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The Dust Cobra - XCK110010 Owner's Manual

1.800.732.4065

www.oneida-air.com

Oneida Air Systems, Inc. was founded in 1993 to bring cost effective, state-of-the-art dust collection systems and material handling ductwork to woodworking shops. OAS designs and manufactures industrial grade dust collection systems that create a practical, safe and healthy work place environment.

X. Terms and Conditions

Checking in Order

Please look over the shipped order very carefully in the presence of the delivery person for damage or incomplete shipment before signing the delivery receipt. Please note any tears or irregularities in shipping packaging, however slight, on the shipping delivery receipt. This could be an indication of extensive concealed damage. The shipping company will not take responsibility if the damage is not noted on the delivery receipt. In the event of shipping damage, call OAS Customer Service immediately at 1.800.732.4065 so we can expedite replacements. Please check in all parts within 3 days from receiving order. Notify OAS immediately of any missing or incorrect parts. OAS does not accept any claims for damage or shortage after 3 days from date of delivery.

Limited Warranty

Oneida Air Systems warrants 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 OAS are limited to their own manufacturer's warranties. All electrical items such as magnetic starters, remotes, sensors, pumps, and accessories are limited to 90 days. This warranty does not apply to defects due directly or indirectly to misuse, negligence, accidents, abuse, repairs, alterations, improper wiring or lack of maintenance. 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. OAS does not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall OAS's 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.

Oneida Air Systems shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our product.

Oneida Air Systems does not warrant or authorize use of wood dust collectors for other purposes. This includes wood products that are treated, coated, or otherwise altered from their natural state.

***Note: Motors should be protected from extreme weather to prolong motor life. Single phase motors should only be started and stopped up to 4 - 10 times per hour. Starting single phase motors more frequently can cause heat build up and can cause the motor overload to trip or cause motor damage. In general, motors should be started and stopped as little as possible for maximum lifespan and best economy (electrical use).**

Delivery Risk of Loss

Products will be shipped to Buyer's single destination. Title and risk of loss shall pass to the Buyer upon delivery to such destination. Buyer pays transportation expenses. Dates of shipment are advisory and OAS will make reasonable efforts to ship on or before the date states for shipment, however, OAS shall not incur any liability for failure to ship on that date.

Returned Goods Policy

Buyer must inform OAS of any shortage or damage, by so noting in writing, on the freight delivery bill prior to signing to indicate receipt of shipment. All claims, including claims covered under the limited warranty, are subject to inspection and investigation by OAS. OAS reserves the right to inspect and investigate all returned products before Buyer's claim is settled. All products returned for a refund must be unused and resaleable and purchased within the last 30 days. There are no refunds on flex hose or custom made components. There will be a 25% restocking fee applied to any returned items. **Buyer must call and get an RMA#. (Return authorization number.) Merchandise must be shipped to us prepaid.**

Installing a dust collection system will greatly reduce airborne dust levels in your shop. However, NIOSH recommends that respirators must be worn if the ambient concentration of wood dust exceeds the prescribed exposure limit. If in doubt, wear a NIOSH mask.

Thank You for Choosing an Oneida Air Systems Product!

OAS manufactures and sells dust collection equipment only. Our qualified technicians and sales staff are available 7:30am - 6:00pm EST Mon. - Thurs. and 7:30am - 5:00pm EST Fri. to answer any questions concerning OAS products and dust collection. Call for ductwork design and ductwork quotes, including system pricing and shipping cost.

Read the entire Owner's Manual before installing or operating system!

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Installing a dust collection system will greatly reduce airborne dust levels in your shop. However, NIOSH recommends that respirators must be worn if the ambient concentration of wood dust exceeds the prescribed exposure limit. If in doubt, wear a NIOSH mask.

I. System Start-Up Information

Safety Instructions to be Strictly Followed.

Read the installation and maintenance instructions as well as the recommended safety practices in this manual before assembling and using the Dust Cobra.

Caution

The Dust Cobra is heavy! Handling and assembly should always be performed by experienced and trained personnel who have experience with assembling equipment. In addition to the following instructional manual, care should be taken to ensure compliance with specific safety requirements mandated by federal, state and local codes.

This vacuum is designed for indoor / dry material pick-up applications and should not be used outside or in wet conditions or to pick up liquids.

- Make sure that the voltage nameplate of the device corresponds to the voltage of your network. The plug has to be protected with a minimum of 15 amps. Important! The vacuum is supplied from the factory with a supply cable with a grounded plug. It must only be connected to an approved grounded socket.
- Before performing any maintenance work, unplug the vacuum from the outlet.
- Warning! Explosion and fire hazard! Never vacuum flammable fluids or gas, oil, alcohol, solvents, etc. Do not operate near flammable fluids or gas. Never vacuum warm fluids or materials at more than 140 deg. F (60 Deg. C), such as burning cigarettes, ashes, glowing coals, etc.
- Warning! Do not vacuum hazardous / carcinogenic dust unless HEPA filter is installed.
- Do not pull the vac by the cable and do not damage the insulation on the cable. If cable is damaged, it must be replaced immediately.
- Always keep filter cartridge clean so the vacuum operates properly.
- Components used in packaging (i.e. - plastic bags) can be dangerous. Keep away from children and animals.
- The use of this machine for anything not specified in this manual may be dangerous and must be avoided.
- The suction nozzle should be kept away from the body. Especially delicate areas such as the eyes, ears and mouth.
- The equipment should be correctly assembled before use.
- Ensure that power sockets are correct for the machine.
- Check the voltage indicated on the rating plate is the same as the supply voltage.
- Never leave the equipment switched on.
- Never carry out any maintenance on the machine without first disconnecting from the main supply. If machine is to be left unattended or can be reached by children or others not aware about their action, the supply should also be terminated.
- The vac should never be immersed in water or a pressure jet of water used for cleaning.
- Periodically examine the power cable and machine for damage. If any damage is found, contact your service center for repair.
- Should extension cords be used, ensure that the cord rating is suitable for use with the equipment. Do not use the extension cord coiled as this could result in a voltage drop or overheating.
- If the vacuum should overturn, it is recommended that the machine should be stood up before switching off.
- Service and repairs should be carried out by qualified personnel only. Replacement parts for the machine must be manufacturers original parts only.
- The manufacturer can not be held responsible for any damage / injury caused to persons or property because of the incorrect use of the machine or due to procedures being used that are not specified in this instruction manual.
- Empty dust drum frequently. Never leave flammable material in vac.

IX. Fire Hazards - Read Before Installing and Operating

Oneida Collectors are designed for DUST only!!

Wood shaping and cutting processes generate wood chips, shavings, and dust. These materials are considered combustible. Air borne wood dust below 420 microns in size (.017 of an inch) in certain concentration ranges when ignited can deflagrate (burn quickly). Aluminum dust, flour dust and sugar dust are explosive.

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.* The best way to avoid a 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.

The following points are worth heeding:

- It is the buyer's responsibility to follow all applicable federal, state, local, OSHA, NFPA, or authorities having jurisdiction codes and regulations when installing and operating this dust collector.
- **Do not use this product to collect flammable vapors. Fire or explosion may occur!**
 - Never collect sparks from a bench grinder into a wood dust collector.
 - Never introduce sparks or sources of ignition into the dust collector.
 - Check dust bin frequently and before leaving the shop for smoldering material.
- Keep portable Fire Extinguishers handy.
 - The ABC type (dry chemical) is generally a good choice for small wood shops.
 - Additional information on portable extinguishers can be found in NFPA 10 (Standard for Portable Fire Extinguishers)
- 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.
 - This high air volume will dilute the mixture below the lower limit of flammability. Be careful not to generate sparks into the sanding dust.
 - Empty dust bin and clean filter often, especially when sanding.

VIII. Troubleshooting

Poor Dust Pick-Up

Caused By:

- Clean filter.
- Check length of duct runs and duct diameters compared to ductwork design guideline.
- Check for air leaks between collector and dust bin.
- Examine hood design for weaknesses according to the ductwork guide.
- Check for a restricted hose, too small a hood port or too small a branch line. See branch line diameter chart in ductwork guide.
- Be sure that your filter is clean. See filter cleaning directions.

Filter Clogging

Caused By:

- Air leakage between cyclone and dust bin. Cyclone and dust bin must be air tight. Even small leaks can will cause poor pre-separation in the cyclone.
- Large chips clogging the filter:
 - Check for a leak in the dust bin, flex coupling or lid. Check for split or torn flex coupling. (See also: Motor Over-heating Section above.)
 - Make sure dust bin has not over filled. Dust bin should be emptied before dust reaches top of container.
 - Interruption of air flow, such as vacuuming chips with a flex hose connection, will increase filter maintenance.
 - Check for clogs or large debris inside cyclone, on the inside or outside of the vortex tube.

Excessive Vibration

Caused By:

- Loose mounting bolts.

Note: If you continue to experience difficulty with your collector, call Oneida Air Systems at 1.800.732.4065 for assistance.

II. General Specifications



Finally, a dust collection solution for portable, table top, and hand power tools with small dust ports.

The Dust Cobra works for applications where dust collectors or shop vacuums don't.

- ▶ High Suction. 3X the air performance of most shop vacs - 90"W/C - 260 CFM (Std shop vacs 70 CFM)
- ▶ Ultra-High Efficiency Cyclonic Separation - 99% before the filter - Eliminates filter clogging.
- ▶ HEPA filter 99.97% @ 0.3 microns.
- ▶ Less than 50 Lbs.
- ▶ No Filter Bags.
- ▶ Runs on 110V.
- ▶ 73 dBA @ 10'.



Included Wall Bracket SMS001200

| Part # | Description |
|-----------|-----------------------------------------|
| XCK010000 | Dust Cobra - Standard Motor |
| XCK010099 | Dust Cobra - Brushless Industrial Motor |

| | |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Performance | <ul style="list-style-type: none">▶ 90" W/C Max. Suction - 260 CFM Max. Air Flow▶ U.S. Made Motor Voltage: 110V▶ 73 dBA @ 10' |
| System Dimensions | <ul style="list-style-type: none">▶ Height w/ 10 Gallon Drum: Under 62"▶ Footprint: Approx. 24" x 24"▶ Inlet Diameter: Full Welded 2.5" w/ Neutral Vane▶ Powder Coated Paint Finish Over Heavy Gauge Steel |
| Filter Media | <ul style="list-style-type: none">▶ HEPA Filter Media Captures 99.97% of Test Material from 0.3 Microns No Other Filter Bags Required. |
| Dust Bin | <ul style="list-style-type: none">▶ 10 Gallon Heavy Steel Drum removes and dumps in minutes. |
| Included | <ul style="list-style-type: none">▶ Wall Bracket - SMS001200▶ 10 Gal. Steel Drum |
| Weights | <ul style="list-style-type: none">▶ Cyclone Box - 30"x 19"x 15" - 16 lbs. |
| Shipping Weight | <ul style="list-style-type: none">▶ Stand Box - 24"x 25"x 47" - 84 lbs. |
| Options | <ul style="list-style-type: none">▶ Cart - STZ0000010A - Use w/ included Wall Bracket▶ 12.5' of 2.5" hose - AXD500000▶ 25' of 2.5" hose - VSHRFB250▶ Larger Drums |

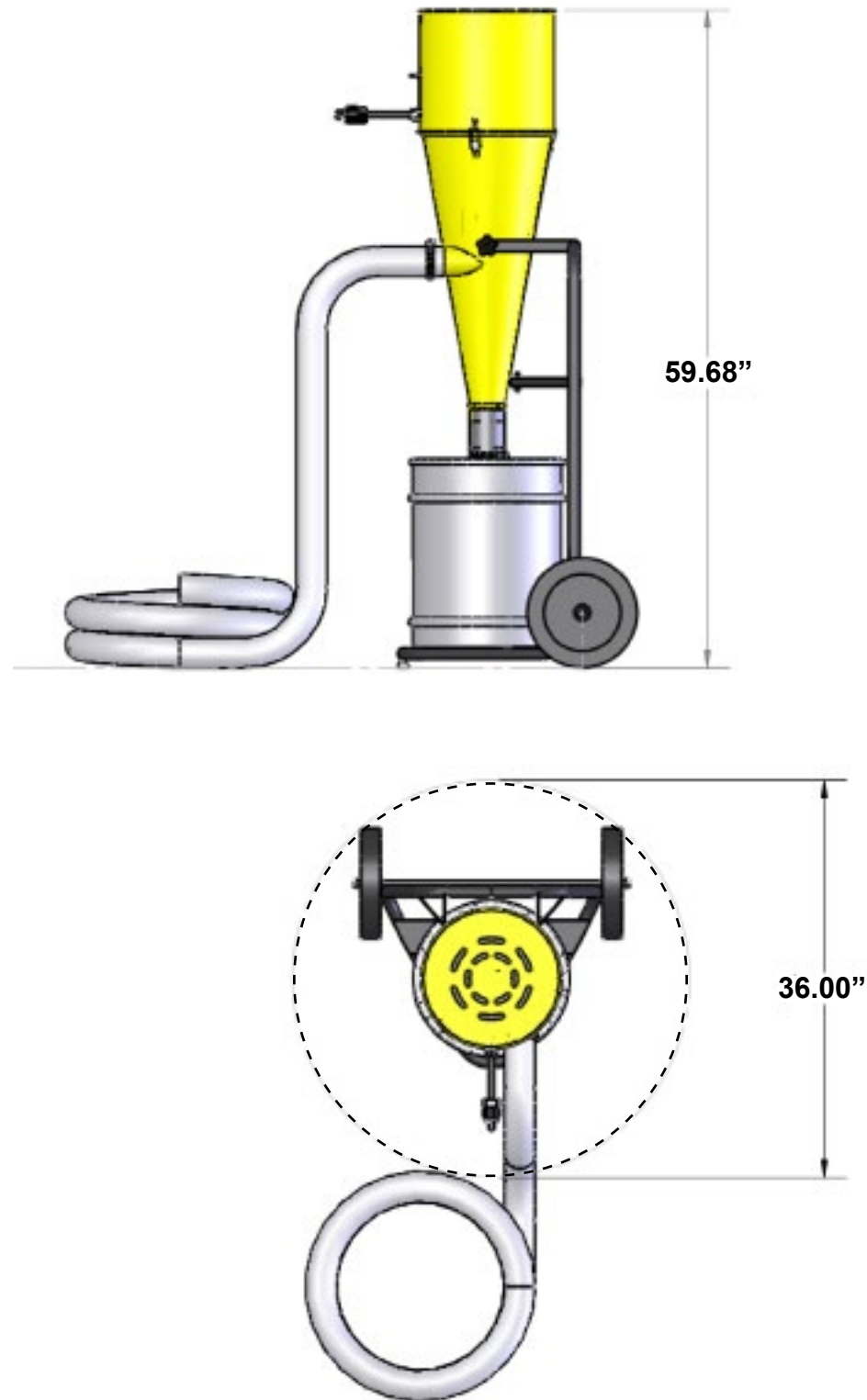
*Oneida reserves the right to change or modify specs and system appearance without notice. Actual system appearance may vary.

Contractors - Keep the Job Site Clean!

Designed for Portable Woodworking Tools - Ideal for portable tools with small dust ports. High Pressure Applications (where standard dust collectors don't work) - Panel Saws, Routers, Dremel Tools, Carving Tools, Scroll Saws, Band saws, Lathes, Chop and Miter saws.



III. Dimensions



VI. Filter Maintenance & Cleaning

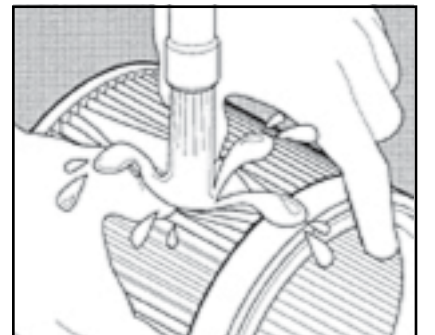
Filter Cartridge Cleaning Intervals

Filters are easily cleaned by removing and lightly tapping on floor. Dirt and debris will fall away from the filter. Filter can be placed inside of a plastic bag and gently tapped. Wear dust mask when cleaning filter. For more thorough cleaning, use the following steps.

1. Remove filter from system and inspect for damage. Do not re-use a filter with bad gaskets, dented metal parts, torn media, etc...
2. Using compressed air (90 psi max.), blow the loose surface dust off of the filter, blowing from the outside / in to prevent forcing the dust into the media pores. Keep nozzle 6 - 8" from surface.

Optional Cleaning Procedure

1. Rinse the filter with a water hose (40 psi max.) on the outside. Wash from outside. Avoid getting water on the inside of filter. Do not use 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.
2. Blow excess water off using compressed air (50 psi). Keep nozzle 6 - 8" away from inside surface to avoid damaging membrane.
3. Dry filters prior to returning them to service. It is NOT recommended to dry at temperatures above 150 Deg. F. The filter must be absolutely dry before re-use. Allow at least 24 hours of drying time.
4. Protect the filter from dust during the drying process.
5. Re-install the filter and run the collector 10 - 15 minutes without collecting any dust. Assure that all moisture is gone and there are no leaks prior to continuing service.



Caution! Fine dust collected in filter is hazardous to your health! Do not breathe!

VII. Emptying Dust Drum

- Empty dust drum frequently.
- Wear a mask when emptying drum.
- Let dust settle before lifting off drum lid.
- Dispose of waste safely and properly.

V. General Assembly Instructions

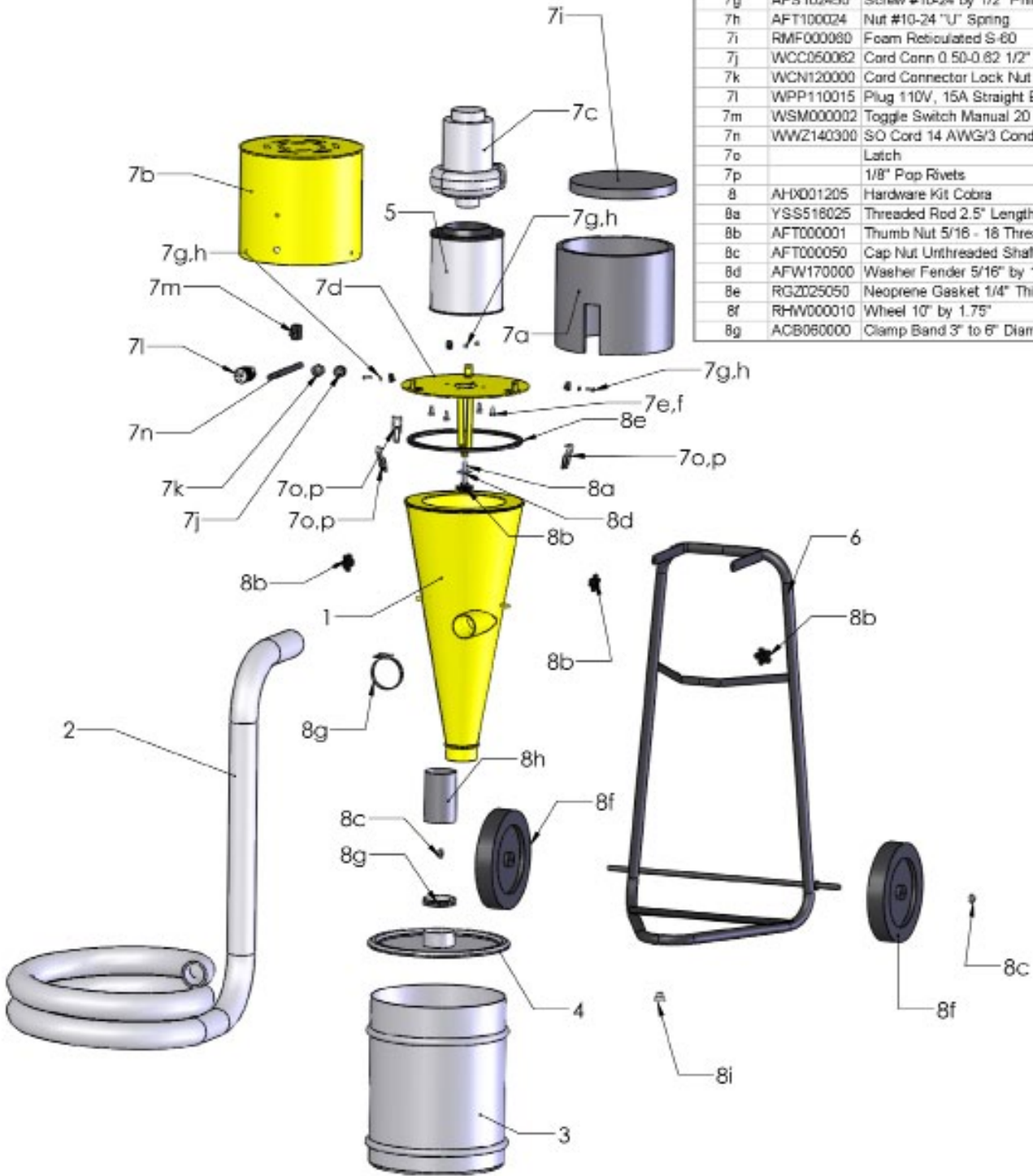


12. Attach hose to inlet with band clamp and you're ready to go.



Caution!
Let dust settle in drum after usage before you open to dispose of material. The dust in the drum is very fine. Wear a dust mask when emptying and dispose of carefully and properly.

IV. General Assembly



| Item | Part Number | Description | Qty |
|------|-------------|--------------------------------------|-----|
| 1 | SCX001205 | Cone Cobra | 1 |
| 2 | AXD500000 | Hose 2.5" by 12.5' | 1 |
| 3 | SES100000 | Drum Steel 10 gal includes Clamp | 1 |
| 4 | SEX100300 | Drum Lid Steel 3" Inlet 10 Gal | 1 |
| 5 | FCH000002 | Hepa Goro Cleanstream - Rigid | 1 |
| 6 | STZ000010 | Cobra Cart Assy | 1 |
| 7 | BX001205 | Cobra Vac Motor Assy | 1 |
| 7a | RMF012000 | Foam Embossed Poly Acoustical | 1 |
| 7b | BHX001205 | Blower Cowling for Cobra | 1 |
| 7c | BMZ010121 | Motor Cobra Machined Exhaust | 1 |
| 7d | RMP001205 | Motor Plate Cobra | 1 |
| 7e | AFL010400 | Lockwasher 1/4" | 4 |
| 7f | AFS015620 | Bolt 1/4-20 by 3/4" Hex Head | 4 |
| 7g | AFS102450 | Screw #10-24 by 1/2" Phillips | 3 |
| 7h | AFT100024 | Nut #10-24 "U" Spring | 3 |
| 7i | RMF000080 | Foam Reticulated S-80 | 1 |
| 7j | WCC050062 | Card Conn 0.50-0.82 1/2" NPT | 1 |
| 7k | WCN120000 | Card Connector Lock Nut 1/2" NPT | 1 |
| 7l | WPP110015 | Plug 110V, 15A Straight Blade | 1 |
| 7m | WSM000002 | Toggle Switch Manual 20 AMP | 1 |
| 7n | WWZ140300 | SO Cord 14 AWG/3 Cond | 1 |
| 7o | | Latch | 3 |
| 7p | | 1/8" Pop Rivets | 6 |
| 8 | AHX001205 | Hardware Kit Cobra | |
| 8a | YSS518025 | Threaded Rod 2.5" Length | 1 |
| 8b | AFT000001 | Thumb Nut 5/16 - 18 Thread | 4 |
| 8c | AFT000050 | Cap Nut Unthreaded Shaft 1/2" | 2 |
| 8d | AFW170000 | Washer Fender 5/16" by 1 1/2" | 1 |
| 8e | RGZ025050 | Neoprene Gasket 1/4" Thick 1/2" Wide | 1 |
| 8f | RHW000010 | Wheel 10" by 1.75" | 2 |
| 8g | ACB050000 | Clamp Band 3" to 6" Diameter | 2 |

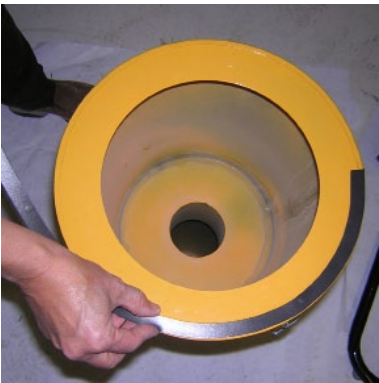
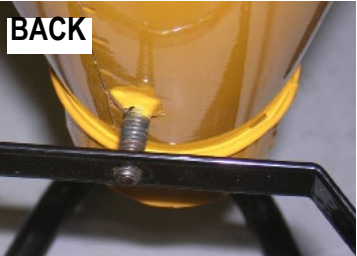
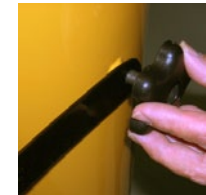
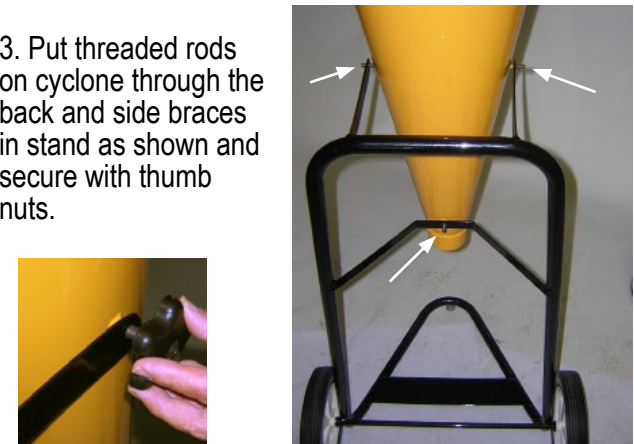
V. General Assembly Instructions



1. Put wheel on one side of axle and put end cap on axle to keep wheel from sliding off.



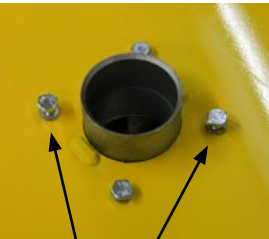
2. Slide axle through holes in bottom of Cobra stand and put on other wheel and end cap to secure.



4. Put self-sticking gasket around outside rim on top of cyclone as shown in photos. Be sure ends meet evenly and there is no gap for air leakage. Gasket should be placed on the edge.



Supplied Filter Bracket



Loose Bolts

5. Two of the four bolts holding the motor plate on are purposely left loose and raised so you can attach the filter bracket.



6. Remove one bolt and slide foot of filter bracket under opposite washer and bolt head. Then put removed bolt and washer back into motor plate to hold down filter bracket.



7. Tighten both bolts to secure bracket.

V. General Assembly Instructions



8. Screw supplied threaded rod in filter bracket.



9. Put open end of filter over holder and put threaded rod through hole in other end. Attach with supplied washer and thumb nut as shown above.

Fig. "A"



Fig. "B"



10. Line up the three tabs on motor housing rim with the three clamps on cyclone, making sure housing rim and cyclone rim are evenly centered. Hook clamp over tab as shown in Fig. "A" and then snap clamp down as shown in Fig. "B".

Fig. "A"



Fig. "B"

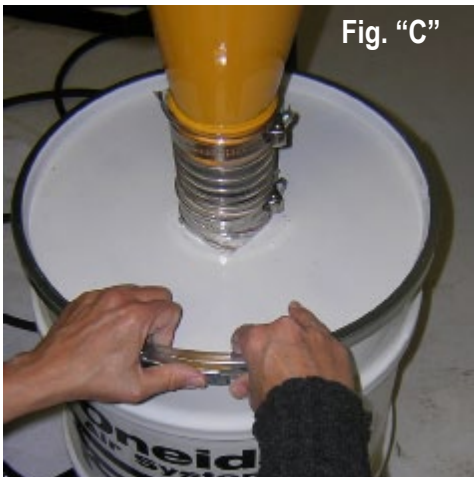
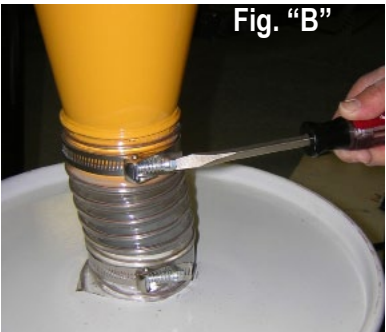


Fig. "C"

11). Attach flex hose to top of dust drum with band clamp (Fig. "A"). Slide drum underneath cyclone and attach top of flex hose to bottom of cyclone with another band clamp (Fig. "B"). Attach dust drum top to barrel with clamp ring. (Fig. "C")