File MH65847 Project 4790542639

November 8, 2023 REPORT UL710 cUL710

on

## EXHAUST HOODS WITHOUT EXHAUST DAMPERS

GAON TRADING Gwangju, Korea

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## DESCRIPTION

## PRODUCT COVERED:

USL, CNL (YYCW/7) - The products covered by this Report are exhaust hoods without exhaust dampers, identified as Models:

SavorX-EH101823, SavorX-Monster, SavorX-Lite

Note: These models are for use with specific restaurant cooking appliances.

## GENERAL CHARACTERISTICS:

These exhaust hoods without exhaust dampers and having a telescoping exhaust collar are intended principally for use over specific types of cooking equipment. The adjustable, telescoping feature permits the hood to be placed directly over cooking appliance at the required clearance between the bottom edge of the hood and cooking surface for Korean barbecue style cooking. The assemblies are factory-built units.

Model	Exhaust Flow,	Approximate	No. of	Size of	Exhaust
	CFM, Minimum	Max. temp.	Filter	filter	duct
					dimension
SavorX-	123	700 F	1	See ILL.3	See Ill.3
EH101823					
SavorX-	123	700 F	1	See ILL.13	See Ill.13
Monster					
SavorX-	90	661 F	1	See ILL.12	See ILL.12
Lite					

## MODEL NOMENCLATURE:

Example SavorX - EH 101823 Position (1) (2) (3)

Position	Variable	Description of Variable		
(1)	SavorX	Model series		
		SavorX		
(2)	EH	Model Type		
		<pre>EH = Exhaust hood Lite = Lite model Monster = Exhaust hood with ball bearing assembly</pre>		
(3)	101823	Serial number		
		101823 = Specific to the SavorX-EH models Blank = SavorX-Lite and SavorX-Monster models		

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#### INSTALLATION:

These exhaust hoods without exhaust dampers are intended for use in accordance with the Standard of the National Fire Protection Association for the Installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment, NFPA No. 96. See ILL.1

All electrical equipment is to be installed in accordance with the National Electrical Code.

## ASSEMBLY FOR SHIPMENT:

Each hood assembly shall be prepared for shipment in a manner to avoid injury during transit. The grease filters may be packaged separately but shipped with the hood assembly.

#### INSTALLATION INSTRUCTIONS:

Each shipment shall include a complete grease filter, and installation instructions.

Model	Illustration	
SavorX-EH101823	1	
SavorX-Monster	13	
SavorX-Lite	12	

### MARKINGS:

A metal plate or a UL Recognized Marking and Labeling System shall be attached to the front of each hood assembly and includes the following information:

- 1. The Listing Marking of Underwriters Laboratories LLC.
- 2. Manufacturer's name and model designation.
- 3. For all Models: see ILL.2 for marking label example.
- 4. Replace baffle filters only with UL Classified grease filters.

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Korean BBQ Hood models (See Fig. 1-4 and Ill. 1-11)

#### \*SavorX-EH101823

## 1. Hood/Filter Box Assembly:

#### a) Access box

Material: SS304

Min. thickness: 16 gauge

Description: Liquid-tight continuous weld all around except access door in the front with the graphite gasket and hinges. The top of the box is where the (6x6 inch) exhaust collar is, and the bottom of the box is where the inner pipe is connected. This houses the greater filter assembly and also has a slot for a field installed

fire suppression system.

Dimensions: 7.99 x 13.33 x 7.99 inches (depth x height x width)

Comment: See Ill. 4, 5

### b) Access door

Material: SS304

Min. thickness: 16 gauge

Function: Opening to replace or remove Grease Filter Description: Part of the access box

Dimensions: See Ill. 5

**Securement:** Attached by piano hinges on one side and 2 latches on other side or 2 latches on each side.

Gasket: Model V30010M2 Graphite (metal inserted) gasket, manufactured by Sigraseal, inside of access door to seal the door to prevent any escaping of smoke and grease vapor, 3.0 mm thick. See ILL.10 for gasket details.

Comment: See Ill. 4, 5, 10

## 2. Tension spring assembly:

# a) Tension spring box

Material: SS304

Min. thickness: 19 gauge (0.04 inches)

Description: This box houses the pulley system to allow the hood to telescope up or down. Includes the pulley.

Dimensions: 3.54 x 1.34 x 4.72 inches (width x length x height)

Location: On the outer exhaust pipe on opposite sides

Securement: Welded wire brackets on the outer exhaust pipe

No. Employed: 1 or 2

Comment: See Ill.

## b) Pulley

Material: SS304 or Galvanized steel

Min. thickness: 19 gauge (0.04 inches)
Description: The cable/pulley inside the tension spring box prevents twisting or distorting of the outer exhaust pipe and bottom grease collector by clipping onto a welded bracket on each side of the inner exhaust pipe. The mechanical stop of the pulleys are preventing separation of the 2 pipes.

Location: Inside the tension spring box

No. Employed: 1 or 2

No. Employed: 1 or 2 Comment: See Ill. 7

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## 3. Exhaust Pipes:

## a) Outer exhaust pipe

Material: SS304 or Galvanized steel Min. thickness: 19 gauge (0.04 inches) Dimensions: Diameter 3.51 inches, Height 21.65 or 26.65 inches

Description: Used for the telescoping movement up and down to adjust the hood distance from the cooking surface. The outer pipe

has the brackets for the pulleys and handles.
Securement: 2 pulleys for adjusting heights. The mechanical stop shall prevent separation of the duct collar and maintain the overlap.

Comment: See ILL. 8

### b) Inner exhaust pipe

Material: SS304 or Galvanized steel Min. thickness: 19 gauge (0.04 inches)
Dimensions: Diameter 4 inches, Height 18.11 or 23.11 inches Description: This exhaust pipe will and have the tension spring box

mounted to it. Securement: Welded to the bottom of the access door box

Comment: See ILL. 8

### 4. Grease filter assembly:

### a)Outer grease filter

Material: SS304

Dimensions: Diameter 4.84 inches, Height 9.72 inches

Description: Assembles to the inner filter and then onto the filter

grease collector Comment: See ILL. 6

### b) Inner grease filter

Material: SS304

Dimensions: Diameter 4.72 inches, Height 9.06 inches

Description: Assembles into the outer filter and then onto the

filter grease collector Comment: See ILL. 6

### c) Filter grease collector

Material: SS304

Dimensions: Outer Diameter 5.25 inches, inner diameter 2.99 inches Height 1.42 inches

Capacity: 150ml

Descriptions: The outer and inner grease filter snap into place on

this filter grease collector to collect the grease.

Location: Placed inside filter box

Comment: See ILL. 6

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## 5. Bottom grease collector:

Material: SS304

Min. thickness: 14 gauge (0.08 inches)
Dimensions: Diameter 10.43 inches, Height 1.96 inches

Capacity: 300ml

Description: Grease cup can be removed from the trumpet by turning it counterclockwise for cleaning. Reattach grease collector by

turning it clockwise.

Securement: Fastened by a extruded bump into a guide Comment: See ILL. 1 and 9  $\,$ 

### 6. Trumpet:

Material: SS304

Min. thickness: 14 gauge (0.08 inches)
Dimensions: Diameter from 4 to 8 inches (Funnel shape)

Description: Connects the outer exhaust pipe and bottom grease collector. Used as a reducer in size from the bottom grease

collector to the outer exhaust pipe.

Securement: Fastened by a extruded bump into a guide

Comment: See ILL. 1

### 7. Guide Rod:

Material: SS304

Function: Steel rod to guide bottom exhaust pipe to top inner pipe Dimensions: Diameter 0.47 inches, Height 23.62 inches Securement: Welded to filter box

Comment: See ILL. 11

## 8. Handles:

Material: SS304

Function: Used to move the inner exhaust pipe up and down Location: Opposite sides of the inner exhaust pipe near right above

the bottom grease collector Securement: Welded

## 9. Cooking Appliance (For reference):

Model: Various

Manufacturer: Saycook grill Maximum BTUs: 9000 Btu/hr

Number of burners: 1

Cooking Surface Area: 10.43 inches (265 mm) diameter

#### Alternate

Model: Various

Manufacturer: Various
Maximum BTUs: 9000 Btu/hr Number of burners: 1

Cooking Surface Area: 10.43 inches (265 mm) diameter

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> Korean BBQ Hood models (See Ill. 13)

SavorX-Monster

### 1. Hood/Filter Box Assembly:

### a) Access box

Material: SS304

Min. thickness: 16 gauge

Min. thickness: 16 gauge Description: Liquid-tight continuous weld all around except access door in the front with the graphite gasket and hinges. The top of the box is where the (6x6 inch) exhaust collar is, and the bottom of the box is where the inner pipe is connected. This houses the grease filter assembly and also has a slot for a field installed fire suppression system. Dimensions:  $7.99 \times 13.33 \times 7.99$  inches (depth x height x width) Comment: See Ill. 13

### b) Access door

Material: SS304

Min. thickness: 16 gauge

Function: Opening to replace or remove Grease Filter Description: Part of the access box

Dimensions: See Ill. 13

Securement: Attached by piano hinges on one side and 2 latches on other side or 2 latches on each side.

Gasket: Model V30010M2 Graphite (metal inserted) gasket, manufactured by Sigraseal, inside of access door to seal the door to prevent any escaping of smoke and grease vapor, 3.0 mm thick. See ILL.10 for gasket details.

Comment: See Ill. 13

## 2. Tension spring assembly:

## a) Tension spring box

Material: SS304

Min. thickness: 19 gauge (0.04 inches)

Description: This box houses the pulley system to allow the hood to

telescope up or down. Includes the pulley.

Dimensions: 3.54 x 1.34 x 4.72 inches (width x length x height)

Location: On the outer exhaust pipe on opposite sides

Securement: Welded wire brackets on the outer exhaust pipe

No. Employed: 1 or 2 Comment: See Ill. 13

## b) Pulley

Material: SS304 or Galvanized steel
Min. thickness: 19 gauge (0.04 inches)
Description: The cable/pulley inside the tension spring box
prevents twisting or distorting of the outer exhaust pipe and
bottom grease collector by clipping onto a welded bracket on each
side of the inner exhaust pipe. The mechanical stop of the pulleys
are preventing separation of the 2 pipes.
Location: Inside the tension spring box
No. Employed: 1 or 2

No. Employed: 1 or 2 Comment: See Ill. 13

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#### 3. Exhaust Pipes:

#### a) Outer exhaust pipe

Material: SS304 or Galvanized steel
Min. thickness: 19 gauge (0.04 inches)
Dimensions: Diameter 3.51 inches, Height 21.65 or 26.65 inches
Description: Used for the telescoping movement up and down to
adjust the hood distance from the cooking surface. The outer pipe
has the brackets for the pulleys and handles.
Securement: 2 pulleys for adjusting heights. The mechanical stop
shall prevent separation of the duct collar and maintain the
overlap.
Comment: See ILL. 13

## b) Inner exhaust pipe

Material: SS304 or Galvanized steel
Min. thickness: 19 gauge (0.04 inches)
Dimensions: Diameter 4 inches, Height 18.11 or 23.11 inches
Description: This exhaust pipe will and have the tension spring box
mounted to it.
Securement: Welded to the bottom of the access door box
Comment: See ILL. 13

### 4. Grease filter assembly:

### a)Outer grease filter

Material: SS304

Dimensions: Diameter 4.84 inches, Height 9.72 inches

Description: Assembles to the inner filter and then onto the filter

grease collector
Comment: See ILL. 13
b) Inner grease filter

Material: SS304

Dimensions: Diameter 4.72 inches, Height 9.06 inches

Description: Assembles into the outer filter and then onto the

filter grease collector Comment: See ILL. 13

### c) Filter grease collector

Material: SS304

Dimensions: Outer Diameter 5.25 inches, inner diameter 2.99 inches

Height 1.42 inches Capacity: 150ml

Descriptions: The outer and inner grease filter snap into place on

this filter grease collector to collect the grease.

Location: Placed inside filter box

Comment: See ILL. 13

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## 5. Bottom grease collector:

Material: SS304

Min. thickness: 14 gauge (0.08 inches)

Dimensions: Diameter 10.43 inches, Height 1.96 inches

Capacity: 300ml

Description: Grease cup can be removed from the trumpet by turning it counterclockwise for cleaning. Reattach grease collector by

turning it clockwise. Securement: Fastened by a extruded bump into a guide

Comment: See ILL. 13

### 6. Trumpet:

Material: SS304

Min. thickness: 14 gauge (0.08 inches)

Dimensions: Diameter from 4 to 8 inches (Funnel shape)

Description: Connects the outer exhaust pipe and bottom grease collector. Used as a reducer in size from the bottom grease

collector to the outer exhaust pipe.

Securement: Fastened by a extruded bump into a guide

Comment: See ILL. 13

## 7. Guide Rod:

Material: SS304

Function: Steel rod to guide bottom exhaust pipe to top inner pipe Dimensions: Diameter 0.47 inches, Height 23.62 inches Securement: Welded to filter box

Comment: See ILL. 13

## 8. Handles:

Material: SS304

Function: Used to move the inner exhaust pipe up and down Location: Opposite sides of the inner exhaust pipe near right above

the bottom grease collector Securement: Welded

## 9. Cooking Appliance (For reference):

Model: Various

Manufacturer: Saycook grill Maximum BTUs: 9000 Btu/hr

Number of burners: 1

Cooking Surface Area: 10.43 inches (265 mm) diameter

#### Alternate

Model: Various

Manufacturer: Various Maximum BTUs: 9000 Btu/hr

Number of burners: 1

Cooking Surface Area: 10.43 inches (265 mm) diameter

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## 10.Pipe connector/ball reducer:

Material: SS304
Min. thickness: 14 gauge (0.08 inches)
Dimensions: See Ill. 13
Description: Ball bearing assembly to allow the outer pipe to move up or down as well as hold the inner and outer exhaust pipes together. 3 ball bearings spaced evenly around the pipe.
Securement: Fastened by an extruded bump into a guide

Comment: See Ill. 13

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> Korean BBQ Hood models (See Fig. 5-12 and Ill. 12)

SavorX-Lite

### Hood/Filter Box Assembly:

### a) Access box

Material: SS304

Min. thickness: 16 gauge

Description: Liquid-tight continuous weld all around except access door in the front with the graphite gasket and hinges. The top of the box is where the (6x6 inch) exhaust collar is, and the bottom of the box is where the inner pipe is connected. This houses the grease filter assembly and also has a slot for a field installed

fire suppression system.

Dimensions: See Ill. 12 Comment: See Fig. 6, 6A, 6B, 6C

### b) Access door

Material: SS304

Min. thickness: 16 gauge

Function: Opening to replace or remove Grease Filter

Description: Part of the access box

Dimensions: See Ill. 12

Securement: Attached by piano hinges on one side and 2 latches on other side or 2 latches on each side.

Gasket: Model V30010M2 Graphite (metal inserted) gasket,

manufactured by Sigraseal Inside of Access Door with to seal the door to prevent any escaping of smoke and grease vapor, 3.0 mm

thick.

Comment: See Fig. 7, 7A

### 2. Exhaust Pipes:

## a) Inner exhaust pipe

Material: SS304 or Galvanized steel

Min. thickness: 19 gauge (0.04 inches)
Dimensions: Diameter 3.51 inches, Height 21.65 or 26.65 inches Description: Used for the telescoping movement up and down to adjust the hood distance from the cooking surface.

Securement: The ball reducer/pipe connector shall prevent separation of the 2 exhaust pipes and maintain the overlap.

Comment: See Fig. 5

## b) Outer exhaust pipe

Material: SS304 or Galvanized steel Min. thickness: 19 gauge (0.04 inches)

Dimensions: Diameter 4 inches, Height 18.11 or 23.11 inches Description: This exhaust pipe will house the inner exhaust pipe. Securement: Welded to the bottom of the access door box

Comment: See Fig. 5

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### 3. Grease filter assembly:

## a) Outer grease filter

Material: SS304

Dimensions: See Ill. 12 Description: Assembles to the inner filter and then onto the filter

grease collector

Comment: See Fig. 8, 8A, 8B

## b)Inner grease filter

Material: SS304

Dimensions: See Ill. 12

Description: Assembles into the outer filter and then onto the

filter grease collector Comment: See Fig. 8, 8A, 8B

#### c) Filter grease collector

Material: SS304

Dimensions: See Ill. 12

Capacity: 150 ml

Descriptions: The outer and inner grease filter snap into place on

this filter grease collector to collect the grease. Location: Placed inside filter box

Comment: See Fig. 8, 8A, 8B

## 4. Bottom grease collector:

Material: SS304

Min. thickness: 14 gauge (0.08 inches)

Dimensions: See Ill. 12

Capacity: 300ml

Description: Grease cup can be removed from the hood assembly by turning it counterclockwise for cleaning. Reattach grease cup by turning it clockwise.

Securement: Fastened by an extruded bump into a guide

Comment: See Fig. 9, 9A, 9B

### 5. Trumpet:

Material: SS304

Min. thickness: 14 gauge (0.08 inches)

Dimensions: See Ill. 12
Description: Connects the outer exhaust pipe and bottom grease collector. Used as a reducer in size from the bottom grease

collector to the outer exhaust pipe.

Securement: Fastened by an extruded bump into a guide

Comment: See Fig. 9B, 10

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## 6. Pipe connector/ball reducer:

Material: SS304

Min. thickness: 14 gauge (0.08 inches) Dimensions: See Ill. 12

Description: Ball bearing assembly to allow the outer pipe to move

up or down as well as hold the inner and outer exhaust pipes together. 3 ball bearings spaced evenly around the pipe.

Securement: Fastened by a extruded bump into a guide Comment: See Fig. 11, 11A

### 7. Handles:

Material: SS304

Function: Used to move the inner exhaust pipe up and down Location: Opposite sides of the inner exhaust pipe near right above

the bottom grease collector

Securement: Welded

Comment: See Fig. 5 and Ill. 12

### 8. Cooking Appliance (For reference):

Model: Various

Manufacturer: Saycook grill Maximum BTUs: 9000 Btu/hr

Number of burners: 1

Cooking Surface Area: 10.43 inches (265 mm) diameter Comment: See Fig. 12, 12A

### Alternate

Model: Various

Manufacturer: Various Maximum BTUs: 9000 Btu/hr Number of burners: 1

Cooking Surface Area: 10.43 inches (265 mm) diameter

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Figures and Illustrations:

# Figures:

Fig. NO.	DESCRIPTION	Model
1	Hood assembly-bottom	SavorX-EH101823
1A	Hood assembly-Top	SavorX-EH101823
2	hood box access door joint	SavorX-EH101823
3	View of grease cup	SavorX-EH101823
4	View of guide rod - connecting	SavorX-EH101823
	inner exhaust pipe and outer	
	exhaust pipe	
5	General appearance	SavorX-Lite
6, 6A, 6B, 6C	Hood/Filter Box Assembly	SavorX-Lite
7, 7A	Hood/Filter Box Assembly access	SavorX-Lite
	door with gasket	
8, 8A, 8B	Grease filter assembly	SavorX-Lite
9, 9A, 9B	Bottom grease collector	SavorX-Lite
10	Trumpet	SavorX-Lite
11, 11A	Pipe connector/ball reducer	SavorX-Lite
12, 12A	Saycook grill example appearance	SavorX-Lite

## Illustrations:

ILL.No	Description	Model	
1	Installation manual-English	SavorX-EH101823	
1A	Installation manual-French	SavorX-EH101823	
2	Marking Label	SavorX-EH101823	
3	Dimensions of Complete assembly including	SavorX-EH101823	
	Exhaust Box, Filter, Pulley Box, Exhaust		
	Pipes, Exhaust Bowl.		
4	Hood Box Assembly	SavorX-EH101823	
5	Access Box (with top exhaust collar and	SavorX-EH101823	
	bottom flue pipe)		
6	Grease Filter with grease cup	SavorX-EH101823	
7	Pulley Box Assembly	SavorX-EH101823	
8	Inner and outer pipe overlap	SavorX-EH101823	
9	Bottom grease cup	SavorX-EH101823	
10	Graphite gasket at Filter Access Box	SavorX-EH101823	
11	Guide rod details	SavorX-EH101823	
12	Dimensions of complete assembly	SavorX-Lite	
	Installation manual		
	Components of hood assembly		
13	Dimensions of complete assembly	SavorX-Monster	
	Installation manual		
	Components of hood assembly		