



This publication contains supplemental instructions for the UV Light kit. Carefully read this publication and the product's Installation, Operation, and Maintenance manual prior to any installation or maintenance procedure. For additional safety information, refer to AMCA Publication 410-96, Safety Practices for Users and Installers of Industrial and Commercial Fans.

### **!WARNING**

- Before performing maintenance or service ensure unit is unplugged. Electrical shock can cause injury or death.
- Never expose eyes or skin to UVC light. Wear gloves and face shield/safety glasses while performing maintenance.
- Do not touch UVC lamps without gloves. Damage to the lamp may occur. Oil from fingers will permanently etch glass and weaken structure. If necessary, clean lamp with isopropyl alcohol and a lint-free cloth.
- UVC lamps are fragile and should be handled with care.
- UVC lamps contain mercury. If a lamp breaks ventilate the room for 30 minutes then clean and dispose of properly.
- Unit is equipped with a safety interlock switch. Do not attempt to bypass the switch.

### **Operation**

The UVC lamp kit is pre-installed and pre-wired as part of the MACUV unit. Electrical power is supplied from the power switch located on the fan. For operation refer to the Operation section of the MAC IO&M supplied with the unit.

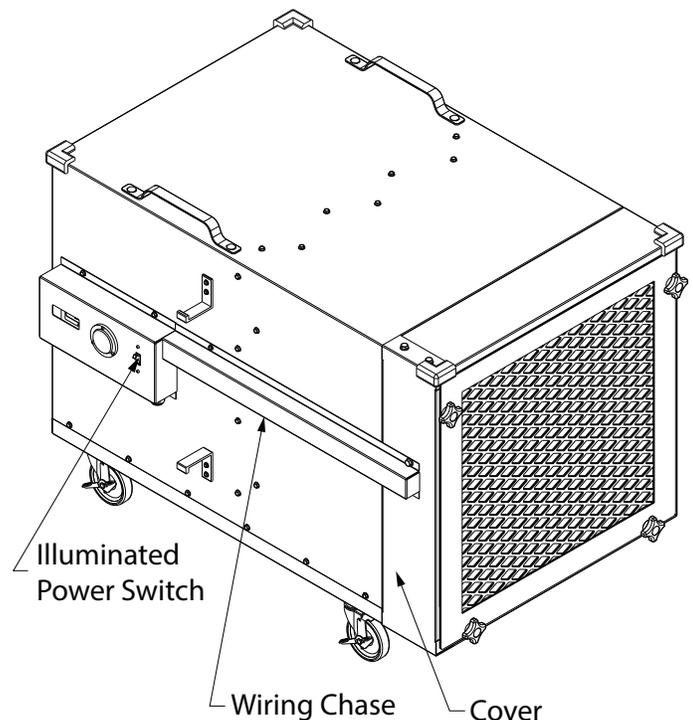
### **UVC Lamp Replacement**

The UVC lamps have a nominal useful life of 9000 hours. The MACUV comes with (3) UVC lamps. If it is suspected that a lamp has failed remove the inlet guard and pre-filter according to the MAC IO&M. With the unit operating and the guard and filter removed it can be determined if all three lamps are functioning properly.

If a lamp has failed or the lamps have reached the end of their useful life it will be necessary to replace the lamp or lamps.

1. Be sure that the unit is switched off and unplugged from the wall before any maintenance is performed.
2. Remove the wiring chase that connects the UV section of the unit to the wiring compartment on the fan portion of the unit. This is held in place by (2) sheet metal screws and (2) hex head bolts. With the wiring chase removed, the wire connector located near the illuminated power switch can be unplugged.
3. The cover for the UV section can then be removed by removing the (4) hex head bolts located at the top and bottom. Removing this cover gives access to all the wiring for the UV section.
4. Located at the top of this interior compartment is a single hex nut that needs to be removed to allow the lamp section to be removed. With the nut removed, the entire lamp section can move forward off the threaded stud and then slide out from the side.
5. With the lamps facing up, lay the lamp section down on a large flat working surface. The lamp socket is held to the mounting angle by (2) machine screws and nuts. Remove these and set them aside. Remove the bulb from the metal clip at the opposite end. The bulb is held into the socket by clips. Gently pry the socket clip nearest the wires until the lamp can be pivoted away from socket and removed.

6. When installing the new lamp be sure to not touch the glass with bare skin as this can damage the lamp.
7. To install the new lamp insert it into the socket on an angle with the end furthest from the wires first. With the one side of the lamp hooked on the clip of the socket press the other end together until the lamp snaps into place on the other clip of the socket.
8. For reassembly follow the instructions above in reverse. Be sure that during reassembly none of the wires get placed in a position where they will be pinched or cut. When reinstalling the lid for the UV section be sure to get a tight seal against the foam on the fan unit. Before reinstalling the pre-filter and inlet guard, plug in the unit and verify proper operation of all three lamps. Once this is verified, switch off the unit and unplug from the wall before reinstalling the pre-filter and inlet guard.



## Air Flow Requirements

To determine the optimal operating speed for the fan, the volume of the room and required number of air changes per hour needs to be considered. The volume of the room is calculated by measuring the length, width and height in feet and multiplying those three numbers together. The number of air changes per hour can vary greatly depending on factors such as the rooms intended use, number of occupants and if there are additional sources of fresh clean air. Suggestions range from 2 to 6 air changes per hour. The formula below can help you determine how much air flow is required.

$$L \text{ (ft)} \times W \text{ (ft)} \times H \text{ (ft)} \times N / 60 = \text{CFM}$$

L = Length of Room

W = Width of Room

H = Height of Room

N = Number of Air Changes per Hour

CFM = Cubic Feet per Minute

Once your desired CFM has been calculated, reference the chart below for the necessary motor RPM. The motor RPM can be set by following the instructions in the Changing Fan Speed section of this manual.

CFM	RPM
451	534
600	710
800	947
1000	1184
1200	1421
1400	1659
1456	1725

## Limited Warranty

Loren Cook Company warrants that your Loren Cook fan was manufactured free of defects in materials and workmanship, to the extent stated herein. For a period of one (1) year after date of shipment, we will replace any parts found to be defective without charge, except for shipping costs which will be paid by you. This warranty is granted only to the original purchaser placing the fan in service. This warranty is void if the fan or any part thereof has been altered or modified from its original design or has been abused, misused, damaged or is in worn condition or if the fan has been used other than for the uses described in the company manual. This warranty does not cover defects resulting from normal wear and tear. To make a warranty claim, notify Loren Cook Company, General Offices, 2015 East Dale Street, Springfield, Missouri 65803-4637, explaining in writing, in detail, your complaint and referring to the specific model and serial numbers of your fan. Upon receipt by Loren Cook Company of your written complaint, you will be notified, within thirty (30) days of our receipt of your complaint, in writing, as to the manner in which your claim will be handled. If you are entitled to warranty relief, a warranty adjustment will be completed within sixty (60) business days of the receipt of your written complaint by Loren Cook Company. This warranty gives only the original purchaser placing the fan in service specifically the right. You may have other legal rights which vary from state to state. For fans provided with motors, the motor manufacturer warrants motors for a designated period stated in the manufacturer's warranty. Warranty periods vary from manufacturer to manufacturer. Should motors furnished by Loren Cook Company prove defective during the designated period, they should be returned to the nearest authorized motor service station. Loren Cook Company will not be responsible for any removal or installation costs.



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