ZBM000004

5HP High Vacuum Dust Collector

5_10

Owner's Manual

Oneida Air Systems, Inc. 1001 West Fayette St., Syracuse, NY 13204
Phone 1.800.732.4065 315.476.5151 Fax 315.476.5044 www.oneida-air.com

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!

Proudly Made in the USA

Table of Contents

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:
   (A.) Seal ductwork with silicone sealant or duct tape.
   (B.) Have Dust Bin in place and sealed.
3. Have licensed electrician wire Fan / Blower according to wire diagram in this owner's manual.
4. Have a licensed electrician check current draw on motor with all gates open. Current draw should not exceed maximum motor amperage. (OAS is not responsible for destroyed motors.)

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 bt federal, state and local codes.

Warning

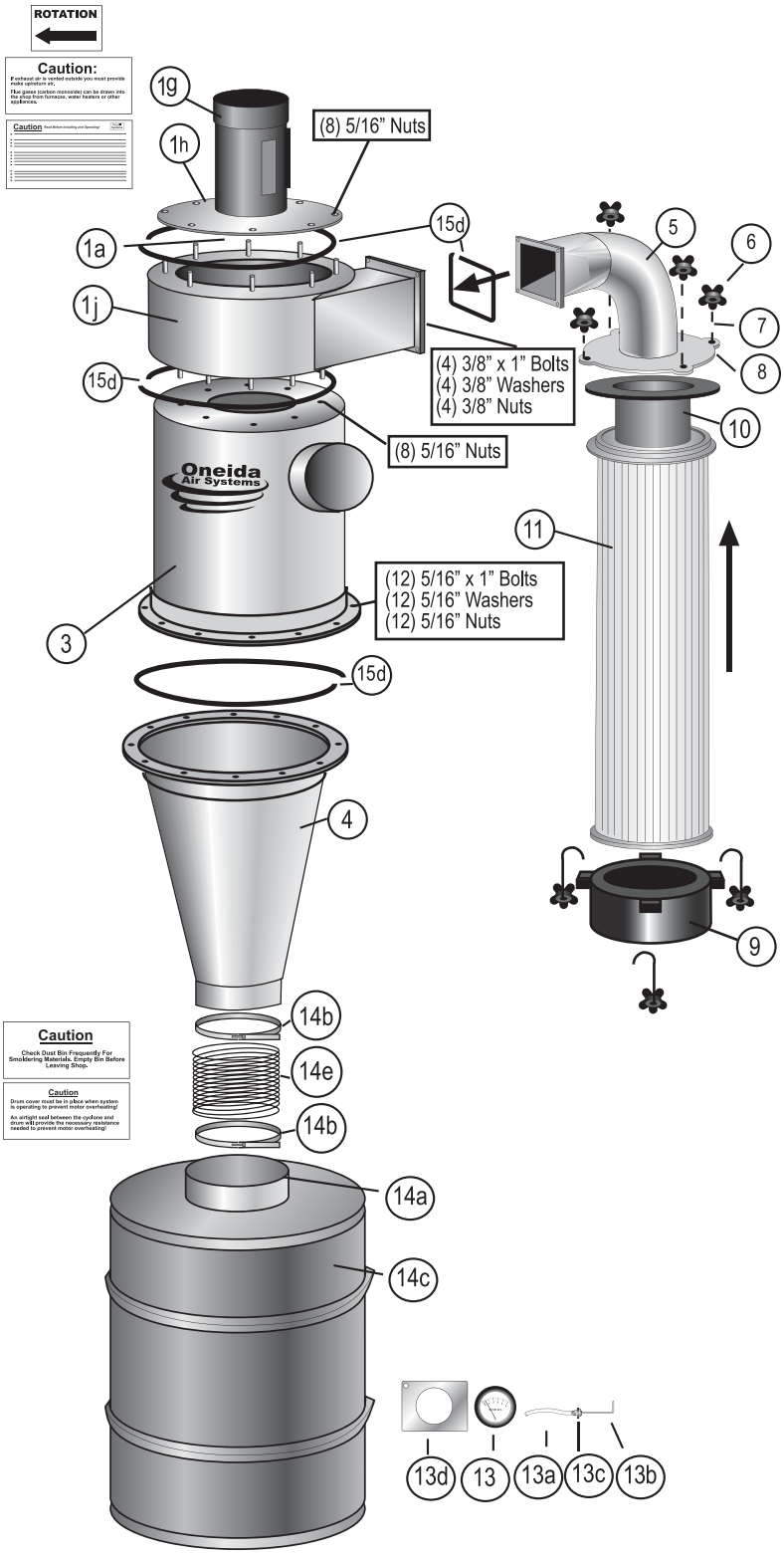
Do not operate Fan / Blower without connecting ductwork. Never operate Fan / Blower without belt shaft guard in place. Keep clear of exhaust. Keep hands and objects clear of inlet and outlet.

Warning

Check amperage draw during operation with all blast gates open. Make certain amperage is not outside operating limit indicated on motor plate! If amperage is too high - shut down immediately! (See Troubleshooting section.)

II. General Assembly

- XXK050133 - 1 Phase / XXK05033 - 3 Phase



1. Motor/Blower Assembly BXI050100-1ph -BXI050300 - 3ph
   - 1a. Fan Wheel - BWX160000
   - 1b. Shaft Spacer - BBS070001
   - 1c. Bolt 5/16" x 24" x 1" - AFB155160
   - 1d. Magnetic Starter w/ Remote Option includes cord- AMR221721-1phase or - AMI020000 - 3ph (not pre-wired)
   - 1e. Cord Connector- WCC027063 1 phase only
   - 1f. Cord Connector Locknut - WCN340000 1 phase only
   - 1g. 5hp Motor BMZ050170-1 ph / BMZ050370-3 ph
   - 1h. Motor Plate - CRMP000000
   - 1i.Fan Housing - BHX070000
   - 1j.(4) 3/8" Washers - AFW190000
   - 1k. (4) 3/8" Wiz Nuts - AFT00004
   - 1l. (4) 3/8" x 1" Bolts - AFS015100
3. Cyclone Barrel - SXI050000
4. Cyclone Cone - SCX002309
5. Plenum Assembly 8" Elbow - FPX010500
6. Thumb Nut (4) - AFT000001
7. Cartridge Filter Threaded Clamp (4) - AFX000000
   - 7a. AFB155180 Bolt 5/16-18 x 2 1/2" (4)
8. Fender Washer (4) - AFW170000
9. Dust Pan 16" H - FPZ016000
10. Internal Silencer (Pat. Pend.) - BSC180000
11. Filter - 18" Dia. x 62"L - FCS186200
12. Owner's Manual - ZBM000004
13. Filter Efficiency Gauge 0"-5" H20 - VRG001005
    - 13a. Vinyl Tubing Clear 5/16" O.D. - VRV003125 (8')
    - 13b. Static Pressure Tip - VRP001875
    - 13c. Mounting Flange for Pitot Tube - VRP010000
    - 13d. Filter Efficiency Gauge Bracket - FXX000000
14. 55 Gal. Steel Drum Kit - SEK550901 **Standard**
    - 14a. Drum Lid w/ 10" Ring - SEX551000
    - 14b. Hose Clamps (2) - ACB120000
    - 14c. 55 Gal. Steel Drum - SES550000
    - 14e. Flex Hose (10" dia. x 1') - DHF100000
15. Hardware
    - 15a. (12) 5/16" x 1" Bolts - AFB155190
    - 15b. (24) 5/16" Washers - AFW180000
    - 15c. (28) 5/16" Wiz Lock Nuts AFT155175
    - 15d. Gasket - RGZ000000 (25')
16. Decal - (1) Oneida Logo - ZBC000015
17. Labels
    - 17a. Rotation Label - ZBC000029
    - 17b. Caution / Exhaust Label - ZBS000004
    - 17c. General Caution Label - ZBS000001
    - 17d. Filter Maintenance Label - ZBS000007
    - 17e. Caution / Check Frequently Label - ZBS000006
    - 17f. Caution / Drum Cover Label - ZBS000005
18. Angle Iron Stand - STG023055
    - 18a. (4) Uprights - SXX000068
    - 18b. (4) Braces - SXX000023
    - 18c. (4) Feet - STX002001
    - 18d. (32) 5/16" Bolts - AFB155190
    - 18e. (32) 5/16" Wiz Nuts - AFT155175
    - 18f. (64) 5/16" Flat Washers - AFW180000

III. General Specifications & Fan Performance Curves

Physical and Electrical Data for 5hp High Vacuum Unit.

System Performance

5hp - 2150 max cfm @ 2" SP w/ Filter

System Dimensions

Height w/ 55 Gal. Drum: Approx. 110 1/8"
Footprint: Approx. 56" x 34"
Fan Wheel Diameter: 16" Backward Incline Design
Cyclone Inlet: 8"

Dust Bin

55 Gal. Steel Drum
Large Dust Bins available

Included

Magnetic Motor Starter
Filter Efficiency Gauge
Stand
Filter Grounding Wire

Integral Fan Blower - 5hp

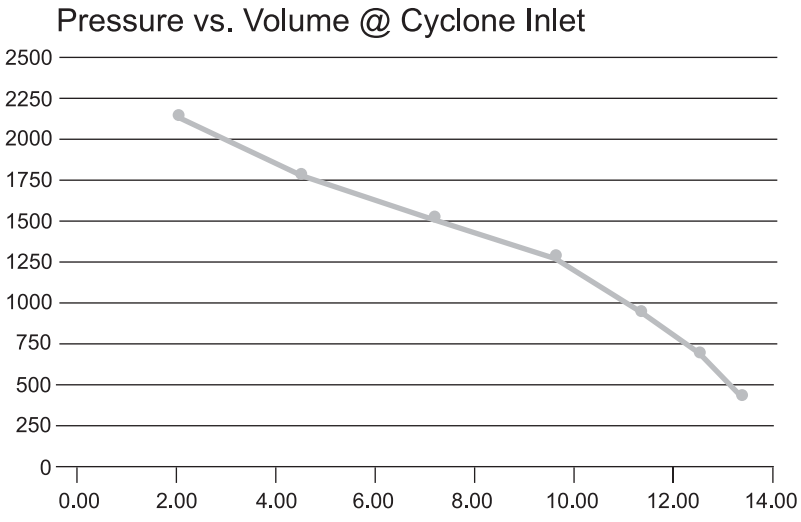
TEFC 60 Hz Motor - Single Phase
Insulation Class: F4
Voltage: 230
Amperage: 19.5
Made in U.S.A.

TEFC 60 Hz Motor - Three Phase
Insulation Class: F4
Voltage: 208 - 230/460
Amperage: 13.2 - 12/6
Made in U.S.A.

External Cartridge Filter

1 Pleated Cartridge - 130 Sq. Ft.
Spun-Bonded polyester BIA ZH1/487 test - Rated C
Captures 99.99% of test material over 20 microns
Captures 99,9% of test material between 0.2 - 2 microns @ 11 fpm

5hp Fan Performance Curve

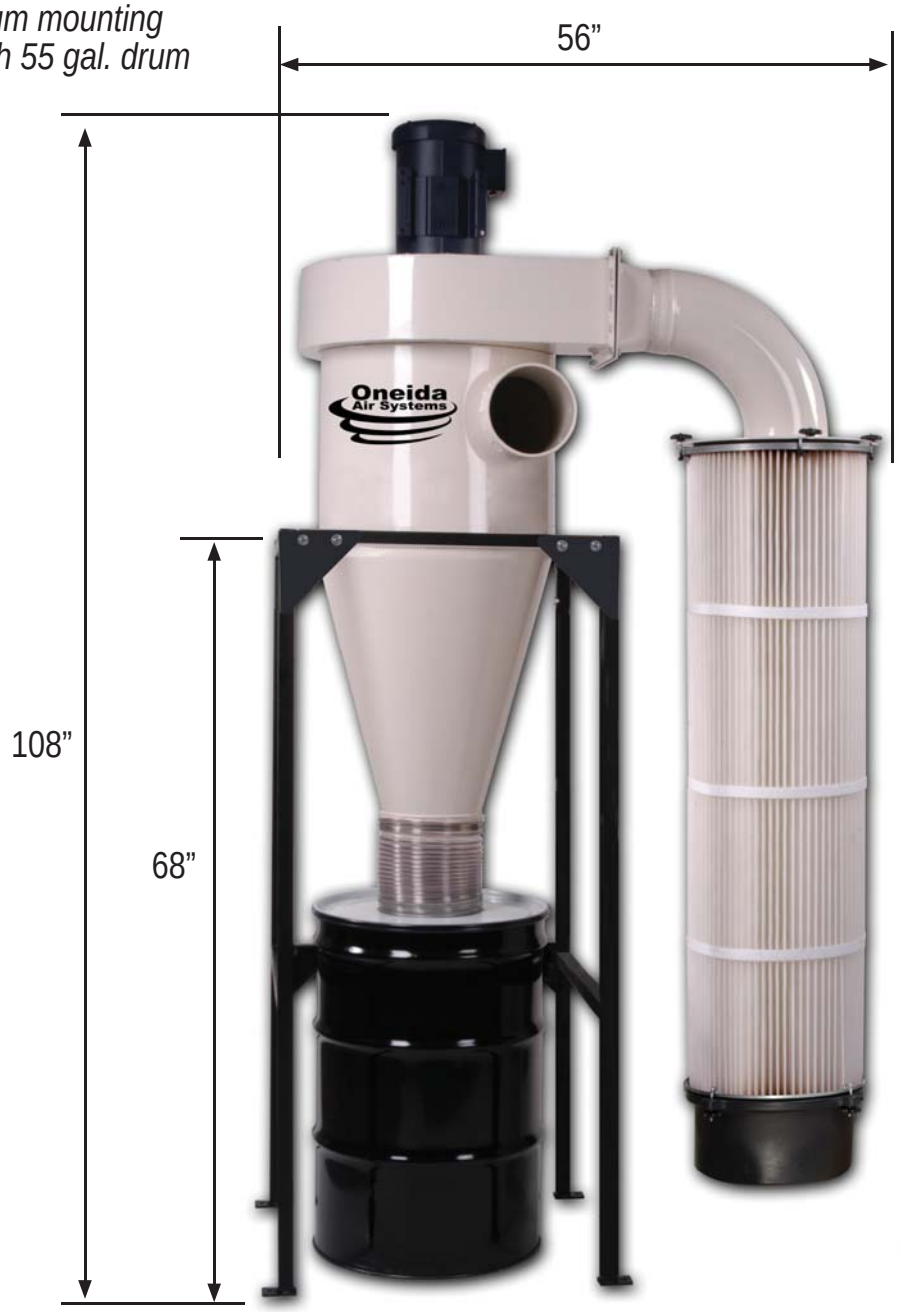


Static pressure and volume together determine a fan's performance. Several factors, such as layout of ductwork and diameter of openings, can affect a fan's performance.

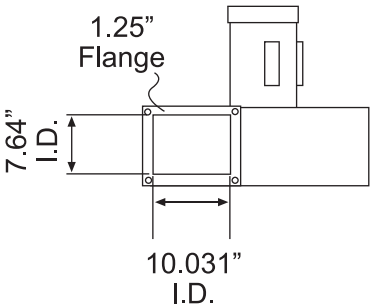
IV. Dimensions

For Twin 55 Gal. Barrel Measurements, See Pg. 9

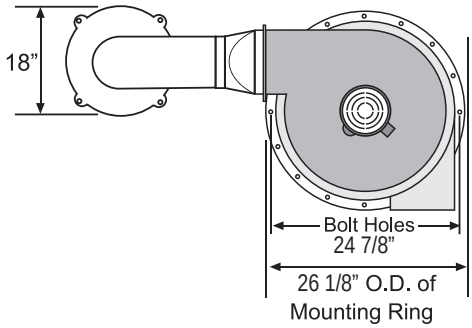
For minimum mounting heights with 55 gal. drum



Outlet Size

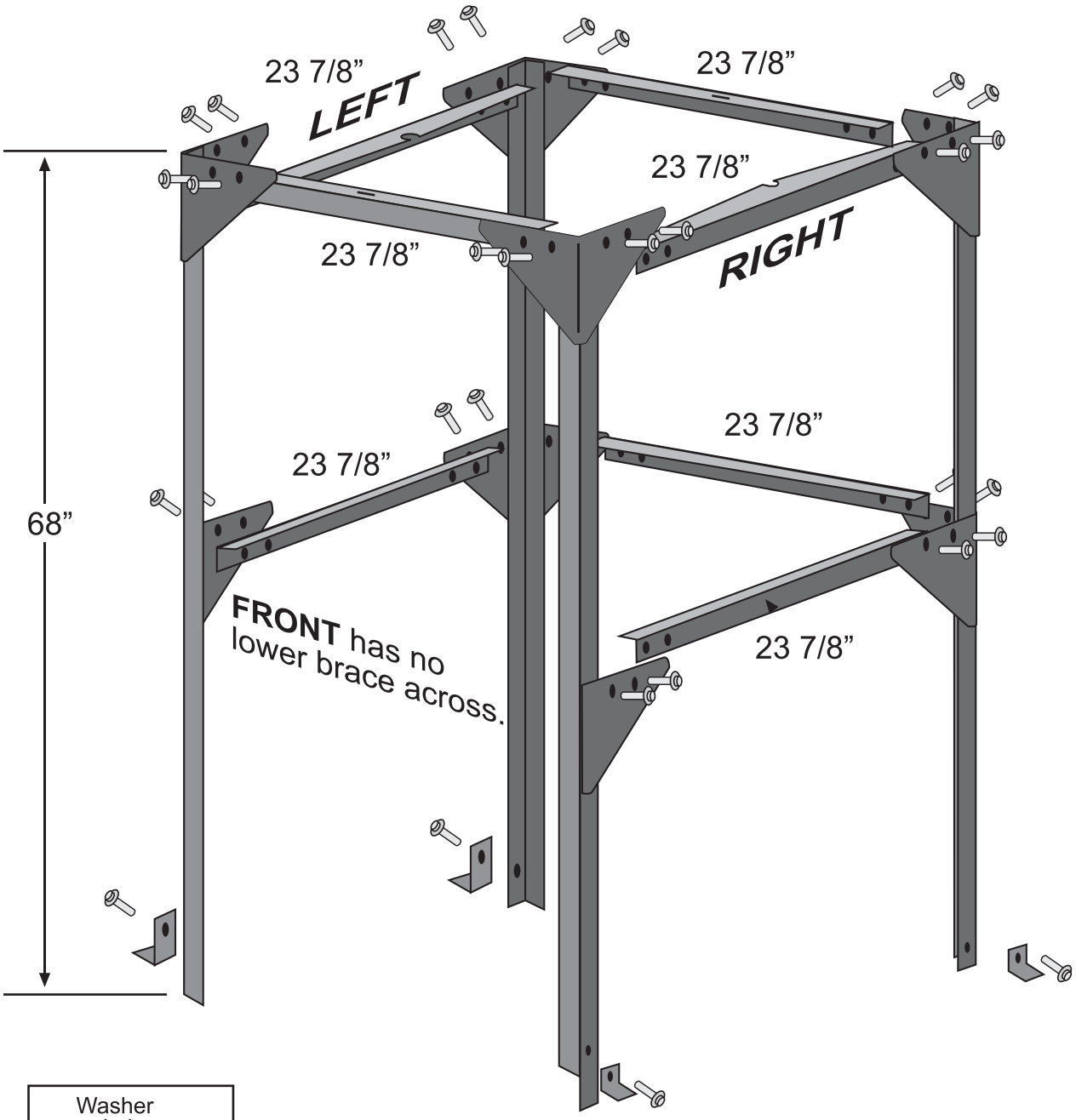


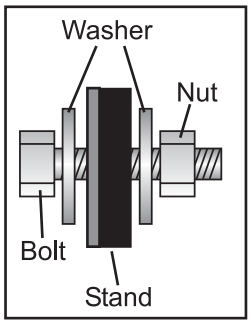
Top View



V. Angle Iron Stand

(32) 5/16 Bolts
(32) 5/16 Nuts
(64) 5/16 Flat Washe





VI. Assembly Instructions

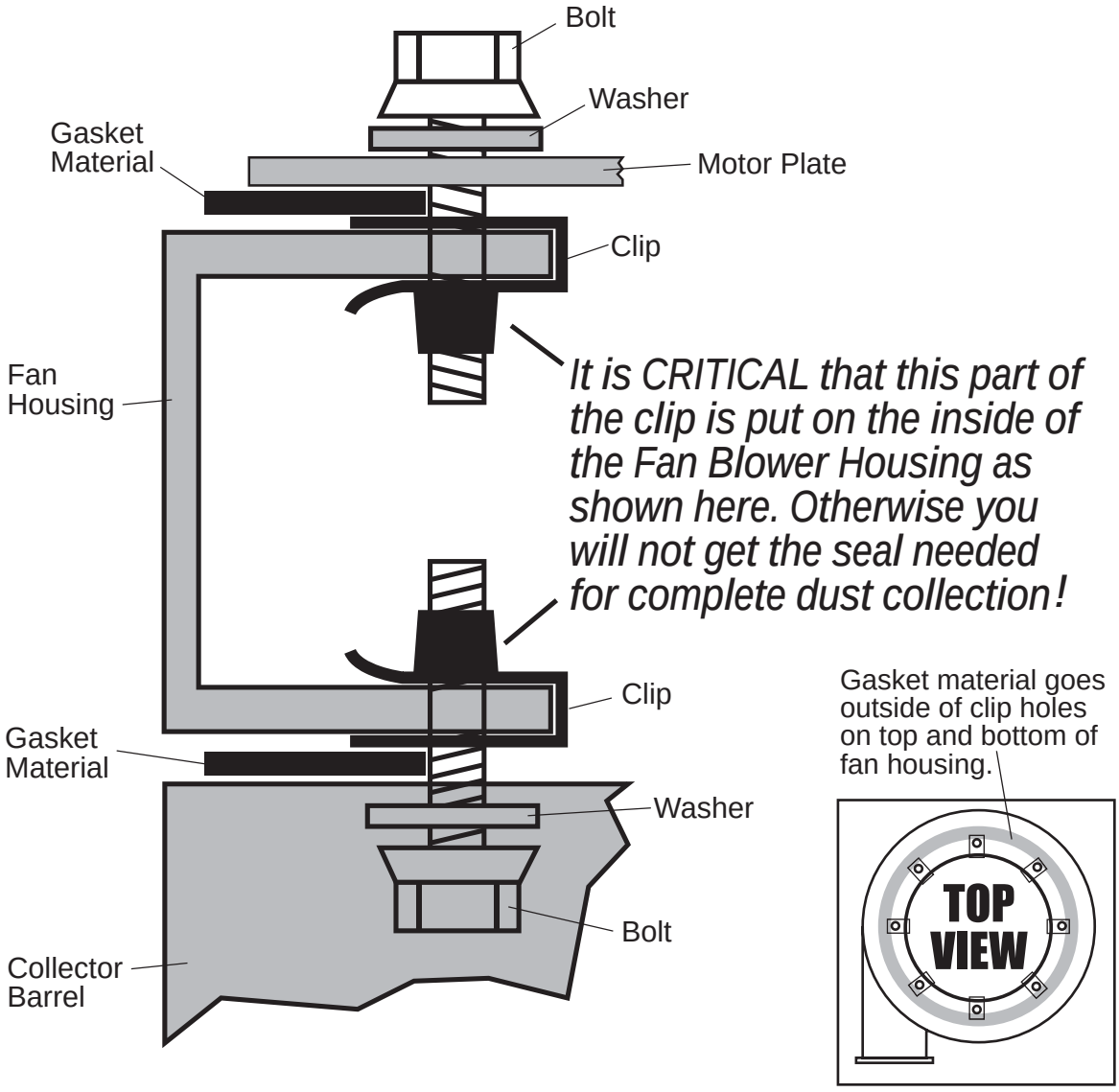
Instructions for assembly of Fan Blower Housing and Barrel of the Oneida Models .*

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.



VI. 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.

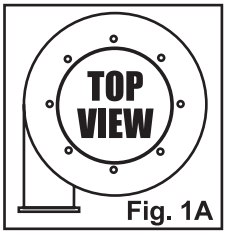


Fig. 1A

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.

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.

Attach flex hose to bottom of collector and to lid of dust bin. Securely fasten hose clamps. There must be an air tight seal between the collector and dust bin.

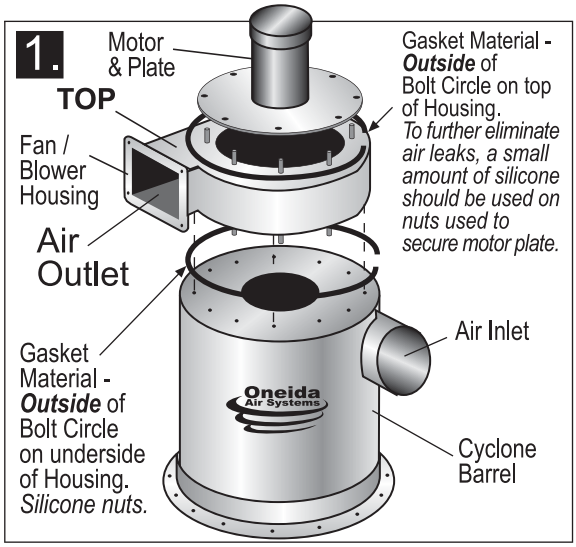
Make sure the dust bin lid sits securely and the rubber gasket on the bin lid is in place on the barrel. Maintain an air tight seal between cyclone and dust bin to prevent motor from overloading.

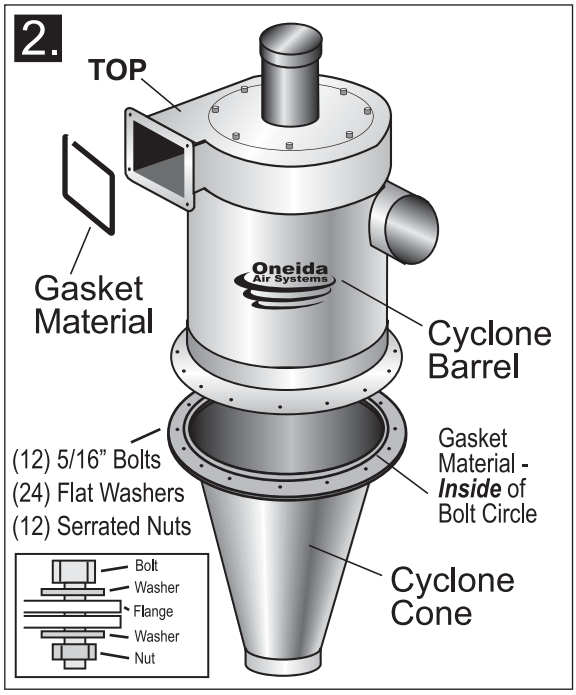
Important!
Do not operate the collector until the dust bin is in place and connector is air tight or motor damage could result!
Stay clear of fan exhaust while collector is operating.

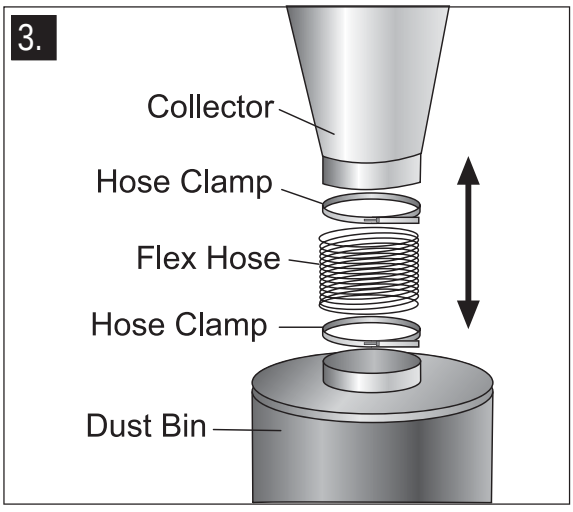
Attach the ductwork from the woodworking machines to the inlet of the collector.

Bolt Stand to the floor. Unit is top heavy!

Unit is very heavy and top weighted. Make sure you have adequate help to assemble and lift the unit. Serious injury or damage could occur otherwise.







See next page for further instructions on attaching cone to drum with flex hose.

Flex Hose Connection Cone to Drum

Distance between drum lid and cone can vary. Some systems have little space there to minimze overall system height. The hose is used to seal between the drum and system and needs only enough height to allow the lid of the drum to come off. In some cases the flex hose will have to be cut down (especially with stands or when mounting the system as low as possible). OAS ships 1' of hose as standard but this is not necessarily the needed length once the system is installed.
Tools needed to shorten hose: razor knife and 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.

VII. Fan / Blower Maintenance

- A high pressure blower requires a certain amount of resistance which will prevent motor over amperage.
- Make sure power source matches wire voltage configurations.
- Check set screw and key in fan wheel, make sure fan wheel is secure. Fan blower should not vibrate.

1. Electical - Failure to follow instructions and safe electrical procedures could result in serious injury or death. Disconnect all power and discharge all capacitors before servicing. Install and ground per local and national codes. Consult a licensed electrician with questions or if repairs are required.

Electrical Connections_

A.) All wiring, fusing, and grounding must comply with National Electrical Codes and local codes.
B.) To determine proper rotation and voltage connections, refer to the wire diagram of this manual.
C.) Use the proper size of line current protection and motor controls as required by the National Electrical Code and local codes. Recommended use is 125% of full load amps as shown on the nameplate for motors with 40 degrees celsius ambient and a service factor over 1.0. Recommended use is 115% of full load amps as shown on nameplate for all other motors. Do not use protection with larger capacities than recommended. Three phase motors must have all three phases protected.

2. Cleanliness - Keep both the interior and exterior of the motor free from dirt, water, oil, and grease.

3. Safety- Motors should be installed, protected and fused in accordance with the latest issue of National Electrical Code, NEMA Standard Publication No. 2 MG 2 and local codes. Rotating parts such as pulleys, coupling, external fans, and unusual shaft extentions should be permanently guarded. Keep hands and clothing away from moving parts. Electrical repairs should be made by trained, qualified personnel only.

4. Service - Notice - If lubrication instructions are shown on the motor nameplate, they will supercede this general instruction.

Warning! Rotating Fan Blades. Keep Objects Clear of Inlet and Outlet!

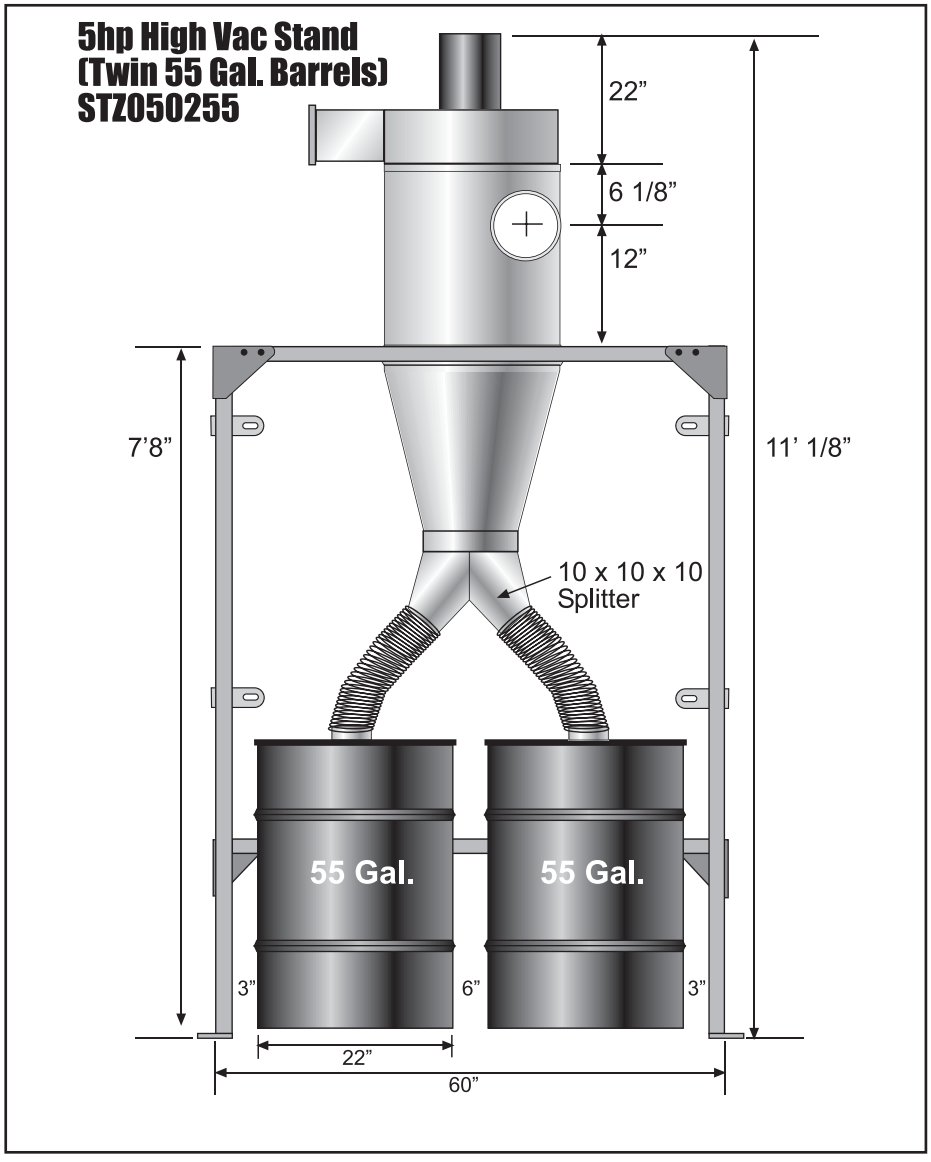
VIII. Filter Maintenance

External Filter Cartridge Cleaning Intervals

When unit is turned off, use compressed air to blow dust off of pleats from the 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. You can also run your fingers around the filter pleats to knock material down.

** 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!



IX. Single and Three Phase Wire Diagram

Use wiring diagram on motor plate if different from below.

Wiring should always be done by a licensed electrician!

- Electrically insulate all connections.
- For counter-clockwise rotation, looking from top of motor down.

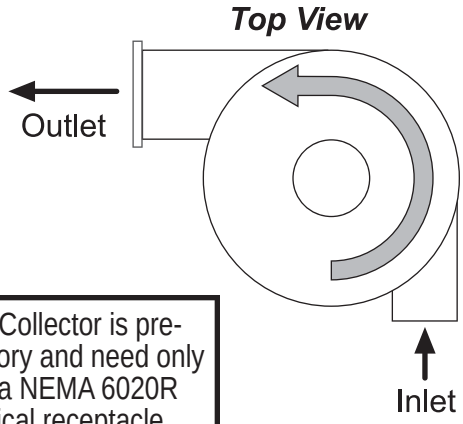
5hp Single Phase
Baldor Motor / 230v / 19.5 amps / TEFC / C Face / 3450 rpm

1 - Blue
8 - Red — Power Line 1*

J - Brown
5 - Black — Tie together and insulate with a wire nut (Do NOT connect to any house wiring)

4 - Yellow — Power Line 2*

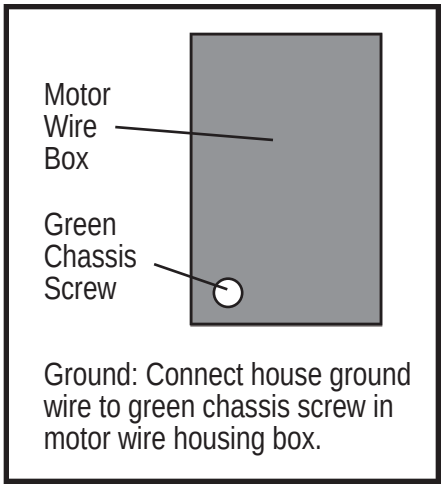
*Power Line 1 & 2 are interchangeable



Note: This Dust Collector is pre-wired at the factory and need only be plugged into a NEMA 6020R dedicated electrical receptacle. 3hp single phase only.

5hp Three Phase
Baldor Motor / 208 - 230/460v / 13 - 12/6 amps / TEFC / C Face / 3450 rpm

208 / 230 Volts	460 Volts
L1 — 1 & 7	**L1 — 1**
L2 — 2 & 8	**L2 — 2**
L3 — 3 & 9	**L3 — 3**
4, 5, 6 — Tie Together	**7 & 4** — Tie Together
	8 & 5 — Tie Together
	9 & 6 — Tie Together



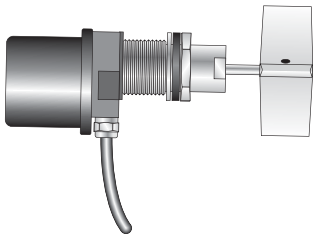
Ground: Connect house ground wire to green chassis screw in motor wire housing box.

To reverse rotation interchange any two line leads.

Check rotation after wiring.
Wire for counter-clockwise rotation.

X. Accessories

Bin Level Monitor - Provides level sensing for dry bulk solids. The monitor operates by using a 1 rpm synchronous motor to rotate a paddle. When paddle rotation is impeded by material surrounding it, the motor is de-energized and triggers a SPDT snap switch. The snap switch can be used in conjunction with a motor starter to turn equipment off or provide alarm functions.



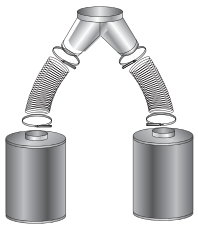
The BAG Gripper ™

ABX000000

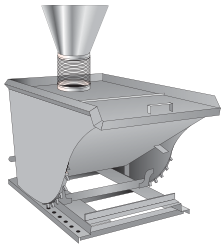
The BAG Gripper provides the ability to use convenient plastic bags inside your dust drum. It provides a constant, negative pressure on the outside surface of the plastic bag that keeps it pulled tight against the sides of the dust drum. Can be used with 35 and 55 gal. barrels. Must be wired into your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

Dust Bin Options - (Must order custom mounting stand.)

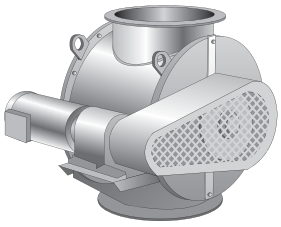
1. Multiple Drums -
Custom order the System Mounting Stand for multiple drums or hoppers. Stand widths will vary depending on dust container.



2. Hoppers -
Large capacity hoppers from .5 cu. yd. to 3 cu. yd.
3/15" reinforcing angle for added support - 3/16" plate body is 100% continuously MIG welded on inside - 3/8" rear cross brace angle (not 3/16") - three 3" base channel - All angles are structural not formed.

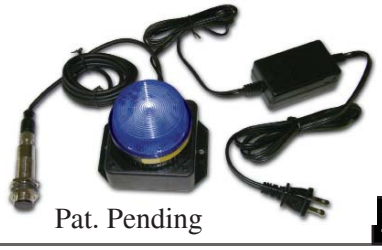


3. Air Locks -
Rotary air locks provide an alternative to an air tight dust bin for larger volume capacity and less maintenance.
Example - A 10" air lock will drop 1.85 cu. ft. / rev. of material.



Dust Sentry™ AXB999110

The Oneida Dust Sentry™ with adjustable IST (Infrared Sensing Technology), flashes a strobe light to alert you when the dust in your container reaches your preset level, telling you when it's time to empty the container.



Pat. Pending

XI. Troubleshooting

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

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.

Poor Dust Pick-Up at Woodworking Machines

Caused By:

Improper motor rotation - Running backwards will reducr 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.

X. 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).

XIII. Terms and Conditions

Checking in Order

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

Limited Warranty

Oneida Air Systems warrants products it manufactures for a period of 2 years to the original purchaser from the date of purchase. Items not manufactured by O.A.S. are limited to their own manufacturer's warranties. All electrical items such as magnetic starters, remotes, sensors, pumps and sccessories are limited to 90 days. This warranty does not apply to defects directly or indirectly to misuse, negligence, accidents, abuse, repairs, or alterations or lack of maintenance. This is Oneida Air Systems sole written warranty and any 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. O.A.S. 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 O.A.S.'s liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Oneida Air Systems shall be tried in the State of New York, County of Onondaga.
Oneida Air Systems shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our product.
Oneida Air Systems does not warrant or authorize use of wood dust collectors for other purposes. This includes wood products that are treated, coated, or otherwise altered from their natural state.

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

Delivery Risk of Loss

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

Returned Goods Policy

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

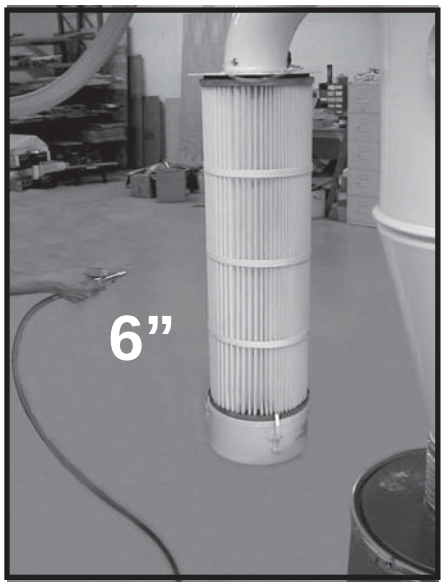
Installing a dust collection system will greatly reduce airborne dust levels in your shop. However, NIOSH recommends that respirators must be worn if the ambient concentration of wood dust exceeds the prescribed exposure limit. If in doubt wear a NIOSH mask.

XIV. 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.

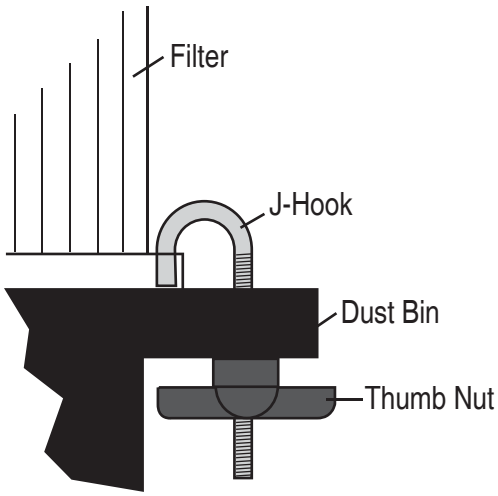
Blast air along pleats of the filter at about a 20 degree angle. Blast air out and away from you or anyone in the general area. Keep air nozzle at least 6" from filter. Closer blasts may damage material. This operation should be done with filter on the unit. Dust is trapped inside filter so it will not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



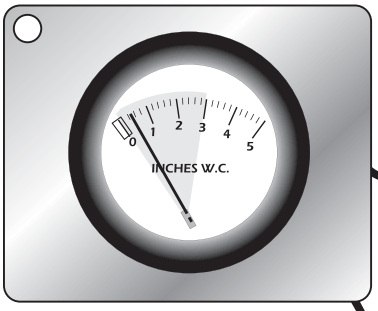
> Filter must be cleaned regularly or filter damage may result. If gauge reaches 3, it is time to clean your filter. Never allow gauge to reach 5. You could destroy your filter. See page 16.

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.

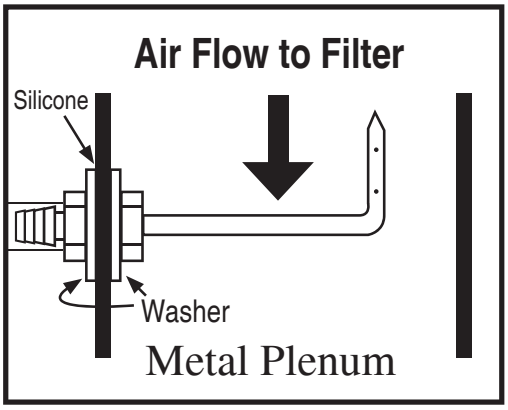


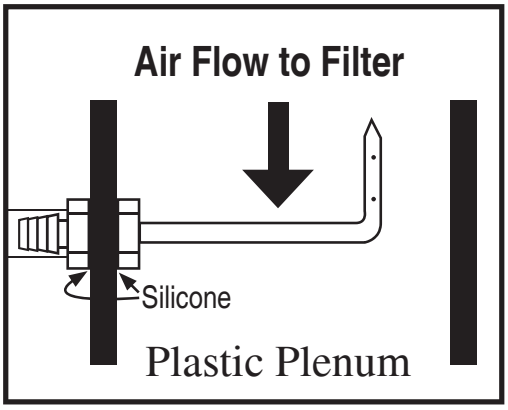
XV. Filter Efficiency Gauge Mounting Instructions

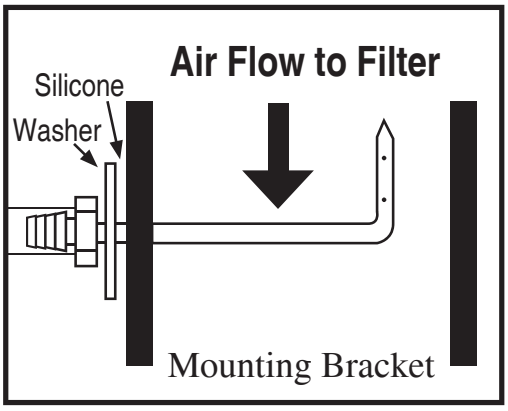


Up to 8' away

OR







Mounting Instructions

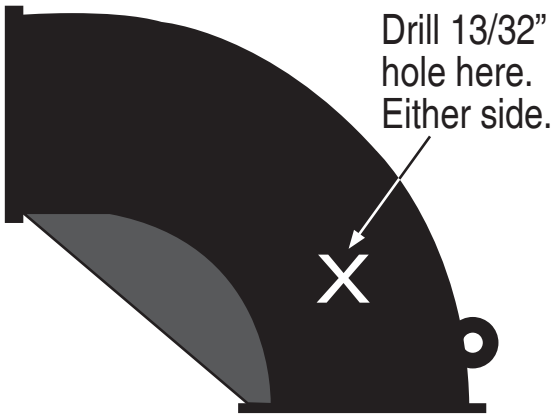
1. Select a location free from excessive vibration and where ambient temperature is between 20 F to 120 F (-6.7 C to 49 C). You can mount gauge up to 8' away from static pressure tube. Gauge bracket can be mounted to stand gusset for easy reading.

2. Mount brass static tube in plenum with tip pointed into air stream. Use included washers and nut as shown in drawings. 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.

XVI. Directions for Filter Assembly / Internal Silencer

External 62" Filter Assembly

*Silencer Included

1. Attach cartridge with hardware provided making sure gasket is attached. See Fig. 1

2. Drop Silencer into filter. Hook J-Clamps under top of filter with threaded shaft through hole in plenum plate. Secure with Thumb Nut. Clamp Dust Bin on Filter bottom.

3. If filter requires additional support. Use the plate at the top of the filter to support the filter assembly.

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

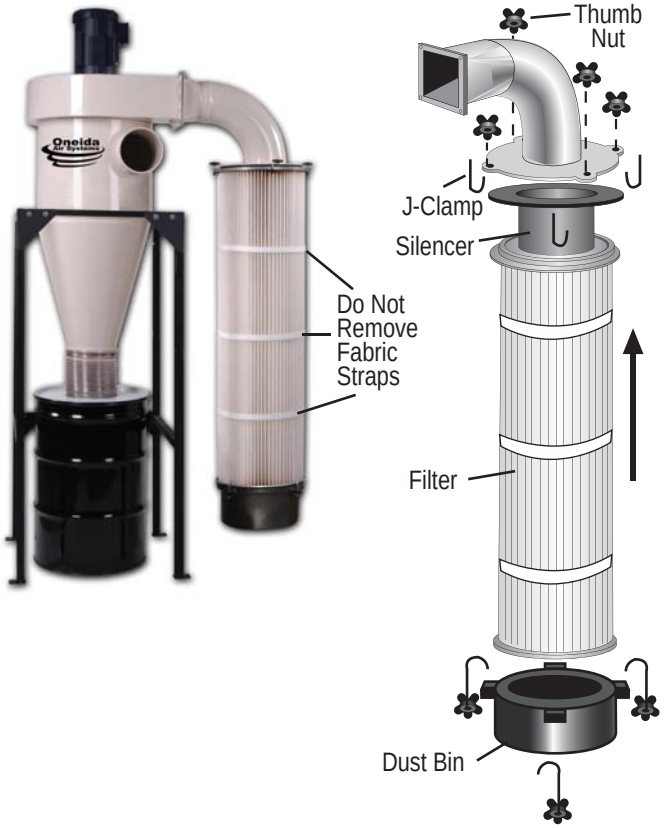
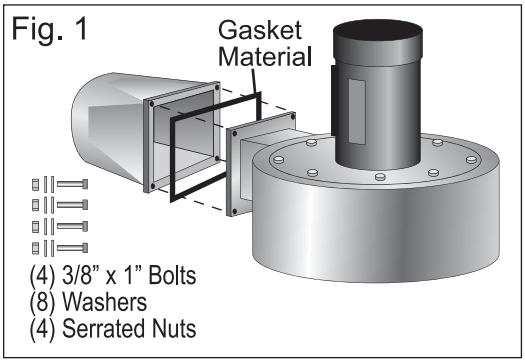
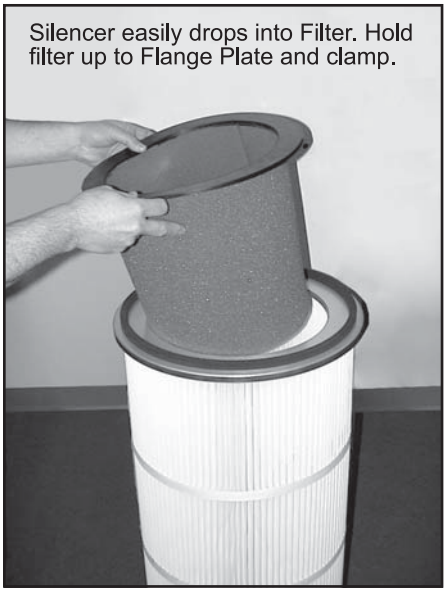


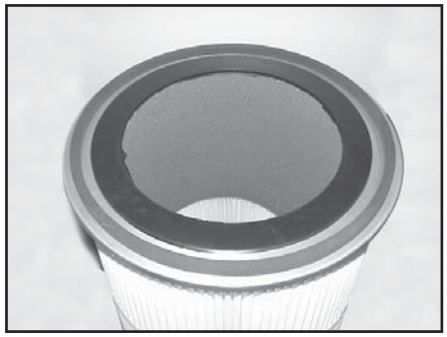
Fig. 1



For filter cleaning instructions, see pg. 15

Fig. 2





Follow Owner's Manual to Complete Installation

Filter Grounding Wire

Attach the alligator clip on the green ground wire from the motor to the filter cage as shown in Fig. 3. Tape the loose ring terminal end to the wire or connect it to one of the filter's J- hooks.

Figure 3

XVII. Fan Motor Lubrication

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 regreased while stopped (at less than 80 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.

XVIII. Supplemental Instructions for Magnetic Motor Starters with Oneida Air Systems Dust Collectors

Please see complete manufacturer instructions for more information.

This supplement is designed to aid Oneida Air Systems customers with frequently asked questions.

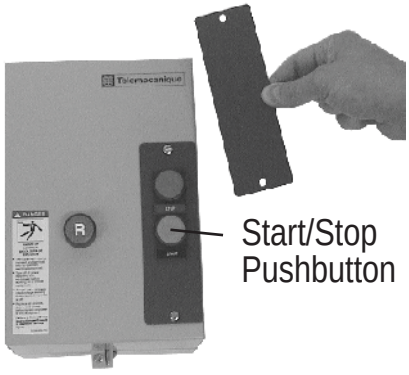
You must have this product installed by a qualified and licensed electrician.

Improper installation is very dangerous and will void your warranty. Follow all local & national electrical codes when installing this product.

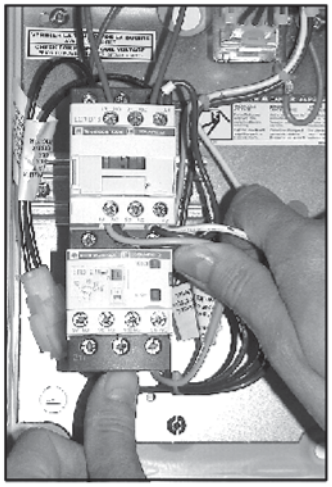
This starter can be used in single or 3 phase applications. When used in 1 phase it requires a jumper wire that connects T2 and L3. (See attached wiring diagram.) This "tricks" the overload into thinking it has 3 phase power. This jumper must be installed by a licensed electrician. *The jumper is not required if you are using 3 phase power.*

Important!

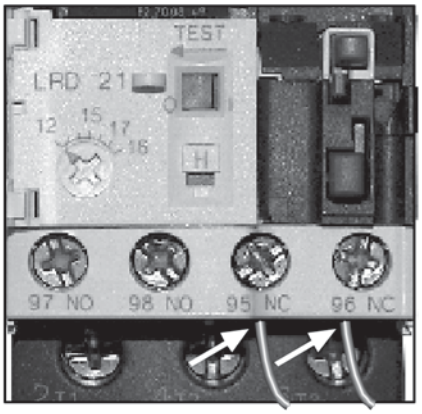
The gauge of the Jumper wire must match the gauge of the wire bringing power to the motor through the Starter.



- Remove the blank plate and install the Start / Stop Pushbutton into the starter cover.

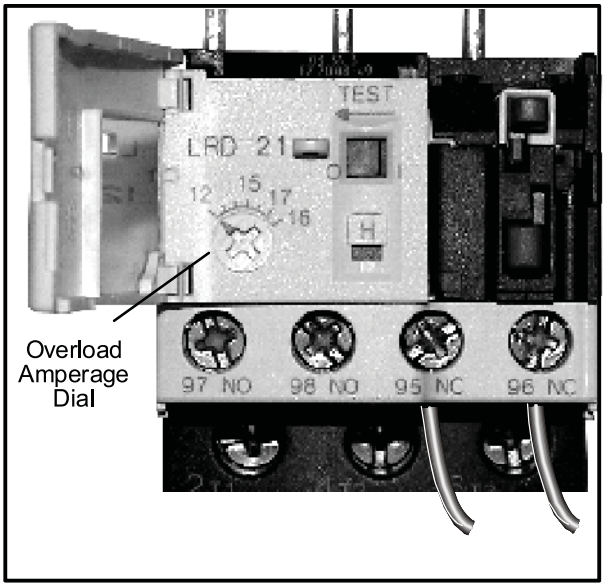


- You must mount the Overload Protector to the contactor. The Overload comes in the small white box. It mounts to the three terminals at the bottom of the contractor. *See the complete instructions for more information.*



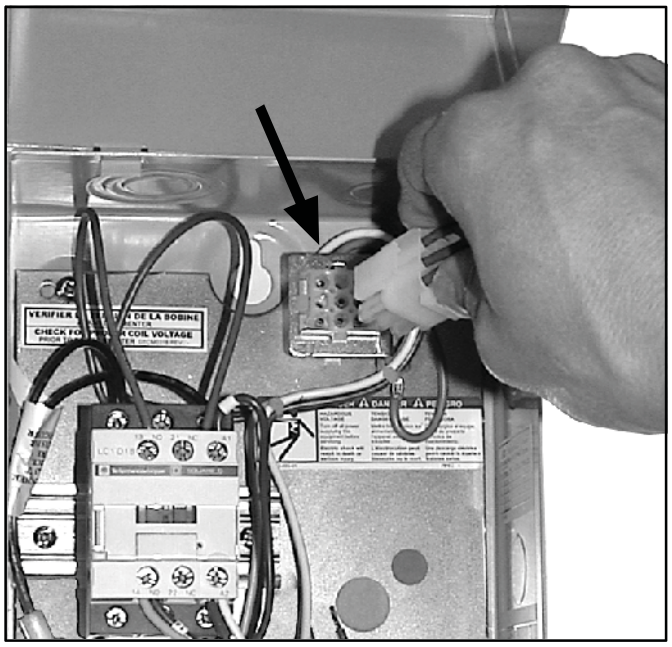
- After mounting the overload, connect (2) brown wires marked 95 & 96 to their respective numbered terminals on the overload.

- Open access cover on the overload, then set the overload amperage dial to match the FLA amperage of your motor. The FLA value can be found on your motor nameplate.



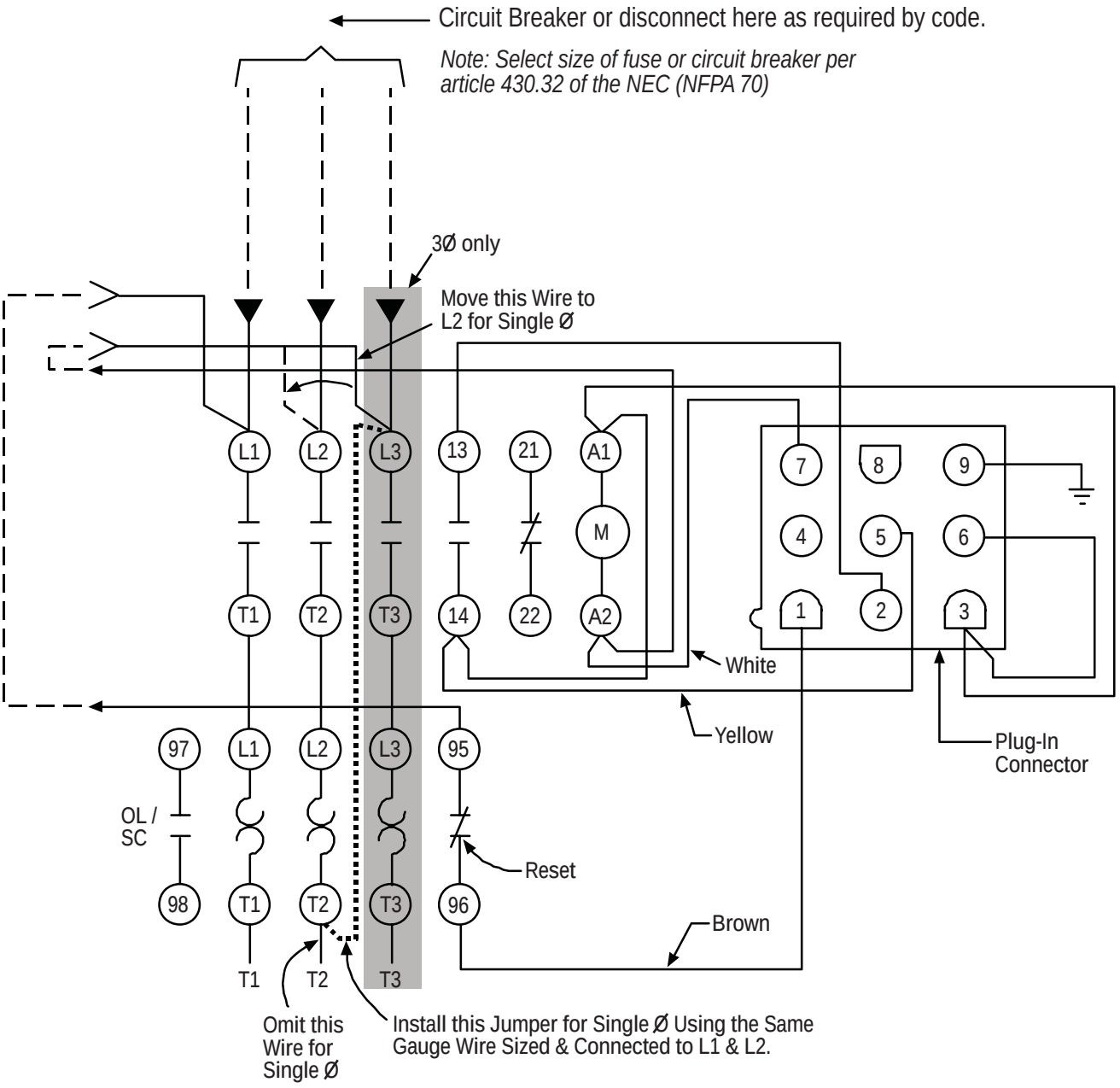
- Be sure you have the proper voltage available for your Starter's Power & Control Circuit (Control circuit controls Contactor Coil in Starter). Coil voltage is/can be independent from the line voltage that runs your motor. Customers may desire an alternative Contactor Coil voltage to connect a Starter to a low voltage control circuit. Most OAS starters are shipped with 240v coils.

- Plug the Start / Stop Push-Button Assembly into keyed receptacle. As shown below.)



- Run power to the starter and from the starter to your motor. See the manufacturer instructions for more details.
  The Power Circuit connected to the Starter should be fed from a dedicated circuit breaker or disconnect with fuses. Don't connect any branch circuits to the Mag Starter Power Circuit is to be sized per Article 430.32 of the NEC.

*Use time delay fuses rated for motor circuits.


Circuit Breaker or disconnect here as required by code.
Note: Select size of fuse or circuit breaker per article 430.32 of the NEC (NFPA 70)
3Ø only
Move this Wire to L2 for Single Ø
L1
L2
L3
13
21
A1
M
14
22
A2
T1
T2
T3
7
8
9
4
5
6
1
2
3
White
Yellow
Plug-In Connector
97
95
OL / SC
98
96
Reset
Brown
T1
T2
T3
Omit this Wire for Single Ø
Install this Jumper for Single Ø Using the Same Gauge Wire Sized & Connected to L1 & L2.