HOTCOAT®

4 x 4 x 6 POWDER COATING BOOTH

INSTRUCTIONS

Item #33276
The **HOTCOAT 4X4X6 POWDER COATING BOOTH** is built with the professional Powder Coater in mind. It features a 2600 CFM fan that utilizes a two stage filtration system: an easily replaced pre-filter and a V-bank style HEPA Filter for 100%, vent-free operation. A built-in LED light panel provides glare and shadow free illumination. The integral, full-width steel floor offers quick and easy clean-up.

## CONTENTS

1. Fully assembled Powder Coating Booth

## SPECIFICATIONS

<table>
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<tr>
<th><strong>Power Requirements:</strong></th>
<th>120 Volt AC, 50/60Hz, 9 Amps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fan Capacity:</strong></td>
<td>2600 CFM</td>
</tr>
<tr>
<td><strong>Interior Dimensions:</strong></td>
<td>68-5/8” [1.74m] High x 40-7/8” [1m] wide x 44-1/2” [1.13m] deep (72 cubic feet) [2 cubic meters]</td>
</tr>
<tr>
<td><strong>Exterior Dimensions:</strong></td>
<td>72-1/2” [1.84m] High x 48-1/8” [1.2m] wide x 48-1/4” [1.2m] deep (Cabinet only, no external appendages)</td>
</tr>
</tbody>
</table>
SAFETY INFORMATION

The following explanations are displayed in this manual, on the labeling, and on all other information provided with this product:

⚠️ DANGER
DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠️ WARNING
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠️ CAUTION
CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠️ NOTICE
NOTICE is used to address practices not related to personal injury.

⚠️ READ INSTRUCTIONS
- Thoroughly read and understand these product instructions before using the Powder Booth.
- Keep these product instructions for future reference.

⚠️ DANGER  FIRE OR EXPLOSION HAZARD!
- This Booth was designed for and intended to be used for powder coat application purposes only. DO NOT use for applying liquid coatings or any other purpose. DO NOT allow flammable vapors to enter the air intake of the Powder Booth.

⚠️ WARNING  FIRE HAZARD
- Never allow the Booth to operate unattended. Always disconnect Booth from the electrical power supply before leaving it unattended.

⚠️ WARNING  ELECTRICAL SHOCK HAZARD!
- Never use the HotCoat Powder Booth outdoors when it is raining or in wet or damp areas, as it may cause an electric shock.
- Connect only to a 120VAC, 60Hz, 20 Amp circuit meeting all applicable local electrical codes.

⚠️ WARNING  INJURY HAZARD!
- DO NOT climb, stand or sit on the Booth. DO NOT use the top of the booth for storage. It may cause collapse resulting in serious injury.
POWDER BOOTH SITE LOCATION

**WARNING** INJURY HAZARD!

DO NOT locate the Powder Booth on an elevated platform, table, bench, roof or other non-secure location. This Powder Booth must be located only on a flat, level and secure floor.

**CAUTION** TRIP HAZARD!

Keep all lines, cords, and hoses out of the operator working area to avoid a potential tripping hazard.

**NOTICE**

To provide proper air flow and fan operation, the Powder Booth Rear Filter must be placed at a minimum of 3' (31 cm) from the nearest wall, in a well-ventilated area. DO NOT allow the Fan intake or exhaust to be restricted or blocked as permanent damage could occur.

**NOTICE**

To avoid stress and deformity in the Booth frame which could result in potential powder leakage at corners or seams, locate only on a flat and level floor.

POWDER BOOTH SET-UP

- Prepare Powder Booth to accept parts for powder coating
  - **The Use of an Eastwood #33274 Rolling Rack or Equivalent is Required** – Some means of support is required for parts placement and grounding in the Powder Booth. A Rolling Rack is the preferred method as parts may be placed on a grounded rack for coating and rolled into the Powder Booth for curing. As an alternative, a metal hanging rack may be fabricated for this purpose.
    **NOTE:** Any rolling or hanging rack MUST be constructed of materials able to withstand constant exposure to 400°F [204°C].

ELECTRICAL CONNECTION

- 20 Volt, 60Hz, 9-amp, Single Phase voltage and amperage requirements.

**WARNING**

All wiring must be done by a licensed electrician, in accordance with all National Electric Code, state and local requirements.
For best performance, the Powder Booth must be installed on a dedicated circuit, with circuit breaker or fuse protection.

- The 120 Volt wiring connections are made at the Upper Terminals of the Electrical Box.

**WARNING** SHOCK HAZARD!

- Never bypass the ground connections!
- **DO NOT** attempt to use a powder coating system without secure grounding! Complete grounding is necessary for the proper function of powder coating systems and prevents operator shock.
- The power supply wiring must be adequately sized to prevent low voltage at the Powder Booth. Low voltage will cause reduced fan performance. The wire gauge must be increased for longer wire runs to accommodate the increased resistance inherent in longer runs. Refer to the National Electric Code to determine the proper wire gauge for specific wire run lengths. Low voltage can also be caused by low supply voltage from the power company, or from other equipment running on the same line.
- For safety reasons, install a disconnect switch in the line from the electrical panel to the Powder Booth within reach of the Powder Booth. Alternatively, a dedicated 20 AMP 120 Volt outlet may be located within reach of the Powder Booth.
- When the installed disconnect switch is off, or the unit unplugged from an outlet, all power to the Powder Booth should be fully disconnected before any service or repairs are attempted.
CONTROL PANEL FEATURES AND FUNCTIONS (FIG 1)

[A] Power & Fan Switch – Indicator Illuminates GREEN.
[B] Light Switch – Indicator Illuminates GREEN.

POWDER BOOTH OPERATION

- Turn on the POWER & Fan Switch [A] of the Control Panel. GREEN lamp illuminates, Exhaust Fan runs.
- Set the LIGHT Switch [B] of the Control Panel to “ON” to illuminate the Light Panel.

MAINTENANCE

! WARNING HEALTH HAZARD!
Dust and fine particles are dispersed when handling filters which can contain hazardous or toxic substances. Breathing this dust can cause respiratory health problems. Always use NIOSH approved respiratory protection while cleaning, performing filter changes or any other Booth maintenance.

- The Powder Booth walls, and floor should be dusted and swept out after use to remove any loose powder that may have fallen during the application process.
- Always disconnect power at the main disconnect when Powder Booth use is complete. DO NOT rely on simply setting Fan and Heating Element or Emergency Switches to off.
FILTER REPLACEMENT

INNER PRE-FILTER REPLACEMENT:
1. With the Fan Switch in the OFF position, Pull the Pre-Filter from its recess in the back wall of the Booth (FIG 2).
2. Insert the replacement filter into the recess area and seat it securely.
   NOTE: The outer filter frame should be completely flush with the rear Booth wall.

REAR V-BANK, HEPA FILTER REPLACEMENT

1. With the Exhaust Fan Switch in the OFF position, disconnect the power supply to the Booth.
2. Loosen but do not remove the sheet metal screws attaching the Filter to the Rear Panel.
3. Using a utility knife, carefully cut through the bead of silicone sealer between the Filter and Rear Panel.
4. Remove the sheet metal screws that attach the Filter to the Rear Filter Panel (FIG 3) and carefully withdraw the entire Filter.
5. Scrape any remnants of the silicone sealer from the Rear Panel.
6. Following the sealant manufacturers instructions, apply a generous bead of quality silicone sealant to the flange area of the replacement V-bank HEPA Filter.
7. With the aid of a helper, hold the replacement Filter against the Rear Panel and re-install the sheet metal screws into the original holes.
8. Allow sealant to fully cure then test filter installation for leakage.

POWDER BOOTH REPAIR

LED LIGHT PANEL REPLACEMENT

NOTE: The LED Light Panel electrical connection is accessed from above.
1. The electrical connections are push-in type and require no tools. Release the wires from the terminals of the LED Panel.
2. At the underside, remove the sheet metal screws retaining the Light Panel (FIG 4).
3. Install the replacement Light Panel.
4. Insert the wires into the push-in terminals and test the Light Panel.
FAN REPLACEMENT

1. With the aid of a helper to support it, remove the sheet metal screws attaching the flange of the Plenum Box to the rear panel of the Booth.
2. Allow the entire Plenum Box/V-bank Filter assembly to rest face down on the floor.
3. Disconnect the wiring lug terminals on the Fan motor terminal posts by removing the retaining nuts.
4. Remove the nuts and bolts retaining the Fan housing in the Plenum and withdraw it.
5. Install the replacement Fan to the Plenum and secure with the previously removed hardware.
6. Reconnect the lug terminals to the Fan motor.
7. Replace the Plenum Box/V-bank Filter assembly and secure with previously removed screws.
8. Test the new Fan.

FAN RELAY CONTACTOR REPLACEMENT

1. Loosen the screws retaining the cover of the Control Box and slide it up and off by the Keyhole Slots (FIG 5).
2. Loosen screws and remove the terminal connections on the Fan Relay Contactor (FIG 6).
3. Loosen clamping screws and remove the Fan Relay Contactor.
4. Replace the Fan Relay Contactor.
5. Reconnect the terminal connections.
6. Replace the Cover.
7. Reconnect Powder Booth power and test the Fan.

FAN OR LIGHT SWITCH REPLACEMENT

1. Loosen the screws retaining the cover of the Control Box and slide it up and off by the Keyhole Slots (FIG 5).
2. Loosen and remove the terminal connections on the Fan or Heating Element Switch.
3. Remove the ring nut retaining the Switch to the control box cover (FIG 7).
4. Replace the Fan or Light Switch.
5. Reconnect the terminal connections.
6. Replace the Cover.
7. Reconnect Powder Booth power and test Fan or Light Switch.
# TROUBLESHOOTING AND DIAGNOSTICS

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>CORRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GREEN Lamp Does Not Illuminate When Switch (A) is Set to “ON”</strong></td>
<td>No Power</td>
<td>Check 220 VAC, 60Hz, power source and connection to entire Powder Booth unit.</td>
</tr>
<tr>
<td></td>
<td>Power supply circuit breaker to entire Powder Booth is tripped</td>
<td>Reset circuit breaker.</td>
</tr>
<tr>
<td><strong>Light Panel Fails To Illuminate</strong></td>
<td>No Power</td>
<td>Check 120 VAC, 60Hz, power source and connection to entire Powder Booth unit.</td>
</tr>
<tr>
<td></td>
<td>Power supply circuit breaker to entire Powder Booth is tripped</td>
<td>Reset circuit breaker.</td>
</tr>
<tr>
<td></td>
<td>Light Panel is faulty</td>
<td>Replace LED Light Panel as described in LED Light Panel Replacement section.</td>
</tr>
<tr>
<td></td>
<td>Light Switch may be faulty</td>
<td>Disconnect wires from switch, check continuity across poles with Switch in the ON position. Replace if failed.</td>
</tr>
<tr>
<td><strong>Fan Fails to Run</strong></td>
<td>No Power</td>
<td>Check 120 VAC, 60Hz, power source and connection to entire Powder Booth unit.</td>
</tr>
<tr>
<td></td>
<td>Power supply circuit breaker to entire Powder Booth is tripped</td>
<td>Reset circuit breaker.</td>
</tr>
<tr>
<td></td>
<td>Fan motor terminal connections may be loose</td>
<td>Follow “Fan Replacement” instructions and stop at Step 3. Check Fan motor terminal connections. Tighten if loose.</td>
</tr>
<tr>
<td></td>
<td>Fan Motor is faulty</td>
<td>Follow “Fan Replacement” instructions. If an audible “click” is not heard at the Fan Relay Contactor when switch is turned ON:</td>
</tr>
<tr>
<td><strong>WARNING</strong> SHOCK HAZARD! The following procedures should only be performed by a locally licensed electrician.**</td>
<td>Fan Switch Contactor terminal connections may be loose</td>
<td>Disconnect all power and check Fan Relay Contactor terminal connections. Tighten if loose.</td>
</tr>
<tr>
<td></td>
<td>Fan Switch Contactor may be faulty</td>
<td>Using a voltmeter, check the voltage on the output side of the Fan Relay Contactor with the fan switch in the ON position. Output should read line voltage (120V). If not, replace the Fan Relay Contactor.</td>
</tr>
<tr>
<td></td>
<td>Fan Switch may be faulty</td>
<td>Disconnect wires from switch, check continuity across poles with Switch in the ON position. Replace if failed.</td>
</tr>
</tbody>
</table>

# REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#32820</td>
<td>Relay Contactor</td>
</tr>
<tr>
<td>#32821</td>
<td>Electrical Enclosure</td>
</tr>
<tr>
<td>#32823</td>
<td>Distribution Terminal Block</td>
</tr>
<tr>
<td>#32824</td>
<td>Control Panel On-Off Toggle Switch</td>
</tr>
<tr>
<td>#32827</td>
<td>Control Panel Indictor Lamp</td>
</tr>
<tr>
<td>#32828</td>
<td>12 Gauge Connection Wire</td>
</tr>
<tr>
<td>#32839</td>
<td>Flat Panel LED Lamp</td>
</tr>
<tr>
<td>#32830</td>
<td>Booth Exhaust Fan Assembly</td>
</tr>
<tr>
<td>#32836</td>
<td>V-bank HEPA Replacement Filter</td>
</tr>
<tr>
<td>#32837</td>
<td>Inner Replacement Pre-Filter Element</td>
</tr>
</tbody>
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