLEANING COMPOUNDS OR STEEL WOOL FOR CLEANING REFLECTORS. THESE HARSH PRODUCTS WILL REMOVE THE FINISH AND REDUCE THE REFLECTOR EFFICIENCY.
## 8 Documentation

### 8.1 Spare Parts List

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>UV Enhanced Metal Halide Lamp</td>
<td>97246</td>
</tr>
<tr>
<td>Visible Light Enhanced Metal Halide Lamp</td>
<td>983050</td>
</tr>
<tr>
<td>UV Safety Glasses</td>
<td>97210</td>
</tr>
<tr>
<td>6 Foot Power Cable</td>
<td>983680</td>
</tr>
<tr>
<td>Cotton Gloves</td>
<td>984070</td>
</tr>
</tbody>
</table>

### 8.2 Optional Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>Headrest Assembly</td>
<td>1153503</td>
</tr>
<tr>
<td>UV V Light Radiometer Dosimeter</td>
<td>1265282</td>
</tr>
<tr>
<td>UV A/B Light Radiometer Dosimeter</td>
<td>1390323</td>
</tr>
</tbody>
</table>
9 Warranty

Henkel expressly warrants that all products referred to in this Instruction Manual for the Focused UV Flood Lamp item 1113131 (hereafter called “Products”) shall be free from defects in materials and workmanship. Liability for Henkel shall be limited, as its option, to replacing those Products which are shown to be defective in either materials or workmanship or to credit the purchaser the amount of the purchase price thereof (plus freight and insurance charges paid therefor by the user). The purchaser’s sole and exclusive remedy for breach of warranty shall be such replacement or credit.

A claim of defect in materials or workmanship in any Products shall be allowed only when it is submitted in writing within one month after discovery of the defect or after the time the defect should reasonably have been discovered and in any event, within (12) months after the delivery of the Products to the purchaser. This warranty does not apply to perishable items, such as UV lamp, work surface pad, fuses, etc. No such claim shall be allowed in respect of products which have been neglected or improperly stored, transported, handled, installed, connected, operated, used, or maintained. In the event of unauthorized modification of the Products including, where products, parts or attachments for use in connection with the Products are available from Henkel, the use of products, parts or attachments which are not manufactured by Henkel, no claim shall be allowed.

No Products shall be returned to Henkel for any reason without prior written approval from Henkel. Products shall be returned freight prepaid, in accordance with instructions from Henkel.

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