5 & 7.5 HP Direct Drive Cyclonic Dust Collectors

Oneida® Air Systems

10_08

Owner's Manual

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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. - Thur. 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 U.S.A.

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 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 due to improper wiring or incorrect installation.)

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.

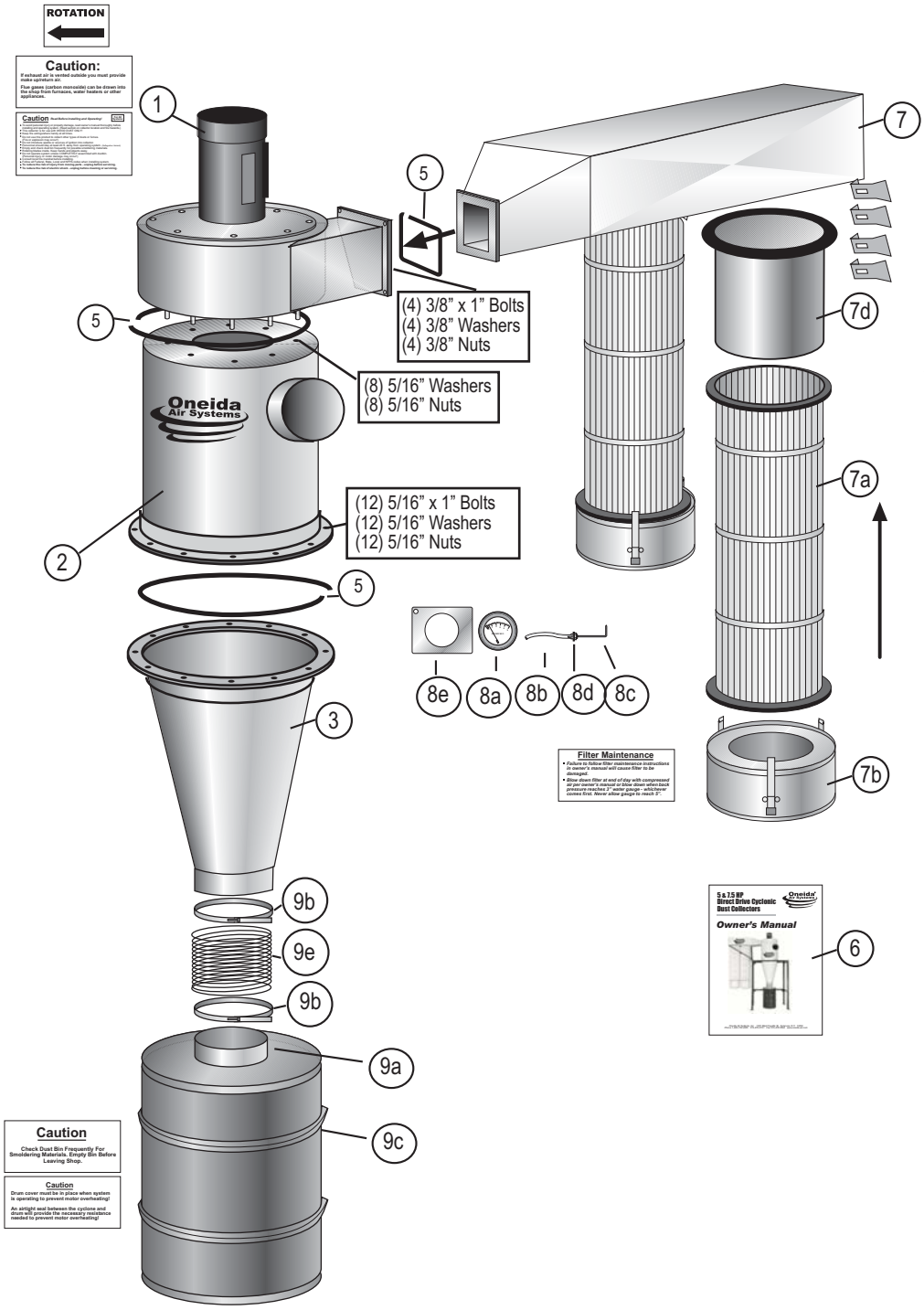
Warning

Do not operate Fan / Blower without connecting dustbin. 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 - XXK050100 - 1 phase - XXK070300- 3 phase



7.5 hp Direct Drive System - XXK070300 3 phase

1. Motor/Blower Assembly BXI050100-1ph -BXI070300 - 3ph
   - 1a.Motor -1 ph / BMZ070370-7.5 hp 3 phase 3 ph
   - 1b.Fan Housing5 & 7.5 hp 16" - BHX070000
   - 1c.Fan Wheel - BWX160000
   - 1d.7.5 hp Shaft Spacer - BBS070001
   - 1e.Bolt 5/16" - 24x1" Left Thread - AFB155160
   - 1f. Motor Plate - RMP000000
   - 1g. 5/16" Washer - AFW155160
   - 1h. Bolt 1/2"-13x3/4" HH (4) - AFB155200
   - 1j. Fender Washer 5/16" x 1 1/2" (2) - AFW170000
   - 1k. Washer Flat 3/8" (8) - AFW190000
   - 1l. Whiz Lock Nut 3/8" GR5 (4) - AFT000004
   - 1m. Bolts 3/8" - 16x1" HHGR% (4) - AFS015100
2. Cyclone Barrel - SXI070000
3. Cyclone Cone 5-7.5 HP 27" - SCX070000
4. Bolts 3/8" 16x1" (16) - AFS015100
   Washers 3/8" (32) - AFW190000
   3/8" Wiz Lock Nuts (16) - AFT000004
   5/16" Wiz Lock Nuts (16) - AFT155175
5. Neoprene Gasket (30') - RGZ000000
6. Owners Manual - ZBM000006
7. Plenum Filter Assembly - FXK020100
   - 7a. Plenum Assembly 2 Filters 5-7.5 hp DD - FPX020700
   - 7b. Dust Bin 16" Dia. x 12" high (2) - FPZ016000
   - 7c. Filter Cartrigde 130 sq. ft. 18"dia. x 62" L (2) - FCS186200
   - 7d. Internal Silencer - BSC180000
8. Filter Efficiency Gauge Kit - FXK000000
   - 8a.Filter Efficiency Gauge 0"-5" H20 - VRG001005
   - 8b. Vinyl Tubing Clear 5/16" O.D. - VRV003125 (8')
   - 8c. Static Pressure Tip - VRP001875
   - 8d. Mounting Flange for Pitot Tube - VRP010000
   - 8e. Filter Efficiency Gauge Bracket - FXX000000
9. 55 Gal. Steel Drum Kit - SEK551001 **Standard**
   - 9a. Drum Lid w/ 10" Ring - SEX551000
   - 9b. Hose Clamps (2) - ACB120000
   - 9c. 55 Gal. Steel Drum - SES550000
   - 9e. Flex Hose (10" dia. x 1') - DHF100000
10. Stand Standard with Plenum Support - STZ070000
    Hardware for stand
    - 10a. (38) 3/8" 16 x 1" Bolts - AFS015100
    - 10b. (38) 3/8" Flat Washers - AFW190000
    - 10c. (38) 3/8" Wiz Lock Nuts - AFT000004
11. Decal - (1) Oneida Logo - ZBC000015
12. Labels
    - 12a. Rotation Label - ZBC000029
    - 12b. Caution / Exhaust Label - ZBS000004
    - 12c. General Caution Label - ZBS000001
    - 12d. Filter Maintenance Label - ZBS000007
    - 12e. Caution / Check Frequently Label - ZBS000006
    - 12f. Caution / Drum Cover Label - ZBS000005

III. General Specifications & Fan Performance Curves

Physical and Electrical Data for 5 and 7.5hp Direct Drive Systems.

System Performance
5hp 2686 max cfm @ 1.65” S.P.
7.5hp 2725 max cfm @ 1.7” S.P.

System Dimensions
Height w/ 55 Gal. Drum: 132”
Footprint: 8.5’ x 3’
Fan Wheel diameter: 16” Air Foil design
Cyclone Inlet: 10”

Integral Fan Blower - 5hp
TEFC 60 Hz Motor - Single Phase
Insulation Class: F4
Voltage: 230
Amperage: 19.8
Made in U.S.A.

Integral Fan Blower - 7.5hp
TEFC 60 Hz Motor - Three Phase
Insulation Class: F4
Voltage: 208 - 230 / 460
Amperage: 19.6 - 18.4 / 9.2
Made in U.S.A.

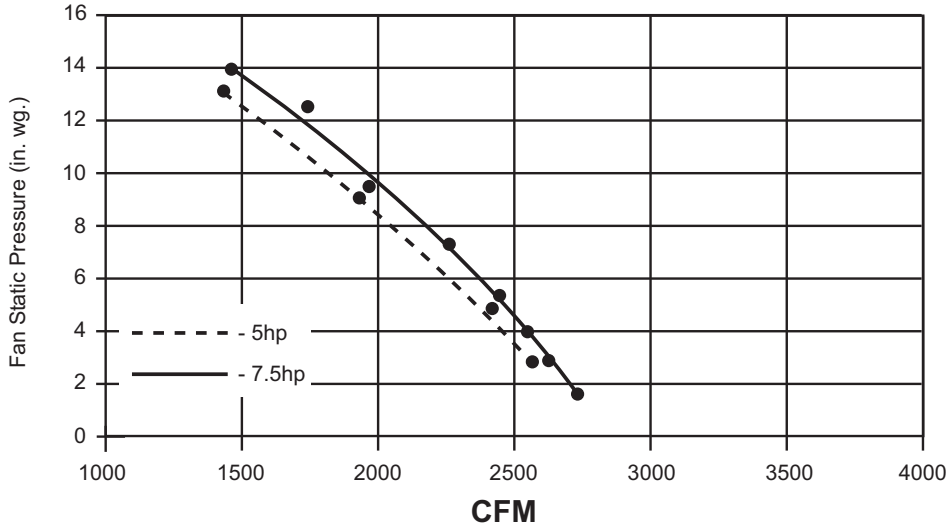
Dust Bin
55 Gal. Steel Drums
Large dust bins available

Options
Angle iron stand for free-standing unit
Silencers available
Magnetic Motor Starters
Tube Filters & Tube Filter Plenum

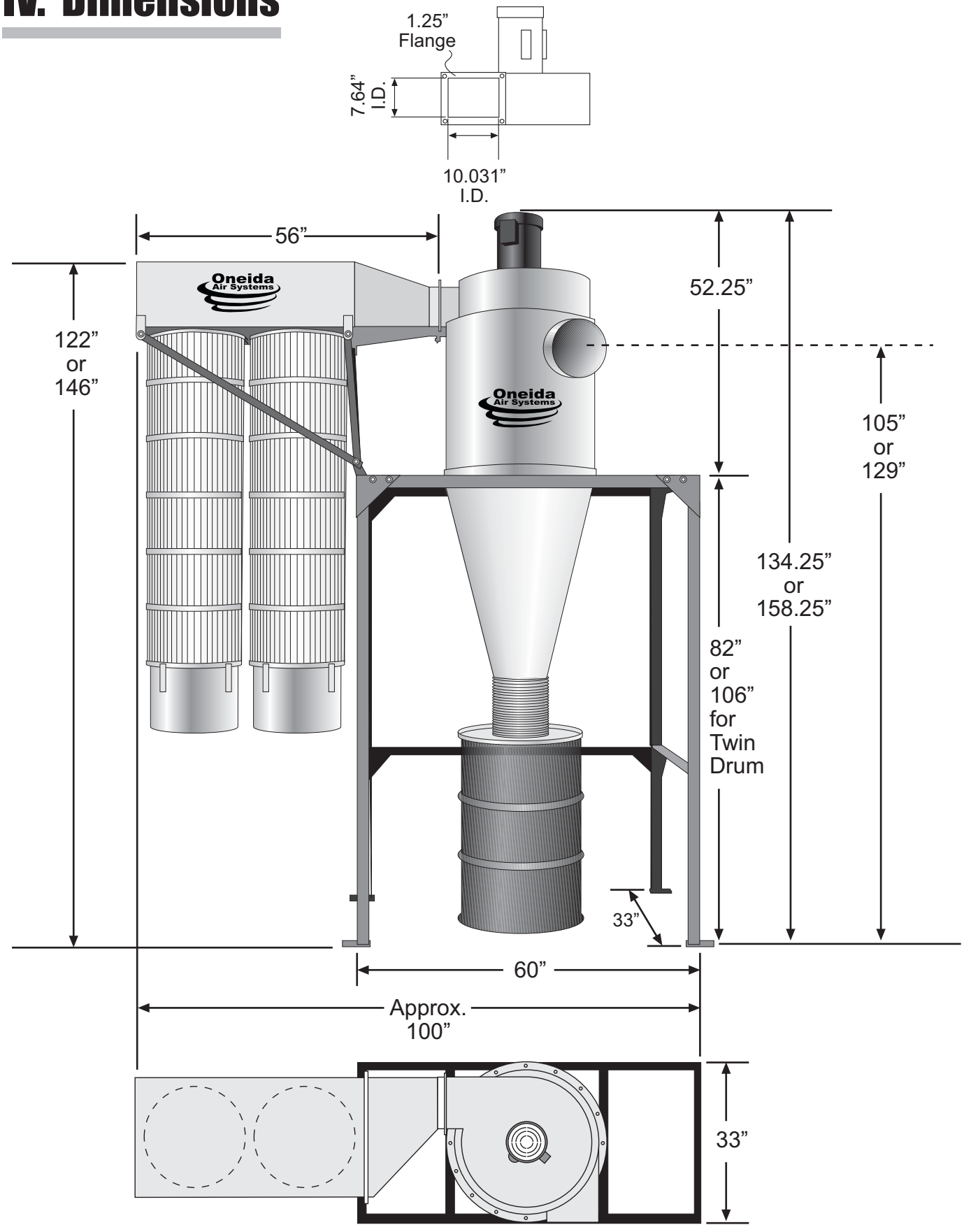
External Cartridge Filters (2)
2 Pleated Cartridges - 260 sq. ft.
Spun Bonded polyester BIA ZH1 / 487 test - Rated C
Captures 99.99% of test material over 20 microns
Captures 99.9% of test material between 0.2 - 2.0 microns @ 11fpm

System Curves

5 & 7.5hp Fan Performance Curve



IV. Dimensions



Top View

V. Angle Iron Stand

Stand Hardware:

1. (28) 3/8 x 1 1/4” bolts for Stand Assembly
2. (28) 3/8” flat Washers
3. (28) 3/8” serrated Nuts
4. (4) Vertical Angle Iron Legs
5. (4) Cross Braces
6. (1) Cross Brace w/ Plenum Connection
7. Square Cross Brace - A.) Front B.) Back

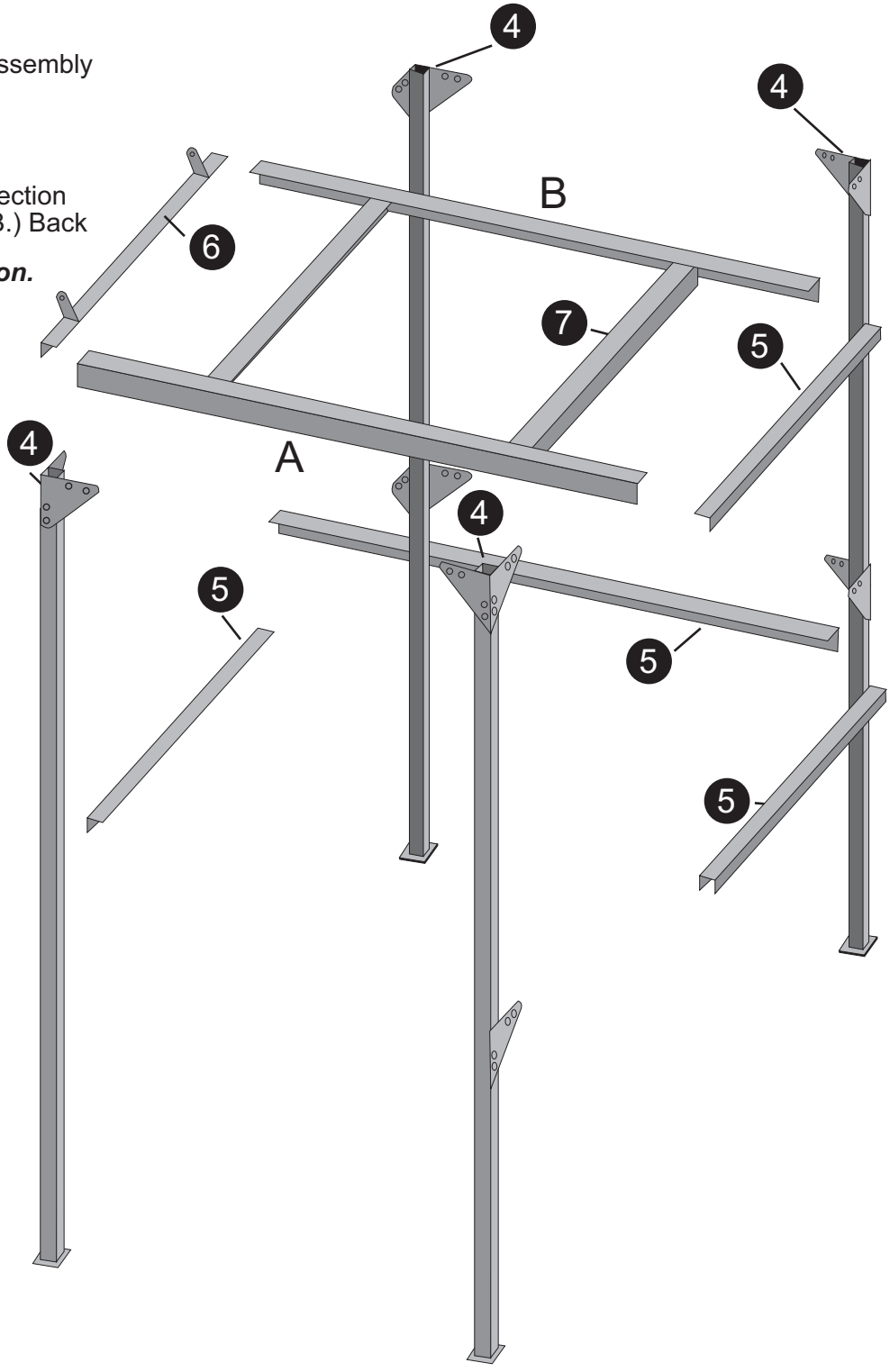
Requires Fork Truck for installation.

1. Bolt stand together laying down. Orient square cross brace (7). Cross brace (6) must be oriented to face plenum.

Note: There will be NO lower brace on front so drum or hopper can be moved.

2. Stand must be set on a stable base capable of supporting fan blower / cyclone / stand / dust bins when full.

3. Anchor stand in place with appropriate fasteners. (Fasteners not provided.)



Wall Bracket installation instructions are on pg.9.

VI. Assembly Instructions

Fan / Blower is shipped strapped to Cyclone Barrel. It is NOT attached to the unit. You must bolt them together. Follow the instructions below.

> ***Oneida Air recommends having at least two people for assembly. System is heavy.***

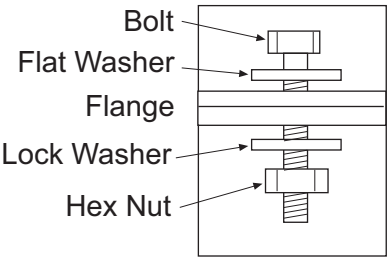
1. Orient the blower housing to match the stand configuration and the desired angle for the cyclone inlet. Bolt the fan / blower to the cyclone barrel using the hardware taped on the motor.
Bolts are already welded on Fan/Blower unit. Check underneath Fan/Blower for self-stick gasket, then put bolts through holes in barrel. Put flat washer on bolt. then lock washer, then hex nut.

Cyclone Inlet and Fan / Blower are independent. Filters can be to the right or left of the unit.

16 ea. 3/8" Flat Washers, Lock Washers and Hex Nuts

2. Place self-stick gasket around cyclone flange. Bolt the fan housing and cyclone barrel to the cyclone cone using hardware taped to cyclone barrel. Note: the fan / blower and the cyclone barrel are very heavy. The system will be top heavy. One method is to lay the stand down, then bolt the cyclone with the fan / blower to the stand. The iron ring will be on top of the cross bars of the stand. Then put bolt through flat washer, then bolt through holes in both flanges, thenput lock washer on bolt, then attach hex nut.
Tip the fan housing and cone upright. ***The system is very top heavy.***

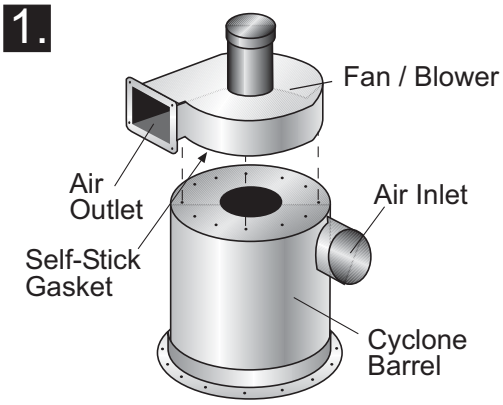
16 ea. 3/8" Flat Washers, Lock Washers, Hex Nuts and 3/8 x 1" Bolts



3. Attach front and rear braces to plenum using bolts, washers and nuts. Loosly bolt the braces to the plenum stand using one bolt. The plenum will hang down vertically next to the system. ***See illustration (3).*** Cantilever the plenum up into position and bolt the fan outlet to the plenum inlet with supplied bolts, washers and nuts. Tighten front and rear brace bolts.

(Cont.)

1.



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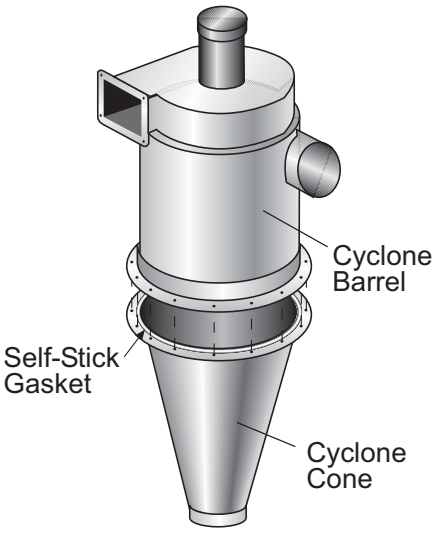

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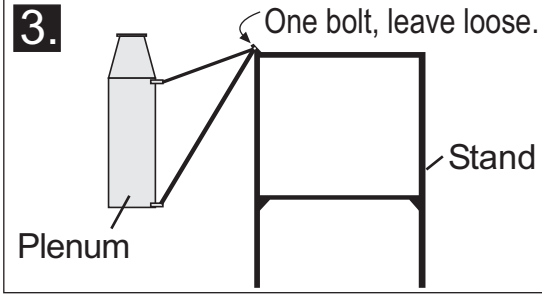

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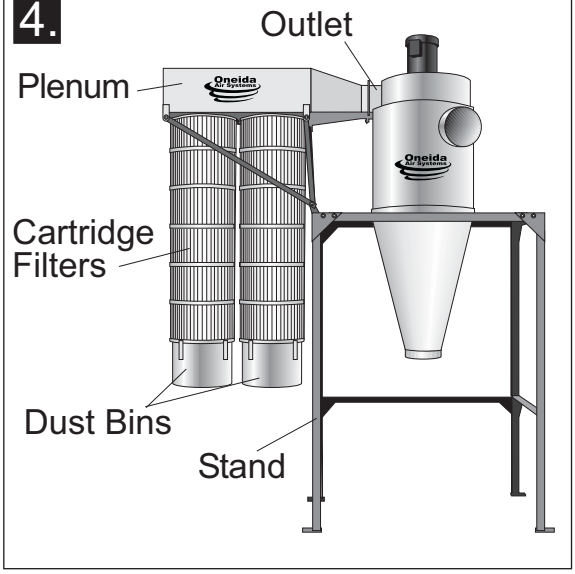
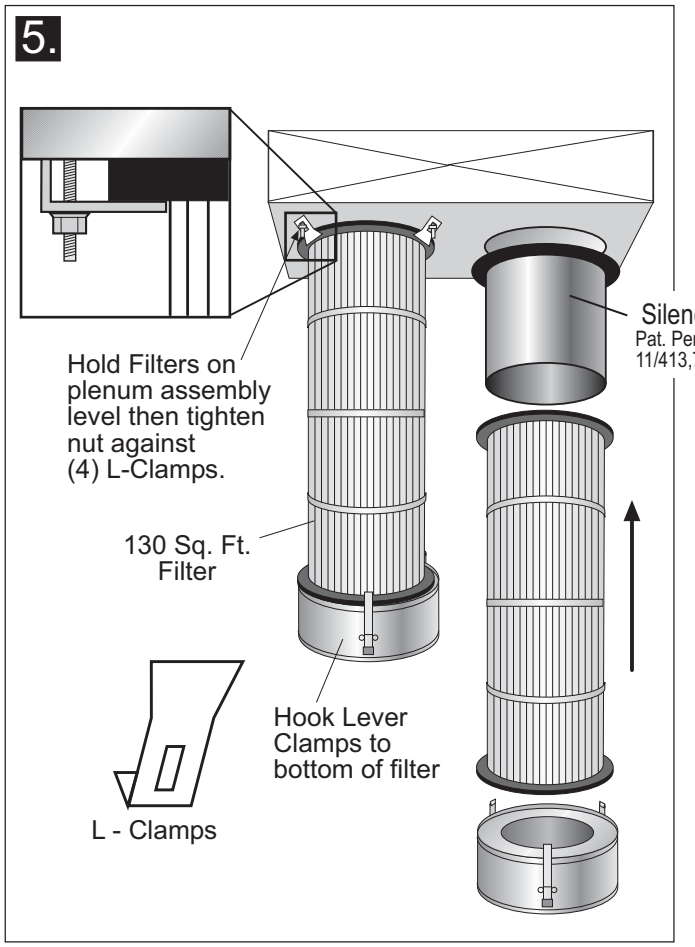


VI. Assembly Instructions (Cont.)

4. Clamp Cartridge Filters to the Plenum. Clamp the Dust Bins to the bottom of the Filter Cartridges. ***See III. 5.*** (L-Clamps are packed separately with hardware.)

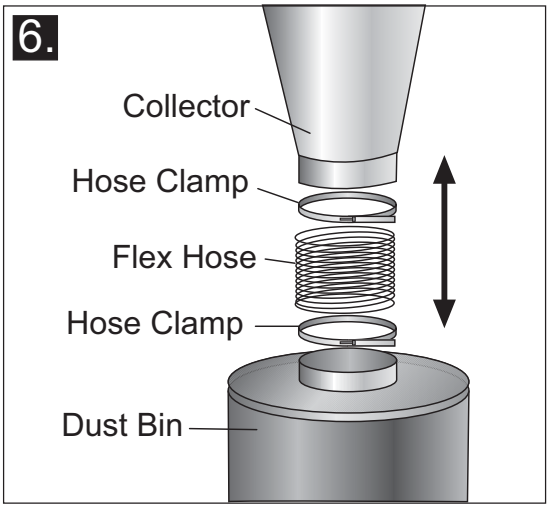


Silencer easily drops into Filter. Hold filter up to Flange Plate and clamp.

5. 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.

6. 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 the connector is air tight or motor damage could result!
Stay clear of fan exhaust while collector is operating.



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

8. On external filter models, attach the Plenum Assembly or connect to your own plenum box.

9. Attach feet of Angle Iron Stand to floor.

Note: Assembly with Tube Filters - Note plenum height requirements of Tube Filters - 6' tubes - 8' plenum / 8' tubes - 10' plenum / 10' tubes - 12' plenum. Adjust system height accordingly.

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. Electrical - 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 the 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 latest issue of National Electrical Code, NEMA Standard Publication No. MG 2 and local codes. Rotating parts such as pulleys, coupling, external fans, and unusual shaft extensions 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.

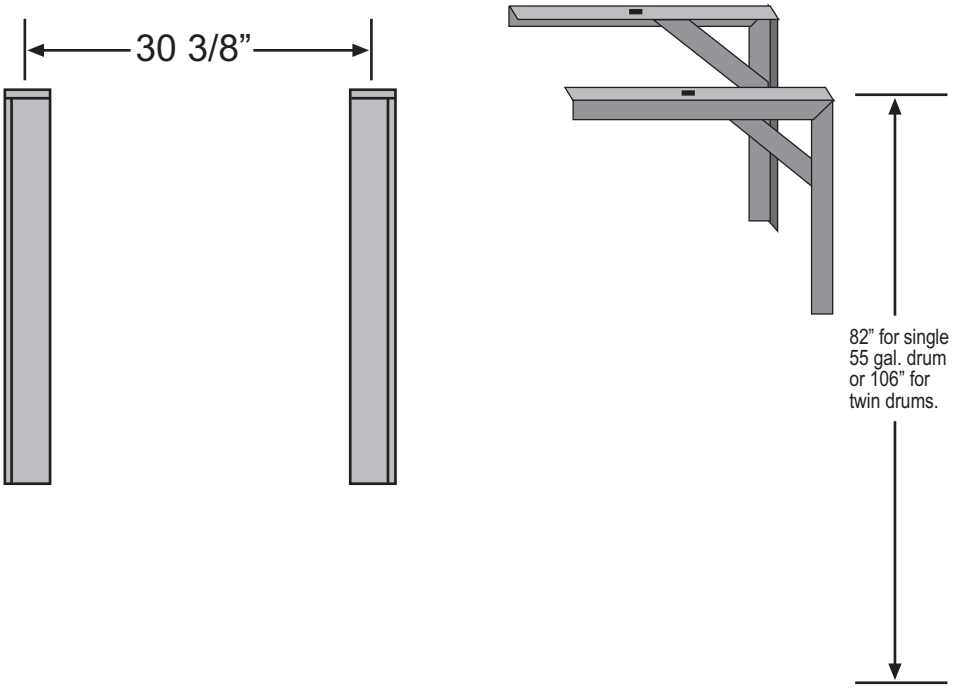
Warning: Rotating Fan Blades. Keep Objects Clear of Inlet and Outlet.

Wall Bracket Mounting Instructions

Mount to wall using apprpriate hardware and methods for your situation.

Position Cone on Brackets making sure that gasket material is in position.

Making sure that cyclone barrel and fan / blower housing is correctly oriented for your set-up, position corresponding bolt holes over cone holes and fasten with supplied hardware. Be very careful with this part of procedure. Unit is very top heavy. Make sure you have appropriate help.



VII. External Filter Maintenance

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

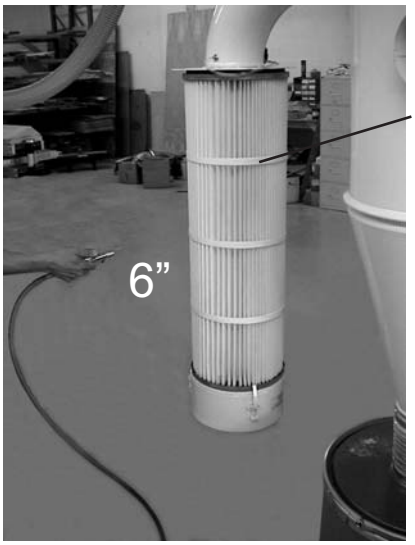
All steps should be done with a dust mask and eye protection and System off.

The External Filter can be cleaned using the following methods:

1. Compressed air from outside.

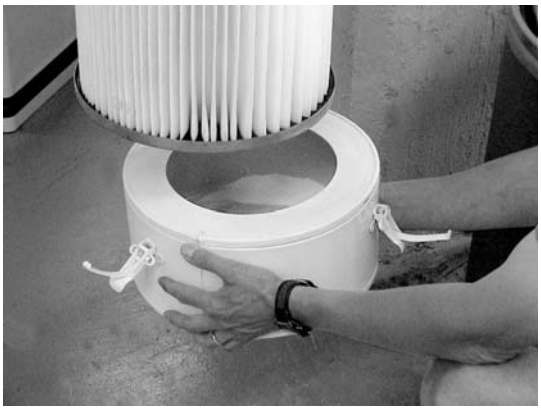
Blast air along pleats of the filter at about a 20° angle. Blast air out and away from you or anyone in the general area. DO NOT remove dust pan before blowing.
Keep air nozzle at least 6” from filter. Closer blasts may damage filter material.

Wait a few minutes for internal dust to settle in dust pans or 55 gal. drum, then unclip and carefully empty dust bin.



Do not remove fabric straps around pleated cartridge.

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.



VIII. 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

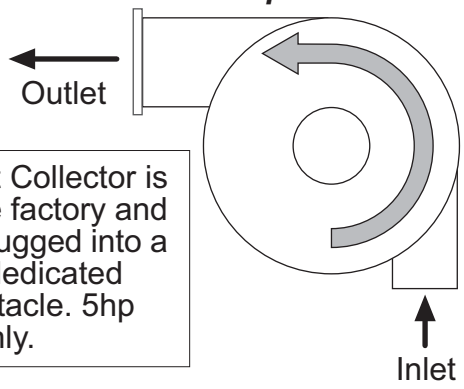
1 - Blue
8 - Red — Power Line 1*

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 and 2 are interchangeable

Top View

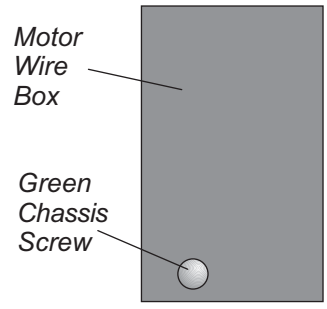


Note: This Dust Collector is pre-wired at the factory and need only be plugged into a NEMA 6020R dedicated electrical receptacle. 5hp single phase only.

7.5hp Three Phase
Baldor Motor / 208 - 230/460v / 19 - 17/8.6 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

To reverse rotation interchange any two line leads

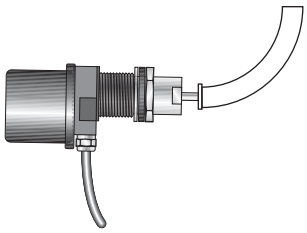


Ground: Connect house ground wire to green chassis screw in motor wire housing box.

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

IX. Accessories

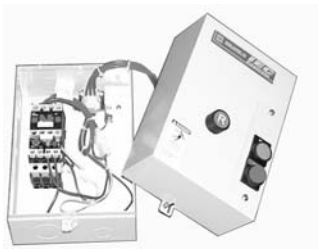
Bin Level Monitor - AIB000000 - Provides level sensing for dry bulk solids. The monitor operates by using a 1 rpm synchronous motor to rotate a paddle. When paddle rotation is impeded by material surrounding it, the motor is de-energized and triggers a SPDT snap switch. The snap switch can be used in conjunction with a motor starter to turn equipment off or provide alarm functions.



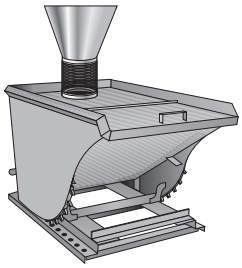
Bin Level Sensor Assembly w/ Strobe Light - AXB000000

Pre-assembled package Includes:
- Bin-level sensor, pre-wired to junction box
- Blue strobe light
- Modular cord connections from strobe light to junction box
- Junction box with pigtail wires to connect 110V supply power

Magnetic Motor Starters - The 7.5hp Direct Drive dust collectors do not come wired or with an on/off switch. Because of the voltage and amperage requirements of the system, an industrial switch must be used.
OAS offers Square "D" Full Voltage Non-Reversing across the Line Starters, Nema Type 1 Enclosure with Start/Stop in cover, and class 10 overload. Industrial switches can also be purchased through your local electrician. Due to varying electrical codes, OAS cannot specify exact wiring requirements. When wiring the collector you should always hire a licensed electrician.

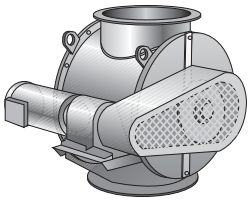


Dust Bin Options - (May require Custom Mounting Stand.)

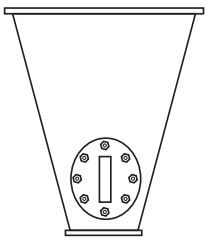


1. Hoppers -
Large capacity hoppers from .5 cu. yd. to 3 cu. yd.
3/16" reinforcing angle for added support - 3/16" plate body is 100% continuously MIG welded on inside - 3/8" rear cross brace angle (not 3/16") - three 3" base channel - All angles are structural not formed.
Supplied stand will accomodate up to a 2 yd. hopper w/o modification. Larger stands available.

2. Air Locks -
Rotary air locks provide an alternative to an air tight dust bin for larger volume capacity and less maintenance.



3. Cone w/ Clean Out -
Optional cone with clean out plate for use with airlocks..



X. Troubleshooting

Motor Overheating

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

Caused By:

- 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 power supply is 110V if wiring 110V or 220V if wiring for 220V.

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 filters are clean. See filter cleaning directions.

Filters filling with large chips and excessive dust

Caused By:

- Air leakage between cyclone and dust bin. Cyclone and dust bin must be air tight. Even small leaks will cause poor preseparation in the cyclone.
  - Check drum for any leaks.
  - Make sure drum lid forms a good air tight seal with the drum.
  - Check flex hose connection. Make sure hose clamps are tight. Seal with silicone.
  - Make sure dust bin has not over filled. Dust bin should be emptied before the dust reaches top of the container.
  - Make sure clamp around cyclone is tight and sealed with silicone.
  - If there is not enough air entering system, open more blast gates.
  - Minimum 4" diameter pick up at tool location. Less than 4" will restrict air flow into collector and will increase filter maintenance.

Excessive vibration

Caused By:

Loose mounting bolts, set screws, bearings or couplings.
Bent shaft due to mishandling or material impact.
Accumulation of foreign material on the fan wheel.
Excessive system pressure or restriction of airflow due to closed blast gates.
Inadequate support structure.

XI. 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 Marshalls 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 (Standard 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 accessories are limited to 90 days. This warranty does not apply to defects due 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 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. 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

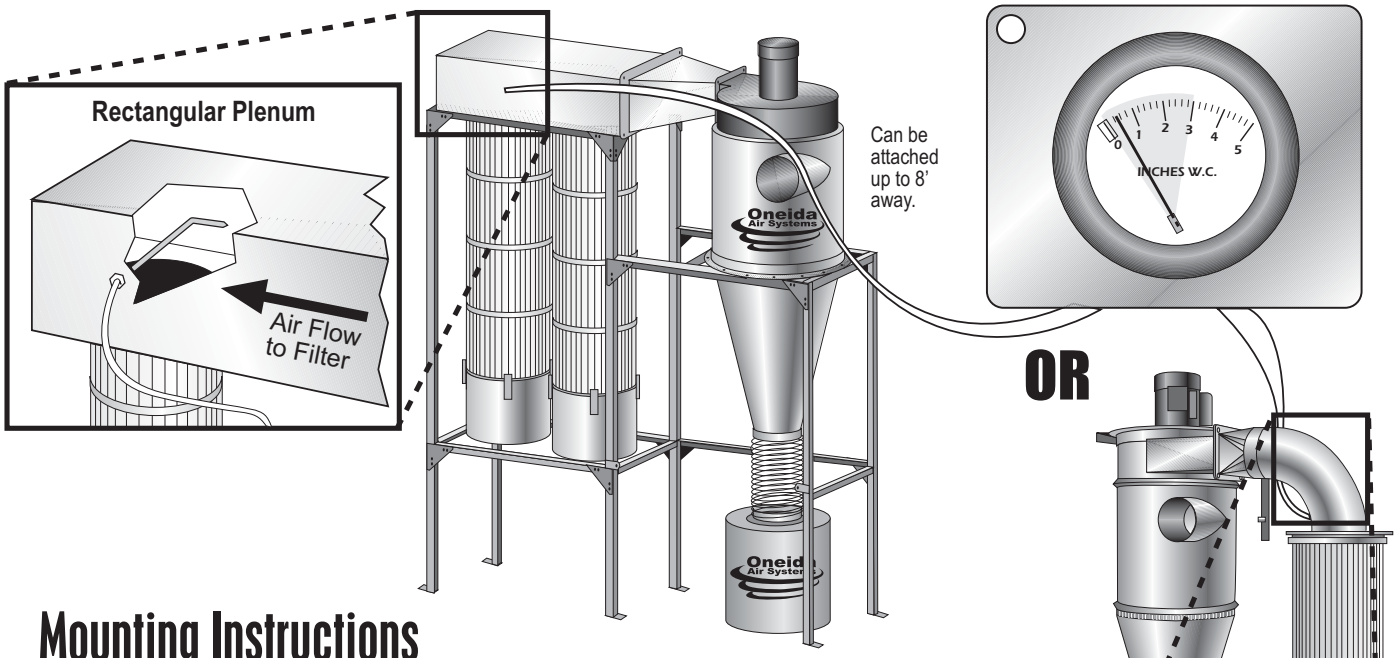
Products will be shipped to Buyer's single destination. Title and risk of loss shall pass to the Buyer upon delivery to such destination. Buyer pays transportation expenses. Dates of shipment are advisory and O.A.S. will make reasonable efforts to ship on or before the date states for shipment, however, 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 and investigate all returned products before Buyer's claim is settled. All products returned for a cash refund must be unused, resaleable 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 get an RMA# (Return Authorization number). All merchandise must be shipped 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. Filter Efficiency Gauge Mounting Instructions

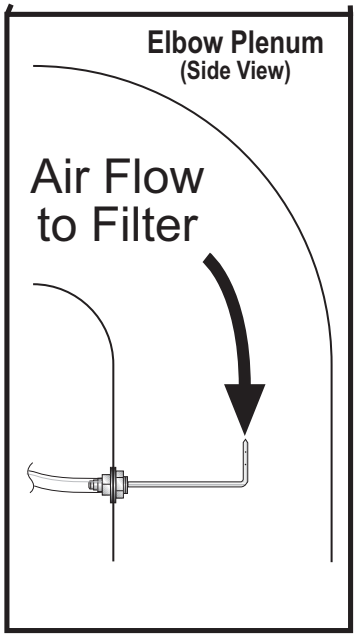


Mounting Instructions

1. Mount brass static pressure tube in plenum with tip pointed into the air stream. Use mounting bracket and sheet metal screws if interior of plenum is not accessible. Refer to drawings for location of brass static pressure tube.
2. Refer to instructions provided with gauge for mounting to bracket.
3. Mount gauge up to 8' away, mounting it closer will not affect reading.
4. Connect clear tubing from brass static pressure tube to the port labeled "+" on the back of the pressure gauge.
5. Make sure the tubing is not crushed or kinked along its entire length, cut shorter if necessary.

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.

XV. 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.

XVI. 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.

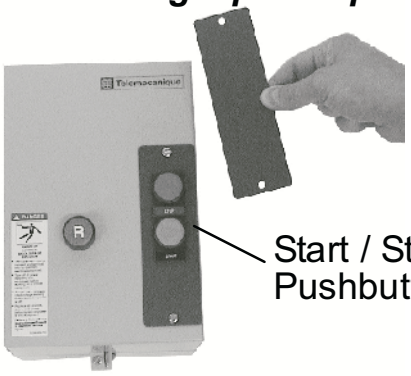
You must have this product installed by a qualified and licensed electrician.

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

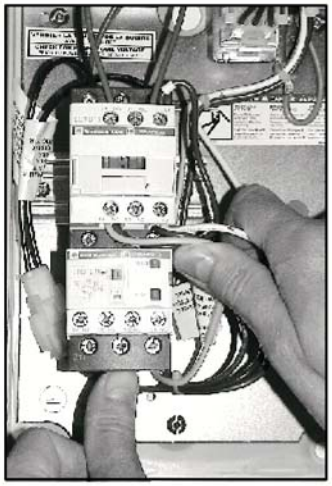
This starter can be used in single or 3 phase applications. When used in 1 phase it requires a jumper wire that connects T2 and L3. (See attached wiring diagram.) This "tricks" the overload into thinking it has 3 phase power. This jumper must be installed by a licensed electrician. ***The jumper is not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

Important!

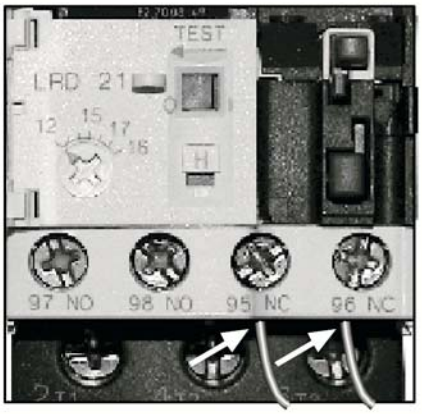
The gauge of the Jumper wire must match the gauge of the wire bringing power to the motor thru the Starter.



▶ Remove the blank plate and install the start / stop pushbutton into the starter cover.

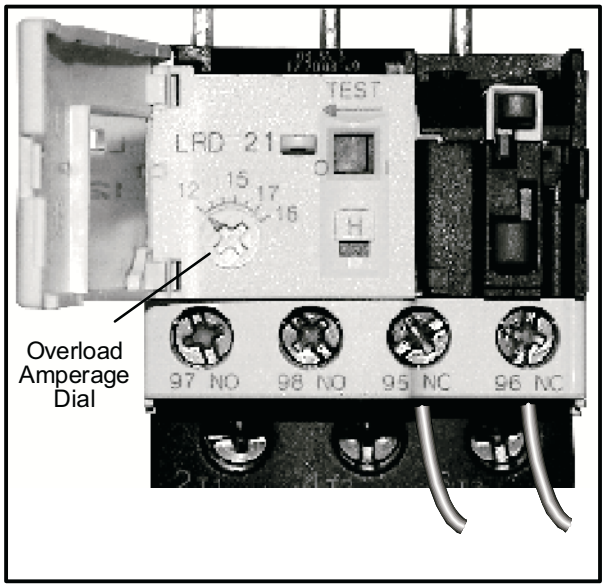


▶ You must mount the Overload Protector to the contactor. The Overload comes in the small white box. It mounts to the three terminals at the bottom of the contactor. ***See the complete instructions for more information.***



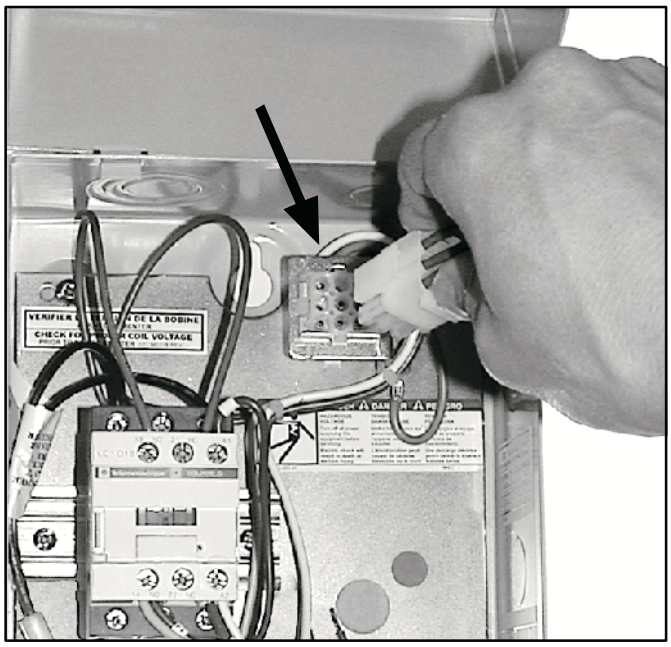
▶ After mounting the overload, connect (2) brown wires marked ***95*** & ***96*** to their respective numbered terminals on the overload.

▶ 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.



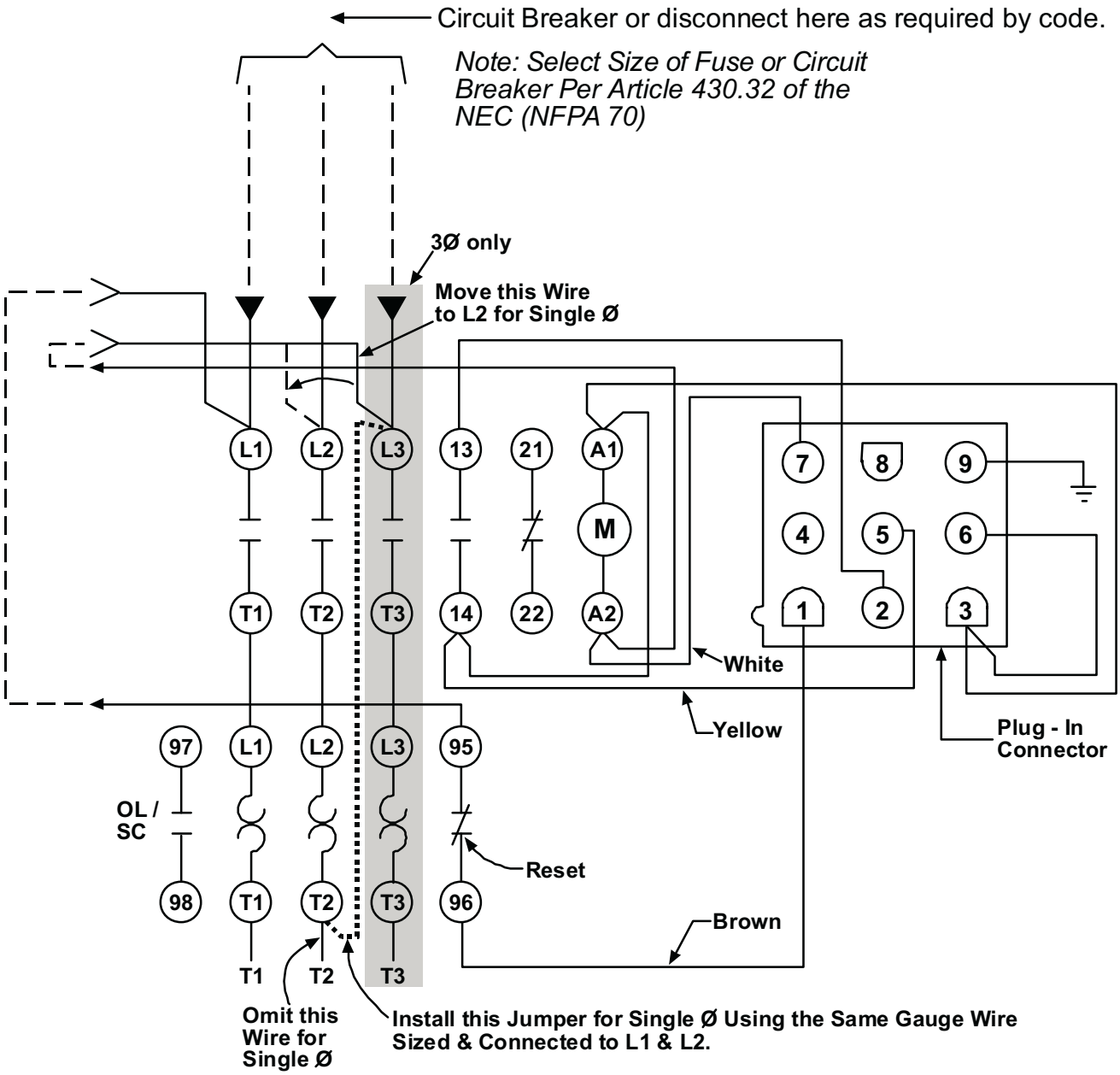
▶ Be sure you have the proper voltage available for your Starter's Power & Control Circuit (Control circuit controls Contactor Coil in Starter). Coil voltage is/can be independent from the line voltage that runs your motor. Customers may desire an alternative Contactor Coil voltage to connect a Starter 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. The overcurrent protection (circuit breaker or fuse*) for the 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.