



*The* Industry Leader in Dust Collection

# OWNER'S MANUAL



U.S. Patent: #8,377,160  
U.S. Patent #9,125,535 B2

## Dust Cobra Dust Collector

Standard /Industrial/Vortex

#XCKM010000

#XCKM013500

#XCKM010000-IND

#XCKM013500-IND

#XCKM010000-VOR

#XCKM013500-VOR



**Intertek**



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# System Start-Up Information



**Make sure to read and understand the installation and maintenance instructions as well as all recommended safety practices.**

## **⚠ WARNING ⚠**

1. This unit is NOT rated for use in combustible environments.
2. DO NOT leave dust collector plugged in. Turn off all controls before unplugging. Unplug from outlet when not in use and before servicing.
3. DO NOT use outdoors or on wet surfaces.
4. Use only as described in this manual. DO NOT allow use as a toy. DO NOT allow use by or near children.
5. DO NOT use with damaged cord or plug. If dust collector is not working as it should, has been dropped, damaged, left outdoors, or dropped in water, return to service provider.
6. DO NOT pull or carry by cord. DO NOT use cord as handle. DO NOT close door on cord or pull cord around sharp edges or corners. DO NOT run dust collector over cord. Keep cord away from heated surfaces. DO NOT unplug by pulling on cord. To unplug, grasp the plug, not the cord.
7. DO NOT handle plug or dust collector with wet hands.
8. DO NOT put any object in openings. DO NOT use with any opening blocked except when pulsing. (See Maintenance Section for more information.)
9. Keep free of dust, lint, hair, and anything that may reduce air flow.
10. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
11. DO NOT use to pick up liquids, flammable liquids or combustible liquids, such as gasoline, or use in areas where they may be present.
12. Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
13. This machine has high speed rotating elements than can cause severe injury. NEVER operate without filter and cowling in place. Unplug unit before removing motor head for service or filter cleaning.
14. Dust can be flammable and explosive. Some dust can be toxic or cause allergic reactions.
15. Wire according to all applicable codes. Improper wiring can cause electrocution or fire. The motor must be properly grounded. If permanently installed, use individual branch circuit.

## **⚠ FIRE HAZARDS ⚠**

1. Wood shaping and cutting processes generate wood chips, shavings, and dust. These materials are considered combustible. Air borne wood dust below 500 microns in size (.017 of an inch) in certain concentration ranges can deflagrate (when ignited). An ignition source such as a spark or ember can ignite a dust mixture resulting in an expanding flame front, which can cause an explosion if tightly contained. A disturbance that raises a cloud of accumulated fine dust can raise additional dust clouds, which can cause a series of explosions that can level an entire building. Until this type of fire has been witnessed, it is difficult to believe the devastation. This type of fire is rare but worth safeguarding against.
2. The best way to avoid a wood shop fire is to keep the shop clean. A shop ankle deep in dust with layers of fine dust everywhere is an accident waiting to happen. A good dust collection system reduces overall fire hazards but also adds new concerns. A fire hazard is still present. Combustible material is now in the dust collector and storage container.
3. The following points are worth heeding:
  - a. It is the buyer's responsibility to follow all applicable federal, state, local, OSHA, NFPA, or authorities having jurisdiction

# System Start-Up Information (Continued)

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- codes and regulations when installing and operating this dust collector.
- b. Before Purchasing or Installing a dust collection system the buyer is cautioned to do so in accordance with prescribed Federal, State, Local, OSHA, NFPA, and any other applicable codes or regulations relating to the type of dust(s) you are collecting.
  - c. Most local jurisdictions consult or adopt NFPA (National Fire Protection Agency) codes. However, other codes may apply. Local codes may vary from jurisdiction to jurisdiction.
  - d. NFPA664 Code book, "Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities", applies to woodworking operations that occupy areas of more than 5,000 sq. ft. or to areas where dust producing equipment requires an aggregate dust collection flow rate of more than 1,500 cfm (cubic feet per minute). This exempts some small operators from the NFPA code 664, but other codes may apply in your jurisdiction. Consult your local Fire Marshal for help. Additional information can be found in NFPA Code Book 664.
4. DO NOT use this product to collect other types of flammable dust or flammable vapors! - Fire or explosion may occur!
  5. NEVER collect sparks from a bench grinder into a wood dust collector.
  6. NEVER introduce sparks or sources of ignition into the dust collector.
  7. Check dust bin frequently for smoldering material and before leaving the shop.
  8. Keep portable fire extinguishers handy.
    - a. The ABC type (dry chemical) is generally a good choice for small wood shops.
    - b. Additional information on portable extinguishers can be found in NFPA 10 (Standard for Portable Fire Extinguishers).
  9. Be especially careful with sanding units. They can produce concentrations of dust in the combustible range. Make certain enough air volume is at the suction point to capture all the particulate generated.
  10. This high air volume will dilute the mixture below the lower limit of flammability. Be careful not to generate sparks into the sanding dust.
  11. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Oneida Air Systems recommends using additional approved safety equipment such as an approved OSHA and NIOSH dust mask or respirator. Some examples of these chemicals are:
    - a. Lead from lead-based paints.
    - b. Crystalline silica from bricks, cement and other masonry products.
    - c. Arsenic and chromium from chemically-treated lumber.
  12. DO NOT overload woodworking equipment, especially sanders. Excessive frictional heat can spontaneously ignite dust.
  13. Empty dust bin and clean filter often, especially when sanding.
  14. DO NOT allow accumulation of layers of fine dust on horizontal surfaces (especially overhead lights, electrical boxes and fuse panels which can ignite dust.)
  15. UNPLUG UNIT BEFORE SERVICING, REMOVING BLOCKAGES, OR CLEANING.

**Customer Service Dept.**

1-866-387-8822 • [support@oneida-air.com](mailto:support@oneida-air.com)

# System Specifications

<b>OPERATION</b>	
Fan Rating (Free Fan)	245CFM
Fan Rating (with Cyclone & Filter)	245 CFM @ 23" WC - Maximum Flow Rate 202 CFM @ 34" WC - with 25' of 2.5" diameter flex hose
Maximum Suction Rating	70" WC
<b>MOTOR AND ELECTRICAL</b>	
Motor Type	UL listed Industrial motor
Voltage	110V
Amperage	15.5A
Power Cord Length	20'
Power Plug Included	Yes
Power Plug Type	110V: NEMA
Recommended Circuit Size	20A
Sound Emission	With Standard Silencer & Filter: 73 dBA @ 10 ft
<b>CARTRIDGE FILTER</b>	
Filter Type	GORE Cleanstream® HEPA Filters
Filter Rating	99.97% filtration efficiency at 0.3 microns (µm)
Pulse Type	Manual Internal Rapid Pulse Filter Cleaner System
Pulse Interval	~30 Minutes or as needed based on the situation
<b>SYSTEM DIMENSIONS AND CONSTRUCTION</b>	
Cyclone Body	Industrial, Static Conductive Resin
Inlet Size	2.5" O.D. (2.25" I.D.)
Inlet Dimensions	2.3" ID
Drum Type	Reinforced Steel Drum with Painted Exterior
Container Size	17 Gallons/35 gallons
Overall Height	17 Gallon: 53.5" / 35 Gallon: 59.25"
Drum Dolly Height	Add 4-7/8"
Overall Weight	17 Gallon: 45 lbs // 35 Gallon: 55.8 lbs

# System Specifications

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Keep the Certificate of Compliance on hand while doing lead remediation



## Certificate of Compliance

### Dust Cobra™ HEPA Vacuum Unit

Oneida Air Systems  
1001 West Fayette St  
Syracuse, NY 13204

On this Date: 9 Nov 2012

Testing conducted in accordance with  
IEST-RP-CC0034.3 HEPA and ULPA Filter Leak Tests  
Recommended Practices

Conducted by: ENV Services, Inc.  
2880 Bergey Road, Suite K  
Hatfield, PA 19440

Administered By : *Ron Bolesta*

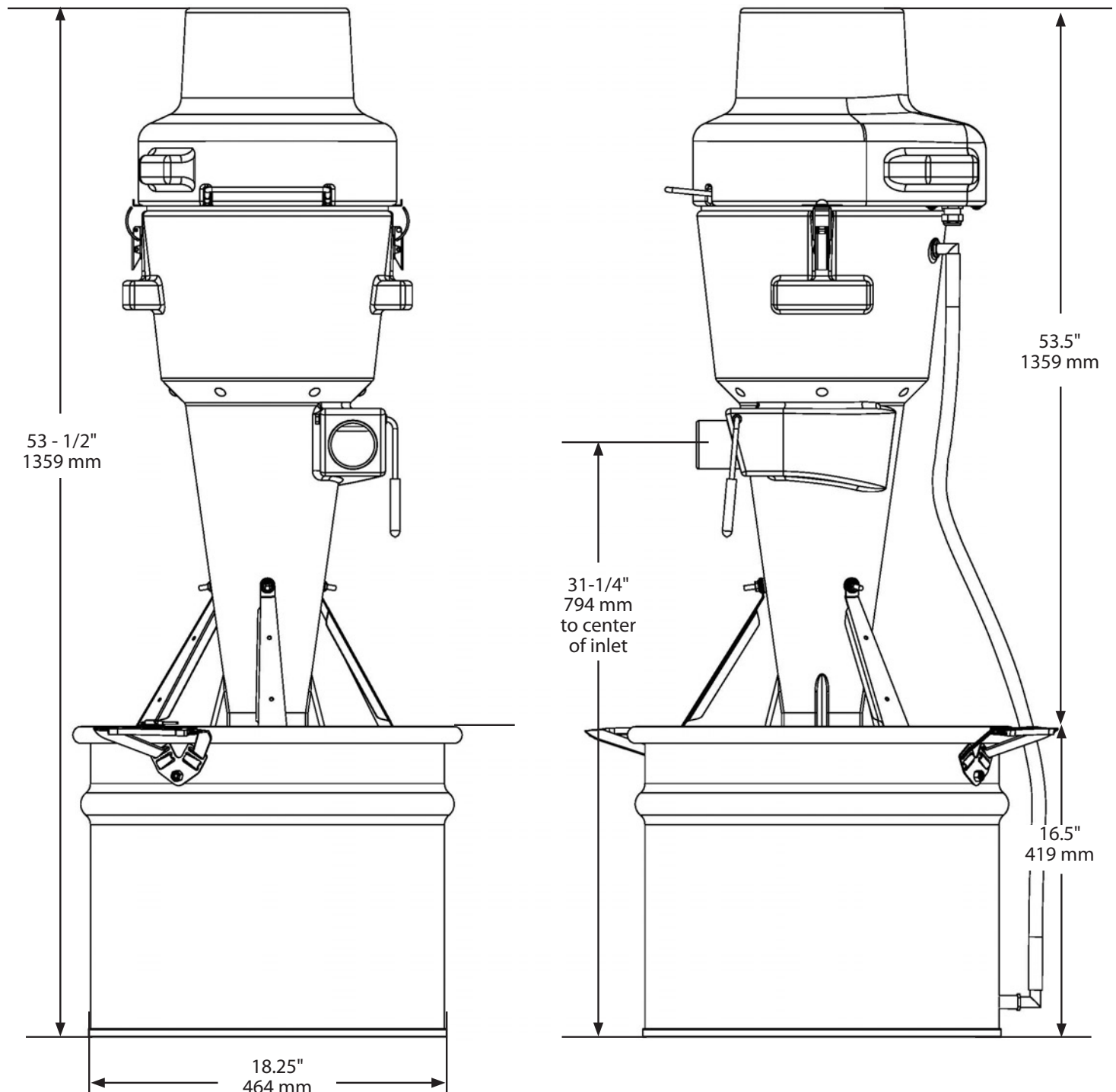
## **WARNING**

This motor can expose you to chemicals, including carbon black, which is known to the State of California to cause cancer.

For more information go to  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# System Dimensions with 17 Gallon Drum

Nominal dimensions shown. Dimensions subject to slight variations in manufacturing.

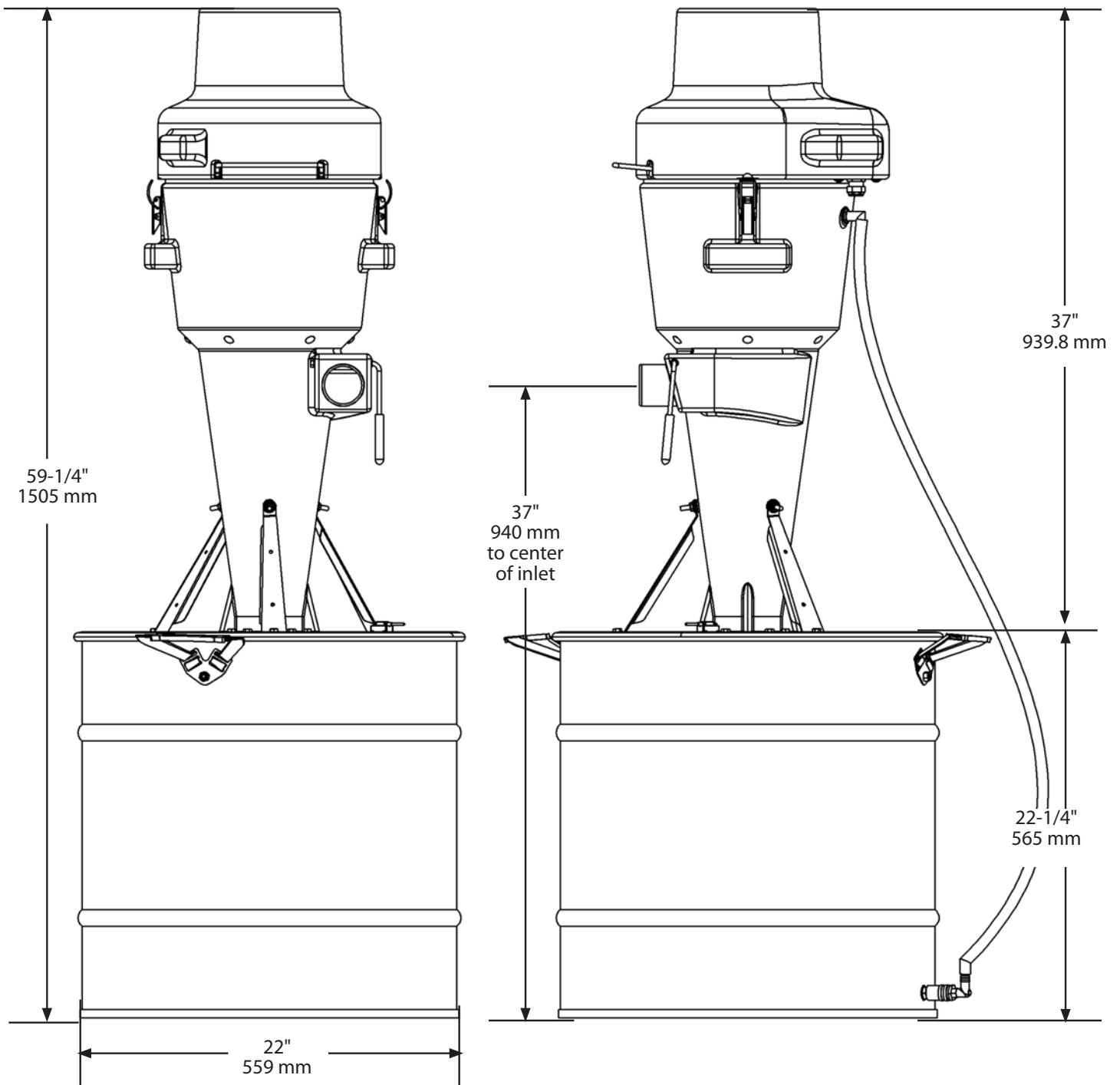


*Note: Drum Dolly adds 4.25" (108 mm) to height.  
Larger casters add 1/2 (25 mm) to height.*



# System Dimensions with 35 Gallon Drum

Nominal dimensions shown. Dimensions subject to slight variations in manufacturing.



*Note: Drum Dolly adds 4.25" (108 mm) to height.  
Larger casters add 1/2" (25 mm) to height.*

# System Contents



If you cannot find an item on the list, examine the packaging materials very carefully. Certain components have been pre-installed. \* There may be hardware leftover.

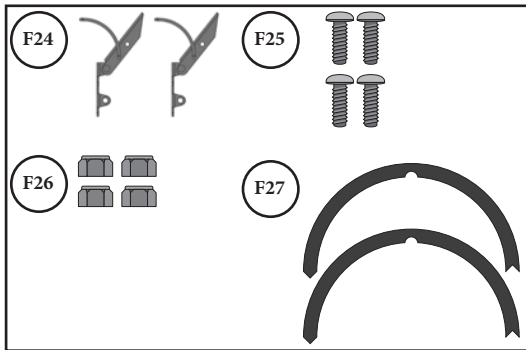
ID	Part number	Part description	Qty
A	BXI001205H	110V Cobra Motor Assembly for 17 Gal	1
	BXI001205F35	110V Cobra Motor Assembly for 35 Gal	
B	SCX001205D	Molded Cobra Cone Assembly	1
C	FCH000004	GORE® CleanStream Pro HEPA Filter	1
D	SES170002	17 Gal Steel Drum Kit	1
	SES350005	35 Gal Steel Drum Kit	
E	SEX170400A	17 Gal Drum Lid	1
	SEX350400A	35 Gal Drum Lid	
F	AHX001205D	17 Gallon Cobra Hardware Kit	1
	AHX001205F35	35 Gallon Cobra Hardware Kit	
F1	STP000006	Handle Plate	2
F2	AFB155175	5/16"-18 x 3/4" Hex Head Bolt	2
F3	AFW180000	5/16" Flat Washer	2
F4	AFW180516	5/16" Rubber Washer	2
F5	AFT900516	5/16" - 18 Nylock Nut	2
F6	RHS009043	Webbing Handle	2
F7	RBB000003	Struts	3
F8	AFS015920	1/4"-20 X 3/4" Hex Head Bolt	3
F9	AFB250125	1/4"-20 x 1 1/4" Carriage Bolt	3
F10	AFW180516	5/16" Rubber Washer	6
F11	AFW025000	1/4" Flat Washer	12
F12	AFT000005	1/4" Whiz-Lock Nut	6
F13	AFT000006	1/4"-20 Thumb Nut	1
F14	VSC001205	Velcro Tie Straps	1
F15	RHS000000	Vacuum Hose Storage Strap	1
F16	AFJ051602	5/16"-18 x 2" J Bolt	2
F17	AFT155175	5/16" Whiz-Lock Nut	2
F18	RHS000010	Filter Retainer Strap	1

ID	Part number	Part description	Qty
F19	AFS501032	#10 Phillips Drive Pan Head Screw	2
F20	AFW200000	#10 Washer	2
F21	AFT901032	10-32 Nylock Nut	2
F22	AXD000006	1" Hook Tape	.16 ft
F23	AXD000007	1" Loop Tape	.16 ft
F24	AFL001205	Motor Assembly Draw Latches	2
F25	AFS632438	6-32 x 7/16" Phillips Drive Pan Head Screw	4
F26	AFT900632	6-32 Nylock Nut	4
F27	RGM250000	Cobra Motor Gasket	2
F28	ABF000500	1/2" Nylon Elbow	1
F29	RLH000006	1/4" NPT Nylon Elbow	1
F30	RLH000005	3/8" Socket	1
F31	RLH000004	3/8" Male Plug	1
F32	RLH000002	Nylon Washer	2
F33	RLH000003	Rubber O Ring	2
F34	RLH000007	Nylon Nut	1
F35	RLH000008	Round Tapered Plug	1
F36	VRV050500	1/2" ID Clear Vinyl Tubing	5 ft.
F37	RGZ190000	Cobra Gasket	1
F38	AFS015920	1/4"-20 X 3/4" Hex Head Bolt	8
F39	AFW025000	1/4" Flat Washer	16
F40	AFT000005	1/4" Whiz-Lock Nut	8
F41	AXD600300	9-17 Gallon Drum Liner Bag	5
	VAB251555	35-55 Gallon Drum Liner Bag	

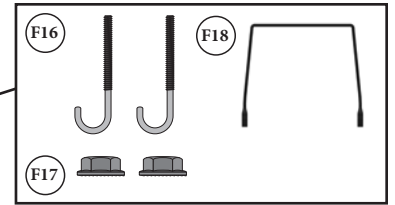
*Please unpack the parts carefully and confirm you have received each item listed here.*

# System Contents (Continued)

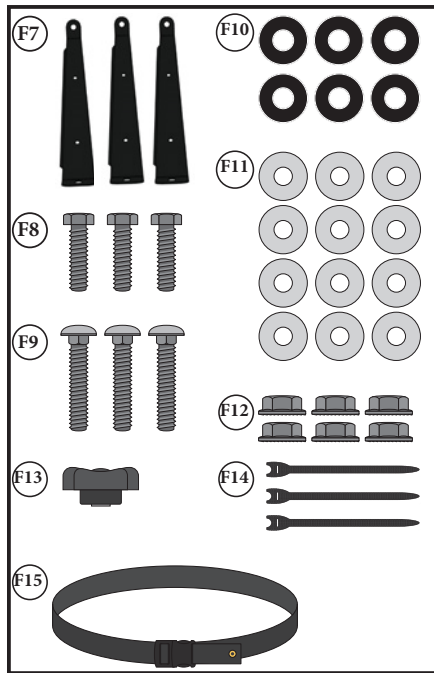
## Motor Attachment



## Filter Hardware



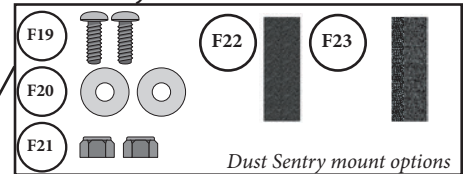
## Strut Pack



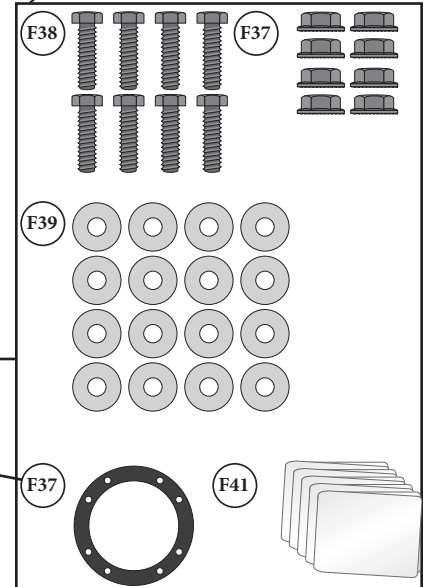
## Bag Hold Down Kit



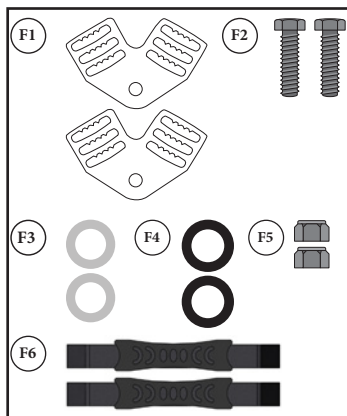
## Dust Sentry Hardware



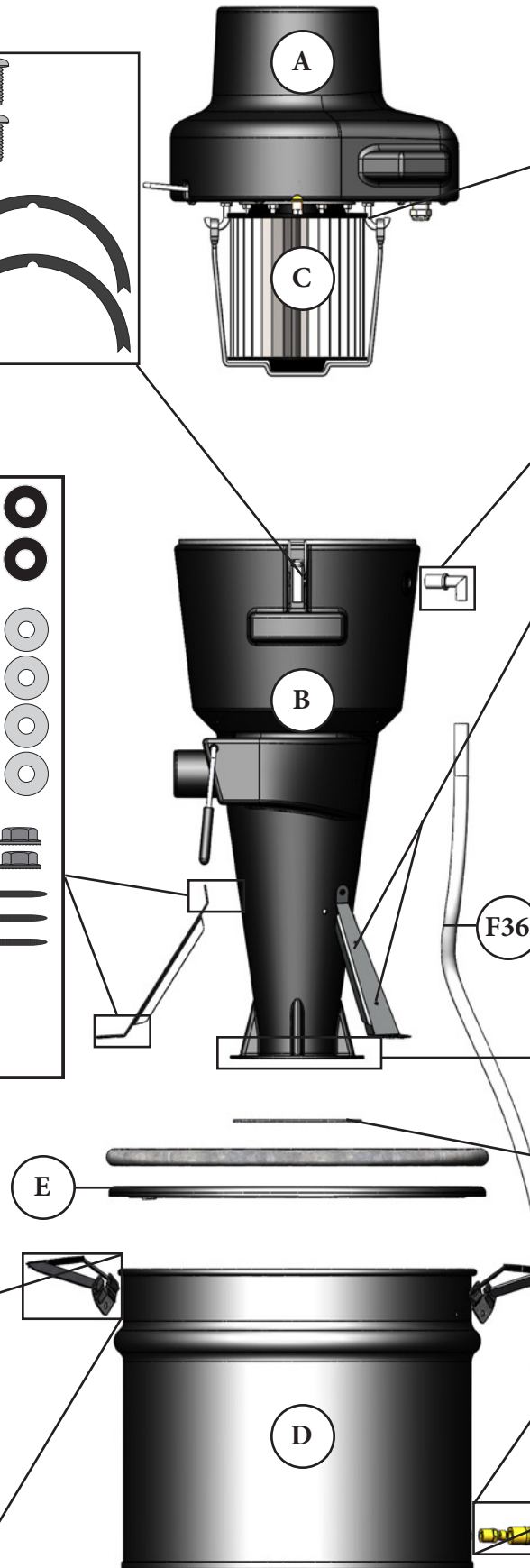
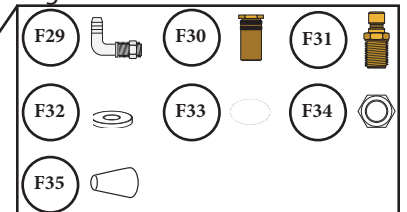
## Cyclone Hardware Kit



## Handle Pack



## Bag Hold Down Kit



# Industrial and Vortex Contents



If you cannot find an item on the list examine the packaging materials very carefully. Certain components may have been pre-installed for shipping purposes. There may be hardware leftover.

ID	Part number	Part description	Qty
K	AXC000003	Cobra Strap Pack	1
K1	RHS000050	Vacuum Hose Tether Strap	1
K2	AFB155180	5/16"-18 x 2-1/2" Hex Head Bolt	1
K3	AFT051602	5/16"-18 Square Nut	1
K4	RHS000002	Hose Tether Strap Plate	1
K5	RHS203016	Ladder Lock Slider	2
L	SDD990000	Molded Drum Dolly	1
M	AXB999110B	Dust Sentry Automatic Dust Bin Level Indicator	1
N	AXC000004	3" Cobra Caster Pack	1
N1	RHC000012	3" Caster with 5/16-18 x 3/4" stems	5
<b>INCLUDED ONLY WITH IND SYSTEMS</b>			
O	VSHRFB250	2.50" x 25' Hose	1
P	ASV000000	Accessory Shop Vac Kit	1
Q	DRL040212	4 to 2-1/2" Reducer	1
<b>INCLUDED ONLY WITH VOR SYSTEMS</b>			
R	AXD900001	2" X 50' Hose with Molded Cuffs	1
S	VSKCSZ000B	Vortex Sander Cyclone Kit	1
S1	VFSHZ000A	Sander Cyclone HEPA Filter	1
S2	VXCSXZ000B	Molded Vortex Barrel	1

ID	Part number	Part description	Qty
S3	VRS080113	Clear Polycarbonate Cone Assembly	1
S4	AHX000011	Vortex Sander Hardware kit	1
S4A	AFT000001	5/16"-18 Thumb Nut	2
S4B	AFW000150	Rubber Spacer	2
S4C	YSS000011	11" Threaded Rod	2
S4D	AFT155175	5/16" Whiz-Lock Nut	2
S4E	QCZ080000	8" Quick-Clamp with Locking Pin	1
S4F	AFC270250	2-1/2" Rubber Coupling	1
S4G	VRC480000	Rubber Coupling Band Clamp	2
S4H	ACB360000	Turn Key Hose Clamp	2
S4I	RGZ180250	3/16 x 1/4 x 28" Poron Gasket	2

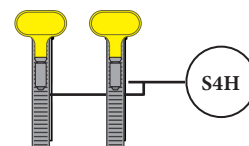
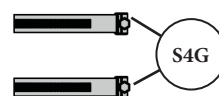
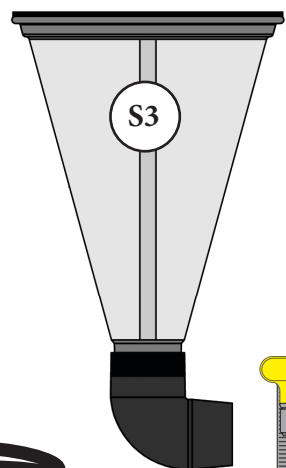
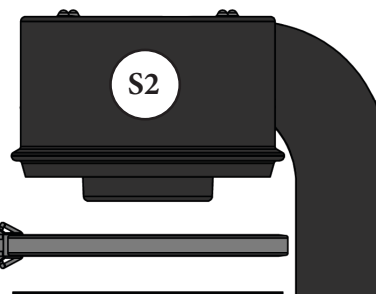
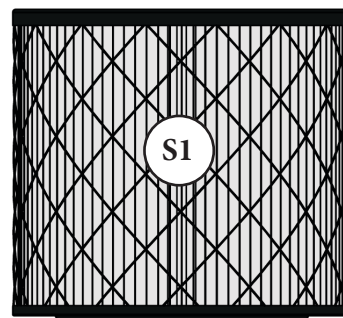
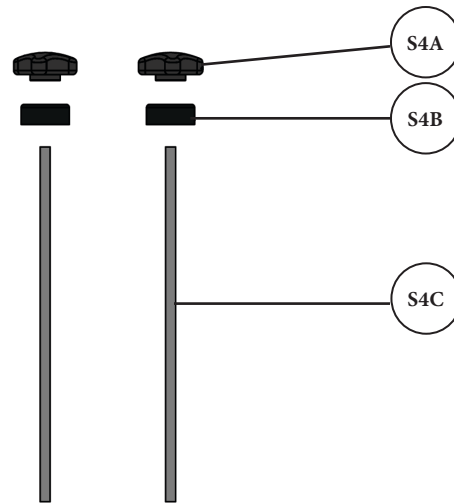
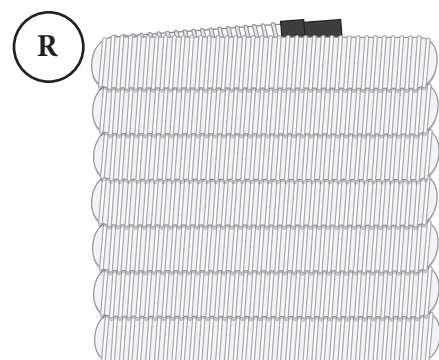
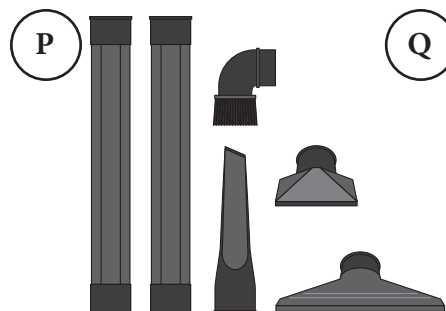
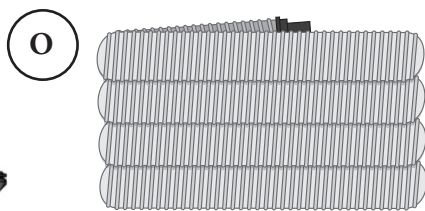
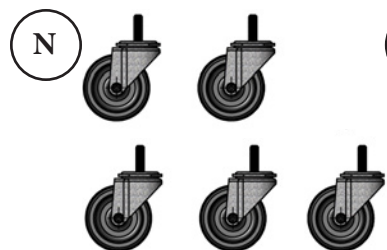
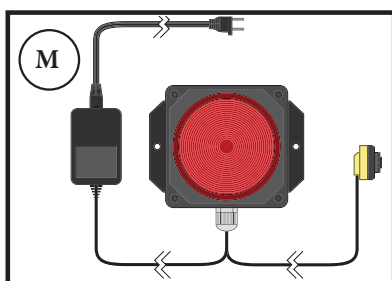
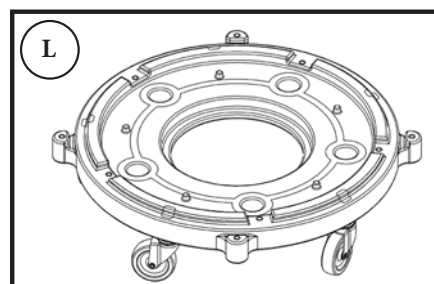
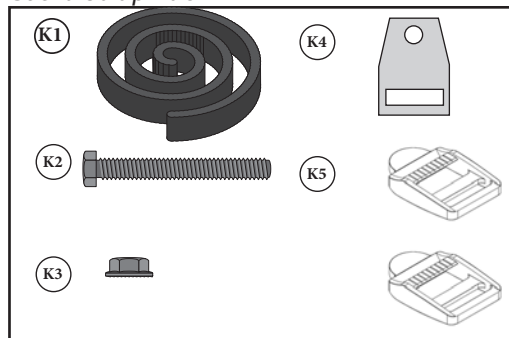
Please unpack the parts carefully and confirm you have received each item listed here.

Note: The 3/16" x 1/4" x 28" Poron Gasket (S4I) are replacement gaskets for the top of Clear Polycarbonate Cone Assembly (S3).

Note: NEVER use any solvents, cleansers, or abrasives on the plastic components. Solvents will cause the clear polycarbonate cyclone to crack and abrasives will cause scratching. Use a clean soft cloth for cleaning.

# Industrial and Vortex Contents (Continued)

## Cobra Strap Pack



# Assembly Instructions

## You will need the following tools:

GENERAL		VORTEX	
Utility Knife	Two 7/16" Wrenches	Tape Measure	Pliers
Phillips Head Screwdriver	1/2" Wrench	Utility Knife	
5/16" Wrench	Adjustable Wrench		

1

Place steel drum (D) on a flat level surface [FIG. 1].

If you purchased an Industrial (#IND) or Vortex (#VOR) kit, install Drum Dolly (K) per included instructions:

- **Molded Drum Dolly Instructions**

*Note: Larger 3" Casters (N) are included with #IND and #VOR Kits to replace the 2" Casters packaged with the Drum Dolly (L).*



FIG. 1

2

Pull the left and right ends of the Webbing Handle (F6) through loop 1 of the Handle Plate (F1). Then thread up through loop 2 and into loop 3 [FIG. 2a]. Tuck the excess behind the Handle Plate (F1) so that the end of the Webbing Handle (F6) is captured between the Drum (D) and the Handle Plate (F1). See [FIG. 2b]

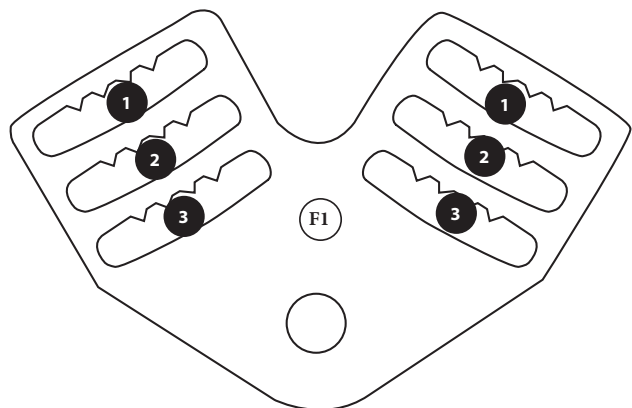


FIG. 2a

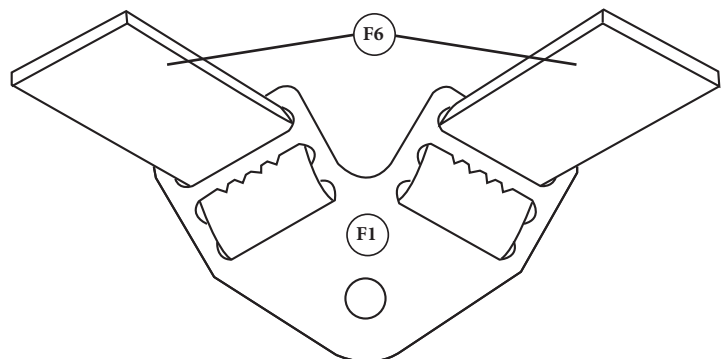


FIG. 2b

# Assembly Instructions (Continued)

3

Secure both Handle Assemblies to pre-drilled holes on sides of Drum (D) using Hex Head Bolt (F2), Flat Washer, (F3), Rubber Washer (F4), and Nylock Nut (F5) as shown in FIG 3.

Firmly Tighten.

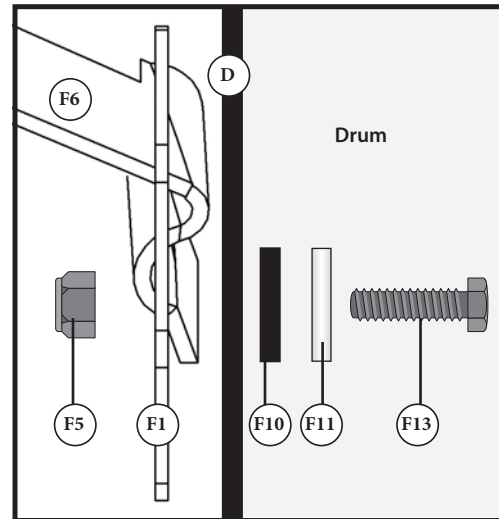


FIG. 3

4

Turn Cone Assembly (B) upside down and install Strut (F7) using one Carriage Bolt (F9), Rubber Washer (F10), two Flat Washers (F11), and fasten with a Whiz-Lock Nut (F12) as shown in FIG. 4.

Install Thumb Nut (F13) onto one of the Struts (F7).

*Note: This Thumb Nut (F13) will be used to secure the Vacuum Hose Storage Strap (F15) to the system.*

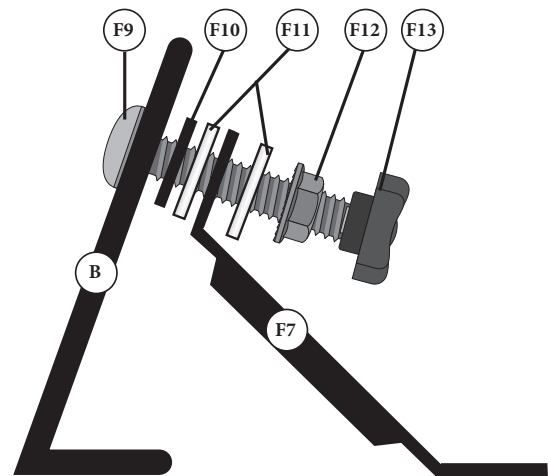


FIG. 4

5

Align the Cobra Gasket (F37) along the bottom flange of the Cone Assembly (B). Align the Drum Lid (E) with the Cobra Gasket (F37), three Struts (F7), and Cone Assembly holes as shown in FIG. 5a.

*Note: The plugged hole (for the Dust Sentry (M)) in the lid MUST be in the back. SEE FIG. 5b.*

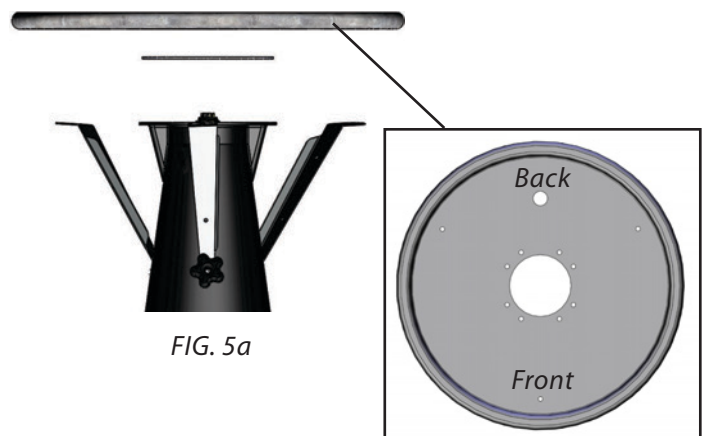


FIG. 5a

FIG. 5b

# Assembly Instructions (Continued)

6

Secure the Cone Assembly (B) to the Drum Lid (E) with a Hex Bolt (F38), two Flat Washers (F39), and a Whiz-Lock Nut (F37) as shown in FIG. 6.

Secure the Strut (G3) to the Drum Lid (E) with a Hex Bolt (F8), two Flat Washers (F11), a Rubber Washer (F10) and a Whiz-Lock Nut (F12) as shown in FIG. 6.

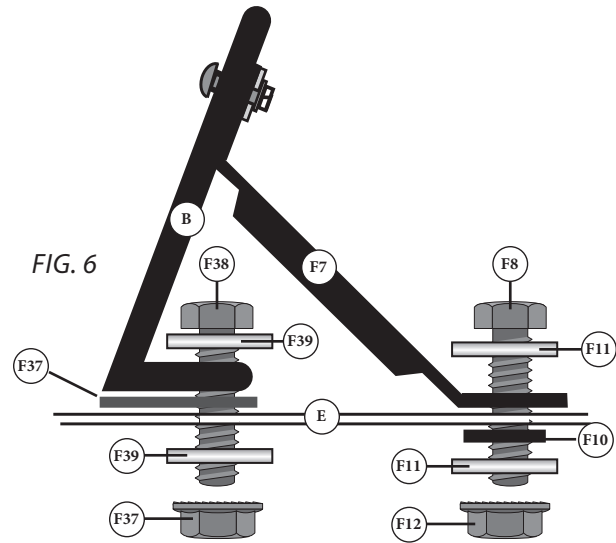


FIG. 6

7

Turn Cone Assembly (B) right side up and secure Nylon Elbow (F28) into upper drilled hole with Rubber O Ring (F33), Nylon Washer (F32), and the Nut included on the Nylon Elbow (F28) [FIG. 7a].

Install Bag Hold Down Kit into pre drilled hole located on the Drum (D) [FIG. 7b].

- Refer to the **Quick Disconnect Installation Sheet** (#ZBI000019) for more information.

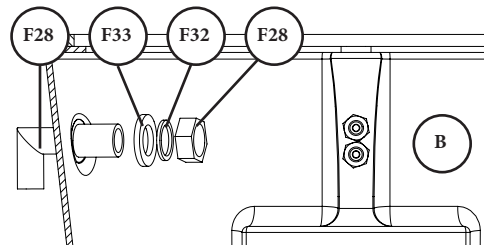


FIG. 7a

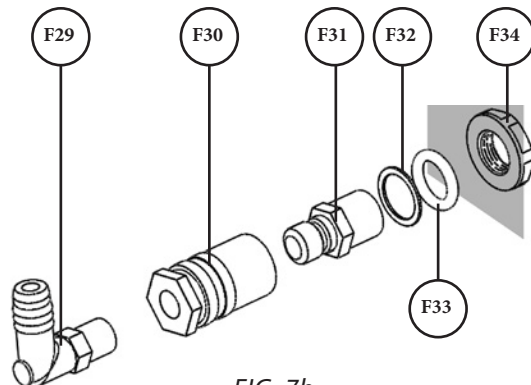


FIG. 7b

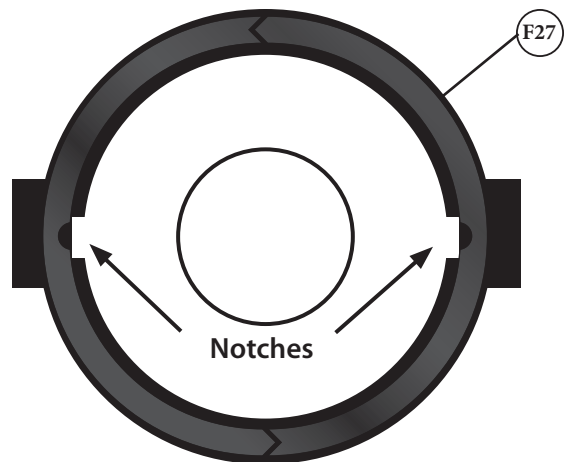


# Assembly Instructions (Continued)

8

Install Gasket (F27) around the top outer rim of the Cone Assembly (B) [FIG 8.]

*Note: Align the gasket notches over the notches in the rim. Dust collection systems cannot operate effectively if there isn't a complete seal. There must be NO air leaks.*



Front (Top View)

FIG. 8

9

Secure Draw Latches (F24) to Cone Assembly (B) with Pan Head Screws (F25) and Nylock Nuts (F26). [FIG 9.]



FIG. 9

10

Screw two Whiz-Lock Nuts (F17) up the shaft of two J Bolts (F16). Then screw J Bolts (F16) onto the motor plate with the J Bolts (F16) pointing out as shown in FIG. 10a.

*Note: When properly installed, the distance between the motor plate and the top of the 5/16"-18" x 2" J bolt is 1-11/16". [FIG 10b]*

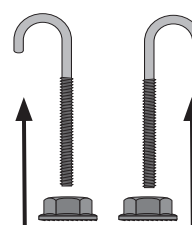


FIG. 10a

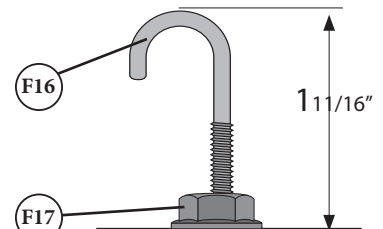


FIG. 10b

Install Filter Retainer Strap (F18) onto the J Bolts (F16) [FIG 10c]

*Note: If your filter retainer strap has steel S-hooks on the ends, remove and discard. They are not needed for the install.*

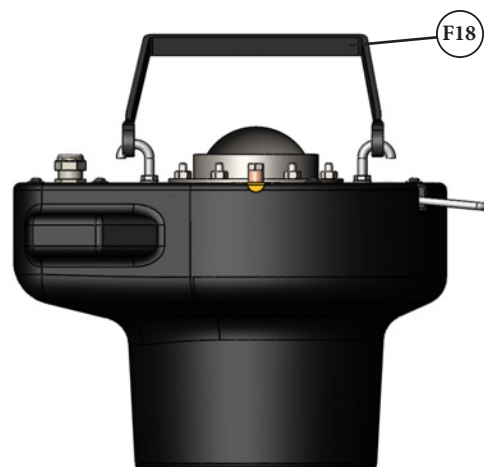


FIG. 10c

# Assembly Instructions (Continued)

11

Carefully install the GORE® CleanStream Pro HEPA Filter (C) onto the ring and then slip filter retainer strap (F18) to secure. [FIG 11]

*Note: It is VERY important that the strap be tight enough to hold the filter snugly in place yet not so tight as to pull down and damage the filter. Be careful not to crush the flame arrestor mesh.*

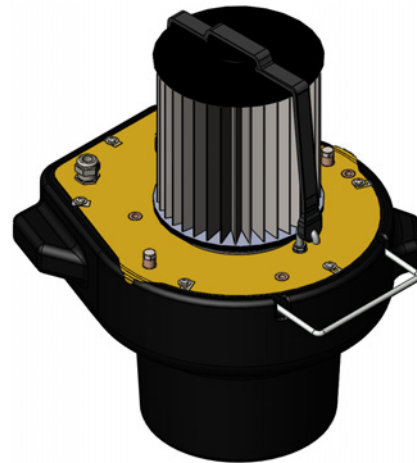


FIG. 11



**THE FAN BLOWER ASSEMBLY IS HEAVY AND CUMBERSOME. BE SURE TO HAVE ADEQUATE HELP WHEN LIFTING!**

12

Align the two retaining studs on the bottom of the Motor Assembly (A) with the two notches on the Cone Assembly (B) [FIG 12a] and fasten these components together with Draw Latches (F24) on either side. [FIG 12b.]

*Note: Clean, HEPA filtered air will exit from the Motor Assembly during operation to aid with heat dissipation.*

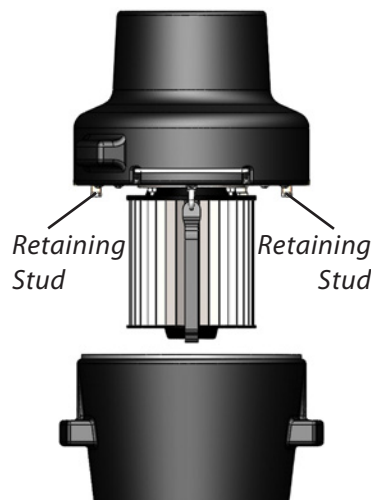


FIG. 12a

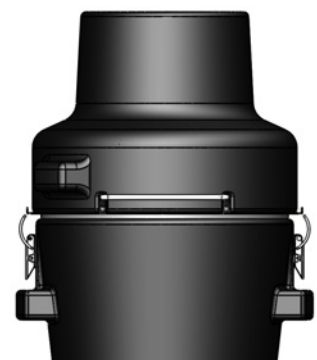


FIG. 12b

13

Insert a Drum Liner Bag (F41) into the Drum (D), making sure it fully expands against the sides and the bottom of the Drum. The top edges of the bag should fold out and over the Drum's upper rim [FIG. 13].



FIG. 13

# Assembly Instructions (Continued)

14

Align the Nylon Elbow (F28) on the Cone (B) with the Nylon Elbow (F29) on the Drum (D). [FIG. 14] Attach the fully assembled unit onto the Drum with Lid Clamp (D).

*Note: Make sure that the Liner Bag (F41) is smoothly laid over the edge of the Drum (i.e. no folds or bunches) before fastening the drum shut with the Drum Lid Clamp.*



FIG. 14

15

Install the Clear Vinyl Tubing (F36) onto the Nylon Elbow (F28) on the Cone (B) with the Nylon Elbow (F29) on the Drum (D). [FIG. 15]

*Note: Push tubing onto elbows until the connection is firm and tight.*

If you did not purchase the Industrial Unit (#IND), your installation is complete!

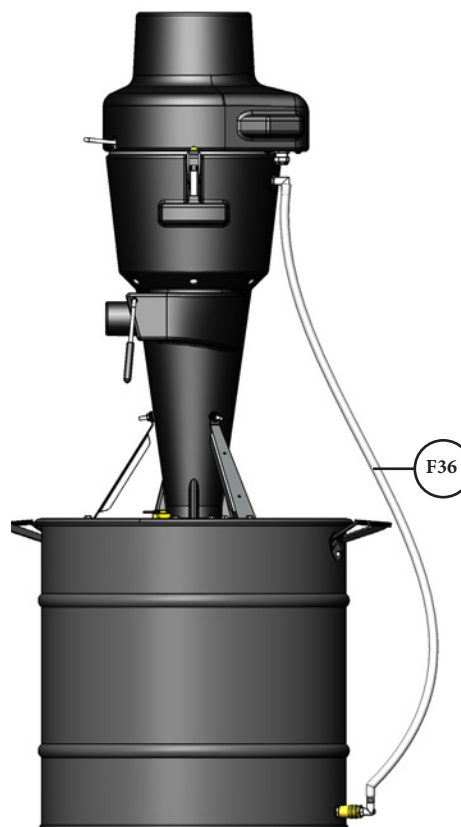


FIG. 15

# Industrial Assembly Instructions

16

Install Dust Sentry sensor (M) onto your Drum Lid (E) per included instructions:

Dust Sentry Instructions  
#ZBI00002A

Mount the Dust Sentry strobe light (M) centered between the two holes of the Strut (F7) using the hook and loop tape (F22 and F23). Secure onto the Strut (F7) through the two holes with a Phillips Drive Pan Head Screw (F19), Washer (F20), and Nylock Nut (F21). Plug in the Dust Sentry (M) to the connecting adapter found on the Motor Assembly (A) [FIG. 16].

*Note: You may mount the Dust Sentry (M) in an alternate location that works best for your setup.*

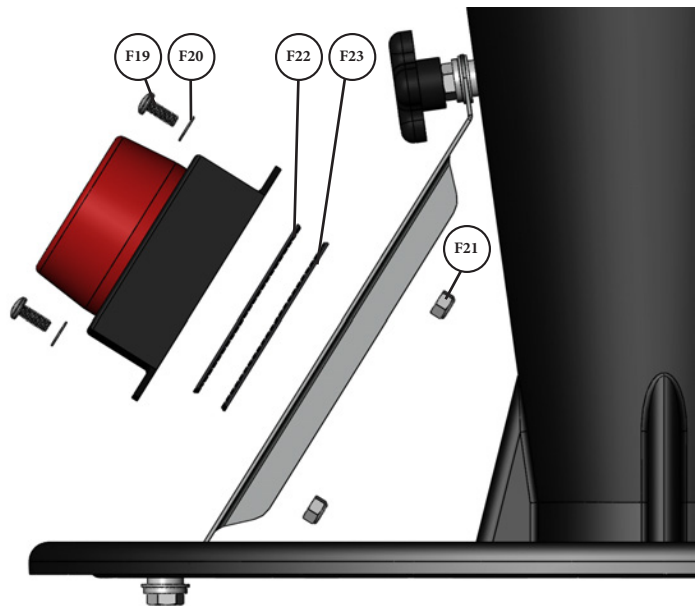


FIG. 16

17

Install Tether Strap Plate (K4) with Hex Head Bolt (K2) and Square Nut (K3) in the front of the Molded Drum Dolly (L) [FIG. 17].

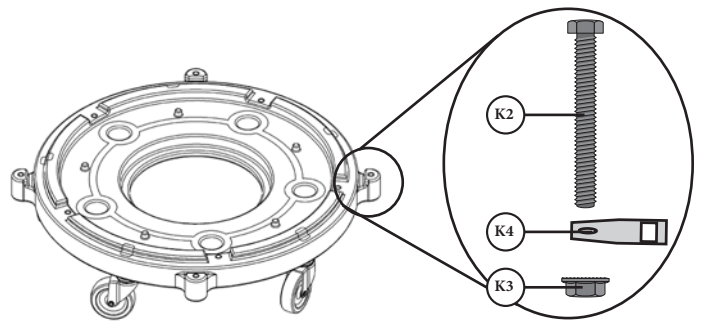


FIG. 17

18

Use one of the Ladder Lock Sliders (K5) to secure one end of the Tether Strap (K1) to the Tether Strap Plate (K4). See [FIG. 18a] on instructions how to thread the ladder lock slider. Loop the other end of the Tether Strap (K1) around the center of the inlet Hose (O). Use the second Ladder Lock Slider (K5) to secure the Tether Strap (K1) to the inlet Hose (O). [FIG 18b]

If you did not purchase the Vortex Unit (#VOR), your installation is complete!

Thread Tether Strap through Ladder Lock Slider.



Loop this end around Hose.

Pull Tether Strap tight

FIG. 18a



FIG. 18b

# Vortex Assembly Instructions

19

Remove cardboard ring from Vortex Barrel (S2) Inlet; you may need pliers to do so.

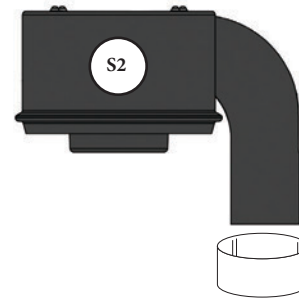


FIG. 19

20

Thread a Whiz-Lock Nut (S4D) onto each Threaded Rod (S4C), flat side down, until it is about 1" deep. [FIG. 20a] Then screw each Threaded Rod (S4C) into the threaded inserts on top of the Vortex Barrel (S2) so that the flat side of the Whiz-Lock Nut is flush with the Barrel. Finger tighten the rod and then use a wrench to firmly tighten the Whiz-Lock Nut down to the Barrel [FIG. 20b].

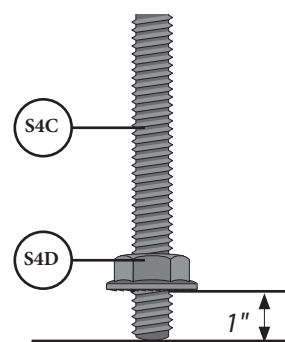


FIG. 20a



FIG. 20b

21

Place the HEPA Filter (S1) over the Threaded Rods (S4C) with the gasket side facing down [FIG. 21a].

The Rods should pass through the holes in the tabs of the bottom of the Filter and through the holes in the top of the Filter and the Filter should align snugly with the top of the Vortex Barrel [FIG. 21b].

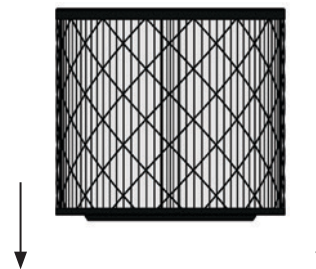


FIG. 21a



FIG. 21b

22

Install the Rubber Spacer (S4B) onto the top of each Threaded Rod (S4C), with the flat side facing up and the tapered side facing down [FIG. 22a].

Thread the Thumb Nut (S4A) onto the top of each Threaded Rod (S4C), tightening firmly against the Rubber Spacer (S4B) below it [FIG. 22b].



FIG. 22a



FIG. 22b

# Vortex Assembly Instructions (Continued)

23

Attach the Clear Cone Assembly (S3) to the bottom of the Vortex Barrel (S2) and use the 8" Quick-Clamp (S4E) to secure them together. [FIG. 23]

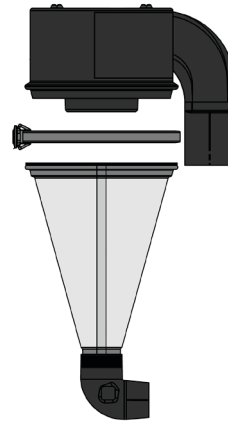


FIG. 23

24

Remove cardboard ring from the Rubber Coupling (S4F); you may need pliers to do so [FIG. 24a].

Remove the pre-installed clamps from the Rubber Coupling (S4F) [FIG. 24b]. Install the Rubber Coupling narrow end down, onto the dust pipe of your floor sander or onto the purchased handle. The top of the Rubber Coupling should be level with the top of the dust pipe. Secure it in place using one of the Rubber Coupling Hose Clamps (S4F).



FIG. 24a

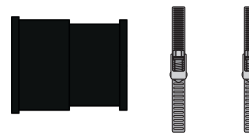


FIG. 24b

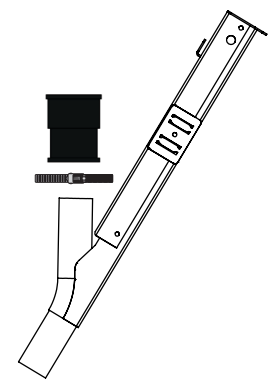


FIG. 24c

25

Secure the inlet of the Vortex Barrel (S2) onto the dust pipe of your floor sander or purchased handle by sliding the open end of the Vortex Barrel Inlet Elbow in between the dust pipe or your purchased handle and the Rubber Coupling (R4F). Make sure the slot in the side of the inlet elbow is covered entirely by the rubber coupling.

The rubber coupler should then be sealed in place using the Rubber Coupling Band Clamp (R4G) on the Rubber Coupler. [FIG. 25]

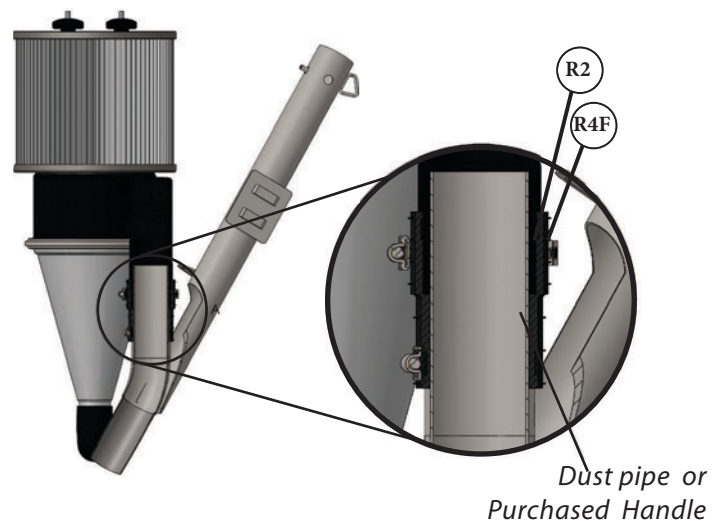


FIG. 25

# Vortex Assembly Instructions (Continued)

26

Secure Hose (R) in place onto elbow of the Vortex Sander Cyclone (S3) with one Turn Key Hose Clamp (R4H) [FIG. 26].

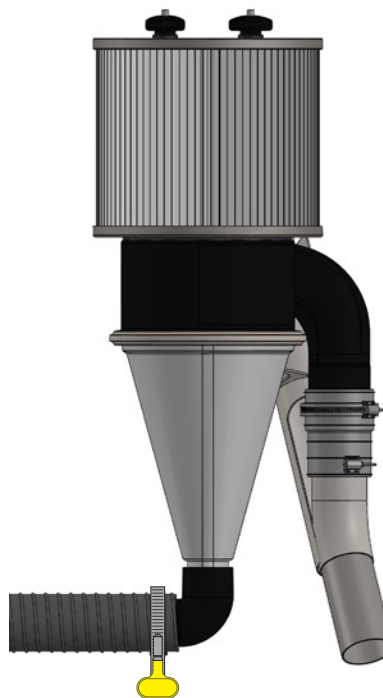


FIG. 26

27

Connect other end of Hose (R) to Cobra's inlet and secure with 1/2" Turn Key Hose Clamp (S4H) [FIG. 27]

Installation is complete!



FIG. 27

# Maintenance

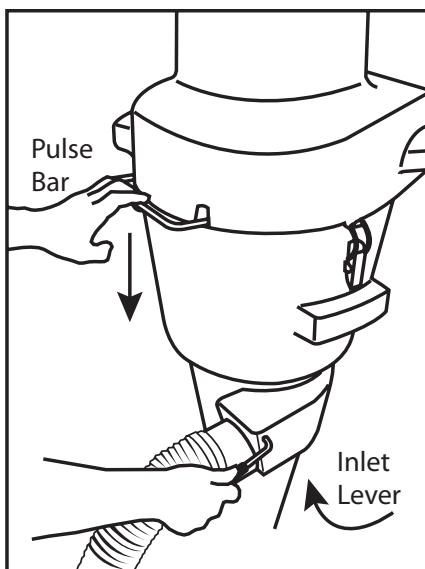


**Do NOT shut off air to inlet for extended periods of time. This can cause motor to overheat and shut off!**

## Filter Pulse Bar Cleaning

Internal Rapid Pulse Filter Cleaner™ System helps to keep the flow continuous and remove the clogging of the filter. If air flow is not restored, check for clogs and clean filter. (Review Cleaning the Filter and Troubleshooting Sections)

1. Clean your filter after every 30 minutes of use -more often for heavy use. Frequent pulse cleaning of the filter will keep your performance optimal.
2. While the unit is running, rotate the Inlet Lever upward to close off the inlet. While continuing to hold the Inlet Lever upward, quickly push down the Pulse Bar extending out of the cowling, pass the initial resistance, and hold for a few seconds then release the Pulse Bar.
3. Dispose of waste safely and properly.



## Cleaning the Filter

Proper filter cleaning should not be neglected as a dirty filter can significantly affect your dust collector's performance and the overall lifespan of your filter.

1. **WEAR A DUST MASK AND EYE PROTECTION WHILE CLEANING THE FILTER.**
2. Turn off the dust collector and wait for the system's fan blower to come to a complete stop.
  - a. Dust blowing out could indicate that dust was dropped into motor inlet while taking off filter.
  - b. Vacuum filter's outside before removing it to clean.
3. Remove filter from the system. The filter can be easily cleaned by placing it into a plastic bag lightly tapping the filter onto the floor. Dirt and debris will fall away from the filter. For a more thorough cleaning, continue to the below steps.
4. Use a hand-held, compressed air nozzle with a pressure between 30 to 60 PSI to blast air along the filter's exterior pleating. Hold the air nozzle at a 20 degree angle and at least 6" away from the filter; closer blasts may damage the filter material. Direct air out and away from anyone in the area. Do not use this method when any hazardous material has been vacuumed up.
5. Check to make sure filter is in good condition with no torn media or cracks or tears in the seal. A broken filter can leak material into the motor and cause severe damage! You cannot operate the Dust Cobra without a proper filter in place. (See Accessories page for the replacement filter part.) Operating without a sufficient filter will cause severe damage to the motor and will void the warranty!
6. When you replace the filter, it is very important to carefully install the GORE® CleanStream Pro HEPA Filter (C) onto the ring and then slip filter retainer strap (F18) to secure.



# Maintenance



**UNPLUG YOUR UNIT BEFORE SERVICING OR CLEANING. KEEP THE TOP VENTS IN THE COWLING CLEAN. THESE ARE FOR BOTH EXHAUST AND INCOMING COOLING AIR FOR THE MOTOR.**

## Optional Water Cleaning

Proper filter cleaning should not be neglected as a dirty filter can significantly affect your dust collector's performance and the overall lifespan of your filter.

1. WEAR A DUST MASK AND EYE PROTECTION.
2. Rinse the filter with a water hose (40 psi maximum) along the filter's exterior pleating. Avoid getting water on the inside of filter. Do not use a high pressure nozzle or a power washer on inside of filter. The PTFE membrane surface on the inside of the filter is fragile and can be damaged.
3. Blow excess water off using a hand-held, compressed air nozzle with a pressure between 30 to 60 PSI along the filter's exterior pleating. Hold the air nozzle at a 20° angle and at least 6" away from the filter; closer blasts may damage the filter material.
4. Dry filters prior to returning them to service. It is NOT recommended to dry at temperatures above 150°F (65.56°C). The filter must be absolutely dry before re-use. Allow at least 24 hours of drying time. Protect the filter from dust during the drying process.
5. Ensure that all moisture is gone and there are no leaks prior to install. Re-install the filter and run the collector 10 - 15 minutes without collecting any dust.

## Emptying the Drum

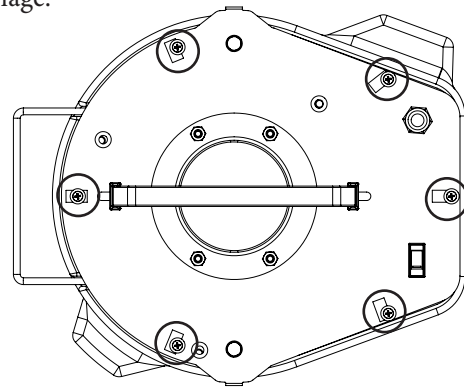
When first using the Dust Cobra dust collector, check the drum regularly to get an idea of how often it needs to be emptied. If the drum becomes overfilled, the dust will be sucked into the collector and into the filter.

1. WEAR A DUST MASK AND EYE PROTECTION.
2. Turn off the dust collector and wait for the system's fan blower to come to a complete stop and for the dust to settle before slowly lifting off the drum lid.
3. Dispose of waste safely and properly.
4. Replacement bags should be 14 x 16 x 36" and at least 1.5 mils thick. See Accessories page for replacement bags needed for your system. When you are not using a bag in your drum then you must use the Round Tapered Plug (F35) that comes with the Bag Hold Down Kit.

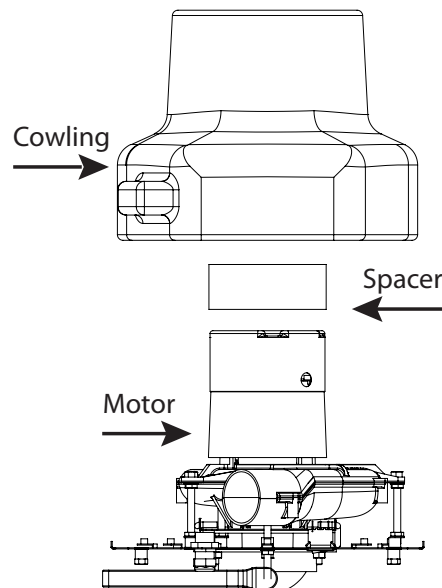
## Motor Brush Replacement

The Dust Cobra has a brushed motor. The brushes have a lifespan of approximately 500-750 hours. If you have reached the lifespan or the motor stops operating, then it's time to replace the carbon brushes with Part number: BRB010120. To access the brushes:

1. Un-clamp the motor assembly from the cone assembly.
2. Unscrew the six screws shown circled in the below image.



3. Remove the cowling and the spacer to access the motor.



# Troubleshooting

PROBLEM	CAUSE	SOLUTION
Bag sucked up into the cyclone	Air leaks in the drum	<ol style="list-style-type: none"> <li>1. Confirm the lid of the dust drum is in place and is well seated when operating.</li> <li>2. Check for any damage on the foam seal of the lid.</li> <li>3. Check that drum lid clamp is tight.</li> <li>4. Check for holes or leaks in the dust drum.</li> </ol>
	Clear Vinyl Tubing (F17) not attached properly	<ol style="list-style-type: none"> <li>1. Make sure there is no clog, kink, or damage in the vinyl tubing.</li> <li>2. Make sure the vinyl tubing is pushed all the way onto both fittings so it is firm and tight.</li> <li>3. Make sure all connections to the Quick Disconnect Kit (I) are tight.</li> <li>4. Make certain that the Round Tapered Plug (F35) is not installed in the quick disconnect kit.</li> </ol>
Excessive Vibration	Loose Mounting Bolts	<ol style="list-style-type: none"> <li>1. Tighten all connections, including the motor to the plate and the struts. DO NOT OVER-TIGHTEN.</li> </ol>
Poor dust pick-up	Air leaks in your system and filter issues	<ol style="list-style-type: none"> <li>1. Check for air leaks between cyclone and dust drum. Cyclone and dust drum must be air tight. Even small leaks will cause poor pre-separation in the cyclone.</li> <li>2. Check gasket between motor assembly and cone assembly.</li> <li>3. Be sure that your filter is clean and free of damage to the membrane.</li> <li>4. Check to make sure filter is in good condition with no cracks or tears or interruptions in the seal.</li> </ol>
	Large chips clogging the hose	<ol style="list-style-type: none"> <li>1. Check length of hose for obstructions.</li> </ol>
Filter Clogging	Large chips or fine dust clogging the filter	<ol style="list-style-type: none"> <li>1. Check for a leak between the dust drum and the lid.</li> <li>2. Make sure dust drum has not over filled. Dust drum should be emptied before the dust reaches top of container. To help monitor the flow of dust, review the Dust Sentry, shown on the Accessories page. The Dust Sentry comes with both the IND and VOR systems.</li> </ol>
	Air Leaks in your system	<ol style="list-style-type: none"> <li>1. Check for air leaks between cyclone and dust drum. Cyclone and dust drum must be air tight. Even small leaks will cause poor pre-separation in the cyclone.</li> <li>2. Check gasket between motor assembly and cone assembly.</li> <li>3. Check for air leaks in the drum.</li> </ol>
System shuts off unexpectedly	Brushes need to be replaced	<ol style="list-style-type: none"> <li>1. Replace the two motor brushes (Oneida Air System's Part Number: BRB010120).</li> </ol>



If you continue to experience difficulty with your Dust Cobra dust collector, call Oneida Air Systems' Customer Service Department at 1-866-387-8822 or email [support@oneida-air.com](mailto:support@oneida-air.com).

# Warranty Information

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## Limited Warranty – Activate online at [oneida-air.com/warranty](http://oneida-air.com/warranty)

Oneida Air Systems®, Inc. warrants the products it manufactures for a period of 1 or more years, depending on the product, to the original purchaser from the date of purchase, unless otherwise specified. Items not manufactured by Oneida Air Systems are limited to their own manufacturer's warranties. All electrical items such as magnetic starters, remotes, sensors, pumps, bin sensors, bag grippers, etc. and accessories are limited to 90 days. Oneida Air Systems warrants that the product will be free from defects in materials and workmanship.

This is Oneida Air Systems' sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. Oneida Air Systems does not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. This warranty does not apply to defects due directly or indirectly to misuse, negligence, accidents, abuse, repairs, alterations, improper wiring or lack of maintenance. In no event shall Oneida Air Systems' liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Oneida Air Systems shall be tried in the State of New York, County of Onondaga.

The buyer is cautioned to install and operate Dust Collectors in accordance with prescribed Federal, State, OSHA, NFPA, local codes and regulations. This equipment should be installed/wired by a licensed electrician following all applicable codes. Local codes can be significantly different from national codes. The customer assumes the responsibility for contacting their insurance underwriter with regard to specific application requirements of venting or if additional fire protection and safety equipment may be required. Oneida Air Systems shall in no event be liable for death, injuries to persons or property or for incidental, and contingent, special, or consequential damages arising from the use of our product.

Oneida Air Systems makes every effort to accurately represent our products and prices, however Oneida Air Systems reserves the right to make changes to products and prices at any time. As a manufacturer, Oneida Air Systems reserves the right to change product specifications at any time in an effort to achieve better quality products.



**ONEIDA AIR SYSTEMS SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY OR FOR INCIDENTAL, AND CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCT.**



## SAFETY WARNING - PLEASE READ

Before Purchasing or Installing a dust collection system the buyer is cautioned to do so in accordance with prescribed Federal, State, Local, OSHA, NFPA, and any other applicable codes or regulations relating to the type of dust(s) you are collecting.

**SOME TYPES OF DUST UNDER CERTAIN CONDITIONS HAVE THE POTENTIAL TO BE EXPLOSIVE.**

Oneida Air Systems is not responsible for how the dust collector is used or installed. Dusts with deflagration or explosion risks, such as wood dust, may require additional safety equipment including but not limited to; venting, spark detection, suppression systems, back draft dampers or may require installation in an outside location or in a protected area away from personnel. The customer assumes the responsibility for contacting their insurance underwriter with regard to specific engineering controls or application requirements. (We suggest you reference NFPA 664, 654 and 68 codes for more information) Oneida Air Dust Collection Systems may not be suitable for some applications and are not designed to be used in explosive atmospheres. Oneida Air Systems equipment should only be installed and wired by a licensed electrician following all applicable local and national electrical codes.

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: Lead from lead-based paints; Crystalline silica from bricks, cement and other masonry products; Arsenic and chromium from chemically-treated lumber; etc.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Oneida Air Systems recommends using additional approved safety equipment such as an approved OSHA and NIOSH dust mask or respirator.

Oneida Air Systems makes every effort to accurately represent our products, specifications and prices; however Oneida Air Systems reserves the right to make changes to products and prices at any time. As a manufacturer, Oneida Air Systems reserves the right to change product designs and specifications at any time.

# Recommended Accessories

---



## GORE CleanStream® PRO HEPA Filter (Dome Top) for Dust Cobra

#FCH000004

- Certified HEPA Filter Media.
- Wide-spaced pleated filters with non-stick coating for quick and easy dust removal.
- Perfect for drywall or any other type of dust.



## 10.5" x 9.5" True-HEPA Cartridge Filter for Vortex

#VSFSHZ000A

- Independently tested G.E. Certified H12 HEPA filter media.
- Wide-spaced pleated filters with non-stick coating for quick and easy dust removal.
- Double hole-top design for use with Vortex® Sander Cyclone.



## 9-17/35-55 Gallon Heavy-Duty Plastic Liner Bag

#AXD600300/#VAB251555

- Lines the inside of large, 9-17/ 35 to 55 gallon containers for fast and simple waste disposal.
- Heavy thickness protects against tearing from wood chips or other sharp debris.
- 22" x 22" x 55"



## Dust Sentry Bin Level Indicator

#AXB999110B

- User controlled fill-level can be adjusted for distances 1" to 20" from the lid.
- High intensity strobe light can be mounted on the wall, on the drum, on your system, etc.
- Low voltage - works on standard 110V power.



## Universal Drum Dolly

#SDD990000

- Fits nearly any cylindrical waste bin sold by Oneida Air Systems.
- Includes five 2" non-marking caster wheels (3 non-locking, 2 locking).
- 3" non-marking caster wheels available (AXC000004)

# Recommended Accessories (Continued)

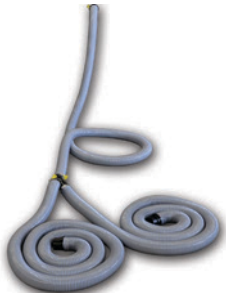
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## 2.5" x 25' CleanShop Vacuum Hose Kit

#ASK000000

- Complete hose accessory kit for general shop cleanup.
- Includes 25' reinforced vacuum hose with smooth inner wall for minimal air resistance.
- Accessory kit includes extension handle, 4" - 2.5" reducer, and vacuum accessory heads.



## 2.5" x 25' Contractor Multi-Tool Hose Package

#AHX000012

- Includes three 2.5" x 12.5' lightweight, reinforced vacuum hoses, five turn-key hose clamps, and a 45 degree y-branch.
- Effectively connect two tools to your dust extract or with minimal loss of airflow.



## Viper Vacuum Scraper-Paint Removal Tool

#AXS001160B

- Reinforced steel construction with enamel painted exterior for long-lasting durability.
- Designed for use with dry waste only.
- Includes locking-lever ring clamp - lid sold separately.



## iVac Pro Automated Dust Control Switch

#ARS115200

- Sends long range wireless signal via radio frequency.
- Mitigate airborne dust and reduce cleanup with a unique system that automatically turns on your dust extractor. Includes remote control.



## Router Hood & Hose Whip Combo

#AXH000200

- Vacuums while you work, eliminating downtime for cleanup.
- Lessens wear on router bits by reducing material buildup.
- Universal design fits nearly any portable router.







*The* **Industry Leader in Dust Collection**

**Thank you for your business!**

Regardless of where you purchased your system, if you have any questions or issues with missing / damaged parts, please call Oneida Air Systems first to let us help resolve your problem. We fully stand behind the quality of our products and place the utmost value on the satisfaction of our customers.

We want to do everything possible to make your purchase and experience with Oneida Air Systems a good one!

**Customer Service Dept.**

**1-866-387-8822 • [support@oneida-air.com](mailto:support@oneida-air.com)**

1001 West Fayette Street, Syracuse, NY 13204 U.S.A.

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