

# Pro 1500 / Pro 2000 Dust Collector



9\_11

## *Owner's Manual*



Shown with  
optional Stand.

Models may vary slightly  
in appearance.

# 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!**

## Table of Contents

*Proudly Made  
in the USA*



**Page**

I.	System Start-Up Information	2
II.	Configurations	3
III.	General Specifications & Fan Performance Curve	4
IV.	Dimensions	5
V.	General Assembly	6
VI.	General Assembly Instructions	7
VII.	General Assembly Instructions	8
VIII.	Bracket Assembly	9
IX.	Stand Assembly	10
X.	Drum Assembly	11
XI.	Filter Assembly	11
XII.	Filter Maintenance	12
XIII.	Directions for Cleaning Filter	13
XIV.	Filter Efficiency Gauge Mounting Instructions	14
XV.	Fan Motor Maintenance	15
XVI.	Remote Wiring Diagram	16
XVII.	Accessories	17
XVIII.	Troubleshooting	18
XIX.	Fire Hazards - Read Before Installing System	19
XX.	Terms & Conditions	20

# I. System Start-Up Information

1. Read the installation and maintenance instructions as well as the recommended safety practices in this manual
2. Install ductwork completely before operating collector:
  - A.) Seal ductwork with silicone sealant or duct tape.
  - B.) Have dust bin in place and sealed.
3. Motor is pre-wired at the factory. If magnetic starter trips circuit, check the following:
  1. Dust drum securely fastened to discharge of cone?
  2. Is ductwork installed at cyclone inlet?

## Caution

The Dust Collector & Fan / Blower is heavy! Handling and installation should always be performed by experienced and trained personnel who have experience with rotary 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.

## Warning

Do not operate Fan / Blower unless Fan Housing is attached to Cyclone body and Dust Drum is in place. Dust Drum and Cyclone must be in place and sealed or motor will overheat!

## Warning

If amperage is too high - shut down immediately! See Troubleshooting section.

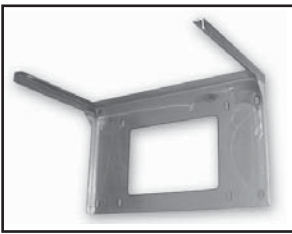
## II. Pro Configurations

### **Caution:**

If exhaust air is vented outside you must provide make up / return air.  
Flue gases (carbon monoxide) can be drawn into the shop from furnaces, water heaters or other appliances.

### **1. External Cartridge Filter - Silencer Included with Filter**

- Cartridge Filter Media  
GE Certified (H-12) HEPA media. MERV 16+ rated.
- Pat. Pend. Flame Guard Arrestor



Wall Bracket



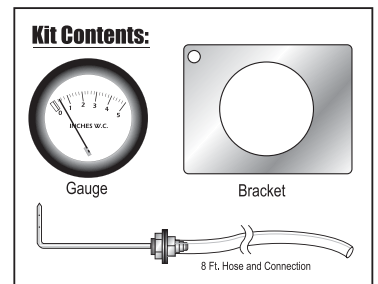
Included Silencer  
Do Not Remove  
Pat. Pending  
11/313,728

**Silencer  
included  
w/ Filter**

Shown with optional  
Stand.



Included Square to Round Inlet

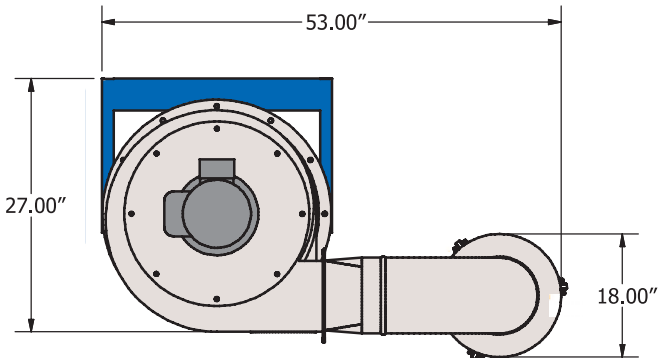
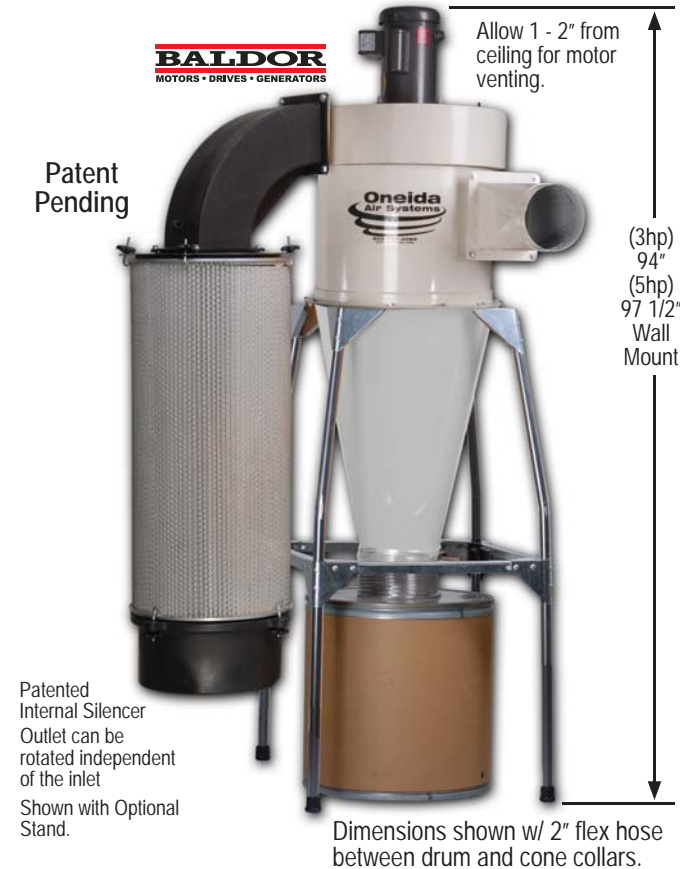


Included Filter Efficiency Gauge



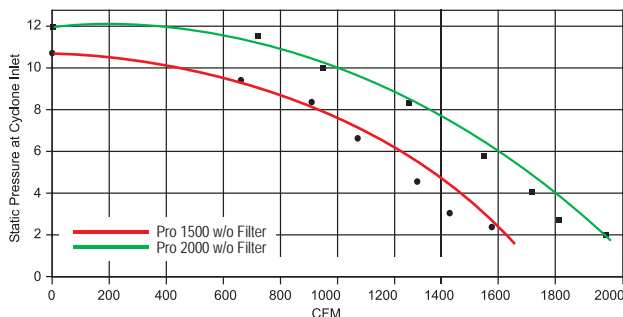
Included Magnetic Starter

# III. General Specifications & Fan Performance Curves



- ▶ (3hp) 1593 CFM @ 2.3 SP w/ Filter - Actual Working CFM
- ▶ (5hp) 1973 CFM @ 2.3 SP w/ Filter - Actual Working CFM

Pro Series 1500 & 2000 System Performance Curve - CFM vs. SP\*



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

**System Performance** ▶ (3hp) 2548 CFM - Free Fan Rating  
▶ (5hp) 2959 CFM - Free Fan Rating **Actual Working CFM - Fan Curves - See below.**

**System Dimensions** ▶ Ht. w/ 35 Gal. Drum: (3hp) 94" / (5hp) 97.5" Wall Mount  
▶ Footprint w/ Ext. Cart.: 27" x 53"  
▶ Inlet Diameter: Full Welded (3hp) 7" or (5hp) 8" w/ Neutral Vane  
▶ Outlet: Rectangle (Square to Round Adapter included)  
▶ Weather-Proof Cyclone and Fan Blower  
▶ Seam-Welded Cyclone Body

**Integral Fan Blower** ▶ U.S. Made Baldor / 3hp 1 & 3 Ph. - 5hp 1 & 3 Ph.  
▶ TEFC Motor / Insulation Class F  
▶ Voltage: (3hp) 1 Ph. 230V / 3 Ph. 208-230/460V  
(5hp) 1 Ph. 230V / 3 Ph. 208-230/460V  
▶ Amperage: (3hp) 1 Ph. 14.5A / 3 Ph. 8.1-7.6/3.8A  
(5hp) 1 Ph. 19.5 / 3 Ph. 13.2-12/6A  
▶ Cast Aluminum Alloy 356-51 / Backward Inclined / Non-Sparking, Non-Ferrous as Required by NFPA Fire Code / Dynamic, Two-Plane Balanced to ISO 6.3 Specifications. The Same as Aircraft Turbine Rotors.

**Filter Media** ▶ 110 Sq. Ft.  
▶ GE Certified (H-12) HEPA media. MERV 16+ rated.

**Sound Level** ▶ With Standard Silencer & Filter: (3hp) 80 - 82 dBA @ 10'  
(5hp) 80 - 83 dBA @ 10'

**Dust Bin** ▶ 35 Gallon Fiber Drum. Other Sizes & Types Available.

**Included** ▶ 5 Yr. Warranty / Patented Internal Silencer  
▶ Heavy Duty One Piece Wall Bracket  
▶ Magnetic Starter - w/ On-Off Switch Preset for Add-On Remote with Amperage Overload Protector (1 Phase)  
▶ FREE Duct Design with Pro 2000  
▶ Filter Efficiency Gauge  
▶ Filter Grounding Wire  
▶ Pat. Pend. Flame Guard Arrestor

**Options** ▶ Duct Design Service  
▶ Stand for Free Standing Unit  
▶ 55 Gal. Steel or Fiber Drums  
▶ Bag Gripper, Plastic Bag Hold-Down System  
▶ Remote Starter - Radio Frequency

Part #	Description
XXK150001H	Pro Series (3hp)1500 Dust Collector - 1 Ph.
XXK150003H	Pro Series (3hp)1500 Dust Collector - 3 Ph.
XXK200001H	Pro Series (5hp) 2000 Dust Collector - 1 Ph.
XXK200003H	Pro Series (5hp) 2000 Dust Collector - 3 Ph.

*For Minimum Mounting Heights w/ 39" Filter*

Technical drawing of a mechanical part, likely a flange or coupling, showing dimensions in millimeters (mm). The drawing includes a top view and a side view.

**Top View Dimensions:**

- Overall width: 53.00 mm
- Overall height: 27.00 mm
- Inner circular feature diameter: 18.00 mm

**Side View Dimensions:**

- Overall height: 18.00 mm

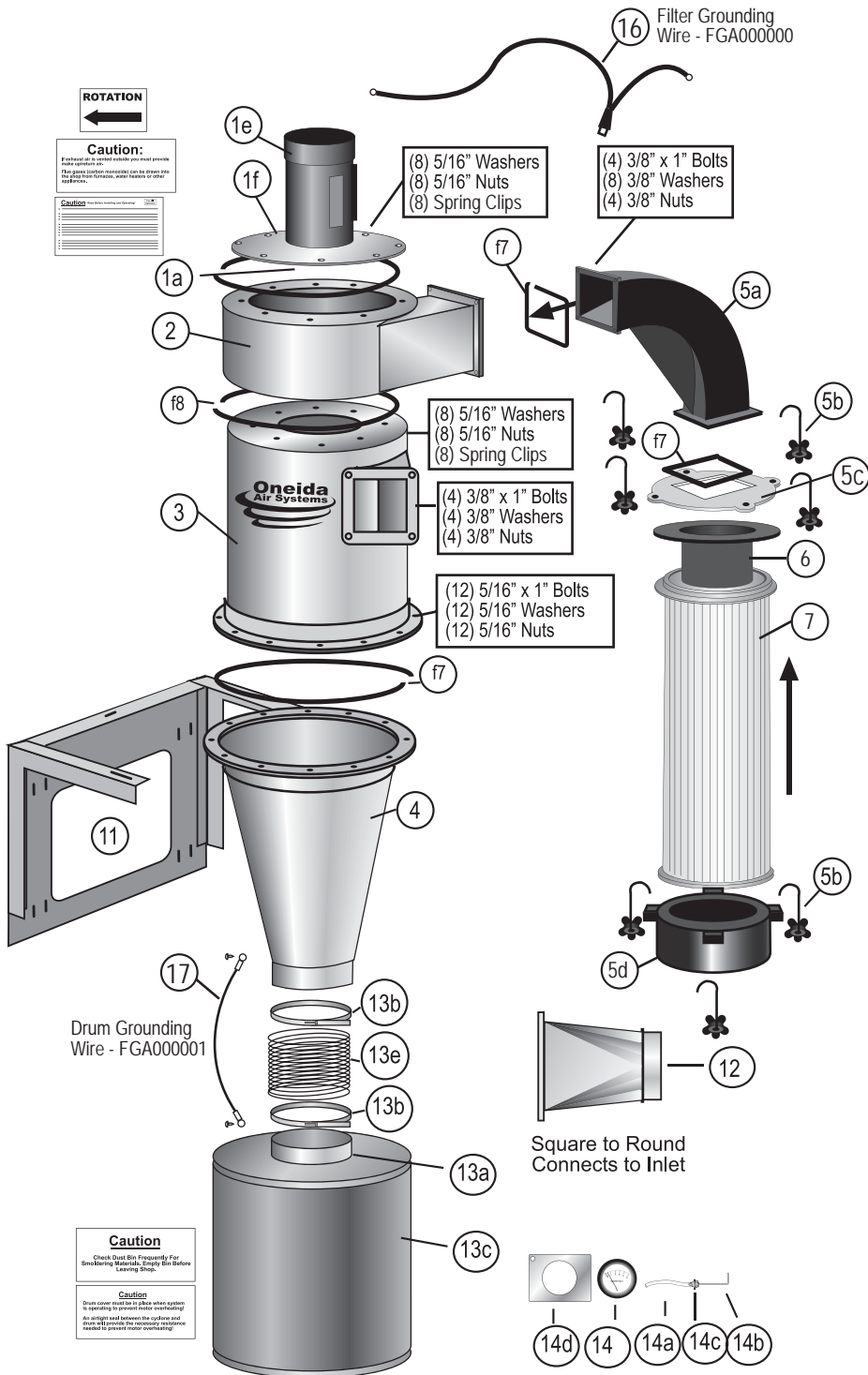
The drawing shows a central circular feature with a smaller circular feature inside it. The outer circular feature has a diameter of 18.00 mm. The overall width of the part is 53.00 mm, and the overall height is 27.00 mm. The side view shows a rectangular feature with a height of 18.00 mm.





# V. General Assembly

- (Pro 1500) XXK150001 1 Phase / XXK150003 3 Phase
- (Pro 2000) XXK200001 1 Phase / XXK200003 3 Phase



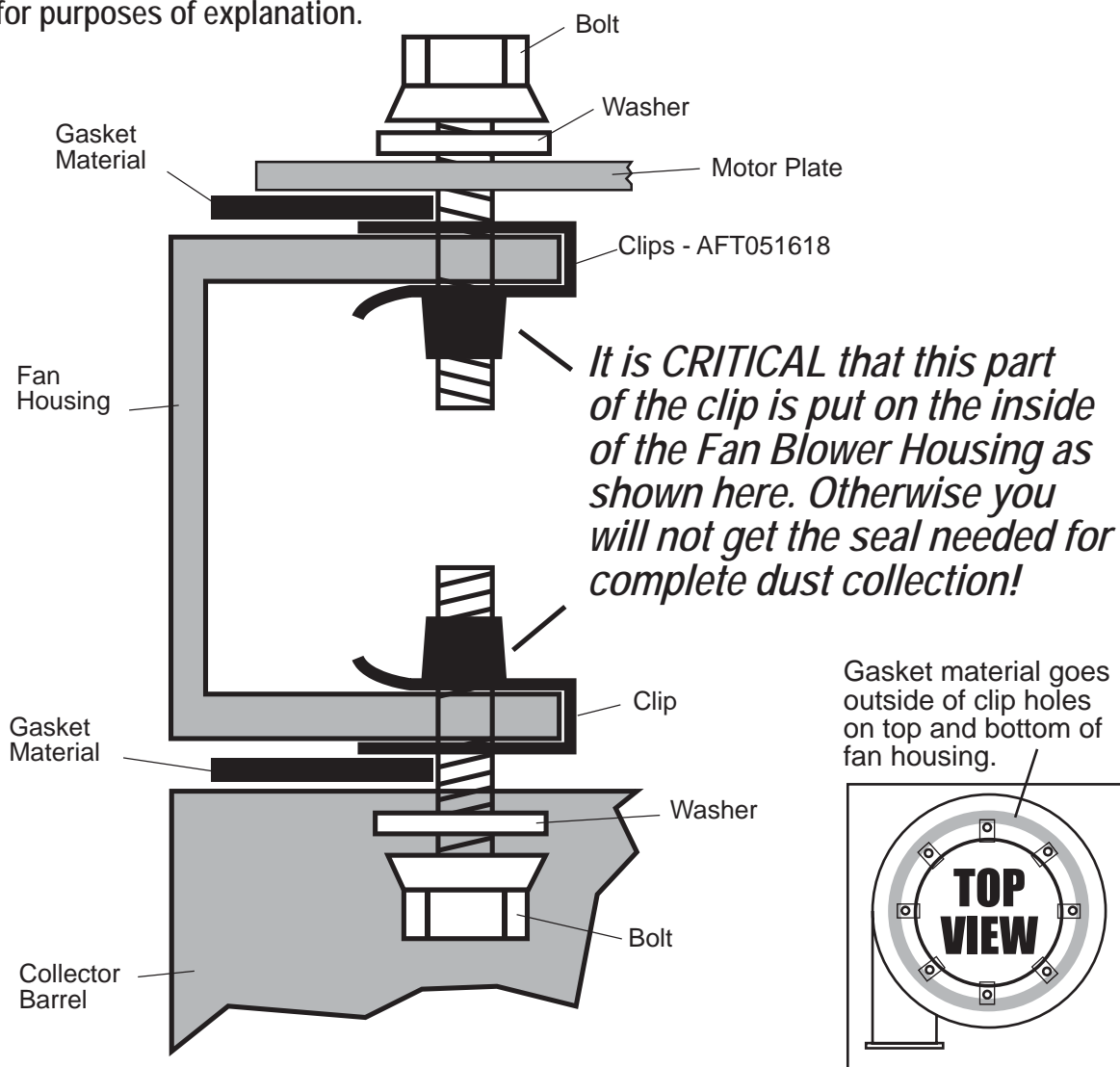
- Motor/Blower Assembly BXI012109-1ph -BXI032109 - 3ph  
Motor/Blower Assembly BXI012309 - 1ph - BXI032309 - 3ph
    - Fan Wheel - BWX159800
    - Magnetic Starter w/ Remote Option includes cord- AMR221417-1phase or - AMI020000 - 3ph
    - Cord Connector- WWC027063
    - Cord Connector Locknut - WCN340000
    - 3hp Motor BMZ030170-1 ph / BMZ030370-3 ph  
5hp Motor BMZ050170 - 1 ph / BMZ050370-3 ph
    - Motor Plate - RMP002301
  - Fan Housing - BHX030009
  - Cyclone Barrel - SXI002109 / SCIO02309
  - Cyclone Cone - SCX012109 / SCX002309
  - Plenum Assembly for Filter 8" Elbow - FPX010300
    - Plenum - FPX000001
    - J-Hooks (8) - AFJ051602 / AFT000001
    - Filter Plate - (13") FPX010013 / (18") FPX010018
    - Dust Pan - FPZ000018
    - Hardware Kit - AHX000000
      - (8) 3/8" Washers - AFW190000
      - (4) 3/8" Wiz Nuts - AFT000004
      - (4) 3/8" x 1" Bolts - AFS015100
      - (12) 5/16" x 1" Bolts - AFB155190
      - (28) 5/16" Washers - AFW180000
      - (28) 5/16" Wiz Lock Nuts AFT155 175
      - Gasket - RGZ000000 (25')
      - (16) Clips - AFT051618
  - Internal Silencer (Pat. Pend.) - BSC180000
  - 18" x 36" HEPA Media Filter w/ Pat. Pend. Flame Guard Arrestor
  - Owner's Manual - ZBM000014
  - Decal - (1) Oneida Logo - ZBC000015
  - Labels
    - Rotation Label - ZBC000029
    - Caution / Exhaust Label - ZBS000004
    - General Caution Label - ZBS000001
    - Filter Maintenance Label - ZBS000007
    - Caution / Check Frequently Label - ZBS000006
    - Caution / Drum Cover Label - ZBS000005
  - Wall Bracket -Standard- SMS300021
  - Square to Round Inlet Transition to 7" dia. - BQX071500
- Options for Dust Drums:**
- 35 Gal. Fiber Drum Kit (Standard) - SDK350901
    - Drum Lid w/ 9" Ring - SDX000900
    - Hose Clamp 12" dia. (2) - ACB120000
    - 35 Gal. Fiber Drum - SDS350000
    - Flex Hose (9" dia. x 1') - DHF090000
  - 55 Gal. Fiber Drum Kit - SDK550901
    - Drum Lid w/ 9" Ring - SDX000900
    - Hose Clamps 12" (2) - ACB120000
    - 55 Gal. Fiber Drum - SDS550000
    - Flex Hose (9" dia. x 1') - DHF090000
  - 55 Gal. Steel Drum Kit - SEK550901
    - Drum Lid w/ 9" Ring - SEX550900
    - Hose Clamps (2) - ACB120000
    - 55 Gal. Steel Drum - SES550000
    - Flex Hose (9" dia. x 1') - DHF090000
- Filter Efficiency Gauge 0"-5" H2O - VRG001005
  - Vinyl Tubing Clear 5/16" O.D. - VRV003125 (8')
  - Static Pressure Tip - VRP001875
  - Mounting Flange for Pitot Tube - VRP010000
  - Filter Efficiency Gauge Bracket - FXX000000
- Optional Fan/Blower Outlet Transitions:**
- Square to 8" dia. For Fan Outlet - BQX308000 Uncrimped
  - Square to 8" dia. For Fan Outlet - BQX308001 Crimped

## VI. Assembly Instructions

### Instructions for assembly of the Fan Blower Housing and Barrel of the Oneida Models.

1. Push clips onto inside circle on Fan Housing, making sure clip is pushed all of the way on, that the bolt holes are in alignment with the clip holes and that the small barrel on the clip is on the *INSIDE* of the Fan Housing as shown in diagram.
2. Stick the gasket material around the Fan Housing as shown in the diagrams, outside of the bolt circle. Making sure of a complete seal. Dust collection systems cannot operate effectively without being tightly sealed with no air leaks.
3. Put bolt through washer. then into appropriate bolt holes in Fan Housing and Barrel. Tighten bolts so they all are snug, then go back and finish tightening the bolts in a star pattern.

Proportions and sizes of parts may be exaggerated for purposes of explanation.





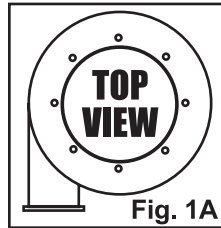
# VII. General Assembly Instructions

Do NOT use hook on motor to lift unit.

*There are essentially three ways to assemble your collector and to attach it to the stand. The way that is right for you should be determined by expertise and manpower available. When the units are all assembled they are very heavy and top weighted. All of this should be taken into account before deciding on the method best suited for you.*

*With all assemblies, make sure rectangular air outlet is oriented on Fan/Blower housing as you are looking down as in Fig. 1A or facing it as shown in diagrams. This is very important.*

Then you can rotate the housing to whatever bolt position is best for your shop.



Before you start, make sure you have cut and placed the provided gasket material on top and bottom of the Fan / Blower housing and the Cone as shown in the diagrams. Then determine which direction you want your filter to hang and which direction your ductwork will enter the collector.

*Use the previous page for directions on attaching the Fan Motor Housing to the Motor Plate and Barrel.*

## Method #1 -

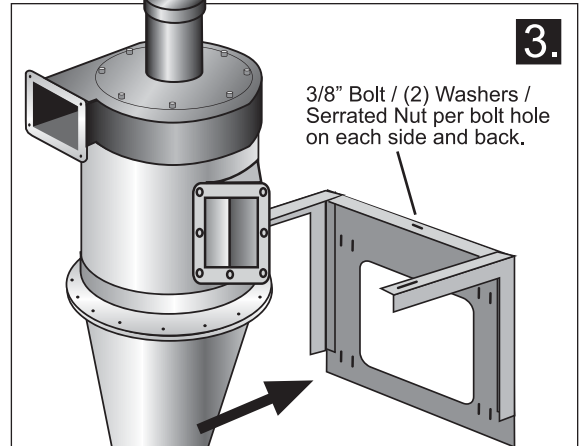
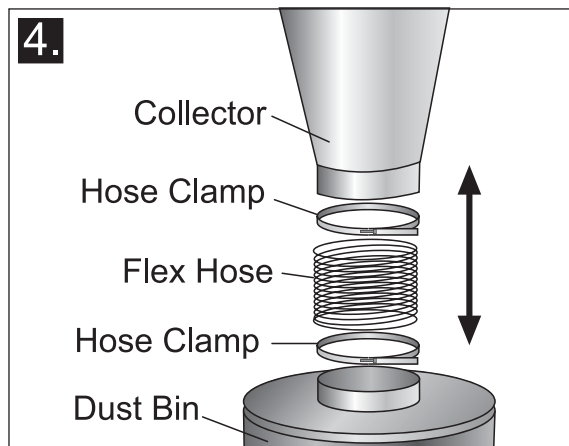
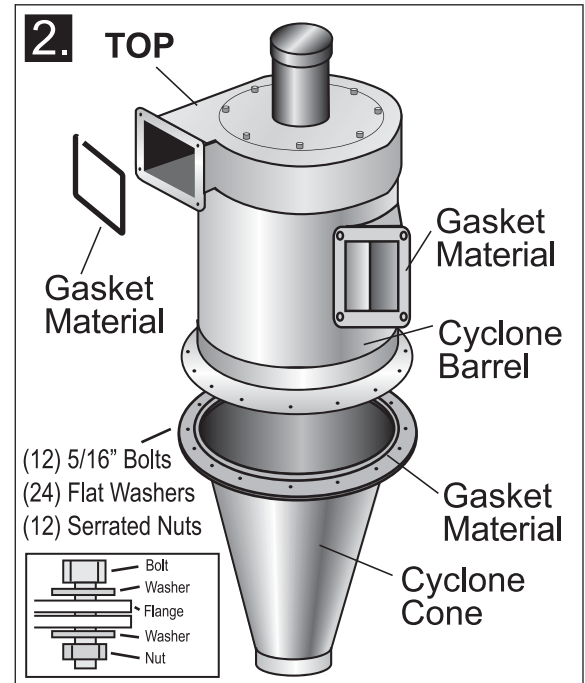
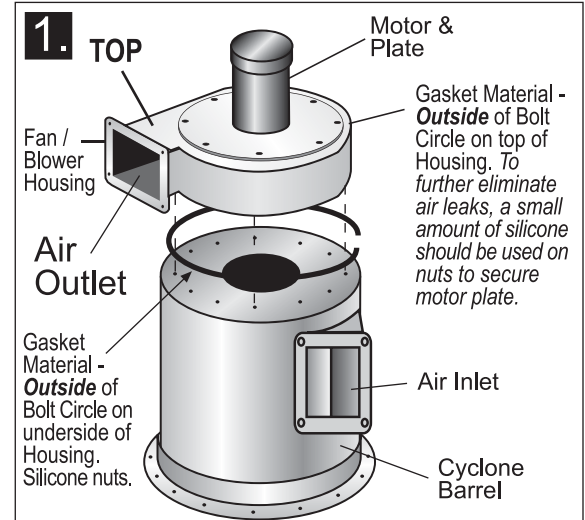
Bolt Fan / Blower housing to Cyclone barrel, Then bolt Motor and Plate to Fan/Blower housing. Carefully lay unit on its side and then bolt cone to barrel. Lift entire unit up onto stand. Unit is extremely heavy and top weighted, be advised!

## Method #2 -

Bolt Fan / Blower housing to Cyclone barrel, Then bolt Motor and Plate to Fan/Blower housing. Put Cone up on stand and orient holes. Lift assembled unit onto cone making sure proper holes are lined up. Bolt unit to stand, then finish bolting barrel to cone.

## Method #3 -

Bolt Fan / Blower housing to Cyclone barrel, Put Cone up on stand and orient holes. Lift assembled unit onto cone making sure proper holes are lined up. Bolt unit to stand, then finish bolting barrel to cone. Lift Motor & Plate onto Fan/Blower housing and bolt together in proper direction.



Note: For pre-separation there must be an air tight seal between cyclone and dust container. Dust bin must be located vertically under cyclone. Material drops down by gravity.

# VIII. Bracket Assembly

1. You must determine the direction the fan outlet will point to proceed with this mounting assembly. The collector will seem quieter if the outlet is aimed away from the area people tend to work. Slots in the brackets are .406" x 1.00".

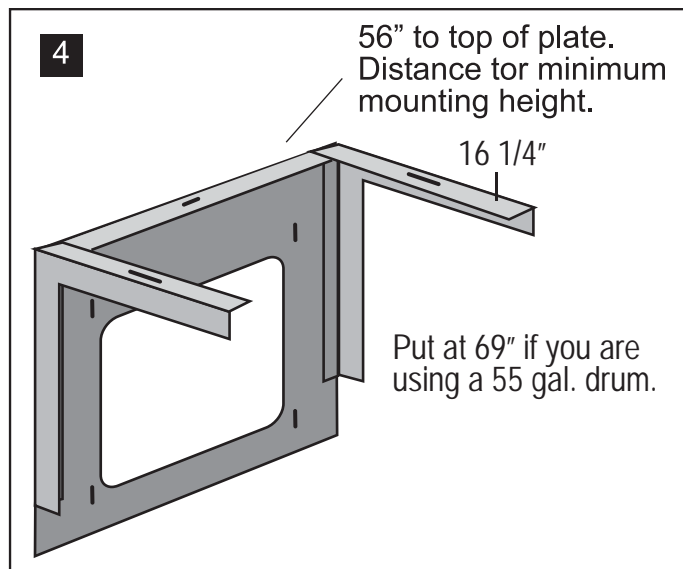
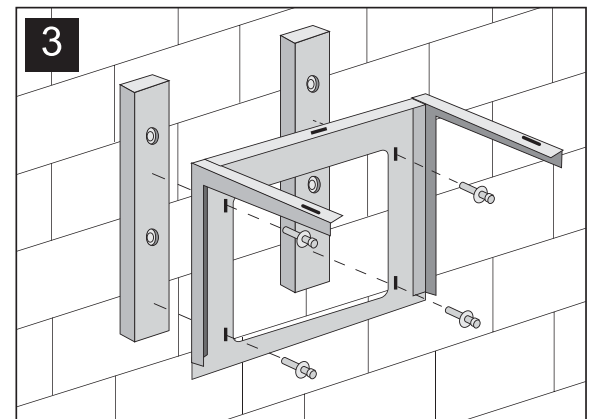
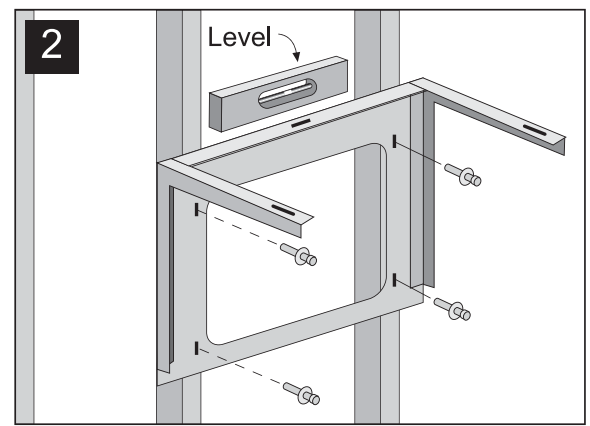
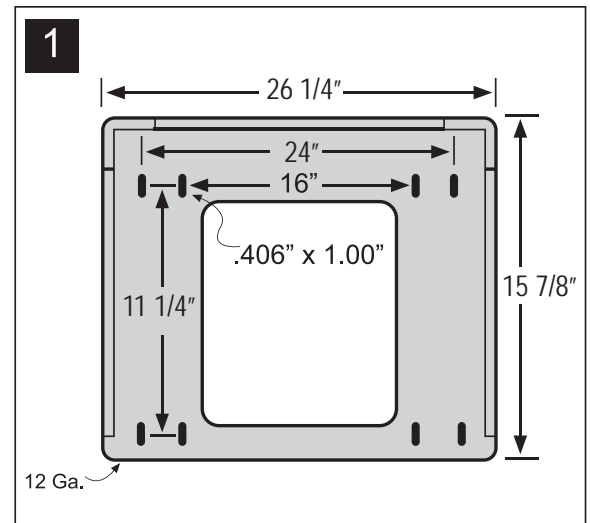
Note: Bolts included to mount bracket to collector. Hardware NOT included to mount to wall.

2. Hold bracket against wall with top of plate at 56". Mark where mounting holes fall. Mount wall bracket. For wall mounting, the bolt centers on the brackets are at 16" & 24" to accomodate most wall stud spacing. See Fig. 1 & 2. Use a level to ensure straightness.

3. Attach bracket to wall with lag screws, concrete anchors, or other suitable hardware. See Fig. 2 & 3. Note: When installing the brackets on a concrete wall, mount 2 x 4's between wall and brackets to stabilize and dampen vibration.

4. Position Angle Ring around top of cone over bracket. Line up one hole in ring with hole in each bracket at desired rotation of outlet. If rotation you desire does not correspond to an existing hole in Angle Ring, drill new ones. Use three 3/8" bolts (included) with washers & lock washers to secure the fan. See Fig. 4.

5. Attach tightly with bolts.



# IX. Stand Assembly

## 35 & 55 Gal. Stand - STG000035 / STG000055

### Stand Kit Contents



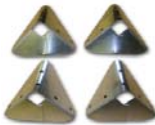
Hardware Kit (1) - AHX000100



Rubber Leg Cap (4) - RCR012500



Top Gusset (4) - RFG010000



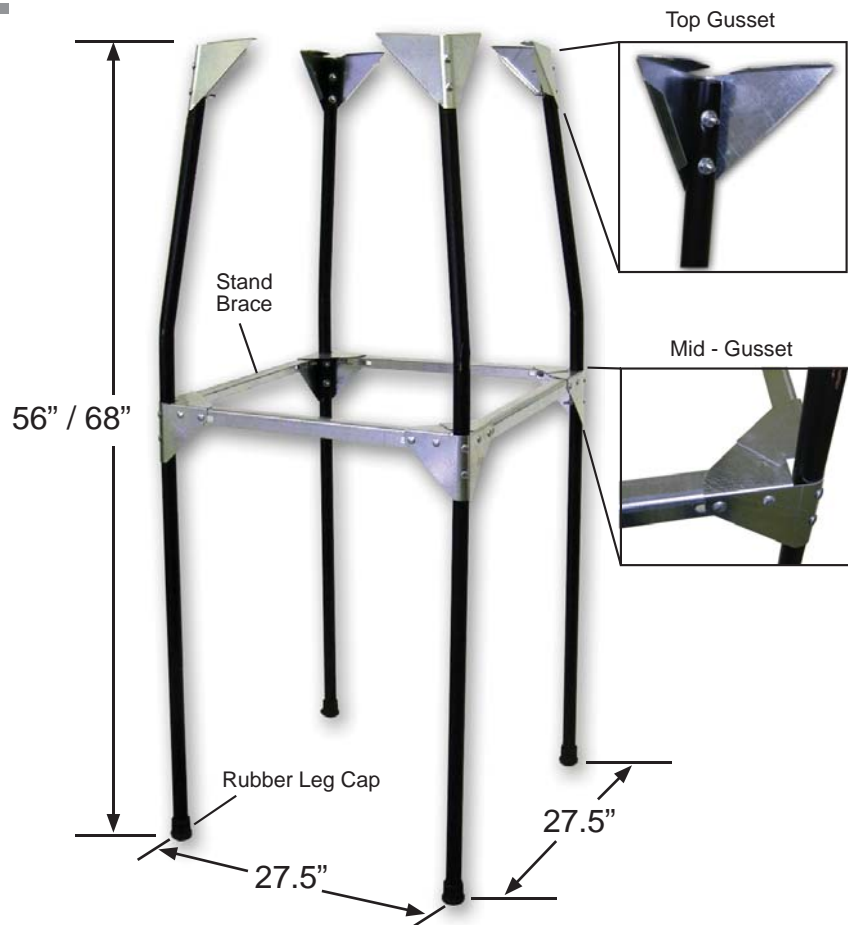
Mid-Gusset (4) - RFG010001



Stand Brace (4) - RFG010002



Stand Leg Set 35 Gal. (4) - SXX000035  
Stand Leg Set 55 Gal. (4) - SXX000055



1. Attach Top Gusset to the top of leg as shown in photo with (2) 1/4"-20 x 2" bolts. Then secure with 1/4" Flat Washer and 1/4"- 20 Nylock Nut. Attach Mid-Gusset to middle of leg as shown with (2) 1/4"-20 x 2" bolts and secure with 1/4" Flat Washer and 1/4"- 20 Nylock Nut. Put Rubber Leg Cap on bottom of leg. Repeat on other three legs.

2. Attach Stand Braces to the inside of Mid-Gussets with (2) 1/4"- 20 x 3/4" bolts and secure with 1/4" Flat Washer and 1/4"- 20 Nylock Nut. Adjust the legs for the 21" or 23" cone by positioning the bolts in the appropriate position in the slotted brace hole. After assembly, make sure your Dust drum slides between the legs for easy emptying.

3. You may want to put the stand on it's side when you attach the collector cone and barrel. ***Always have appropriate help when lifting or moving the stand and collector. The unit is heavy!***

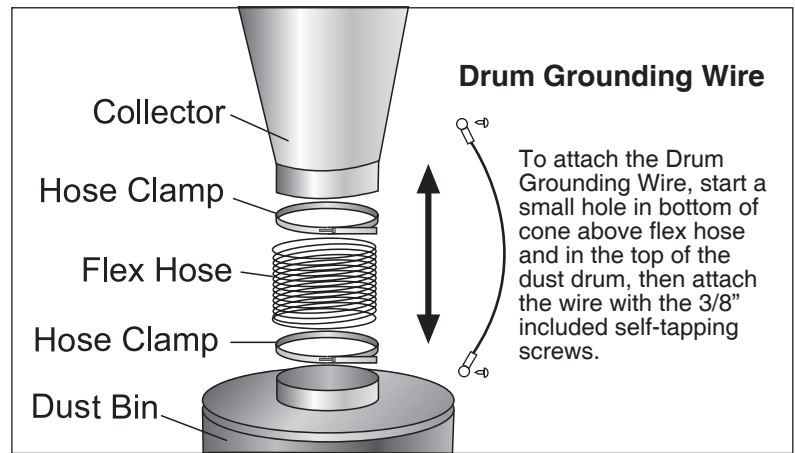
4. Bottom of Cone and Barrel rim go on top of stand gussets. Use the included cyclone hardware to attach to stand. Use (2) 5/16" x 1" bolts, (2) 5/16" flat washers and (2) 5/16" whiz nuts on each gusset.

## X. Drum Assembly

Distance between the drum lid and cone can vary. Some systems have little space there to minimize overall system height. In some cases, the flexible hose will have to be cut down (especially with stands). OAS ships 1' of hose as standard but this is not necessarily the needed length once the system is installed.

**Tools Needed: Razor Knife / Diagonal Cutters**

Measure length between drum lid and collar of cone.  
Measure hose while it is extended (don't overly compress the hose). This allows the lid to move up when installed. Cut the hose with razor knife and then cut the wire with diagonal cutters. **Don't cut too short! If in doubt, cut a little long.** Trim if necessary.



## XI. Filter Assembly

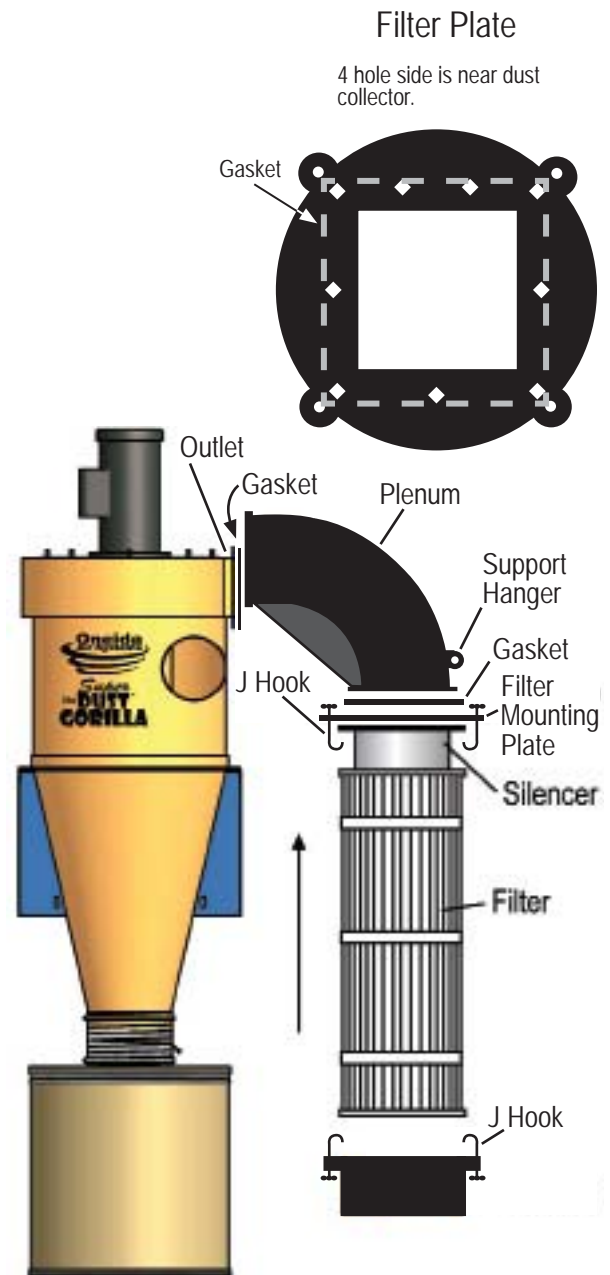
### External 36" Filter Assembly

**\*Silencer Included**

1. Attach gasket to collector outlet making sure there are no gaps where gasket ends meet.
2. Attach Plenum to outlet using the included 7 bolts and hardware making sure the support hanger on the Plenum is at the bottom.
3. Attach gasket around cut out in filter plate as shown in diagram, making sure there are no gaps where ends meet.
4. Attach filter plate to Plenum using the 9 included Carriage bolts, washers and nuts, putting them up through the plate and Plenum from underneath making sure the shaped bolt shaft is snug in the diamond hole in plate.
5. Attach filter cartridge with provided J hooks making sure the gasket is sealed tightly and internal silencer is in filter.
6. If filter requires additional support, use the plate at the top of the filter to support the filter assembly or support hanger on Plenum.

Note: If filter cartridge is located away from the cyclone and motor, additional square to round connectors and pipe can be purchased.

7. Attach the filter dust bin to the bottom of the filter with the J hooks making sure that the seal is tight.

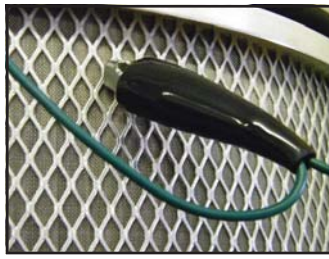




## Filter Grounding Wire

Attach the ring terminal on the green ground wire from the motor to a bolt on the filter plate, under the nut. Then attach the alligator clip to the filter cage as shown in Fig. 1.

Figure 1



Filter  
Grounding  
Wire



## XII. Filter Maintenance

### External Filter Cartridge Cleaning Intervals

When unit is turned off, use compressed air to blow dust off from exterior of filter. Hold nozzle at least 6" away from filter pleats\*. Do not remove bottom dust pan before or during the blow-off process! Let dust settle into dust pan. Unclip and dump out dust. Filter removal is not required.

*\*WARNING: A close, direct blast with the compressed air nozzle too close to filter, may damage filter media. Always wear safety glasses while blowing off filter.*

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

### Fan / Blower & Cyclone Outside Placement

Fan / Blower has a TEFC - Totally Enclosed Fan Cooled Motor.  
Note: Use steel drum when placed outside.

### Before Operation:

Mount system and connect cyclone and dust bin. Make sure dust bin is in place and ductwork is connected to inlet before turning on the dust collector.

***Do not operate Fan / Blower unless Cyclone and Dust Bin are in place! Motor will overheat!***

### Electrical Wiring:

Make sure power source matches wire voltage configurations on motor.

Prior to connecting to the power line, check motor plate for proper voltage. Motor is pre-wired for counter-clockwise rotation. Fan wheel must rotate counter-clockwise if looking down on fan housing. Use 12 gauge cord for the fan / blowers.

***Caution: Rotating Fan Blades! Keep objects clear of outlet.***

### Lubrication:

See pg. 15 for schedule and specifications.



Shown with  
optional Stand.

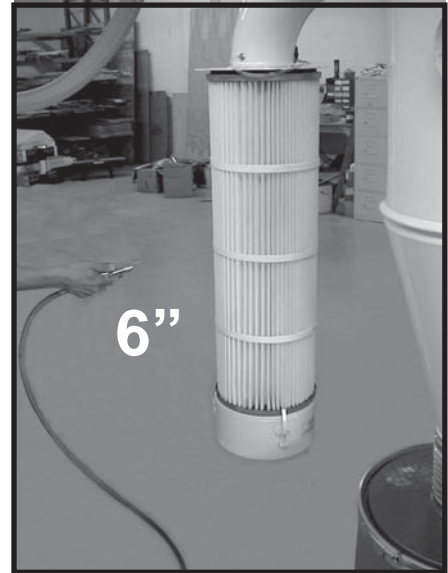
## XIII. Directions for Cleaning the Filter

All steps should be done with a dust mask and eye protection. Proper filter cleaning should not be neglected. A dirty filter can affect dust collector operation and filter life.

### 1. Compressed air from outside.

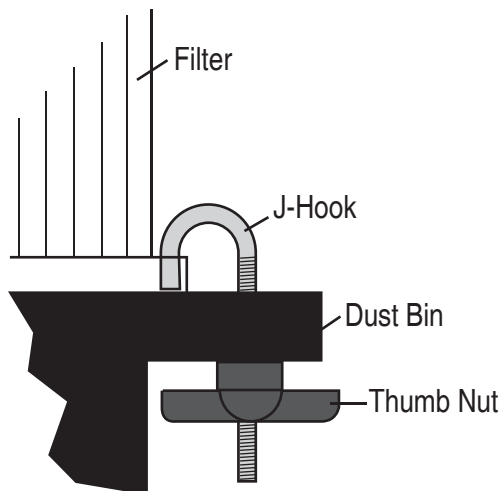
Blast air along pleats of the filter at about a 20 degree angle. Blast air out and away from you or anyone in the general area. Keep air nozzle at least 6" from filter. Closer blasts may damage material. This operation should be done with filter on the unit. Dust is trapped inside filter so it will not make a mess.

Filter must be cleaned regularly or filter damage may result. If gauge reaches 3, it is time to clean your filter. Never allow gauge to reach 5. You could destroy your filter. See page 14.



### 2. Empty Dust Bin.

Wait a few minutes for internal dust to settle then unscrew thumb nuts from J-Hooks and remove dust bin. Empty dust carefully. Replace dust bin. Do not over tighten thumb nuts.



## XII. Wiring Instructions for Magnetic Starter

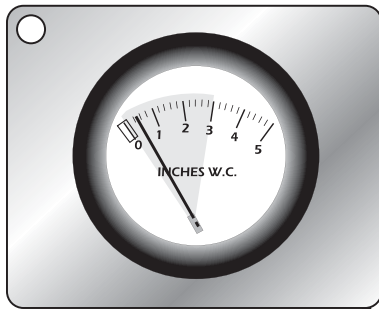
*Always use a licensed, professional electrician.*

Follow wiring diagram on motor.

Note: This Dust Collector is pre-wired at the factory and need only be plugged into a NEMA 6-20R dedicated electrical receptacle. #hp single phase only.



# XIV. Filter Efficiency Gauge Mounting Instructions



Up to 8'  
away



OR



## Mounting Instructions

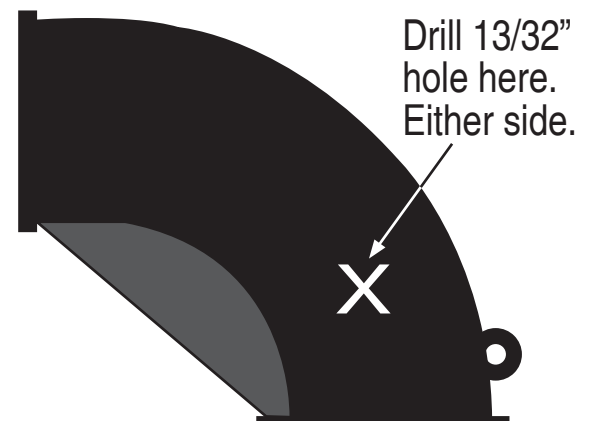
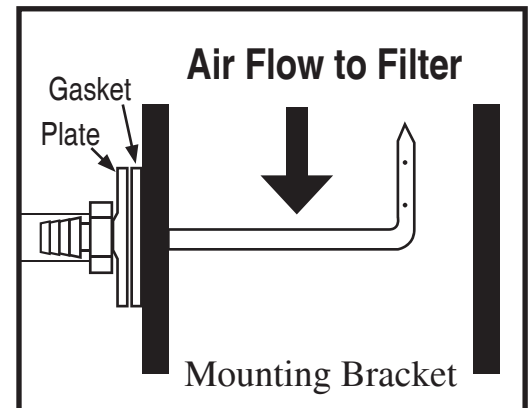
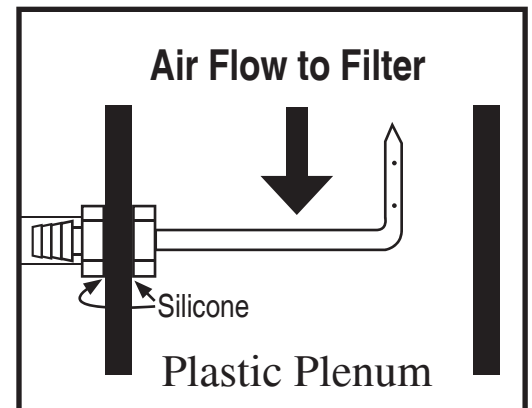
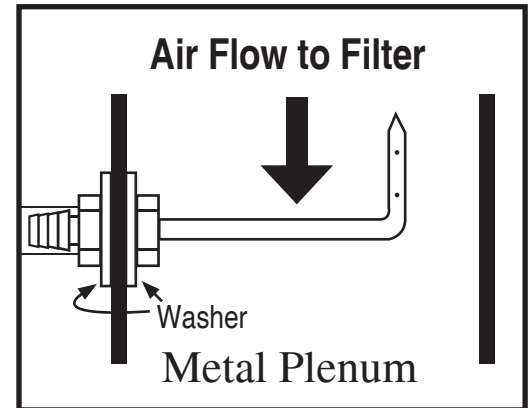
1. Select a location free from excessive vibration and where ambient temperature is between 20 F to 120 F (-6.7 C to 49 C). You can mount gauge up to 8' away from static pressure tube. Gauge bracket can be mounted to stand gusset for easy reading.
2. Mount brass static tube in plenum with tip pointed into air stream. Use included mounting bracket and sheet metal screws if interior of plenum is not accessible. Refer to the drawings for location of brass static pressure tube. Use 13/32" drill bit for hole.
3. Put gauge through supplied mounting plate with pre-cut 2 5/8" hole. Put the two bolts from gauge box through front of gauge. Put metal brace from gauge box against plate back with gauge bolts through brace to hold gauge tight against plate. Put supplied nuts from gauge box on bolts and tighten.
4. Mount plate with gauge to appropriate surface. If mounting to stand, user must drill a hole and supply hardware attachment. Connect clear tubing from brass static pressure tube to port labeled "+" on the back of the pressure gauge. Make sure tubing is not crushed or kinked along its entire length. Cut shorter if necessary.

*Before you insert brass static pressure tube, use a marker and mark top of brass nut where tube will be in the up position so when you position tube or tighten it, you'll know where tube is pointing.*

## Gauge Reading Instructions

1. Gauge may need to be zeroed. Follow the instructions provided with pressure gauge.
2. Take the initial reading with cleaned filter(s) and the typical number of blast gates open in normal operation.
3. Always read the gauge with the same number of gates open. The more gates open, the higher the pressure reading on the gauge.
4. When the gauge rises to 3", it's time to clean your filter(s).

*After many cleaning cycles, a filter's pressure will rise after each cleaning.  
An older filter does not get as clean as a new filter.*



Drill 13/32"  
hole here.  
Either side.

# XV. Fan Motor Maintenance

Per Baldor specifications, their 2 pole motors (3600 RPM) motors are to be relubricated *every 5500 hours*.

**Table 1 - Service Conditions**

Severity of Service	Ambient Temperature Maximum	Atmospheric Contamination	Type of Bearing
Standard	40° C	Clean, Little Corrosion	Deep Groove Ball Bearing
Severe	50° C	Moderate dirt, Corrosion	Ball Thrust, Roller
Extreme	>50° C* or Class H Insulation	Severe dirt, Abrasive dust, Corrosion	All Bearings
Low Temperature	<-30° C**		

\* Special high temperature grease is recommended.

\*\* Special low temperature grease is recommended.

**Table 2 - Lubrication Interval Multiplier**

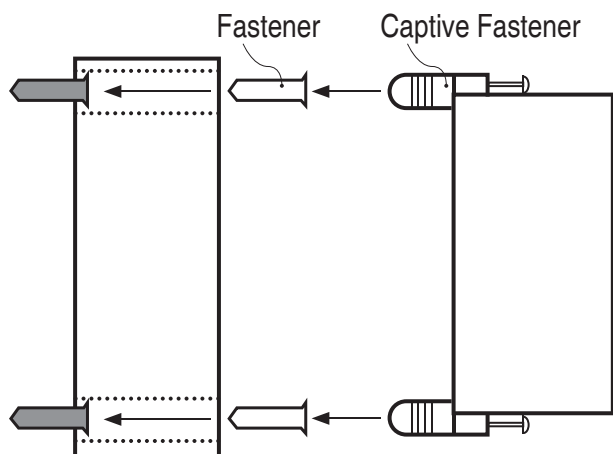
Severity of Service	Multiplier
Standard	1.0
Severe	0.5
Extreme	0.1
Low Temperature	1.0

Per Baldor specifications, add .30 ounces (8.4 grams) of Mobil Polyrex grease by weight or .6 cubic inches (2 teaspoons) of Mobil polyrex grease by volume.

## Procedure

Clean the grease fitting (or area around grease hole, if equipped with slotted grease screws). If motor has a purge plug, remove it> Motors can be re-greased while stopped (at less than 80 degrees C) or running. Apply grease gun to fitting (or grease hole). Too much grease or injecting grease too quickly can cause premature bearing failure. Slowly apply the recommended amount of grease, taking 1 minute or so to apply. Operate motor for 20 minutes, reinstall purge plug if previously removed. Caution: keep grease clean. Mixing dissimilar grease is not recommended.

# Wall Mounting Magnetic Starter



- Remove front cover.
- Fasten screws through mounting bracket into mounting surface. (Screw needs to be smaller than Captive Fastener.)
- Attach Starter cover and tighten Captive Fasteners.

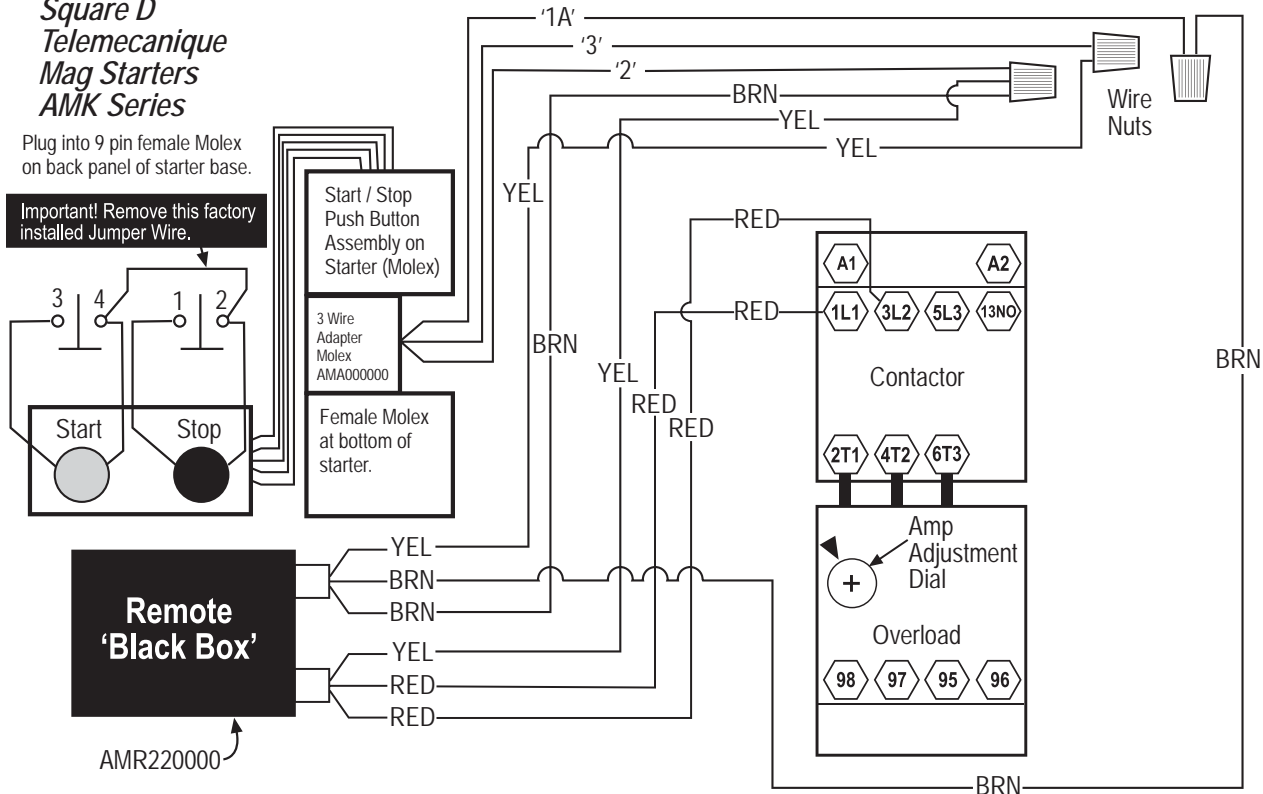
## XVI. Remote Wiring Diagram

## Retrofit (Wiring) of Wireless Remote into 220V Control Circuit of Square D / Telemecanique Mag Starters

*Square D  
Telemecanique  
Mag Starters  
AMK Series*

Plug into 9 pin female Molex on back panel of starter base.

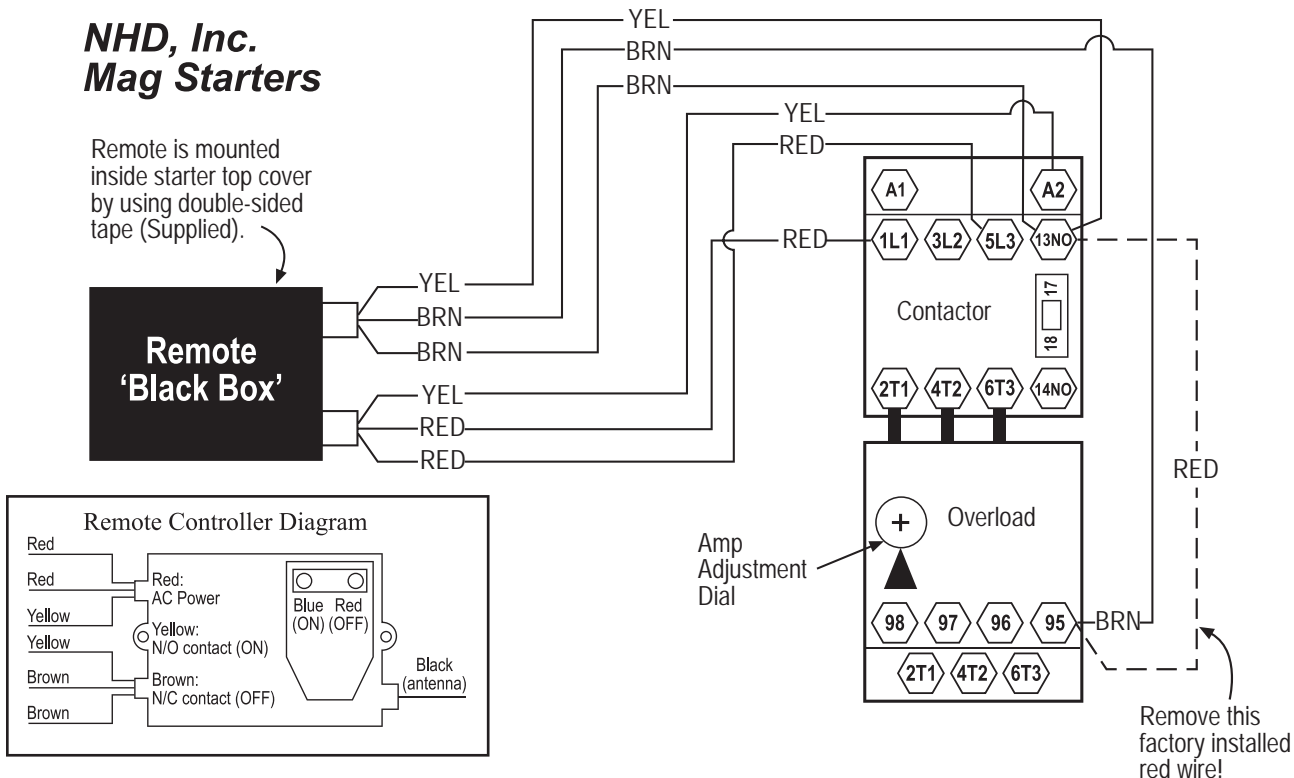
**Important! Remove this factory installed Jumper Wire.**



## Retrofit (Wiring) of Wireless Remote into 220V OAS Import Magnetic Starters: AMI020000 / AMI030000

***NHD, Inc.***  
***Mag Starters***

Remote is mounted inside starter top cover by using double-sided tape (Supplied). \



## XVII. Accessories

### **Bolt Together Stand**

STG000035 - 35 Gal. Stand

STG000055 - 55 Gal. Stand



### **Replacement Filter** w/ Pat. Pend. Flame Guard Arrestor FCS183600HF

18"x 36" / 110 Sq. Ft. Spun-Bonded. Filters 99.9% of test material from 0.2 - 2 microns.



### **Dust Containers**

35 Gal. Fiber

55 Gal. Fiber

55 Gal. Steel



### **The BAG Gripper™**

ABX000000

The BAG Gripper provides the ability to use convenient plastic bags inside your dust drum. It provides a Constant negative pressure on the outside surface of the plastic bag that keeps it pulled tight against the sides of the dust drum. Can be used with 35 and 55 gal. barrels. Must be wired into your system.



### **Drum Liner - Plastic Bag Hold-Down**

ABX000035 / ABX000055

Holds plastic bag in drum for easy removal and disposal.



## XVIII. Troubleshooting

### **Motor Overheating**

*The motor's internal circuit breaker will trip if the motor is overheating.*

Motor amperage too high - Shut system down.

Caused By:

- System should be completely bolted and sealed together.
- Ductwork should be completely installed and sealed with sealant.
- Air leaks between the collector and dust bin.
  - The lid of the dust bin and the cyclone must be in place and sealed when operating the dust collector.
  - Make sure flex hose is not torn and the hose clamps are tight.
  - Check drum lid; cover should have a foam seal and be well seated.
  - Check for holes or leaks in the dust bin barrel.
- Motor not properly wired. Check wire connections.
  - Check motor rotation - See wire diagram
- Check breaker box. Make sure incoming power supply matches motor specifications.

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

### **Poor Dust Pick-Up at Woodworking Machines**

Caused By:

*Improper motor rotation - Running backwards will reduce suction by 30%.*

- Check length of duct runs and duct diameters compared to ductwork design guideline.
- Make sure all ductwork is sealed. Large air losses will occur even through small cracks in the ductwork. Use silicone, duct tape or duct mastic compound as a sealant.
- Check for air leaks between collector and dust bin.
- Close all unused blast gates at your woodworking machines.
- Examine hood design for weaknesses according to the ductwork guide.
- Check for a restricted pipe, 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 Overheating 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.
  - Minimum 4" diameter pick up at tool location. Less than 4" will restrict air flow into collector and will increase filter maintenance, If there is not enough air entry in system, open more blast gates.
  - Make sure clamp around cyclone is tight and sealed with silicone.

### **Excessive Vibration**

Caused By:

- Loose mounting bolts.
- Excessive system pressure or restriction of air due to closed blast gates.
- Accumulation of foreign material on the fan wheel.
- Inadequate support structure.

# **XIX. Fire Hazards - Read Before Installing and Operating**

## ***Oneida Collectors are designed for WOOD 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).

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 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.

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.
- Fire marshals may want the unit located outside of the building. If the collector is located inside the facility, controls such as spark detection, suppression, or explosion venting may be required.
- 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.
- NFPA 664 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 1500 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 Marshall for help. Additional information can be found in NFPA Code Book 664.

*The customer assumes the responsibility for contacting their insurance underwriter with regard to specific application requirements of explosion venting or if additional fire protection and safety equipment may be required.*

**Do not use this product to collect other types of dust or 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.
- Personnel should keep at least 20 feet away from unit.
- 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 (Standards 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.
- Don't overload woodworking equipment, especially sanders. Excessive frictional heat can spontaneously ignite dust.

Sparks can be generated in several ways:

- High-speed sanders and abrasive planers may strike foreign material.
- Saws and edgers may strike foreign material and create a red hot metal fragment.
- Knots in hardwood can create frictional sparks.
- Tramp metal when drawn into the collector can spark against ductwork.
- Check wood stock for old nails and screws which can create red hot metal fragments.
- Avoid using excessively large wood waste storage bins.
- Always check storage bins for smoldering material before leaving for the day.
- Electrically ground all equipment and ducting. Static sparks can ignite wood dust. (Avoid using PVC drainpipe).
- Don't allow accumulation of layers of fine dust on horizontal surfaces. (Especially overhead lights, electrical boxes, and fuse panels which can ignite dust).



## How to Order

► **Phone - 1.800.732.4065 Toll-Free**  
Our hours are Monday - Friday 8:30am - 5:00pm EST

► **Internet - [www.oneida-air.com](http://www.oneida-air.com)**  
You can shop on our online web store 24 hours a day.  
E-mail us at: [info@oneida-air.com](mailto:info@oneida-air.com).

► **Mail - Oneida Air Systems, Inc. 1001 W. Fayette St., Syracuse, NY 13204**  
You can mail in your order and we will send you back a confirmation by e-mail, fax or mail. Be sure to include your name and a daytime phone number.

## Methods of Payment



Checks, Money Orders or C.O.D.

## Terms and Conditions / Shipping

Oneida tries to ship orders out in a timely manner, however sometimes delays and back orders are inevitable. Oneida will not be held responsible or liable for these conditions or the way they may effect your production. Back orders will be shipped when they are available. When orders are shipped UPS, UPS will notify you by e-mail. If shipped by Common Carrier, you can arrange for the trucking company to notify you and make arrangements for delivery. Shipping method is determined by Oneida Air Systems and is dependent upon material to be shipped and destination. You are not charged until your order is shipped.

### ► 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 the products manufactured by Oneida Air Systems, 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 and accessories are limited to 90 days. Oneida Air Systems warrants that the product will be free from defects in materials and workmanship. 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. 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. 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.

**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.

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.**

### ► 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 Oneida Air Systems will make reasonable efforts to ship on or before the date states for shipment, however, Oneida Air Systems shall not incur any liability for failure to ship on that date.

### ► Returned Goods Policy

Buyer must inform Oneida Air Systems 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 covered under the limited warranty, are subject to inspection and investigation by Oneida Air Systems. Oneida Air Systems 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 resalable 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 obtain a Return Material Authorization Number (RMA #) prior to making a return. All merchandise must be shipped to us prepaid.