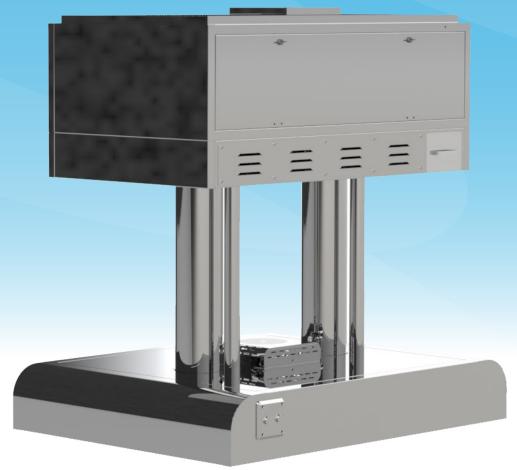
Operators Manual for **JES-HD**Heavy Duty Jet Extraction System

Manual provides
Operation, Maintenance and Service Instructions





Heavy Duty Jet Extraction System Model: JES-HD



TABLE OF CONTENTS

General Description	Page 3
Applications	Page 3
Recommendation	Page 3
General Installation	Page 3
Exhaust Air Flows	Page 4
Installation Instructions	Page 5
Installation Detail & Hanging Bracket Detail	Page 6
Filter Removal	Page 6
Fire Suppression System	Page 7
Hood Assembly Illustration	Page 9
Ceiling Closure Panel Assembly	Page 10
Typical Wiring	Page 11
Hood Operation	Page 12
Hood Maintenance	Page 13
Warranty Statement	Page 14



GENERAL DESCRIPTION

The Halton JES-HD commercial hood system provides ventilation solutions for front of restaurant and display cooking opportunities. The JES-HD is designed for island applications with gas or electric appliances up to and including heavy duty appliances like charbroilers, woks or other high heat applications. To achieve the optimum performance from your hood system please use the following guidelines provided within the pages of this Installation, Operation, and Maintenance Manual. In addition to this information our offices or local representatives are available at any time to provide additional technical support for products, applications, installation, commissioning or in any aspect that you may have.

APPLICATION

This hood system is listed for up to heavy duty gas or electric appliances.

RECOMMENDATION

This hood system is listed for up to heavy duty gas or electric appliances.

GENERAL INSTALLATION

It is the responsibility of the installing contractor to see that the system installation is completed in accordance with the project plans and specifications and that it meets all specific requirements of local code officials. The local authority having jurisdiction could over rule some of the installation details written in this manual. The installation shall be in accordance with NFPA-96, Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment. All electrical systems shall be installed following local and national codes. The owner and/or operator should be instructed in the proper operation, care and maintenance of the system.

If questions or complications should arise during the installation of the Halton hood (s) that cannot be solved using the instructions provided please contact the Halton office at 1-800-442-5866, or (1-800-4-HALTON).

Note: There are no instructions contained within this manual for installation or maintenance of fan packages. **See appropriate manufacturers manual for detailed instructions.



EXHAUST AIRFLOWS

Please see submittal drawings or contact the manufacturer about job specific exhaust air flow rates. Halton's applications department determines the optimum exhaust rate for effective capture & containment of cooking effluent. These exhaust airflows are included in the job submittal drawings for each hood and are customized for the specific kitchen appliance arrangement and environment. Please be prepared with the job name, the order number or the submittal drawing number when contacting the manufacturer.

After installation is complete, it will be necessary to check and balance the airflows. Halton supplies T.A.B. (Testing And Balancing) ports for measuring the pressure drop through the filters. This port is located on the front face of the filter plenum.

Exhaust T.A.B. Readings vs. Airflow

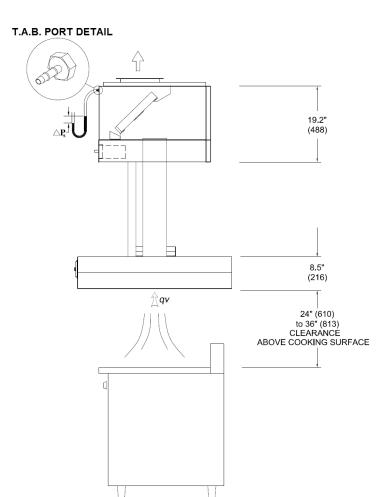


Measured Pressure

This example shows how to determine the correct T.A.B. port reading for the exhaust hoods.

In this example, a design airflow of 1700 cfm is selected from the Airflow axis, and a vertical line is drawn up to the T.A.B. pressure curve for this hood.

A horizontal line is then drawn for the T.A.B. pressure curve to the T.A.B. reading axis on the left-hand side of the chart and the corresponding pressure is read off the chart as 0.19 inches of Water Column.





INSTALLATION INSTRUCTIONS

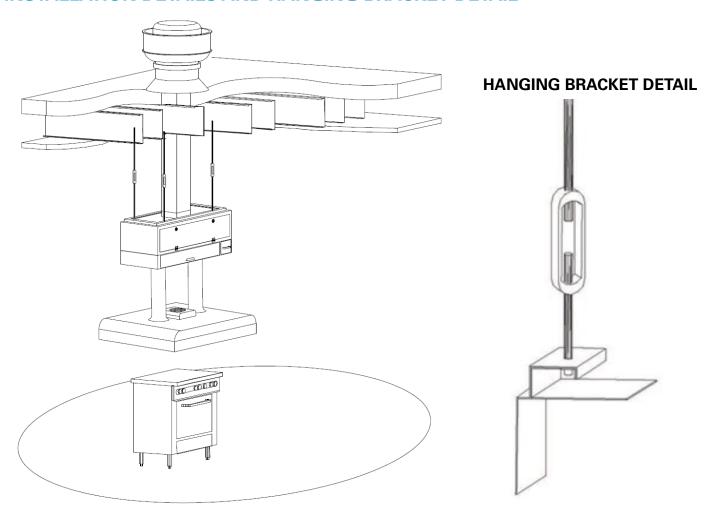
1. Inspect the crating carefully. If there are signs of damage, call the freight carrier before uncrating the units.

Carefully uncrate the units. Check all local codes prior to installation; special requirements may be necessary depending on local building material construction.

- ** Important note ** Do not leave unit (s) exposed to extreme temperatures for an extended period of time; this may cause the protective PVC coating around the unit (s) to become very difficult to remove.
- 2. Position the hood near the actual installation site. In case of multiple hoods, check the engineered set of drawings for locations. Pay close attention to collar sizes and fire protection layouts, matching the hood systems to the correct location shown on the drawings provided.
- 3. If Exhaust Collars are shipped loose for field installation they must be located at least 3 to 11 inches away from the front of the filter plenum and on the centerline of the hood laterally. The front of the filter plenum is the smooth side with no operator controls or openings.
- 4. Once the hood is carefully removed from the shipping crate and set in position, the unit is now ready for installation.
- 5. Hang the hood using ½" threaded rods by attaching the rods to the hood through the hanger brackets that are integral to the top of the hood. Use of turnbuckles will make final adjustment easier. Standard hanging height for the JES-HD hood is 51" above the finished floor. Containment shell may be positioned 24" to 32" above the cooking appliance. Please see submittal drawings or contact the manufacturer about job specific exhaust air flow rates. Please be prepared with the job name, the order number or the submittal drawing number when contacting the manufacturer.
- 6. The Stainless Steel tubes ship attached to the hood plenum and require no installation. The tubes are equipped with grease catcher rings that install into the tubes in the canopy section of the hoods. The grease catcher rings slide onto 3 pins in each tube. Push upwards and turn to install each grease catcher ring. These rings should be removed and cleaned every morning before cooking, then replaced into the tubes.
- 7. The Ceiling closure panels usually ship attached to the top of the hood plenum. If they have shipped separately follow the assembly instructions on page 10.
- 8. Electrical circuits should be connected according to wiring diagram on page 11.
- 9. Grease filters and the grease cup are shipped installed and taped to prevent movement during shipping. Remove the tape or other packing materials before using the hood.
- 10. A cleaning brush for the Stainless Steel tubes is included and ships separately in the hood crate. See page 13.
- 11. Protect the hood from damage under normal job site conditions, until all work is complete and system is ready to be put into operation.



INSTALLATION DETAILS AND HANGING BRACKET DETAIL



INSTALLATION DETAILS AND HANGING BRACKET DETAIL

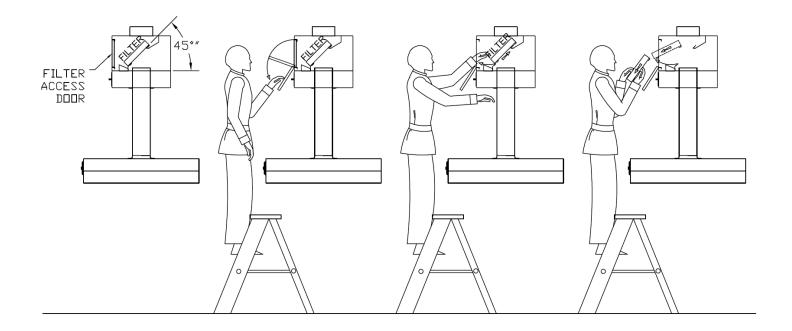
Filters are removed by first opening the filter access door. Filters are arranged so that all exhaust air passes through them. All filters must be in place for unit to operate properly. Filters must be replaced into their original orientation which is a 45 degree angle from the horizontal. Slide filters upward to release them from the filter rack. Tilt and bring them out of the filter plenum via the open door. Replace filters to their original positions by reversing the above instructions.

** Handle the Grease filters carefully **

There is a removable grease trough that runs the length of the filter plenum that catches the grease from the filters. This trough should be removed and cleaned whenever the filters are cleaned. Remove the trough and wipe out the grease and/or spray clean or place trough in ware washer for cleaning. Replace trough before placing the JES-HD back into service.

CAUTION: When accessing the filters for maintenance the temptation may be strong to use the steel containment shell area of the hood as a step or a place to brace your foot to steady yourself. Please resist this temptation. The containment shell may be permanently damaged by stepping or standing on this area. This damage will not be covered by warranty. Do not use this portion of the hood as a step.





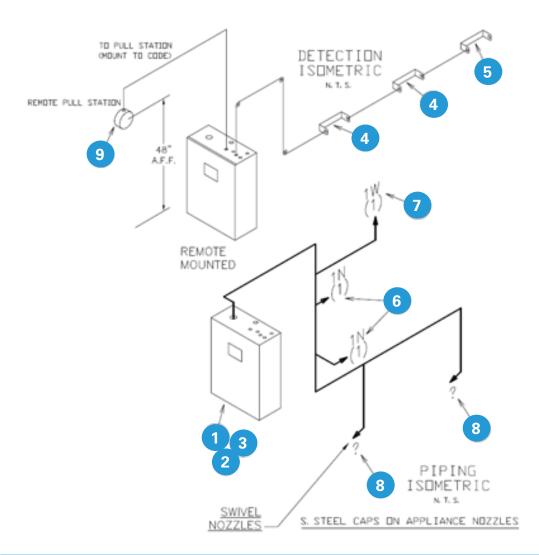
FIRE SUPPRESSION SYSTEM

When installed over grease producing appliances in a Type 1 application this hood must be equipped with a pre-engineered, installed fire suppression system which complies with Standard UL 300. The hood's fire suppression system must be charged, and a remote manual activation device installed, before placing unit into service. This work must be done by properly trained and certified personnel. The fire suppression system requires periodic inspection and maintenance. Maintenance must be conducted to conform to the Design, Installation, Recharge and Maintenance Manual for the fire suppression system installed. Contact the company which completed installation of the fire suppression system for the Manual or for a complete list of these requirements.

- 1. The fire suppression system is accessed for charging and maintenance by removing the access panel in the remote mounted cabinet.
- 2. The remote manual pull station is required and must be mounted at a point of egress and positioned at a height determined by the authority having jurisdiction. The mounting location on the unit should be agreed upon by the local authority having jurisdiction, the properly trained and certified fire suppression system installer and the owner.



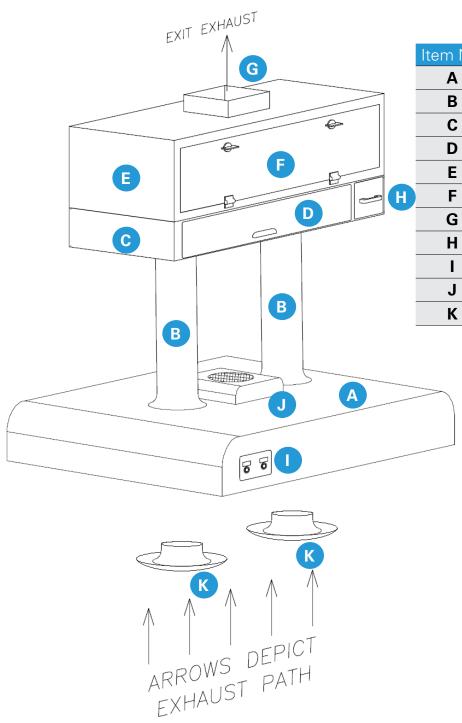
FIRE SUPPRESSION SYSTEM continued



Item No.	Ansul Nozzel	Description
1		R-102 Regulated Release (Remote Mounted)
2		3.0 Gal. Ansulex
3		LT -30-R Cartridge
4		Series Detector
5		Terminal Detector
6	1N - 2 Places (2 Flow Pts.)	One 1N nozzle will protect 10 linear feet of single filter bank plenum. (Both sides of the filters.)
7	1W (1 Flow Pt.)	One 1 W nozzle will protect ducts with a maximum perimeter of 50" or 16" dia.
8	Varies	Appliance nozzles are specific to hazard protected per UL std. 300
9		Remote pull station



HOOD ASSEMBLY



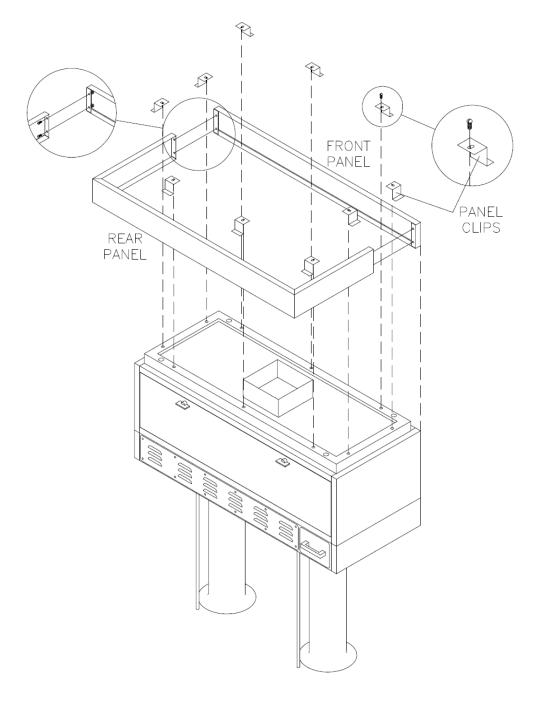
Item No.	Description
Α	Containment Shell Area
В	Stainless Steel Tubes
С	Electrical Plenum
D	Electrical Access
Е	Filter Plenum
F	Filter Access
G	Exhaust Collar
Н	Grease Cup
ı	Switches
J	Capture Jet Fan
K	Grease Catcher Ring



CEILING CLOSURE PANEL ASSEMBLY

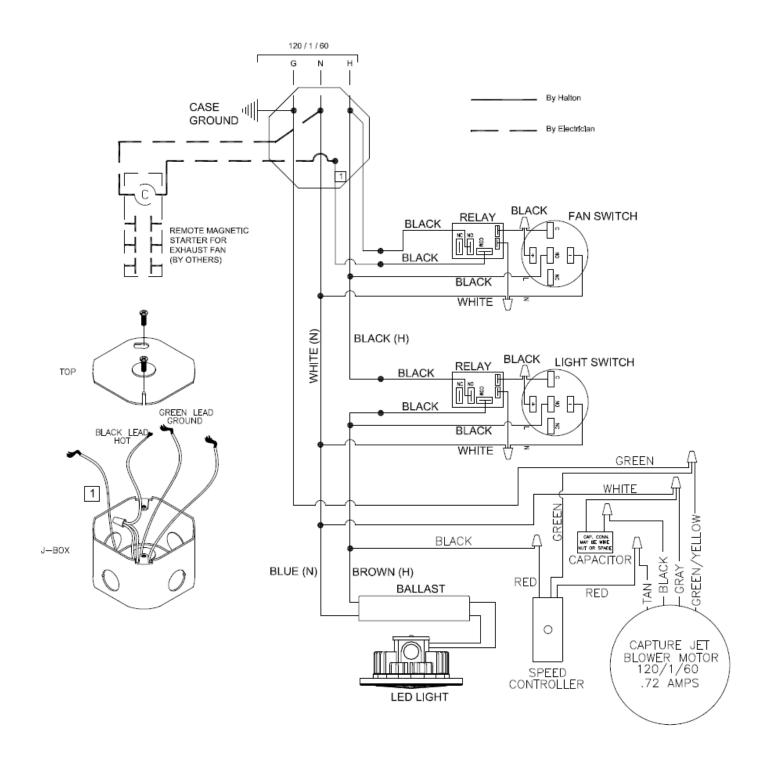
Refer to the Hood Assembly Illustration of page 9 to reference labeled components.

The Ceiling Closure Panels may be placed on top of the hood at the outer perimeter of the hood's filter plenum (E). The front panel is placed on the customer side. The rear three sided panel is placed on the operator side of the filter plenum. Fasten the rear panel to the front panel with screws and nuts provided. The panel assembly is held to the top of the hood with screws and the panel clips. The screws and panel clips are fastened to the top flange of the hood, the screws inserted through the panel clips and into the threaded nuts already installed in the flange and tightened. The hardware and panel clips are found inside the filter plenum of the hood, in a plastic bag.





TYPICAL WIRING OF THE JES-HD Hood





HOOD OPERATION

Press the "Lights" pushbutton found on the switch plate on the operator's side of the canopy to turn on the standard LED lights in the canopy. A ring light around the button will illuminate indicating the circuit is on. This circuit will also automatically start the Capture Jet fan which creates the low pressure air jets around the perimeter of the lower edge of the canopy. Pressing the "Lights" button again will turn off the lights and Capture Jet fan. The ring light will turn off.

Press the "Fan" pushbutton on the switch plate to start the exhaust fan for the hood. A ring light around the button will illuminate indicating the circuit is on. Pressing the "Fan" button again starts a timer that will shut down the exhaust fan after 30 minutes have passed. The ring light will turn off but the exhaust fan will remain on. This is normal. The fan remains on for 30 minutes to allow excess grease in the hood's tubes to be drawn into the filter plenum before the fan stops.

There is an interlock temperature sensor in the canopy that will start the exhaust fan if the appliance is turned on without the operator turning on the exhaust fan. This is a secondary safeguard required by the International Mechanical Code and should not be used as the primary method of turning on the hood's exhaust fan.



HOOD MAINTENANCE

- 1. Clean the hood inside and out as needed with mild soap and water. Never use harsh or abrasive cleaners on Stainless Steel or painted surfaces. Make sure to wipe clean all interior and exterior surfaces of the hood including the light fixtures.
- 2. Clean the filters, grease catcher rings and grease cup daily, first washing by hand, and then placing them into a dishwasher or by steam cleaning. (See page 6 for instructions on how to remove filters) The grease catcher rings should be cleaned in the morning before cooking begins. This will allow any grease accumulation left in the tubes from the previous evening to drain into the grease catcher rings. The grease catcher rings must be left in the tubes overnight to catch any grease droplets which may run down the inside of the tubes.
- 3. The containment shell and Stainless Steel tubes should be cleaned daily or as needed throughout the day to prevent grease buildup. Cleaning of the Stainless Steel tubes is accomplished by running the brush up and down through each tube. Remove grease catcher rings before using brush. Replace grease catcher rings after cleaning tubes. Rinse out brush after cleaning tubes.





WARRANTY ACTIVATION FORM

This form must be completed and returned to Halton in order for your warranty to be valid. **Job & Location Information:** Job Name: _____ State: _____ Zip Code: ____ Equipment Start-Up Date: Product Serial Numbers: **Contact Information:** Contact Name: Title: Chef, Kitchen Mgr/Facility Mgr/Property Mgr/etc. Facility Management Company Name (if applicable): Email: Phone Number: Cell Number: Fax completed form to: **Halton Company Attention: Service Department**

Fax: (270) 237-5700

Halton Indoor Climate Systems Attention: Service Department

Fax: (905) 624-5547



HALTON LIMITED WARRANTY

Halton ("Manufacturer"). Warrants only to its direct purchasers and to no others, that all products manufactured by the Manufacturer shall be free from defect in materials and workmanship for a period of twelve (12) months from the date of the original installation and start-up or eighteen (18) months from date of shipment, whichever occurs first. All products sold but not manufactured by Manufacturer will be warranted for a period of twelve (12) months from date of shipment. (Halton's Warranty Card must be completely filled out and returned to Halton within 3 weeks after the equipment start-up date for your warranty to be valid *IMPORTANT NOTE: "IF" this form is returned within the specified time frame, Halton will extend your standard warranty by 120 days.)

For products manufactured by the Manufacturer we agree to pay any reasonable labor costs necessary to repair or replace, at Manufacturers option, defective parts or materials for a period of twelve (12) months from date of original installation and start-up or eighteen (18) months from date of shipment, whichever occurs first. All labor costs subject hereto shall be performed during standard work hours at straight-time rates.

For products sold but not manufactured by the Manufacturer we agree to pay any reasonable labor costs necessary to repair or replace, at Manufacturers option, defective parts or materials for a period of (90) days from date of original installation and start-up or (12) months from date of shipment, whichever occurs first. All labor costs subject hereto shall be performed during standard work hours at straight time rates.

All warranty claims that include labor requires pre-approval by Halton. Halton, at its discretion, will authorize field warranty work through its own service network or certified third party. No claims for labor charges will be approved for payment if work commences without prior authorization by Halton.

Purchaser shall pay incurred premium labor charge, including overtime, weekends and holidays. Travel time, service charges, miscellaneous tools, material charges, and labor charges resulting from inaccessibility of equipment will not be paid by Manufacturer.

This LIMITED WARRANTY SHALL APPLY ONLY to products that have been installed and maintained in accordance with the installation and Care Instruction Manuals. Purchaser shall be solely responsible for adhering to the instructions and procedures set forth in the said instruction manuals.

This LIMITED WARRANTY SHALL NOT BE APPLICABLE to any damage or defect resulting from fire, flood, freezing or any Act of God, abuse, misuse, accident, neglect or failure to adhere to all instructions set forth in the installation and Care Instruction Manuals. Furthermore, this limited warranty shall not apply to any product that has been altered, unless such alteration has been approved in writing by a duly authorized representative of the manufacturer. In no event shall the manufacturer be liable for any loss, expense, personal injury or consequential damage, of any kind or character, as may result from a defect in material, and/or workmanship, however caused.

EXCEPT AS IS EXPRESSLY SET FORTH IN THIS LIMITED WARRANTY, MANUFACTURER MAKES NO WARRANTY OF MARKETABILITY FOR FITNESS OR ANY PARTICULAR PURPOSE. NEITHER DOES MANUFACTURER MAKE ANY WARRANTY, EXPRESSED OR IMPLIED, WITH RESPECT TO PRODUCTS SOLD BY MANUFACTURER OR AS TO THE USE THEREOF.

Continuous product improvement is a Halton policy, therefore specifications and design are subject to change without notice.

Halton Company

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Website: www.halton.com/foodservice

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