

# Multi-Clean UV-22 Model 2001

This manual provides operating information on the new re-designed year 2001 model. Highlights of the changes are indicated below.

**1:** Faster curing capabilities due to higher energy UV output. Follow the guidelines below.

**Ultra-Tc Curing Recommendations**




The 2001 model UV-22 can be used to cure Ultra-Tc in the #1 or #2 cure modes. The UV-22 should not be used in the #3 fast mode to cure Ultra-Tc.

**Ultra Rock Curing Recommendations**

The 2001 model UV-22 can be used to cure Ultra Rock in all cure modes.

**UVi Curing Recommendations**

The 2001 model UV-22 can be used to cure UVi in all cure modes.

Cure Mode	Ultra-Tc	Ultra Rock	UVi
 - fast	No	Yes	No
 - medium	Yes	Yes	Yes
 - slow	Yes	Yes	Yes

**2:** New on board, dual function digital meter.

Voltage meter measures line voltage to insure trouble free machine operation and curing.

Lamp Voltage Meter measures voltage of lamp as an indicator of lamp life.

**3:** New Transaxle allows traction drive wheels to also be used as manual transport wheels with a simple foot disengagement mechanism.

**4:** Narrower wheelbase width at 18" making wheel marks less likely.

**5:** Better maneuverability with spring loaded front caster and 80 lbs less weight than previous model.

**6:** Front and rear tie downs added for secure transportation.

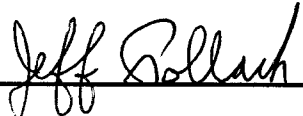
**7:** Cure width indicator arrows mounted on curing head to insure proper overlap during curing.

# EC Declaration of Conformity

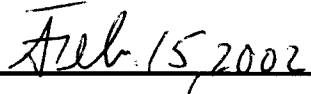
according to Directives 72/23, 89/392, and 89/336

We, Minuteman International Incorporated, of 111 South Rohlwing Road Addison Illinois 60101 USA, declare under our sole responsibility that the product 670230, 670238 Ultraviolet Floor Curing Machine to which this declaration relates corresponds to the relevant requirements of the EC Directives 72/23, 89/392 and 89/336. The following standards were used to determine compliance with the Directives: EN 292, EN 294, EN 811, EN 55014, EN 55104 and EN 60335-1.

<b>SOUND</b>		<b>VIBRATION</b>						
<b>73 dB Operator</b>	<b>68dB At 3m</b>	<b>.5 m/s<sup>2</sup> At Operators Handle</b>						
<p>Tests were conducted on 09/18/00 with calibrated sound and vibration equipment under the conditions noted below:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">General Condition: Indoors</td> <td style="width: 33%;">Wind: 0 km/hr</td> </tr> <tr> <td>Temperature: 25<sup>0</sup>C</td> <td>Humidity: 70%</td> </tr> <tr> <td>Barometric Pressure: 29.5</td> <td></td> </tr> </table>			General Condition: Indoors	Wind: 0 km/hr	Temperature: 25 <sup>0</sup> C	Humidity: 70%	Barometric Pressure: 29.5	
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Barometric Pressure: 29.5								

  
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*Jeff Pollack, Standards Engineer*

  
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*Date*

*Form: EC058*

# FOR COMMERCIAL USE ONLY

## READ ALL INSTRUCTIONS BEFORE USING



### **WARNING** - To reduce the risk of fire, electric shock, or injury:

- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing, cleaning or maintaining.
- Do not expose to rain. Store indoors.
- Wear UV protected safety glasses (P.N. 670600), long pants and shoes when operating or working near machine. Keep all unprotected people away from the machine while in operation.
- Do not touch the lamp assembly, when the machine is on and for 10 minutes after it has been turned off.
- Do not touch the lamp as oil from hands will create a hot spot on the lamp and could cause an early lamp failure.
- Do not stare or look directly at the lamp (light) for any duration.
- Do not connect or disconnect the lamp assembly of the UV-22 without first turning off the power on the UV-22.
- Do not walk on wet coatings, as they are very slippery.
- Do not allow machine to be used as a toy or any other purpose than it is intended for. Close attention is necessary when used by or near children.
- This machine shall be used only by instructed and authorized persons.
- Use only as described in this manual. Use only manufacturer's recommended attachments.
- Inspect cord regularly. Do not use with damaged cord or plug. If machine is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center. Use only cord specified by manufacturer.
- Do not pull by the cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run the machine or any other appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or machine with wet hands.
- Do not put any object into openings. Do not use with any opening blocked, keep free of dust, lint, hair, and anything that may reduce airflow.
- Keep hair, loose clothing, fingers, and all parts of body away from lamp opening and moving parts.
- Turn off all controls before unplugging.
- Connect to a properly grounded outlet only. See grounding instructions.
- Electrical components can cause an explosion when operated near volatile materials and vapors. Do not use this machine near flammable materials such as solvents, thinners, fuels, grain dust, etc.
- Damage to Transaxle may occur if moved while in gear. Transaxle must be disengaged for non-powered transport.

**INSPECTION** - Carefully unpack and inspect your machine for shipping damage. Each unit is tested and thoroughly inspected before shipment, and any damage is the responsibility of the delivery carrier who should be notified immediately.

**ELECTRICAL - 115 Volt** - This machine is designed to operate on a standard 20 amp. 115 - 120 volt, 60 hz, AC circuit. Voltages below 110 volts AC or above 125 volts AC could cause serious damage to the unit and effect its ability for cure coatings.

**ELECTRICAL - 240 Volt** - This machine is designed to operate on a standard 11 amp. 230 - 240 volts, 50 hz, AC circuit. Voltages below 210 volts or above 255 volts could cause serious damage to the unit and effect its ability for cure coatings.

**WARNING** - Electric motors can cause explosions when operated near explosive materials or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dust, etc.

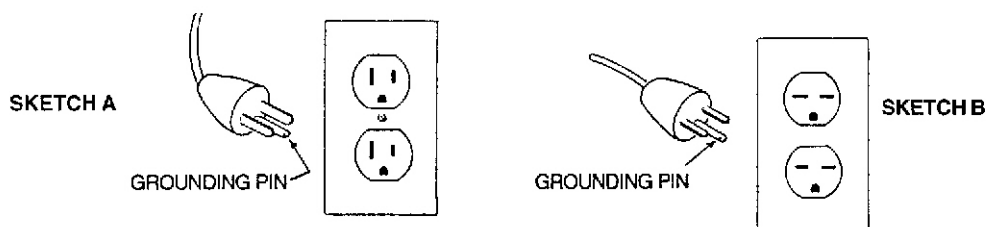
**GROUNDING INSTRUCTIONS** - This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**TRANSPORT INSTRUCTIONS** - Do not transport this machine to job site with Lamp Housing attached. Damage can result to Lamp Housing Lifting Bracket. To transport to job site when not under electrical power, disengage Transaxle by operating Transport Release Lever (up position: Transaxle engaged. Down position: Transaxle disengaged).

**DANGER** - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance — if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This machine is rated for use on a nominal 115 - 120 volts circuit and has a grounding plug that looks like the plug illustrated in Sketch A. Make sure that the machine is connected to an outlet having the same configuration as the plug. No adapter or extension cord should be used with this machine.

For equipment rated 150-250 volts: If the machine is provided with an attachment plug as shown in Sketch B, it is intended for use on a 230 - 240 volt (nominal) circuit. No adapter is available for this plug.



# Check-off List for Operation of UV22



***\*Notice: If you do not complete check-off list, do not attempt to apply Ultra Violet coating.***

**Power Sources** - 120V 20 amp circuit required (for details see Troubleshooting Guide in Method Bulletin #1431 or #1433; see Instruction Manual #987321.)

## **Lamp Operation Test:**

1. First startup may take several tries for the bulb to reach operating temperature. See instruction manual #987321 if lamp will not stay ignited.
2. Housing should be at 1 1/2" from floor for proper operation.
3. Lamp startup, be sure to shield exposed skin, eyes and surfaces as unit emits ultra violet light and high heat.
4. Check for shutter operation in forward and reverse.
5. Pre-test curing of coating on test tile or some impervious surface. Apply coating. Check mil thickness of Ultra Rock coating (2-4 mils). Cure coating at recommended speed set in the Method Bulletin #1431 or #1433. Check tile for cured surface, should be smudge free when rubbed with cloth 10 times.

## **Machine Preparation:**

Clean wheels to prevent marking or leaving residue on fresh cured floor.

## **Coating:**

- Proper applicator with replacement covers.
- Floor tacking equipment to pre-clean floor before coating.
- Clean-up supplies; gloves, rags.
- Mil thickness gauge to check coating of Ultra Rock.
- Test tile for operation check.

## **Personal Protection Equipment:**

- UV protective glasses, must be worn at all times unit is in use.
- No exposed skin to UV light.
- Long sleeves, long pants, appropriate footwear and cleanup gloves.








## OPERATION OF UV-22

**Warning:** Do not apply coating until you successfully complete the Set-up, Power “On”, and Lamp test.

### Set-up UV-22

1. Make sure the electrical power is shut off on the machine. **Warning:** Power must be off when connecting any power plugs to equipment to prevent possible fire, electrical shock, or damage to electrical components.
2. Remove lamp housing from carrying case and locate slotted holes on lifting bracket.
3. Tighten two wing nuts.
4. Connect the thin gray cable to the front height sensor. Connector is keyed, make sure keys line up and gently hand tighten.
5. Connect the thicker gray cable to the lamp housing on top. **Important:** Connector is keyed, make sure keys line up and gently hand tighten. Connector pins must be fully twist locked in place.
6. Below the handle assembly, connect (twist-lock) the electrical power cable to the machine.
7. Connect the electrical cable to the wall outlet. Extension cords should not be used as they can reduce the voltage power necessary to operate machine and cure coating. Make sure outlet has the proper voltage and capacity (110V-120V, 20 amp or 220V-240V, 11 amp). See “Grounding Instructions” on page 4.
8. Engage Transaxle by operating Transport Release Lever (Up position Transaxle engaged).


### Power “On”, Lamp Test UV-22

- 1.
2. Wear UV Protected Safety Glasses, wear long pants and shoes (do not wear sandals or footwear where skin is exposed to UV light). It is important that all persons in the operational area be protected from the UV light during operation. Never allow anyone to look directly at UV light from curing operations.
3. Push power switch to the On ( - ) position. You will notice a green light above the transport mode switch  turns on.
4. Press warm up mode switch.  You will notice the green light above the switch will flash. Also, the caution green light  will turn on. The lamp housing will move down into position and the lamp will begin to glow. This is the “warm-up” phase of the lamp.
5. When the bulb is ready for curing, the green light above cure mode switch  will stay on (stops flashing). Also, the green light  “ready to operate” will light up.
- **Note:** Cure mode has an activity timer that will shut down lamp when not used for one half hour, which will require a 5 minute cool down. If the lamp housing goes back up and the warm up mode light  flashes, the lamp was too hot to refire and needs to cool five minutes. You will also notice the ‘refer to manual’ light  will flash red to indicate a problem. If problem persists, refer to troubleshooting guide.

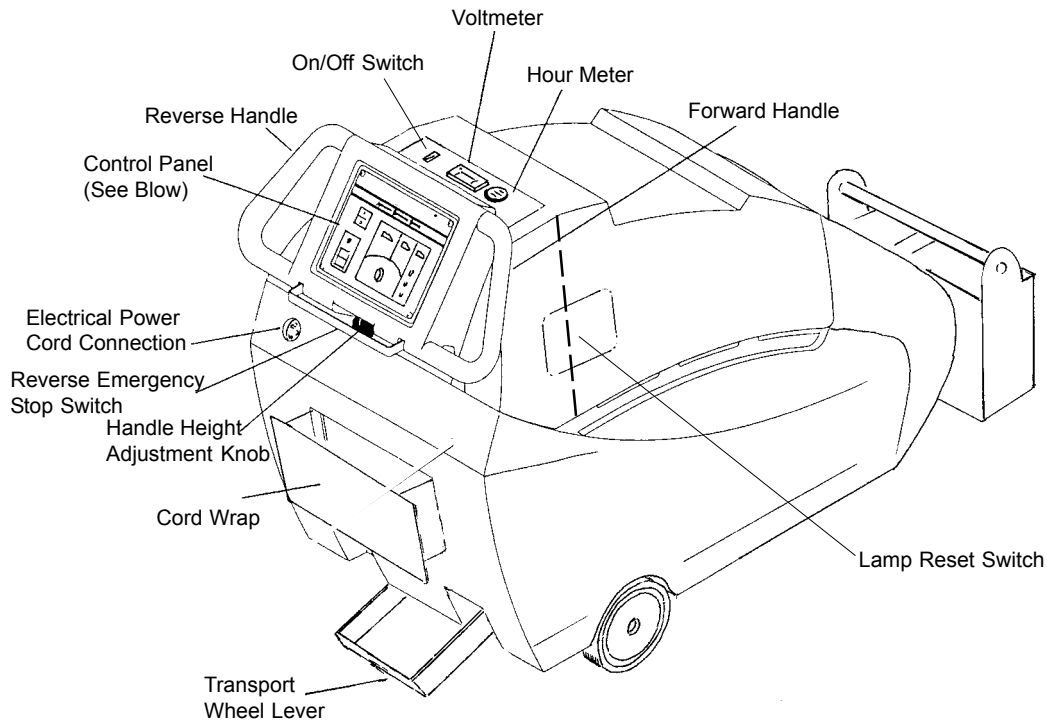
7. When ready to cure, place hands on handle, pull the forward lever (right side). The lamp housing shutter should open, the machine should begin to propel itself forward, after a brief delay.
8. It is recommended that you test the lamp and cure speed by applying a small sample patch (6" x 6") to an impervious tile. Cure this sample to make sure the coating cures through. \*Check for proper cure of the coating by rapidly rubbing the surface back and forth with a paper towel (not bare finger). If the cured coating does not smear or mar, the coating is fully cured.

## Begin Applying & Curing with UV-22

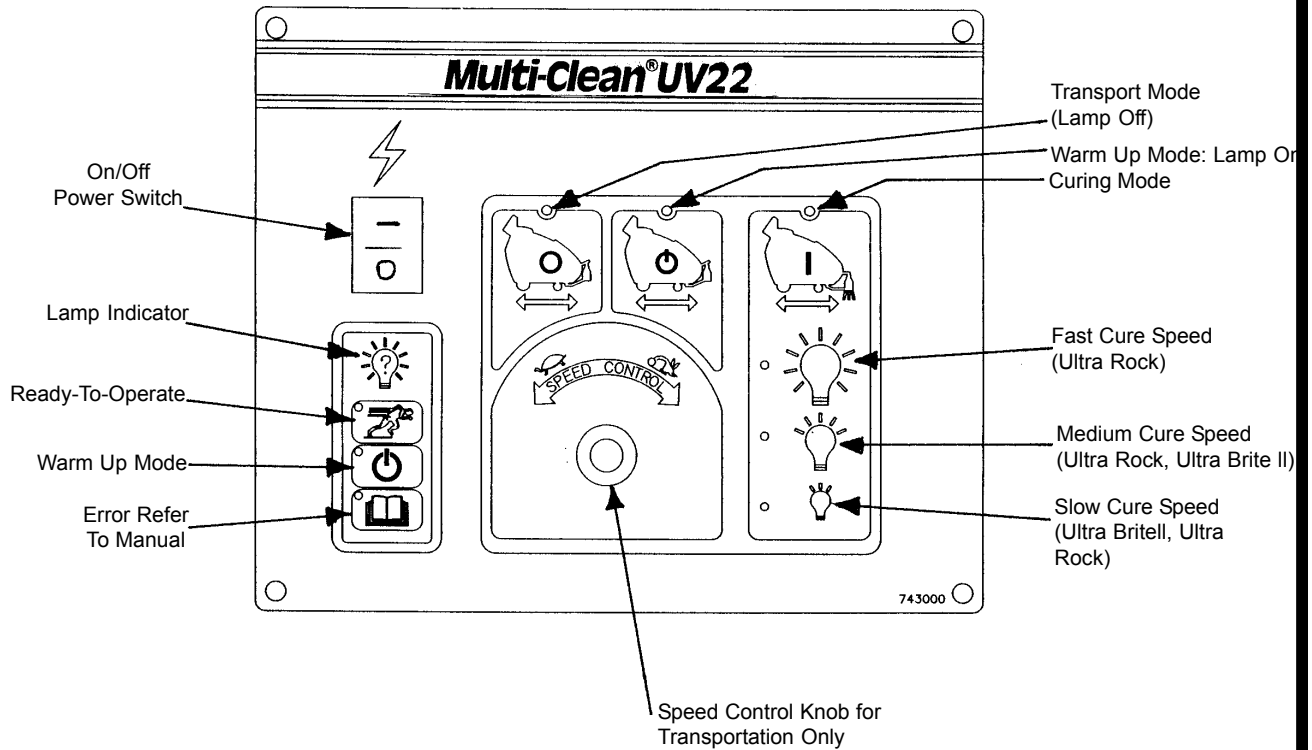
After successfully completing the **Power "On"**, lamp test phase, you can begin preparing and coating the area you have selected. Make sure to follow the procedures as outlined on page 1 and the method for the product and application for your needs.

1. After you have applied the product to the floor surface, it is important that you perform the following checks before you begin curing:
  - A. Check to see the coating has been applied to proper mil thickness. Refer to the Method Bulletin. Use a "Wet Film Thickness Gauge" (P.N. 670603) to determine your coating thickness, if necessary.
  - B. Make sure coating has been applied smoothly and has leveled to your satisfaction. Remember, the UV-22 and UV-8 will cure the coating exactly the way it looks: wet.
2. Begin curing near the side the electrical power cable is plugged into. This electrical connection needs to be away from the wet coating.
3. To start curing, press cure mode switch.  The light will indicate which mode you have selected. Refer to page 1 for the correct setting.
4. Pull forward handle (right side), the shutter will open and the machine will begin to move at a set speed. **Do not try to push the machine to make it go faster.** Pushing will affect your ability to cure the coating.
5. Cure in a straight line, as you will need to keep the wheels on the cured surface.
6. Release the forward handle to stop. To reverse, pull the reverse lever (left side). Be careful not to reverse into the wet coating.
7. Overlap approximately six inches as you cure each path to make sure entire floor is cured. The UV-22 cures a 22" path. Use floor seams to help identify which area has been cured and which is wet.
8. Continue curing until the area that has been coated is cured. Do not stop and leave an area because it will be very difficult for people to tell which area has been cured and which is still wet. The wet coating is very slippery until it is cured.
9. You will need the UV-8 if you have coated under overhangs or near edges.

# MACHINE OVERVIEW








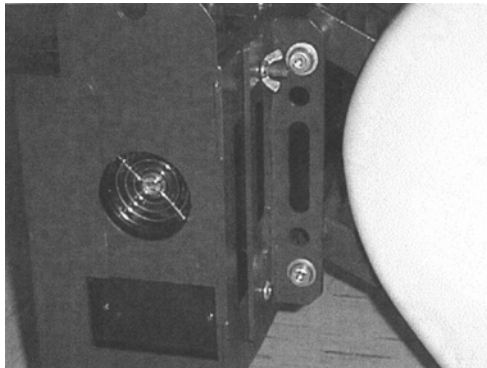
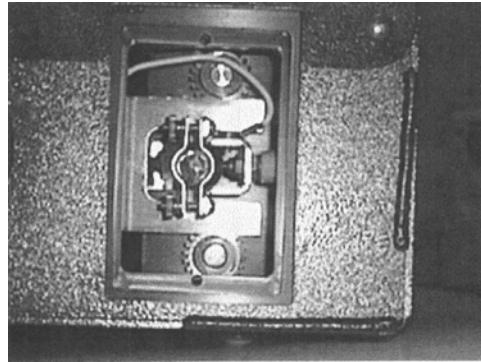
# CONTROL PANEL



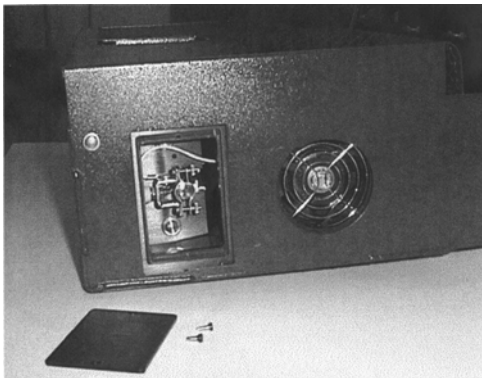
# LAMP REPLACEMENT

The UV lamp (UV-22, UV-8) should be replaced as needed. See warranty page.

With power rocker switch in the "On" (-) position depress and hold mode button  simultaneously push  and  buttons, then release. Release the  button. The mode light  should flash to indicate lamp assembly is in up position and shutters are open. Turn power rocker switch to "Off" (o) position. Disconnect electrical lead to head.

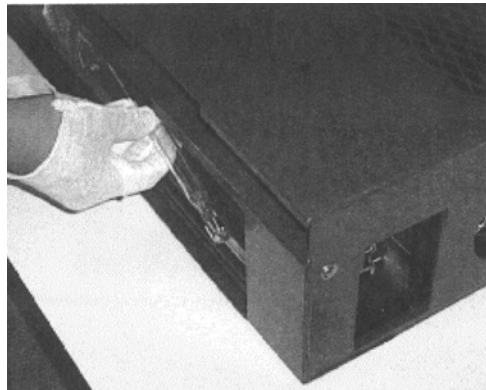


1. Loosen wing nuts on back of lamp assembly and remove lamp assembly.




2. Place head on flat surface and remove inspection covers to expose lamp clamps.

3. Loosen bulb clamp nuts on each end of bulb.
4. Slide bulb to one side and remove.



**Note:** Operation of the lamp with fingerprints on the surface will cause surface crystal formation (devitrification) of the quartz leading to lamp failure. Remove wrapping only when ready to use and handle the lamp by the ends, or use clean lint-free cloth or gloves. Fingerprints can be removed by wiping with a clean cloth soaked in grease-free solvent-like isopropyl alcohol, and drying.

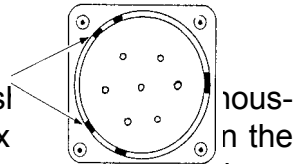
5. Install new bulb (part no. 743349) in reverse order.
6. Reset hour meter which is located under maroon cover on back wall.
7. When power switch is turned on, it will go into transport  mode automatically.
8. Dispose of used bulb in accordance with local codes and ordinances for mercury.

## Set-Up UV-8

**Warning:** Power must be off when connecting any power plugs to equipment to prevent possible fire, electrical shock, or damage to electrical components.

1. Make sure UV-8 power source is unplugged from wall outlet.
2. Assemble handle to base by pushing handle into base and turn clockwise 1/8 turn (45°). See Fig. 1 page 8.
3. Connect power cord to UV-8 base and UV power supply. **Important:** Pins must line up and be fully twist locked into place or damage to electrical equipment, electrical shock or fire could result. See Fig. 2.
4. Wear UV protected safety glasses, wear long pants and shoes (do not wear sandals or footwear where skin is exposed to UV light). It is important that all persons in the operational area be protected from UV radiation. Never allow anyone to look directly at UV light during curing operations.
5. Connect the electrical cable from UV-8 power supply to wall socket. Make sure this is the proper voltage and capacity (110 - 120V, 20 amp. or 220 - 240V, 11 amp.). See "Grounding Instructions" on Page 4.

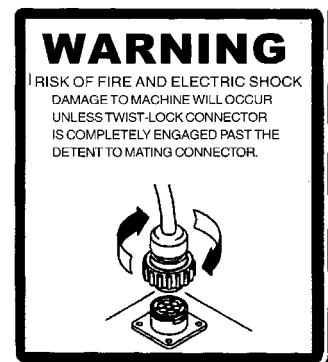
6. Before turning on power supply, make sure sliding housing is shut to prevent excessive UV light exposure. Turn on the main power/fan switch, then turn on the lamp switch. The lamp will ignite when the lamp switch is turned on.



### NOTCHES

Electrical connection. Align notches, press together, thread locknut to secure.

Fig. 2



7. Allow the lamp to warm up about 5 minutes before curing. If warm up is not done, coating may not cure properly.
8. After warm-up period, open UV-8 shutter for 30 seconds. While holding the shutter open, move the unit back and forth so that the floor is not damaged.
9. After use, turn the lamp switch off. This will leave the fan on to cool the lamp. After 5 minutes, or as soon as the UV-8 is cool, turn off the power supply and disconnect the cable.
10. **Important:** Allow UV-8 to adequately cool before handling "Metal housing becomes very hot during operation and can cause severe burns if touched". UV-8 must be adequately cooled before storing, there is a potential for fire or melting materials that come in contact with housing.

## Curing with UV-8

Apply the Multi-Clean UV coating as prescribed in the Method Bulletin for the product and type of surface.

**CAUTION: Lamp housing gets very hot. Do not handle until it has cooled for 10 minutes.**  
**IMPORTANT:** Wear UV protective safety glasses, pants, and shoes (do not wear sandals or footwear where skin is exposed to UV light). It is important that all persons in the operational area be protected from UV radiation during operation. Never allow anyone to look directly at UV light during curing operations.

1. After you have successfully completed the above set-up and the coating has been applied, the UV-8 can be used to cure multiple ways:
  - A. Can be used to cure edges or under counter overhangs that the UV-22 cannot reach.
  - B. Can be used to cure small areas (under 50 sq. ft.)
  - C. Can be used to cure areas that are being repaired like deep scratches or damage to the coating.
2. After the lamp has completed a 5-minute warm-up, you can begin curing by pulling the lever under the handle. This will open the shutter. The shutter provides protection to the lamp and prevents the lamp from burning the floor. The lamp intensity should increase when the shutter is open.
3. Begin moving the unit forward at a slow pace (1/2 the normal walking pace) over the wet coating. Keep all four wheels of the unit on the floor as you proceed forward. Keep the lamp assembly level to the floor. Keep the lamp assembly level to the floor. If tilted excessively the lamp will shut off. **IMPORTANT: Do not stand still (or stationary) while keeping the shutter open. You will burn the floor or potentially cause a fire.**
4. Make sure to move the unit forward in a straight line. This will prevent the wheels from coming in contact with wet, uncured coating.
5. **Never tilt the lamp assembly forward** as the housing will come in contact with the wet coating and leave a mark in your coating.
6. When you have come to the end of area being cured, release the lever to allow the shutter to close. Shutter must be completely closed to prevent harm to floor when not curing coatings. There will be a noticeable drop in light and intensity when shutter is properly closed. **CAUTION:** Do not leave the UV-8 unattended with lamp on as unit gets very hot which can cause serious burns or fire. Exposure to Ultra Violet Light without proper eye and skin protection can be harmful.
7. When finished curing, turn off the power on the UV-22 or the UV-8 Power Supply.
8. **Important:** UV-8 lamp housing gets very hot during operation, a minimum 10 -minute cool down time must be used before handling or leaving the UV-8 unattended to prevent possible injury. The UV-8 has internal over temperature protection. If the fan was to malfunction, the switch will open and the lamp will no longer function. Please bring to an authorized service center to reset the switch.

## TROUBLE SHOOTING FOR UV SYSTEM

PROBLEMS	PROBABLE CAUSE	SOLUTION
<b>Floor Coating Does Not Cure or Marks After Cure.</b>	<ul style="list-style-type: none"> <li>● Low UV light output.</li> <li>● Coating too thick.</li> <li>● Too fast curing speed.</li> <li>● Housing too high from lamp assembly to floor.</li> <li>● Extension cord use.</li> </ul>	<p>Check lamp to see if dirty or clean. Check voltage and outlet, must be 110 volts minimum when machine is curing.</p> <p>Check Method Bulletin for correct coating application.</p> <p>Use slow curing speed. Verify wheel rpm does not exceed 14 rpm.</p> <p>Height should be 1 1/2" from bottom of housing.</p> <p>Check for voltage at machine, must be 110 volts when curing.</p>
<b>Machine UV Light Head Goes Out or Will Not Go On.</b>	<ul style="list-style-type: none"> <li>● Check electric connections.</li> <li>● Check for power to unit.</li> <li>● Check Bulb for working condition.</li> <li>● Check temperature of lamp housing.</li> </ul>	<p>Tighten connections.</p> <p>Reset circuit breaker or use different circuit. Requires 20 amp dedicated outlet. Verify voltage, needs to be 110 volts minimum when machine is curing.</p> <p>Refer to manual for maximum useable hours on lamp. - replace if broken</p> <p>If stored in excess cold before use, bulb may need to be warmed up. See manual "Lamp Replacement" for shutter opening installation. If too hot, you need to wait a couple minutes for it to cool.</p>
<b>Light Housing Shutters Will Not Operate.</b>	<ul style="list-style-type: none"> <li>● Check electric connection.</li> </ul>	<p>Tighten connection, unplug and begin start up procedure.</p>
<b>Coating Flaking Off Floor.</b>	<ul style="list-style-type: none"> <li>● Floor not properly prepared, old coating left on floor.</li> <li>● Applied to inappropriate surface.</li> <li>● Check coating thickness.</li> <li>● Check cure speed.</li> </ul>	<p>Remove coating to bare floor.</p> <p>See Method Bulletin for product selection.</p> <p>Coating not cured through, 2 to 4 mil maximum thickness, see method bulletin.</p> <p>Too fast cure speed, use slower cure speed.</p>
<b>Coating has Poor Appearance.</b>	<ul style="list-style-type: none"> <li>● Coating not smooth.</li> <li>● Coating has wrinkles.</li> <li>● Coating looks yellow.</li> <li>● Over-coating seams.</li> </ul>	<p>Floor not properly prepared. See Repair Procedures in Method Bulletin for product selection.</p> <p>Floor cured too fast after application and not leveled.</p> <p>Uneven coating thickness on floor. See Method Bulletin.</p> <p>See Method Bulletin for product selection.</p> <p>Check curing speed, speed too slow may cure edges.</p> <p>Temporary slight discoloration might be noticed immediately after cure, within 10 minutes to 24 hours.</p> <p>Coating will bead up on cured coating if not prepared (sanded).</p>

## TROUBLE SHOOTING FOR UV SYSTEM

PROBLEMS	PROBABLE CAUSE	SOLUTION
<b>UV-22 Does Not Move When in Transport or Cure Mode.</b>	<ul style="list-style-type: none"> <li>● Transport wheel still engaged.</li> <li>● Fuse on transport drive out.</li> </ul>	<p>Move lever to right to disengage.</p> <p>Check fuse and replace it, reset if necessary.</p>
<b>UV Curing Lamp Stops Working During Job.</b>	<ul style="list-style-type: none"> <li>● Machine breakdown.</li> <li>● Electrical breakdown.</li> <li>● Bulb burnout.</li> </ul>	<p>A. Cure coating with UV-8 or UV-8A.</p> <p>B. Clean up coating on floor.</p> <ol style="list-style-type: none"> <li>1. Collect coating (squeegee) into salvage drum for later curing or disposal.</li> <li>2. Clean up floor with degreaser (Ultra RD) using autoscrubber.</li> </ol> <p>Reset breaker.</p> <p>Replace bulb.</p>
<b>Excessive Coating at End of Coating Application.</b>	<ul style="list-style-type: none"> <li>● Over estimate of coating needed for area.</li> </ul>	<p>Do not attempt to cure greater than recommended coating thickness. the coating will not fully cure or wrinkle on floor.</p> <p>Collect excess coating on non-porous surface (coated cardboard) and cure for disposal.</p> <p>See Method Bulletin for coat used for re-leveling options.</p>
<b>Odor Present.</b>	<ul style="list-style-type: none"> <li>● Uncured coating.</li> </ul>	<p>Check floor and cure any uncured coating.</p>
<b>Coating Area Becomes Dirty Quickly.</b>	<ul style="list-style-type: none"> <li>● Uncured or not fully cured coating.</li> </ul>	<p>Too fast cure speed or missed area when curing floor. Clean area with cleanup solvent, recoat and cure properly.</p>
<b>UV-8(A) Will Not Operate.</b>	<ul style="list-style-type: none"> <li>● Lamp safety switches not closed.</li> </ul>	<p>Make sure cover is in place and screwed closed.</p> <p>Make sure unit is level.</p> <p>Make sure unit has not over heated due to fan malfunction.</p> <p>Insure power cord is properly connected.</p>
<b>Lamp Assembly Will Not Lower.</b>	<ul style="list-style-type: none"> <li>● Ultrasonic sensor malfunction.</li> </ul>	<p>Disconnect ultrasonic sensor. Press and hold curing mode switch.</p> <p>Lamp will lower in 10 seconds.</p> <p>Press stand-by to raise lamp assembly.</p> <p>Repeat until lamp is 1 1/2" from floor.</p>

# LIMITED WARRANTY

Multi-Clean Division warrants to the original purchaser/user that this product is free from defects in workmanship and materials under normal use and service for a period of one year from date of purchase. In addition, Multi-Clean Division will, at its option, honor labor warranty claims for the first 6 months from date of sale, provided such claims are submitted through and approved by factory authorized repair stations. Multi-Clean Division will, at its option, repair or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as lamps, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts not manufactured by Multi-Clean Division such as, batteries, battery chargers and tires are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Multi-Clean Division for procedures in warranty claims against these manufacturers.

Multi-Clean warrants the lamp for manufacturing defects up to 100 hours. For lamp used between 100 and 1,000 hours a pro-rated credit is applied according to the following formula:

$$\left( 1,000 - \frac{\boxed{\phantom{0000}}}{\text{Hours Used}} \right) \times \text{Unit Cost} \div 1,000 = \text{Credit}$$

## SPECIAL WARNING TO PURCHASER . . .

A potential health hazard exists without exact original equipment replacement.

All warranted items become the sole property of Multi-Clean Division or its original manufacturer, whichever the case may be.

Multi-Clean Division disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Multi-Clean Division assumes no responsibility for any special, incidental or consequential damages.

This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. Multi-Clean Division is not responsible for costs or repairs performed **Multi-Clean** specifically authorized by Multi-Clean Division. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non compatible chemicals, or damage to property, or loss of income due to malfunctions of the product.

If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.

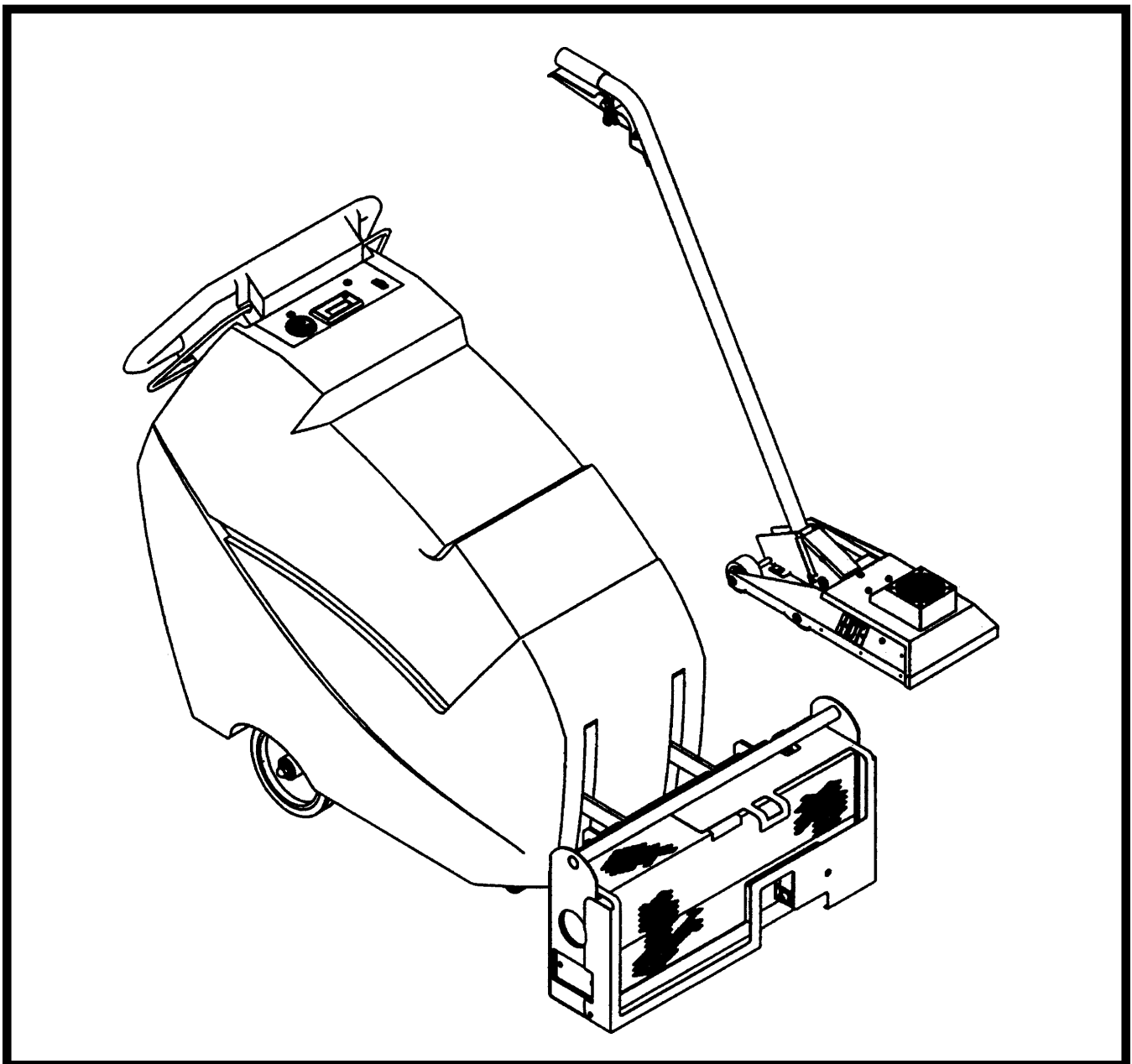
Electrical parts can only be replaced by an authorized service center. Replacement by someone other than an authorized serviceman voids all warranties.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

**UV-22**  
**UV-8**

**OPERATION and CARE**

**Model:**  
**UV22000 (115V)**  
**UV22230 (230V)**  
**UV08000 (115V)**  
**UV08230 (230V)**



Revised 11/02

**Multi-Clean<sup>®</sup>**

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## **WARNING**

Machine generates intense UV light which can cause severe personal injury. UV safety glass and appropriate personal protective equipment must be worn by user of this equipment and anyone in the immediate area when the machine is in use.

## **WARNING**

Machine generates intense heat which can cause burns. Do Not touch areas marked Hot until adequately cooled.

## **WARNING**

Power must be off when connecting any power plugs to equipment. All connections must be securely twist locked into place before power is turned on to prevent possible fire or electric shock.