Oneida® Air Systems

The Industry Leader in Dust Collection

Dust Deputy Deluxe

AXD000004A



U.S. Pat.
6833016
RE40048
7282074
and patent pending

System Start-Up Information



READ THE SAFETY PRACTICES INSTALLATION AND MAINTENANCE INSTRUCTIONS AND YOUR WET/ DRY VACUUM'S OWNER'S MANUAL BEFORE ASSEMBLING AND USING THE DUST DEPUTY

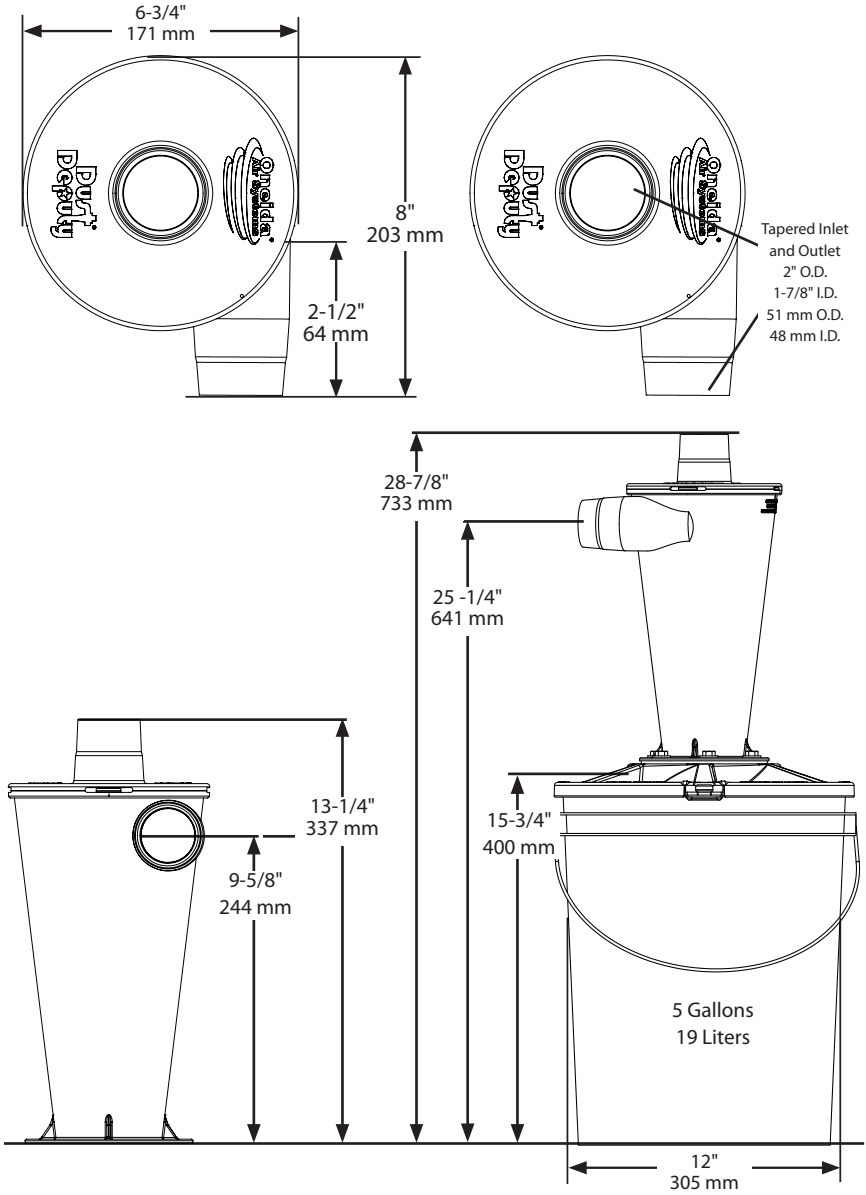
1. Do not vacuum anything that is burning or smoking, such as cigarettes, matches, hot ashes, or any hot substance!
2. Do not vacuum (or use this cyclone near) flammable or combustible liquids, gases, or explosive dusts, such as gasoline or other fuels, lighter fluid, cleaners, oil-based paints, natural gas, hydrogen, coal dust, magnesium dust, grain dust, aluminum dust, sugar dust, flour dust or gun powder.
3. To reduce the risk of health hazards from vapors or dusts, do not vacuum toxic materials unless a HEPA filter is used. Do not use or store near hazardous materials.
4. Dust can be flammable and explosive. Some dust can be toxic or cause allergic reactions.
5. Wood dust mixtures are highly flammable and can be explosive. NEVER introduce sparks or sources of ignition into collector.
   a. Empty drum after each use.
   b. Ground system.
6. NEVER leave wood dust in a building or vehicle.
7. Keep ABC fire extinguishers handy at all times.
8. Can be used for collecting non-flammable liquids.
9. Dispose of waste in a FIRE SAFE AREA.



SOME DUSTS ARE HIGHLY FLAMMABLE OR EXPLOSIVE. LEARN/ KNOW WHAT YOU ARE DEALING WITH. FOLLOW ALL LOCAL, STATE, FEDERAL & NFPA CODES AND GUIDELINES.

System Dimensions

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



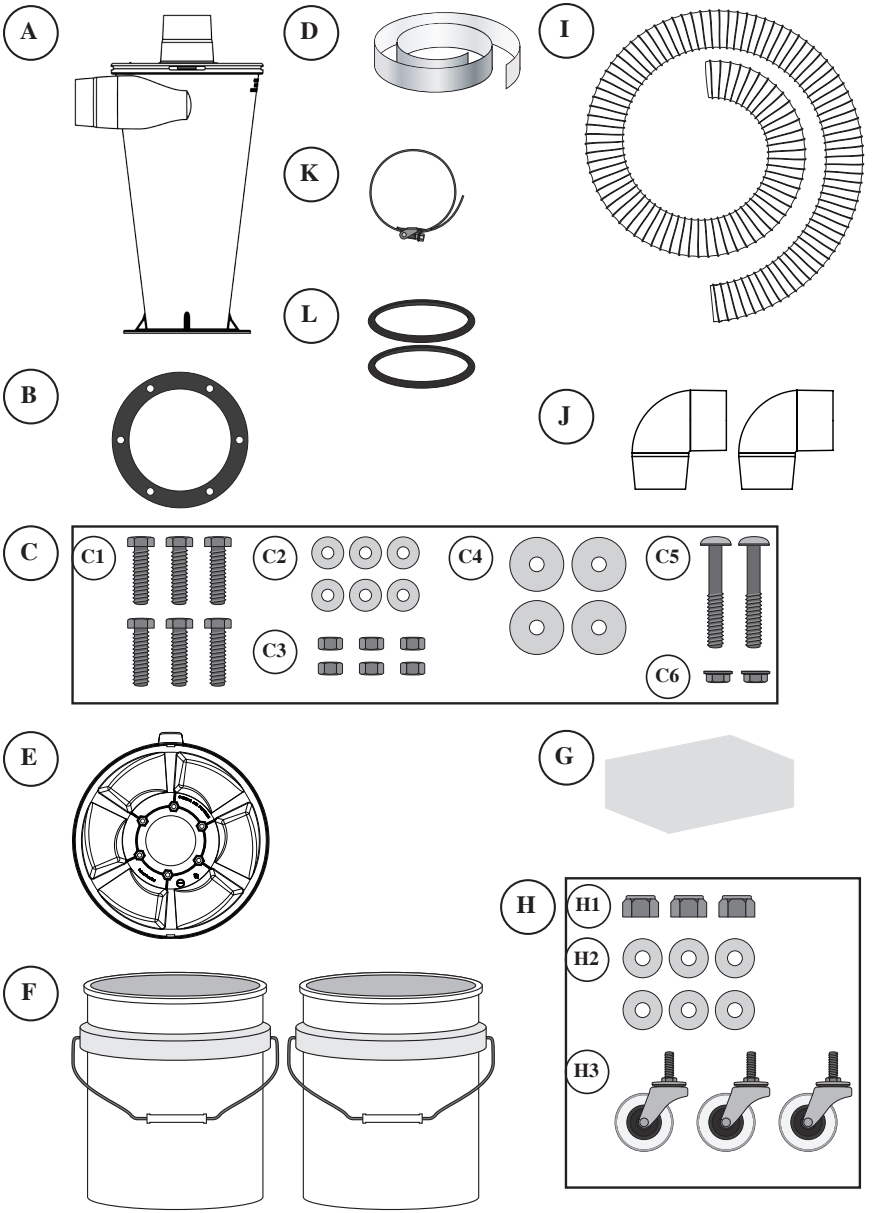
System Contents

ID	Part number	Part description	Qty
A	VXC110002	Anti- Static Cyclone	1
B	AXG000004A	Cyclone Gasket	1
C*	AHK000004A	Cyclone Mounting and Hardware Pack	1
C1	AFS015920	1/4" - 20 x 3/4" Hex Head Bolt	6
C2	AFW025000	1/4" Flat Washer	6
C3	AFT000011	1/4" Hex Nut	6
C4	AFW170000	5/16" x 1-1/2" Fender Washer	4
C5	AFB025350	1/4-20 x 3-1/2" Carriage Bolt	2
C6	AFT000005	1/4" Whiz-Lock Nut	2
D	VFA050015	Metal Grounding Tape	24"
E	SDL050001A	Lid with center and bolt holes	1
F	SDS050001	5-Gallon, 100-Mil, Plastic Buckets	2
G	AFF030306	2" x 3" x 6" Foam Spacer Block	1
H*	AHK000012	Caster Hardware Pack	1
H1	———————	Nylock Nuts	3
H2	———————	Washers	6
H3	———————	38mm Polypropylene Wheels	3
I	AXD200036A	2" x 36" Hose	1
J	AXD600103A	2" Elbow	2
K	ACB320000	Clamp Band	1
L	AFO990225	O Ring	2

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

**Hardware is stored in between the two Buckets (F).*

System Contents (Continued)



You will need the following:

- Power Drill
- 5/16", 1/4" Drill Bits
- 1/2" Open End Wrench
- 7/16" Open End Wrench
- Wet/Dry Vacuum
- Vacuum hose adapters

1 Turn Cyclone (A) upside-down. Place Gasket (B) on the base of Cyclone and align all the holes. Place the topside of the Lid (E) against Gasket and align all the holes. Secure Cyclone, Gasket and Lid together using six Bolts (C1), six Washers (C2), and six Hex Nuts (C3) as shown in [FIG. 1].

Note: Tighten hardware evenly to eliminate air leaks. DO NOT OVERTIGHTEN! On the Lid there is a hex-shaped recess for ease of installation of the nuts.

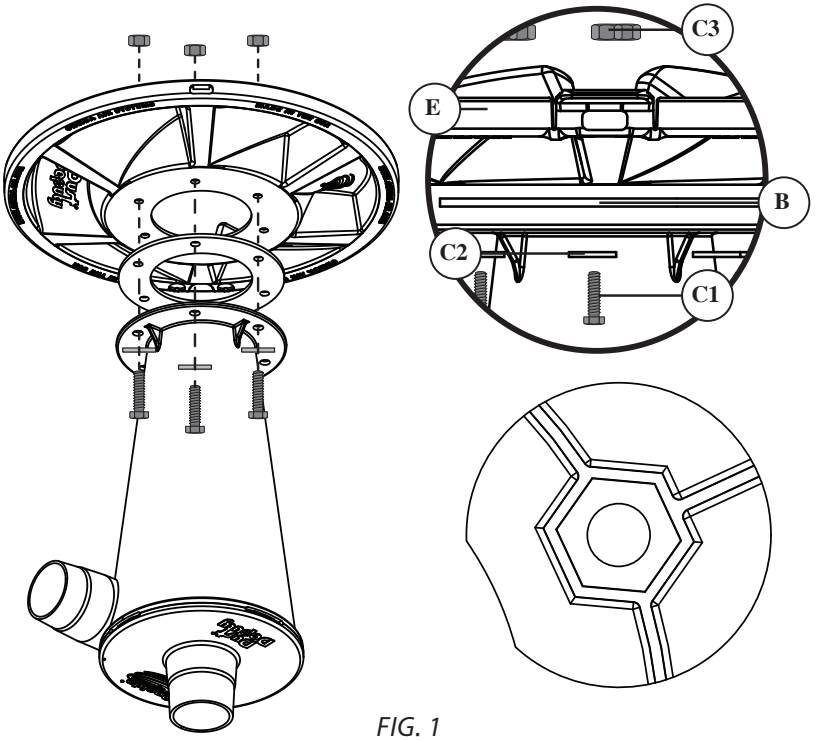


FIG. 1

Assembly Instructions (Continued)

2 Snap Cyclone (A) and Lid (E) assembly onto one of the Buckets (F) and ensure it's fully seated.[FIG. 2a]. The lid will make an audible click as it seals close.

Note: When emptying the Bucket, lift up on latch and pull up on the lid to release the cyclone assembly from the 5 gallon Bucket. [FIG. 2b]

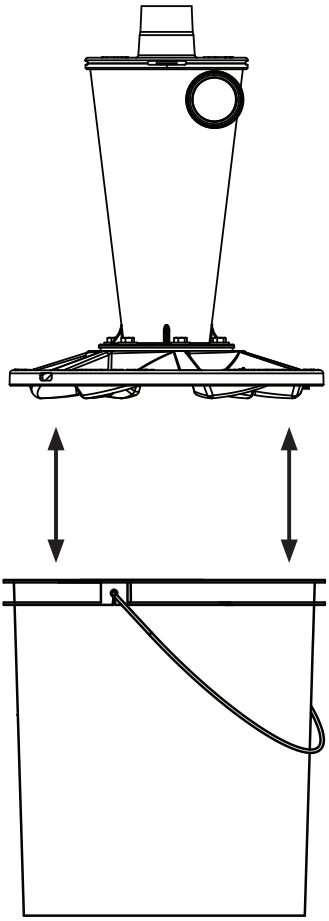


FIG. 2a

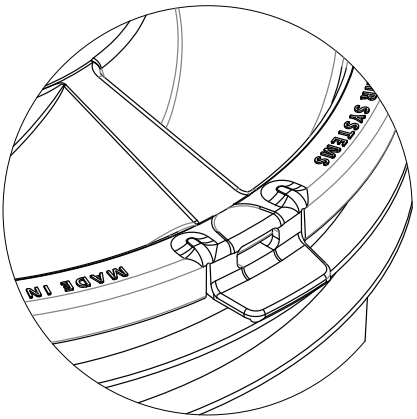


FIG. 2a

Assembly Instructions (Continued)

The Deluxe Kit includes two Buckets (F): One Bucket is used to collect the debris and the second Bucket is used as a sidecar connected to your wet/ dry vacuum to make the kit portable [FIG. 3]. If you choose not to use the second Bucket as a sidecar and instead use it as an additional debris bucket, continue to Step 9 on page 13.

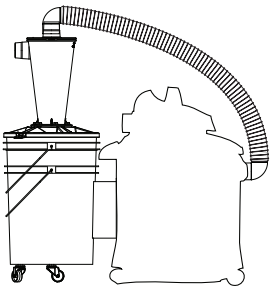


FIG. 3

3 Mark the bottom of your Bucket (F) as shown in [FIG. 4] at least 1" from the outside edge. Using a 5/16" drill bit, drill into the Bucket at all four marked locations.

Note: The fourth hole is to relieve vacuum pressure inside the side-car Bucket.

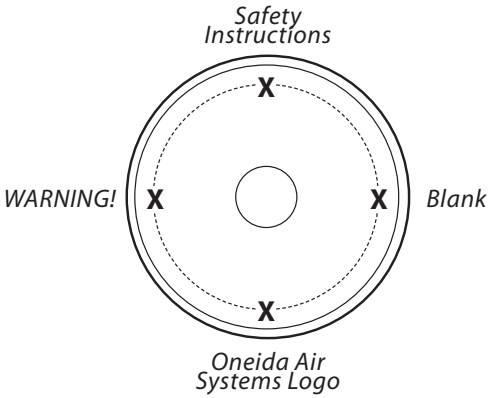


FIG. 4

4 Install the Caster Hardware Pack (H) to the Bucket (F). Install Wheels (H3) at three of the previously drilled hole locations using two Washers (H2), and one Nylock Nut (H1)[FIG. 5].

Note: To make sure the safety instructions are not covered up when attaching to your wet/dry vacuum, DO NOT install a caster into the hole on the "Blank" side [FIG. 4].

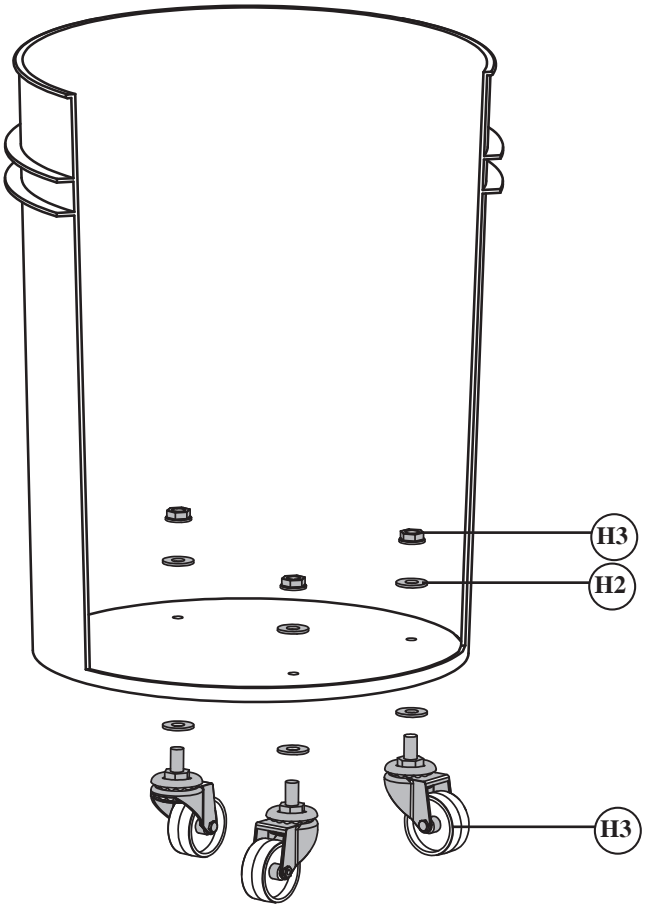


FIG. 5

5 Align the bucket to your wet/dry vacuum to locate the best placement for the Foam Spacer Block (G) [FIG. 6]. A Foam Block Template is provided on page 29 to assist when marking where the Foam Spacer Block will attach to your vacuum and Bucket. The Foam Spacer Block can be trimmed or cut to best conform to your vacuum's shape and size.

Note: Attach the Bucket to the side of your vacuum opposite its inlet.

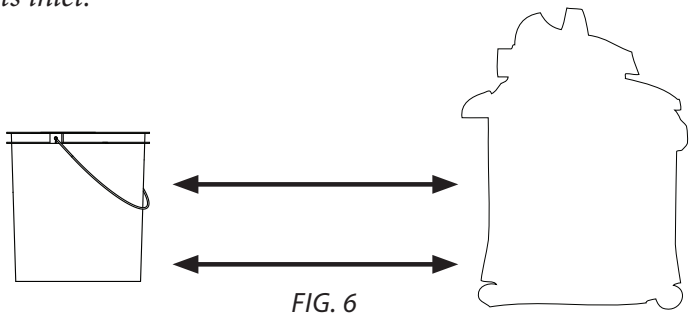


FIG. 6

6 Mark the Foam Spacer Block (G), Bucket (F), and wet/dry vacuum. Carefully drill two 1/4" holes at all marked locations [FIG 7].

Note: If you decide to detach the Bucket from your wet/dry vacuum; seal the holes with a bolt, washer, nut and silicone.

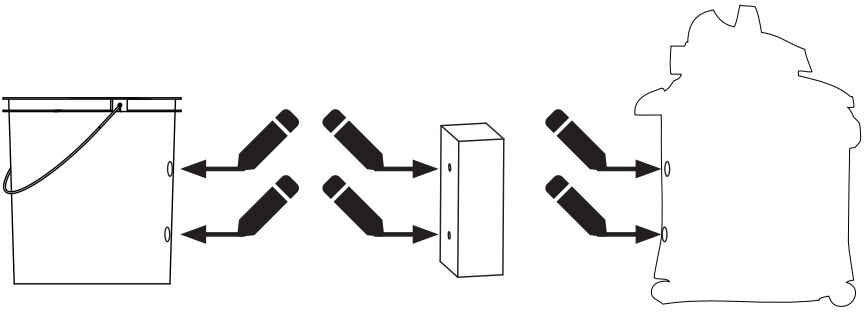


FIG. 7

7 Fasten your Bucket (F), Foam Spacer Block (G) and your wet/dry vacuum with two Carriage Bolts (C5), four Fender Washers (C4) and two Whiz-Lock Nuts (C6) as shown in [FIG. 8].

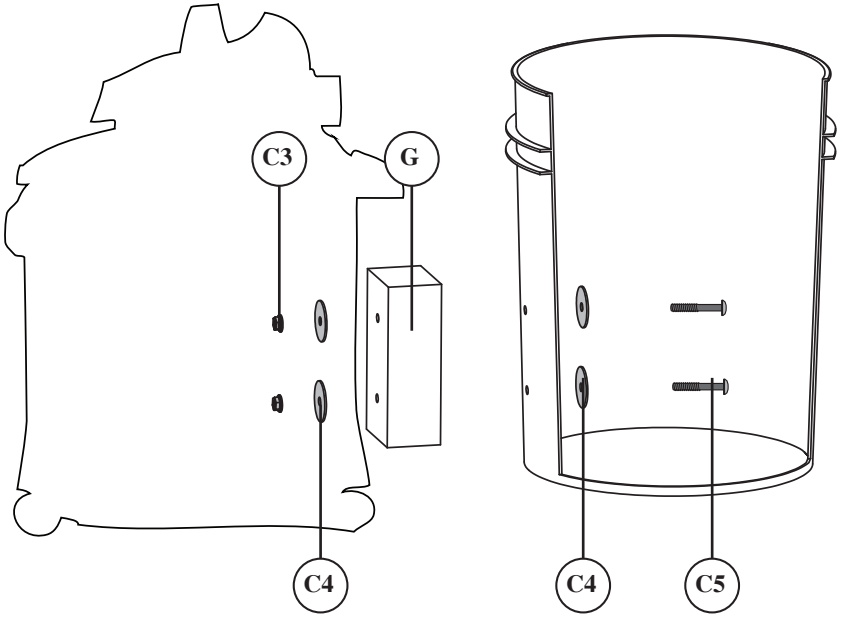


FIG. 8

Assembly Instructions (Continued)

8 Insert the previously assembled Dust Deputy into the side car Bucket (F) [FIG. 9].

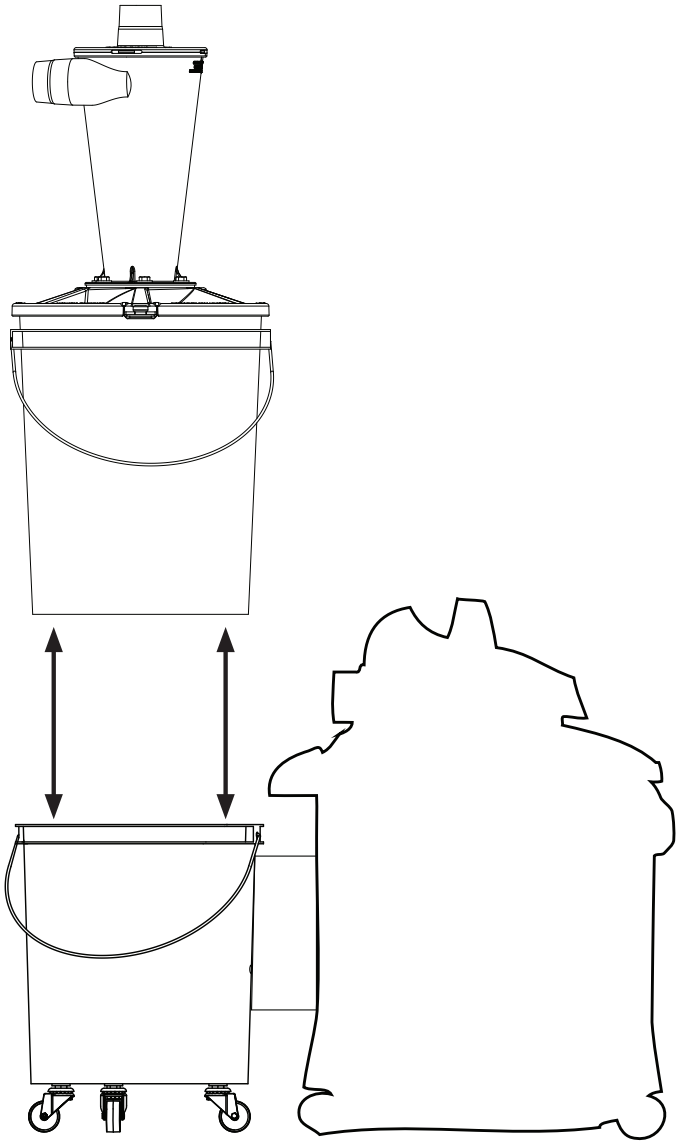


FIG. 9

9 Attach one Elbow (J) to the top outlet of the Cyclone (A) and affix Hose (I) to the tapered end of the Elbow. Attach the other open end of Hose to the second Elbow and attach to the inlet of your wet/dry vacuum.

Connect the Cyclone's inlet (sideways facing port) to your dust producing tool with your vacuum's hose or ductwork *[FIG. 10a].*

Note: If your vacuum hose is not tight on the inlet or it keeps pulling off, use the Clamp Band (K) and/or the two O-Rings (L) [FIG. 10b] [FIG. 10c].

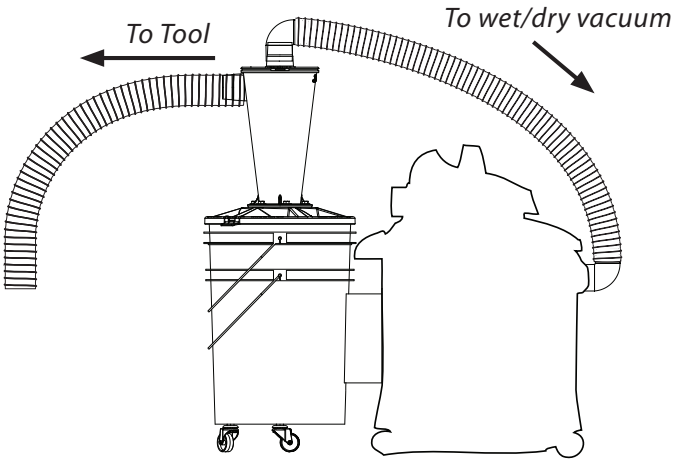


FIG. 10a

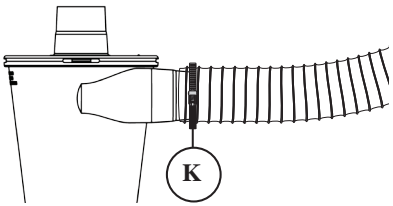


FIG. 10b

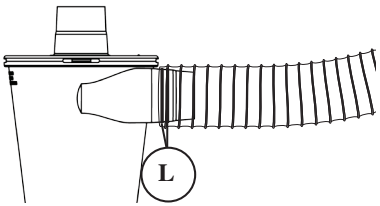


FIG. 10c

Alternate Sidecar Ideas

You are only limited by your imagination. Below are some alternate sidecar setups that customers have created.











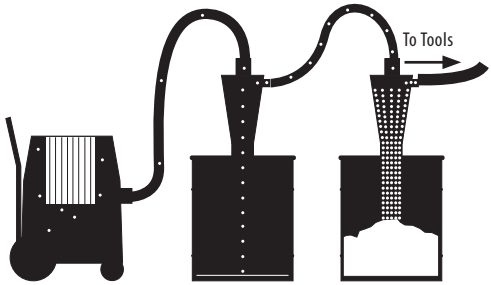


Attach in Series

Increases particle efficiency and helps in very fine dust situations.

Top View

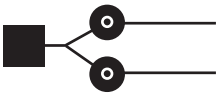


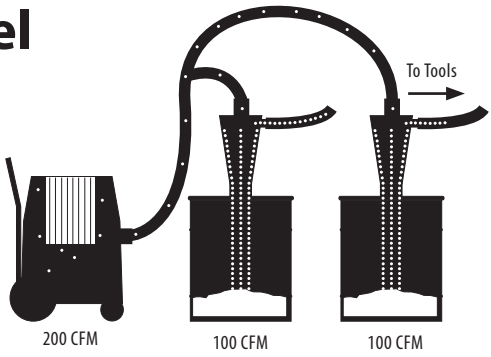


Attach in Parallel

Same particle efficiency but increases the CFM.

Top View

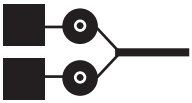


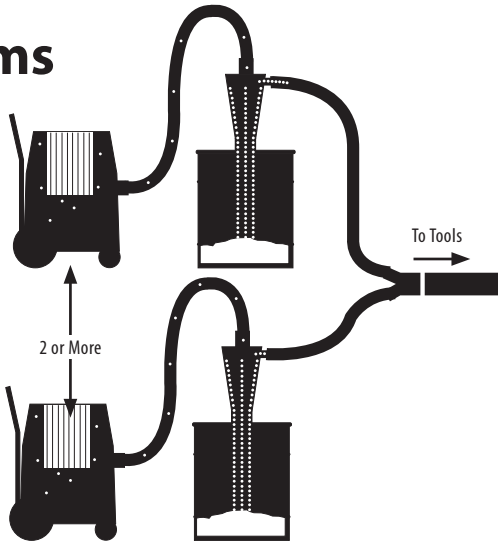


Multiple Vacuums

More CFM/airflow to larger tools such as Table Saw, Jointer, and Planer.

Top View





Optional Grounding Instructions

Recommended for fine dust situations or electronically sensitive applications.

1. Install the Metal Tape (D) to the Cyclone (A) so that the inlet, outlet, and flange are attached by a continuous, conductive path. The tape should wrap 1/4" around the edge of each opening [FIG 11].

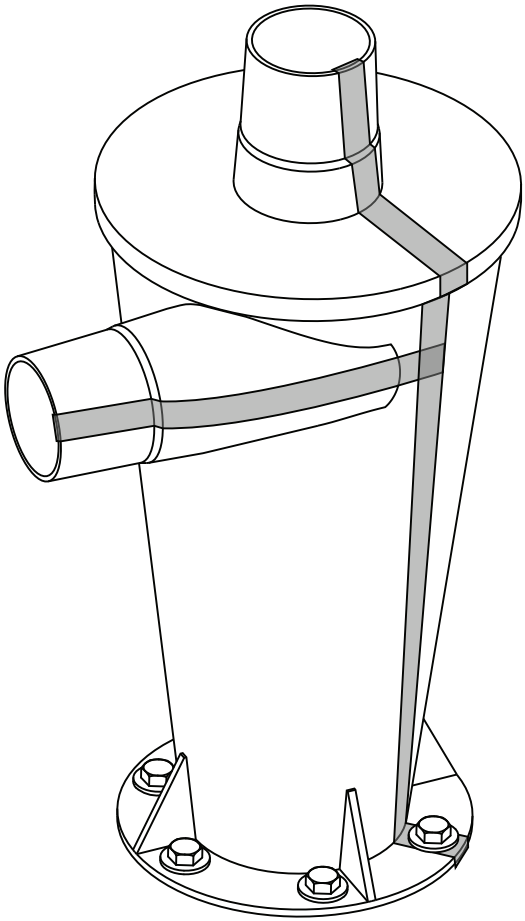


FIG. 11

Optional Grounding Instructions (Continued)

2 For added grounding, attach a self-supplied wire with a ring terminal on one end and a washer tied to the other end when installing one of the bolts in step 1 on page 6. The wire must be long enough for the washer to lie on the floor [FIG 12].

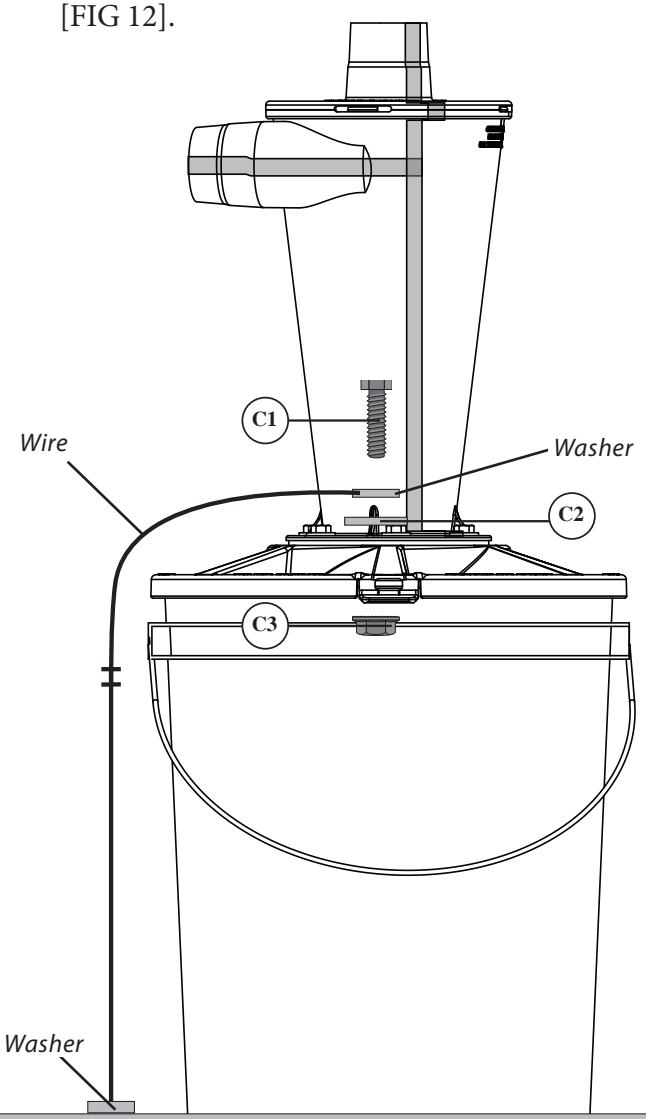


FIG. 12

Troubleshooting

PROBLEM	CAUSE	SOLUTION
Not separating well. (Only a tiny amount of dust should reach the vacuum)	Air leaks in the drum	1. Check for leaks between the lid and the dust drum. 2. Check for holes or leaks in the dust drum. 3. Check for leaks along the flange of the cyclone.
Material swirls in cyclone and won't drop into the dust container.		
Material swirls in cyclone and won't drop into the dust container.	Collecting large bulky material	1. Large, bulkier material might swirl. Restart or temporarily cut off air flow to drop material down.
Low Air Volume	System clogged	1. Clean vacuum and the vacuum filter per the manufacturer's specs. 2. Check all hose connections for a blockage in the hose.
Drum Collapsing	Blocked airflow	1. Ensure the end of the hose isn't blocked.
Hose Pulling off	Hose connections not tight	1. Due to the varied hose diameters, flexible couplers can be used. They are available at local hardware stores in the plumbing section. 2. Use a hose clamp. 3. Wrap the inlet and outlet of the Dust Deputy with a layer of electrical tape to increase the friction fit. 4. Secure hose with a sheet metal screw.

Troubleshooting Air Leaks

Even a small leak can significantly affect the overall separation performance of the cyclone [FIG. 13]. If you can't audibly pinpoint where the leak might be coming from, one of the simplest ways to check for air leaks is with a smoke test. You can usually find smoke test kits at any hardware store (typically in the HVAC section). Introduce smoke around every leak point. If you see the smoke being drawn into the system, you've found an air leak that needs to be sealed.

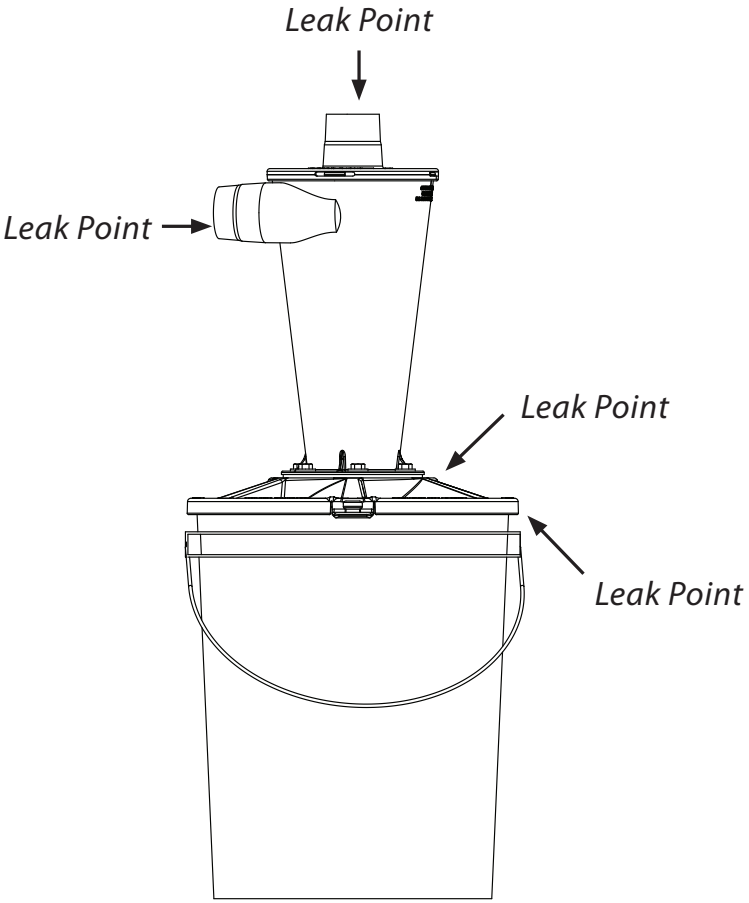


FIG. 13

FAQ

Where is the hardware for the Dust Deputy Deluxe?

The hardware is stored between the two buckets included in the kit.

What do I need to hook up my Dust Deputy to my vacuum?

Our Dust Deputy Deluxe Kit is ready to go right out of the box for most wet-dry vacuums. However, not all wet-dry vacuums are identical and may need an adapter to attach. Please visit our site for adapters at oneida-air.com/flex-hose/adapters.

You can also find adapters at your local hardware store. Look in the plumbing section for a sleeve or adapter. There are many different sizes and configurations.

Can I use this cyclone with smoldering or abrasive debris?

No. This cyclone is designed for use with light debris such as wood dust. For applications with highly abrasive or smoldering materials, we recommend our steel, Heavy-Duty Dust Deputy kits instead.

Does the Dust Deputy work with water?

The Dust Deputy can be used with nearly any wet or dry material to cyclonically separate waste from the air stream. Some particular viscous liquids may have trouble spinning inside the cyclone so use caution before sucking them up into your vacuum.

What is an anti-static material?

This term refers to the range of conductivity that a material has. Anti-static materials range from 10^{10}-10^{12} Ohms.

FAQ (Continued)

Will the Dust Deputy cyclone work if my tool has its own fan blower?

In most cases, yes - but the cyclone's efficiency will vary based on whether your vacuum is also turned on.

The Dust Deputy cyclone needs a consistent airflow rate to "spin" the dust out of the airstream; If your tool's fan blower is pushing air in while your vacuum is also sucking air out, this can disrupt the airflow rate and reduce the cyclone's separation performance.

In many cases, the fan blower on tools (such as planers) cannot be turned off. If that is the case for you, try collecting your dust with the vacuum turned off. In doing so you will be creating a positive pressure system as the tool's fan blower pushes air through the Dust Deputy cyclone. This method may not work with every vacuum.

What is the minimum air watts needed for the Dust Deputy?

Rather than worrying about what specs your vacuum needs (e.g. air watts, cfm, static lift, etc.), we at Oneida Air Systems have a much simpler approach - simply match the size of your vacuum's inlet to the size of the Dust Deputy cyclone's ports.

The Dust Deputy cyclone's tapered 2" ports are designed to work with any make and model wet/dry vacuum on the market today, regardless of horsepower, wattage, etc. Most vacuums will have an inlet ranging from 1.5" to 2.5" in diameter - perfect for our cyclone.

Keep in mind that every component installed onto your vacuum will have an effect on the system's suction power. That includes your hose, hose attachments, adapters, elbows, couplers, etc

FAQ (Continued)

Why are there two buckets?

One bucket has the cyclone mounted on it and is for containing the dust. The second bucket is attached to your vacuum as a "side car" bucket that holds the first bucket while in use. This allows you to easily slip the first bucket out of the second bucket allowing for fast and easy waste disposal.

If you choose to not attach the second bucket as a "side car" to your vacuum, you can use it as a "quick change" of buckets when emptying waste.

How do I get the gasket out of the cyclone?

Use needle-nose pliers or tongs if you cannot simply reach your hand into the bottom of the cyclone and pull it out. NEVER REMOVE THE TOP PORTION OF THE DUST DEPUTY!

Can I remove the top portion of the Dust Deputy?

No, it is not advised and can cause damage to the cyclone and is not covered under warranty.

The top portion of the Dust Deputy is detached. Is there a way to fix it?

Please contact our customer service department for assistance at 1-866-387-8822 or support@oneida-air.com

Is the Dust Deputy food-grade safe?

No, the raw material is rated food-grade safe, but the additional anti-static material and the factory it's manufactured in are not rated food safe.

FAQ (Continued)

What vacuum do you recommend for the Dust Deputy?

The Dust Deputy can be used with any make, model, or size wet/dry vacuum with an inlet ranging from 1.5" to 2.5" in size. We recommend that it has an airflow rating of at least 50 CFM to ensure optimum dust separation performance.

The elbows that come with the Dust Deputy Deluxe Kit measure out to an ID of 2.25" and an OD. If your wet-dry vacuum hose or inlet is a different size you will need an adapter as noted in the FAQ "What do I need to hook up my Dust Deputy to my vacuum?".

Can I use this upstream of a 650 CFM single stage dust collector?

No. The smaller Dust Deputy cyclone is intended for use with HIGH pressure and LOW airflow systems, such as wet/dry vacuums, with port sizes 2.5" diameter and smaller. It would not be suitable for a HIGH airflow, LOW pressure system (i.e. dust collector).

You would want to look at our line of Super Dust Deputy cyclones instead. Match the cyclone based on the size of your dust collector's intake.

Can I use the Dust Deputy with my 4" hose / port?

No. The standard Dust Deputy cyclones are designed for use with ports/hose that are 1" to 3" in diameter.

Connecting 4" tools to the Dust Deputy cyclone's 2" ports will result in significant losses in airflow and suction power. Larger ports (4" and larger) will instead require one of our Super Dust Deputy cyclones.

Accessories



2.5" x 5.5 Wire Reinforced Vacuum Hose

#AXD250066

- Crush-resistant, flexible hose with a smooth-wall inner lining that minimizes air resistance.



1.25" x 1.5" Hose Adapter Kit

#AKD000000

- Includes reducers, adapters, and O-rings for connecting smaller vacuum hoses to standard 2" Dust Deputy cyclone ports.



2.5 Tapered Static Conductive Vacuum Hose Elbow

#AXD600103

- For creating smooth 90 degree hose turns with minimal loss of air performance. Tapered on one end for easy friction-fit hose connections.



2.5" Vacuum Hose Coupler

#AXD225225

- Used for connecting separate lengths of 2.5" vacuum hose.
- Slips over 2.25" O.D. hose cuffs and features a inner beaded section to complete the friction fitting.

Accessories (Continued)



2.5" Turnkey Hose Clamp

#ACB360000

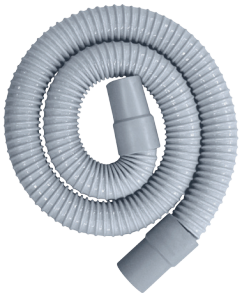
- Secures hose fitting in place to eliminate disconnects when pulling or flexing the hose.
- Fits hoses and port sizes from 2" to 2-1/2" in diameter.



2.5" to 2" Vacuum Hose Screw-Cuff

#VSHCEE001

- For connecting 2.5" I.D. to 2" O.D. hose fittings. Can also thread onto raw 2.25" O.D. vacuum hose.
- Constructed from soft, flexible PVC for lasting durability. .



2" x 10' Wire Reinforced Vacuum Hose

#AXD400000

- Crush-resistant, flexible hose with a smooth-wall inner lining that minimizes air resistance.



2" ID to 2.25" OD Vacuum Hose Adapter

#AXD200225

- Soft PVC hose fitting with smooth interior, ideal for making friction fit connections between our Dust Deputy cyclones and 2.5" vacuum hoses.

Accessories (Continued)



2" Vacuum Hose Coupler

#VSHNZZ200

- Efficiently couple together long lengths of flexible vacuum hose with a secure friction fit.
- Made from steel for rigidity, durability, and static grounding.



Viper Vacuum Scraper Paint Removal Tool

#AXS001160B

- Ergonomic hand scraping tool with high-textured grip and reversible, tungsten-carbide blade.
- Hollow handle fits 1-1/4" to 1-1/2" vacuum hoses.



Universal Dust-Free Router Hood

#AXH000001

- Collects router waste from both above and below the bit, virtually eliminating post-project cleanup.



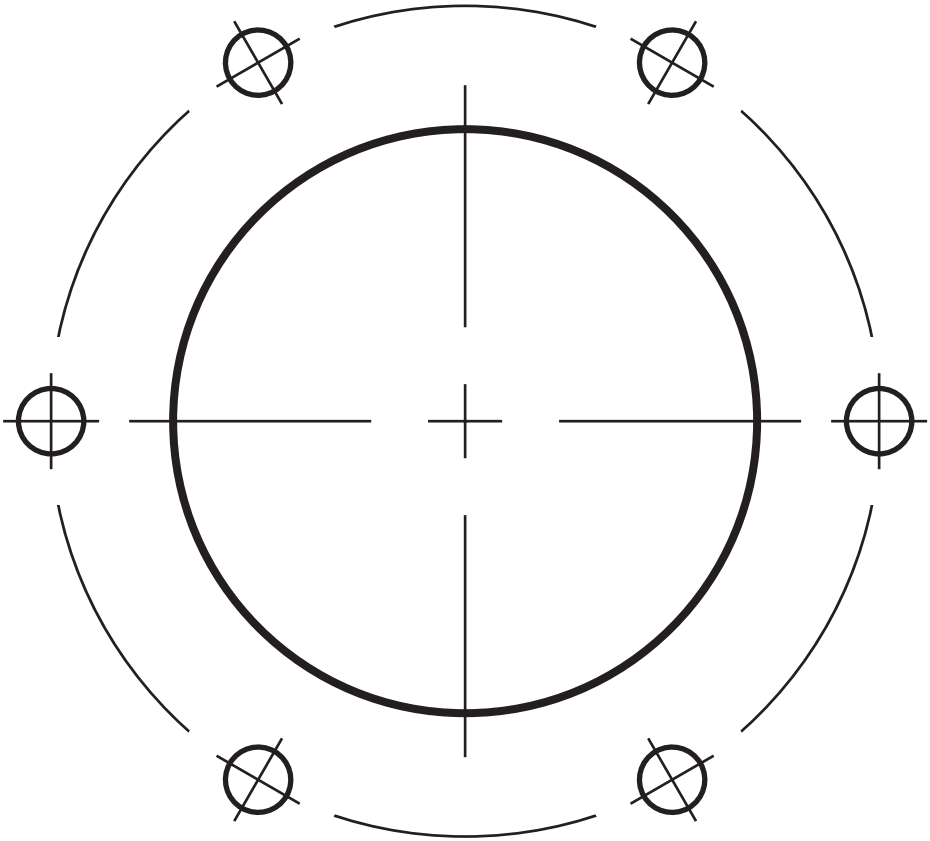
1.5" x 6.5' Dust Extraction Hose Whip

#AHE000001

- This highly flexible vacuum hose fits onto the dust collection ports of common portable power tools. Includes 2.5" rotating swivel cuff.

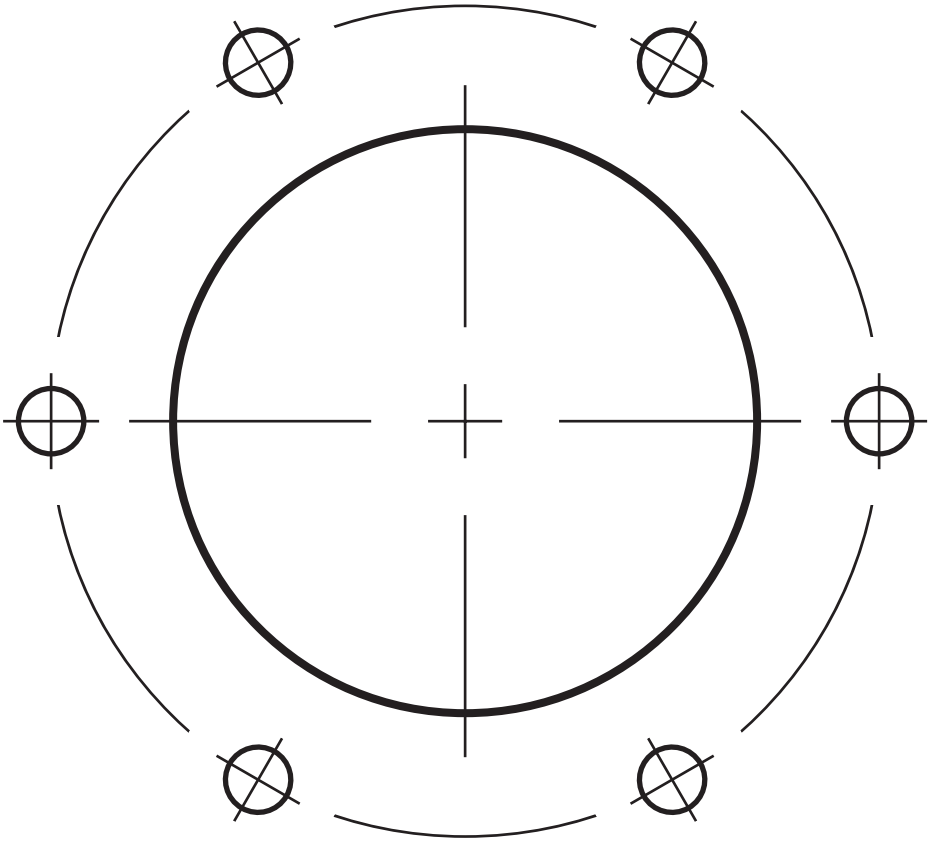
Dust Deputy Template

Use this template if you want to reinforce your lid.



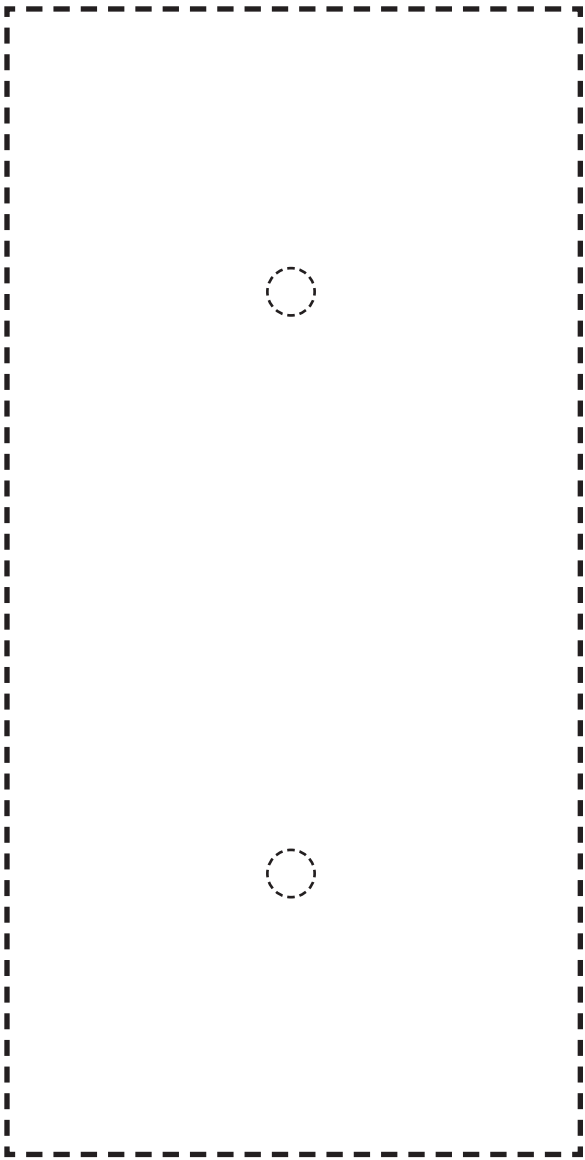
Mirrored Dust Deputy Template

Use this template if you want to reinforce your lid.



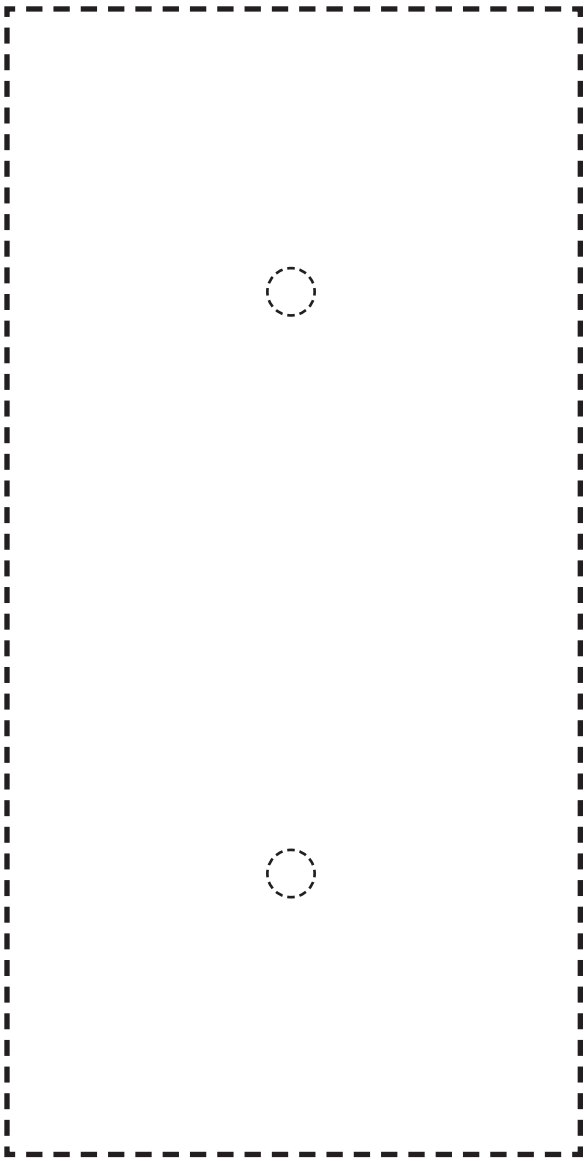
Foam Block Template

Cut out this template and use it to position where the block will be located on your shop vacuum. You can reposition the bolt holes if need be according to your vacuum's structure.



Mirrored Foam Block Template

Cut out this template and use it to position where the block will be located on your shop vacuum. You can reposition the bolt holes if need be according to your vacuum's structure.



Warranty Information

Limited Warranty – Activate online at oneida-air.com/warranty

Oneida Air Systems®, Inc. (OAS) warrants the Dust Deputy for a period of 1 year, 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.



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

Thank you for your purchase of this American made product!

Regardless of where you purchased your Oneida Air Systems' product, 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

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