Super Dust Deputy
5” Cyclone
6” XL Cyclone

# AXD002030A
# AXD002030AXL

U.S. Patent:
#7282074B1,#7282074C1,
#D703401
## System Contents

<table>
<thead>
<tr>
<th>ID</th>
<th>Part number</th>
<th>Part description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>VXC160001A</td>
<td>Cyclone with 5&quot; inlet</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>VXC180001A</td>
<td>Cyclone with 6&quot; Inlet</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>RGZ125250</td>
<td>1/8&quot; Thick x 1/4&quot; Neoprene Gasket</td>
<td>2 ft.</td>
</tr>
<tr>
<td>C</td>
<td>AFS015920</td>
<td>1/4-20 X 3/4&quot; Hex Head Bolt</td>
<td>6</td>
</tr>
<tr>
<td>D</td>
<td>AFW025000</td>
<td>1/4&quot; Flat Washer</td>
<td>12</td>
</tr>
<tr>
<td>E</td>
<td>AFT000005</td>
<td>1/4&quot; Whiz-Lock Nut</td>
<td>6</td>
</tr>
<tr>
<td>F</td>
<td>DA0050000</td>
<td>5&quot; Adapter</td>
<td>1</td>
</tr>
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</table>

INCLUDED ONLY WITH SUPER DUST DEPUTY (AXD002030A)

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

**You will need the following:**

- Phillips Head Screwdriver
- 5/16" Wrench
- Two 7/16" Wrenches
- 1/2" Wrench
- Adjustable Wrench
System Contents (Cont.)
AXD002030A
Nominal dimensions shown. Dimensions subject to slight variations in manufacturing.
AXD002030AXL
Nominal dimensions shown. Dimensions subject to slight variations in manufacturing.
Assembly Instructions

1. Apply Gasket (B) around the discharge hole of the Cyclone (A), making sure that the Gasket goes inside the bolt holes and around the inlet hole [FIG. 1].

   *Note: Make sure ends of Gasket butt together and there are no gaps. Dust collection systems cannot operate effectively if there isn’t a complete seal. There must be NO air leaks.*

![FIG. 1](image1)

2. Turn Cyclone (A) upside-down and align with the drum lid. Secure to the drum lid with six Hex Bolts (C), twelve Flat Washers (D), and six Whiz-Lock Nuts (E) [FIG. 2].

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

![FIG. 2](image2)
3 Put Cyclone (A) and lid on top of your dust container and seal it airtight.[FIG. 3].

FIG. 3
If you purchased the Super Dust Deputy XL (#AXD002030AXL) proceed to step 5.

Connect the Cyclone’s inlet (sideways facing port) to your dust producing tool with hose or ductwork. The Super Dust Deputy’s (#AXD002030A) inlet is designed to connect to flex hose. To connect to ductwork, attach the 5” Adapter (F) over the cyclone’s inlet [FIG. 4].

*Note: To connect 4” hose to the Super Dust Deputy, Oneida Air Systems offers a specific reducer (#DRL001205) to provide for easier installations. Standard duct reducers can attach when connected to the 5” Adapter (F).*

![Diagram of Cyclone connection](image)
If you purchased the Super Dust Deputy (#AXD002030A) proceed to step 6.

Connect the cyclone's inlet (sideways facing port) to your dust producing tool with hose or ductwork. The Super Dust Deputy XL's (#AXD002030AXL) inlet is designed to accept crimped ductwork fittings [FIG. 5].

*Note: To connect 6" hose to the Super Dust Deputy XL's inlet, Oneida Air Systems offers a specific adapter (#DAO060000) to provide for easier installations.*

![FIG. 5](image-url)
Connect the Cyclone’s outlet (upwards facing port) to your collectors’ fan blower. The Super Dust Deputy (#AXD002030A) and the Super Dust Deputy XL’s (#AXD002030AXL) outlets are designed to accept crimped ductwork fittings [FIG. 6].

Note: To connect 6″ hose to the Super Dust Deputy XL’s outlet, Oneida Air Systems offers a specific adapter (#DAO060000) to provide for easier installations.
Make sure there are no air leaks at the connections. Review [FIG. 7] on common leak points.

*Note: Make sure to check your dust drum frequently so you do not overfill it.*
## Troubleshooting

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<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
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| Not separating well. (Only a tiny amount of dust should reach the collector). | Air leaks in the drum | 1. Make sure the lid of the dust drum is in place and well seated.  
2. Check for any damage to the foam seal of the lid.  
3. Ensure the drum lid clamp is tight.  
4. Check for holes or leaks in the dust drum.  
5. Check for leaks along the flange of the cyclone.  
6. Check for leaks on the outlet’s shoulder connection. |
| 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. |
| 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 collector’s filter per the manufacturer's specs.  
2. Check all hose connections for a blockage in the hose. |
| Drum Collapsing | Blocked airflow | 1. Ensure at least one gate is open during operation of your dust collector. |
### Accessories

**6" Super Dust Deputy Hose Adapter**  
#DAO060000  
- Allows for easier flex hose connections over the cyclone's top port  
- Outer diameter of 5.85” (3” total height)

**Reducer**  
#DRL  
- Raw on both ends and available in a variety of pipe diameters. Raw ends can be crimped when specified by customer  
- Recommended to be crimped going into the Super Dust Deputy inlet and outlet

**Clear Reinforced Flex-Hose**  
#DHF  
- Extremely durable and crush resistant  
- Hose is raw on both ends and is available in a variety of diameters and in 5’ increments

**3"-6" Quick-Release Hose Clamp**  
#ACB060000  
- Secures hose fittings in place to eliminate disconnects when pulling or flexing the hose  
- Fits hoses and port sizes from 3” to 6” in diameter
Accessories (Cont.)

17 Gal Steel Drum Kit
#SEK170601
- Includes reinforced steel drum, steel lid with pre-cut cyclone mounting holes, and locking-lever ring clamp

SDD Cyclone Steel Drum Lid
#SEX355506
- Ships with pre-cut holes for installing the Super Dust Deputy cyclones
- Ideal for DIYers creating their own dust collection system

35 or 55 Gal. Steel Drum
#SES350000 and #SES550000
- Reinforced steel construction with enamel painted exterior for long lasting durability
- Designed for use with dry waste only
- Includes locking-lever ring clamp

35 or 55 gal Drum Liner Bag Holders
#ABX000035 and #ABX000055
- Keeps liner bags in place during operation.
- Features several finger holes for easy lifting and removal from the liner bag.
Accessories (Cont.)

35-55 Gal. Heavy-Duty Plastic Liner Bags
#VAB251555
- Lines the inside of large (35 to 55 gallon) containers for fast and simple waste disposal
- Heavy thickness protects against tearing from wood chips or other sharp debris

Angle Brace Support Kit for Super Cyclones
#AHX000004
- Provides additional stability for Super Dust Deputy cyclones
- Ideal for configurations where the drum will be moved around the shop

Dust Collector HEPA Cartridge Filter Upgrade Kit
#FXK011820
- Upgrade your single-stage dust collector with a retrofit filter that can capture even the finest of dusts

External 13" x 39" Super Cartridge Filter Retrofit Kit
#FXK010039
- Includes a wide-pleated, spunbond polyester cartridge filter, a 7" inlet adapter, quick-release dust pan, and pre-drilled holes for hanging wires
Choose a drum and lid [FIG. 8] that is:

a. Sealed Air Tight - If there are any cracks or leaks present in the drum, lid, or anywhere in your custom assembly, it will create a back draft that can significantly reduce the cyclone’s ability to separate.

b. Built With A Strong, Rigid Structure - Your drum and lid should be reinforced or rigidly built to avoid caving in due to the air pressure and to support the weight of the cyclone.

*Note: The suction provided by your dust collector will hold down the lid when in use (if your seal is air-tight) but we recommend using a sealing agent (gasket, caulk or foam) [FIG. 9] and simple latches for added security [FIG. 10].*
Mount flex hose to the bottom of the Cyclone instead of mounting the Cyclone directly to the lid. The components you would need to complete this are shown in [FIG. 11]:

a. (x2) 5" Collared Flange (DLX050000) or 6" Collared Flange (DLX060000)
b. (x2) Quick-Release Hose Clamp (ACB060000)
c. 5" (DHF050500) or 6" dia. (DHF060500) Flex Hose. 5’ is the shortest length we offer. If needed, you can purchase longer lengths for your setup.
d. Lid (we carry blank lids for our drums)
e. Drum (we carry steel drums)
f. Gasket/silicone for an air tight seal
g. A wall mount or stand to support the cyclone and to easily remove the lid when emptying your drum.

[FIG. 12].

Note: The collared flanges may not fully align with the cyclone’s hole pattern. You may need to bore out holes or punch out holes for the 4" Super Dust Deputy Deluxe Kit.
Upgrade your unit’s filtration by either

a. Replacing the cloth bag filter on your single stage collector with our HEPA Cartridge Filter Upgrade Kit (FXK011820) [FIG. 13]; or

b. Connecting our Super Cartridge Filter (FXK010039) to your collector’s fan housing and then mounting it to the Super Dust Deputy cyclone [FIG. 14].

Recommended components:

i. Square to Round Adapter. Call us at 866-387-8822 Mon-Friday, 8am-5:30pm EST for help choosing a compatible adapter.

ii. Adjustable Elbow (DEA900700)

iii. Super Cartridge Filter Retrofit Kit (FXK010039)
Use metal instead of rigid PVC (plastic) ducting. Scientists, engineers, and industry experts who work in insurance, human safety, woodworking, and equipment manufacturing consistently agree that plastic pipe (PVC) should not be used in material (e.g. wood waste) conveying collection.

- Metal systems are much easier to disassemble and change as your shop evolves.
- Static sparks arcing from the PVC pipe can jolt, injure or startle personnel working on dangerous equipment. Remember the shock from a shop-vacuum hose and try to imagine what a dust collector can do.
- All commercial codes require metal pipe for wood dust.

Oneida Air Systems offers metal pipe, because it provides substantially better performance, and proper fittings are readily available [FIG. 15].
Rely on the dust collection experts for guidance. Due to technical limitations, we do not offer our consulting services for shops using third-party dust collectors. Unlike Oneida Air Systems, other manufacturers do not provide real-world airflow performance data. Without that information, we cannot reliably size a ducting system for those dust collectors.

The Super Dust Deputy was designed initially to be hooked up to flex hose connections no longer than 20’. Metal duct may allow for longer runs, but it all varies based on the power of your blower/single stage collector.

Recommended best practices for ductwork:

a. Minimize the number of bends. See [FIG. 16] for a recommended drop setup.

b. Centrally locate the collector and keep ductwork runs to a minimum. Locate your highest air requirement machines closest to the collector. [FIG. 17]

c. Use fittings designed for dust collection, not HVAC fittings. [FIG 18]:
   i. 45 deg. wyes instead of 90 deg. tees.
   ii. Long radius 90 deg. elbow instead of short radius to create a gentle sweep.

d. Seal all ductwork with silicone, duct tape, or metal tape. Well sealed ductwork will ensure you have maximum air available. All joints on adjustable elbows should be sealed after installation.

Further education is available at oneida-air.com/blog/category/dust-collection
Tips and Tricks (Cont.)

To dust collector

FIG. 16

90 deg. tee vs. 45 deg. wye

Short radius vs. long radius

FIG. 17

FIG. 18
Warranty Information

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

Oneida Air Systems®, Inc. (OAS) 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.

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.
Recommended Products

**Router Hood**

#AXH000001

- Universal design fits nearly any portable fixed-base or plunge router
- 1.5" O.D. swiveling hose connection includes quick-release "seat-belt style lock.

**Viper Scraper**

#AXS001160B

- Hollow handle safely conveys hazardous scraping waste to the wet/dry vacuum for containment and disposable.
- Includes a reversible tungsten carbide blade.

**Mini-Gorilla Portable Cyclone Dust Collector**

#XXPM010100H

- Rated as one of the Top Tools of 2017 by Fine Woodworking Magazine.
- Compact, lightweight system.

**Supercell 14 Gal. High-Pressure Dust Collector**

#XSK000014

- 10x higher suction power than standard dust collectors
- Excels at collecting dust from all tools with 1" to 5" dia. ports
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!