



*The* Industry Leader in Dust Collection

# Dust Deputy D.I.Y. Dust Deputy D.I.Y. SD Dust Deputy D.I.Y. Plus Cyclone Separator

# AXD001004

# AXD001004SD

# AXD001004HE



U.S. Pat.  
6833016  
RE40048  
7282074

# System Start-Up Information

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

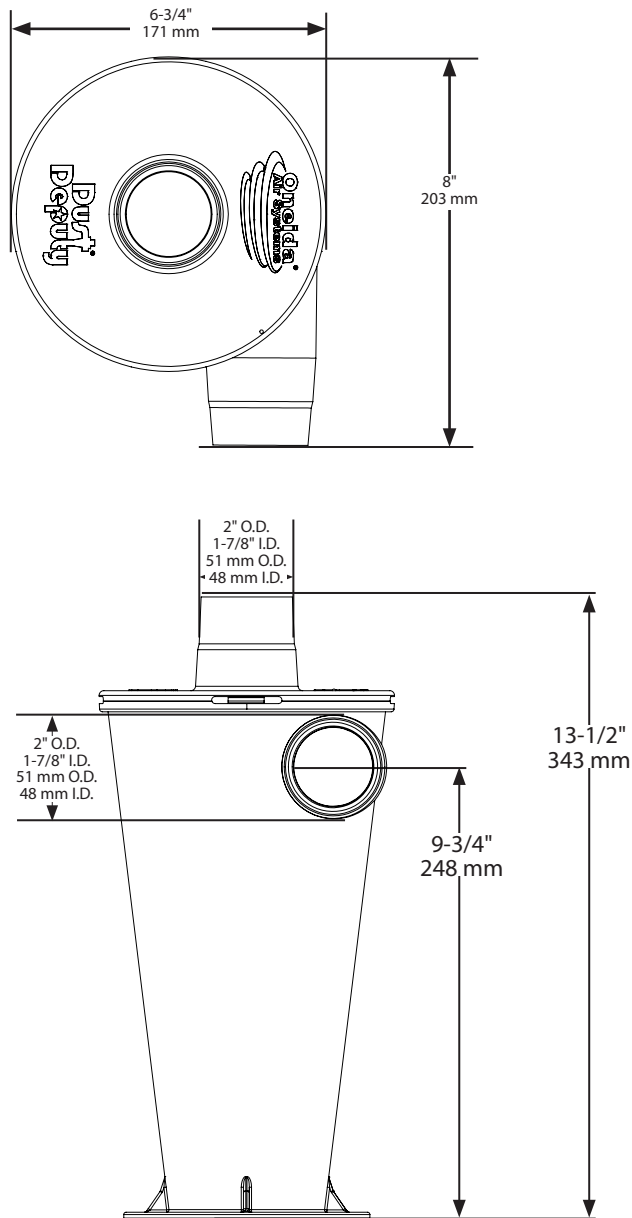
1. Do not vacuum anything that is burning or smoking, such as cigarettes, matches, hot ashes, or any hot substance!
2. Do not vacuum (or use this cyclone near) flammable or combustible liquids, gases, or explosive dusts, such as gasoline or other fuels, lighter fluid, cleaners, oil-based paints, natural 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 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 GUIDE LINES.**

# System Dimensions

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



# System Contents

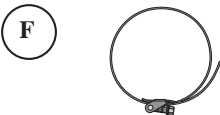
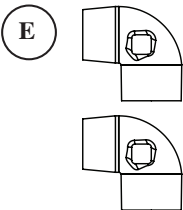
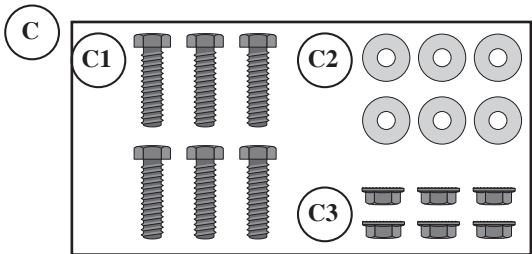
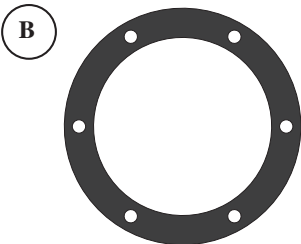
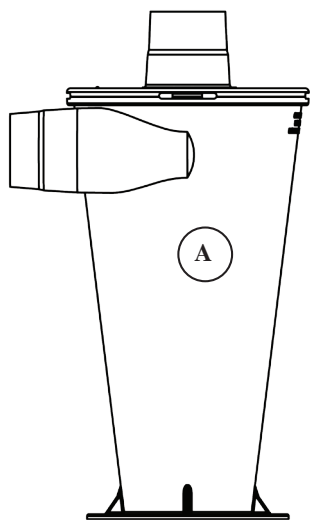
ID	Part number	Part description	Qty
A	VXC110002	Anti- Static Cyclone	1
B	AXG000004A	Cyclone Gasket	1
C	AHX000016	Cyclone Hardware Pack	1
C1	AFS015920	1/4" - 20 x 3/4" Hex Head Bolt	6
C2	AFW025000	1/4" Flat Washer	6
C3	AFT000005	1/4" Whiz-Lock Nut	6
INCLUDED ONLY WITH AXD001004SD			
A	VXC110009	Static Dissipative Cyclone	1
INCLUDED ONLY WITH AXD001004HE			
D	AXD200036	2" x 36" Hose	1
E	AXD600103A	2" Elbow	2
F	ACB320000	Clamp Band	1
G	AF0990225	O Ring	2

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

## You will need the following:

- Air tight dust container and lid
- Power Drill
- 5/16" Drill Bit
- Hole Saw or reciprocating saw
- Wet/Dry Vacuum
- Vacuum Hose
- Vacuum hose adapters

# System Contents (Cont.)



# Assembly Instructions

1

Draw 3" diameter circle on your supplied lid. Carefully cut out 3" hole in lid. Use 5/16" drill bit to drill bolt holes.

*Note: Use the base of the Cyclone (A), Gasket (B), or the Dust Deputy Template on page 17 for reference.*

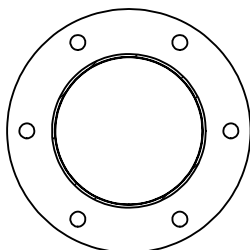


FIG. 1

2

Turn Cyclone (A) upside-down. Place Gasket (B) on the base of Cyclone (A) and align all the holes. Place the topside of the supplied lid against Gasket (B) and align all the holes. Secure Cyclone (A), Gasket (B) and lid together using six Bolts (C1), six Washers (C2), and six Whiz-Lock Nuts (C3) as shown in [FIG. 2].

*Note: Thoroughly tighten hardware to eliminate air leaks.*

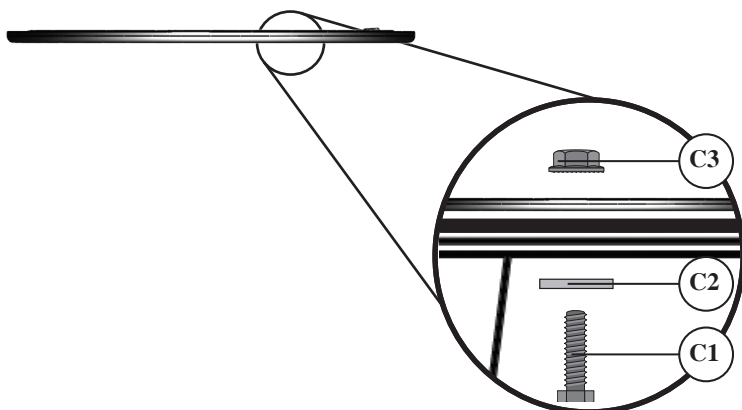


FIG. 2

## Assembly Instructions (Cont.)

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3

Put Cyclone (A) and lid on top of your dust container and seal it airtight.[FIG. 3].

*Note: We recommend a drum or container that will withstand the vacuum pressure (at least a 90 mil side thickness) otherwise the container may collapse when in use. The larger the container, the sturdier the walls must be to prevent collapse. Oneida Air Systems has many container options available at [oneida-air.com](http://oneida-air.com).*



FIG. 3

## Assembly Instructions (Cont.)

4

If you purchased the DIY Plus (#AXD001004HE), continue to step 5.

Connect the Cyclone's (A) inlet (sideways facing port) to your dust producing tool with your vacuum's hose or ductwork. Connect Cyclone's outlet (upwards facing port) to your vacuum [FIG. 4] with hose or ductwork.

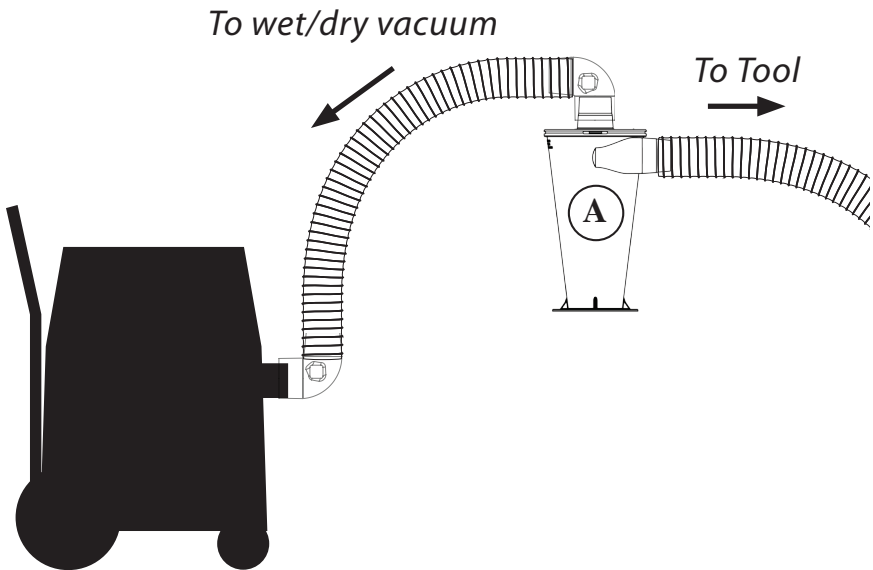


FIG. 4



## Assembly Instructions (Cont.)

5

If you did not purchase the DIY Plus (#AXD001004HE), continue to step 6.

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

Connect the Cyclone's (A) inlet (sideways facing port) to your dust producing tool with your vacuum's hose or ductwork [FIG. 5a].

*Note: If your vacuum hose is not tight on the inlet or it keeps pulling off use the Clamp Band (F) and/or the two O-Rings (G) [FIG. 5b] [FIG. c].*

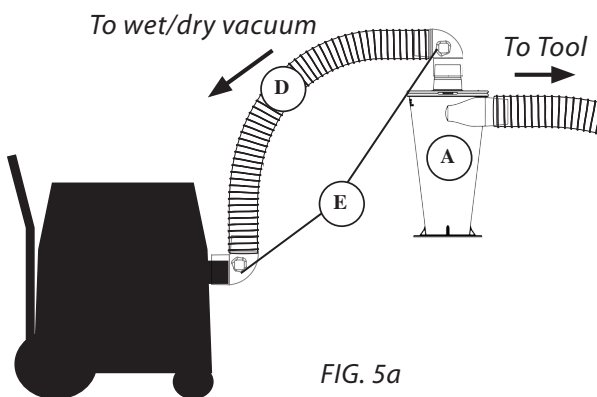


FIG. 5a

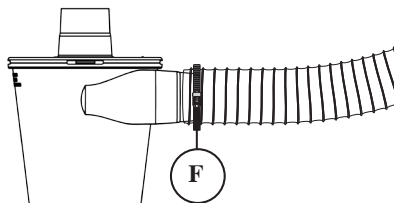


FIG. 5b

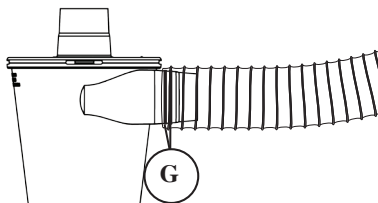


FIG. 5c

## Assembly Instructions (Cont.)

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6

Make sure there are no air leaks at the connections. Review [FIG. 6] for common leak points.

*Note: Any air leak in the lid or drum will affect separation performance. Make sure to check your dust drum frequently so you do not overfill it.*

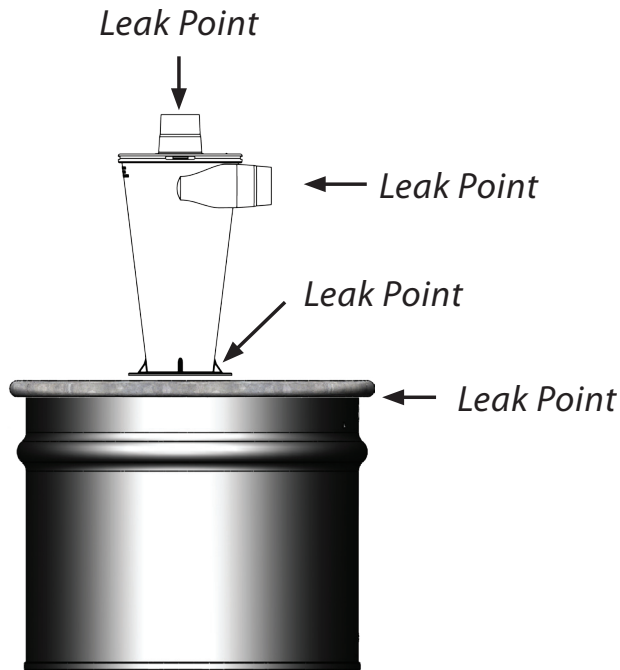


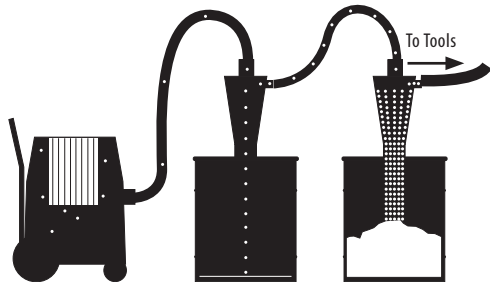
FIG. 6

# Adding Cyclones to Improve Performance

## Attach in Series

Increases particle efficiency and helps in very fine dust situations.

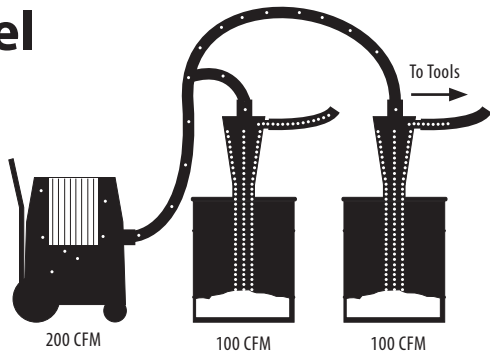
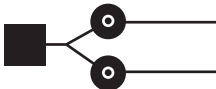
Top View



## Attach in Parallel

Same particle efficiency but increases the CFM.

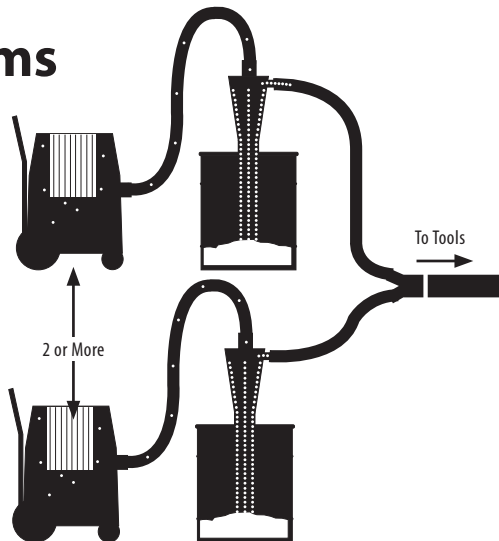
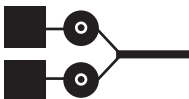
Top View



## Multiple Vacuums

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

Top View

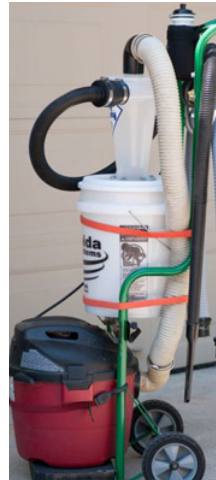


## Additional D.I.Y. Ideas

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**You are only limited by your imagination. The lid must be sealed and the container must stand up to your vacuum's suction pressure without collapsing.**

### Examples of DIY setups

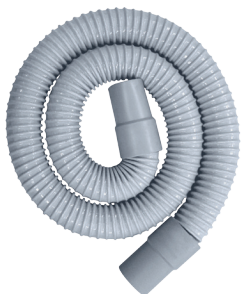


An example of a plywood top that had a groove routed out of it to fit the bucket rim and accommodate the gasket. For mobility and additional stability, you can make a plywood platform to fasten your bucket to. We recommend 5 casters for the best stability.



# Accessories

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## 2" x 10' Wire Reinforced Vacuum Hose

#AXD400000

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



## 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.



## 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.

# Accessories

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## 2.5" x 5.5 Wire Reinforced Vacuum Hose

#AXD250066

- Crush-resistant, flexible hose with a smooth-wall inner lining that minimize 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.



## 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.

# Troubleshooting

PROBLEM	CAUSE	SOLUTION
Not separating well. (Only a tiny amount of dust should reach the vacuum)	Air leaks in the drum	<ol style="list-style-type: none"><li>1. Check for leaks between the lid and the dust drum.</li><li>2. Check for holes or leaks in the dust drum.</li><li>3. Check for leaks along the flange of the cyclone.</li></ol>
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	<ol style="list-style-type: none"><li>1. Large, bulkier material might swirl. Restart or temporarily cut off air flow to drop material down.</li></ol>
Low Air Volume	System clogged	<ol style="list-style-type: none"><li>1. Clean vacuum and the vacuum filter per the manufacturer's specs.</li><li>2. Check all hose connections for a blockage in the hose.</li></ol>
Drum Collapsing	Blocked airflow	<ol style="list-style-type: none"><li>1. Ensure at least one gate is open during operation of your dust collector.</li></ol>
Hose Pulling off	Hose connections not tight	<ol style="list-style-type: none"><li>1. Due to the varied hose diameters, flexible couplers can be used. They are available at local hardware stores in the plumbing section.</li><li>2. Use a hose clamp.</li><li>3. Wrap the inlet and outlet of the Dust Deputy with a layer of electrical tape to increase the friction fit.</li><li>4. Secure hose with a sheet metal screw.</li></ol>

# Warranty Information

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

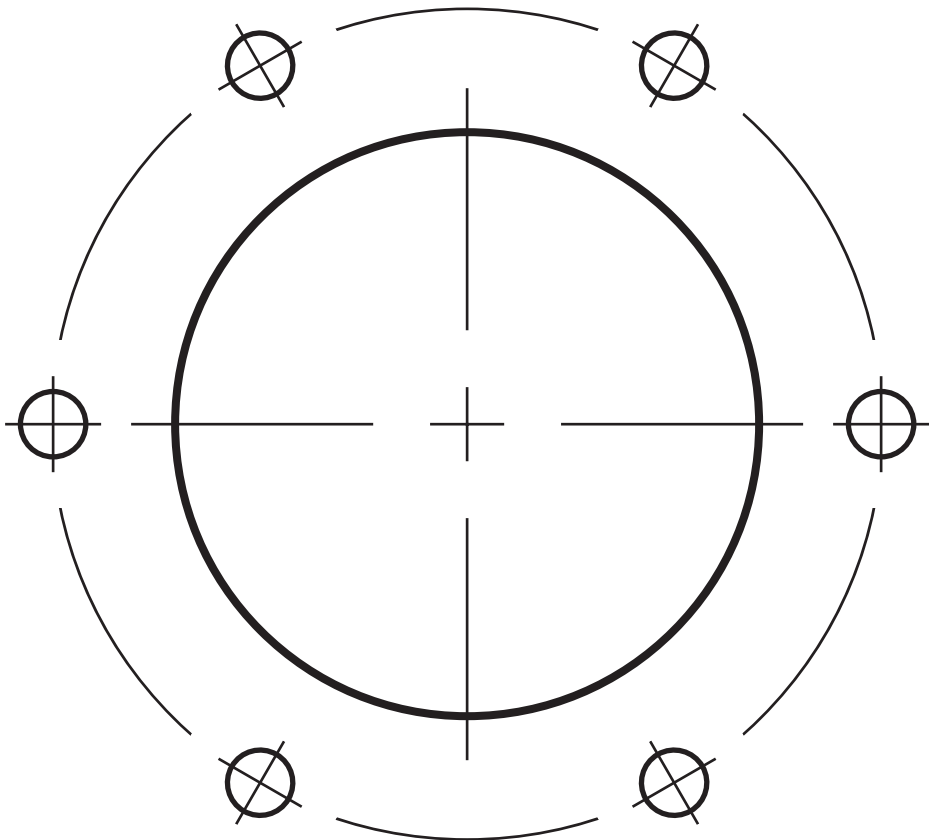
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Oneida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



# Dust Deputy Template

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Use this template to prepare your lid for installation of the Dust Deputy.









*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](mailto:support@oneida-air.com)**

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

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