

Supreme Air Series **VENTURI FUME HOOD**

Operation Maintenance Technical Manual

Operation & Maintenance Procedures
Recommended Work Practices
Installation Instructions



We're honored that you have purchased a Kewaunee fume hood.

We take pride in many things; our families, our town, our flag and this great country — to name a few. We also take great pride to have you as a customer. We have worked hard to create the world's safest and best fume hood. Why...? Because we know you are doing important work—work that is sometimes dangerous — and we want you to be safe so you can return home to your family.

We have spent countless hours creating this manual — it includes the latest fume hood safety procedures and best practices. It also includes valuable installation and maintenance information that will protect your fume hood investment. Please read this manual and practice what it teaches. Knowing this manual will help you stay safe and help you keep your Venturi fume hood working properly for years to come.

If you have any questions regarding your Venturi fume hood you can contact us at kscmarketing@kewaunee.com or call 704-873-7202.

Thanks again for purchasing Kewaunee.

The Kewaunee Fume Hood Assembly Group

Supreme Air Venturi Fume Hoods

Operation & Maintenance Technical Manual

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Operating Procedures

General Procedures for Supreme Air Venturi Fume Hoods

*Failure to follow these
Procedures may result in
overexposure to
contaminates or other
injury.*

1. Do not use Perchloric Acid in a hood not specifically designed for use with Perchloric Acid.
2. Prior to using hood, verify that the exhaust fan is operating and sufficient air is being exhausted from hood.
3. Never put head into hood while contaminants are being generated.
4. Set up all apparatus and sources of contaminants at least 6" back from sash opening and in recessed portion of worksurface.
5. Do not place electrical receptacles or other sources of ignition in hood when flammables are present.
6. Use a safety shield if there is a possibility of a small explosion or runaway reaction. This hood is not designed for explosion protection.
7. Do not obstruct slots in rear baffle.
8. Do not remove bottom deflector vane nor block off opening between the underside of the deflector vane and the work top.
9. Place equipment with large flat surfaces parallel to hood face on legs 2" to 3" high.
10. While working at hood, keep sash lowered to the minimum opening required for access to working area. During other times, keep sash closed.
11. Wear gloves and other protective clothing if skin contact with airborne contaminants is a hazard.

For more information see *Recommended Work Practices* on page 22

*Other important
operating data*

- Remove all materials from hood which are not needed for the immediate work.
- Do not store chemicals in hood.
- Avoid making rapid movements while working at hood.
- Minimize personnel traffic past hood.
- Avoid creating air currents in the laboratory which affect the air flow patterns into hood.
- Use good housekeeping in hood at all times. Clean up spills immediately.
- Test the performance of hood at least once every six months.
- In models with removable sash, always replace sash before operating.

Operating Procedures

Procedures for Perchloric Acid Fume Hoods

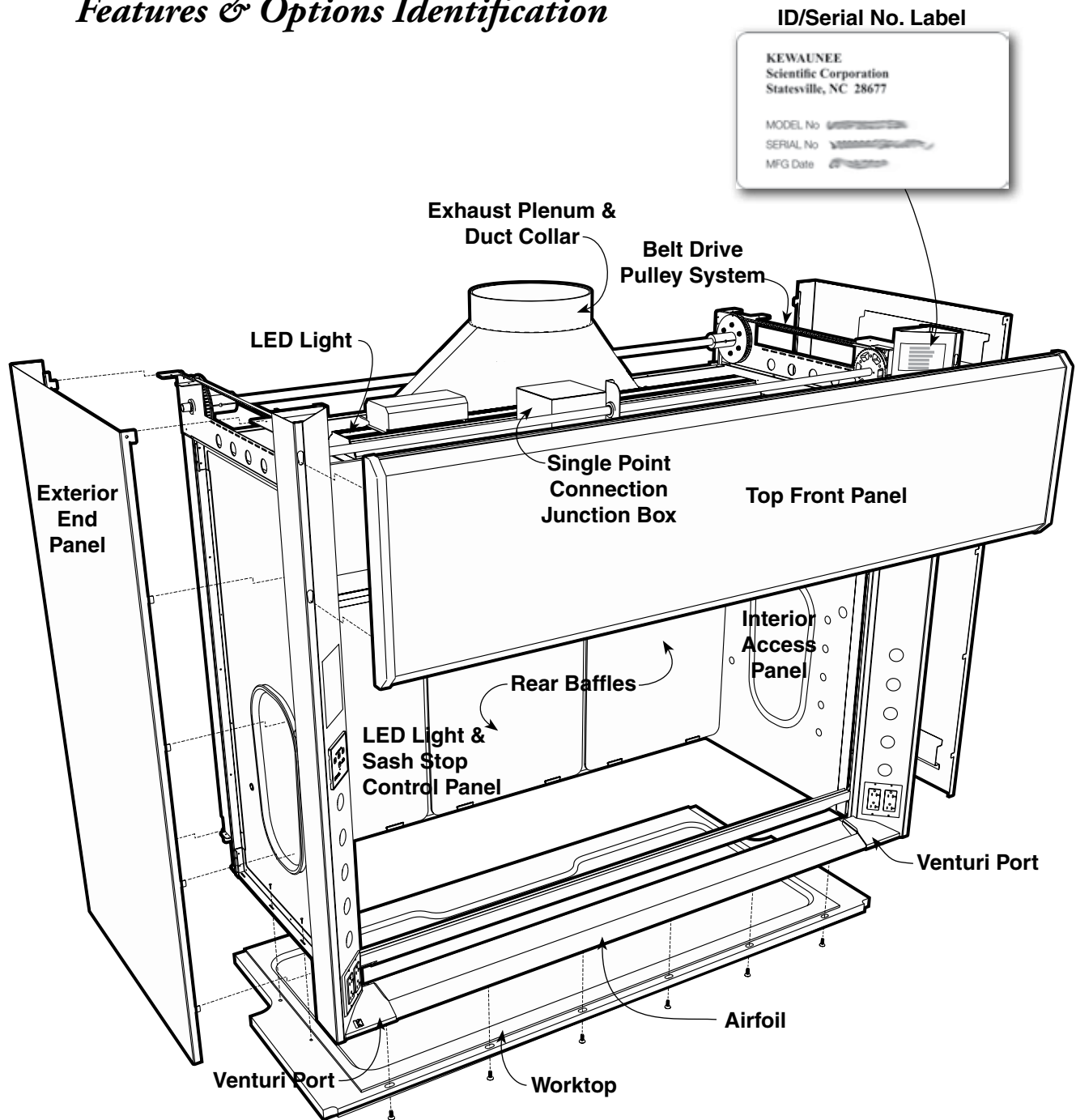
When heated, Perchloric Acid becomes a strong oxidizer producing unstable residues which contaminate the fume hood and ductwork and produce an explosion hazard. The following additional precautions should be followed when heating perchloric acid.

1. Use this hood only for Perchloric Acid procedures. Perchloric Acid may react with organic materials to create an explosion hazard.
2. Operate the water wash down system for 15 minutes after each use. If the hood is used continuously during the work day, then the wash down system should be used at the end of the work day.
During the wash down procedure a small amount of water may drip into the hood work area. Prior to operating the wash down system clear the hood work area of any materials or equipment that may be damaged or contaminated by this water.
The exhaust fan should be turned off during the operation of the wash down system. The fan impeller wheel may be damaged by the water spray impacting on it at a high velocity.
The valve for the hood wash down is located on the left front vertical fascia. There may be a separate valve or switch for activating the wash down system for the duct.
3. Approximately once a week, clean the interior surfaces of the work area with water.
4. Place large hot plates on 2" or 3" tall metal legs to allow air flow below the hot plate.
5. The use of other inorganic acids in the hood may adversely affect the stainless steel liner and necessitate more frequent cleaning and operation of the wash down system.

Operating Procedures

Supreme Air Venturi Fume Hoods

Features & Options Identification



Operating Procedures

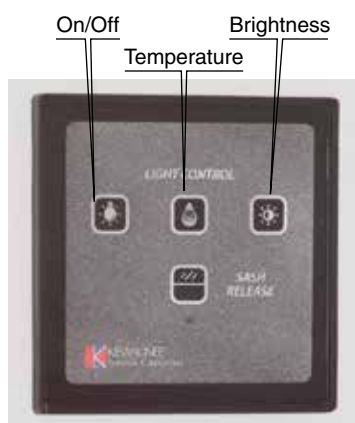
Supreme Air Venturi Fume Hoods Features

Venturi Effect



Kewaunee's Venturi line of bench mounted fume hoods employ two Venturi ports located at the bottom left and right corners of the sash. The Venturi ports assist air movement and improves corner airflow. Prior to using the fume hood, ensure these ports are not blocked and air movement is not impeded through the ports. Do not run hoses, wires or cables through or above these ports. (see *Cord Pass Through* section of this manual, page 9.)

LED Lights



Light/Sash Stop Control Panel

This hood is equipped with long life LED lights that enhance the user experience and greatly reduces maintenance. The top three buttons of the Control Panel, located on the hood side post, control the LED lights.

On/Off

Press once to turn the light on. Press again to turn the light off

Temperature

Three light temperature settings are offered:

Warm White	3000K
Neutral	4500K
Cool White	6000K

Pressing the Temperature button will cycle through the three settings.

Brightness

Fifteen (15) light brightness settings are offered. Each press of the brightness button increases intensity by approximately 6.5%.

The LED light has a life expectancy is approximately 20 years and contains no user serviceable parts.

NOTE:

If your hood is equipped with an explosion proof or vapor tight light the above conditions may vary.

Operating Procedures

Supreme Air Venturi Fume Hoods Features

Electromechanical

Sash Stop

The Venturi is equipped with a sash stop located within the sidewall of the fume hood. A raised sash will meet the sash stop at a preset height and will stop upon its encounter. To defeat the sash stop, press the “Sash Release” button. The sash stop will release for 1½ seconds so the sash can be raised to full open. The sash stop will not impede sash movement when the sash is being closed.

In the event of a power failure the sash stop may be released manually. To manually override the sash stop, remove the protective plug button located just behind the sash track, midway up, in the left end interior liner. Using your finger or a probe, find the sash stop mechanism, and slide the plunger to the rear.



Sash Release

Light/Sash Stop Control Panel

Belt Drive Pulley System

Venturi employs a low maintenance, dual shaft, belt and gear driven sash system. It is recommended that a user check the hood roof mounted sash support system annually to ensure no foreign objects or obstructions have found their way into the belt and gear path. A user should annually lubricate the pulley shaft bearings with white lithium grease. The belt and gear has been tested to 300,000 cycles.



Dynamic Barrier Bypass

The Venturi fume hood Upper Bypass is factory set and should not be modified. In the event of a significant change in airflow application please contact Kewaunee to see if the Upper Bypass requires modification.

Airfoil

The Lower Airfoil should not be removed or altered to ensure safe fume hood operation. Airfoils should be cleaned of all exposed chemicals in accordance to the MSDS sheets and your laboratories safety guidelines.

Operating Procedures

Supreme Air Venturi Fume Hoods Features

Rear Baffle Removal and Adjustment

The Venturi fume hood is designed with rear baffles that require no user adjustment. These baffles are intentionally non-adjustable and should not be removed while the fume hood is in use. For cleaning or other maintenance, the baffles can be removed (without tools) by lifting up and then pulling the bottom out towards the user. Baffle replacement is accomplished by reversing the removal process.

Interior Access Panels

Hoods are equipped with Interior Access Panels allowing user access to the hood sidewalls. These access panels are held in place with a gasket and are removable (without tools) by pulling gently on the gasket perimeter until the gasket and panel are free. Access panels are replaced by gently working the gasket back around and into the access opening perimeter until the gasket and panel sits flush with the hood interior sidewall.

Exterior End Panels

The left and right exterior fume hood sides are removable without the use of any tools by lifting the end panel up and away. Depending on the size of the hood a user may want to employ a second person to safely remove the panel. To replace the end panel, insert the tabs on the end panel in the slots in the hood frame, press the panel in, and press down.

Operating Procedures

Supreme Air Venturi Fume Hood Options

Auto Sash **Auto Sash Return**

The Auto Sash Return option is a passively balanced system that lowers the open sash to an 18" operating height. When the sash is raised to the full open position, a sash lock holds the sash open for set-up purposes. By pressing the electronic sash stop release button, the sash automatically closes to the 18" operating height.

Push Button Sash

The Push Button Sash, located within the light control panel, is a motorized sash controller that opens or closes the sash. From the closed position, a single push of the up button will open the sash to a preprogrammed sash stop height and another push of the up button will then fully open the sash. From the open position, a single push of the down button will fully close the sash. At any time a user may interrupt the mechanism, and stop sash travel, by pushing the stop button. In the event of a sash obstruction the sash will stop and retract a few inches so the object can be removed. When the mechanism is not in operation, the sash can be manually opened or closed. The standard electromechanical sash stop is not provided when this option is chosen. The push button sash mechanism is supplied installed and prewired to a junction box located on the top of the hood.

Split sash hoods are equipped with two sash controllers—one for each sash.

Auto Sash Operator

The Proximity Sash is designed to close the sash after it has been left open for a set period of time. Using an Overhead Motion Sensor the system senses operator absence and then closes the sash after a programmable time period (0-3600 seconds). At any time a user can override this function and manually adjust the sash.

The system also includes a photoelectric sensor which scans the sash plane for obstructions. Any obstruction will halt sash descent and issue a warning. Once the obstruction is removed the system will reset and sash operation will continue.

All control variables are user programmable. See supplemental Proximity Sash manual for more information.

The Automatic Sash Operator is supplied factory installed and prewired to a junction box located on the top of the hood.

NOTE: The Proximity Sash Operator can be programmed to open or close a sash. As it is possible that an occurrence in a fume hood could be complicated by opening the sash, Kewaunee recommends this system to be used only for closing the sash. Therefore, the choice of opening of a sash should be manually performed.

Operating Procedures

Supreme Air Venturi Fume Hood Options

Tissue Screen Your fume hood may be equipped with a tissue screen which is present to catch any materials light enough to be swept up by fume hood airflow. The tissue screen is located behind the rear baffles and can be accessed by removing the Lower Rear Baffles. (see ***Rear Baffle Removal and Adjustment*** on page 7)

Vent Holes The fume hood worksurface may be supplied with optional vent holes which provide exhaust to the fume hood base cabinets. These vent holes must remain clear of debris. Any obstruction must be immediately removed.

Cord Pass Through Your fume hood may have been supplied with optional Cord Pass Throughs located in the fume hood sidewalls. These provide convenient and safe passage of hoses, wires, and cords into the fume hood interior.

Safety Shield Your hood may be furnished with a safety shield designed to provide protection to fume hood users from small explosions, splattering of chemicals, breaking glass, etc. The shield slides the full length of the hood face opening on ball bearing rollers suspended from a track at the top of the sash opening, with a guide at the bottom to keep the shield from swinging. During research and when the sash must be open, a user should locate the safety shield in front of them-protecting their face and torso-and working their arms around the safety shield. When the shield is not in use, it can be easily removed from the upper track and stored until it is needed again. Users should lubricant the ball bearings on an annual basis with a white lithium grease.

Airflow Monitors An airflow monitor is a safety device designed to notify a user of an unsafe airflow condition with in their fume hood. To ensure maximum safety, the airflow monitor's power source should not be disconnected nor should any monitor parts within the fume hood be disconnected.

The monitor must be calibrated after the building has been balanced. Once calibrated, the monitor will give a visual and an audible alarm during a period of unsafe airflow. In the event of an alarm, the user is advised to close the sash fully and wait until the alarm stops. Once the alarm has stopped then a user may continue to use the fume hood. If the alarm continues, even after the sash has been fully closed, the user should contact the building maintenance supervisor for further investigation.

For calibration, programming and operating instructions please refer supplemental airflow monitor instructions.

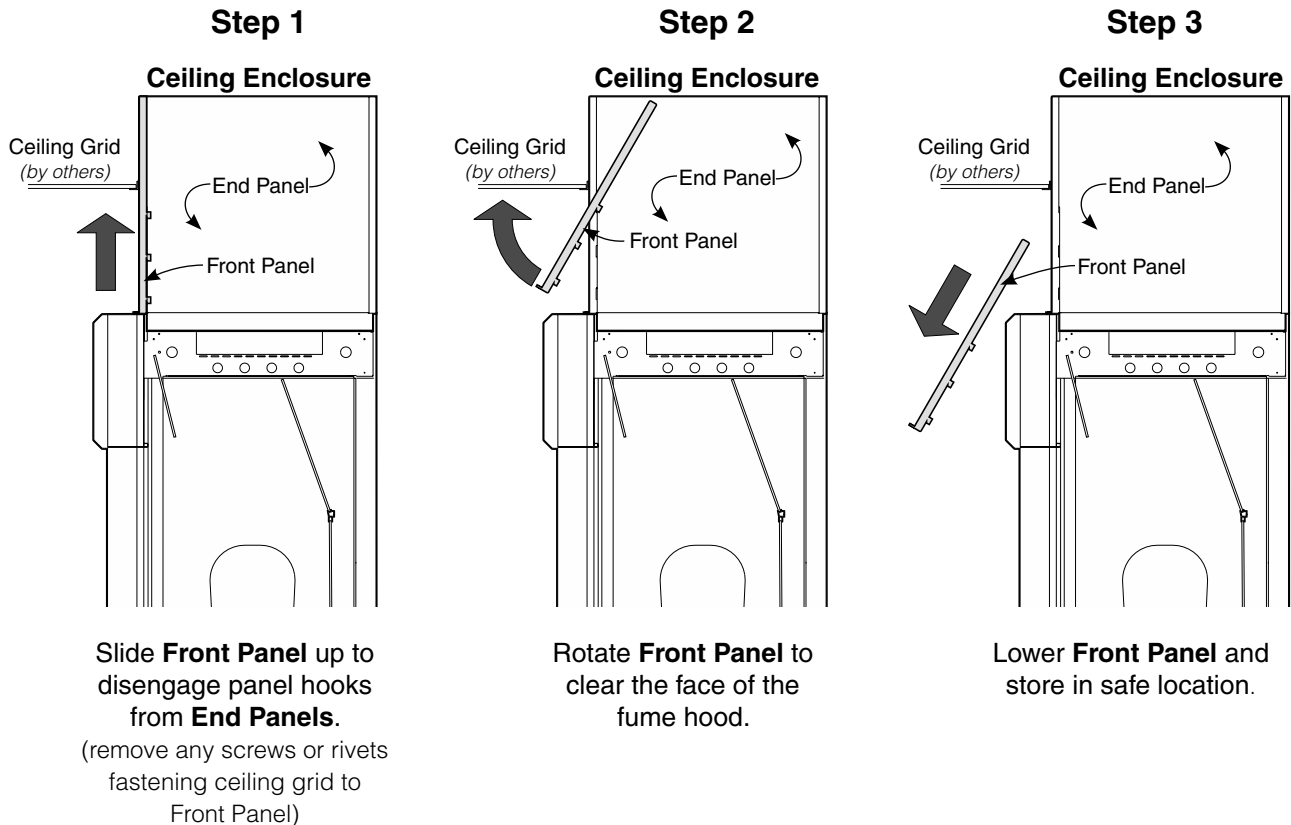
Operating Procedures

Supreme Air Venturi Fume Hoods Options

Ceiling Enclosure Kewaunee has engineered the Venturi Fume Hood Ceiling Enclosures with a removable Front Panel to allow access to the top of the hood. To access a hood through the enclosure you will need a ladder. If the hood is six feet long or larger, it is best to have one person on each side of the enclosure. If there is a drop ceiling, you may need to remove enough of the ceiling panels to gain access to the top of the Ceiling Enclosure Front Panel. The ceiling grid may be attached to the Front Panel using rivets, screws, or some other type of hardware.

Once all fasteners are removed, remove the Front Panel by lifting up and tilting the top backwards to disengage the hooks from the left and right sides that holds the Front Panel to the End Panels of the enclosure. Safely remove the panel and store it flat to prevent damage while the hood maintenance is performed.

To reinstall the Ceiling Enclosure Front Panel, reverse the steps. It is best to use the same type of fasteners that were originally used to attach the ceiling grid to Front Panel when required.



Maintenance Instructions

Supreme Air Venturi Fume Hoods

CAUTION

Prior to performing any maintenance work, verify with the chemical hygiene officer in charge of the laboratory that there are no hazardous contaminants on the surfaces inside the hood and which cleaners are compatible with the chemicals used in the hood.

Periodically:

- Check the hood for proper face velocity at least annually.
- Clean glass panel shielding LED lights from hood interior. On hoods with vapor proof or explosion proof lights, clean the exterior of the globe.
- Clean both sides of the sash glass.
- Clean work top and apply a coat of polish.
- Check sash belts for damage or wear. Replace if frayed. Apply white lithium grease to the bearings on the sash pulley axles.

As Needed:

- Plumbing service fittings can be serviced by removing the hood outside end panels. If the hood is located against a wall or another hood, removable gasketed access panels are provided (except on Isotope and Perchloric Acid hoods) in the hood interior. These panels may be removed by pulling gently on the gasket perimeter until the gasket and panel are free.
- For hoods with vapor proof lights, the lights can be accessed from the hood interior. The globe can be unscrewed from the fixture to expose the incandescent bulb. The fixture is rated for a maximum bulb size of 150 watts.
- For hoods with explosion-proof light, the light can be accessed from the hood interior. Remove the light panel by unscrewing the bolts at each corner. Loosen the set screw and unscrew the globe assembly from the upper portion of the fixture to gain access to the incandescent bulb. The fixture is rated for a maximum bulb size of 150 watts.

Maintenance Instructions

Supreme Air Venturi Fume Hoods

Belt Drive and Pulley System Maintenance

**HTD-8mm steel reinforced urethane belt
and aluminum gear on 3/4" diameter shaft drive system**

1. Check that sash is level. Level sash if necessary by following sash leveling instructions on page 14.
2. Inspect belt, sash, and counterweight drive path is free and clear of any foreign objects.
3. Move sash up and down full travel and check belt for any wearing. If belt wearing is discovered, locate and remove any foreign object that is causing wear and/or contact Kewaunee for replacement.
4. Check that belt is traveling over front and back pulleys smoothly and in sync. If belt pulleys are out of sync, follow sash leveling instructions on page 14.
5. Check that front belt keeper is spaced 1/16" to 1/8" away from belt and adjust if necessary. (see Detail 1 on page 13)
6. Lubricate all bearings with white lithium grease.

Sash Maintenance

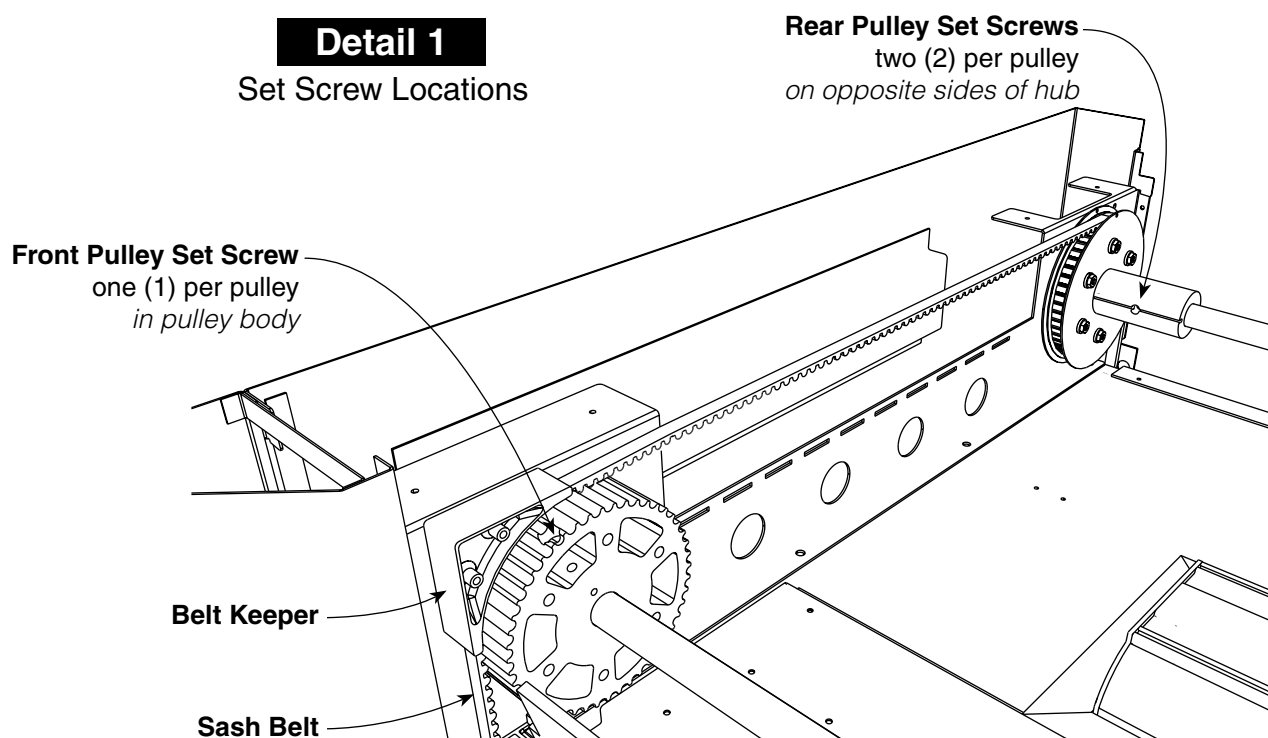
1. Check that sash is level. Level sash if necessary by following sash leveling instructions.
2. Move sash up and down full travel and check that sash is operating smoothly and with minimal friction.
3. Lubricate sash track with white lithium grease.
4. On horizontal sliding sashes, move sash glass horizontally and make sure sash tracks are free of debris. Lubricate sash wheels with white lithium grease.

Maintenance Instructions

Supreme Air Venturi Fume Hoods

Sash Leveling Instructions

1. Completely close sash.
2. Loosen front and rear set screws. Open sash as necessary until set screws rotate to an accessible location. (see Detail 1)
3. Once all set screws are loose, twist drive shafts so set screws will penetrate into a new location when tightened.
4. Level sash.
5. Tighten set screws to the recommended torque setting of 45 inch pounds.



Problem	Possible Cause	Recommended Fix
Light does not turn on.	a) No power to the light. b) Intensity is at lowest setting.	<ul style="list-style-type: none"> • Check that power is connected to the hood. • Check that all wiring connections from the control panel to the light are intact. • Check that the switch located on the power supply is in the “ON” position. • Press the intensity button several times. • Press the on/off button again and press the intensity button several times.
Only one light color will come on.	Loose wiring connection.	Check that all wiring connections from the control panel to the light are intact.
Sash stop does not retract	a) No power to control panel. b) Sash is pressed against stop c) Solenoid does not activate when button is pressed.	<p>Check that the green light on control panel illuminates when sash release button is pressed. If not, check that hood and control have power connected.</p> <p>Check that sash is not pressed up against the sash stop.</p> <p>Check solenoid mechanism is functioning properly.</p> <ol style="list-style-type: none"> 1) Check that all wiring connections from the control panel to the solenoid are intact. 2) Access solenoid on left hand side of hood behind the left end panel. Access may also be gained from inside of the hood through the removable access panel. 3) Remove solenoid bracket attachment screws. 4) Check that solenoid is pulling straight and not binding. 5) Test that the solenoid will activate when not attached to the hood. 6) If solenoid and latch mechanism are binding and are not in line and pulling straight, contact Kewaunee for a replacement.

Troubleshooting Guide

Problem	Possible Cause	Recommended Fix
Sash Return does not release from upper position (R1 Option Only)	a) No power to control panel. b) Sash is not raised to full open position. c) Solenoid does not activate when button is pressed. d) Sash Return Option not included.	Check that the green light on control panel illuminates when sash release button is pressed. If not, check that hood and control have power connected. Raise sash until sash engages upper sash stop. Check solenoid mechanism is functioning properly. <ol style="list-style-type: none"> 1) Check that all wiring connections from the control panel to the solenoid are intact. 2) Access solenoid on right hand side of hood behind the right end panel. Access may also be gained from inside of the hood through the removable access panel. 3) Remove solenoid bracket attachment screws. 4) Check that solenoid is pulling straight and not binding. 5) Test that the solenoid will activate when not attached to the hood. 6) If solenoid and latch mechanism are binding and are not in line and pulling straight, contact Kewaunee for a replacement. Check that the Sash Return Option was ordered.
Sash Return releases but sash does not return to desired location. (R1 Option Only)	a) Too much friction in sash track. b) Sash return needs adjustment.	Spray white lithium grease onto sash track linear bearing. (Located inside sash track) Adjust spring force. <ol style="list-style-type: none"> 1) Loosen set screws and rotate the reel assembly while holding shaft stationary. 2) Check that sash/counterweight are balanced. 3) Rotate reel to the rear to increase sash travel. 4) Rotate reel to the front to decrease sash travel. 5) Snug tighten one of the set screws and test. 6) Repeat the procedure until the sash returns to the desired location. 7) Fully tighten both set screws.
Sash does not remain in hold open position. (R1 Option Only)	Too much tension in return spring.	Follow above Adjust spring force instructions.

Maintenance Instructions

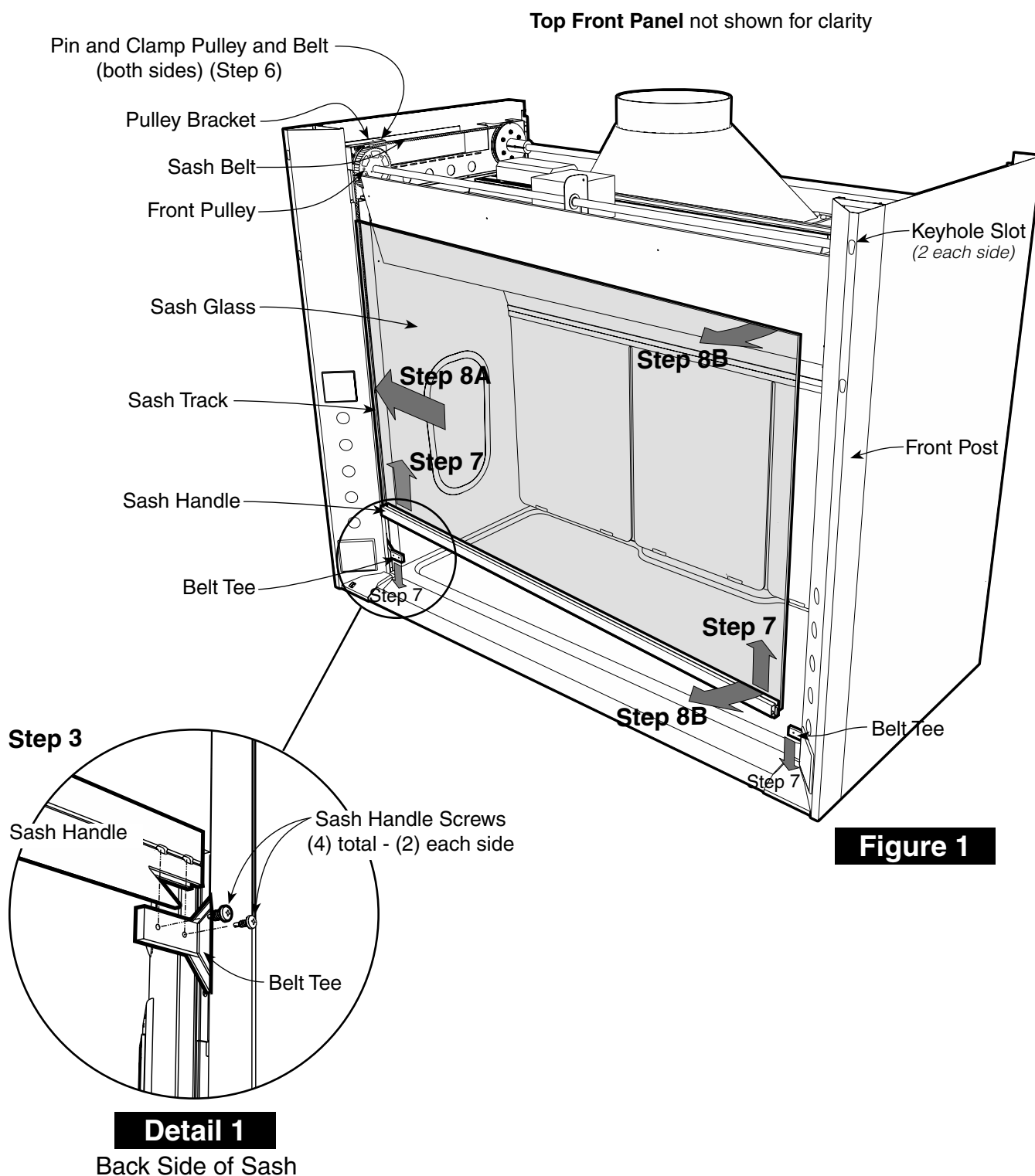
Sash Glass Replacement Instructions

Vertical Sash

1. Remove the hood **Top Front Panel** by lifting up and pulling out.
(The panel is attached to the hood front posts by four flat head pins that match to the four Keyhole Slots in the front of the posts.)
2. Open **Sash** to operating height.
3. Remove **(4) Screws** on backside of **Sash Handle**. These screws attach the handle to the **Belt Tees**. (see detail 1)
4. Completely close **Sash**.
5. Slowly open sash until a hole in the **Front Pulley** lines up with the hole in the **Pulley Bracket**.
6. Insert a pin such as a bolt or screwdriver through the **Pulley** and **Pulley Bracket**. Clamp the pin in place so that it cannot work loose. Clamp the **Sash Belt** to the side of the **Pulley Bracket** on each side of the hood. The sash drive system is now locked so that the sash can be removed without the counterweight falling.
7. Holding the **Sash Handle**, carefully lift the **Sash** up from both ends, while at the same time pulling down on the **Belt Tees**, until the sash is free from the **belt tees** on both ends. (see Figure 1)
8. Slide the **Sash**, as far as possible, into one side of the **Sash Track** and swing the other side out and away from the front of the hood. The sash is now free.
9. If replacing the **Sash Handle** onto a new glass panel, continue to step 9. If replacing the glass and handle assembly in the hood only, skip to step 16.
10. Lay sash down on a horizontal surface.
11. Using a razor blade and putty knife, cut the silicone between the **Sash Glass** and the slot in the **Sash Handle** and work the handle loose from the glass.
12. Clean all excess silicone from the handle slot.
13. Apply a bead of silicone inside the handle slot.
14. Press the **Sash Handle** onto the **Sash Glass**. Make sure the handle is centered along the length of the glass.
15. Clean any excess silicone from the glass and handle.
16. Tape the **Sash Handle** to the **Sash Glass** and let the silicone cure for 24 hours before continuing.
17. Holding the new **Sash** vertical, insert one end into the **Sash Track** and swing the other end in line with the track on the opposite end.
18. Center the **Sash Handle** between the shoulders of both **Belt Tees** and line the tees up with the notches on the bottom of the **Sash Handle**.
19. Carefully lower the **Sash Handle** onto the **Belt Tees**. Make sure the **Belt Tees** are completely seated into the **Sash Handle**.
20. Remove the clamps and pins from the **Pulley**, **Pulley Brackets**, and **Belts**.
21. Open the sash and install the **(4) Screws** through the backside of the **Sash Handle** into the **Belt Tees**. (see Detail 1)
22. Replace **Top Front Panel**

Maintenance Instructions

Sash Glass Replacement Instructions



Maintenance Instructions

Sash Glass Replacement Instructions

Combination Sash

1. Remove the hood **Top Front Panel** by lifting up and pulling out.
(The panel is attached to the hood front posts by four flat head pins that match to the four Keyhole Slots in the front of the posts.)
2. Slowly move **Sash** until a hole in the **Front Pulley** lines up with the hole in the **Pulley Bracket**.
3. Insert a pin such as a bolt or screwdriver through the **Pulley** and **Pulley Bracket**. Clamp the pin in place so that it cannot work loose. Clamp the **Belt** to the side of the **Pulley Bracket** on each side of the hood. The sash drive system is now locked so that the sash can be removed without the counterweight falling.
4. Remove the screws attaching the **Top Front Sash Track** to the **Sash Frame**.
5. Carefully lean the **Front Sash Panel** and **Top Front Sash Track** forward.
6. Lower the **Top Front Sash Track** down and out from the **Front Sash Panel** wheels.
7. Individually lift the **Front Sash Panel** out of the **Bottom Track**.
8. On back side of sash, remove the center row of screws which hold the **C-channel** onto the inside of the **Top Rear Sash Track** and remove the **C-channel**.
9. Individually lift the **Rear Sash Panel** up and out of the **Bottom Track** and **Top Rear Sash Track**.
10. If replacing the glass in the glass pane assembly, continue to step 11. If replacing the complete glass pane assembly in the sash frame, skip to step 15.
11. Remove bolts from **Sash Panel Wheel Bracket Assembly**.
12. Separate **Inner** and **Outer Wheel Brackets** from **Glass**.
13. Remove excess tape from **Inner** and **Outer Wheel Brackets** and replace with new 3M VHB double sided tape.
14. Attach **Inner** and **Outer Wheel Brackets** to the top edge of the glass and reinstall bolts. Make sure the **Wheel Brackets** are seated as far down on the top edge of the **Glass** as possible.
15. Insert **Rear Sash Panel** into rear channel of **Bottom Track** and tilt back and up to hook wheels into the **Top Rear Sash Track**.
16. Install **C-channel** onto the inside of the rear track and install the center row of screws on the back of the sash into the **C-channel**.
17. Install **Front Sash Panels** into front channel of **Bottom Track** and stand up vertically.
18. Hook **Top Front Sash Track** onto wheels of **Front Sash Panels** and lift up into position.
19. Install screws to attach **Top Front Sash Track** to the **Sash Frame**.
20. Remove the clamps and pins from the **Pulley**, **Pulley Brackets**, and **Belts**.
21. Replace **Top Front Panel**

Maintenance Instructions

Combination Sash Glass Replacement Instructions

Top Front Panel not shown for clarity

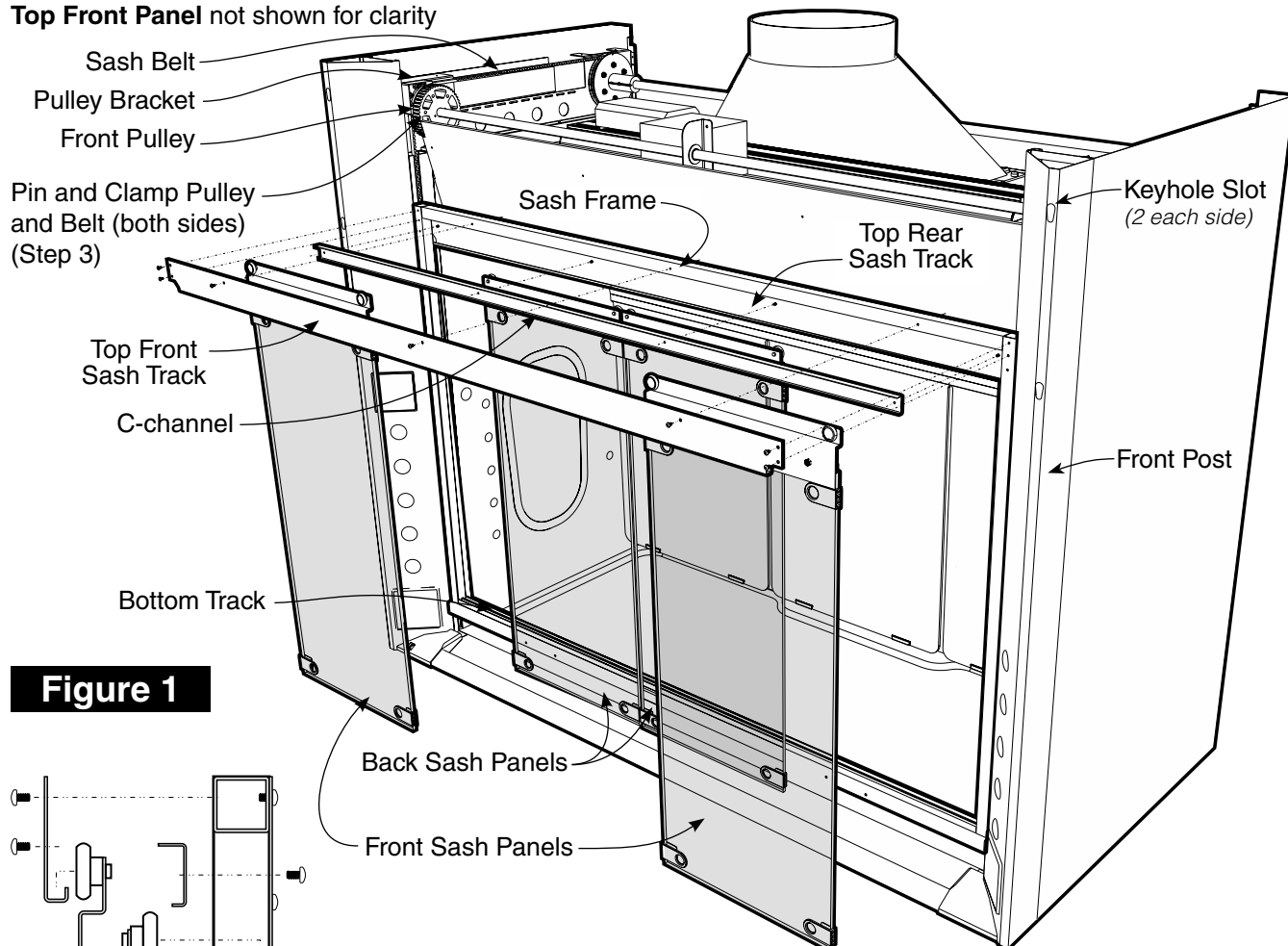
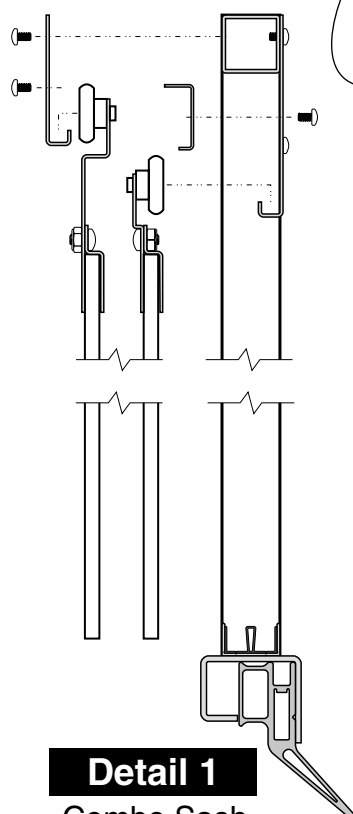


Figure 1



Detail 1

Combo Sash
Cross-section

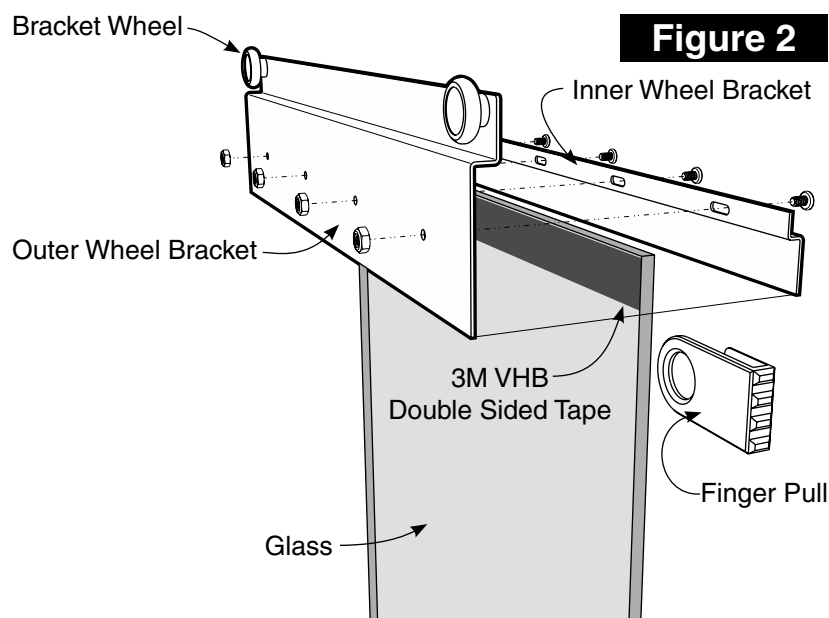


Figure 2

Maintenance Instructions

Sash Glass Replacement Instructions

Horizontal Sash

1. Remove the **Top Front Panel** by lifting up and pulling out to gain access to the screws in the front of the **Top Front Sash Track**.
(The panel is attached to the hood front posts by four flat head pins that match to the four Keyhole Slots in the front of the posts.)
2. Remove the screws attaching the **Top Front Sash Track** to the **Sash Frame**.
3. Carefully lean the **Front Sash Panels** and **Top Front Sash Track** forward.
4. Lower the **Top Front Sash Track** and out from the **Front Sash Panels Wheels**.
5. Lift the **Front Sash Panels** out of the **Bottom Track**.
6. Lift the **Rear Sash Panels** up and out of the **Bottom Track** and **Top Rear Sash Track**.
7. If replacing the glass in the glass panel assembly, continue to step 8. If replacing the complete glass panel assembly in the sash frame, skip to step 12.
8. Remove **Bolts** from **Sash Panel Wheel Bracket** assembly.
9. Separate **Inner** and **Outer Wheel Brackets** from **Glass**.
10. Remove excess tape from **Inner** and **Outer Wheel Brackets** and replace with new 3M VHB double sided tape.
11. Attach **Inner** and **Outer Wheel Brackets** to the top edge of the **Glass** and reinstall **Bolts**. Make sure the wheel bracket assembly is seated as far down on the top edge of the glass as possible.
12. Insert **Rear Sash Panels** into rear channel of **Bottom Track** and tilt back and up to hook wheels into the **Top Rear Sash Track**.
13. Install **Front Sash Panels** into front channel of **Bottom Track** and stand up vertically.
14. Hook **Top Front Sash Track** onto wheels of **Front Sash Panels** and lift up into position.
15. Install screws to attach **Top Front Sash Track** to the **Sash Frame**.
16. Reinstall the **Top Front Panel**.

Maintenance Instructions

Horizontal Sash Glass Replacement Instructions

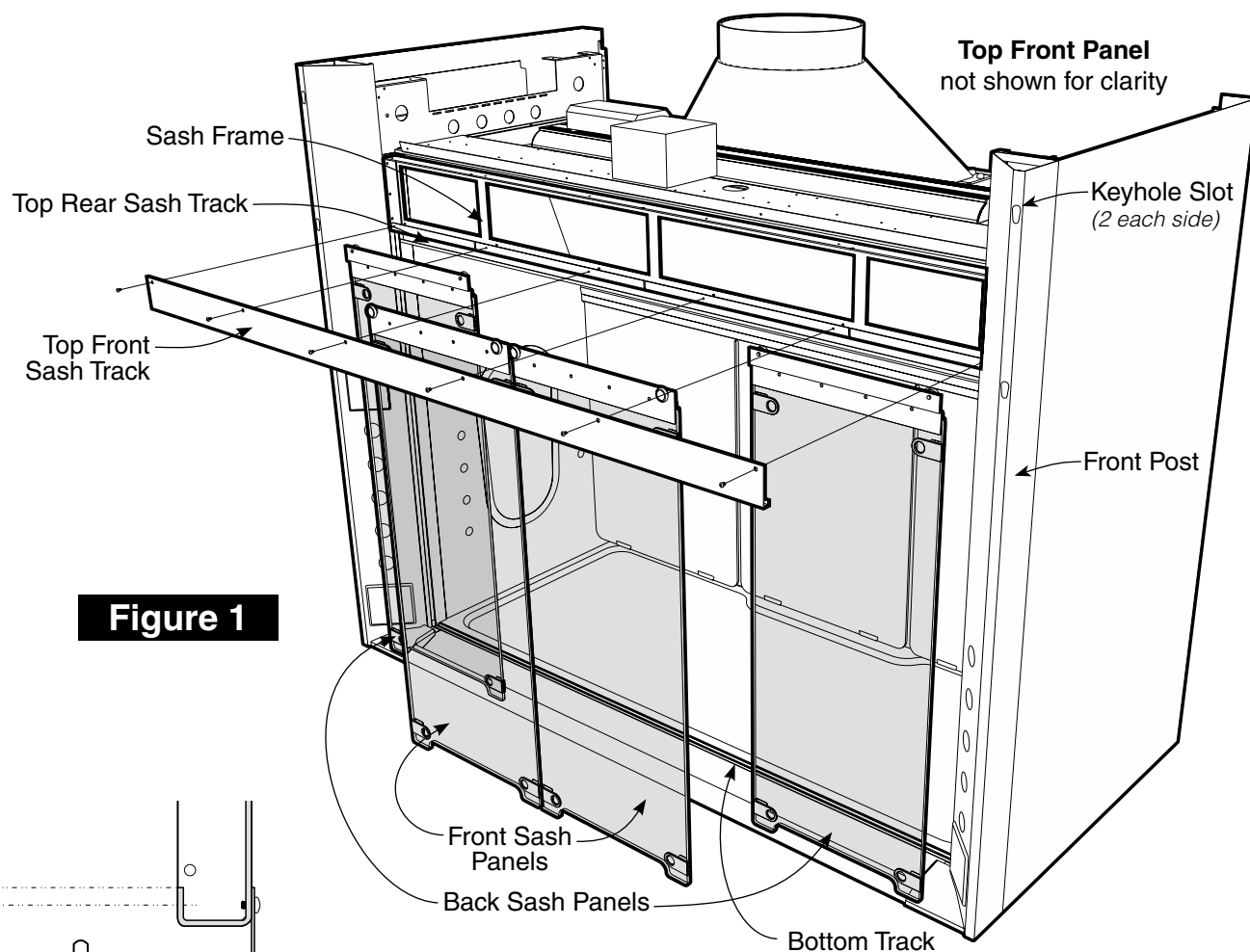
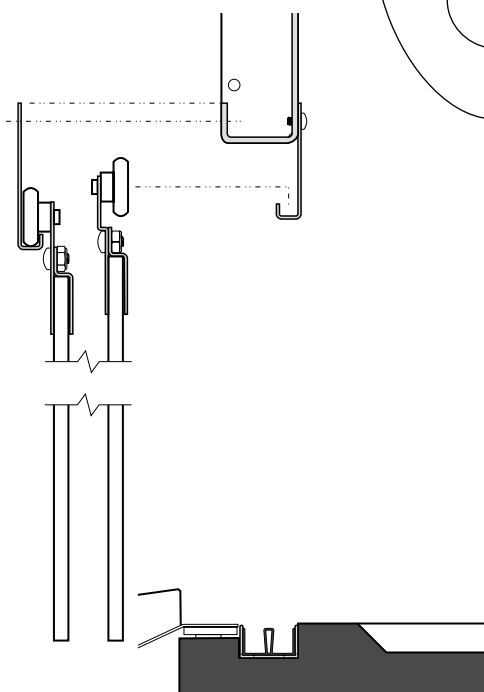


Figure 1



Detail 1

Horizontal Sash
Cross-section

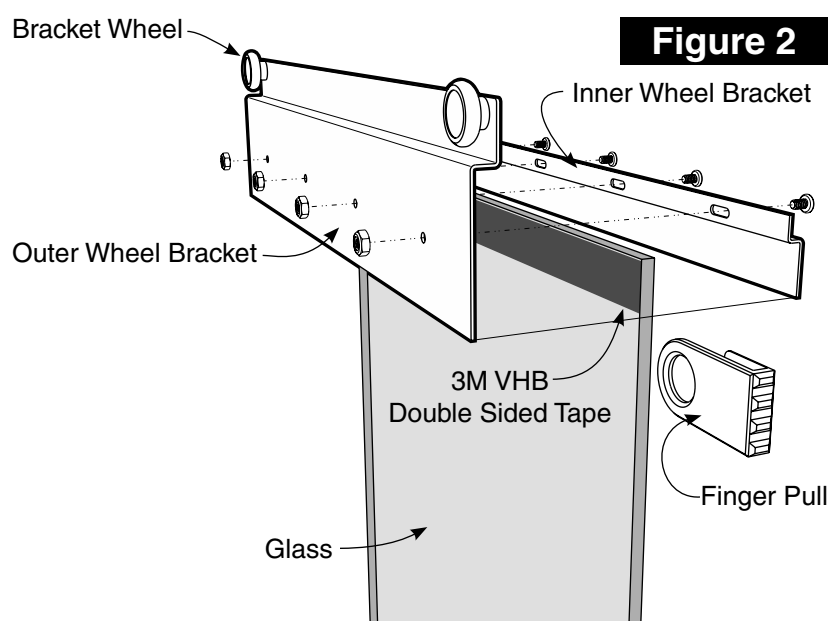


Figure 2

Recommended Fume Hood Work Practices

A Safe, Healthy Work Environment

Most people think of a scientific laboratory as a clean, safe place to work. But for the people who work there every day, the typical laboratory—filled with flammable and toxic chemicals, harmful vapors, gases and corrosive acids—can be an extremely hazardous place.

By containing harmful contaminants and venting them out of the work area, laboratory fume hoods help create and maintain a safe, healthy environment for you—the laboratory worker—and your co-workers.

Your fume hood is designed to protect you by providing an enclosed work area that has an air barrier between you and the harmful materials you

work with. Behind this protective air barrier, the hood's directional air flow carries harmful contaminants away from you toward the rear of the hood. Also, the properly tuned hood and its exhaust system dilutes the contaminants with large volumes of air and safely exhausts them.

If anything interferes with the protective air barrier of the fume hood or disrupts the proper air flow, the hood's ability to protect you and your co-workers may be seriously reduced.

Since 1906, we at Kewaunee Scientific Corporation have been designing and building laboratory fume hoods to help keep laboratory work environments safe and healthy.

Based on our knowledge and experience, we've outlined a number of basic safety practices for you and your co-workers to follow when choosing, using and maintaining laboratory fume hoods. The following practices are based on the superior design found in Kewaunee Supreme Air Venturi hoods.

We urge you to familiarize yourself with these recommended fume hood work practices and with your facility's safety guidelines and standard operating procedures. We think you'll agree—it's the best way to help ensure a safe, healthy work area for you and your co-workers.

The Right Fume Hood for the Job

If your laboratory fume hood is to properly protect you, it must be designed for the type of work you're doing.

For example, if you work with radioisotopes, carcinogens or other toxic materials for which decontamination is important, you should always use a hood with a non-

absorbent lining that is designed to be easily decontaminated.

If you work with large volumes of flammable substances, you may need a hood equipped with such features as a non-absorbent lining, explosion-proof lights and electrical receptacles, a fire-suppression system, and a spark-resistant exhaust fan.

If you use perchloric acid heated above ambient temperature then you need a fume hood and exhaust system specifically designed for this hazard.

To be sure your fume hood is the right one for the work you're doing, contact your local Kewaunee sales representative.

Venturi Fixed Baffle Configuration

Kewaunee Supreme Air Venturi fume hoods are provided with a fixed baffle

configuration. **(See Figures 1 and 2.)** The slots in the baffle are optimized to

provide the best performance.

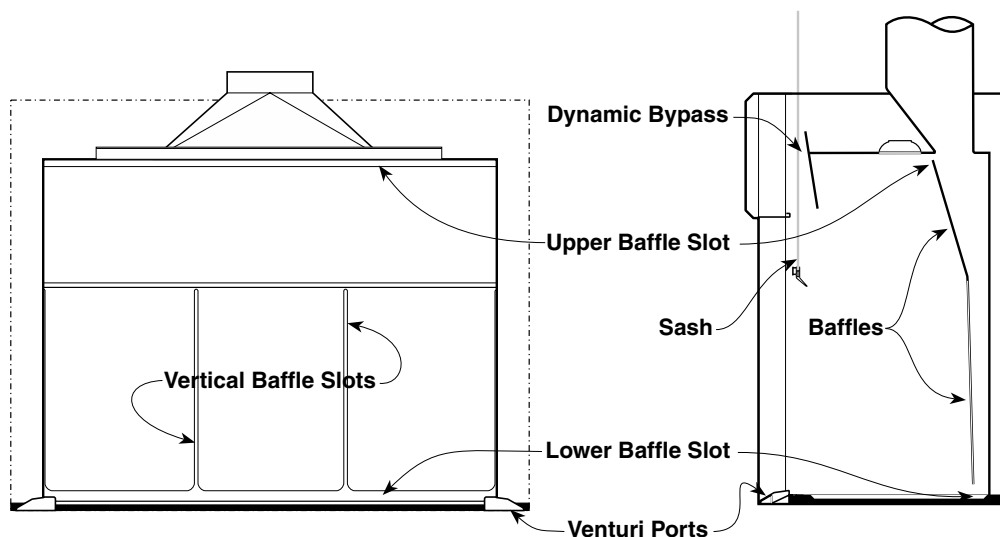


Figure 1. Face Section View

Figure 2. End Section View

Recommended Work Practices (continued)

Checking Fume Hood Performance

To confirm that your fume hood exhaust system is working properly, the Occupational Safety and Health Administration (OSHA) recommends that all hoods be equipped with an airflow monitor. Inspect both the monitor and the system periodically for malfunctions.

For some applications a pressure gauge connected to the exhaust duct is sufficient. The safe pressure

range should be marked on the gauge. When using more hazardous contaminants, a fume hood alarm such as the Kewaunee Air Alert 300 or Air Alert 600 Digital Face Velocity Alarms should be used. These alarms provide both a visual and audible warning when the exhaust flow becomes unsafe.

If your hood is equipped with a variable air volume controller (VAV)

with alarm capabilities, then an additional alarm is not necessary.

You should have a qualified technician thoroughly test your fume hood before you use it the first time and at least once a year after that. You should also have your hood tested after any modification to the laboratory ventilation system or other factors which may affect hood exhaust capability or room air flow patterns.

Maintaining the Protective Air Barrier for a Safe Work Area

When you stand in front of a laboratory fume hood, the air passing your body to enter the hood forms a zone of low air pressure directly in front of you which extends into the hood. Since contaminants may enter this turbulent area from inside the hood, you should keep all hazardous materials at least six inches inside the hood, behind the protective air barrier. (See Figure 3.)

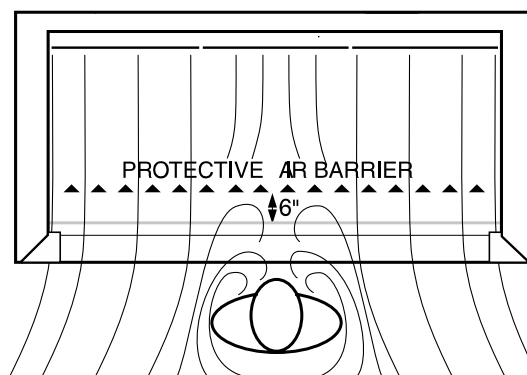


Figure 3
Formation of Protective Air Barrier

The farther behind the fume hood protective air barrier you place the source of contaminants, the greater the protection the hood provides. Therefore, place the equipment and

contaminants as far back inside the hood as possible, being careful not to block the slots in the rear baffle. (See **Figure 4.**) Never place apparatus so far back that you have to put your head

into the hood while the procedure is generating contaminants.

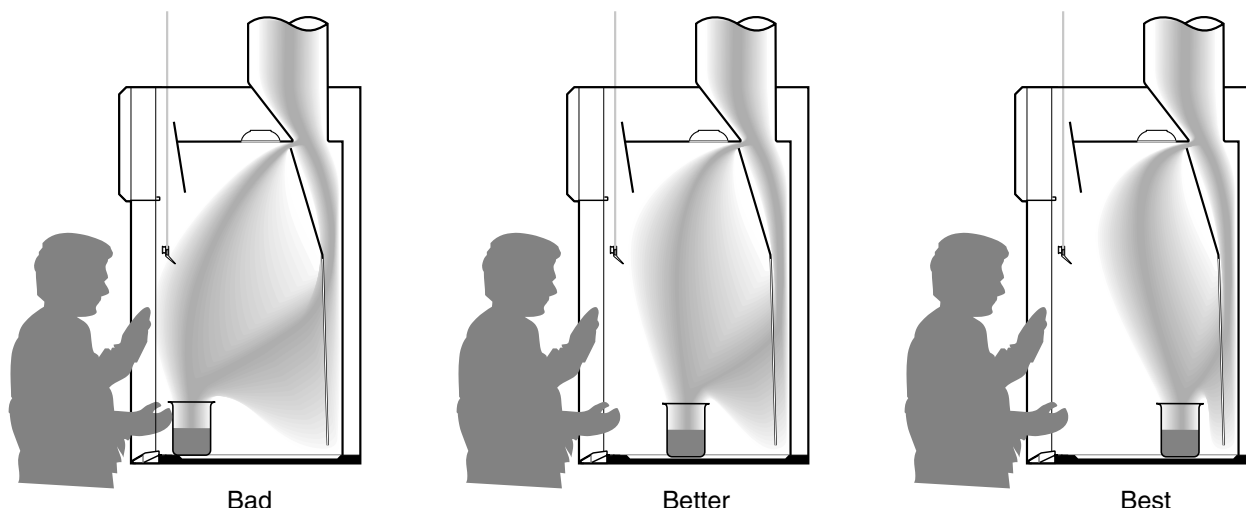


Figure 4
Effect of placement of contaminate source

Recommended Work Practices (continued)

Maintaining the Protective Air Barrier for a Safe Work Area (continued)

Large containers or equipment such as furnaces, incubators and oil baths often interfere with air flow inside the fume hood by causing lazy air and reverse flows which may affect airflow patterns. Placing large, bulky equipment on legs will help improve airflow patterns by allowing air to circulate beneath the equipment. (See **Figure 5.**)

The fume hood should not be used for storage of chemicals and apparatus. Remove all unnecessary containers and equipment from the hood.

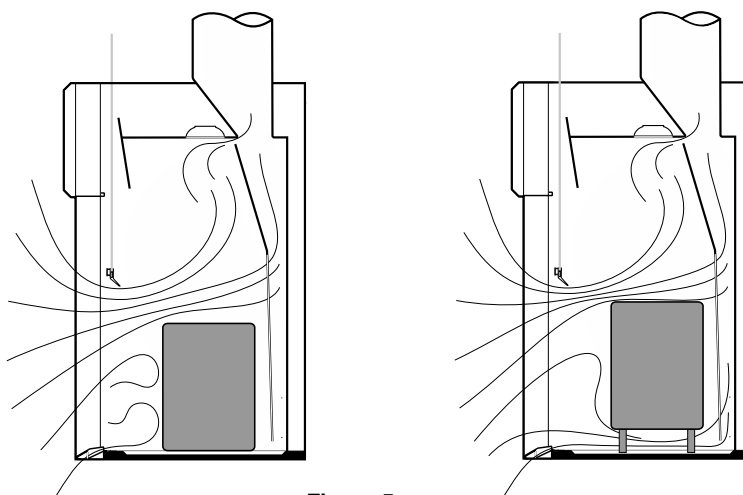


Figure 5
Effect of large equipment

The air velocities used to provide containment in fume hoods are relatively low and the air flow patterns are easily disrupted. Avoid making rapid movements while working at the hood or while walking past the hood.

When working at a fume hood, always open the sash only as far as needed to access to the work area. The lowered sash increases the distance (**D** in **Figure 6**) between your breathing zone and the area where contaminants may escape. In addition the smaller hood face area makes the hood less susceptible to room drafts and other external air disturbances.

The sash also provides protection by replacing part of the protective air barrier with a solid barrier against contaminants and splashing chemicals.

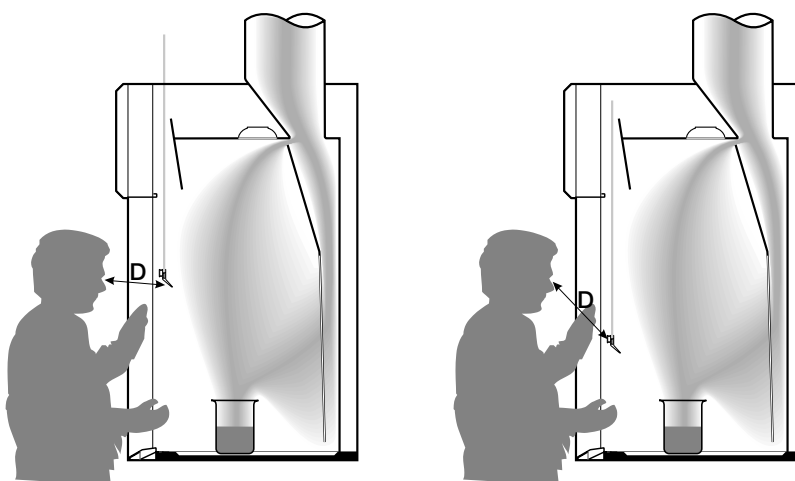
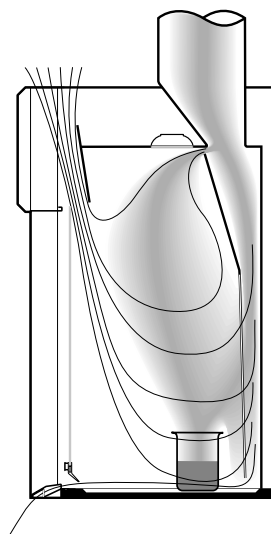


Figure 6
Effect of lowering the sash

If the hood has a sash stop to limit sash travel or is marked for a safe sash height, the sash should not be raised above this point while contaminants are being generated within the hood.

If continuous access is not needed to the inside of the fume hood, the sash should be closed completely. (See **Figure 7**) A closed sash provides protection from flying debris or a runaway reaction. It also eliminates the effects of room drafts or other adverse air currents.



If your hood has horizontal sashes, be sure they are all in place when working with contaminants inside the hood. Operating the hood with any of the sashes removed reduces the protection they provide by decreasing the velocity of the air entering the hood face. If you remove any hood sashes while setting up equipment, be sure to replace them before beginning the actual procedure. On hoods with a combination vertical/horizontal sash, the hood should be operated either with the vertical frame closed while the horizontal panels are open or the horizontal panels closed while the vertical frame is open.

Figure 7
Airflow through By-Pass with Sash Closed

Recommended Work Practices (continued)

For More Information

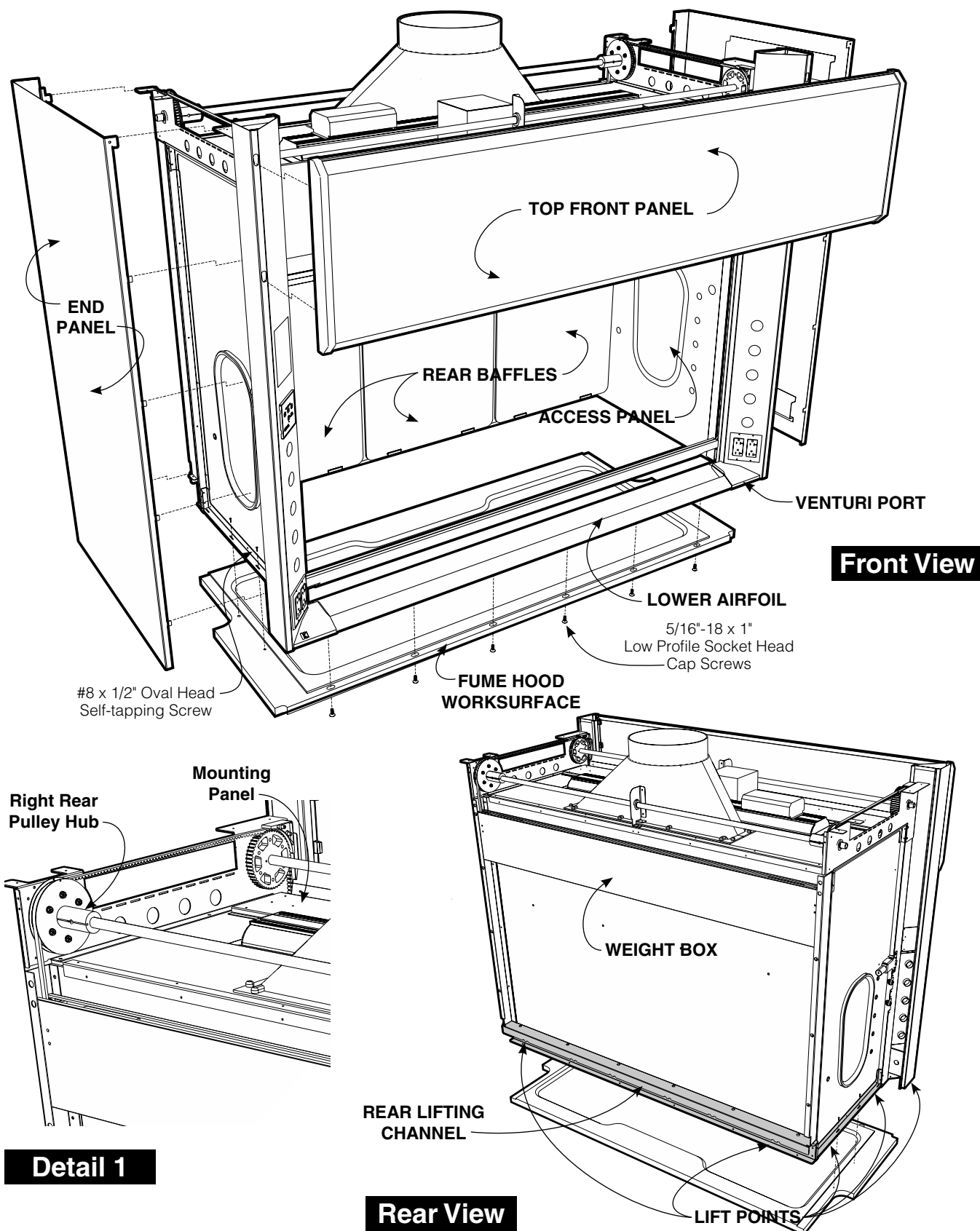
We at Kewaunee Scientific hope these guidelines will be helpful to you as you choose, use and maintain your laboratory fume hood. If you have questions we haven't answered in this section, please contact your local Kewaunee sales representative.

Fume Hood Safety Checklist

- ☐ The hood is the correct type for the work to be performed.
- ☐ The airflow monitoring device indicates adequate airflow.
- ☐ There are no unnecessary chemicals or equipment in the fume hood.
- ☐ All chemicals and equipment are at least six inches behind the plane of the sash.
- ☐ All procedures are performed with the laboratory worker's head remaining outside the hood.
- ☐ Large equipment is placed on stands with legs.
- ☐ The sash is not above the safe operating height while the fume hood is in use.
- ☐ The sash is open only as far as needed.
- ☐ Safety equipment is close to the hood in case of fire or explosion.
- ☐ All laboratory workers are following the procedures outlined in these instructions, as well as any additional fume hood safety guidelines supplied by your laboratory safety manager.

Installation Instructions

Supreme Air Venturi Bench Fume Hoods



Installation Instructions

Supreme Air Venturi Bench Fume Hoods

Packing List

On Pallet	Fume Hood	Hardware Package	
	Hardware Package (taped to side of hood)	(4-8)	5/16"-18 x 1" Low Profile Socket Head Cap Screw
		(6)	#8 x 1/2" Oval Head Self-tapping Screw
		(1)	Installation Instructions

NOTICE Fume Hood Worksurface is packaged separately.

Preparation

1. Place, level, and install **Base Unit Assembly** that will support the **Fume Hood** as shown on page 27.
2. Attach the **Fume Hood Worksurface** to the **Base Unit Assembly** at the corners using epoxy cement or similar adhesive.

NOTICE Worksurface should be centered on units and overhang the front by 1½". Worksurface must be level. Shim as needed. Top should extend all the way to rear wall.
3. Uncrate **Fume Hood** taking care to sort and inventory all parts.
4. Remove **End Panels** from **Fume Hood** (by lifting up and out) and remove screws anchoring **Fume Hood** to pallet and **Weight Box** to **Fume Hood**.
5. Remove all packing from **Fume Hood** and any tape holding parts in place for shipping.

NOTICE Fume Hood is packed fully assembled. The **Top Front Panel** may be removed (by lifting up and out) to fit through narrow doorways and/or for easier access.

NOTICE Generally electrical fixtures and plumbing fittings are shipped installed, but may be shipped loose depending on job requirements. Fittings may also be prewired and/or prepiped. Fixtures are not shown on assembly diagram as quantities and locations vary to meet individual requirements.

Installation

6. Check that **Sash Belts** are properly routed over front and rear pulleys, and engage pulley sprockets.
7. Perform sash adjustments and troubleshooting if needed, before placing hood on worksurface. (see page 12)

CAUTION Handle Sash with care - Glass will crack if abused.

CAUTION Do not lift fume hood by the Lower Airfoil, Venturi Ports, or any other parts on the front of the hood.

8. Using as many workers as needed, lift assembled **Fume Hood**, by its **Lift Points**, and place on the front of the leveled **Worksurface**. Slide the hood back into place making sure the left and right **End Liner Panels** are seated in **Worksurface Rabbets** and keeping the front of the hood elevated to allow the **Lower Airfoil Weld Nuts** to engage the slots in the front of the **Worksurface**.

TIP: The **Rear Lifting Channel** at the rear of the hood is designed to accept a standard two-by-four. Use of a two-by-four can be helpful in lifting the hood when space allows.

TIP: Place cardboard panels between bottom of **Fume Hood** and **Worksurface** to allow the hood to slide easier and to protect the Worksurface. Remove cardboard after hood is in place.

continued on next page

Installation Instructions

Supreme Air Venturi Fume Hoods *(continued)*

9. Make sure the fume hood is pushed back as far as possible and properly seated on the **Worksurface** and centered on the **Base Unit Assembly**. Check the **Fume Hood** for plumb and square.
10. Secure the hood to the Worksurface using at least four (4) #8 x 1/2"x Oval Head Self-tapping Screws. Screw through the slots located in the fume hood **End Frames** and into the **Pilot Holes** in the **Worksurface**.
11. Attach **Lower Airfoil** to **Worksurface** with supplied 5/16"-18 x 1" Low Profile Socket Head Cap Screws (number of screws will vary depending on length of hood). Check that **Lower Airfoil** is straight and level then tighten all screws hand-tight with a 5/32" Hex Key Wrench.

⚠ CAUTION Do not tighten screws until all have been installed and Airfoil is checked for straight and level.

12. Once **Lower Airfoil** is fastened to **Worksurface**, check that all openings in the **Airfoil** and **Venturi Ports** are clear and free from any debris.
13. Coordinate connections of service fittings, electrical fixtures, and ductwork with the respective trades (i.e. mechanical, electrical, HVAC). After connections are complete, replace interior **Access Panels**, if removed, and the exterior **End Panels**.
14. Check **Sash** again for level, smooth movement. To level refer to **Sash Leveling Instructions** on page 12.
15. Inspect the complete installation, remove any dust, dirt, or other debris. Assure that other trades (Electrical, Plumbing, HVAC, VAV Control, etc.) have not added any friction to the sash system. Check all moving parts for proper operation, and adjust or lubricate as necessary.

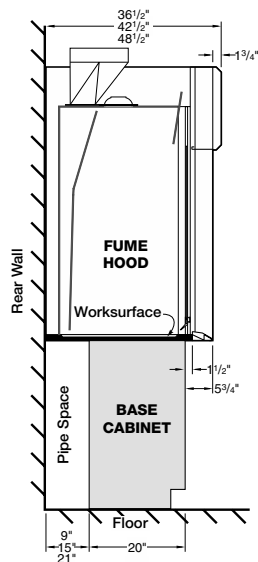
NOTICE **Rear Baffles** may be removed for cleaning by lifting up and swinging out.

VAV Installations

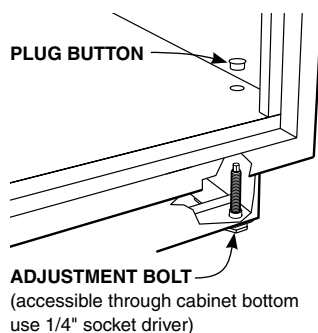
1. When using a Sash Position Sensor to control a VAV system, Kewaunee recommends attaching the cable to the right rear Pulley Hub and the controller to the metal panel at the front of the hood (as shown in Detail 1)
2. A pilot hole can be drilled into the aluminum hub and attachment made with a self-tapping screw. Keep all parts clear from any possible obstructions.

Installation Instructions

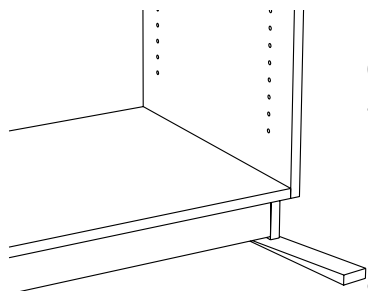
Base Unit Assembly for Bench Type Fume Hoods



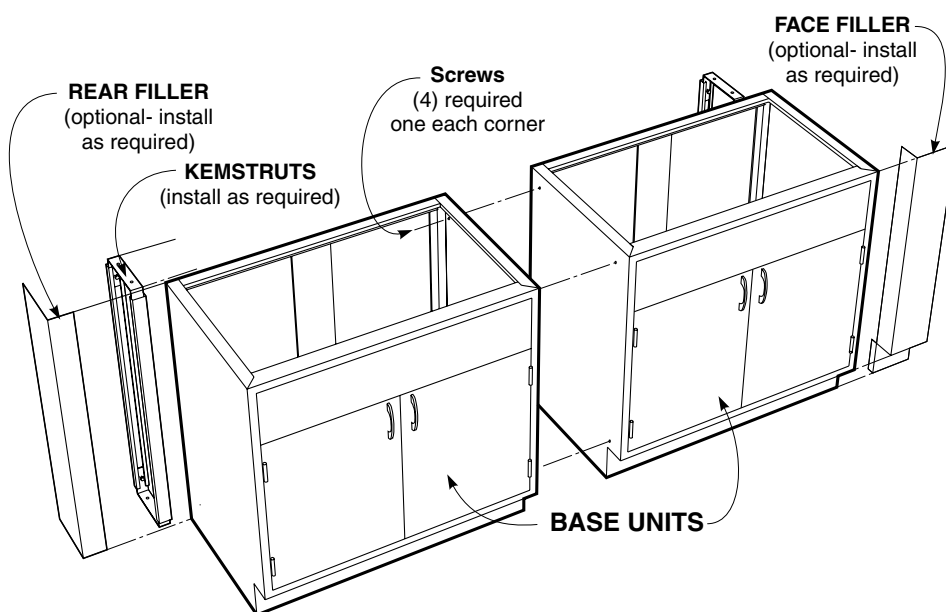
Detail 1
Fume Hood Base Cabinet Location



Detail 2S
Steel base cabinets are leveled using the adjustment bolts located in the cabinet base.



Detail 2W
Wood base cabinets are leveled using wood or plastic shims, available at any lumber yard or home center.



Preparation

1. Locate and mark hood and base cabinet locations making sure area is clear of obstructions and debris. Be sure all conduit, duct work and service lines have been run and are ready for final connections.

NOTICE Kemstruts and other pipe or worksurface supports should be installed before the base cabinets are moved into place.

2. Locate the high point of the floor within the area that the base cabinets will be installed.

Installation

3. Starting with the base cabinet on the highest point on the floor, move the first cabinet into location as shown in Detail 1 and according to project drawings.
4. Using a four foot carpenters level, level the cabinet; side-to-side, front-to-back, and diagonally. (see Detail 2S and 2W to the left for leveling methods)

NOTICE Blocks or cleats may be used to fasten cabinets to floor or walls to insure cabinets don't move during installation.

5. Move the next cabinet into position and clamp it to the first cabinet, making sure that the cabinet faces and tops are flush.
6. Level the cabinet, as in step 4.
7. Using four (4) screws, as listed below, fasten the two cabinets together at all four corners of the end panels.
Use #8 x 1-1/4" Flat Head screws for wood cabinets.
Use #8 x 1/2" Truss Head Sheet Metal screws for steel cabinets.
(pilot holes must be drilled in the steel cabinets before driving screws)
8. Complete hood installation and all mechanical connections before installing any required fillers or scribes.

NOTICE It is recommended that the polyethylene liner be removed from Acid Storage cabinets during installation to allow fastening to adjacent cabinets and ease plumbing connections. Be sure to replace when installation is complete.

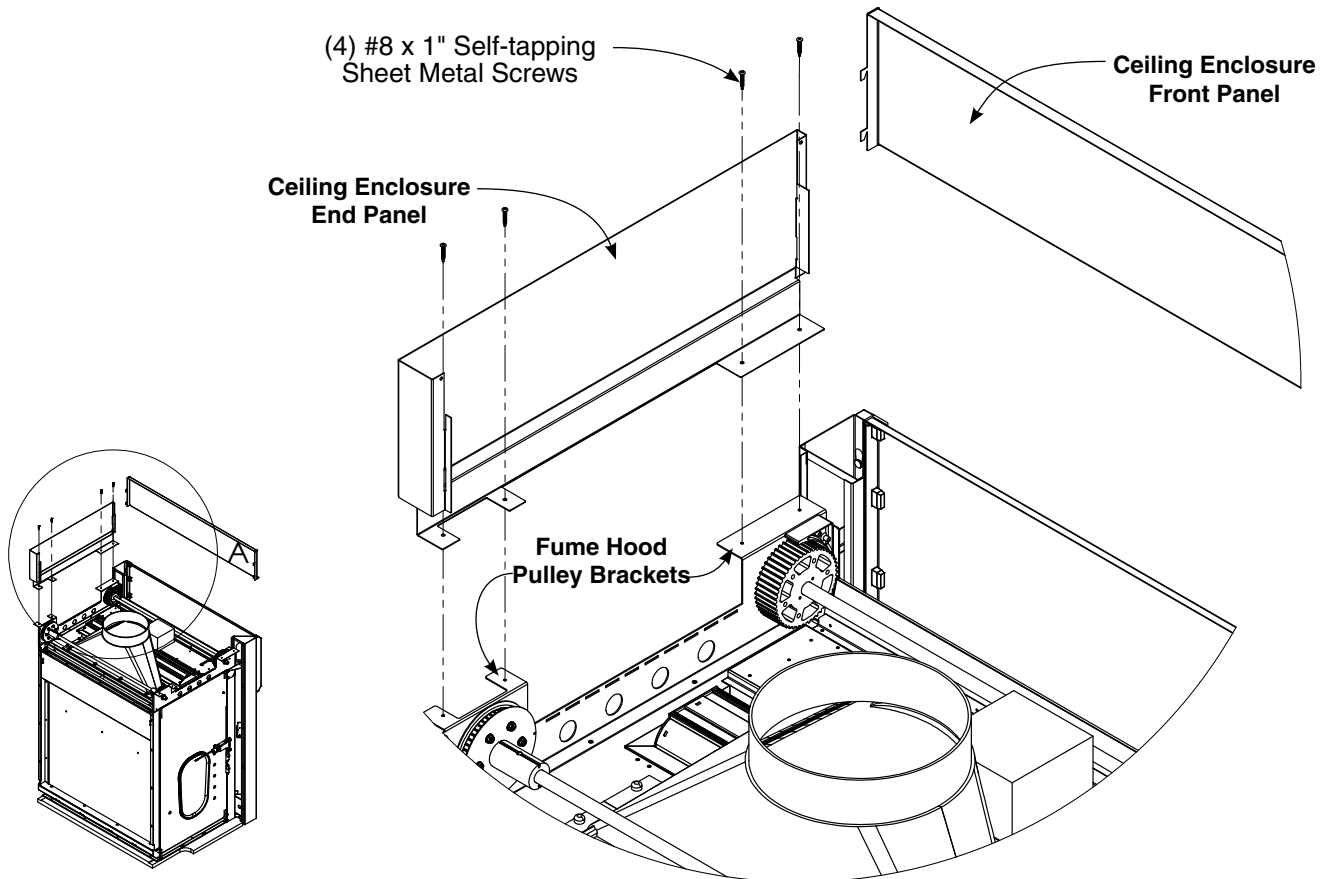
Installation Instructions

Ceiling Enclosure Installation Instructions

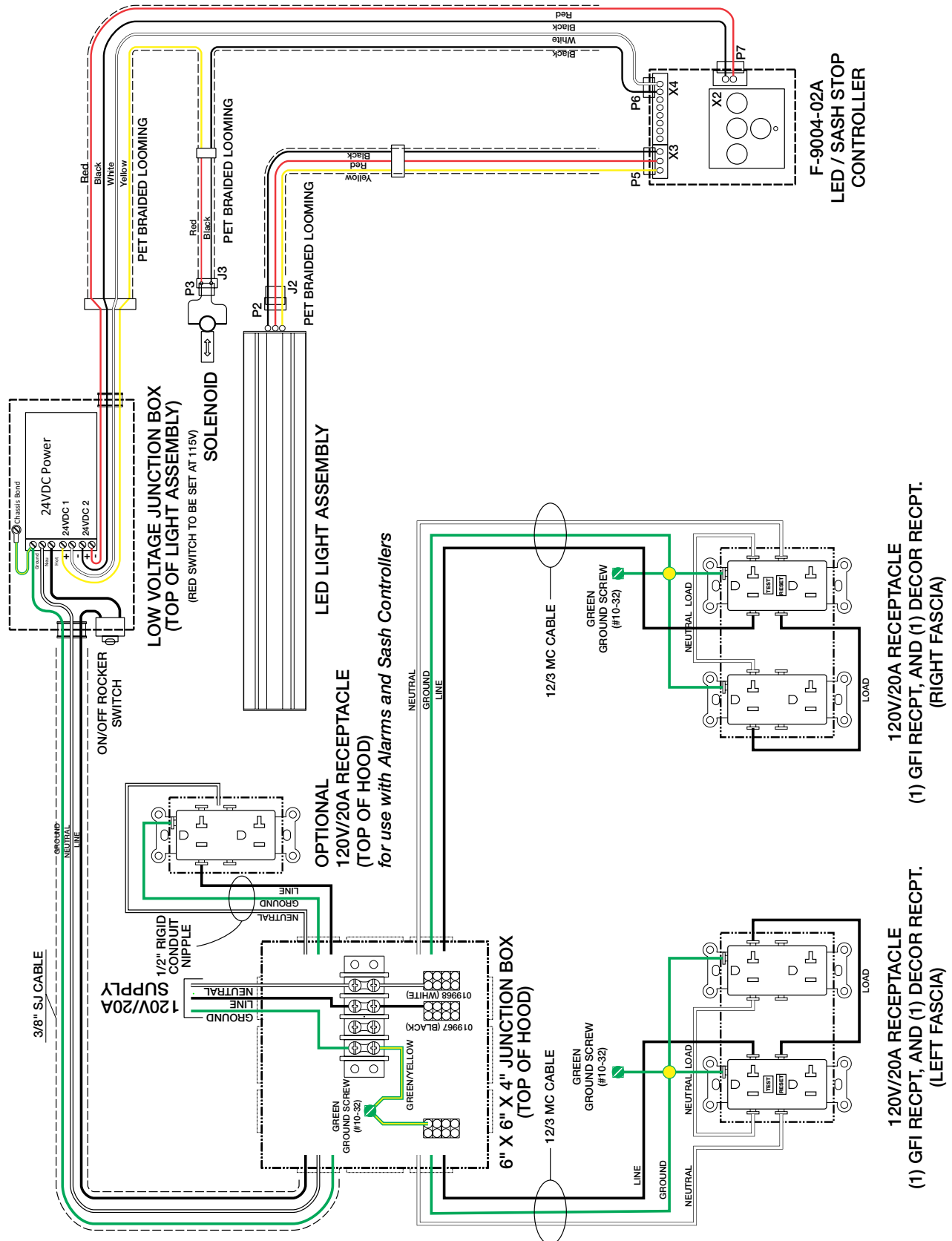
1. Fasten **Ceiling Enclosure End Panels** to **Fume Hood Pulley Bracket** tabs using four (4) #8 x 1" Self-tapping Sheet Metal Screws for each **End Panel**.
2. Insert tabs on **Ceiling Enclosure Front Panel** in slots on **Ceiling Enclosure End Panels**. Allow **Front Panel** to drop so that the tabs engage the **End Panel** slots.

NOTICE The **Ceiling Enclosure** is designed to penetrate a standard ceiling grid. To allow the **Front Panel** to be removable after installation, it is important not to attach the **Ceiling Grid Angle** to the **Front Panel**. If attachment is required, use fasteners that can be removed. The **Ceiling Grid Angles** may and should be fastened to the **Ceiling Enclosure End Panels**.

NOTICE Verify there is enough space between the **Fume Hood End Panels** and the **Ceiling Enclosure End Panels** to allow the **Fume Hood End Panels** to be removed and replaced. Add washers or shims to increase the spacing if required.



Wiring Diagram



Electrical Installation Instructions

Prewired Venturi Fume Hoods / UL Listed

Purpose These instructions are provided as a guide for properly connecting and maintaining Supreme Air Venturi fume hoods that are factory wired. A factory wired fume hood will be delivered equipped with all electrical receptacles, light fixtures and switches mounted on the fume hood and wired to an electrical junction box. The junction box is mounted on the top panel of the hood behind the top front panel.

The instructions and illustrations that follow must be followed in order to comply with the requirement set forth by Underwriters Laboratories, Inc. Any deviation from these instructions or modification of the factory wiring may void the UL listing.

If technical assistance is required please contact:

Kewaunee Scientific Corporation
Fume Hood Engineering
P.O. Box 1842
Statesville, NC 28687-1842
Phone: (704) 873-7202
Fax: (704) 872-4355
www.kewaunee.com

Technical Information

Supply Voltage: 120VAC	Maximum Humidity Rating: 80%
and/or 240VAC*	Maximum Fluid Pressure: 60 psi
Supply Current: 20 A	Maximum Gas Pressure: 20 psi
Supply Frequency: 60Hz	Input Conductor Gauge: 12 ga.
Maximum Altitude: 2000M	Input Conductor Type: THHN
Max. Ambient Temperature 40°C	Input Conductor Temperature Rating: 90° C

*Supply voltage will be indicated on the rating plate on each junction box.

Installation

Location Requirements

Mains supply fluctuations should not exceed $\pm 10\%$ of rated voltage.
Intended for connection to an Installation Category II circuit.
Intended for use in a Pollution Degree 1 or 2 environment.
Intended for "Indoor Use".

If a switch is not part of the equipment:

1. A switch or circuit-breaker must be included in the installation.
2. It must be suitably located and easily reached.
3. It must be marked as the disconnecting device for the equipment.

Electrical Installation Instructions

Prewired Venturi Fume Hoods / UL Listed

General Installation

Instructions Assemble and securely mount the fume hood per the instruction in the accompanying installation manual.

Preparation:

1. Locate junction boxes.
Supply circuits will be attached to the unit within each junction box. These junction boxes are located on top of the hood, behind the front panel. If the top of the fume hood is flush with or extends into the ceiling, the ceiling tiles must be removed to gain access to the junction box. If the top of the fume hood is below the ceiling level, access can be gained from above the hood, or through the ceiling enclosure panel.
2. Note the input ratings on the rating plate. Each junction box will have a rating plate for each supply circuit located above an unused knockout.

Installation:

3. Run supply conductors into junction box. Conductors should be enclosed in conduit. Conduit should be attached to the junction box using an appropriate bushing. Supply should be attached to a 20 Amp circuit breaker. Supply circuit should be dedicated to the fume hood.
4. Attach conductors to terminals. Remove the junction box cover. A label in the bottom of the junction box will identify each supply terminal. Attach supply conductors to proper terminals using 16 in-lb. of torque.
5. Attach building ground to grounding lug identified by symbol.
6. Replace the junction box cover.

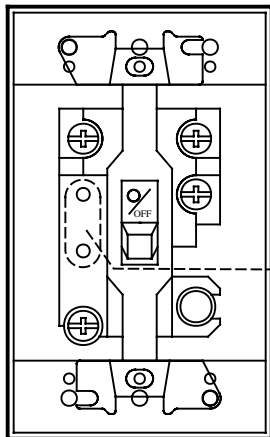
Installation Instructions

Prewired Venturi Fume Hoods / UL Listed

Fan Switch Wiring Fan switch wiring will be located in a separate 6" x 4" junction box on top of the hood.

Note: The fan controlled by this switch should not exceed 1 HP.

1. Follow steps 1 through 3 as in the general installation instructions with the following exceptions: The fan switch circuitry is wired for 120 VAC/20 A/60 Hz input. The input circuit to the junction box must match the requirements of the fan motor.
2. There are terminals in the junction box for output to the fan motor. A label in the box also identifies these terminals.
3. Attach the conductors as previously noted, using conduit and a bushing to insulate the conductors running from the junction box to the fan motor.
4. Install proper thermal unit in the fan switch to match the maximum motor current (load) in amps. The thermal unit is installed by removing the fan switch cover plate and mounting the thermal unit in the location specified in the diagram below.



Location of
Overload Relay
Thermal Unit

The fan switch is a Square D Manual Starter, Class 2510, Type F, and Size FHP. Thermal units can be purchased from a Square D distributor. The following chart for referencing the proper thermal unit number is reprinted from Table 43, Page 23-28, of the Square D Digest, Volume 170.

Motor Full Load Current (Amp)	Thermal Unit Number	Motor Full Load Current (Amp)	Thermal Unit Number	Motor Full Load Current (Amp)	Thermal Unit Number
0.41 – 0.44	A .49	1.57 – 1.65	A 1.86	5.36 – 5.85	A 7.65
0.45 – 0.49	A .54	1.66 – 1.79	A 1.99	5.86 – 6.41	A 8.38
0.50 – 0.53	A .59	1.80 – 1.95	A 2.15	6.42 – 6.79	A 9.25
0.54 – 0.58	A .65	1.96 – 2.15	A 2.31	6.80 – 7.57	A 9.85
0.59 – 0.65	A .71	2.16 – 2.38	A 2.57	7.58 – 8.15	A 11.0
0.66 – 0.71	A .78	2.39 – 2.75	A 2.81	8.16 – 8.98	A 11.9
0.72 – 0.78	A .86	2.76 – 2.84	A 3.61	8.99 – 9.67	A 13.2
0.79 – 0.85	A .95	2.85 – 3.06	A 3.95	9.68 – 9.95	A 14.1
0.86 – 0.96	A 1.02	3.07 – 3.45	A 4.32	9.96 – 10.8	A 14.8
0.97 – 1.04	A 1.16	3.46 – 3.70	A 4.79	10.9 – 12.1	A 16.2
1.05 – 1.16	A 1.25	3.71 – 4.07	A 5.30	12.2 – 13.1	A 17.9
1.17 – 1.29	A 1.39	4.08 – 4.32	A 5.78	13.2 – 13.9	A 19.8
1.30 – 1.37	A 1.54	4.33 – 4.90	A 6.20	14.0 – 15.0	A 21.3
1.38 – 1.47	A 1.63	4.91 – 5.35	A 6.99	15.1 – 16.0	A 25.2
1.48 – 1.56	A 1.75				

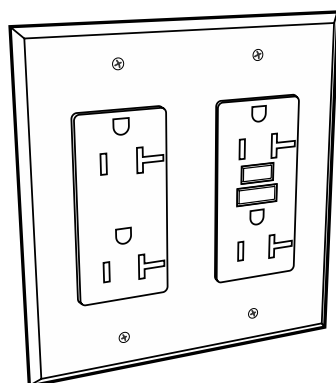
Wiring Diagram

Prewired Venturi Fume Hoods / UL Listed

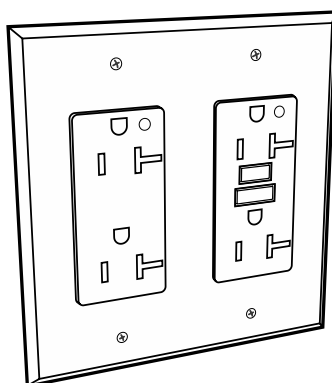
Control Identification The captions for each illustration gives the Kewaunee part number, rating and general description.

Electrical Fixtures:

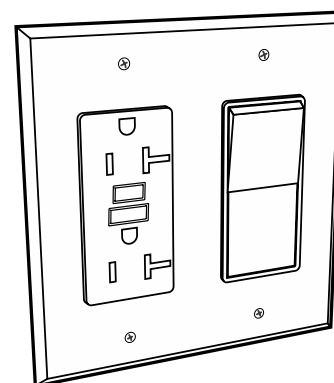
Use the following illustration to identify electrical fixtures:



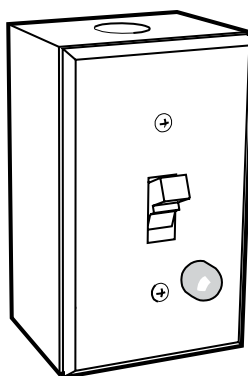
S658-6
120V / 20A / 60HZ
Specification Grade
GFCI Receptacle



H658-6
120V / 20A / 60HZ
Hospital Grade
GFCI Receptacle



S659-6
120V / 20A / 60HZ
Combination
GFCI Receptacle
Light Switch



0695-1S
277V / 16A / 60HZ
Blower/Fan Switch

All voltages are AC / Total load for all circuits is 20 Amps

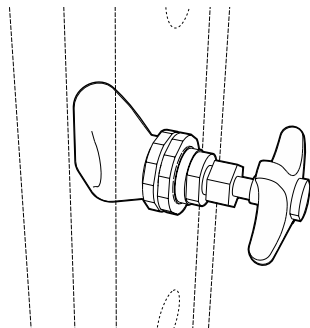
Installation Instructions

Prewired Venturi Fume Hoods / UL Listed

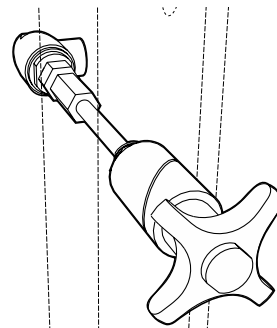
Control Identification (continued)

Service Fittings:

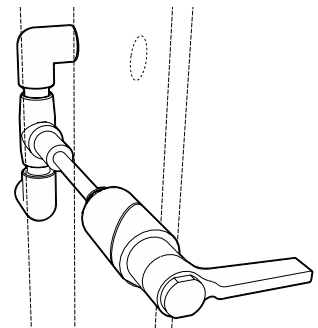
There are two basic styles of service fittings: Front load and remote control. A front load fitting's valve is located immediately behind the handle, inside the fascia. A remote control fitting's valve is located immediately behind the fitting, behind the hood wall. The handle of the service fitting has a color-coded index button indicating the service. The type of service determines the valve type and the maximum pressure. See the chart below for information on individual fittings.



**Front Load
Needle Valve Fitting**



**Rod Driven
Needle Valve Fitting**



**Rod Driven
Ball Valve Fitting**

Symbol	Color	Service	Needle Valves		Ball Valves	
			Valve Type	Maximum PSI	Valve Type	Maximum PSI
CW	Green	Cold Water	Disc	60	Ball	60
HW	Red	Hot Water	Disc	60	Ball	60
AIR	Orange	Air	Conical	60	Ball	60
VAC	Yellow	VAC	Conical	60	Ball	60
DW	White	Distilled Water	Disc	60	Ball	60
STM	Black	Steam	Disc	20	Ball	n/a
GAS	Blue	Gas	Conical	60	Ball	60
NIT	Brown	Nitrogen	Conical	60	Ball	60
Ar	Violet	Argon	Conical	60	Ball	60

All valves tested to one-and-a-half times Maximum PSI

Wiring Diagram

Prewired Venturi Fume Hoods / UL Listed

Other Connections

1. Piping Connections:
 - A. Prepiped Hoods:

Gas and steam fittings are piped using black iron, distilled water fittings are piped using PVC and all others are piped using copper tubing. Connection should be made to supply piping using an appropriate coupling or union of the same material.
 - B. Non-prepiped Hoods:

Connections to supply piping should be made at the valve using the appropriate piping material and a male adapter or nipple.
2. Duct Connections:

Exhaust ductwork should be attached to the duct collar on the fume hood using screws and sealed with silicone. In the case of a stainless steel duct collar and duct material, the attachment can be made with a welded joint.
3. Drainage Connections:

Drainpipes should be connected to the threaded drain extension below the sink or cupsink using a proper coupling. This connection should be properly sealed to prevent leakage.

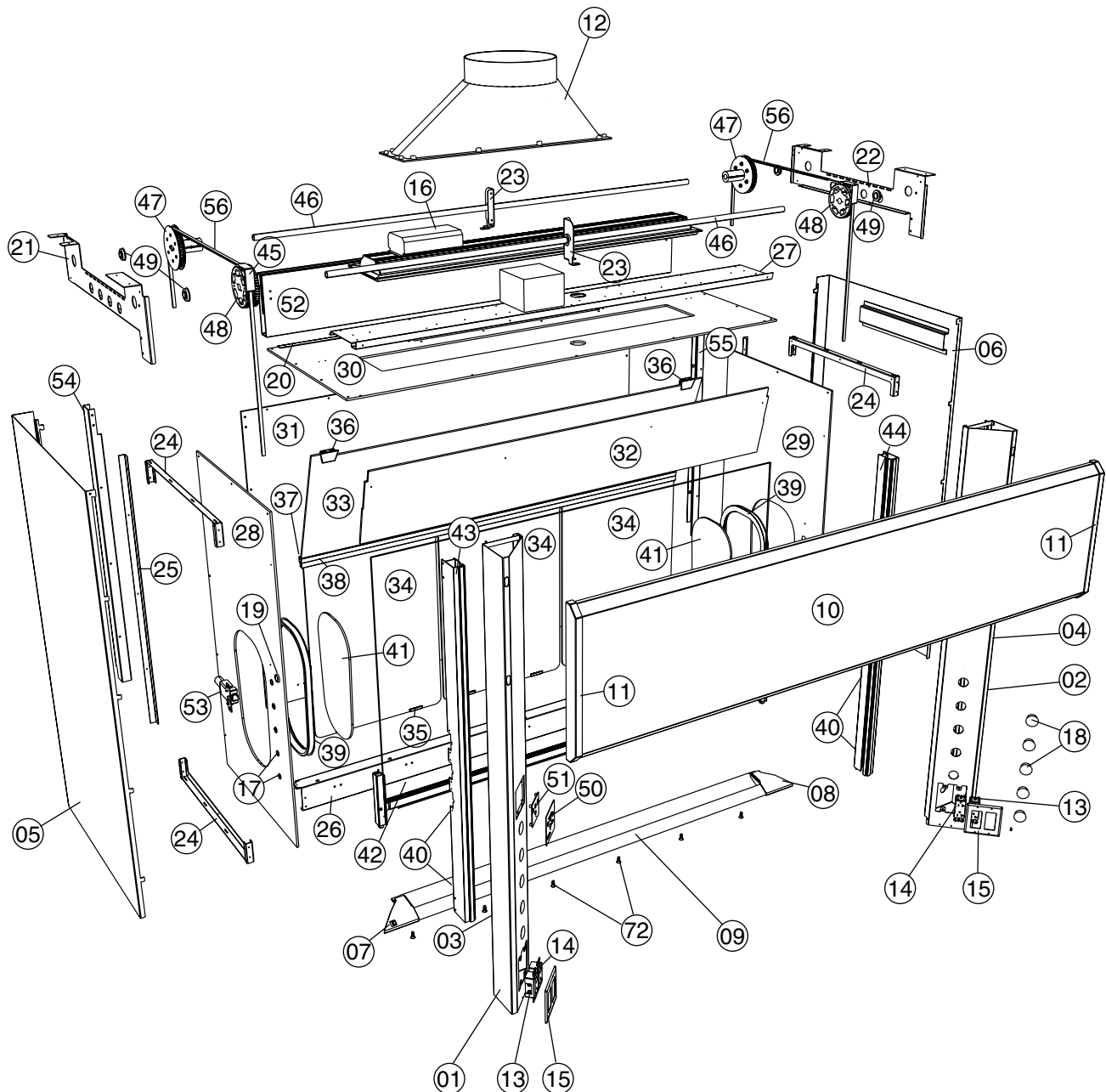
Cleaning Instructions

The exterior metal surface and interior liner of the fume hood should be cleaned with a nonabrasive, standard household cleaner or a mild soap and water solution. The cleaning solution should be applied to a cloth to wipe the surface. The sash glass should be cleaned with a standard household window cleaner.

Solvents or other flammable cleaners should not be used to clean the fume hood.

Exploded View

Supreme Air Venturi Fume Hoods



Parts List

Supreme Air Venturi Fume Hoods

No.	Qty.	Part Number	Description
01	1	VFCW-L11M-ht00	VENTURI FASCIA POST - LEFT SIDE
02	1	VFCW-R11M-ht00	VENTURI FASCIA POST - RIGHT SIDE
03	1	VFGS-L01M-0000	VENTURI FASCIA GUSSET - LEFT SIDE
04	1	VFGS-R01M-0000	VENTURI FASCIA GUSSET - RIGHT SIDE
05	1	VEPW-L01M-htdp	VENTURI END PANEL - LEFT SIDE
06	1	VEPW-R01M-5724	VENTURI END PANEL - RIGHT SIDE
07	1	F-9003-00-P	VENTURI PORT - LEFT SIDE
08	1	F-9003-01-P	VENTURI PORT - RIGHT SIDE
09	1	VAFW-X01M-00lg	VENTURI AIRFOIL
10	1	VFRP-X01M-00lg	VENTURI TOP FRONT PANEL
11	2	F-9010-00-P	VENTURI TOP FRONT PANEL END CAP
12	1	F-9000-00	TRANSITIONAL DUCT COLLAR
13	2	980112	RECEPTACLE 20A, DUPLEX, 125VAC, BLACK P & S 26342-BK
14	2	F-4981-0B	RECEPTACLE, GFCI, 20A, DUPLEX, 125VAC, BLACK
15	2	0805-03	FACE PLATE, 2-GANG, GFCI, 302 S/S, LEV# 84409-40
16	1	F-9004-01	LED LIGHT FIXTURE AND CONTROL ASSEMBLY 4FT
17	12	F-0468-01	WHITE PLUG BUTTON FOR F.H. (0.750" HOLE)
18	10	F-9038-00	WHITE PLUG BUTTON FOR F.H. (1.093" HOLE)
19	1	F-9038-00	WHITE PLUG BUTTON FOR F.H. (1.093" HOLE) SASH STOP
20	1	VALB-X01V-00lg	VENTURI BACK LINER ANGLE
21	1	VBPU-L01V-dp00	VENTURI LEFT HAND PULLEY BRACKET
22	1	VBPU-R01V-dp00	VENTURI RIGHT HAND PULLEY BRACKET
23	2	VBSS-X01V-0000	VENTURI PULLEY SHAFT SUPPORT BRACKET
24	4	VAHF-X01V-dp00	VENTURI HORIZONTAL FRAME ANGLE
25	2	VAVF-X01V-ht00	VENTURI VERTICAL FRAME ANGLE
26	1	VABB-X01V-00lg	VENTURI BOTTOM BACK ANGLE
27	1	VATF-X01V-00lg	VENTURI TOP FRONT ANGLE
28	1	VLNE-L01 mat-htdp	VENTURI; LINER; END; LEFT
29	1	VLNE-R01 mat-htdp	VENTURI; LINER; END; RIGHT
30	1	VLNT-X01 mat-dplg	VENTURI TOP LINER
31	1	VLNB-X01 mat-htlg	VENTURI; LINER; BACK
32	1	VLNP-X01 mat-00lg	VENTURI; LINER; BYPASS
33	1	VBFU-X01 mat-htlg	VENTURI UPPER BAFFLE
34	3	VBFL-X01 mat-00lg	VENTURI; BAFFLE; LOWER
35	6	F-9039-00	BAFFLE BLOCK, LOWER
36	2	F-9042-00	BAFFLE BLOCK, UPPER
37	4	030042-00	BAFFLE SPACER
38	1	F-9012-lg	MID BAFFLE EXTRUSION
39	2	F-9017-01	ACCESS PANEL GASKET 48" CIRCUMFERENCE
40	4	F-9096-00	LINER WEDGE
41	2	VLNE-X01-mat	ACCESS PANEL

Parts List

Supreme Air Venturi Fume Hoods

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