

# READ THIS FIRST



**Model G0442/G0601**  
**\*\*\*IMPORTANT UPDATE\*\*\***  
 For Machines Mfd. Since 07/20,  
 and Owner's Manual Revised 12/18

For questions or help with this product contact Tech Support at (570) 546-9663 or [techsupport@grizzly.com](mailto:techsupport@grizzly.com)

The following changes were made since the owner's manual was printed:

- The dust collection drum now has a handle for easy hood raising, and the frame has square holes for carriage bolts.

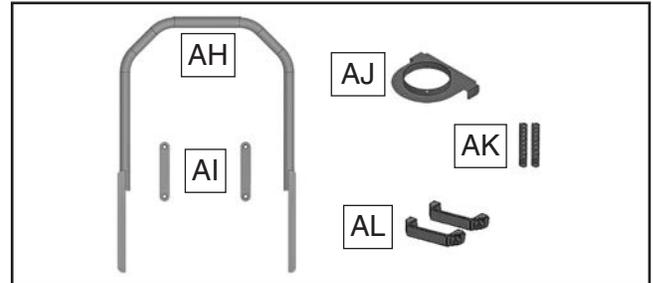
Aside from this information, all other content in the owner's manual applies and **MUST** be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or [techsupport@grizzly.com](mailto:techsupport@grizzly.com).

## Revised Inventory

### Collector Box Contents (see Figure 1): Qty

<b>T.</b> Hardware Box	
—Foam Tape 3 x 15 x 700mm .....	8
<b>U.</b> Hardware Box	
—Hex Bolts $\frac{3}{8}$ "-16 x 11" .....	2
—Hex Bolts $\frac{3}{8}$ "-16 x 1" .....	10
—Hex Bolts $\frac{5}{16}$ "-18 x 1" .....	30
—Hex Bolts $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " .....	7
—Hex Bolts $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " .....	28
—Phillips Head Screws $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " .....	4
—Sheet Metal Screws M4 x 12.....	3
—Flat Washers $\frac{3}{8}$ " (Thin) .....	8
—Flat Washers $\frac{3}{8}$ " .....	38
—Flat Washers $\frac{5}{16}$ " .....	80
—Lock Washers $\frac{3}{8}$ " .....	4
—Fender Washers $\frac{5}{16}$ " .....	12
—Lock Nuts $\frac{3}{8}$ "-16.....	12
—Lock Nuts $\frac{5}{16}$ "-18.....	8
—Hex Nuts $\frac{3}{8}$ "-16.....	11
—Hex Nuts $\frac{5}{16}$ "-18.....	22
—Acorn Nuts $\frac{5}{16}$ "-18.....	4
<b>AH.</b> Collection Lid Handle .....	1
<b>AI.</b> Drum Lid Connecting Plates .....	2
<b>AJ.</b> Cyclone Funnel Adapter.....	1
<b>AK.</b> Drum Lid Springs .....	2
<b>AL.</b> Collection Drum Plastic Handles.....	2



**Figure 1.** Revised collector parts (not hardware).

### Stand Box Contents (see Figure 2): Qty

<b>F.</b> Hardware Bags	
—Hex Bolts $\frac{3}{8}$ "-16 x 1" .....	3
—Carriage Bolts $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " .....	56
—Lock Nuts $\frac{3}{8}$ "-16.....	3
—Hex Nuts $\frac{5}{16}$ "-18.....	56
—Flat Washers $\frac{3}{8}$ " .....	6
—Flat Washers $\frac{5}{16}$ " .....	56
<b>H.</b> Handle Hook.....	1
<b>I.</b> Handle Hook Bracket .....	1



**Figure 2.** Revised stand parts (not hardware).

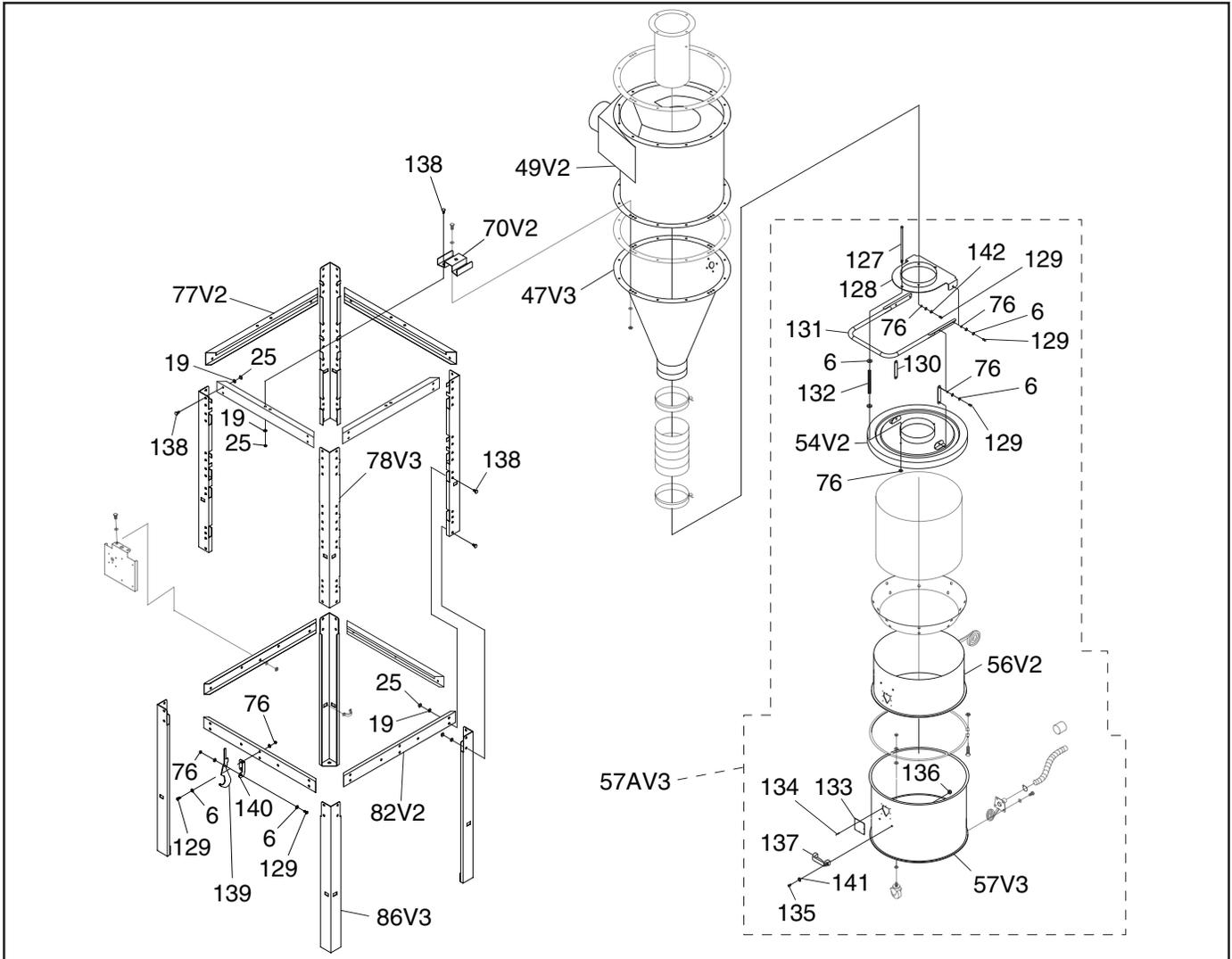
COPYRIGHT © AUGUST, 2020 BY GRIZZLY INDUSTRIAL, INC.  
**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**  
 #CS21268 PRINTED IN TAIWAN

# Revised Specifications

## Product Specifications

Width (side-to-side) x Depth (front-to-back) x Height ..... 66 x 51-1/2 x 114 in.

## Revised Parts Breakdown



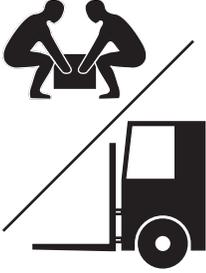
REF	PART #	DESCRIPTION
6	P0442006	FLAT WASHER 3/8
19	P0442019	FLAT WASHER 5/16
25	P0442025	HEX NUT 5/16-18
47V3	P0442047V3	CYCLONE FUNNEL V3.07.20
49V2	P0442049V2	INTAKE BARREL V2.07.20
54V2	P0442054V2	COLLECTION DRUM LID V2.07.20
56V2	P0442056V2	UPPER DRUM 25GAL V2.07.20
57AV3	P0442057AV3	COLLECTION DRUM ASSY 55GAL V3.07.20
70V2	P0442070V2	COLLECTOR MOUNTING BRACKET V2.07.20
76	P0442076	LOCK NUT 3/8-16
77V2	P0442077V2	UPPER STAND BRACE V2.07.20
78V3	P0442078V3	UPPER STAND LEG V3.07.20
82V2	P0442082V2	LOWER STAND BRACE V2.07.20
86V3	P0442086V3	LOWER STAND LEG V3.07.20
127	P0442127	HEX BOLT 3/8-16 X 11

REF	PART #	DESCRIPTION
128	P0442128	CYCLONE FUNNEL ADAPTER
129	P0442129	HEX BOLT 3/8-16 X 1
130	P0442130	DRUM LID CONNECTING PLATE
131	P0442131	COLLECTION LID HANDLE
132	P0442132	DRUM LID SPRING
133	P0442133	DRUM WINDOW
134	P0442134	RIVET
135	P0442135	PHLP HD SCR 5/16-18 X 3/4
136	P0442136	ACORN NUT 5/16-18
137	P0442137	COLLECTION DRUM HANDLE PLASTIC
138	P0442138	CARRIAGE BOLT 5/16-18 X 3/4
139	P0442139	HANDLE HOOK
140	P0442140	HANDLE HOOK BRACKET
141	P0442141	FENDER WASHER 5/16
142	P0442142	FLAT WASHER 3/8 THIN



# Assembly

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Needed for Setup** and gather all listed items. To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).

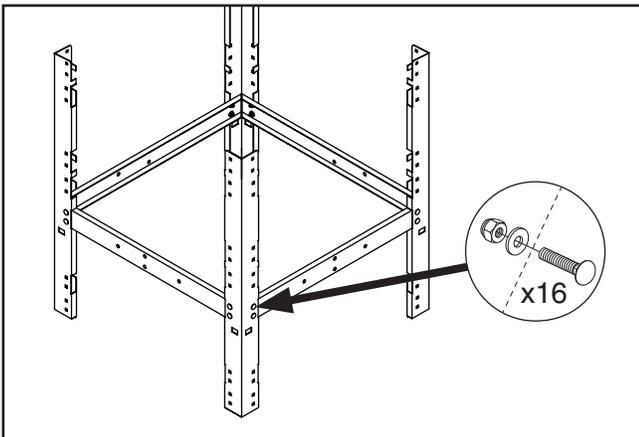
	<p><b>! WARNING</b> <b>HEAVY LIFT!</b> Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.</p>
---	---

## To assemble machine:

1. Connect upper stand legs with lower stand braces, using (16)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " carriage bolts,  $\frac{5}{16}$ " flat washers, and  $\frac{5}{16}$ "-18 hex nuts (see **Figure 3**).

**Note:** Only finger tighten hardware.

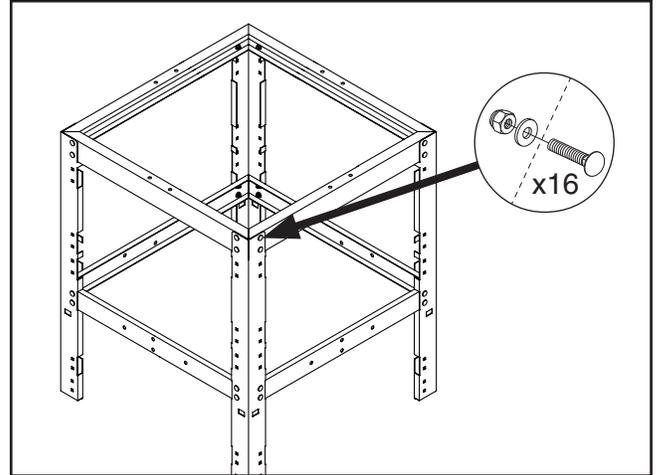
**Note:** Be sure to build frame using bolt holes indicated in **Figures 3–4** and **19**. Machine will not fit correctly on frame if wrong holes are used and you will need to rebuild frame.



**Figure 3.** Initial assembly of upper stand legs connected to lower stand braces.

2. Attach upper stand braces to top of assembly from **Step 1**, using (16)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " carriage bolts,  $\frac{5}{16}$ " flat washers, and  $\frac{5}{16}$ "-18 hex nuts (see **Figure 4**).

**Note:** Only finger tighten hardware.



**Figure 4.** Upper braces attached to stand assembly.

3. Square stand, as shown in **Figure 5**, then tighten all hardware.

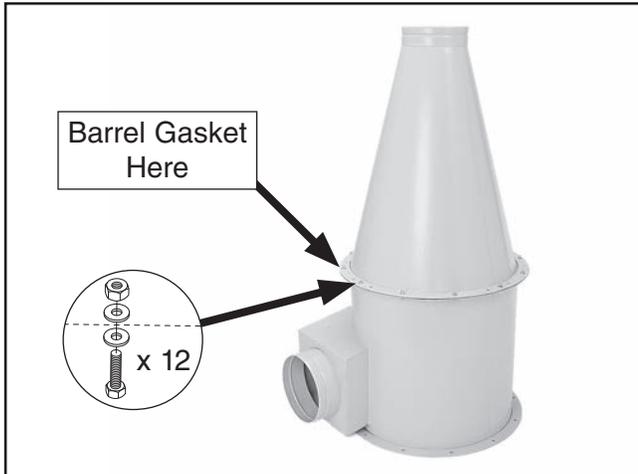


**Figure 5.** Example of squaring stand assembly before tightening stand hardware.



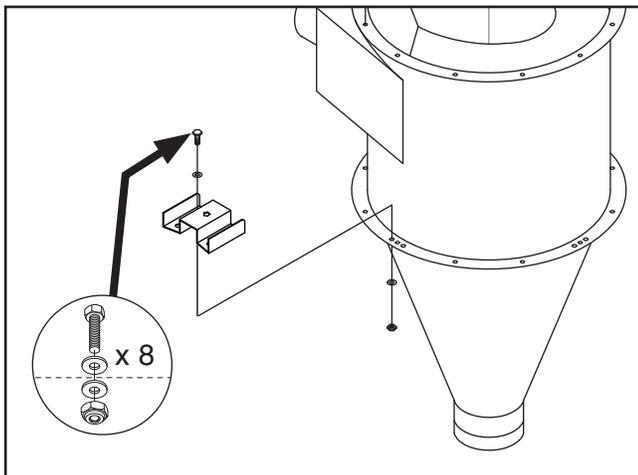
- Attach cyclone funnel to intake barrel with barrel gasket between them, as shown in **Figure 6**, with (12)  $\frac{5}{16}$ "-18 x 1" hex bolts, (24)  $\frac{5}{16}$ " flat washers, and (12)  $\frac{5}{16}$ "-18 hex nuts.

**Note:** At places where you see three holes close together, only use center hole for this step. The two outside holes will be used in the next step.



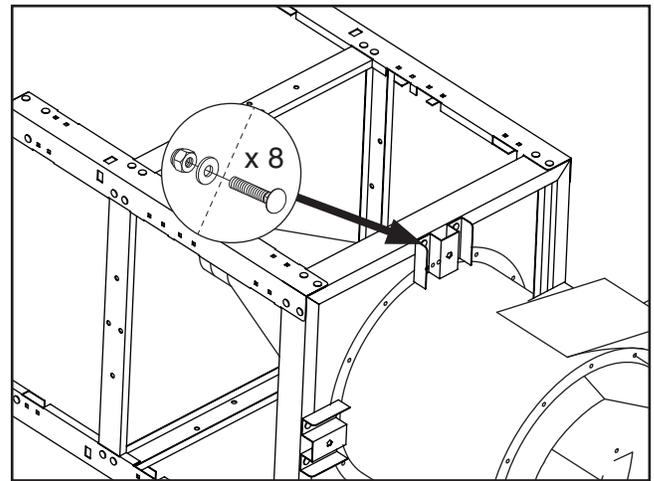
**Figure 6.** Cyclone funnel attached to intake barrel.

- Attach collector mounting brackets to intake assembly, as shown in **Figure 7**, using (8)  $\frac{5}{16}$ "-18 x 1" hex bolts, (16)  $\frac{5}{16}$ " flat washers, and (8)  $\frac{5}{16}$ "-18 lock nuts.



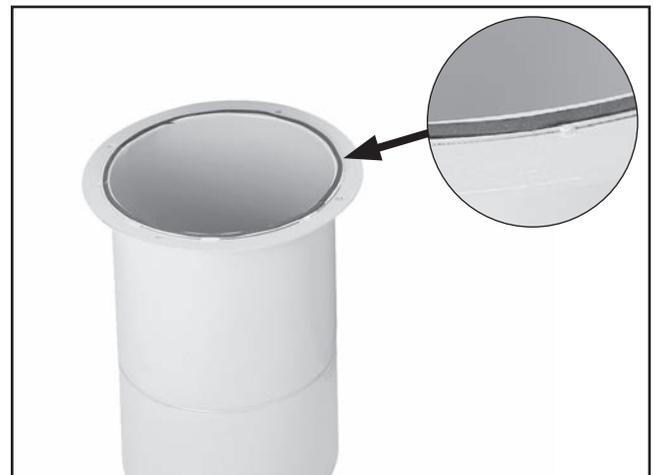
**Figure 7.** Collector mounting brackets and securing fasteners.

- Place large piece of cardboard on ground to prevent scraping parts on bare floor during next steps.
- With help of another person, lay stand assembly on its side on cardboard and slide collector assembly into stand assembly, as shown in **Figure 8**.
- Fasten collector assembly to stand with (8)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " carriage bolts,  $\frac{5}{16}$ " flat washers, and  $\frac{5}{16}$ "-18 hex nuts, as shown in **Figure 8**.



**Figure 8.** Collector assembly fastened to stand.

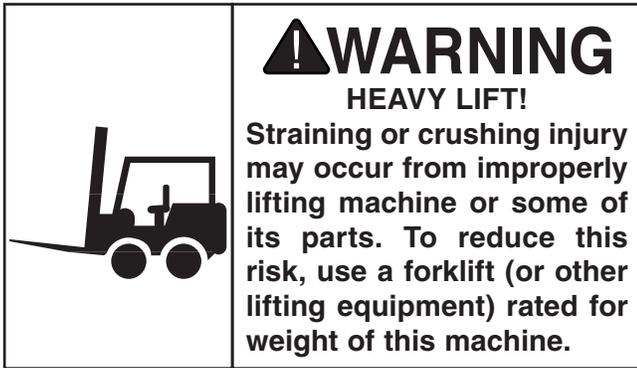
- Apply 3 x 6mm foam tape on intake cylinder, as shown in **Figure 9**.



**Figure 9.** Foam tape attached to the intake cylinder.



10. Lift assembly upright and rotate it so inlet/outlet directions are suitable for your shop.



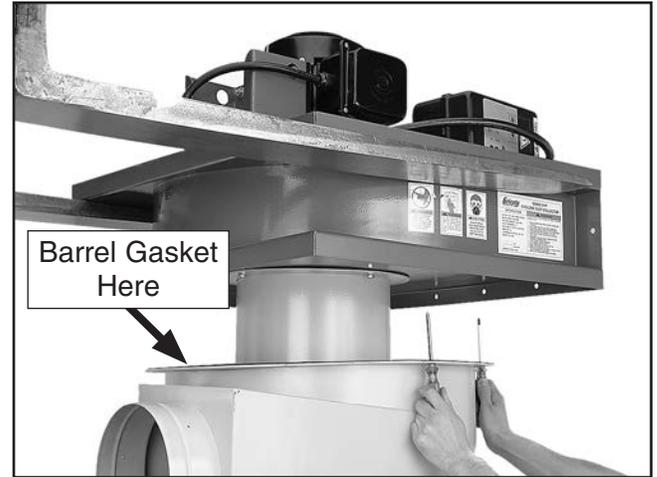
11. Lift motor/blower housing assembly with forklift and attach intake cylinder to bottom of housing, as shown **Figure 10**, using (4)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (4)  $\frac{5}{16}$ " flat washers.

**Note:** Because this part of the dust collector is not accessible after assembly is complete, consider using thread locker on bolts that secure intake cylinder to motor/blower housing assembly to ensure that fasteners will not come loose with vibration.

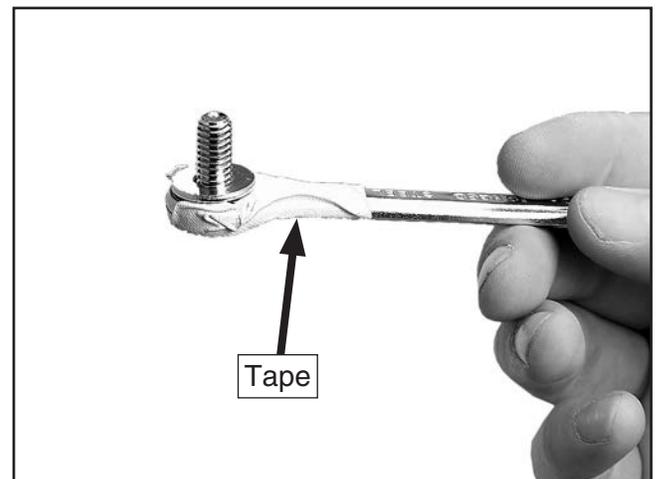


12. Place remaining barrel gasket on top of intake barrel, then carefully lower motor/blower housing assembly on top of it approximately 1" away from intake barrel.

13. Using two punches or Phillips screwdrivers, align mounting holes, as shown in **Figure 11**, and lower assembly onto intake barrel.



**Note:** In next step, when installing two bolts above intake port, use duct tape on bottom of your wrench to hold bolts in place, as shown in **Figure 12**. This will enable you to start the bolts more easily.

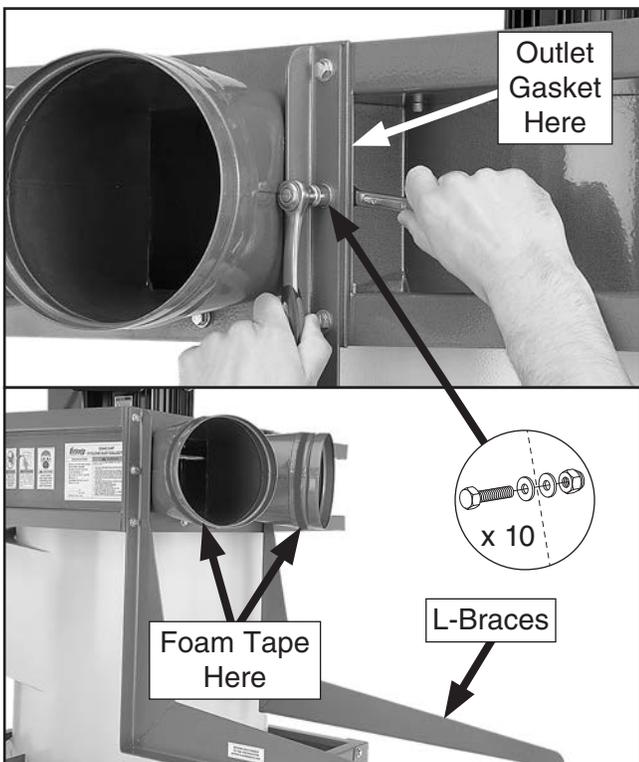


- Attach assembly to intake barrel, as shown in **Figure 13**, with (12)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (12)  $\frac{5}{16}$ " flat washers.



**Figure 13.** Securing blower on intake barrel.

- Place outlet gasket between motor/blower housing and outlet port, then attach outlet port and filter L-braces to housing, as shown in **Figure 14**, using (10)  $\frac{5}{16}$ "-18 x 1" hex bolts, (20)  $\frac{5}{16}$ " flat washers, and (10)  $\frac{5}{16}$ "-18 hex nuts.

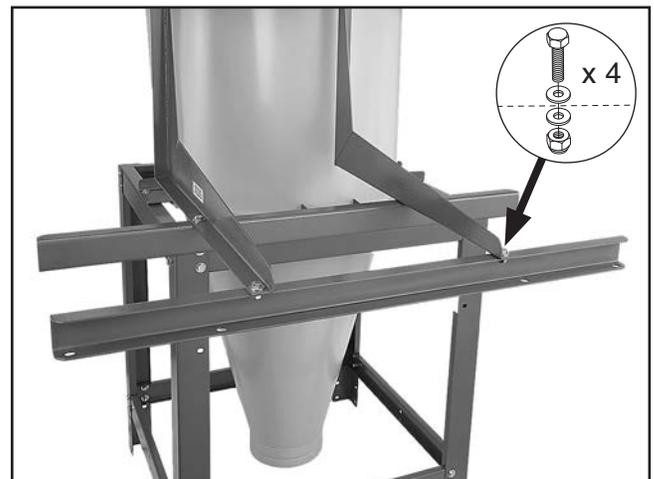


**Figure 14.** Attaching outlet ports and filter L-braces to blower housing.

- Attach one roll of 3 x 15 x 700mm foam tape to outside lip of each outlet port, as shown in **Figure 14**.

- Attach two filter cross braces to L-braces, as shown in **Figure 15**, using (4)  $\frac{3}{8}$ "-16 x  $\frac{3}{4}$ " hex bolts, (8)  $\frac{3}{8}$ " flat washers, and (4)  $\frac{3}{8}$ "-16 hex nuts.

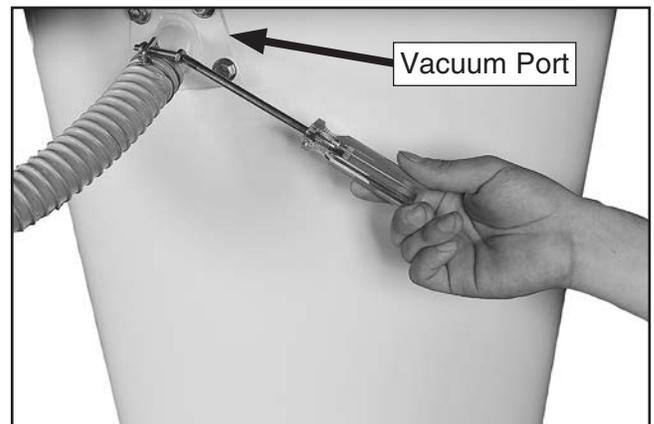
**Note:** Before attaching hardware in this step, separate  $\frac{3}{8}$ " flat washers into two piles: one for thin and one for thick. Do not use thin washers until specified in **Step 32**.



**Figure 15.** Filter cross braces attached to L-braces.

- Apply 3 x 6 x 300mm foam tape to mating surface of cyclone vacuum port.

- Attach vacuum port to cyclone funnel with (4)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (4)  $\frac{5}{16}$ " flat washers (see **Figure 16**).



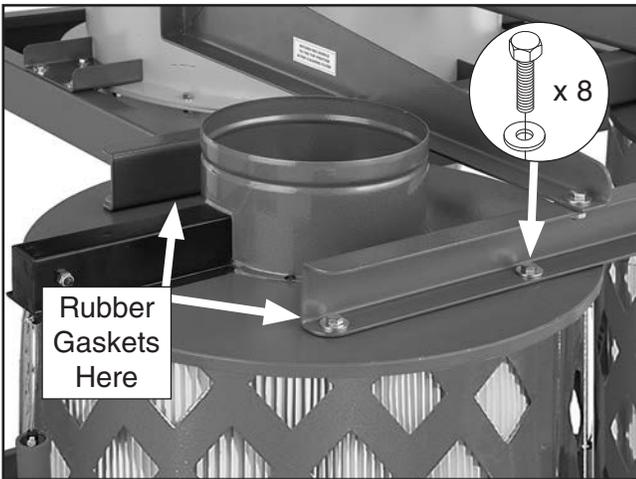
**Figure 16.** Cyclone vacuum tube and hose attachment.





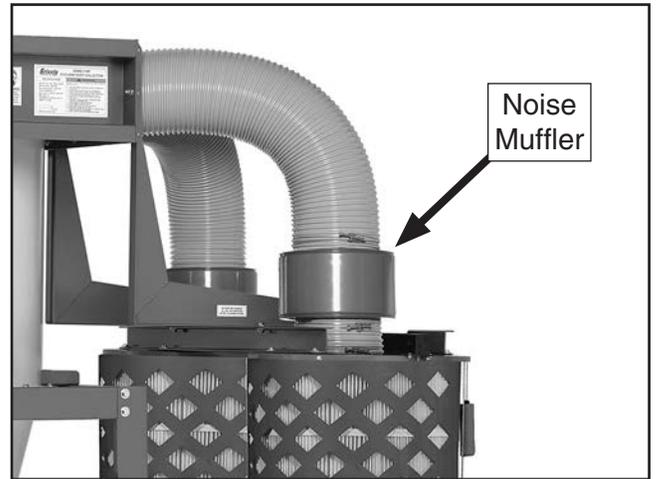
**! WARNING**  
**HEAVY LIFT!**  
 Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, use a forklift (or other lifting equipment) rated for weight of this machine.

20. Using forklift, lift entire assembly approximately 2" off ground to gain clearance for filter installation.
21. Mount two filters to braces with brace gaskets between them, as shown in **Figure 17**, using (8)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (8)  $\frac{5}{16}$ " fender washers.



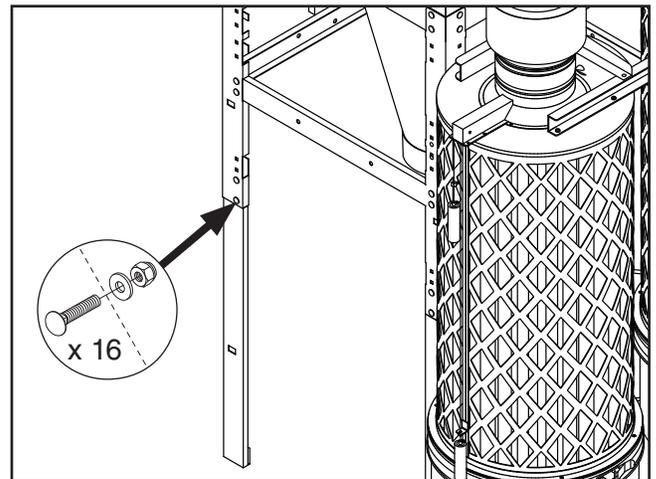
**Figure 17.** Canister filters mounted to long support braces.

22. Attach one roll of 3 x 15 x 700mm foam tape to both ends of each noise muffler, then connect mufflers between outlet ports and canisters with 8" flexible hoses and clamps, as shown in **Figure 18**.



**Figure 18.** Noise mufflers connected between outlet ports and canisters.

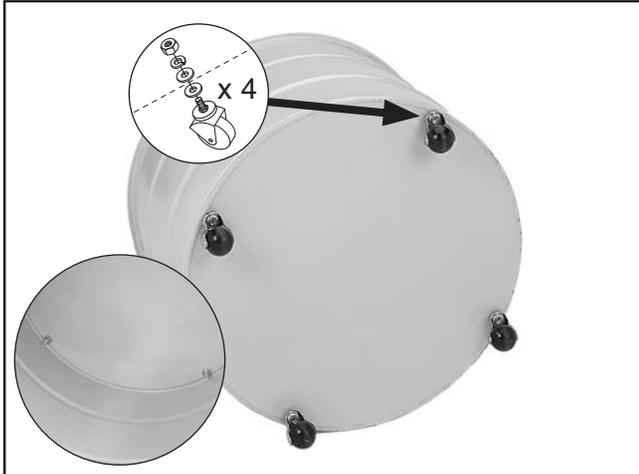
23. Using forklift, raise assembly up and attach lower stand legs to upper stand legs, as shown in **Figure 19**, using (16)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " carriage bolts,  $\frac{5}{16}$ " flat washers, and  $\frac{5}{16}$ "-18 hex nuts.



**Figure 19.** Attaching lower legs to the initial stand assembly.

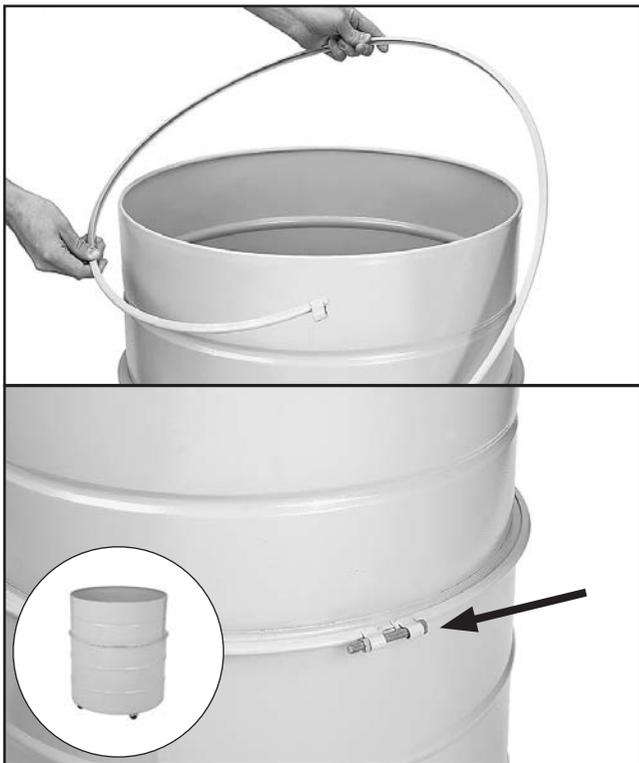


24. Attach casters to bottom of lower collection drum, as shown in **Figure 20**, using (4)  $\frac{3}{8}$ "-16 hex nuts, (8)  $\frac{3}{8}$ " flat washers, and (4)  $\frac{3}{8}$ " lock washers included in box with casters.



**Figure 20.** Casters attached to lower collection drum.

25. Connect upper and lower collection drums with included metal clamp and provided hex bolt and nut, as shown in **Figure 21**.



**Figure 21.** Installing metal clamp around collection drum.

26. Place collection drum vacuum ring on bottom of collection drum (see **Figure 22**).

**Note:** During operation, this ring and vacuum connection to cyclone funnel will prevent collection bag from collapsing.

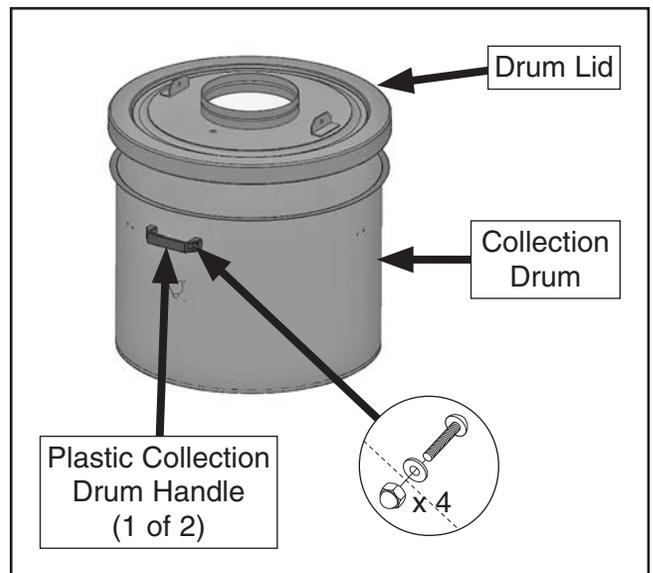


**Figure 22.** Inserting collection drum vacuum ring.

27. Attach (2) plastic collection drum handles to collection drum using (4)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " Phillips head screws,  $\frac{5}{16}$ " fender washers, and  $\frac{5}{16}$ "-18 acorn nuts (see **Figure 23**).

28. Install larger plastic collection bag into drum.

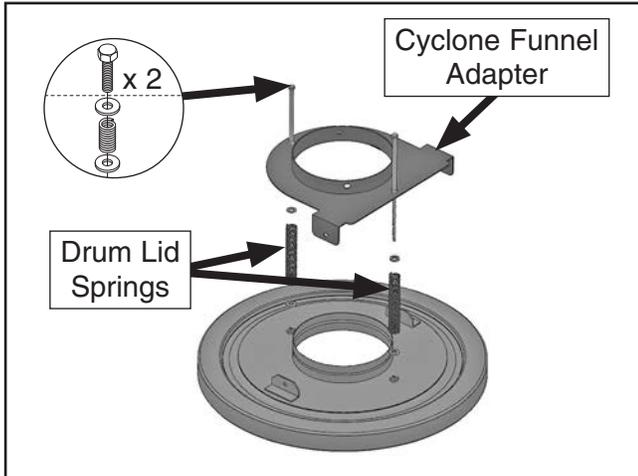
29. Place collection drum lid on top of collection drum (see **Figure 23**).



**Figure 23.** Drum lid and handles installed on collection drum.

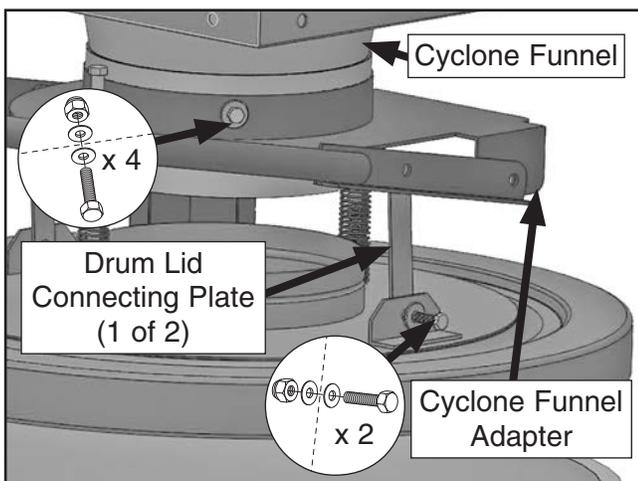


30. Attach cyclone funnel adapter to drum lid using (2)  $\frac{3}{8}$ "-16 x 1" hex bolts, (2) drum lid springs, and (4)  $\frac{3}{8}$ " flat washers, as shown in **Figure 24**.



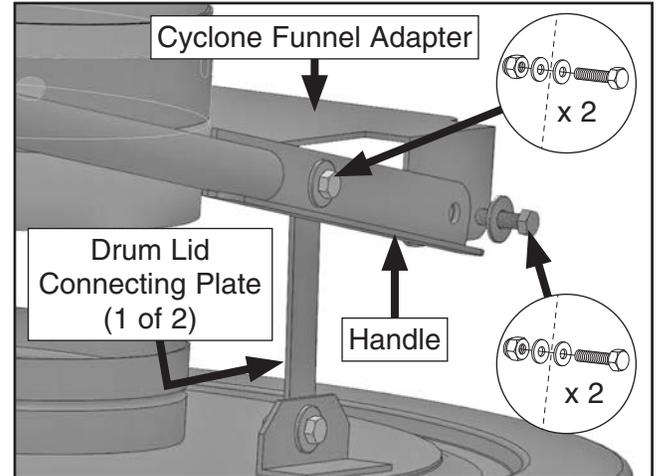
**Figure 24.** Installing cyclone funnel adapter.

31. Move collection drum assembly under cyclone assembly. Press cyclone funnel adapter and springs down to fit under cyclone funnel.
32. Align mounting holes of cyclone funnel and cyclone funnel adapter then attach with (4)  $\frac{3}{8}$ "-16 x 1" hex bolts, (8)  $\frac{3}{8}$ " thin flat washers, and (4)  $\frac{3}{8}$ "-16 lock nuts (see **Figure 25**).
33. Install drum lid connecting plates using (2)  $\frac{3}{8}$ "-16 x 1" hex bolts, (4)  $\frac{3}{8}$ " flat washers, and (2)  $\frac{3}{8}$ "-16 lock nuts (see **Figure 25**).



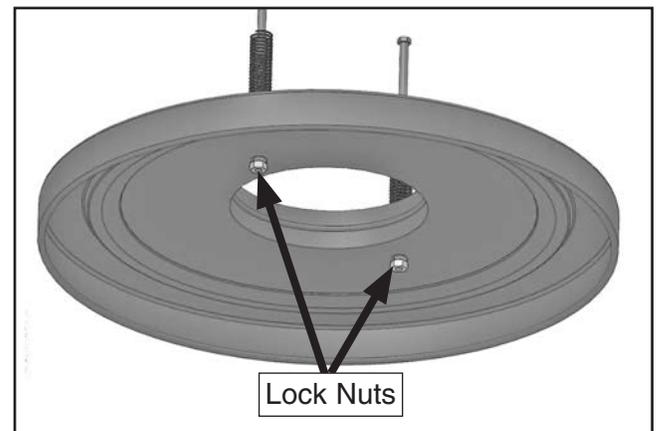
**Figure 25.** Cyclone funnel attached to adapter and drum lid connecting plates installed on drum lid.

34. Attach collection lid handle to cyclone funnel adapter and drum lid connecting plates using (4)  $\frac{3}{8}$ "-16 x 1" hex bolts, (8)  $\frac{3}{8}$ " flat washers, and (4)  $\frac{3}{8}$ "-16 lock nuts (see **Figure 26**).



**Figure 26.** Collection lid handle attached to connecting plate and adapter.

35. Remove collection drum from under lid, and secure hex bolts from **Step 30** using (2)  $\frac{3}{8}$ "-16 lock nuts (see **Figure 27**).

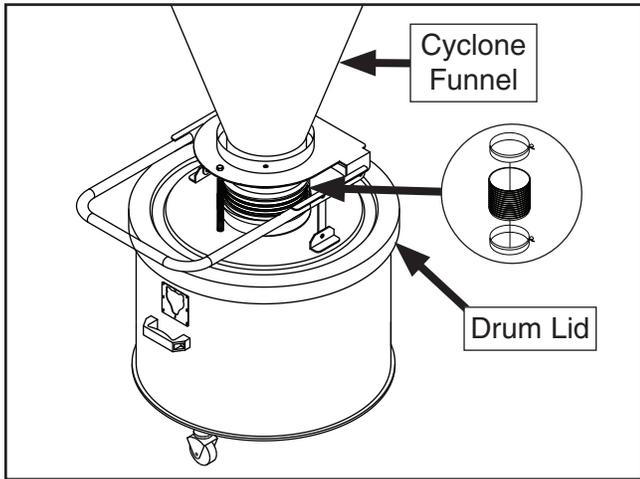


**Figure 27.** Cyclone funnel adapter hex bolts secured with lock nuts.

**Note:** Do not overtighten. Only tighten lock nuts until they are flush with bottom of hex bolts.

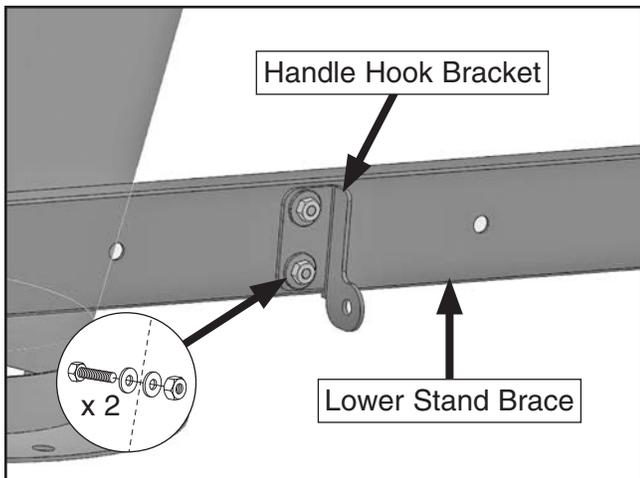


36. Move collection drum back under lid.
37. Connect bottom of cyclone funnel to collection drum lid with clear flexible hose and (2) 9" hose clamps (see **Figure 28**).



**Figure 28.** Cyclone funnel connected to drum lid with flexible hose (stand removed for clarity).

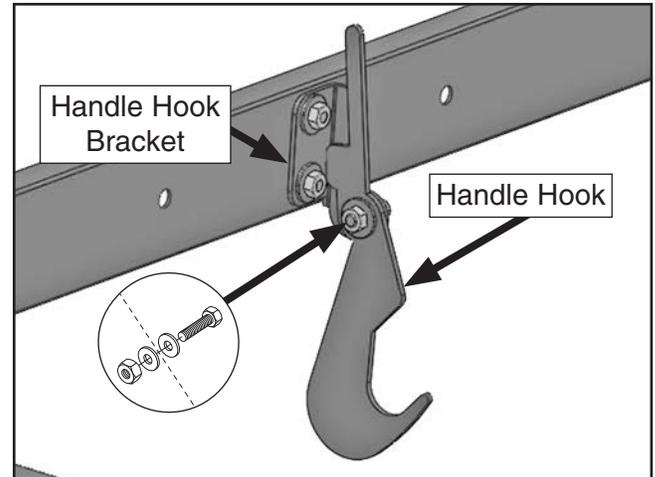
38. Attach handle hook bracket to lower stand brace above handle using (2)  $\frac{3}{8}$ "-16 x 1" hex bolts, (4)  $\frac{3}{8}$ " flat washers, and (2)  $\frac{3}{8}$ "-16 lock nuts (see **Figure 29**).



**Figure 29.** Handle hook bracket attached to lower stand brace.

39. Attach handle hook to bracket using (1)  $\frac{3}{8}$ "-16 x 1" hex bolt, (2)  $\frac{3}{8}$ " flat washers, and (1)  $\frac{3}{8}$ "-16 lock nut (see **Figure 30**).

**Note:** Do not tighten nut completely to allow hook to move.



**Figure 30.** Handle hook attached to hook bracket.

40. Fit plastic collection bags over bottom of filters and clamp in place with metal bag clamps, as shown in **Figure 31**.



**Figure 31.** Canister filter collection bag installed.

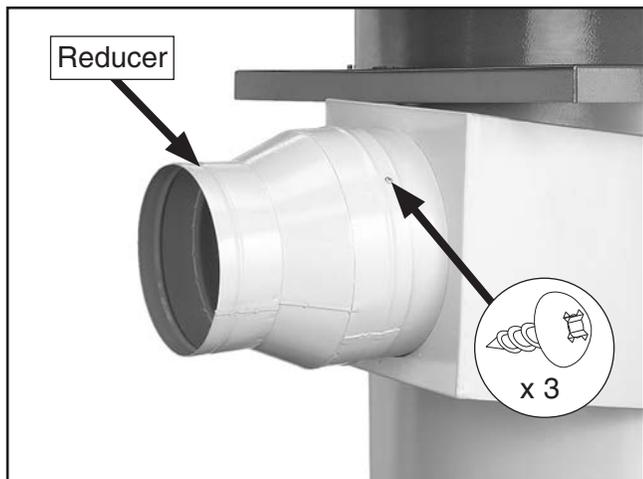


41. Connect vacuum hose to collection drum vacuum ports with (2) 1 1/4" hose clamps (see **Figure 32**).



**Figure 32.** Connecting vacuum hose.

42. Slide reducer over inlet port on barrel (**Figure 33**) and secure with (3) M4 x 12 sheet metal screws.



**Figure 33.** Reducer installed.

43. Secure vacuum hose inside upper and lower stand legs with (2) U-shaped clips (see **Figure 34**).



**Figure 34.** Securing vacuum hose to stand legs.

44. Mount switch on stand, as shown in **Figure 35**, with (3) 3/8"-16 x 3/4" hex bolts, (6) 3/8" flat washers, and (3) 3/8"-16 hex nuts.



**Figure 35.** Switch mounted to stand.

**Note:** Hand-held remote control uses IR (infrared) to communicate with control box receiver port, and must have direct line-of-sight to control box face. Locate control box with this in mind.



# *grizzly.com*<sup>®</sup>

**TOOL WEBSITE**

Buy Direct and Save with Grizzly<sup>®</sup> – Trusted, Proven and a Great Value!  
~Since 1983~

*Visit Our Website Today For  
Current Specials!*

**ORDER  
24 HOURS A DAY!  
1-800-523-4777**



# **Grizzly** **Industrial, Inc.**®

## **MODEL G0442/G0601** **5 HP CYCLONE DUST** **COLLECTOR** **OWNER'S MANUAL**

*(For models manufactured since 03/12)*



  
C US  
201825

COPYRIGHT © APRIL, 2010 BY GRIZZLY INDUSTRIAL, INC., REVISED DECEMBER, 2018 (JL)  
**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE  
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**  
#TS12622 PRINTED IN TAIWAN

V3.12.18



## **WARNING!**

**This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.**

**Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.**

**The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.**

**The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.**



## **WARNING!**

**Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California 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.**

# Table of Contents

<b>INTRODUCTION</b> .....	<b>2</b>	<b>SECTION 4: DESIGNING THE SYSTEM</b> .....	<b>30</b>
Manual Accuracy .....	2	General .....	30
Contact Info.....	2	Duct Material.....	30
Machine Description .....	2	Metal Duct .....	31
Identification.....	3	Flexible Duct.....	31
G0442 Machine Data Sheet .....	4	System Design.....	32
G0601 Machine Data Sheet .....	6	Decide Who Will Design.....	32
<b>SECTION 1: SAFETY</b> .....	<b>8</b>	Sketch Your Shop Layout.....	32
Safety Instructions for Machinery .....	8	Sketch a Basic Duct Layout .....	32
Additional Safety for Dust Collectors .....	10	Determine Required CFMs.....	33
<b>SECTION 2: POWER SUPPLY</b> .....	<b>11</b>	Determining Main Line Duct Size.....	34
Availability.....	11	Determining Branch Line Duct Size .....	34
Full-Load Current Rating .....	11	Planning Drop Downs.....	35
Circuit Requirements .....	11	Calculating Duct Resistance .....	35
G0442 Circuit Requirements for 220V .....	11	Example Materials List .....	37
G0601 Circuit Requirements for 220V .....	12	System Grounding .....	38
G0601 Circuit Requirements for 440V .....	12	<b>SECTION 5: OPERATIONS</b> .....	<b>39</b>
Connection Type .....	12	General .....	39
Grounding Instructions .....	12	Remote Control.....	39
Extension Cords .....	12	Control Box Panel.....	40
G0601 440V Conversion .....	13	<b>SECTION 6: ACCESSORIES</b> .....	<b>41</b>
Correcting Phase Polarity (G0601 Only)...	14	<b>SECTION 7: MAINTENANCE</b> .....	<b>43</b>
<b>SECTION 3: SETUP</b> .....	<b>15</b>	Schedule .....	43
Needed for Setup.....	15	Emptying Drum .....	43
Unpacking .....	15	Cleaning Filters .....	43
Inventory .....	16	Rinsing Filter .....	44
Site Considerations.....	18	Removing/Replacing Filter.....	44
Mounting to Shop Floor .....	19	<b>SECTION 8: SERVICE</b> .....	<b>46</b>
Bolting to Concrete Floors.....	19	Troubleshooting .....	46
Assembly .....	20	<b>SECTION 9: WIRING</b> .....	<b>48</b>
Power Connection.....	28	Wiring Safety Instructions .....	48
G0442 Power Connection .....	28	G0442 Wiring Diagram .....	49
G0601 Power Connection .....	28	G0601 220V Wiring Diagram.....	50
Test Run .....	29	G0601 440V Wiring Diagram.....	51
For Model G0601 Only .....	29	<b>SECTION 10: PARTS</b> .....	<b>52</b>
		Main .....	52
		<b>WARRANTY AND RETURNS</b> .....	<b>57</b>



# Identification

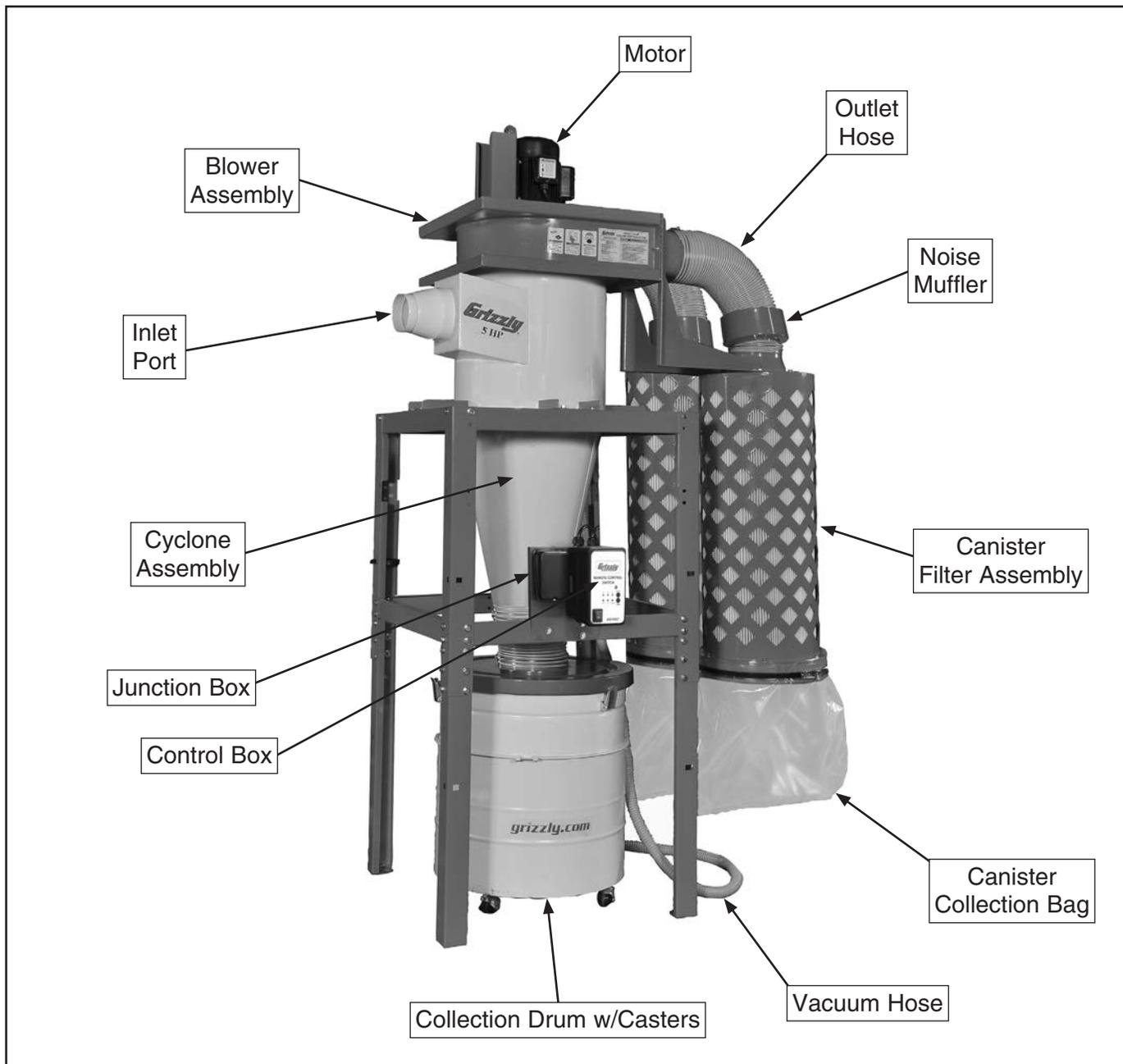
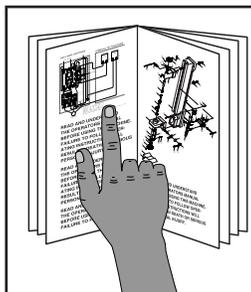


Figure 1. Identification (Model G0442 shown).

	<p><b>⚠ WARNING</b></p> <p>To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.</p>
---	--





# MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

## MODEL G0442 5 HP CYCLONE DUST COLLECTOR

### Product Dimensions:

Weight..... 517 lbs.  
Width (side-to-side) x Depth (front-to-back) x Height..... 63 x 56-7/8 x 111-1/2 in.  
Footprint (Length x Width)..... 63 x 56-7/8 in.

### Shipping Dimensions:

#### Carton #1

Type..... Cardboard Box  
Content..... Machine  
Weight..... 446 lbs.  
Length x Width x Height..... 61 x 30 x 37 in.  
Must Ship Upright..... Yes

#### Carton #2

Type..... Cardboard Box  
Content..... Canister Filter  
Weight..... 55 lbs.  
Length x Width x Height..... 49 x 22 x 22 in.  
Must Ship Upright..... No

#### Carton #3

Type..... Cardboard Box  
Content..... Canister Filter  
Weight..... 55 lbs.  
Length x Width x Height..... 22 x 49 x 22 in.  
Must Ship Upright..... No

#### Carton #4

Type..... Cardboard Box  
Content..... Stand  
Weight..... 88 lbs.  
Length x Width x Height..... 41 x 15 x 8 in.  
Must Ship Upright..... No

### Electrical:

Power Requirement..... 220V, Single-Phase, 60 Hz  
Prewired Voltage..... 220V  
Full-Load Current Rating..... 22.4A  
Minimum Circuit Size..... 40A  
Connection Type..... Permanent (Hardwire to Shutoff Switch)  
Switch Type..... Remote Control Magnetic Switch w/Overload Protection

### Motors:

#### Main

Horsepower..... 5 HP  
Phase..... Single-Phase  
Amps..... 22.4A  
Speed..... 3450 RPM  
Type..... TEFC Capacitor-Start Induction (Class F)  
Power Transfer ..... Direct Drive  
Bearings..... Shielded & Permanently Lubricated  
Centrifugal Switch/Contacts Type..... External



**Main Specifications:**

**Operation**

Dust Collector Type.....	Two-Stage (Cyclone)
Approved Dust Types.....	Wood
Filter Type.....	Pleated Cartridge
Airflow Performance.....	2184 CFM @ 1.9 in. SP
Max Static Pressure (at 0 CFM).....	14 in.
Main Inlet Size.....	10 in.
Inlet Adapter Included.....	No
Machine Collection Capacity At One Time.....	4
Maximum Material Collection Capacity.....	7.4 cu. ft.
Filtration Rating.....	0.2 – 2 Micron
Filter Surface Area.....	226 sq. ft.

**Bag Information**

Number of Lower Bags.....	2
Lower Bag Diameter.....	19-3/4 in.

**Canister Information**

Number of Canister Filters.....	2
Canister Filter Diameter.....	19-11/16 in.
Canister Filter Length.....	39-3/8 in.
Collection Drum Size.....	55 Gallons

**Impeller Information**

Impeller Type.....	Radial Fin
Impeller Size.....	16 in.

**Construction**

Lower Bag.....	Clear Plastic
Canister.....	Spun Bond Polyester
Frame.....	Steel Sheet Metal (14 ga.)
Impeller.....	Steel
Paint Type/Finish.....	Powder Coated
Blower Housing.....	11 Gauge Steel
Body.....	14 Gauge Steel
Collection Drum.....	Steel

**Other Specifications:**

Country of Origin .....	Taiwan
Warranty .....	1 Year
Approximate Assembly & Setup Time .....	4 Hours
Serial Number Location .....	ID Label
Sound Rating .....	83 – 86 dB
ISO 9001 Factory .....	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL) .....	Yes





# MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

## MODEL G0601 5 HP 3-PHASE CYCLONE DUST COLLECTOR

### Product Dimensions:

Weight..... 517 lbs.  
 Width (side-to-side) x Depth (front-to-back) x Height..... 63 x 56-7/8 x 111-1/2 in.  
 Footprint (Length x Width)..... 63 x 56-7/8 in.

### Shipping Dimensions:

#### Carton #1

Type..... Cardboard Box  
 Content..... Machine  
 Weight..... 446 lbs.  
 Length x Width x Height..... 61 x 30 x 37 in.  
 Must Ship Upright..... Yes

#### Carton #2

Type..... Cardboard Box  
 Content..... Canister Filter  
 Weight..... 55 lbs.  
 Length x Width x Height..... 49 x 22 x 22 in.  
 Must Ship Upright..... No

#### Carton #3

Type..... Cardboard Box  
 Content..... Canister Filter  
 Weight..... 55 lbs.  
 Length x Width x Height..... 49 x 22 x 22 in.  
 Must Ship Upright..... No

#### Carton #4

Type..... Cardboard Box  
 Content..... Stand  
 Weight..... 89 lbs.  
 Length x Width x Height..... 41 x 15 x 7 in.  
 Must Ship Upright..... No

### Electrical:

Power Requirement..... 220V or 440V, 3-Phase, 60 Hz  
 Prewired Voltage..... 220V  
 Full-Load Current Rating..... 13.7A at 220V, 6.9A at 440V  
 Minimum Circuit Size..... 30A at 220V, 15A at 440V  
 Connection Type..... Permanent (Hardwire to Shutoff Switch)  
 Switch Type..... Remote Control Magnetic Switch w/Overload Protection  
 Voltage Conversion Kit..... G440VG0601 for 440V  
 Recommended Phase Converter..... Rotary Only (Not Approved for Static)



**Motors:**

**Main**

Horsepower..... 5 HP  
Phase..... 3-Phase  
Amps..... 13.7A/6.9A  
Speed..... 3450 RPM  
Type..... TEFC Induction (Class F)  
Power Transfer ..... Direct Drive  
Bearings..... Shielded & Permanently Lubricated  
Centrifugal Switch/Contacts Type..... N/A

**Main Specifications:**

**Operation**

Dust Collector Type..... Two-Stage (Cyclone)  
Approved Dust Types..... Wood  
Filter Type..... Pleated Cartridge  
Airflow Performance..... 2184 CFM @ 1.9 in. SP  
Max Static Pressure (at 0 CFM)..... 14 in.  
Main Inlet Size..... 10 in.  
Inlet Adapter Included..... No  
Machine Collection Capacity At One Time..... 4  
Maximum Material Collection Capacity..... 7.4 cu. ft.  
Filtration Rating..... 0.2 – 2 Micron  
Filter Surface Area..... 226 sq. ft.

**Bag Information**

Number of Lower Bags..... 2  
Lower Bag Diameter..... 19-3/4 in.

**Canister Information**

Number of Canister Filters..... 2  
Canister Filter Diameter..... 19-11/16 in.  
Canister Filter Length..... 39-3/8 in.  
Collection Drum Size..... 55 Gallons

**Impeller Information**

Impeller Type..... Radial Fin  
Impeller Size..... 16 in.

**Construction**

Lower Bag..... Clear Plastic  
Canister..... Spun Bond Polyester  
Frame..... Steel Sheet Metal (14 ga.)  
Impeller..... Steel  
Paint Type/Finish..... Powder Coated  
Blower Housing..... 11 Gauge Steel  
Body..... 14 Gauge Steel  
Collection Drum..... Steel

**Other Specifications:**

Country of Origin ..... Taiwan  
Warranty ..... 1 Year  
Approximate Assembly & Setup Time ..... 3 Hours  
Serial Number Location ..... ID Label  
Sound Rating ..... 83 – 86 dB  
ISO 9001 Factory ..... Yes  
Certified by a Nationally Recognized Testing Laboratory (NRTL) ..... Yes



# SECTION 1: SAFETY

## For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.

**⚠ DANGER** Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

**⚠ WARNING** Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

**⚠ CAUTION** Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTICE** Alerts the user to useful information about proper operation of the machine to avoid machine damage.

## Safety Instructions for Machinery

### ⚠ WARNING

**OWNER'S MANUAL.** Read and understand this owner's manual **BEFORE** using machine.

**TRAINED OPERATORS ONLY.** Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

**DANGEROUS ENVIRONMENTS.** Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

**MENTAL ALERTNESS REQUIRED.** Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

**ELECTRICAL EQUIPMENT INJURY RISKS.** You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

**DISCONNECT POWER FIRST.** Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are **NOT** approved safety glasses.



# WARNING

**WEARING PROPER APPAREL.** Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

**HAZARDOUS DUST.** Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

**HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**REMOVE ADJUSTING TOOLS.** Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

**USE CORRECT TOOL FOR THE JOB.** Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**CHILDREN & BYSTANDERS.** Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

**GUARDS & COVERS.** Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

**FORCING MACHINERY.** Do not force machine. It will do the job safer and better at the rate for which it was designed.

**NEVER STAND ON MACHINE.** Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

**STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

**USE RECOMMENDED ACCESSORIES.** Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

**UNATTENDED OPERATION.** To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

**MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

**DAMAGED PARTS.** Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

**MAINTAIN POWER CORDS.** When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

**EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.



# Additional Safety for Dust Collectors

## **WARNING**

**INTENDED USE.** This dust collector is only intended for collecting wood dust and chips from woodworking machines. DO NOT use this dust collector to collect metal, dirt, pebbles, drywall, asbestos, lead paint, silica, liquids, aerosols, or any flammable, combustible, or hazardous materials.

**HAZARDOUS DUST.** Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

**DUST ALLERGIES.** Dust from certain woods may cause an allergic reaction in people and animals. Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction.

**WEAR RESPIRATOR.** Fine dust that is too small to be caught in the filter will be blown into the ambient air during operation. Always wear a NIOSH approved respirator during operation and for a short time after to reduce your risk of permanent respiratory damage.

**EMPTYING DUST.** When emptying dust from the collection container, wear a respirator and safety glasses. Empty dust away from ignition sources and into an approved container.

**DISCONNECTING POWER SUPPLY.** Turn the switch **OFF**, disconnect the dust collector from the power supply, and allow the impeller to come to a complete stop before leaving the machine unattended or doing any service, cleaning, maintenance, or adjustments.

**REGULAR CLEANING.** Regularly check/empty the collection bags or drum to avoid the buildup of fine dust that can increase the risk of fire. Make sure to regularly clean the surrounding area where the machine is operated—excessive dust buildup on overhead lights, heaters, electrical panels, or other heat sources will increase the risk of fire.

**SUSPENDED DUST PARTICLES AND IGNITION SOURCES.** DO NOT operate the dust collector in areas where explosion risks are high. Areas of high risk include, but are not limited to, areas near pilot lights, open flames, or other ignition sources.

**FIRE SUPPRESSION.** Only operate the dust collector in locations that contain a fire suppression system or have a fire extinguisher nearby.

**IMPELLER HAZARDS.** DO NOT place your hands or tools near the open inlet during operation for any reason. The powerful suction could easily cause accidental contact with the impeller which will cause serious personal injury or damage to the machine. Always keep small animals and children away from open dust collection inlets.

**AVOIDING SPARKS.** DO NOT allow steel or rocks to strike the impeller—this may produce sparks. Sparks can smolder in wood dust for a long time before a fire is detected. If you accidentally cut into wood containing tramp metal (nails, staples, spikes, etc.), immediately turn **OFF** the dust collector, disconnect it from power, and wait for the impeller to stop—then empty the collection container into an approved airtight metal container.

**OPERATING LOCATION.** To reduce respiratory exposure to fine dust, locate permanently installed dust collectors away from the working area, or in another room that is equipped with a smoke detector. DO NOT operate the dust collector in rainy or wet locations—exposure to water may create a shock hazard or decrease the life of the machine.

**STATIC ELECTRICITY.** Plastic dust lines generate high amounts of static electricity as dust chips pass through them. Although rare, sparks caused by static electricity can cause explosions or fire. To reduce this risk, make sure all dust lines are thoroughly grounded by using a grounding wire.



# SECTION 2: POWER SUPPLY

## Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.

### **WARNING**

**Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.**

## Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

**G0442 Current Rating ..... 22.4 Amps**

**G0601 Current Rating at 220V ..... 13.7 Amps**

**G0601 Current Rating at 440V ..... 6.9 Amps**

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

## Circuit Requirements

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

### **CAUTION**

**For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.**

**Note:** *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

## G0442 Circuit Requirements for 220V

The Model G0442 is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

**Nominal Voltage ..... 220V**  
**Cycle ..... 60 Hz**  
**Phase ..... Single-Phase**  
**Circuit Rating ..... 40 Amps**  
**Connection ..... Hardwire with Locking Switch**



## G0601 Circuit Requirements for 220V

The Model G0601 is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

**Nominal Voltage** .....220V  
**Cycle** .....60 Hz  
**Phase** ..... 3-Phase  
**Circuit Rating** ..... Time Delay 30 Amps  
**Connection**.....Hardwire with Locking Switch

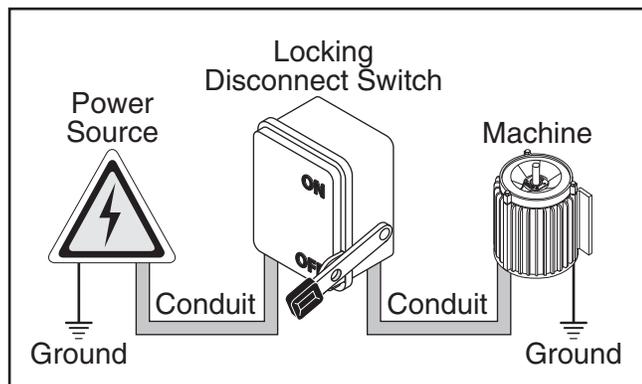
## G0601 Circuit Requirements for 440V

The Model G0601 can be converted to operate on a 440V power supply. **G0601 440V Conversion** instructions are provided on **Page 13**. The intended 440 circuit must have a verified ground and meet the requirements that follow:

**Nominal Voltage** .....440V  
**Cycle** .....60 Hz  
**Phase** ..... 3-Phase  
**Rated Size** ..... Time Delay 20 Amps  
**Connection**.....Hardwire with Locking Switch

## Connection Type

A permanently connected (hardwired) power supply is typically installed with wires running through mounted and secured conduit. A disconnecting means, such as a locking switch (see following figure), must be provided to allow the machine to be disconnected (isolated) from the power supply when required. This installation must be performed by an electrician in accordance with all applicable electrical codes and ordinances.



**Figure 2.** Typical setup of a permanently connected machine.

## Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. A permanently connected machine must be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor. All grounds must be verified and rated for the electrical requirements of the machine. Improper grounding can increase the risk of electric shock!

**⚠ WARNING**

**Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.**

## Extension Cords

Since this machine must be permanently connected to the power supply, an extension cord cannot be used.



## G0601 440V Conversion

The Model G0601 can be converted for 440V operation. This conversion job consists of disconnecting the machine from the power source, replacing the control box assembly and motor cord, and rewiring the motor for 440V operation.

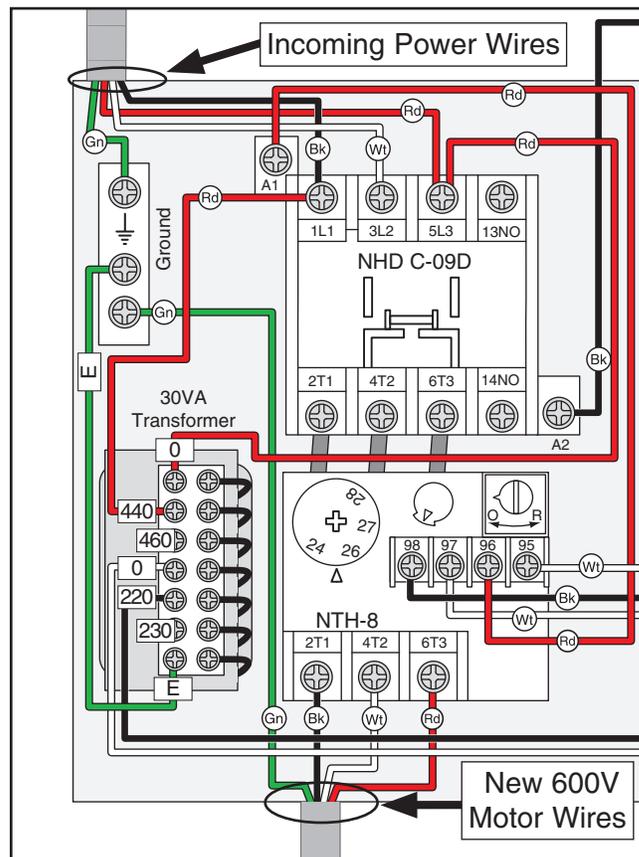
The necessary conversion kit (Part P0601003-1V2) for this procedure can be purchased by calling Grizzly Customer Service at (800) 523-4777.

All wiring changes must be inspected by a qualified electrician before the machine is connected to the power source. If you need help at any time during this procedure, call Grizzly Tech Support at (570) 546-9663.

### To convert Model G0601 for 440V operation:

1. DISCONNECT MACHINE FROM POWER!
2. Disconnect existing incoming power and 300V motor wires from the control box (use illustration in **Figure 3** for a general reference), then replace 220V control box with 440V control box. You can also refer to the **G0601 Wiring Diagrams** on **Pages 50–51** for more complete wiring illustrations.
3. Connect four incoming power wires to the control box, as illustrated in **Figure 3**.
4. Connect new 600V motor cord wires to control box, as illustrated in **Figure 3**.
5. Disconnect old 300V motor cord from motor, then rewire motor as shown inside motor junction cover and attach new 600V motor cord.

**Note:** The reference wiring diagrams on **Pages 50–51** were current at the time of printing, but always use the wiring diagram provided inside the motor junction box, as it will reflect any changes to the motor shipped with the machine.



**Figure 3.** G0601 440V control box wiring.



## Correcting Phase Polarity (G0601 Only)

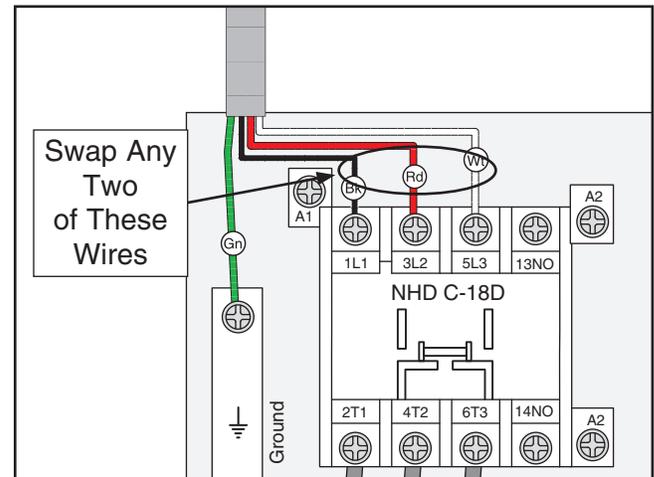
This subsection is only provided for troubleshooting. If you discover during the test run that the machine will not operate, or that the impeller spins backward, the power connections may be wired out-of-phase. Without the proper test equipment to determine the polarity of the power source legs, wiring machinery to 3-phase power may require trial-and-error. Correcting phase polarity is simply a matter of reversing the positions where two of the incoming power source wires are connected inside the control box.

### **NOTICE**

If this machine is wired out-of-phase, the motor and impeller will spin in the wrong direction. The efficiency of the dust collector will be greatly reduced and will not provide the rated CFM. You must make sure the motor is spinning in the correct direction before placing the machine into full operation. Perform **Step 10** of the test run on **Page 29** to make sure the machine is correctly wired.

### To correct phase polarity:

1. DISCONNECT MACHINE FROM POWER!
2. Open the control box and swap the connections of any two incoming hot wires from the power source (see **Figure 4**).



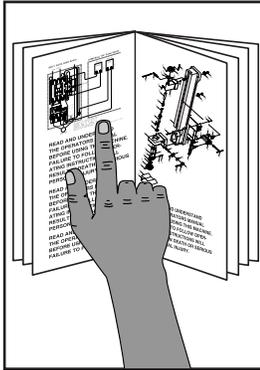
**Figure 4.** Wire connections to swap to correct phase polarity.

3. Secure the control box cover, then re-connect the machine to power.
4. Perform **Step 10** of the test run on **Page 29** to confirm that the power connections are correct.

—If the motor and impeller are still rotating in the wrong direction, contact our Tech Support at (570) 546-9663 for assistance.



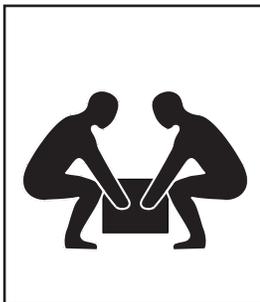
# SECTION 3: SETUP



**!WARNING**  
 This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



**!WARNING**  
 Wear safety glasses during the entire setup process!



**!WARNING**  
 This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

## Needed for Setup

The following are needed to complete the setup process, but are not included with the machine.

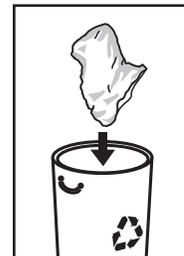
Description	Qty
• Safety Glasses .....	1
• Forklift.....	1
• Additional People .....	1
• Wrench/Socket 1/2" .....	2
• Wrench/Socket 9/16" .....	2
• Square.....	1

## Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



**!WARNING**  
**SUFFOCATION HAZARD!**  
 Keep children and pets away from plastic bags or packing materials shipped with this machine.



# Inventory

The following is a description of the main components shipped with the machine. Lay the components out to inventory them.

<b>Collector Box Contents (Figure 5):</b>	<b>Qty</b>
<b>A.</b> Intake Cylinder .....	1
<b>B.</b> Cyclone Funnel .....	1
<b>C.</b> Intake Barrel .....	1
<b>D.</b> Collection Bags	
— Canister Filter .....	2
— Collection Drum .....	2
<b>E.</b> Gray Flexible Hoses 8" x 25" .....	2
<b>F.</b> Motor/Blower Housing Assembly .....	1
<b>G.</b> Upper Collection Drum & Clamp Assy .....	1
<b>H.</b> Noise Mufflers .....	2
<b>I.</b> Gray Flexible Hoses 8" x 5" .....	2
<b>J.</b> Lower Collection Drum .....	1
<b>K.</b> Clear Flexible Hose 9" x 10" .....	1
<b>L.</b> Hose Clamps 9" .....	2
<b>M.</b> Collection Drum Lid .....	1
<b>N.</b> Filter Cross Braces .....	2
<b>O.</b> Outlet Port .....	1
<b>P.</b> Filter L-Braces .....	2
<b>Q.</b> Foam Tape 3 x 6 x 1800mm .....	2
<b>R.</b> Hose Clamps 8" .....	9
<b>S.</b> Reducer .....	1
<b>T.</b> Hardware Box	
—Phillips Head Screws #10-24 x 3/8" .....	12
—Hex Nuts #10-24 .....	12
—Drum Latches .....	3
—Foam Tape 3 x 15 x 700mm .....	8
<b>U.</b> Hardware Box	
—Hex Bolts 5/16"-18 x 1" .....	22
—Hex Bolts 5/16"-18 x 3/4" .....	28
—Hex Bolts 3/8"-16 x 3/4" .....	7
—Flat Washers 3/8" .....	14
—Flat Washers 5/16" .....	64
—Fender Washers 5/16" .....	8
—Hex Nuts 5/16"-18 .....	22
—Hex Nuts 3/8"-16 .....	7
—Sheet Metal Screws M4 x 12 .....	3
<b>V.</b> Hardware Box	
—Casters .....	4
—Hex Nuts 3/8"-16 .....	4
—Lock Washers 3/8" .....	4
—Flat Washers 3/8" .....	8
<b>W.</b> Barrel Gaskets .....	2
<b>X.</b> Outlet Gasket .....	1
<b>Y.</b> Brace Gaskets .....	4
<b>Z.</b> Drum Lid PVC Rubber Seal 2M .....	1
<b>AA.</b> Remote Control (not shown) .....	1

<b>AB.</b> Vacuum Hose Clamps 1 1/4" .....	2
<b>AC.</b> Vacuum Hose Clips .....	2
<b>AD.</b> Vacuum Hose 1 1/4" x 98" .....	1
<b>AE.</b> Collection Drum Vacuum Ring .....	1
<b>AF.</b> Cyclone Vacuum Port .....	1
<b>AG.</b> Hose Clamp 10 1/2" .....	1

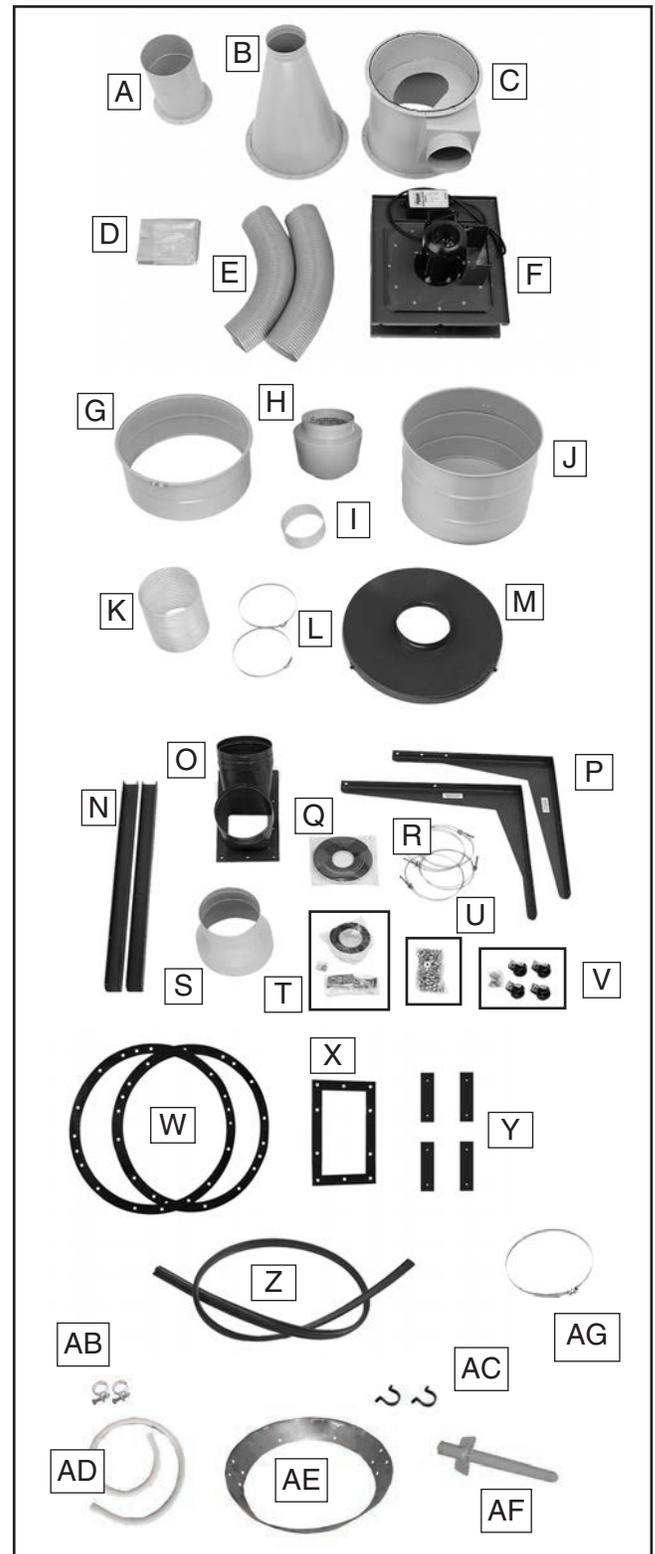
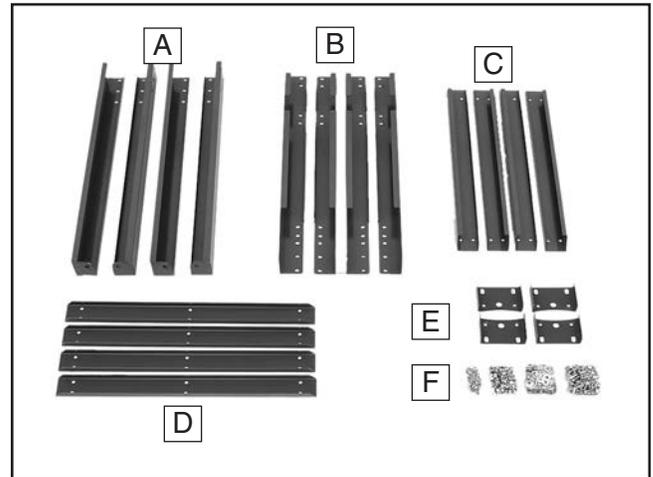


Figure 5. Contents of collector box.



<b>Stand Box Contents (Figure 6):</b>	<b>Qty</b>
<b>A.</b> Lower Stand Legs .....	4
<b>B.</b> Upper Stand Legs .....	4
<b>C.</b> Upper Stand Braces .....	4
<b>D.</b> Lower Stand Braces .....	4
<b>E.</b> Collector Mounting Brackets .....	4
<b>F.</b> Hardware Bags	
—Hex Bolts $\frac{3}{8}$ "-16 x $\frac{3}{4}$ " .....	64
—Lock Nuts $\frac{3}{8}$ "-16 .....	64
—Flat Washers $\frac{3}{8}$ " .....	128
—Hex Bolts $\frac{5}{16}$ "-18 x 1" .....	8
—Lock Nuts $\frac{5}{16}$ "-18 .....	8
—Flat Washers $\frac{5}{16}$ " .....	16



**Figure 6.** Contents of stand box.

<b>Contents of Filter Boxes (Figure 7):</b>	<b>Qty</b>
<b>G.</b> Canister Filter Assemblies.....	2

If any nonproprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.



**⚠ WARNING**

**SUFFOCATION HAZARD!**

Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.



**Figure 7.** Contents of filter boxes.



# Site Considerations

## Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

## Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



## Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20%–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

## Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave enough space around machine to disconnect power supply or apply a lockout/tagout device, if required.

## Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

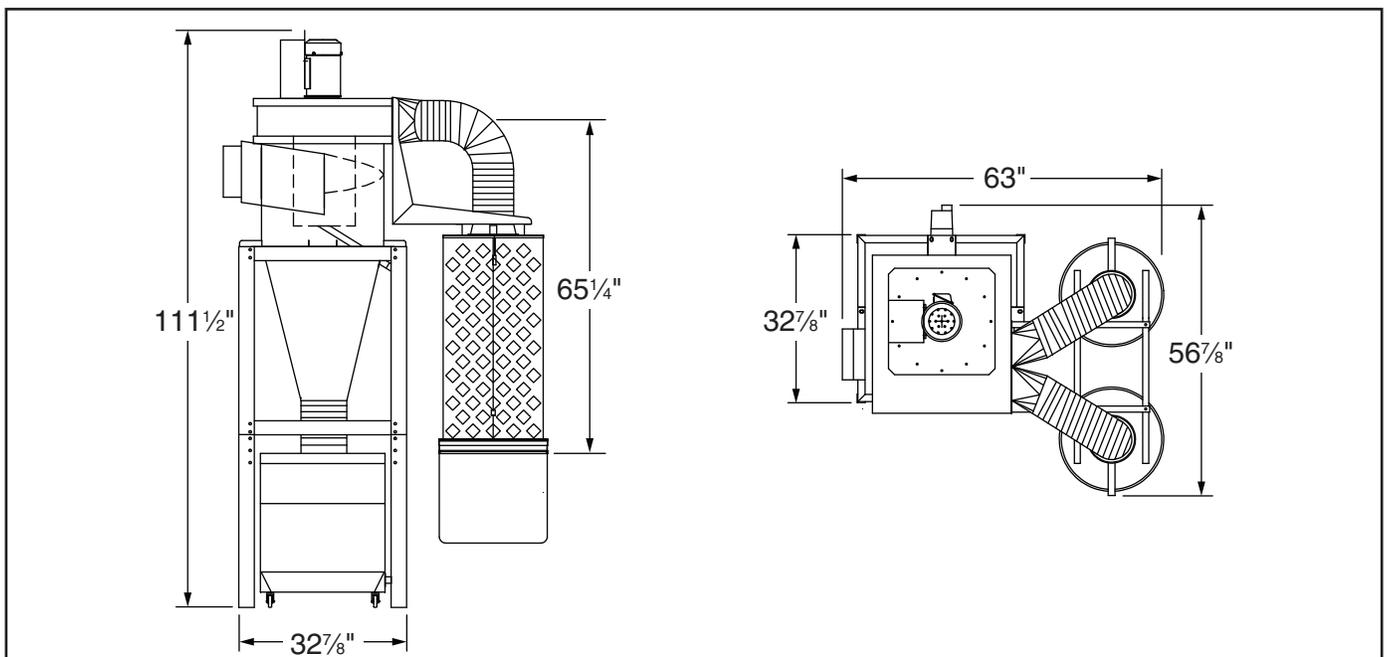


Figure 8. Machine dimensions.



# Mounting to Shop Floor

---

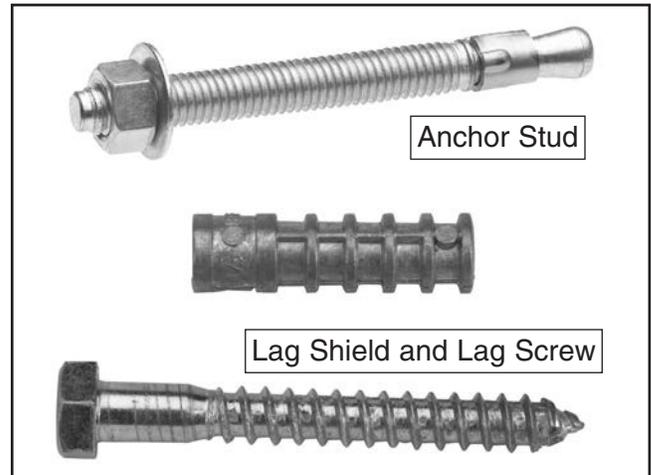
Since your dust collector will be hardwired to the power source, we strongly recommend securing your machine to the floor. Consult with your electrician to ensure compliance with applicable codes. Because floor materials may vary, floor mounting hardware is not included.

## Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (**Figure 9**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options for mounting your machine and choose the one that best fits your specific application.

## ***NOTICE***

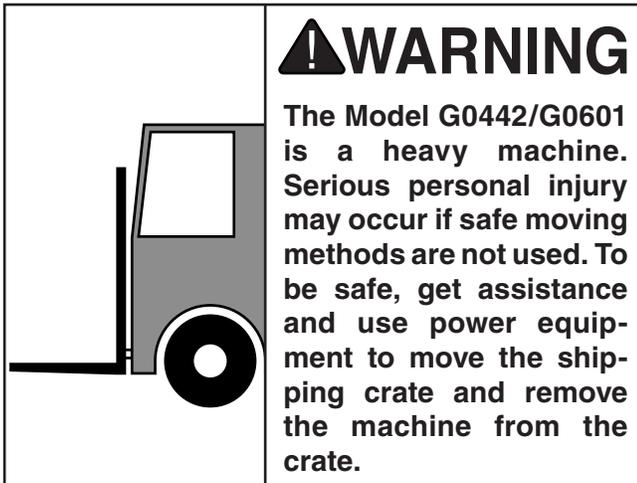
Anchor studs (see Figure 9) are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, presenting a tripping hazard if you decide to move your machine.



**Figure 9.** Typical fasteners for mounting to concrete floors.



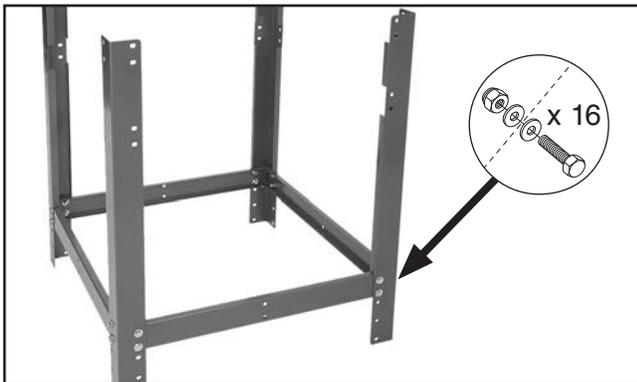
# Assembly



## To assemble the dust collector:

1. Connect the upper stand legs with the lower stand braces, using (16)  $\frac{3}{8}$ "-16 x  $\frac{3}{4}$ " hex bolts, (32)  $\frac{3}{8}$ " flat washers, and (16)  $\frac{3}{8}$ "-16 lock nuts (see **Figure 10**).

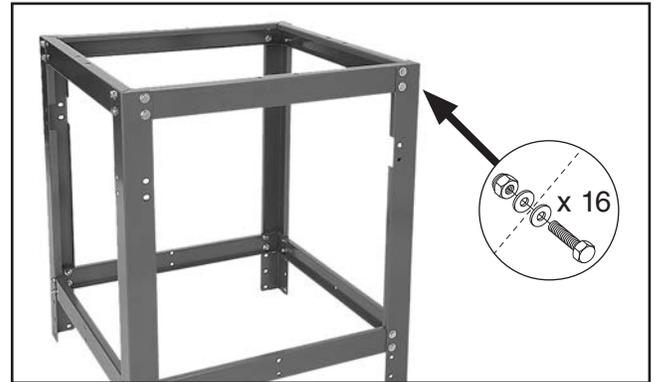
**Note:** Do not fully tighten the fasteners for now.



**Figure 10.** Initial assembly of upper stand legs connected to lower stand braces.

2. Attach the upper stand braces to the top of the assembly from **Step 1**, using (16)  $\frac{3}{8}$ "-16 x  $\frac{3}{4}$ " hex bolts, (32)  $\frac{3}{8}$ " flat washers, and (16)  $\frac{3}{8}$ "-16 lock nuts, as shown in **Figure 11**.

**Note:** Do not fully tighten the fasteners for now.



**Figure 11.** Upper braces attached to stand assembly.

3. Square up the stand, as shown in **Figure 12**, then tighten all the bolts.

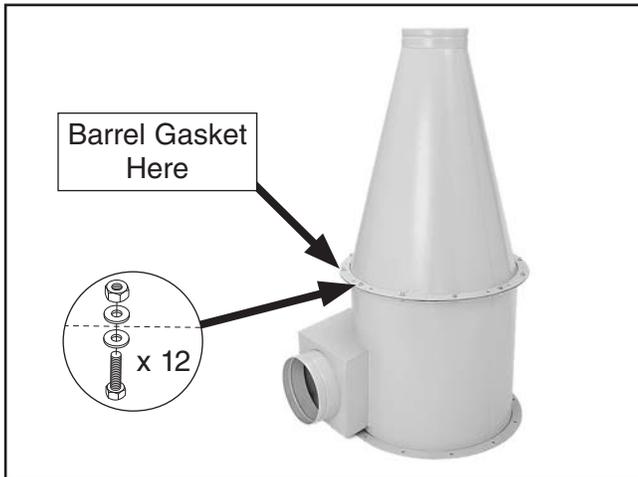


**Figure 12.** Squaring stand assembly before tightening stand hardware.



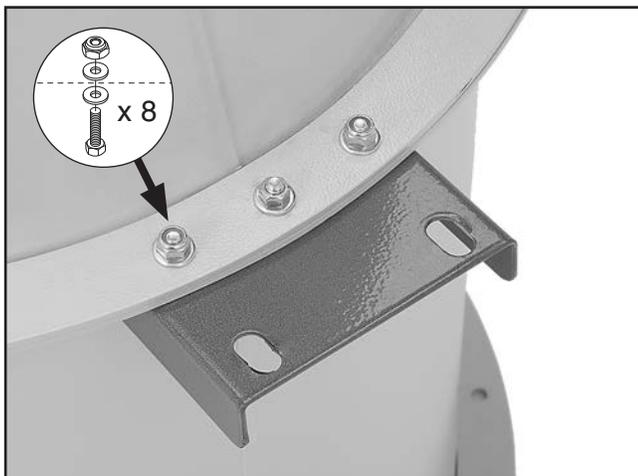
- Attach the cyclone funnel to the intake barrel with a barrel gasket between them, as shown in **Figure 13**, with (12)  $\frac{5}{16}$ "-18 x 1" hex bolts, (24)  $\frac{5}{16}$ " flat washers, and (12)  $\frac{5}{16}$ "-18 hex nuts.

**Note:** At the places where you see three holes close together as shown in **Figure 14**, only use the center hole for this step. The two outside holes will be used in the next step.



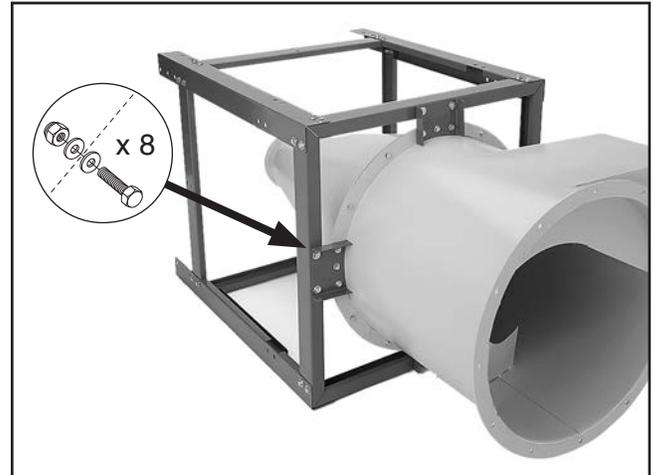
**Figure 13.** Cyclone funnel attached to intake barrel.

- Attach the collector mounting brackets to the intake assembly, as shown in **Figure 14**, using (8)  $\frac{5}{16}$ "-18 x 1" hex bolts, (16)  $\frac{5}{16}$ " flat washers, and (8)  $\frac{5}{16}$ "-18 lock nuts.



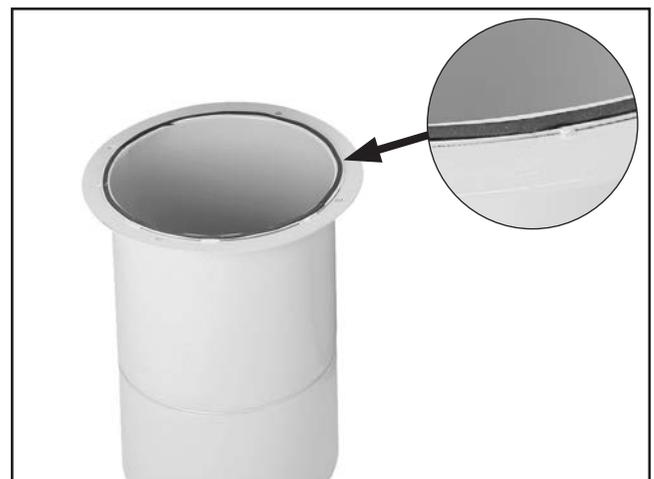
**Figure 14.** Collector mounting brackets attached to intake assembly (collector shown upside down in this photo).

- Place a large piece of cardboard on the ground to prevent scraping the parts on the bare floor during the next steps.
- With the help of another person, lay the stand assembly on its side on the cardboard and slide the collector assembly into the stand assembly, as shown in **Figure 15**.



**Figure 15.** Collector assembly fastened to the stand.

- Fasten the collector assembly to the stand with (8)  $\frac{3}{8}$ "-16 x  $\frac{3}{4}$ " hex bolts, (16)  $\frac{3}{8}$ " flat washers, and (8)  $\frac{3}{8}$ "-16 lock nuts, as shown in **Figure 15**.
- Attach the 3 x 6mm foam tape on the intake cylinder, as shown in **Figure 16**.



**Figure 16.** Foam tape attached to the intake cylinder.



10. Lift the assembly upright and rotate it so the inlet/outlet directions are suitable for your shop.
11. Lift the motor/blower housing assembly with a forklift and attach the intake cylinder to the bottom of the housing, as shown **Figure 17**, using (4)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (4)  $\frac{5}{16}$ " flat washers.

**Note:** Because this part of the dust collector is not accessible after the assembly is complete, consider using Medium Strength Blue Thread Locker (Grizzly Model T21854) on the bolts that secure the intake cylinder to the motor/blower housing assembly to ensure that the fasteners won't come loose with vibration.



**Figure 17.** Intake cylinder attached to the bottom of motor/blower housing.

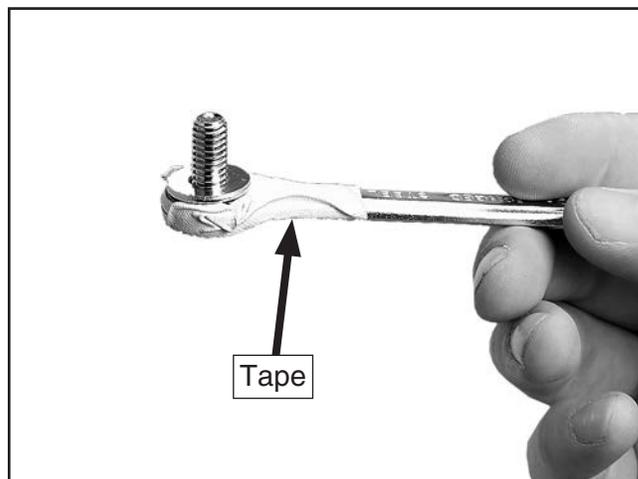
12. Place the remaining barrel gasket on top of the intake barrel, then carefully lower the motor/blower housing assembly on top of it approximately 1" away from the intake barrel.

13. Using two punches or Phillips screwdrivers, align the mounting holes, as shown in **Figure 18**, and lower the assembly onto the intake barrel.



**Figure 18.** Aligning the mounting holes.

**Note:** In the next step, when installing the two bolts above the intake port, use duct tape on the bottom of your wrench to hold the bolts in place, as shown in **Figure 19**. This will enable you to start the bolts easier.



**Figure 19.** Using tape on wrench in tight spot.

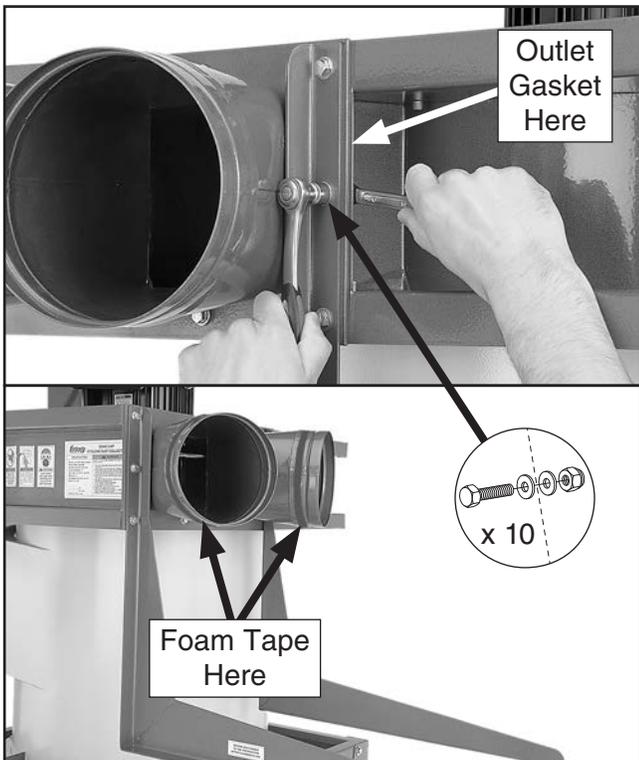


14. Attach the assembly to the intake barrel, as shown in **Figure 20**, with (12)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (12)  $\frac{5}{16}$ " flat washers.



**Figure 20.** Securing blower on intake barrel.

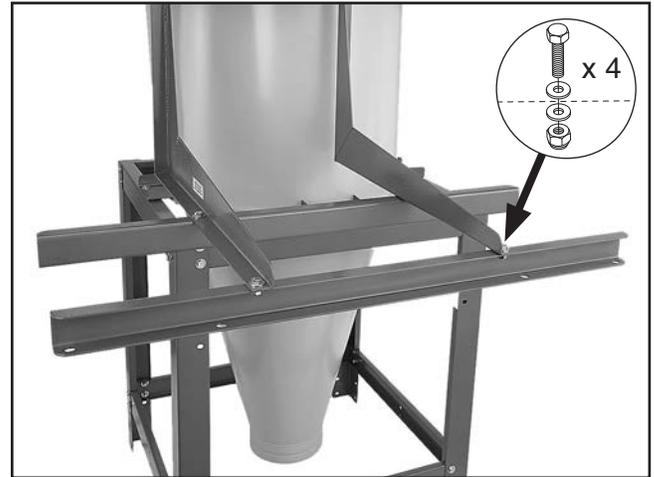
15. Place the outlet gasket between the motor/blower housing and outlet port, then attach the outlet port and filter L-braces to the housing, as shown in **Figure 21**, using (10)  $\frac{5}{16}$ "-18 x 1" hex bolts, (20)  $\frac{5}{16}$ " flat washers, and (10)  $\frac{5}{16}$ "-18 hex nuts.



**Figure 21.** Attaching the outlet ports and filter L-braces to the blower housing.

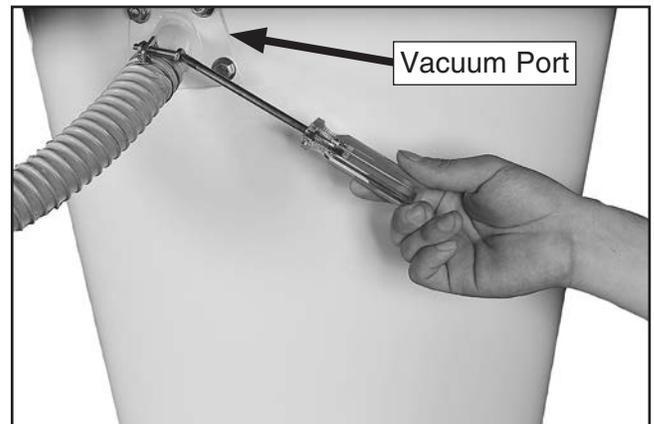
16. Attach one roll of 3 x 15 x 700mm foam tape to the outside lip of each outlet port, as shown in **Figure 21**.

17. Attach the two filter cross braces to the L-braces, as shown in **Figure 22**, using (4)  $\frac{3}{8}$ "-16 x  $\frac{3}{4}$ " hex bolts, (8)  $\frac{3}{8}$ " flat washers, and (4)  $\frac{3}{8}$ "-16 hex nuts.



**Figure 22.** Attaching filter cross braces to L-braces.

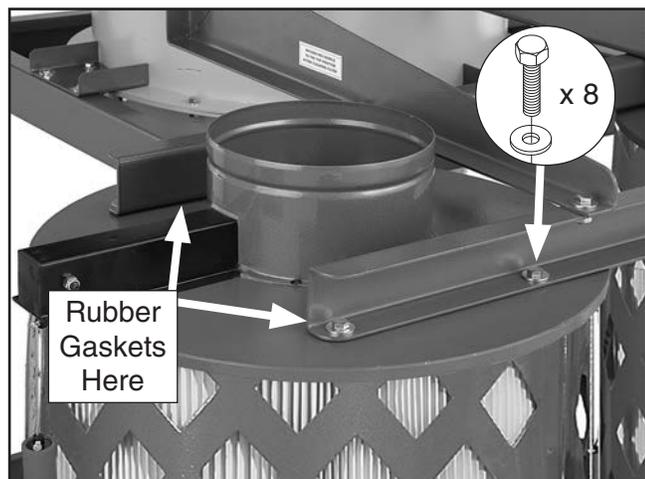
18. Apply the 3 x 6 x 300mm foam tape to the mating surface of the cyclone vacuum port, then attach it to the cyclone funnel with (4)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (4)  $\frac{5}{16}$ " flat washers (see **Figure 23**).



**Figure 23.** Cyclone vacuum tube and hose attachment.

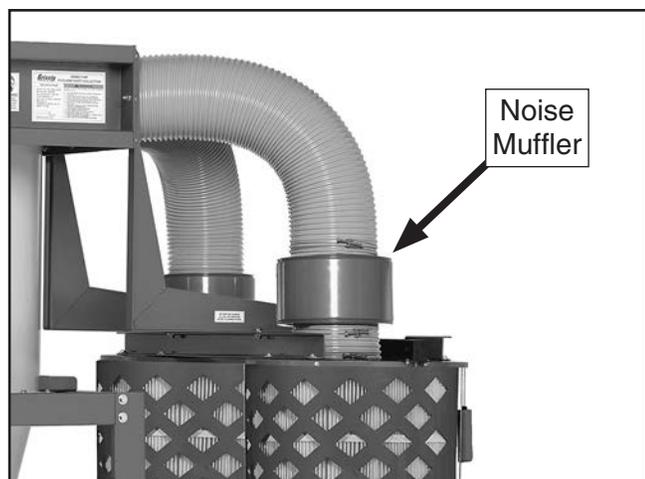


19. Using the forklift, lift the entire assembly approximately 2" off the ground to gain clearance for filter installation.
20. Mount the two filters to the braces with brace gaskets between them, as shown in **Figure 24**, using (8)  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " hex bolts and (8)  $\frac{5}{16}$ " fender washers.



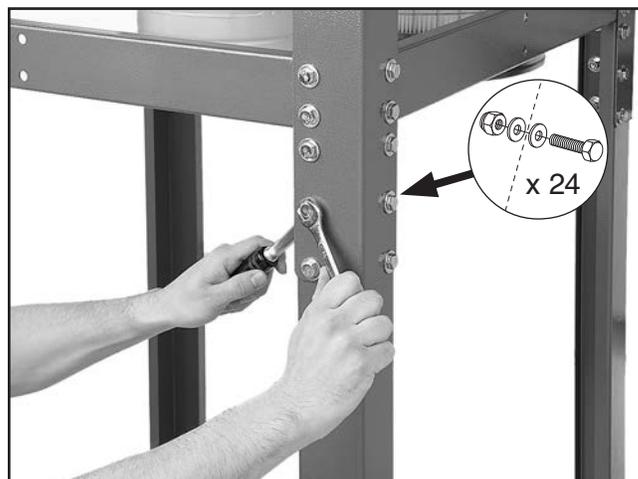
**Figure 24.** Canister filters mounted to the long support braces.

21. Attach one roll of 3 x 15 x 700mm foam tape to both ends of each noise muffler, then connect them between the outlet ports and the canisters with the 8" flexible hoses and clamps, as shown in **Figure 25**.



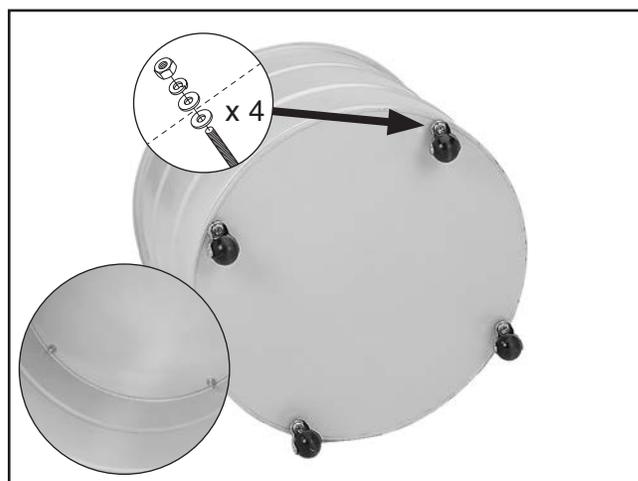
**Figure 25.** Noise mufflers connected between the outlet ports and the canisters.

22. Using the forklift, raise the assembly up and attach the lower stand legs to the upper stand legs, as shown in **Figure 26**, using (24)  $\frac{3}{8}$ "-16 x  $\frac{3}{4}$ " hex bolts, (48)  $\frac{3}{8}$ " flat washers, and (24)  $\frac{3}{8}$ "-16 lock nuts.



**Figure 26.** Attaching lower legs to the initial stand assembly.

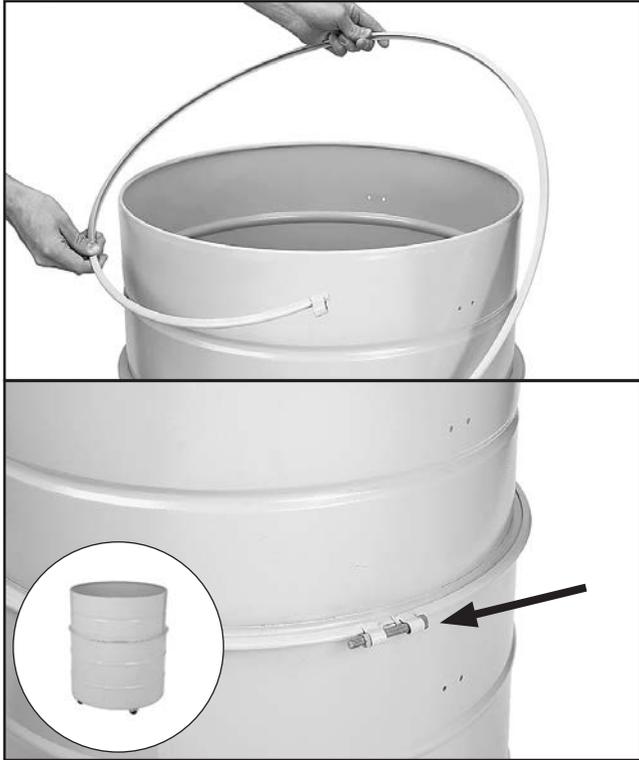
23. Attach the casters to the bottom of the lower collection drum, as shown in **Figure 27**, using the (4)  $\frac{3}{8}$ "-16 hex nuts, (8)  $\frac{3}{8}$ " flat washers, and (4)  $\frac{3}{8}$ " lock washers included in the box with the casters.



**Figure 27.** Casters attached to the lower collection drum.



24. Connect the upper and lower collection drums together with the included metal clamp and the provided hex bolt and nut, as shown in **Figure 28**.



**Figure 28.** Installing metal clamp around collection drum.

25. Place the collection drum vacuum ring on the bottom of the collection drum (see **Figure 29**).

**Note:** During operation, this ring and the vacuum connection to the cyclone funnel will prevent the collection bag from collapsing.

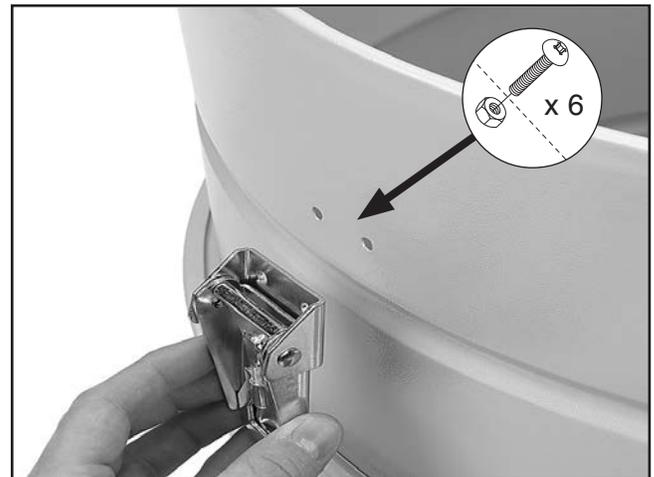


**Figure 29.** Inserting collection drum vacuum ring.

26. Install the three drum latches, as shown in **Figure 30**, with the (6) 10-24 x 3/8" Phillips head screws and (6) 10-24 hex nuts included in the box with the drum latches.

Use the remaining (6) 10-24 x 3/8" Phillips head screws and (6) 10-24 hex nuts to plug the lower latch mounting holes.

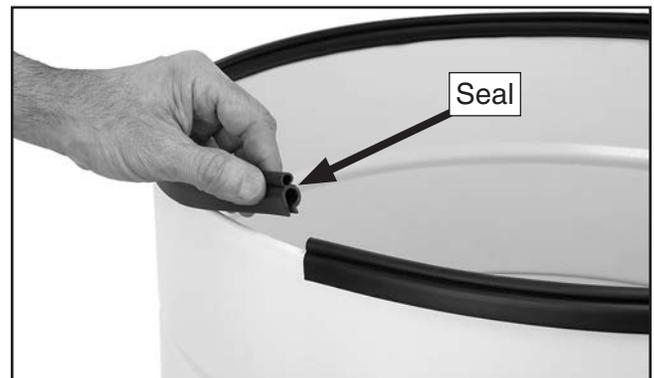
**Note:** To avoid bag snags, face the screw heads inside of the drum with the shanks facing outward.



**Figure 30.** Installing the latches onto the collector drum.

27. Slide the rubber seal over the top lip of the collection drum rim. Pay special attention to the direction of the seal, as shown in the **Figure 31**.

**Tip:** Use an adhesive to keep the seal in place.



**Figure 31.** Installing drum lid seal.



28. Install the larger plastic collection bag into the drum, place the lid on it and hook the latch over the lid, as shown in **Figure 32**, then clamp it in place.



**Figure 32.** Latch hooked over the lid for clamping.

29. Move the collector drum under the cyclone assembly and connect it with the clear flexible hose and the two 9" hose clamps, as shown in **Figure 33**.



**Figure 33.** Drum attached to cyclone funnel with clear 9" hose.

30. Fit the plastic collection bags over the bottom of the filters and clamp them in place with the metal bag clamps, as shown in **Figure 34**.



**Figure 34.** Canister filter collection bag installed.

31. Connect the vacuum hose to the cyclone funnel and collection drum vacuum ports with (2) 1 1/4" hose clamps (see **Figure 35**).



**Figure 35.** Connecting the vacuum hose.



32. Slide the reducer over the inlet port on the barrel (Figure 36), line up the mounting holes, and secure it in place with the (3) M4 x 12 sheet metal screws.

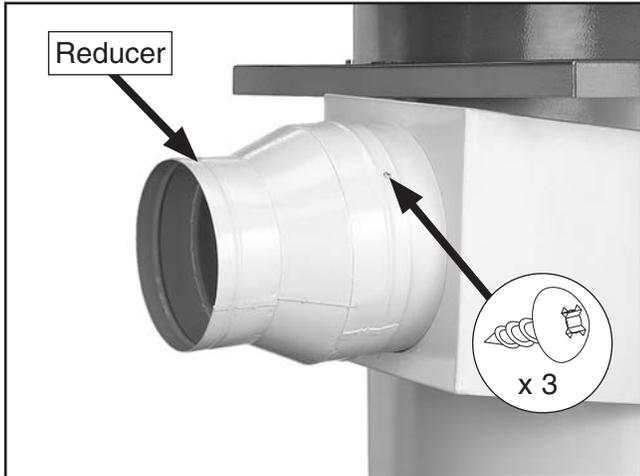


Figure 36. Reducer installed.

33. Secure the vacuum hose inside the upper and lower stand legs with the (2) U-shaped clips (see Figure 37).



Figure 37. Securing the vacuum hose to the stand legs.

34. Mount the switch on the stand, as shown in Figure 38, with (3)  $\frac{3}{8}$ "-16 x  $\frac{3}{4}$ " hex bolts, (6)  $\frac{3}{8}$ " flat washers, and (3)  $\frac{3}{8}$ "-16 hex nuts.



Figure 38. Switch mounted to stand.

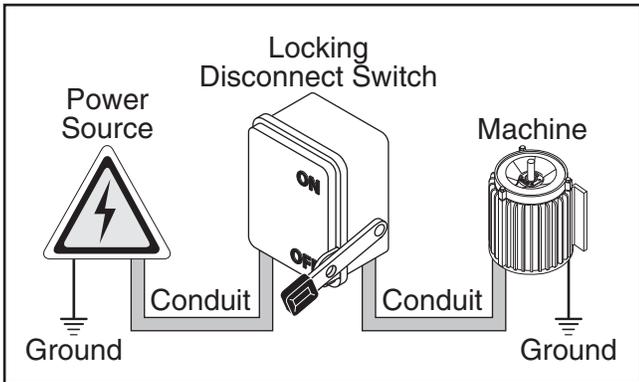
**Note:** The hand-held remote control uses IR (infrared) to communicate with the control box receiver port, and must have direct line-of-sight to the control box face. Locate the control box with this in mind.



# Power Connection

Due to the complexity required for planning, bending, and installing the conduit necessary for a code-compliant hardwire setup, an electrician or other qualified person **MUST** perform this type of installation. Hardwire setups typically require power supply wires to be enclosed inside of a solid or flexible conduit, which is securely mounted at both ends with the appropriate conduit fittings. All work must adhere to the required electrical codes.

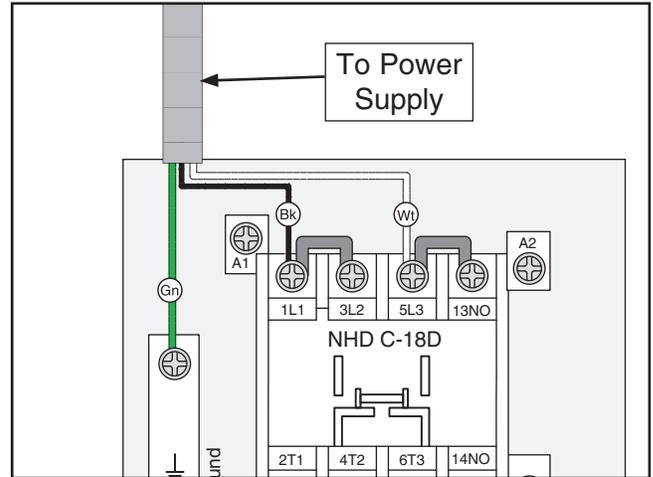
The hardwire setup for this machine must include a locking disconnect switch (see **Figure 39**) between the power source and the machine. This switch serves as the means to completely disconnect the machine from power to prevent electrocution accidental startup during adjustments, maintenance, or service to the machine.



**Figure 39.** Typical hardwire setup with a locking disconnect switch.

## G0442 Power Connection

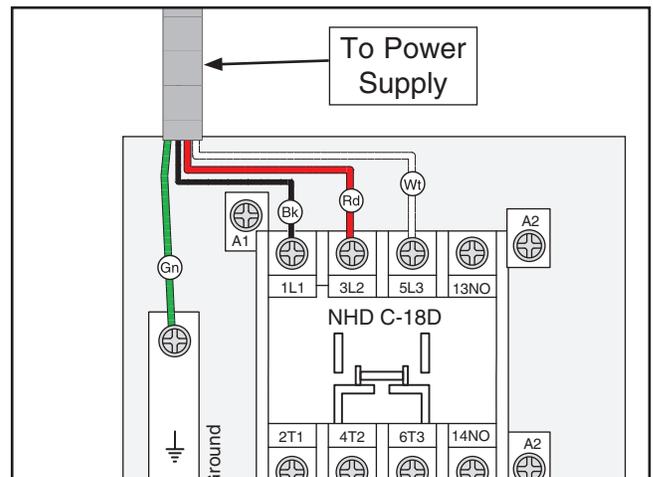
The incoming power wires must be connected to the two terminals on the contactor marked 1L1 and 5L3, and the incoming ground wire must be connected the ground terminal, as illustrated in **Figure 40**. All wires must have adequate slack and be clear of sharp objects.



**Figure 40.** G0442 mag switch to power supply connection.

## G0601 Power Connection

The incoming power wires must be connected to the three terminals on the master power switch marked 1L1, 3L2, and 5L3, and the incoming ground wire must be connected the ground terminal shown in **Figure 41**. All wires must have adequate slack and be clear of sharp objects.



**Figure 41.** G0601 mag switch to power supply connection.



# Test Run

---

When the assembly is complete, test run the dust collection system to make sure it operates properly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review the **Troubleshooting** on **Page 46**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

## To test run the dust collection system:

1. Make sure you have read the safety instructions at the beginning of the manual and that the machine is set up properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Review the **Circuit Requirements** section beginning on **Page 11** and connect the machine to the power source.
4. Flip the main power switch at the lower left hand corner of the control box to the ON ("I") position to enable power to the switch.
5. Press the ON/OFF button to turn the machine **ON**. Make sure your hand stays poised over the switch in case you need to quickly turn the machine **OFF**.
6. Listen and watch for abnormal noises or actions. The machine should run smoothly with little or no vibration or rubbing noises.

—If you suspect any problems, immediately turn the machine **OFF**, then disconnect the machine from power. Refer to **Troubleshooting** on **Page 46** to identify and fix any problems.

—If you cannot solve the problem with the use of the **Troubleshooting** guide, contact our Tech Support at (570) 546-9663 for assistance.

7. Press the TIMER button on the control box and cycle through each of the times to make sure the indicators light.
8. Press the TIMER button on the remote control and cycle through the times in the same manner as **Step 7**.
9. Toggle the ON/OFF button on both the control box and the remote control to make sure they are working properly.

## **DANGER**

If any part of your body contacts the spinning impeller, severe cutting or amputation injuries will occur. Always keep yourself and tools away from the impeller when the machine is connected to power.

## For Model G0601 Only

The Model G0601 uses a 3-phase motor. For proper operation, the impeller inside the blower housing must rotate *counterclockwise* when viewed from above. Since the motor and impeller are directly connected, you must verify that the motor rotates in the correct direction.

10. Use a ladder to safely observe the motor fan through the top motor cover as another person turns the machine **ON** and **OFF**.

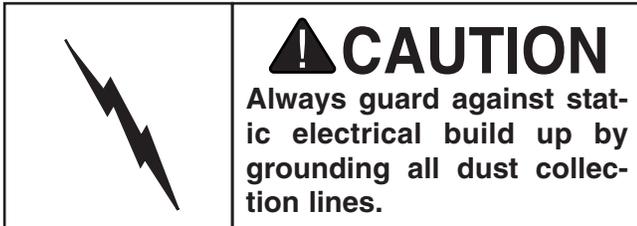
—If the motor fan rotates *counterclockwise* when viewed from above, the rotation direction is correct.

—If the motor fan rotates *clockwise* when viewed from above, the rotation direction is incorrect and the motor is wired out-of-phase. Perform the **Correcting Phase Polarity** procedure on **Page 14** to correctly wire the machine to the power source so that the motor and impeller spin *counterclockwise* when viewed from above.



# SECTION 4: DESIGNING THE SYSTEM

## General



The Model G0442/G0601 is designed to be a central dust collector system. The large suction capacity of the Model G0442/G0601 allows great flexibility in planning and designing of the dust collection duct layout.

**Note:** Check local codes concerning the use of dust collecting machines before deciding the placement of the machine.

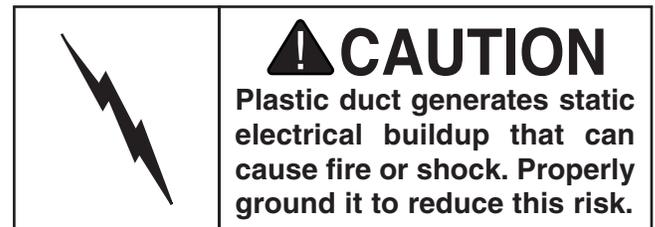
Grizzly offers a complete line of dust collection accessories for setting up a stationary system. Additionally, Grizzly offers a complete guide book titled **Dust Collection Basics**.

Whatever system design you choose, always make sure there are no open flames (including pilot lights) in the same room as the dust collector; otherwise you risk an explosion if dust is dispersed into the air.

## Duct Material

You have many choices regarding main line and branch line duct material. For best results, use metal duct for the main line and branch lines, then use short lengths of flexible hose to connect each machine to the branch lines.

Plastic duct is also a popular material for home shops. However, be aware that there is a fire or explosion hazard if plastic duct material is used for dust collection without being grounded against static electrical charge build-up. This topic will be discussed later in this section. Another problem with using plastic is that it is less efficient per foot than metal.



## Plastic Duct

The popularity of plastic duct is due to the fact that it is an economical and readily available product. It is also simple to assemble and easily sealed against air loss. The primary disadvantage of plastic duct for dust collection is the inherent danger of static electrical buildup.

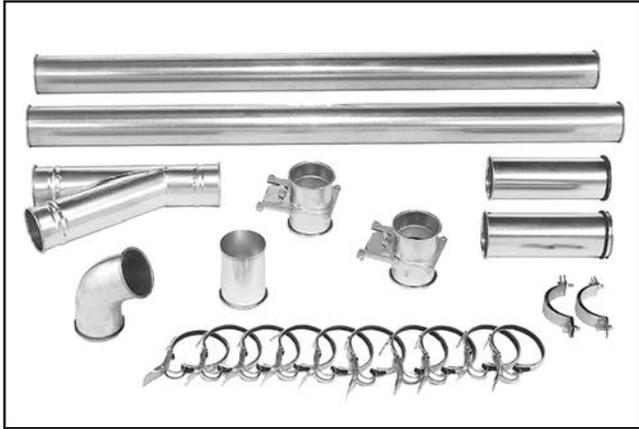


**Figure 42.** Examples of plastic ducting components.



## Metal Duct

Advantages of metal duct is its conductivity and that it does not contribute to static electrical charge build-up. However, static charges are still produced when dust particles strike other dust particles as they move through the duct. Since metal duct is a conductor, it can be grounded quite easily to dissipate any static electrical charges.



**Figure 43.** Examples of metal pipe and components.

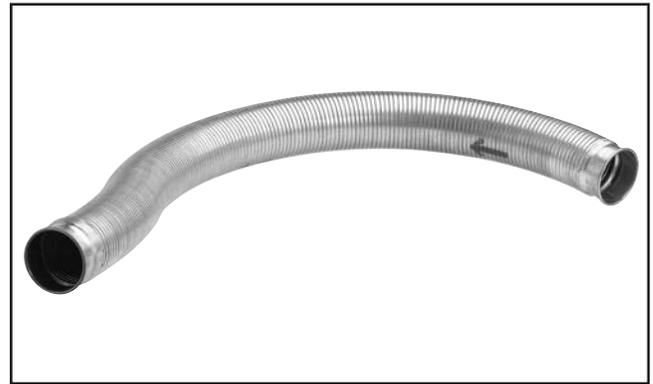
There are a number of options when it comes to metal duct, but metal duct that is specially manufactured for dust collection is the best choice. When selecting your metal duct, choose high quality metal duct with smooth welded internal seams that will minimize airflow resistance. This type of duct usually connects to other ducts or elbows with a simple, self-sealing clamp, is very quick and easy to assemble, and can be readily dismantled and re-installed. This is especially important if you ever need to change things around in your shop or add more tools.

Avoid inferior metal duct that requires you to cut it to length and snap it together. This type of duct is time consuming to install because it requires you to seal all the seams with silicone and screw the components on the ends with sheet metal screws. Another disadvantage is the rough internal seams and crimped ends that unavoidably increase static pressure loss.

## Flexible Duct

Flexible hose is generally used for short runs, small shops and at rigid duct-to-tool connections. There are many different types of flex hose on the market today. These are manufactured from materials such as polyethylene, PVC, cloth hose dipped in rubber and even metal, including steel and aluminum.

The superior choice here is metal flex hose that is designed to be flexible, yet be as smooth as possible to reduce static pressure loss.



**Figure 44.** Example of flexible metal duct.

There are also many kinds of pure plastic flexible hose, such as non-perforated drainage type hose and dryer vent hose. Drainage type hose, while being economical, does not quite have the flexibility required for dust collection. The inside of the duct is also deeply corrugated and can increase the static pressure loss by as much as 50% over smooth wall duct. Dryer vent hose, while being completely flexible, is non-resistant to abrasion and has a tendency to collapse in a negative pressure system. We DO NOT recommend using dryer vent hose in your dust collection system.

If using flex-hose, you should choose one of the many types that are designed specifically for the movement of solid particles, i.e. dust, grains, and plastics. However, the cost of specifically designed flexible duct can vary greatly. Grizzly offers polyethylene hose, which is well suited for the removal of particulate matter, especially sawdust, since it is durable and completely flexible. Polyethylene is also very economical and available in a wide variety of diameters and lengths for most applications.



# System Design

## Decide Who Will Design

For most small-to-medium sized shops, you can design and build the dust collection system yourself without hiring engineers or consultants. We have included some basic information here to get you started on a basic design.

If you have a large shop or plan to design a complicated system, we recommend doing additional research beyond this manual or seeking the help of an expert.

## Sketch Your Shop Layout

When designing a successful dust collection system, planning is the most important step. In this step, sketch a basic layout of your shop, including space requirements of different machines.

Before you get out your pencil and paper, we recommend you visit our FREE *Workshop Planner*, at <http://www.grizzly.com/workshopplanner>.

Our *Workshop Planner* will allow you to quickly and easily design and print a basic shop layout. Don't worry, non-Grizzly brand machines can be substituted with Grizzly machines for layout purposes. **Note:** After you're finished, make sure to save your layout for later modification.

Your sketch only needs the basic details of the shop layout, similar to the figure below, including all your current/planned machines and your planned placement of the dust collector.

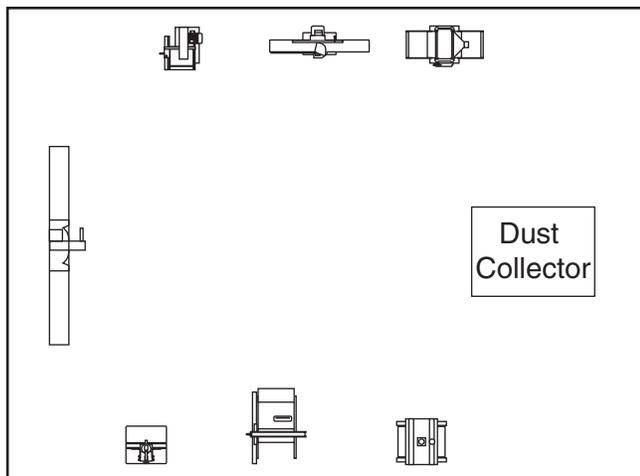


Figure 45. Basic sketch of shop layout.

## Sketch a Basic Duct Layout

For the next step, sketch how you will connect your machines to the dust collector. Consider these general guidelines for an efficient system:

1. Machines that produce the most saw dust should be placed nearest to the dust collector (i.e. planers and sanders).
2. Ideally, you should design the duct system to have the shortest possible main line and secondary branch ducts. See the figures below for ideas of efficient versus inefficient duct layouts.

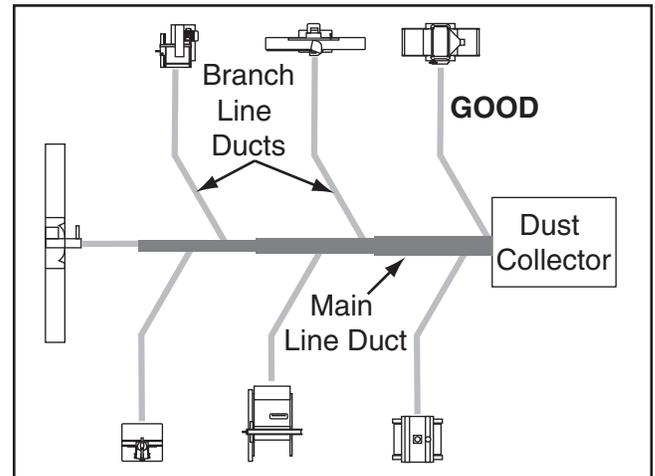


Figure 46. Efficient duct layout.

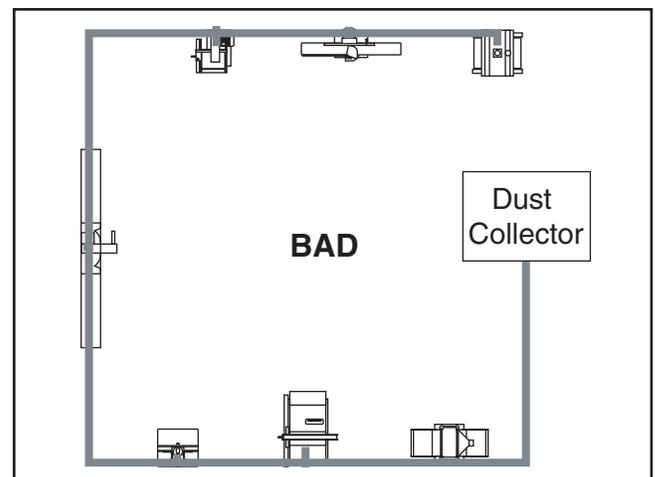


Figure 47. Inefficient duct layout.



3. Directional changes should be kept to a minimum. The more directional change fittings you use directly increases the overall resistance to airflow.
4. Gradual directional changes are more efficient than sudden directional changes (i.e. use the largest corner radius possible when changing hose or pipe direction).
5. Each individual branch line should have a blast gate immediately after the branch to control suction from one machine to another.
6. The simpler the system, the more efficient and less costly it will be.

### Determine Required CFMs

Since each machine produces a different amount of sawdust, the requirements for the minimum amount of CFM to move that sawdust is unique to the machine (for example, a planer produces more sawdust than a table saw). Knowing this required CFM is important to gauging which size of duct to use.

Refer to the figure below for a close estimation of the airflow each machine requires. Keep in mind that machines that generate the most sawdust should be placed closest to the dust collector. If the machine has multiple dust ports, the total CFM required is the sum of all ports.

Machine Dust Port Size	Approximate Required CFM
2"	100
2.5"	150
3"	250
4"	400
5"	600
6"	850
7"	1200
8"	1600
9"	2000
10"	2500

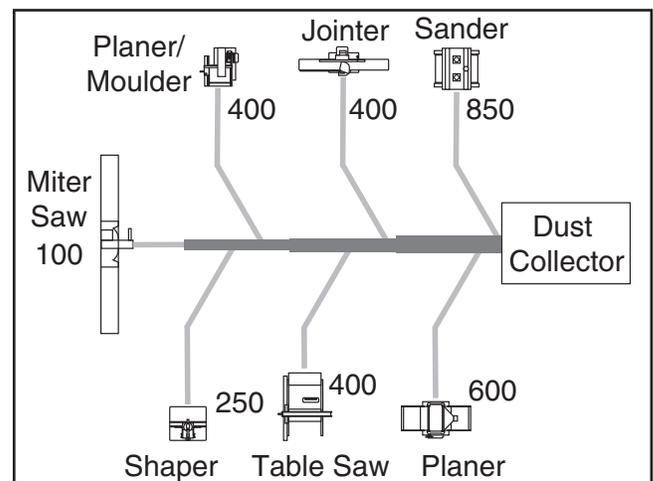
**Figure 48.** Approximate required airflow for machines, based on dust port size.

If the machine does not have a built-in dust port, use the following table to determine which size of dust port to install.

Machine	Average Dust Port Size
Table Saw.....	4"
Miter/Radial-Arm Saw.....	2"
Jointer (6" and smaller) .....	4"
Jointer (8"-12") .....	5"
Thickness Planer (13" and smaller).....	4"
Thickness Planer (14"-20") .....	6"
Shaper.....	4"
Router (mounted to table).....	2"
Bandsaw.....	4"
Lathe.....	4"
Disc Sander (12" and smaller).....	2"
Disc Sander (13-18").....	4"
Belt Sander (6" and smaller) .....	2"
Belt Sander (7"-9") .....	3"
Edge Sander (6" x 80" and smaller).....	4"
Edge Sander (6" x 80" and larger) .....	5"
Drum Sander (24" and smaller).....	2 x 4"
Drum Sander (24" and larger) .....	4 x 4"
Widebelt Sander (18" and smaller).....	5"
Widebelt Sander (24"-37" single head) ...	2 x 6"
Widebelt Sander (24"-51" double head) ..	5 x 4"

**Figure 49.** Dust port size and quantity per average machine.

Write the required CFM for each machine on your sketch, as shown in the figure below.



**Figure 50.** CFM requirements labeled for each machine.



## Determining Main Line Duct Size

The general rule of thumb for a main line duct is that the velocity of the airflow must not fall below 3500 FPM.

For small/medium sized shops, using the inlet size of the dust collector as the main line duct size will usually keep the air velocity above 3500 FPM and, depending on your system, will allow you to keep multiple branches open at one time.

Mark your drawing, as shown in the figure below, but using the inlet size for your dust collector as the main line.

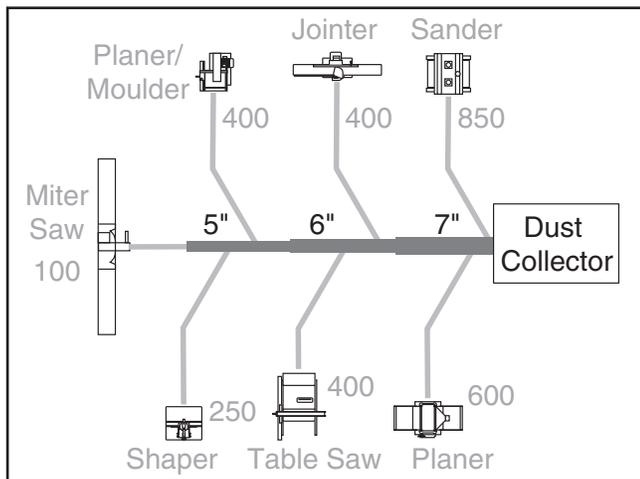


Figure 51. Main line size labeled on sketch.

## Determining Branch Line Duct Size

The general rule of thumb for a branch line duct is that the velocity of the airflow must not fall below 4000 FPM.

For small/medium sized shops, using the dust port size from the machine as the branch line duct size will achieve the correct velocity in most applications. However, if the dust port on the machine is smaller than 4", make the branch line 4" and neck the line down right before the dust port.

**Note:** Systems with powerful dust collectors work better if multiple blast gates are left open. This also allows you to run two machines at once. Experiment with different combinations of blast gates open/closed to find the best results for your system.

Write your determined branch line sizes on your drawing, as shown in the following figure.

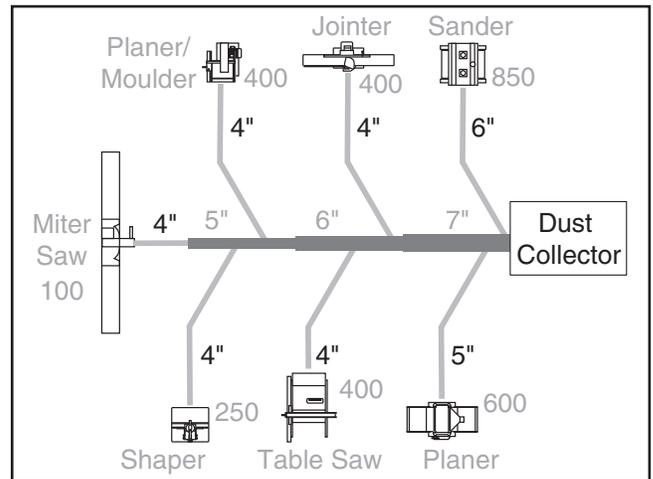


Figure 52. Branch line duct sizes labeled.

If two machines will connect to the same branch line and both will operate at the same time, then add the required CFM for each machine together and find the closest total CFM in the table below to determine the correct branch size.

If both machines will never run at the same time, reference the machine with the biggest dust port in the table below and add blast gates after the Y-branch to open/close the line to each machine.

Total CFM	Branch Line Size
400	4"
500	4"
600	5"
700	5"
800	6"
900	6"
1000	6"

Figure 53. Sizing chart for multiple machines on the same branch line.



## Planning Drop Downs

Plan the drop downs for each machine, using blast gates wherever possible to control airflow.

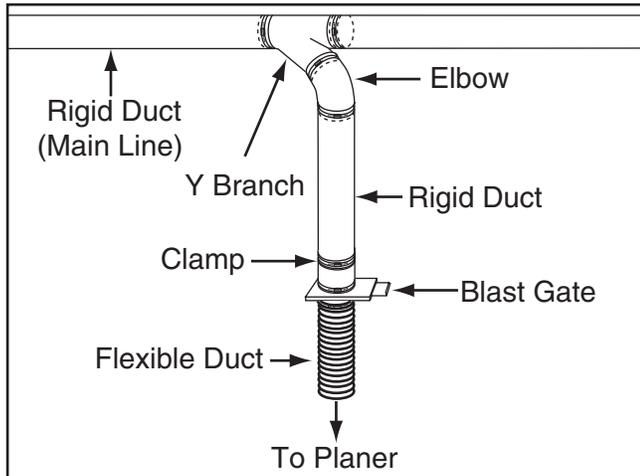


Figure 54. Drop down setup.

## Calculating Duct Resistance

Adding duct work, elbows, branches and any other components to a duct line increases airflow resistance (static pressure loss). This resistance can be minimized by using rigid (smooth) duct and gradual curves, as opposed to flexible duct and 90° elbows.

To help you think about this resistance, imagine riding a bicycle in a tunnel that is an exact replica of your duct work. If the inside of the tunnel is very bumpy (flexible duct) and has a lot of sharp turns (90° elbows), it will take a lot more effort to travel from one end to the other.

The purpose of calculating the resistance is to determine if it is low enough from the machine to the dust collector to meet the given CFM requirement for the machine. Use the following tables to calculate the resistance of duct work.

Duct Dia.	Approximate Static Pressure Loss Per Foot of Rigid Duct		Approximate Static Pressure Loss Per Foot of Flexible Duct	
	Main Lines at 3500 FPM	Branch Lines at 4000 FPM	Main Lines at 3500 FPM	Branch Lines at 4000 FPM
2"	0.091	0.122	0.35	0.453
2.5"	0.08	0.107	0.306	0.397
3"	0.071	0.094	0.271	0.352
4"	0.057	0.075	0.215	0.28
5"	0.046	0.059	0.172	0.225
6"	0.037	0.047	0.136	0.18
7"	0.029	0.036	0.106	0.141
8"	0.023	0.027	0.08	0.108
9"	0.017	0.019	0.057	0.079

Fitting Dia.	90° Elbow	45° Elbow	45° Wye(Y)	90° Wye(Y)
3"	0.47	0.235	0.282	0.188
4"	0.45	0.225	0.375	0.225
5"	0.531	0.266	0.354	0.236
6"	0.564	0.282	0.329	0.235
7"	0.468	0.234	0.324	0.216
8"	0.405	0.203	0.297	0.189

Figure 55. Static pressure loss charts.

In most small/medium shops it is only necessary to calculate the line with the longest duct length or the most fittings (operating under the assumption that if the line with the highest resistance works, the others will be fine).

**To calculate the static pressure of any given line in the system, follow these steps:**

1. Make a list of each size duct in the line, including the length, and multiply those numbers by the static pressure value given in the previous table.
2. List each type of elbow or branch and multiply the quantity (if more than one) by the static pressure loss given in the previous table.



3. Add the additional factors from the following table to your list.

Additional Factors	Static Pressure
Seasoned (well used) Dust Collection Filter	1"
Entry Loss at Large Machine Hood	2"

**Figure 56.** Additional factors affecting static pressure.

4. Total your list as shown in the example below to come up with your overall static pressure loss number for that line.

**Note:** Always account for a seasoned filter, so you don't end up with a system that only works right when the filter is clean.

<b>Main Line</b>		
6" Rigid Duct (0.037) at 20'	.....	0.740
<b>Branch Line</b>		
4" Rigid Duct (0.075) at 10'	.....	0.750
4" Flexible Duct (0.28) at 5'	.....	1.400
<b>Elbows/Branches</b>		
6" 45° Y-Branch	.....	0.329
4" 45° Elbow	.....	0.225
<b>Additional Factors</b>		
Seasoned Filter	.....	1.000
<b>Total Static Pressure Loss</b>	.....	<b>4.444</b>

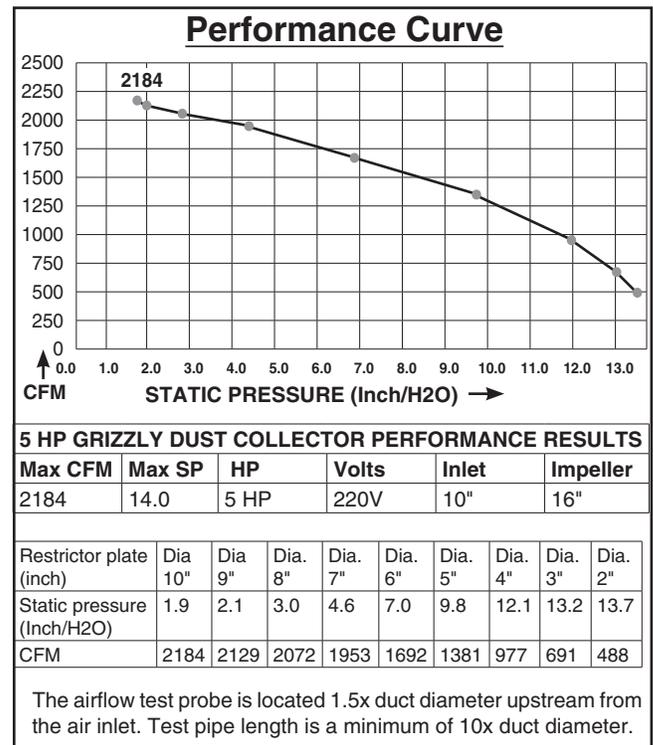
**Figure 57.** Totaling static pressure numbers.

**Note:** When calculating static pressure loss to determine if multiple lines can be left open at the same time, only include the main line numbers once.

5. Compare the total static pressure loss for that line to the closest CFM given in **Figure 58**.

**Example:** The G0442/G0601 **Data Sheet Performance Curve** is illustrated in **Figure 58**. Find 4.6 on the Static Pressure axis (the amount of total static pressure loss calculated in **Figure 57**), then refer to the closest value on the CFM axis—approximately 1953 CFM.

The 1953 CFM for the static pressure loss of the line connected to the router is well above the 220 CFM requirement of that machine.



**Figure 58.** G0442/G0601 performance curve chart and data.

—If the CFM for your static pressure loss is above the requirement of the machine connected to the end of that branch line, then dust collection will most likely be successful. Congratulations! You've just designed your own dust system. Refer to the **Accessories** section on **Page 41** to start buying the components necessary to make your system a reality.



- If the CFM for your static pressure loss is below the requirement of the machine, then that line will not effectively collect the dust. You must then modify some of the factors in that line to reduce the static pressure loss. Some of the ways to do this include 1) installing larger duct, 2) reducing amount of flexible duct used, 3) increasing machine dust port size, 4) moving machine closer to dust collector to eliminate duct length, and 5) reducing 90° elbows or replacing them with 45° elbows.

## Example Materials List

After the system is designed, create a materials list of all the items you will need to build your dust collection system. This will make it easy when it comes time to purchase the materials.

Below is an example of some items that might be needed. Refer to **Accessories** for dust collection components available through *grizzly.com*.

Description	Model	Quantity
6" Rigid Duct at 20'	G7364	4
4" Rigid Duct at 10'	G6162	2
4" Flex Hose at 5'	H7215	6
6" 45° Y-Branch	G7353	6
4" 45° Elbow	G6167	6

**Figure 59.** Example of dust collection system material list.



# System Grounding

Since plastic hose is abundant, relatively inexpensive, easily assembled and air tight, it is a very popular material for conveying dust from woodworking machines to the dust collector.

We recommend only using short lengths of flexible hose (flex-hose) to connect the woodworking machine to the dust collector. However, plastic flex-hose and plastic duct are an insulator, and dust particles moving against the walls of the plastic duct create a static electrical buildup. This charge will build until it discharges to a ground.

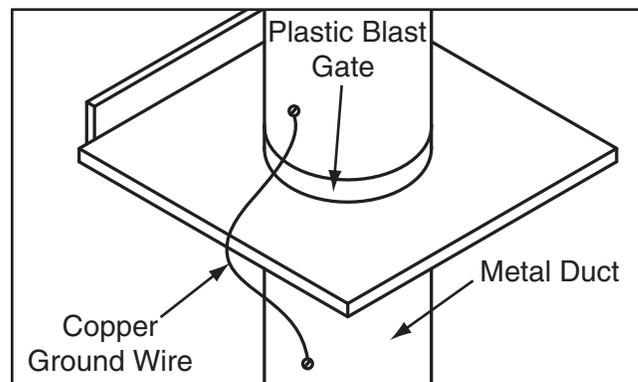
If a grounding medium is not available to prevent static electrical buildup, the electrical charge will arc to the nearest grounded source. This electrical discharge may cause an explosion and subsequent fire inside the system.

To protect against static electrical buildup inside a non-conducting duct, a bare copper wire should be placed inside the duct along its length and grounded to the dust collector. You must also confirm that the dust collector is continuously grounded through the electrical circuit to the electric service panel.

If you connect the dust collector to more than one machine by way of a non-conducting branching duct system and blast gates, the system must still be grounded as mentioned above. We recommend inserting a continuous bare copper ground wire inside the entire duct system and attaching

Be sure that you extend the bare copper wire down all branches of the system. Do not forget to connect the wires to each other with wire nuts when two branches meet at a “Y” or “T” connection.

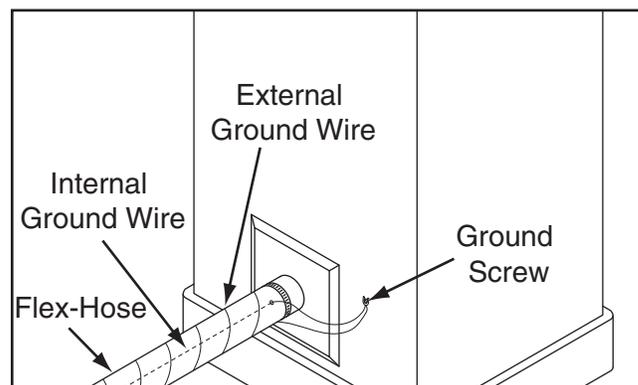
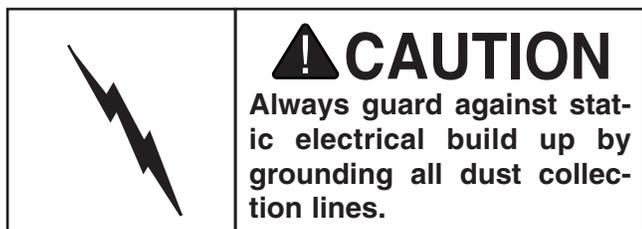
Ensure that the entire system is grounded. If using plastic blast gates to direct air flow, the grounding wire must be jumped (see the figure below) around the blast gate without interruption to the grounding system.



**Figure 60.** Ground jumper wire when using plastic blast gates and metal duct.

We also recommend wrapping the outside of all plastic ducts with bare copper wire to ground the outside of the system against static electrical buildup. Wire connections at Y's and T's should be made with wire nuts.

Attach the bare ground wire to each stationary woodworking machine and attach to the dust collector frame with a ground screw as shown in the figure below. Ensure that each machine is continuously grounded to the grounding terminal in your electric service panel.



**Figure 61.** Flex-hose grounded to machine.

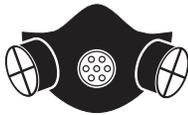


# SECTION 5: OPERATIONS

---

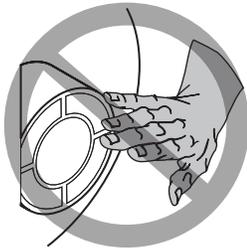
## **!WARNING**

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



## **!WARNING**

Do **NOT** put hands or small objects near inlet openings during operation. Objects sucked into the inlet will meet with the impeller blade. Failure to heed this warning could result in property damage or personal injury.



## **!CAUTION**

**DO NOT** use the dust collector for any other purpose besides collecting dust from connected woodworking machines. A dust collector should **NEVER** be used as a shop vacuum and **IS NOT** a substitute for an air filter system. For safest use, wear a respirator and use an air cleaner in addition to the dust collector.

## **NOTICE**

If you have never used this type of machine or equipment before, **WE STRONGLY RECOMMEND** that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

## General

---

Operating the Model G0442/G0601 is simple and straightforward. Blast gates located at each of the machines controls the air flow from the woodworking machine to the dust collector. If a machine is not being used, keep the blast gate closed to maintain higher levels of efficiency throughout the system.

## Remote Control

---

The remote control for the Model G0442/G0601 is IR (infrared) rather than RF (radio frequency) to prevent accidental startups by other common RF items such as garage door openers.

Because this remote system is IR, the remote control must be pointing directly at the control box with an unobstructed line-of-sight view.

If you place the dust collector in a different room or outside of your shop, you must mount the switch in the shop and wire it through the wall to the dust collector to make use of the remote control.

**Note:** *The remote control requires two "AA" batteries for operation.*



# Control Box Panel

Use the illustration of the control box panel in **Figure 62** and the descriptions that follow to become familiar with the functions of the buttons on the control box.

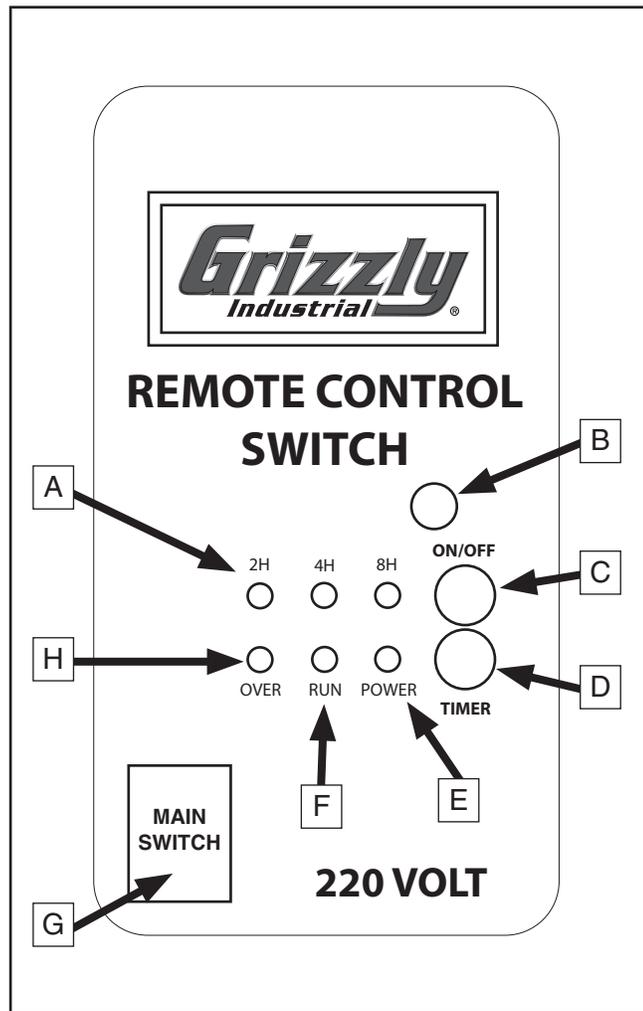


Figure 62. Control box panel.

- A. **Timer Indicator Lights:** Turns **ON** when a timer setting is selected.
- B. **Infrared Port:** Receives infrared communication from the remote control.
- C. **ON/OFF Button:** Starts/stops the dust collector motor.
- D. **Timer Button:** Cycles through the available timer settings.
- E. **Power Light:** Indicates when there is power to the control box.
- F. **Run Light:** Illuminates when the dust collector motor is operating.
- G. **Main Switch:** Enables/disables the power flow to the control box and must be turned ON before using ON/OFF button.
- H. **Overload Light:** Turns ON when the dust collector is overloaded and the motor has stopped.

**Note:** If the overload light illuminates and the motor stops, you must turn the machine **OFF** and allow the motor to cool. The overload relay should reset automatically and the light will go out.

If this is a persistent problem, refer to the **Troubleshooting** section on **Page 46** for additional help.



# SECTION 6: ACCESSORIES

## H5293—4" Metal Duct Starter Kit

## H5295—5" Metal Duct Starter Kit

## H5297—6" Metal Duct Starter Kit

Save over 20% with this great starter kit. Includes: (2) machine adapters, (10) pipe clamps, (3) 5' straight pipes, (1) branch, (3) pipe hangers, (1) end cap, (3) adjustable nipples, (1) 90° elbow, and (1) 60° elbow.

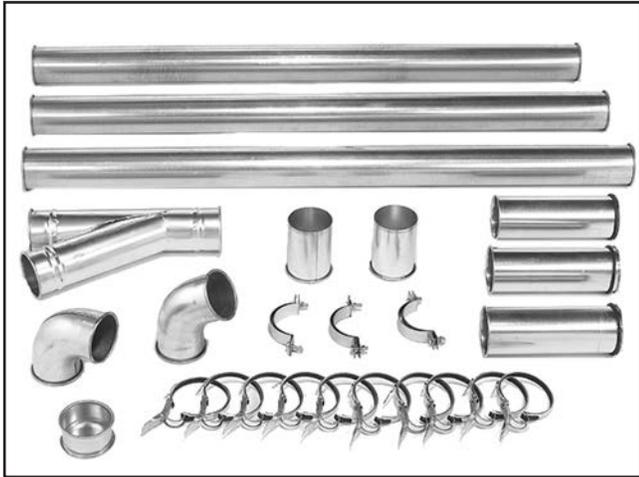


Figure 63. Metal Duct Starter Kit.

## H5294—4" Metal Duct Machine Addition Kit

## H5296—5" Metal Duct Machine Addition Kit

## H5298—6" Metal Duct Machine Addition Kit

Save over 20% with this great machine addition kit. Includes: (2) blast gates, (1) machine adapter, (10) pipe clamps, (2) pipe hangers, (2) 5' straight pipes, (2) adjustable nipples, (1) branch, and (1) 60° elbow.

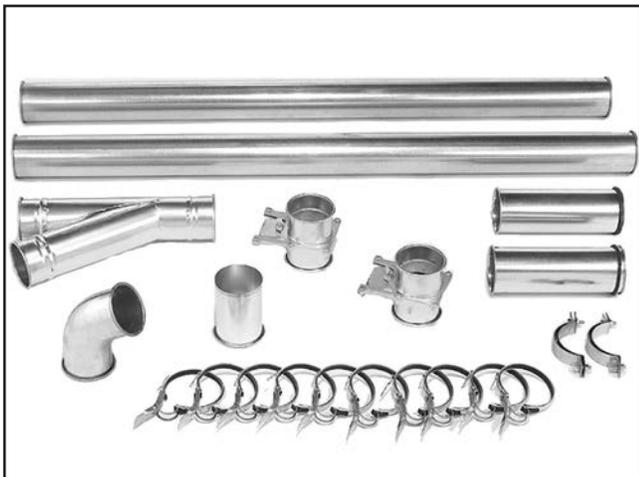


Figure 64. Metal Duct Machine Addition Kit.

## G6162—4" x 5' Straight Metal Pipe

## G7346—5" x 5' Straight Metal Pipe

## G7364—6" x 5' Straight Metal Pipe

## H5227—7" x 5' Straight Metal Pipe

## H5237—8" x 5' Straight Metal Pipe

## H5252—9" x 5' Straight Metal Pipe

These laser welded straight pipes ensure a super smooth internal seam. Ends easily clamp together for a sealed fit without screws or silicone.



Figure 65. Straight Metal Pipe.

## H7216—5" x 5' Rigid Metal Flex Hose

## H7217—6" x 5' Rigid Metal Flex Hose

## H7218—7" x 5' Rigid Metal Flex Hose

## H7219—8" x 5' Rigid Metal Flex Hose

## H7220—9" x 5' Rigid Metal Flex Hose

This flex hose provides just enough flexibility to make difficult connections while still keeping the inside wall as smooth as possible to minimize static pressure loss.

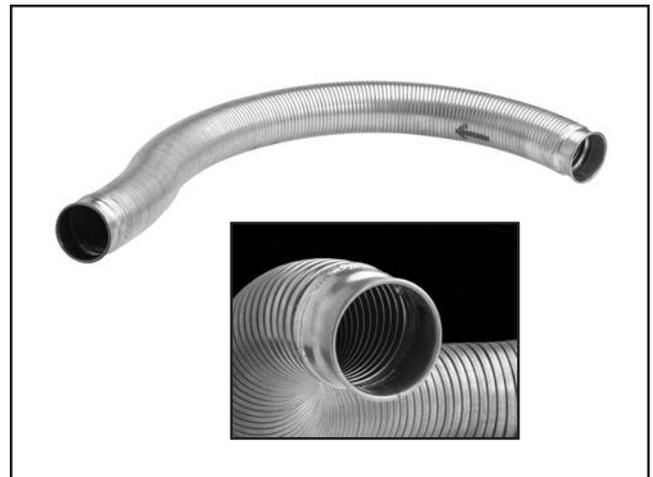


Figure 66. Rigid Metal Flex Hose.



### Metal Elbows

These industrial metal elbows are available from 4"–8" with 90°, 60°, 45°, or 30° curves. Also, available with a 90° long radius curve. Call (800) 523-4777 or visit [www.grizzly.com](http://www.grizzly.com) for more information and pricing.

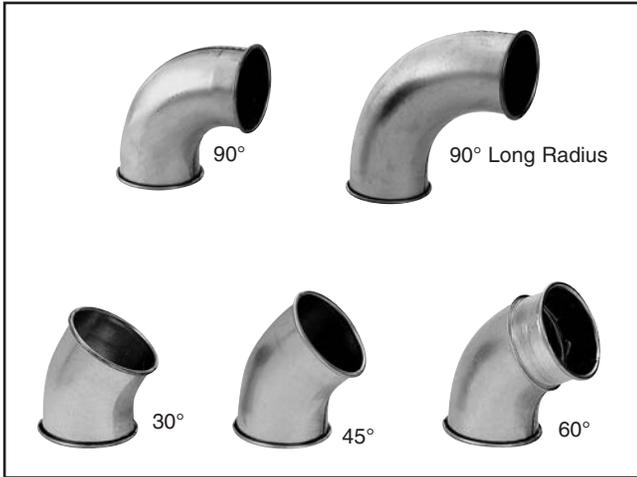


Figure 67. Metal elbow examples.

- G6177—4" Metal Blast Gate
- G7340—5" Metal Blast Gate
- G7358—6" Metal Blast Gate
- H5234—7" Metal Blast Gate
- H5249—8" Metal Blast Gate
- H5259—9" Metal Blast Gate



Figure 68. Metal Blast Gate.

**Call 1-800-523-4777 To Order**

### Metal Branches

We carry many different branches, all designed to minimize airflow resistance.



Figure 69. Metal Branches.

### Reducers & Adapters

We carry a multitude of reducers and elbows to cover most applications from 4" through 9".



Figure 70. Metal Reducers & Adapters.

- G6252—4" Floor Sweep
- G7341—5" Floor Sweep
- G7342—6" Floor Sweep

Great for cleaning up around the shop, these metal floor sweeps close tight when not in use.



Figure 71. Industrial Floor Sweep.



# SECTION 7: MAINTENANCE



## Schedule

For optimum performance from your machine, check the following items during operation. If you notice a problem, resolve it before continuing operation. At the end of the day, make sure the machine is turned **OFF** and disconnected from power.

### During Operations:

- Dust collection drums and bags.
- Check/repair loose mounting bolts.
- Pressure leaks.
- Worn or damaged wires.
- Any other condition that would hamper the safe and efficient operation of this machine.

## Emptying Drum

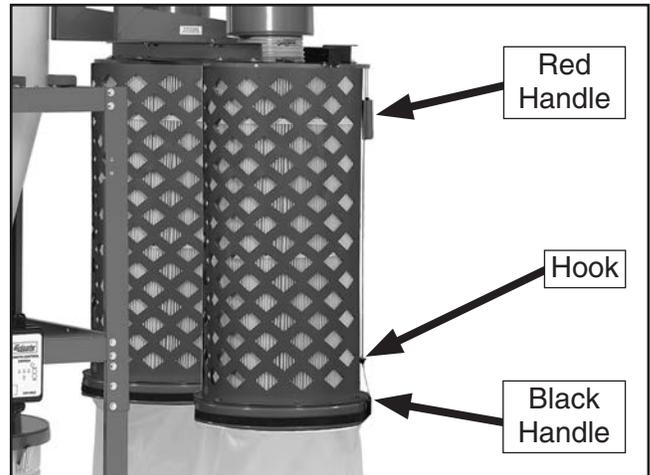
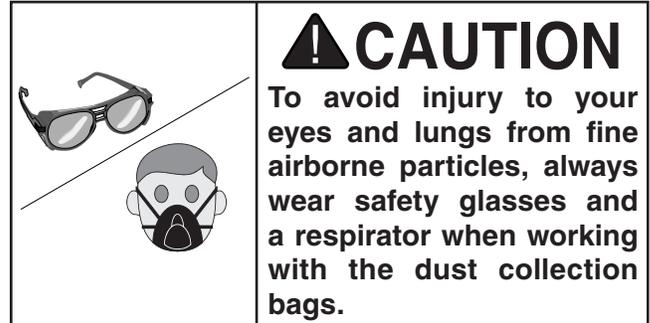
Empty the collection drum when it is no more than  $\frac{3}{4}$  full. If the drum becomes overfilled, the chips will be sucked back into the intake barrel and passed through to the canister filters.

How quickly the drum will fill up is based on the type of work being done at the time.

When first using the machine, check the drum regularly to get an idea of how often it needs to be emptied.

## Cleaning Filters

The Model G0442/G0601 dust collector has a gentle brush system inside the canisters for removing any built-up dust from the filter pleats.



**Figure 72.** Brush handles for cleaning canister filters.

To clean the filters, pull the red handles down all the way, then pull the black handles down and hook them in place.

**Note:** Always make sure to leave the red handles in the up position to ensure that the brushes return to their proper position and do not restrict the filter.



# Rinsing Filter

For a thorough cleaning, the filter can be removed and rinsed off. However, make sure to clean the filter with the brush system first. Allow the filter to air dry. Do not use compressed air on the pleated filter or leave it in the sun to dry—this could damage it.

## Removing/Replacing Filter

The filter for the Model G0442/G0601 manufactured since November, 2009, can be removed from the assembly for replacement or rinsing.

Removing/installing the filter requires disconnecting the canister filter assembly from the dust collector and disassembling it. Follow the instructions below to perform this procedure.

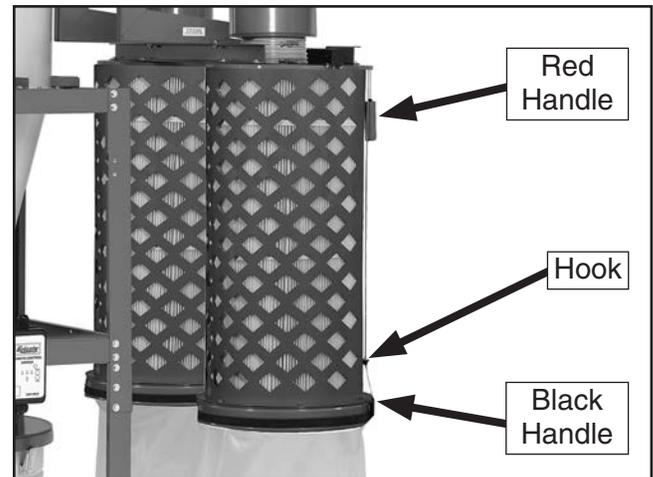
Refer to the parts breakdown diagrams and listings beginning on **Page 52** to order the correct filter from Grizzly at 800-523-4777.

Tools Needed	Qty
Open-End Wrench 10mm.....	1
Wrench or Socket 12mm.....	2

### To replace the canister filter:

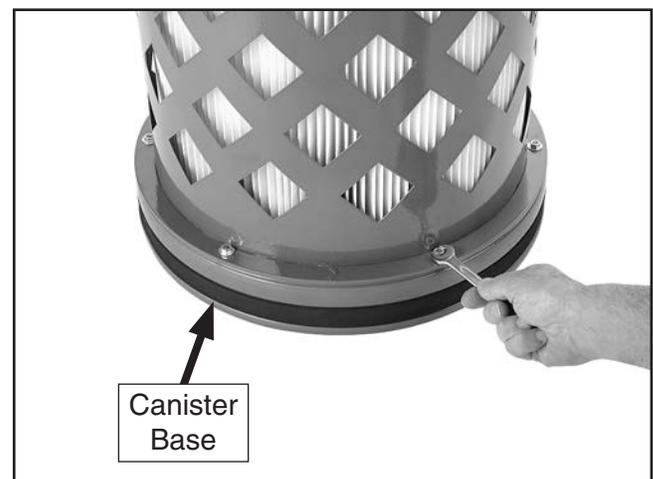
1. DISCONNECT MACHINE FROM POWER!
2. Use the brush handles to knock the built-up dust from the filter pleats, then remove the bag clamp and collection bag from the canister assembly.

3. Pull the black handle all the way down and secure the cable into the handle hook at the bottom of the canister assembly, as shown in **Figure 73**, to hold it in place during the following steps.



**Figure 73.** Brush handles in correct position for filter removal.

4. Remove the canister assembly from the dust collector and place it right-side up on a stable, flat surface.
5. Remove the six hex bolts, hex nuts, and flat washers from the rim of the canister base, as shown in **Figure 74**.



**Figure 74.** Removing the hex nuts and flat washers from the rim of the canister base.



6. With help from another person to steady the canister assembly, turn it upside down and remove the two hex bolts, hex nuts, and flat washers from the cross support (see **Figure 75**), then remove the canister base from the assembly.



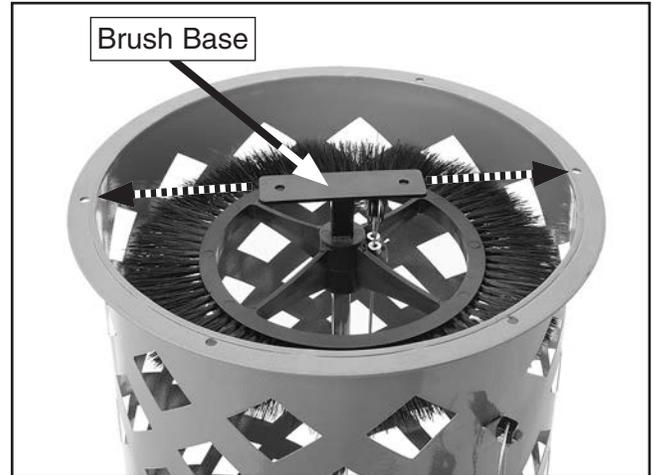
**Figure 75.** Cross support fasteners.

7. Carefully lift the filter from the canister assembly, as shown in **Figure 76**.



**Figure 76.** Removing the filter from the canister assembly.

8. Before re-inserting the filter into the assembly, make sure that the filter brush base is aligned with two of the fastener holes around the base of the assembly (see **Figure 77**). This will allow the canister base to align with the fastener holes around the brush base.



**Figure 77.** Filter brush base aligned with assembly fastener holes.

9. Re-insert the filter into the canister assembly.

**Note:** Make sure the bristles of the brush are pointed straight into the pleats to ensure efficient cleaning of the filter when needed.

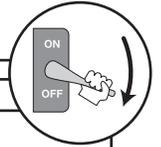
10. Attach the canister base in the reverse order from which you removed it in **Step 6**.
11. Attach the canister assembly to the dust collector, then secure a new collection bag to it with the bag clamp.



# SECTION 8: SERVICE

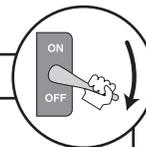
Review the troubleshooting and procedures in this section to fix or adjust the machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

## Troubleshooting



Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> <li>1. Wall fuse/circuit breaker is blown/tripped.</li> <li>2. Power supply switched OFF or is at fault.</li> <li>3. Fuse has blown.</li> <li>4. Hand-held remote controller is at fault.</li> <li>5. (G0442) Start capacitor at fault.</li> <li>6. Receiver is at fault.</li> <li>7. Motor connection wired incorrectly.</li> <li>8. Thermal overload relay has tripped.</li> <li>9. Contactor not getting energized/has burnt contacts.</li> <li>10. Wiring is open/has high resistance.</li> <li>11. Motor start switch or ON/OFF button is at fault.</li> <li>12. Circuit board is at fault.</li> <li>13. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure circuit size is suitable for this machine; replace weak breaker.</li> <li>2. Ensure power supply is switched on; ensure power supply has the correct voltage.</li> <li>3. Correct short/replace fuse in control box.</li> <li>4. Replace batteries in hand-held remote controller; stay in line-of-sight view and signal range.</li> <li>5. Replace start capacitor.</li> <li>6. Inspect receiver computer board; replace if faulty.</li> <li>7. Correct motor wiring connections (<b>Pages 49 &amp; 50</b>).</li> <li>8. Turn cut-out dial to increase working amps and push the reset pin. Replace if tripped multiple times (weak relay).</li> <li>9. Test for power on all legs and contactor operation. Replace unit if faulty.</li> <li>10. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.</li> <li>11. Replace faulty ON button or ON/OFF switch.</li> <li>12. Inspect circuit board; replace if faulty.</li> <li>13. Test/repair/replace.</li> </ol>
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> <li>1. Motor or component is loose.</li> <li>2. Machine is incorrectly mounted or sits unevenly.</li> <li>3. Motor fan is rubbing on fan cover.</li> <li>4. Motor bearings are at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.</li> <li>2. Tighten/replace anchor studs in floor; relocate/shim machine.</li> <li>3. Replace dented fan cover; replace loose/damaged fan.</li> <li>4. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>





Symptom	Possible Cause	Possible Solution
Loud, repetitious noise, or excessive vibration coming from dust collector.	<ol style="list-style-type: none"> <li>1. Dust collector is not on a flat surface and wobbles.</li> <li>2. Impeller is loose or damaged and unbalanced.</li> <li>3. The motor mounting or housing connections are loose.</li> <li>4. Impeller is loose on the motor shaft.</li> <li>5. Motor fan cover is dented, causing the motor fan to hit the cover while spinning.</li> </ol>	<ol style="list-style-type: none"> <li>1. Stabilize the dust collector.</li> <li>2. Disconnect dust collector from power, and inspect the impeller for dents, bends, loose fins. Replace impeller if any damage is found.</li> <li>3. Make sure all fasteners on the dust collector are tight.</li> <li>4. Replace the motor and impeller as a set if the motor shaft and the impeller hub are damaged.</li> <li>5. Replace motor fan cover.</li> </ol>
Dust collector does not adequately collect dust or chips; poor performance.	<ol style="list-style-type: none"> <li>1. Dust collection bags are full.</li> <li>2. Filters are dirty.</li> <li>3. (G0601) Motor is wired out of phase and the impeller is rotating in the wrong direction (clockwise).</li> <li>4. There is a restriction in the duct line.</li> <li>5. The dust collector is too far away from the point of suction, or there are too many sharp bends in the ducting.</li> <li>6. The lumber is wet and dust is not flowing through the ducting smoothly.</li> <li>7. There is a leak in the ducting, or a series of small leaks, or too many open ports.</li> <li>8. There are not enough open branch lines at one time, thereby causing a velocity drop in the main line.</li> <li>9. The ducting and ports are incorrectly sized.</li> <li>10. The machine dust collection design is inadequate.</li> <li>11. The dust collector is too small for the dust collection system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Empty collection bags.</li> <li>2. Clean filters.</li> <li>3. (G0601) Motor is receiving power out-of-phase. Disconnect the machine from power, then swap any two of the incoming hot power leads terminated inside the control box (see <b>Step 10</b> on <b>Page 29</b>).</li> <li>4. Remove dust line from dust collector inlet and unblock the restriction in the duct line. A plumbing snake may be necessary.</li> <li>5. Relocate the dust collector closer to the point of suction, and rework ducting without sharp bends. Refer to <b>Designing Ducting System</b>, beginning on <b>Page 32</b>.</li> <li>6. Process lumber with less than 20% moisture content.</li> <li>7. Rework the ducting to eliminate all leaks. Close dust ports for lines not being used. Refer to <b>Designing Ducting System</b> beginning on <b>Page 32</b> for more solutions.</li> <li>8. Open 1 or 2 more blast gates to different branch lines to allow the velocity in the main line to increase.</li> <li>9. Reinstall correctly sized ducts and fittings. Refer to <b>Designing Ducting System</b> beginning on <b>Page 32</b> for more solutions.</li> <li>10. Use a dust collection nozzle on a stand.</li> <li>11. Install a larger dust collector to power your dust collection system.</li> </ol>
Sawdust being blown into the air from the dust collector.	<ol style="list-style-type: none"> <li>1. Duct clamps or dust collection bags are not properly clamped and secured.</li> <li>2. Cylinder or funnel seals are loose or damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-secure ducts and dust collection bag, making sure duct and bag clamps are tight and completely over the ducts and bags.</li> <li>2. Retighten all mounting and sealing points, replace damaged gaskets.</li> </ol>



# SECTION 9: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this section carefully. If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine.

## WARNING

### Wiring Safety Instructions

**SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

**MODIFICATIONS.** Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

**WIRE CONNECTIONS.** All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

**CIRCUIT REQUIREMENTS.** You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

**WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

**MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

**EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

#### NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at [www.grizzly.com](http://www.grizzly.com).

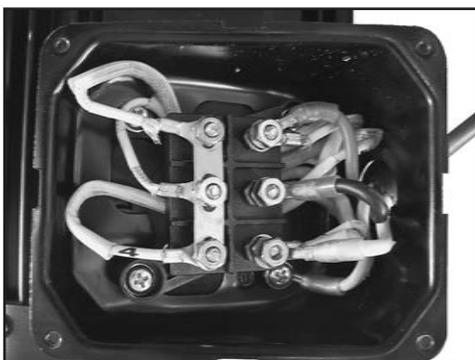
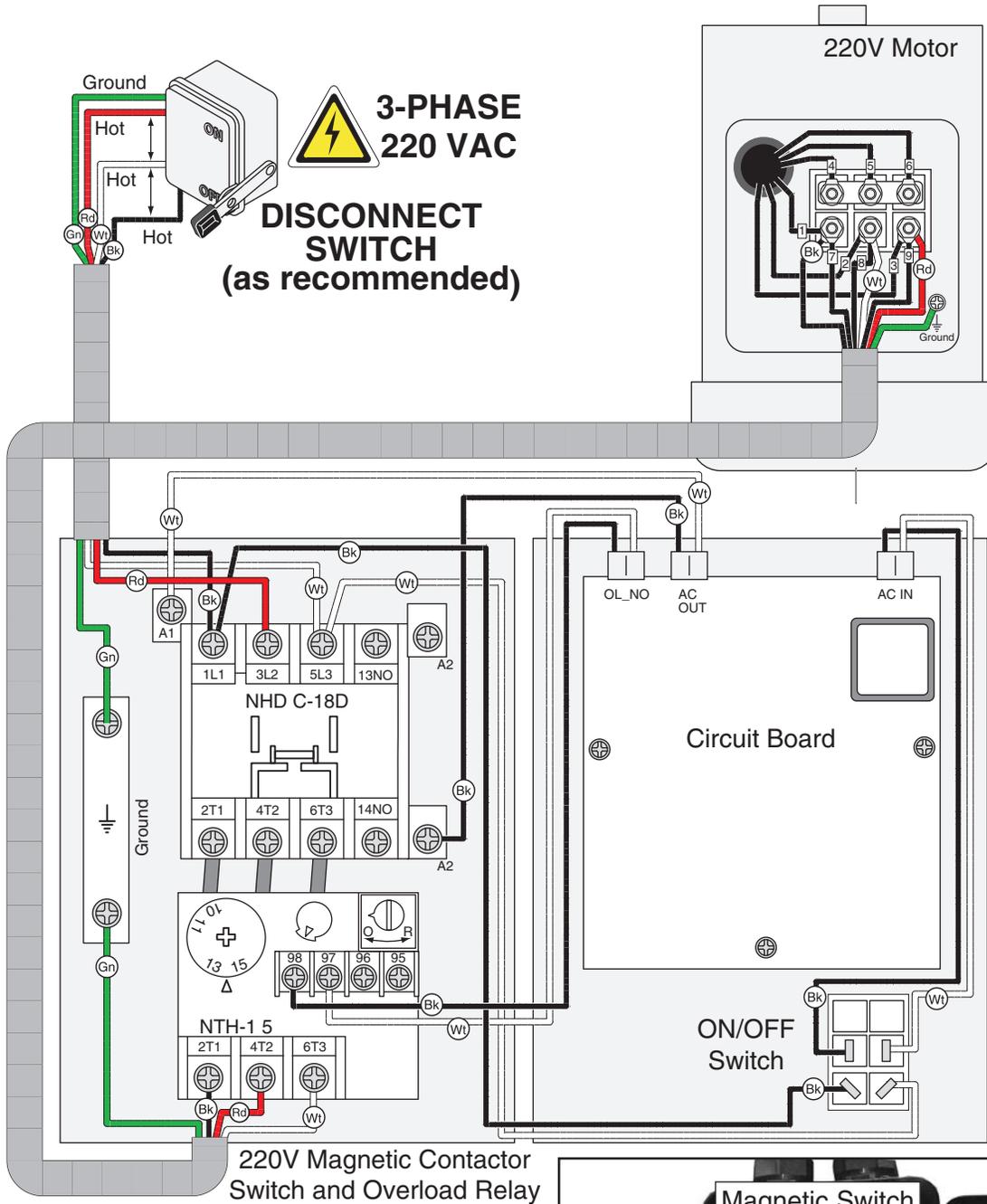
#### COLOR KEY

BLACK 	BLUE 	YELLOW 	LIGHT BLUE 
WHITE 	BROWN 	YELLOW GREEN 	BLUE WHITE 
GREEN 	GRAY 	PURPLE 	TURQUOISE 
RED 	ORANGE 	PINK 	

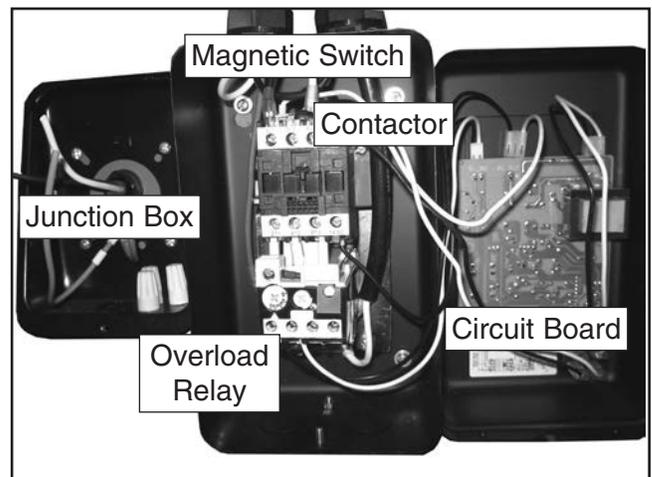
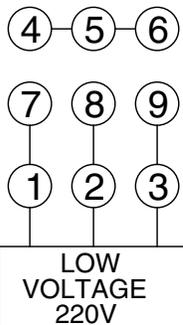




# G0601 220V Wiring Diagram



**Figure 80.** Model G0601 motor wiring.



**Figure 81.** Model G0601 220V control box.



# G0601 440V Wiring Diagram

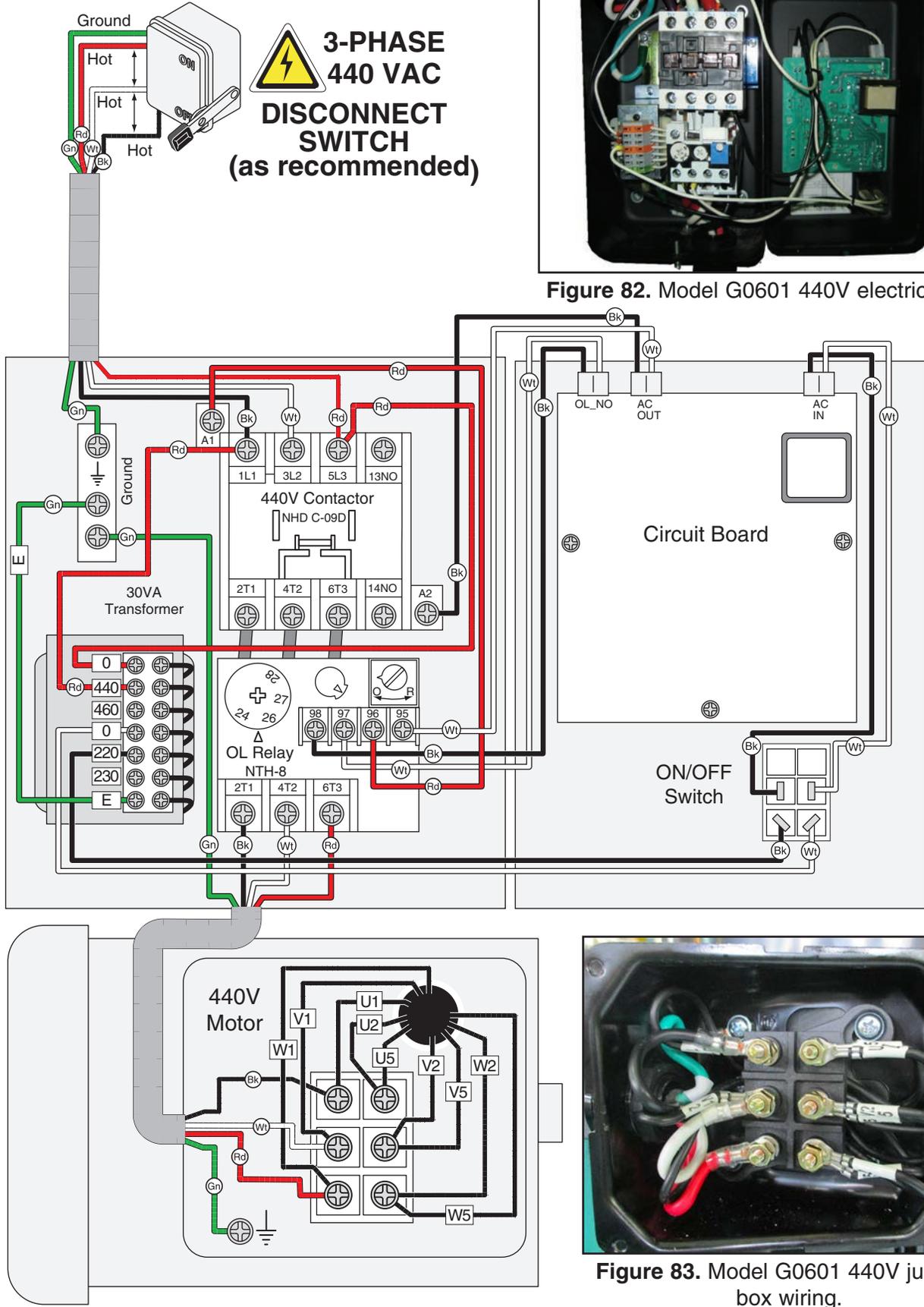


Figure 82. Model G0601 440V electricals.

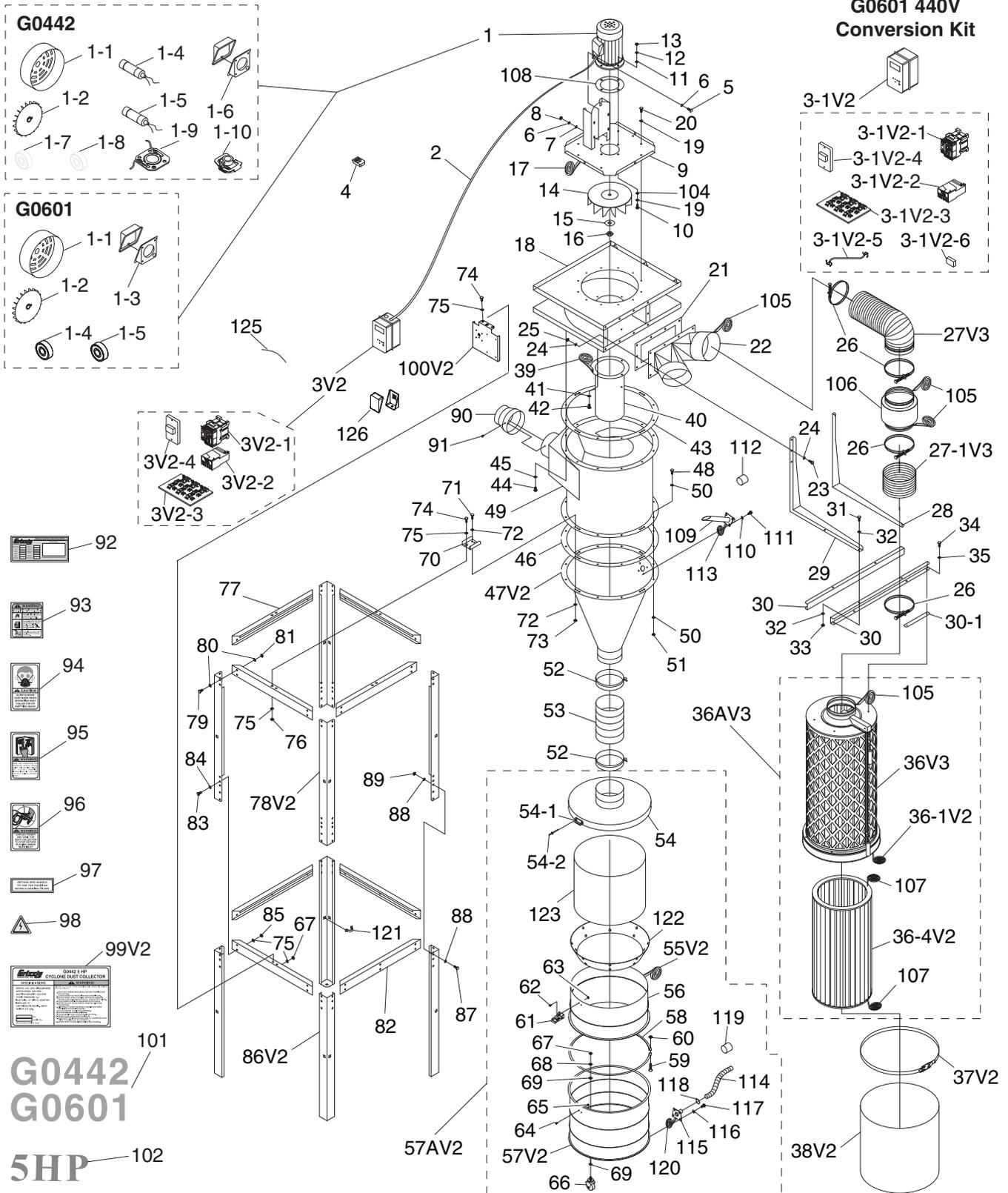


Figure 83. Model G0601 440V junction box wiring.



# SECTION 10: PARTS

## Main



# G0442 Only Parts List

REF	PART #	DESCRIPTION
1	P0442001	MOTOR 5HP 220V 1-PH
1-1	P0442001-1	MOTOR FAN COVER
1-2	P0442001-2	MOTOR FAN
1-4	P0442001-4	S CAPACITOR 400M 250V 1-3/4 X 3-3/4
1-5	P0442001-5	R CAPACITOR 40M 450V
1-6	P0442001-6	JUNCTION BOX
1-7	P0442001-7	BALL BEARING 6207ZZ
1-8	P0442001-8	BALL BEARING 6205ZZ
1-9	P0442001-9	CONTACT PLATE
1-10	P0442001-10	CENTRIFUGAL SWITCH 3450 RPM
2	P0442002	MOTOR CORD 10G 3W

REF	PART #	DESCRIPTION
3V2	P0442003V2	CONT BOX ASSY 220V 1-PH V2.4.12
3V2-1	P0442003V2-1	CONTACTOR NHD C-18D 220V V2.04.12
3V2-2	P0442003V2-2	OL RELAY NHD NTH-25 21-25A
3V2-3	P0442003V2-3	CIRCUIT BOARD
3V2-4	P0442003V2-4	ON/OFF SWITCH 220V
99V2	P0442099V2	MACHINE ID LABEL CSA V2.01.12
100V2	P0442100V2	SWITCH BRACKET CSA V2.03.12
101	P0442101	MODEL NUMBER LABEL
125	P0442125	GREEN GROUNDING WIRE 12G 6"
126	P0442126	JUNCTION BOX

# G0601 Only Parts List

REF	PART #	DESCRIPTION
1	P0601001	MOTOR 5HP 220/440V 3-PH
1-1	P0601001-1	MOTOR FAN COVER
1-2	P0601001-2	MOTOR FAN
1-3	P0601001-3	JUNCTION BOX
1-4	P0601001-4	FRONT MOTOR BEARING
1-5	P0601001-5	REAR MOTOR BEARING
2	P0601002	MOTOR CORD 12G 4W 300V
3V2	P0601003V2	CONT BOX ASSY 220V 3-PH V2.04.12
3V2-1	P0601003V2-1	CONTACTOR NHD C-18D 220V
3V2-2	P0601003V2-2	OL RELAY NHD NTH-15 10-15A
3V2-3	P0601003V2-3	CIRCUIT BOARD
3V2-4	P0601003V2-4	ON/OFF SWITCH 220V

REF	PART #	DESCRIPTION
3-1V2	P0601003-1V2	CONT BOX ASSY 440V V2.04.12
3-1V2-1	P0601003-1V2-1	CONTACTOR NHD C-09D 440V
3-1V2-2	P0601003-1V2-2	OL RELAY NHD NTH-08 6-8A
3-1V2-3	P0601003-1V2-3	CIRCUIT BOARD
3-1V2-4	P0601003-1V2-4	ON/OFF SWITCH 440V
3-1V2-5	P0601003-1V2-5	MOTOR CORD 12G 4W 600V
3-1V2-6	P0601003-1V2-6	SWITCH TRANSFORMER 30VA
99V2	P0601099V2	MACHINE ID LABEL CSA V2.01.12
100V2	P0601100V2	SWITCH BRACKET CSA V2.03.12
101	P0601101	MODEL NUMBER LABEL
125	P0601125	GREEN GROUNDING WIRE 12G 6"
126	P0601126	JUNCTION BOX

# G0442/G0601 Common Parts List

REF	PART #	DESCRIPTION
4	P0442004	REMOTE CONTROLLER
5	P0442005	HEX BOLT 3/8-16 X 1-1/2
6	P0442006	FLAT WASHER 3/8
7	P0442007	LOCK WASHER 3/8
8	P0442008	HEX NUT 3/8-16
9	P0442009	BLOWER COVER
10	P0442010	HEX BOLT 1/2-13 X 1-1/2
11	P0442011	FENDER WASHER 1/2"
12	P0442012	LOCK WASHER 1/2
13	P0442013	HEX NUT 1/2-13
14	P0442014	IMPELLER 16"
15	P0442015	FLAT WASHER 3/4
16	P0442016	HEX NUT 3/4-16 LH
17	P0442017	FOAM TAPE 3 X 6 X 1800MM
18	P0442018	IMPELLER HOUSING
19	P0442019	FLAT WASHER 5/16

REF	PART #	DESCRIPTION
20	P0442020	HEX BOLT 5/16-18 X 3/4
21	P0442021	OUTLET GASKET 456 X 226MM
22	P0442022	OUTLET PORT
23	P0442023	HEX BOLT 5/16-18 X 1
24	P0442024	FLAT WASHER 5/16
25	P0442025	HEX NUT 5/16-18
26	P0442026	HOSE CLAMP 8"
27V3	P0442027V3	FLEXIBLE HOSE 8" X 23-1/2" V3.11.09
27-1V3	P0442027-1V3	FLEXIBLE HOSE 8" X 4-3/4" V3.11.09
28	P0442028	LEFT FILTER L-BRACE
29	P0442029	RIGHT FILTER L-BRACE
30	P0442030	FILTER CROSS BRACE
30-1	P0442030-1	BRACE GASKET 240 X 32MM
31	P0442031	HEX BOLT 3/8-16 X 3/4
32	P0442032	FLAT WASHER 3/8
33	P0442033	HEX NUT 3/8-16



# G0442/G0601 Common Parts List

REF	PART #	DESCRIPTION
34	P0442034	HEX BOLT 5/16-18 X 3/4
35	P0442035	FLAT WASHER 5/16
36AV3	P0441032V3	CANISTER ASSEMBLY, BEIGE V3.07.12
36V3	P0441032V3-1	CANISTER CAGE ASSY, BEIGE V3.07.12
36-1V2	P0442036-1V2	GASKET 3 X 25 X 1700MM V2.11.09
36-4V2	P0442036-4V2	CANISTER FILTER 486 X 995MM W/TAPE V2.11.09
37V2	P0442037V2	FILTER BAG CLAMP 545MM V2.11.09
38V2	P0442038V2	PLASTIC BAG 570 X 600MM V2.11.09
39	P0442039	FOAM TAPE 3 X 6 X 1800MM
40	P0442040	INTAKE CYLINDER 12"
41	P0442041	FLAT WASHER 5/16
42	P0442042	HEX BOLT 5/16-18 X 3/4
43	P0442043	BARREL GASKET 686MM DIA.
44	P0442044	HEX BOLT 5/16-18 X 3/4
45	P0442045	FLAT WASHER 5/16
46	P0442046	BARREL GASKET 686MM DIA.
47V2	P0442047V2	CYCLONE FUNNEL V2.08.10
48	P0442048	HEX BOLT 5/16-18 X 1
49	P0442049	INTAKE BARREL
50	P0442050	FLAT WASHER 5/16
51	P0442051	HEX NUT 5/16-18
52	P0442052	HOSE CLAMP 9"
53	P0442053	CLEAR FLEXIBLE PIPE 9" X 10"
54	P0442054	COLLECTION DRUM LID V2.08.06
54-1	P0442054-1	DRUM LID HOOK
54-2	P0442054-2	HOOK RIVET
55V2	P0442055V2	DRUM SEAL TYPE-R 2M V2.11.09
56	P0442056	UPPER DRUM 25GAL
57AV2	P0442057AV2	COLLECTION DRUM ASSY 55GAL V2.11.09
57V2	P0442057V2	COLLECTION DRUM 35GAL V2.08.10
58	P0442058	DRUM CLAMP
59	P0442059	HEX BOLT 5/16-18 X 3
60	P0442060	HEX NUT 5/16-18
61	P0442061	DRUM LID LATCH
62	P0442062	PHLP HD SCR 10-24 X 3/8
63	P0442063	HEX NUT 10-24
64	P0442064	PHLP HD SCR 10-24 X 3/8
65	P0442065	HEX NUT 10-24
66	P0442066	CASTER 2"
67	P0442067	HEX NUT 3/8-16
68	P0442068	LOCK WASHER 3/8
69	P0442069	FLAT WASHER 3/8
70	P0442070	COLLECTOR MOUNTING BRACKET
71	P0442071	HEX BOLT 5/16-18 X 1
72	P0442072	FLAT WASHER 5/16
73	P0442073	LOCK NUT 5/16-18

REF	PART #	DESCRIPTION
74	P0442074	HEX BOLT 3/8-16 X 3/4
75	P0442075	FLAT WASHER 3/8
76	P0442076	LOCK NUT 3/8-16
77	P0442077	UPPER STAND BRACE
78V2	P0442078V2	UPPER STAND LEG V2.08.10
79	P0442079	HEX BOLT 3/8-16 X 3/4
80	P0442080	FLAT WASHER 3/8
81	P0442081	LOCK NUT 3/8-16
82	P0442082	LOWER STAND BRACE
83	P0442083	HEX BOLT 3/8-16 X 3/4
84	P0442084	FLAT WASHER 3/8
85	P0442085	LOCK NUT 3/8-16
86V2	P0442086V2	LOWER STAND LEG V2.08.10
87	P0442087	HEX BOLT 3/8-16 X 3/4
88	P0442088	FLAT WASHER 3/8
89	P0442089	LOCK NUT 3/8-16
90	P0442090	REDUCER 10" TO 8"
91	P0442091	TAP SCREW M4 X 12
92	P0442092	MOTOR SPEC LABEL
93	P0442093	MOTOR WARNING LABEL
94	P0442094	GLASSES/RESPIRATOR DC LABEL
95	P0442095	READ MANUAL 2W X 3.3H
96	P0442096	HANDS/INLET LABEL
97	P0442097	RETURN RED HANDLE LABEL
98	P0442098	ELECTRICITY 1.4W X 1.2H
102	P0442102	HORSEPOWER LABEL
104	P0442104	EXT TOOTH WASHER 1/2
105	P0442105	FOAM TAPE 3 X 15 X 700MM
106	P0442106	NOISE MUFFLER 8"
107	P0442107	GASKET 35 X 38 X 1570MM V2.11.09
108	P0442108	MOTOR GASKET
109	P0442109	CYCLONE VACUUM PORT
110	P0442110	FLAT WASHER 5/16
111	P0442111	HEX BOLT 5/16-18 X 3/4
112	P0442112	PORT PLUG 1-1/4"
113	P0442113	FOAM TAPE 3 X 6 X 300MM
114	P0442114	VACUUM HOSE 1-1/4" X 98"
115	P0442115	COLLECTION DRUM VACUUM PORT
116	P0442116	FLAT WASHER 5/16
117	P0442117	HEX BOLT 5/16-18 X 3/4
118	P0442118	HOSE CLAMP 1-1/4"
119	P0442119	PORT PLUG 1-1/4"
120	P0442120	FOAM TAPE 3 X 6 X 300MM
121	P0442121	VACUUM HOSE CLIP 2-1/2"
122	P0442122	COLLECTION DRUM VACUUM RING
123	P0442123	DRUM COLLECTION BAG 640 X 1200MM





# WARRANTY CARD

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone # \_\_\_\_\_ Email \_\_\_\_\_  
 Model # \_\_\_\_\_ Order # \_\_\_\_\_ Serial # \_\_\_\_\_

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

Advertisement                       Friend                       Catalog  
 Card Deck                               Website                       Other:

2. Which of the following magazines do you subscribe to?

<input type="checkbox"/> Cabinetmaker & FDM	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Handy	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Live Steam	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Shotgun News	
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Today's Homeowner	
<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Wood	

3. What is your annual household income?

\$20,000-\$29,000                       \$30,000-\$39,000                       \$40,000-\$49,000  
 \$50,000-\$59,000                       \$60,000-\$69,000                       \$70,000+

4. What is your age group?

20-29                                       30-39                                       40-49  
 50-59                                       60-69                                       70+

5. How long have you been a woodworker/metalworker?

0-2 Years                       2-8 Years                       8-20 Years                       20+ Years

6. How many of your machines or tools are Grizzly?

0-2                       3-5                       6-9                       10+

7. Do you think your machine represents a good value?       Yes                       No

8. Would you recommend Grizzly Industrial to a friend?       Yes                       No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?  
**Note: We never use names more than 3 times.**       Yes                       No

10. Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Place  
Stamp  
Here



**GRIZZLY INDUSTRIAL, INC.**  
P.O. BOX 2069  
BELLINGHAM, WA 98227-2069



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

# WARRANTY AND RETURNS

---

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's 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. We do 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 Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We 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 products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

# *grizzly.com*<sup>®</sup>

**TOOL WEBSITE**

Buy Direct and Save with Grizzly<sup>®</sup> – Trusted, Proven and a Great Value!  
~Since 1983~

*Visit Our Website Today For  
Current Specials!*

**ORDER  
24 HOURS A DAY!  
1-800-523-4777**

