

Grizzly **Industrial, Inc.**®

MODEL G0849 3 HP CYCLONE DUST COLLECTOR OWNER'S MANUAL

(For models manufactured since 01/19)




C US
265752

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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
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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.

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INTRODUCTION

Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1815 W. Battlefield
Springfield, MO 65807
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual.**

If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **Manufacture Date** and **Serial Number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.

		MODEL GXXXX MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:		To reduce risk of serious injury when using this machine:	
Specification:		1. Read manual before operation.	
Specification:		2. Wear safety glasses and respirator.	
Specification:		3. Make sure safety glasses and respirator are properly adjusted/setup and	
Specification:		4. power is connected to grounded circuit before starting.	
Weight:		4. Make sure the motor has stopped and disconnect power before adjustments, maintenance, or service.	
		5. DO NOT expose to rain or dampness.	
		6. DO NOT modify this machine in any way.	
		7.	
		8.	
		9. Do not use while under the influence of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	
		Manufactured for Grizzly in Taiwan	

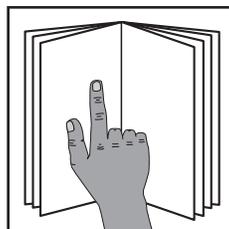
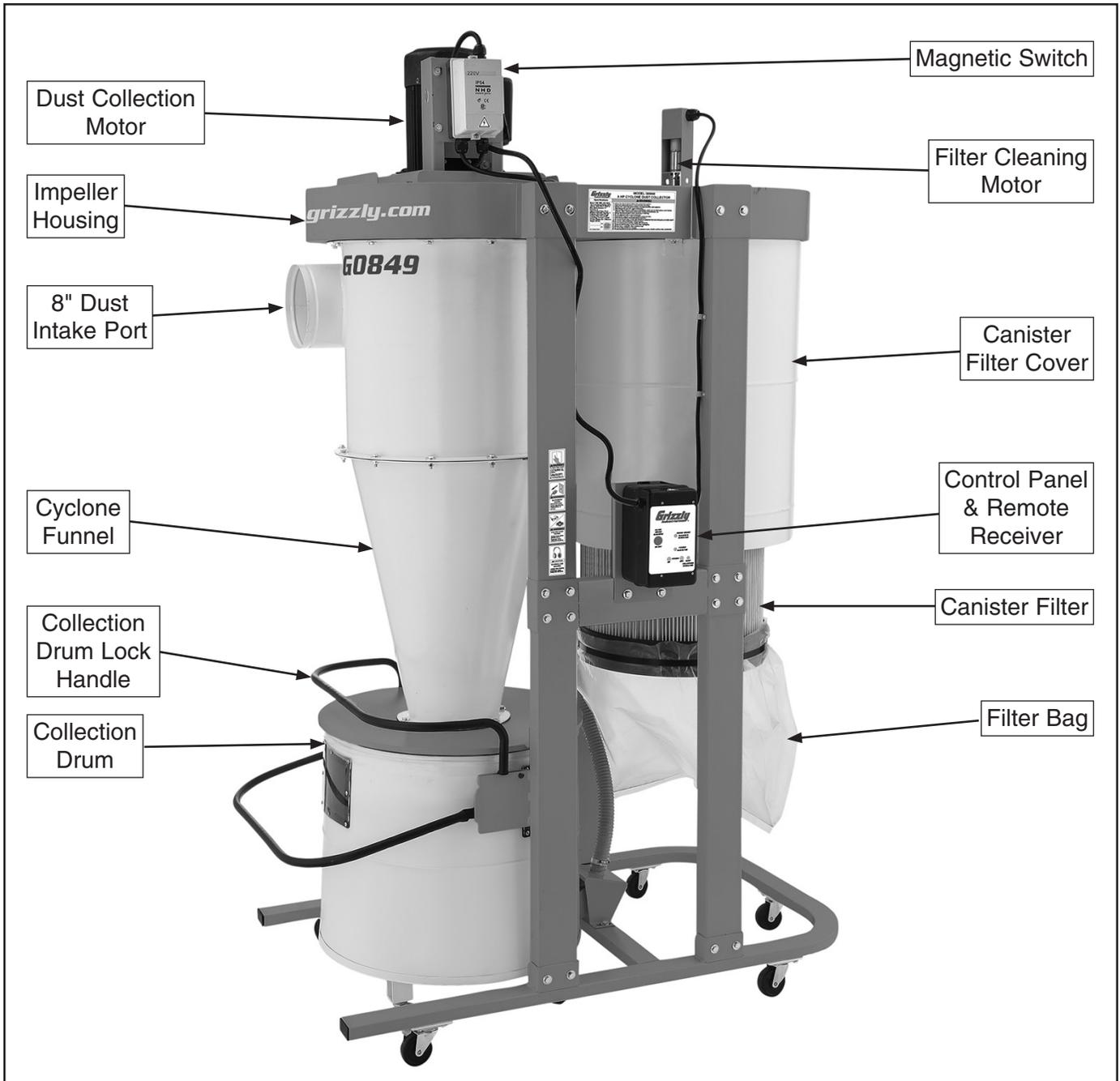
Manufacture Date []

Serial Number []



Identification

Become familiar with the names and locations of the features shown below to better understand the instructions in this manual.



⚠️ WARNING

To reduce your risk of serious injury, read this entire manual **BEFORE** using machine.



Controls & Components



Refer to the following figures and descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and minimize your risk of injury when operating this machine.

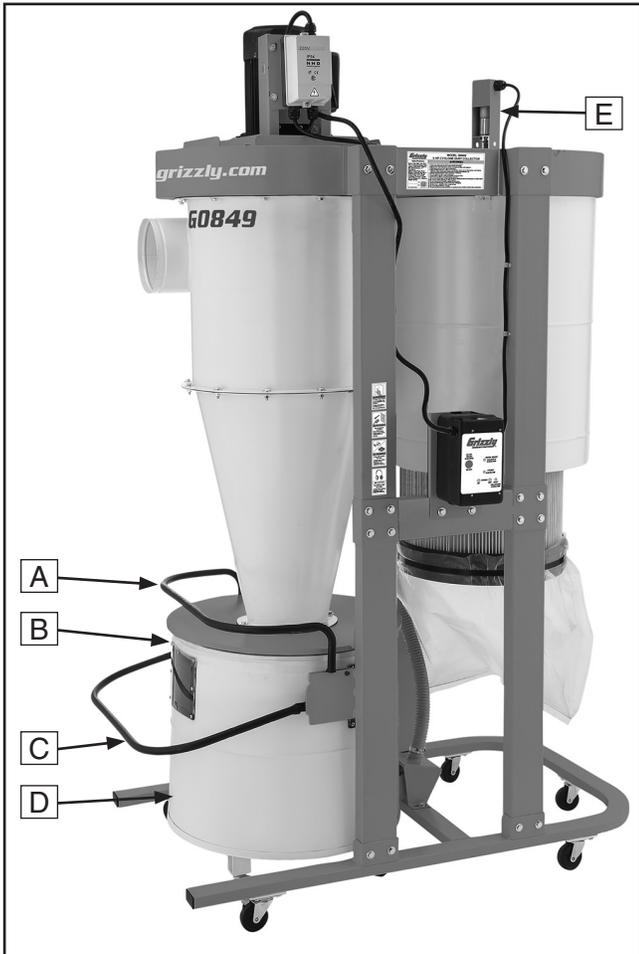


Figure 1. G0849 main function components.

- A. **Collection Drum Lock Handle:** Secures collection drum in position; lift handle to remove collection drum.
- B. **Collection Drum Bag:** Collect wood chips and dust during operation.
- C. **Collection Drum Handle:** Allows easy collection drum movement; press handle down to lock drum to machine.
- D. **Dust Collection Drum:** Holds up to 35 gallons of wood chips and dust.
- E. **Filter Cleaning Motor:** Rotates brushes inside canister filter to remove dust cake.
- F. **Control Panel:** Controls main motor and filter cleaning motor. Refer to **Page 36** for additional details.
- G. **Remote Control:** Provides secondary control for main motor and filter cleaning motor.

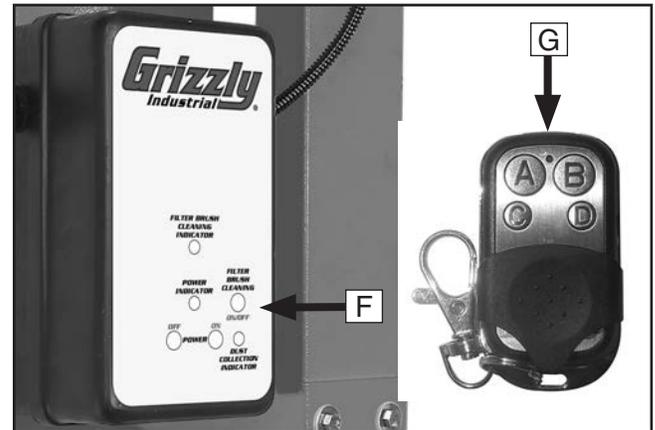


Figure 2. G0849 control panel and remote control.





MACHINE DATA SHEET

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

MODEL G0849 3 HP CYCLONE DUST COLLECTOR

Product Dimensions:

Weight..... 452 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 56 x 43 x 93-3/4 in.
Footprint (Length x Width)..... 54-1/2 x 31-1/2 in.

Shipping Dimensions:

Carton #1

Type..... Wooden Crate
Content..... Machine
Weight..... 560 lbs.
Length x Width x Height..... 58 x 35 x 49 in.
Must Ship Upright..... Yes

Carton #2

Type..... Cardboard Box
Content..... Filter
Weight..... 46 lbs.
Length x Width x Height..... 25 x 25 x 52 in.
Must Ship Upright..... No

Electrical:

Power Requirement..... 230V, Single-Phase, 60Hz
Full-Load Current Rating..... 22.8A
Minimum Circuit Size..... 30A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 10 ft.
Power Cord Gauge..... 12 AWG
Plug Included..... Yes
Included Plug Type..... L6-30
Switch Type..... Remote Control & Magnetic Switch w/Overload Protection

Motors:

Main

Horsepower..... 3 HP
Phase..... Single-Phase
Amps..... 22A
Speed..... 3450 RPM
Type..... TEFC Capacitor-Start Induction
Power Transfer Direct Drive
Bearings..... Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type..... Internal

Filter Cleaning Motor

Horsepower..... 3 Watt
Phase..... Single-Phase
Amps..... 0.8A
Speed..... 12 RPM
Type..... Universal 24VDC
Power Transfer Direct Drive



Main Specifications:

Operation

Dust Collector Type.....	Two-Stage (Cyclone)
Approved Dust Types.....	Wood
Filter Type.....	Pleated Cartridge
Airflow Performance.....	1616 CFM @ 2.0 in. SP
Max Static Pressure (at 0 CFM).....	14.2 in.
Main Inlet Size.....	8 in.
Inlet Adapter Included.....	No
Machine Collection Capacity At One Time.....	3
Maximum Material Collection Capacity.....	55 Gallons
Filtration Rating.....	0.2 – 2 Micron
Filter Surface Area.....	96 sq. ft.

Bag Information

Filter Bag Diameter.....	19 in.
Filter Bag Length.....	23-5/8 in.
Collection Drum Bag Diameter.....	25 in.
Collection Drum Bag Length.....	38 in.

Canister Information

Number of Canister Filters.....	1
Canister Filter Diameter.....	19 in.
Canister Filter Length.....	42-1/2 in.
Collection Drum Size.....	35 Gallons

Impeller Information

Impeller Type.....	Radial Fin
Impeller Size.....	15 in.

Construction

Upper Bag.....	Clear Plastic (Canister Filter)
Lower Bag.....	Clear Plastic (Collection Drum)
Canister.....	Spun Bond Polyester
Base.....	Steel
Frame.....	18-Gauge Steel
Caster.....	Plastic
Impeller.....	Steel
Paint Type/Finish.....	Powder Coated
Blower Housing.....	16-Gauge Steel
Body.....	16-Gauge Steel
Collection Drum.....	16-Gauge Steel

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	2 Hours
Serial Number Location	Machine ID Label
Sound Rating	83 dB
ISO 9001 Factory	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL)	Yes

Features:

- Steel Collection Drum with Casters for Easy Dust Disposal
- 3 HP Class "F" Motor
- Dual-Pleated Cartridge Filter with Automatic Cleaning Motor for Maximum Filter Efficiency
- Unique Vacuum Equalizer Built into Collection Drum for Use with Disposable Plastic Bags
- Remote-Control ON/OFF Switch w/Filter Auto-Clean Function



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.



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



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



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

Long-term respiratory damage can occur from using dust collectors without proper use of a respirator. Fire or explosions can result in smoke inhalation, serious burns, or death—if machine is used to collect incorrect materials, is operated near potential explosion sources, or ducting is improperly grounded. Entanglement, amputation, or death can occur if hair, clothing, or fingers are pulled into the inlet. To reduce the risk of these hazards, operator and bystanders **MUST** completely heed the hazards and warnings below.

INTENDED USE. Collecting the wrong materials can result in serious inhalation hazards, fire, explosions, or machine damage. This machine is **ONLY** designed to collect wood dust and chips from woodworking machines. **DO NOT** use it to collect silica, polyurethane, toxic fumes, metal dust or shavings, lead paint, drywall, asbestos, biohazards, explosive dusts, flammable or combustible liquids or fumes, nor burning or smoking material.

WEAR A RESPIRATOR. Fine dust that is too small to be caught in filter will be blown into ambient air. Always wear a NIOSH-approved respirator during operation and for a short time after to reduce your risk of permanent respiratory damage. Never collect dust from any hazardous material.

IMPELLER HAZARDS. To reduce risk of entanglement or contact with impeller, **DO NOT** place hands, hair, clothing, or tools in or near open dust collection inlet during operation, and keep small animals and children away. The powerful suction could easily pull them into impeller.

HAZARDOUS DUST. Dust exposure 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.

EMPTYING DUST. When emptying bag or drum, wear respirator and safety glasses. Empty dust away from ignition sources and into approved container.

OPERATING LOCATION. To reduce respiratory exposure to fine dust, locate permanently installed dust collectors away from working area or in another room. **DO NOT** place dust collector where it can be exposed to rain or moisture, which creates a shock hazard and will reduce life of machine.

POWER DISCONNECT. Turn machine **OFF**, disconnect from power supply, and allow impeller to completely stop before leaving machine unattended, or doing any maintenance or service.

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

SUSPENDED DUST PARTICLES. To reduce risk of death or injury caused by explosions or fires, **DO NOT** operate in areas where these risks are high, including spaces near pilot lights, open flames, or other ignition sources.

AVOIDING SPARKS. To reduce risk of fire, avoid collecting any metal objects or stones. These can possibly produce sparks when they strike impeller, which can smolder in wood dust for a long time before a fire is detected. If you accidentally cut into wood containing metal, immediately turn **OFF** dust collector, disconnect from power, and wait for impeller to stop. Then empty bag or drum into approved airtight metal container.

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

STATIC ELECTRICITY. To reduce risk of fire or explosions caused by sparks from static electricity, ground all ducting using grounding wire.

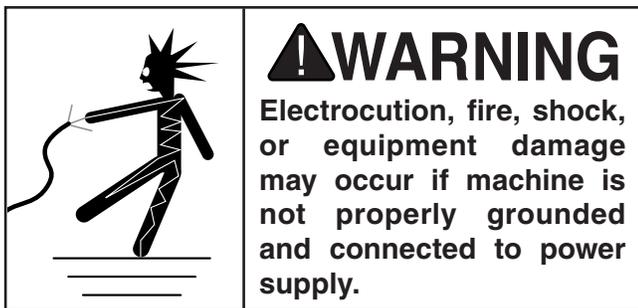
DUST ALLERGIES. Dust from certain woods will cause an allergic reaction. Make sure you know what type of wood dust you will be exposed to in case of an allergic reaction.



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.



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.

Full-Load Current Rating at 230V ..22.8 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 Information

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.*

Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 208V, 220V, 230V, 240V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 30 Amps
Plug/Receptacle NEMA L6-30



Grounding Requirements

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the provided plug!

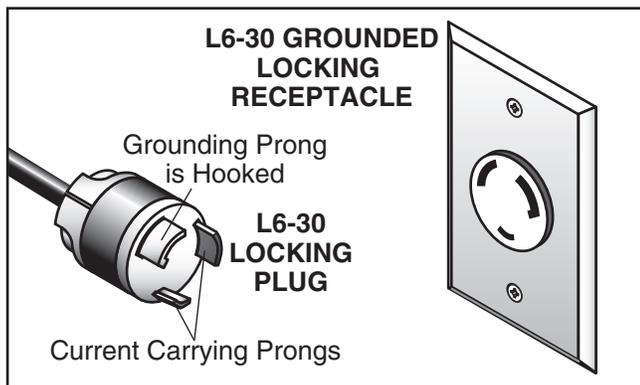
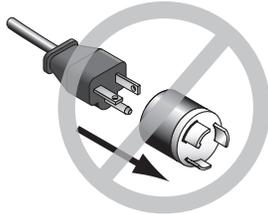


Figure 3. Typical L6-30 plug and receptacle.

⚠ CAUTION



No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.

⚠ 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.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

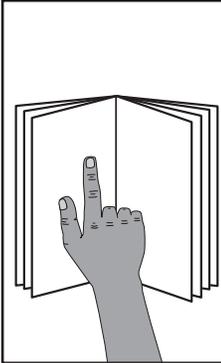
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size10 AWG
Maximum Length (Shorter is Better).....50 ft.



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

HEAVY LIFT!

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.

!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.

Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

Description	Qty
Assistants	2
Safety Glasses	1 Pair Per Person
Open-End Wrench 10mm.....	2
Open-End Wrench 12mm.....	2
Open-End Wrench 7/16"	2
Hex Wrench 1/16"	1
Phillips Screwdriver #2	1
Retaining Ring Pliers (External, 1mm Pin)	1
Needle Nose Pliers.....	1
Stepladder (8' Min.)	1
Lifting Straps (Rated for 500 lbs.).....	2
Forklift or Crane.....	1
Hard Hat.....	1 Per Person

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. ***You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.***



Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary 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.

Main Inventory Components (Figure 4)	Qty
A. Impeller Housing (w/Control Panel and Filter Brush Motor).....	1
B. Lower Stand Front Leg (Left)	1
C. Upper Stand Legs (Left)	2
D. Lower Stand Legs (Rear)	2
E. Upper Stand Leg (Right Rear)	1
F. Upper Stand Leg (Right Front)	1
G. Lower Stand Front Leg (Right)	1
H. Leg Brace (Left).....	1
I. Vacuum Hose Bracket.....	1
J. Leg Brace (Right)	1
K. Canister Filter	1
L. Base Stand.....	1
M. Filter Brush Assembly	1
N. Filter Cover	1
O. Intake Cylinder	1
P. Filter Cover Plate.....	1
Q. Collection Drum Lid.....	1
R. Cyclone Funnel	1
S. Intake Barrel	1

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

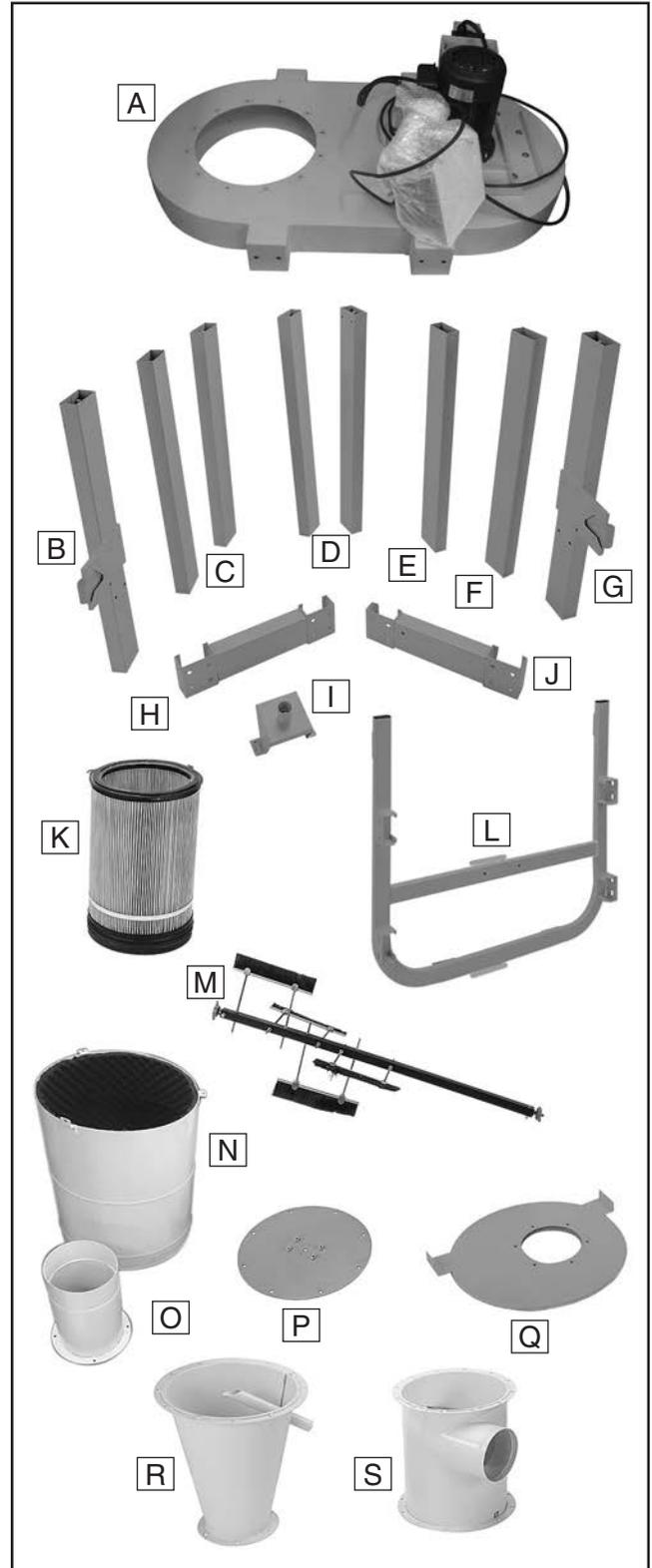


Figure 4. Main inventory components.



Collection Drum (Figure 5)	Qty
T. Collection Drum.....	1
U. 2" Swivel Ball Casters	4
V. Collection Drum Handle	1
W. Collection Bag 25" x 38".....	1

Additional Inventory (Figure 6)	Qty
X. Collection Drum Lock Handle	1
Y. Filter Bag 19" x 39"	1
Z. Filter Bag Clamp 19 ⁵ / ₈ "	1
AA. 3" Swivel Casters (Locking).....	2
AB. 3" Swivel Casters	3
AC. 1 ¹ / ₂ " Vacuum Hose w/Hose Clamps	1

Hardware/Fasteners (Figure 7)	Qty
AD. Hex Bolts 1/4"-20 x 3/4"	24
AE. Hex Bolts 1/4"-20 x 1".....	2
AF. Hex Bolts 5/16"-18 x 3/4"	77
AG. Hex Bolts 5/16"-18 x 1".....	12
AH. Knurled Knob Bolts 5/16"-18 x 1"	3
AI. External Retaining Rings 13mm.....	2
AJ. Conduit Mounting Blocks	4
AK. Cable Ties 100mm	4
AL. Flange Screws 10-24 x 1/2".....	4
AM. Flat Washers 1/4"	24
AN. Fender Washers 5/16".....	101
AO. Lock Nuts 1/4"-20	2
AP. Hex Nuts 3/8"-16.....	4
AQ. Hex Nuts 5/16"-18	12
AR. Remote Control	1
AS. Remote Control Battery A27 12V.....	1

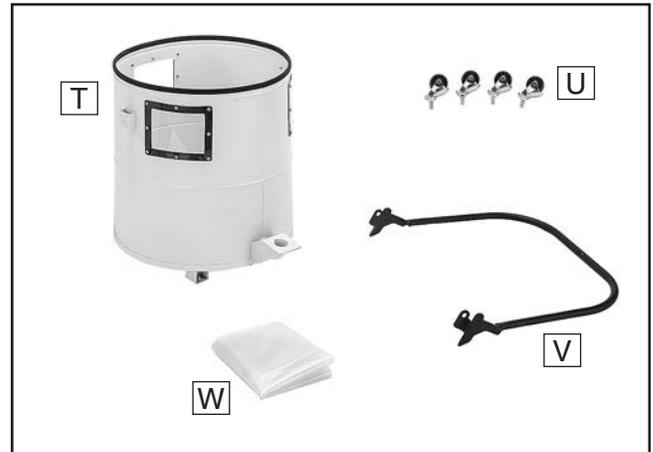


Figure 5. Collection drum components.

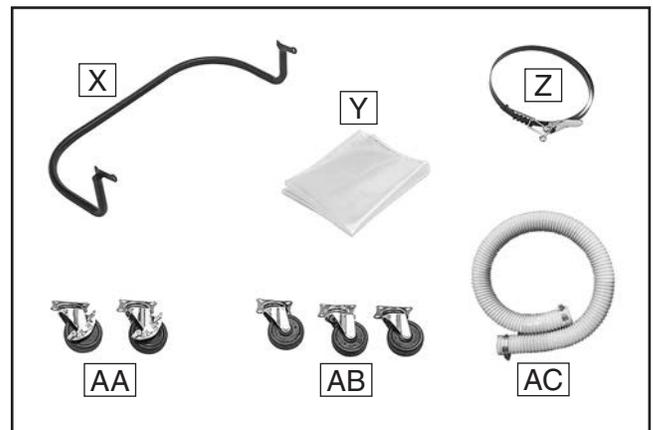


Figure 6. Additional inventory.

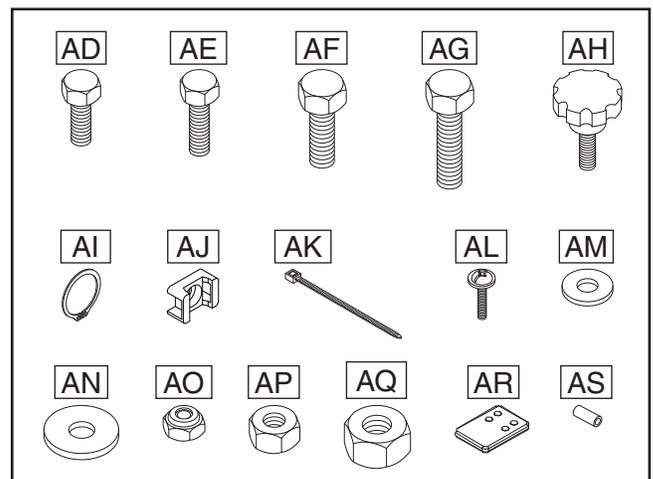


Figure 7. Hardware/fasteners.



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

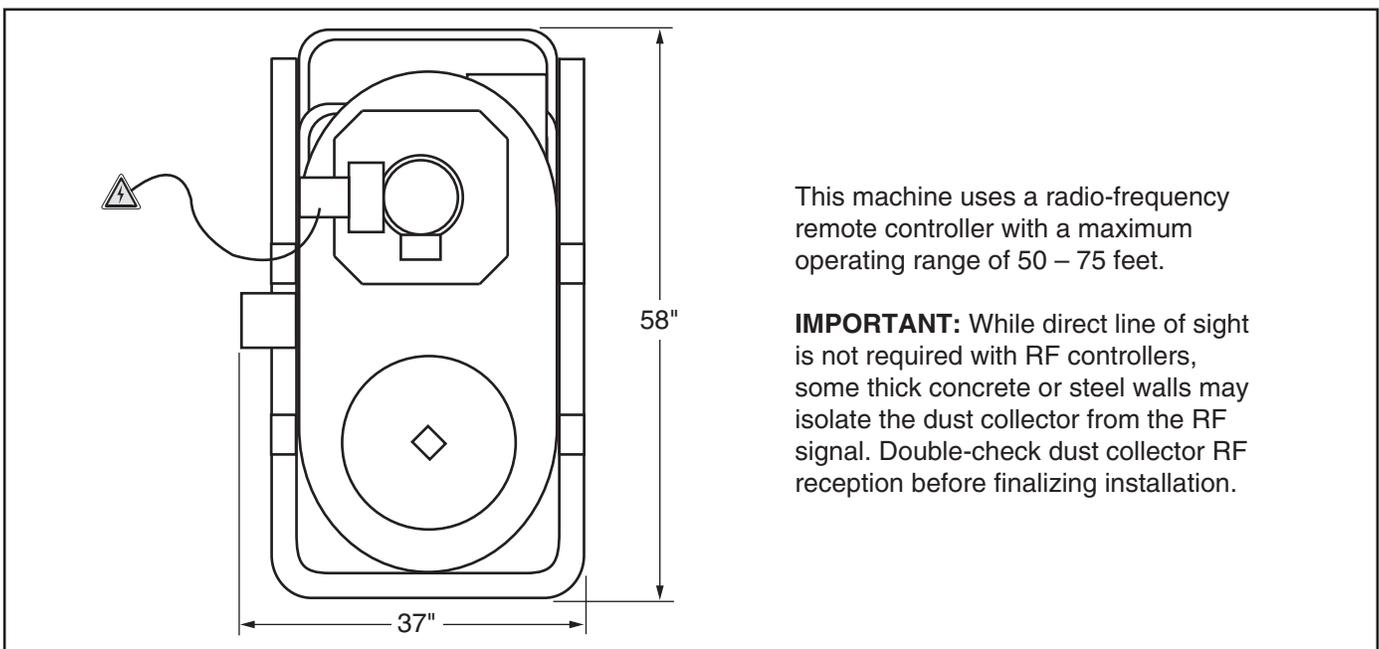
The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions 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.



This machine uses a radio-frequency remote controller with a maximum operating range of 50 – 75 feet.

IMPORTANT: While direct line of sight is not required with RF controllers, some thick concrete or steel walls may isolate the dust collector from the RF signal. Double-check dust collector RF reception before finalizing installation.

Figure 8. Minimum working clearances.



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).

To assemble machine:

1. Install (3) 3" non-locking swivel casters to base stand using (12) $\frac{1}{4}$ "-20 x $\frac{3}{4}$ " hex bolts and (12) $\frac{1}{4}$ " flat washers (see **Figure 9**).

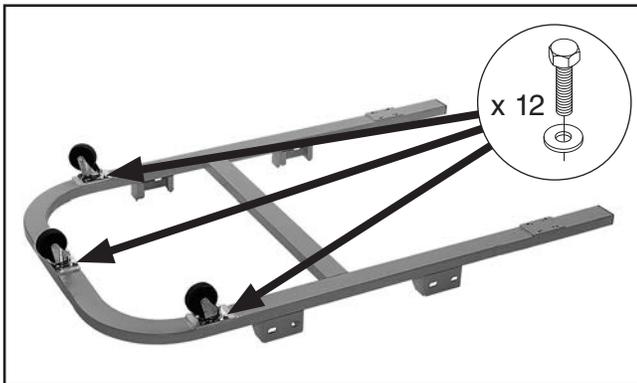


Figure 9. Non-locking swivel casters installed.

2. Install (2) 3" locking swivel casters to base stand using (8) $\frac{1}{4}$ "-20 x $\frac{3}{4}$ " hex bolts and (8) $\frac{1}{4}$ " flat washers (see **Figure 10**), then place base stand on casters.

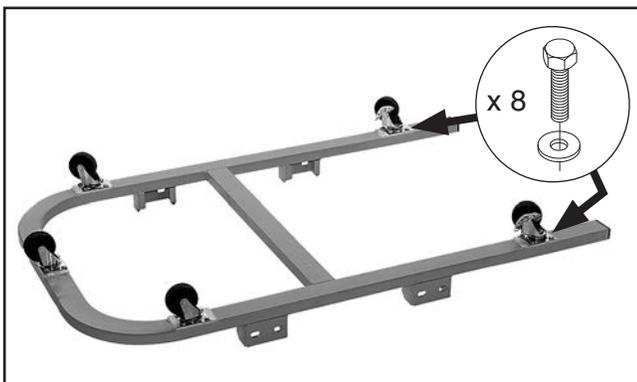


Figure 10. Locking swivel casters installed.

3. Position lower front legs in base stand with flanges facing inside and two threaded bolt holes above, as shown in **Figure 11**.
4. Secure left and right lower front legs to base stand using (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers per leg (see **Figure 11**). Finger-tighten for now.

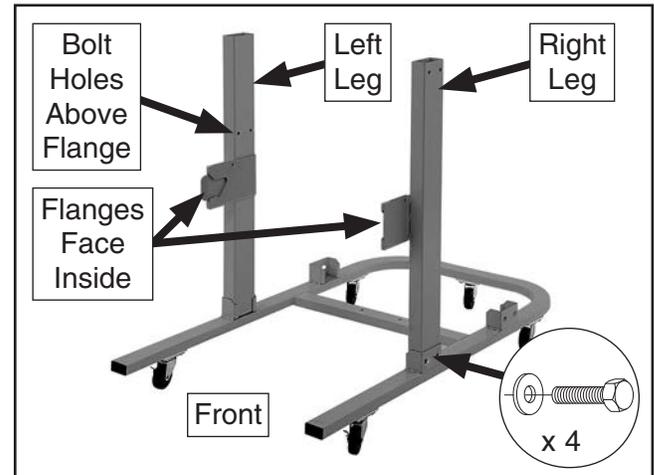


Figure 11. Lower front legs installed.

5. Attach (2) rear legs (36" long) to base stand with (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers per leg (see **Figure 12**). Finger-tighten for now.

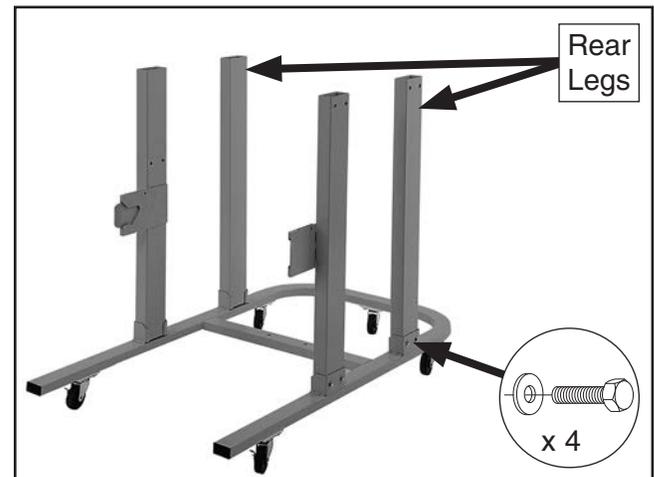


Figure 12. Rear legs attached to base stand.



- Attach left and right leg braces to lower legs as shown in **Figure 13**, and finger-tighten each one using (4) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (4) $\frac{5}{16}$ " fender washers per brace.

Note: Right leg brace has threaded $\frac{5}{16}$ "-18 bolt hole (circled) to mount control panel.

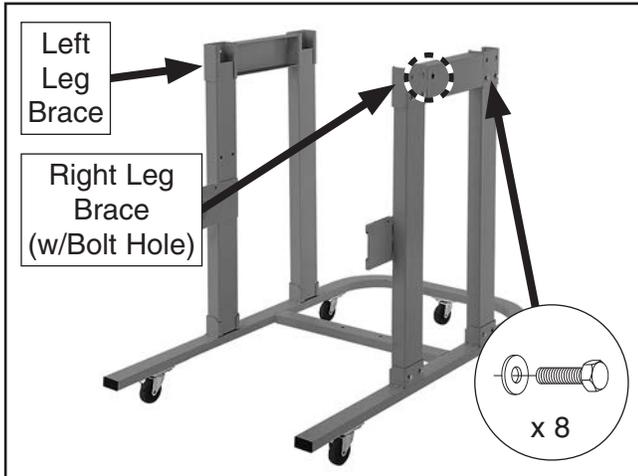


Figure 13. Left and right leg braces installed.

- Find (2) upper left legs (37" long) without additional threaded holes on narrow edges and set aside.

Note: The two upper legs (37" long) with additional threaded holes on narrow edge are used in **Steps 9–10**.

- Attach each leg to left leg brace using (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers (see **Figure 14**). Finger-tighten for now.

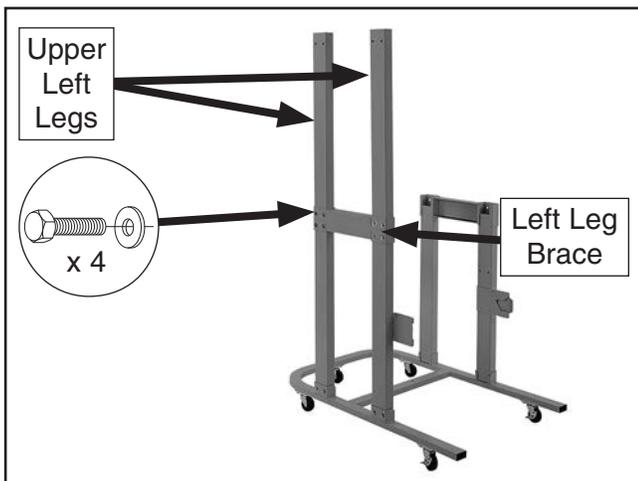


Figure 14. Upper left legs placed in left leg brace.

- Place right front upper leg in right leg brace so warning labels face outward, as shown in **Figure 15**, then attach with (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers. Finger-tighten for now.

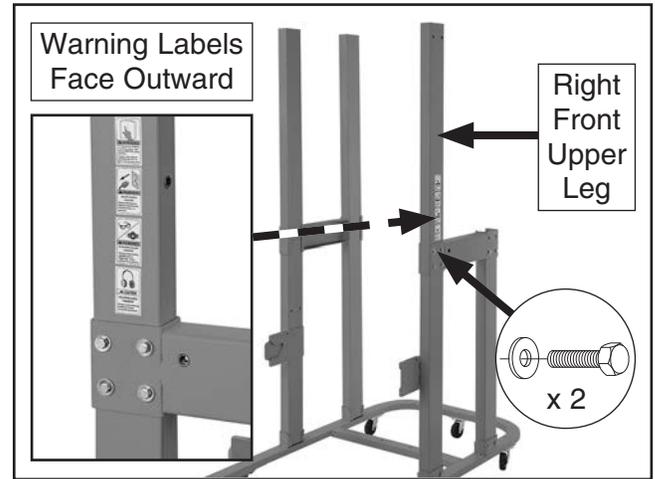


Figure 15. Right front upper leg installed with warning labels facing outward.

- Place right rear upper leg with two threaded 10-24 holes facing forward in right leg brace, then attach using (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers (see **Figure 16**). Finger-tighten for now.

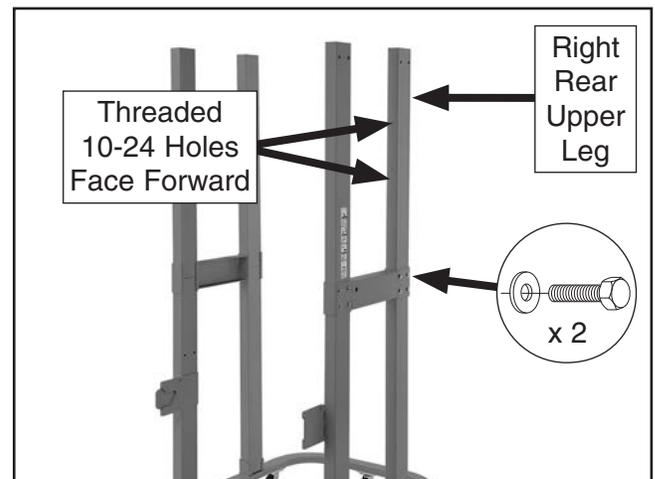


Figure 16. Right rear upper leg installed with 10-24 threaded holes facing forward.



!WARNING

Machine is top heavy. **DO NOT** work under any load without a secondary support system. To keep machine stable, **DO NOT** remove lifting equipment until directed to do so.

11. Place lifting straps rated for at least 500 lbs. under impeller housing so that straps sit on outside of mounting brackets, as shown in **Figure 17**.
12. Lift impeller housing enough to clear legs and base stand (see **Figure 17**).

IMPORTANT: To avoid damage when hoisting the impeller housing, make sure the lifting straps are long enough to avoid contacting the magnetic switch, junction box, and motor.

13. Place base stand under impeller housing as shown in **Figure 17**.

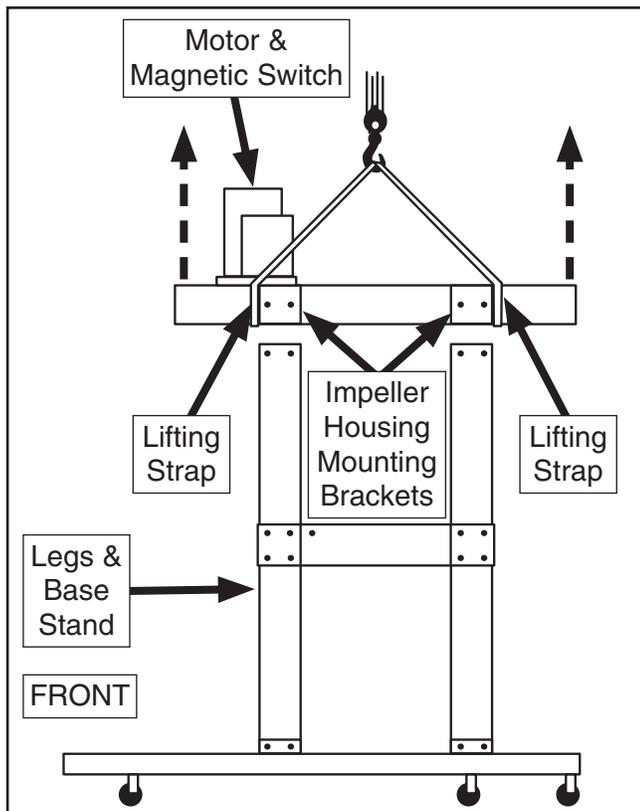


Figure 17. Lifting strap placement for impeller housing installation.

14. While two assistants align legs below impeller housing, slowly lower it so legs slide into impeller housing mounting brackets (see **Figure 18**).

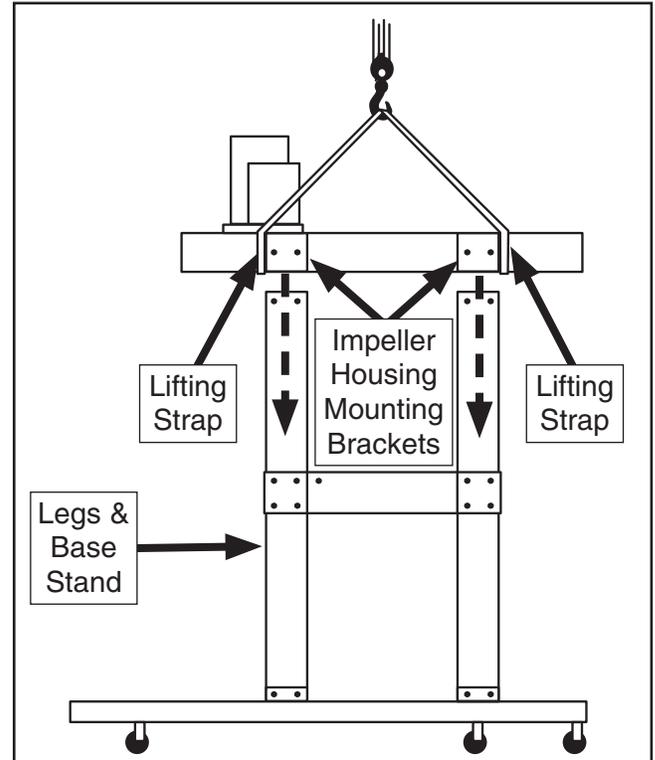


Figure 18. Impeller housing lowered onto legs.

15. Attach impeller housing to each leg with (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers (see **Figure 19**).

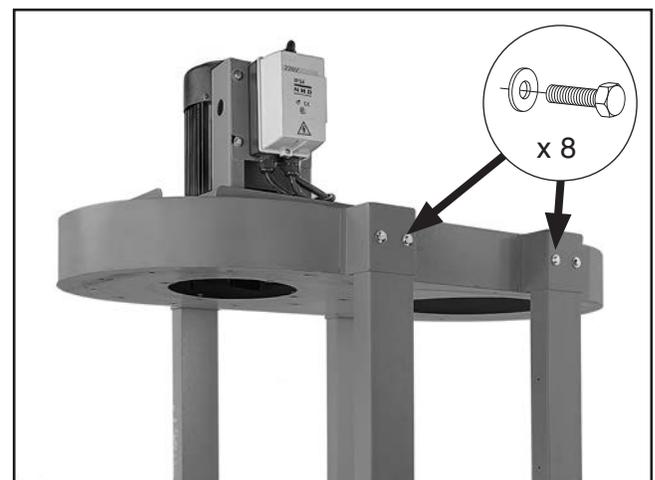


Figure 19. Impeller housing attached to legs.



16. Final tighten all fasteners installed through **Step 15**. Double-check that all are secure.
17. Remove lifting equipment.
18. Attach intake cylinder to impeller housing using (4) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (4) $\frac{5}{16}$ " fender washers (see **Figure 20**).

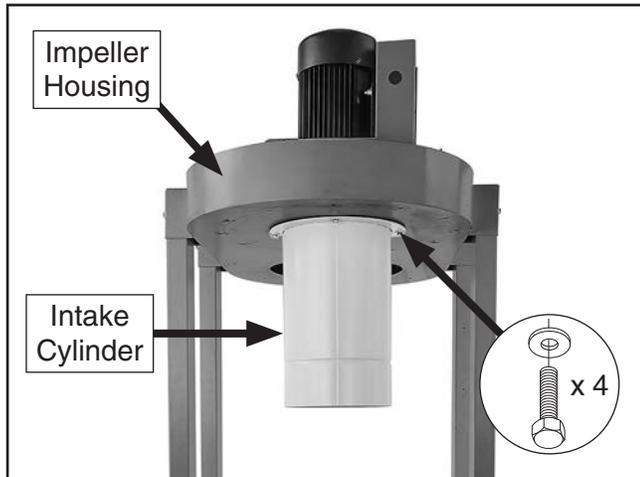


Figure 20. Intake cylinder installed.

19. Tighten bolts in the sequence shown in **Figure 21**.

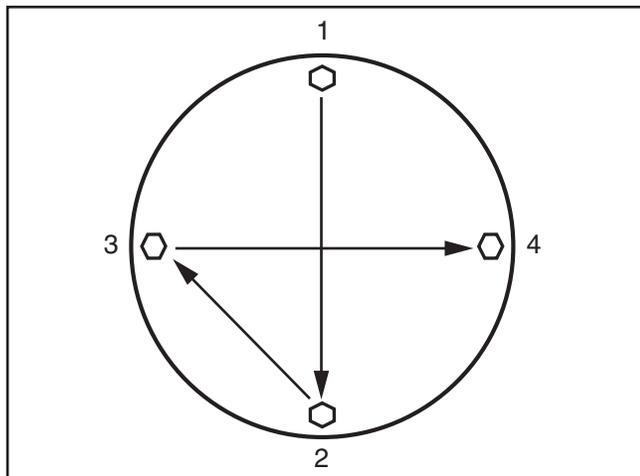


Figure 21. Fastener tightening sequence.

20. Have assistant hold intake barrel and attach to impeller housing using (12) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (12) $\frac{5}{16}$ " fender washers (see **Figure 22**). Finger-tighten for now.

Note: Mount intake barrel with dust port pointing out and away from front of impeller housing.

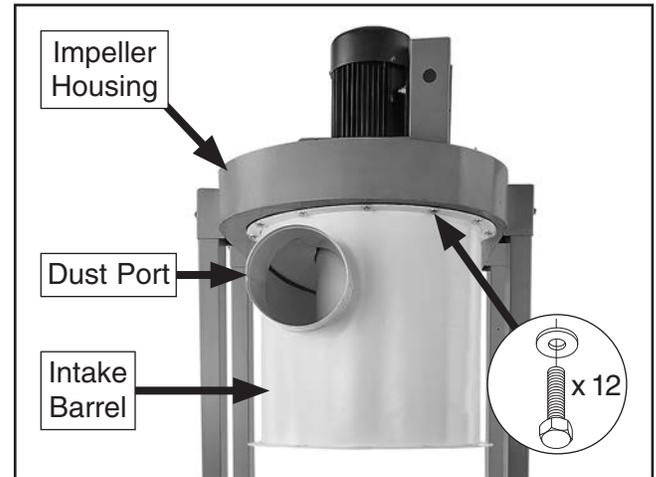


Figure 22. Intake barrel attached to impeller housing.

21. While assistant aligns cyclone funnel so vertical seam faces rear of machine, attach to intake barrel using (12) $\frac{5}{16}$ "-18 x 1" hex bolts, (24) $\frac{5}{16}$ " fender washers, and (12) $\frac{5}{16}$ "-18 hex nuts (see **Figure 23**). Finger-tighten for now.

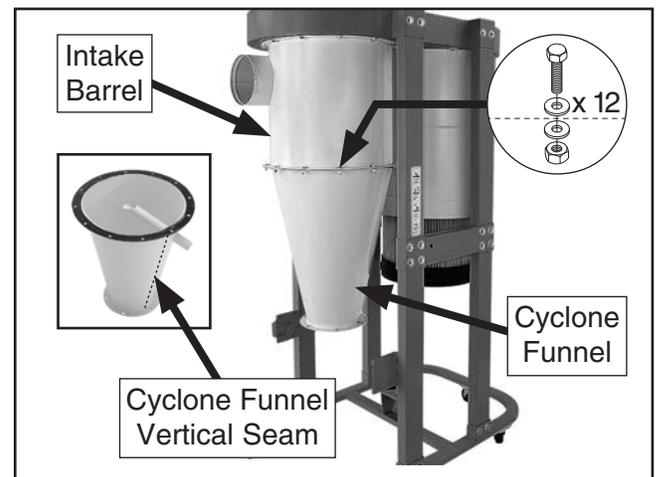


Figure 23. Cyclone funnel attached to intake barrel.



22. Attach collection drum lid to cyclone funnel using (6) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (6) $\frac{5}{16}$ " fender washers (see **Figure 24**). Do not fully tighten fasteners yet.

23. Secure collection drum lid to lower legs using (4) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (4) $\frac{5}{16}$ " fender washers (see **Figure 24**).

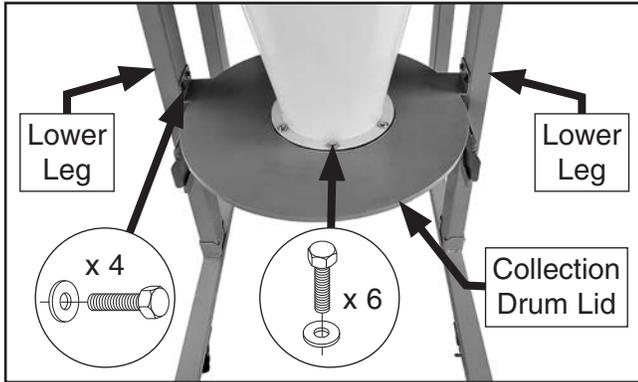


Figure 24. Collection drum lid attached to cyclone funnel and lower legs.

24. Using the pattern shown in **Figure 21** on **Page 19**, final tighten all hex nuts and hex bolts installed in **Steps 22–25**.

25. Align holes in collection drum lock handle with holes in lower legs, then secure drum lock handle to legs (see **Figure 25**) using (2) $\frac{1}{4}$ "-20 x 1" hex bolts and (2) $\frac{1}{4}$ "-20 lock nuts.

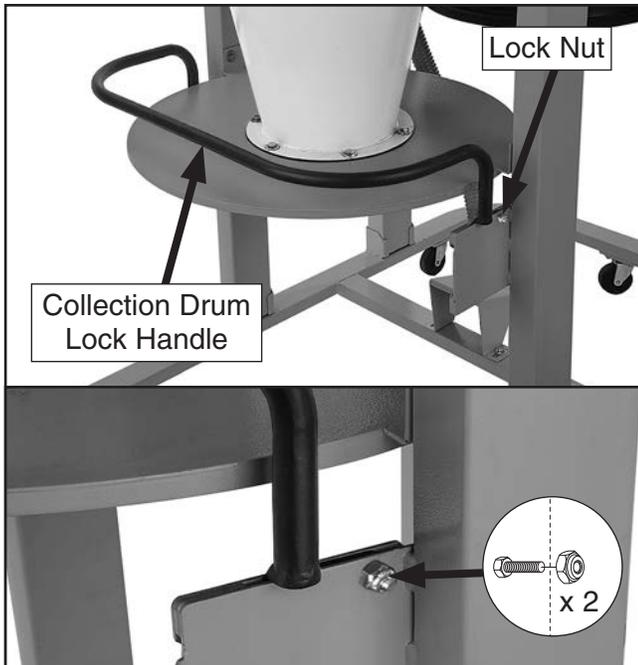


Figure 25. Collection drum lock handle attached to lower legs.

26. Secure canister filter to impeller housing with (3) $\frac{5}{16}$ "-18 x 1" knurled knob bolts (see **Figure 26**).

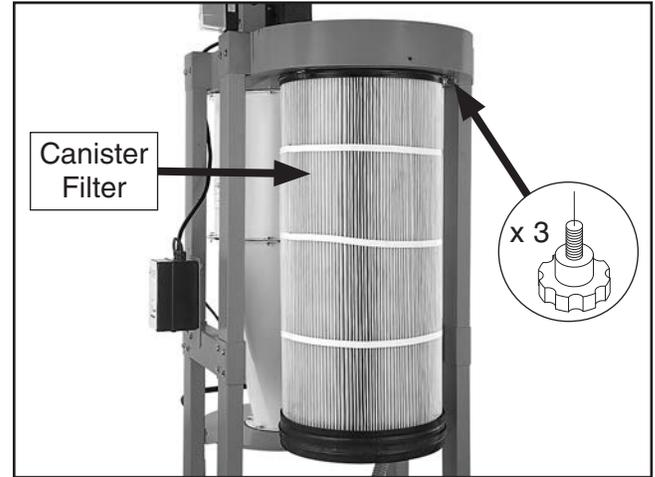


Figure 26. Canister filter installed.

27. Loosen set screw inside brush spindle connector, attach filter brush assembly to filter cover plate using pre-installed (2) $\frac{1}{4}$ "-20 x 1" hex bolts and (2) $\frac{1}{4}$ "-20 lock nuts (see **Figure 27**), then tighten set screw.

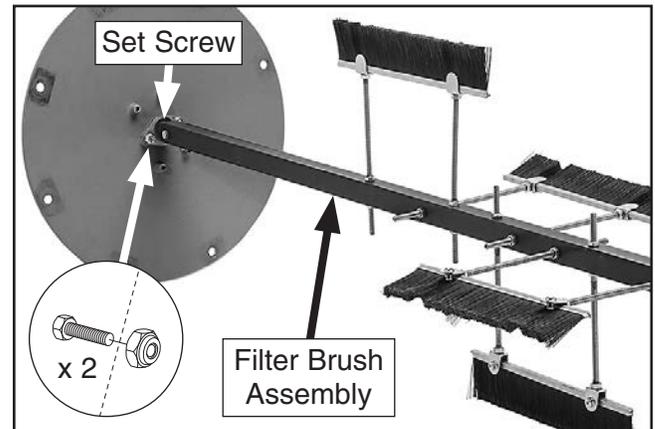


Figure 27. Filter brush assembly attached to filter cover plate.



28. Slide canister filter over filter brush assembly, then attach, using pre-installed (2) 1/4"-20 x 1" hex bolts, (4) 1/4" flat washers, and (2) 1/4"-20 lock nuts (see **Figure 28**).

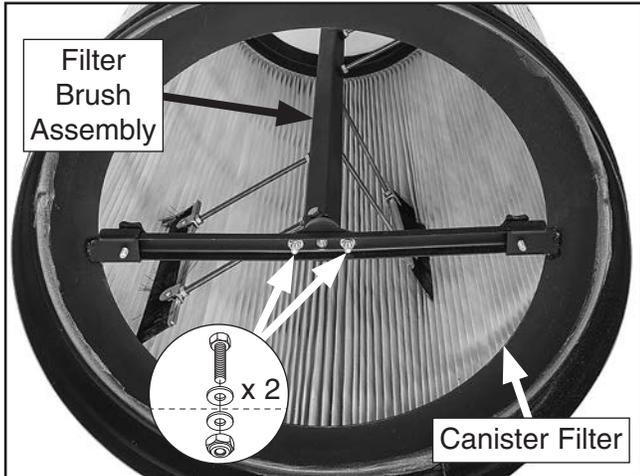


Figure 28. Canister filter attached to filter brush assembly.

29. Secure filter cover plate in a star pattern using (12) 5/16"-18 x 3/4" hex bolts and (12) 5/16" fender washers (see **Figure 29**).

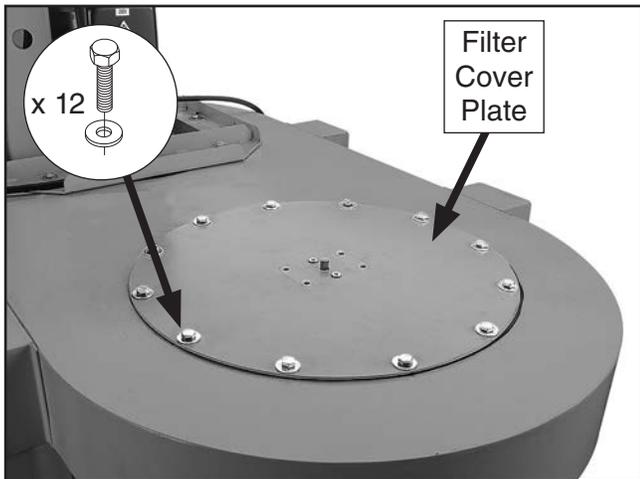


Figure 29. Filter cover plate installed.

30. Attach filter brush motor to filter cover plate (see **Figure 30**). Secure with (4) 1/4"-20 x 3/4" hex bolts and (4) 1/4" flat washers.

Note: When installing the motor, you may need to have an assistant rotate the filter brush assembly from below to help align the brush shaft and motor spindle. After the brush shaft and motor spindle engage, turn the motor bracket until mounting holes align with the filter cover plate.

31. Tighten (2) set screws on motor spindle (see **Figure 30**).

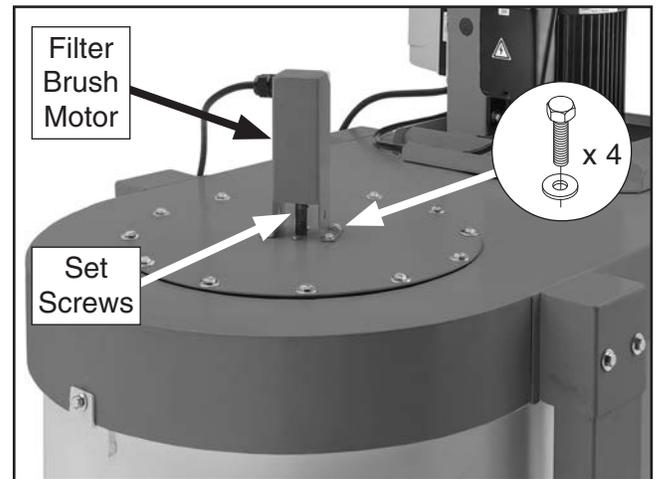


Figure 30. Filter brush motor attached to filter cover plate.

32. With help from an assistant, tilt filter cover to clear stand base and canister filter, then lift cover up to impeller housing and secure using (3) 5/16"-18 x 3/4" hex bolts and (3) 5/16" fender washers (see **Figure 31**).

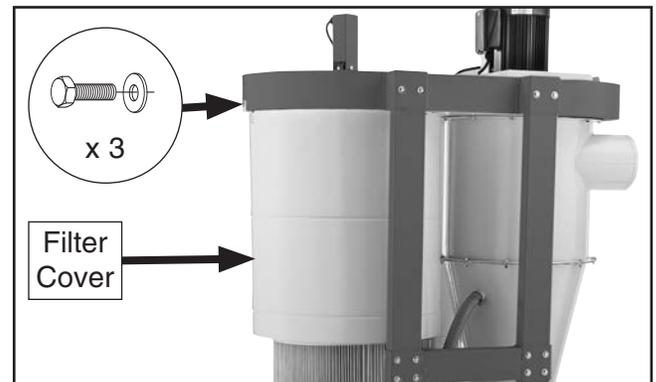


Figure 31. Canister filter cover installed.



33. With help from an assistant, place 19" x 39 $\frac{3}{8}$ " filter bag around bottom of canister filter and secure with clamp (see **Figure 32**).

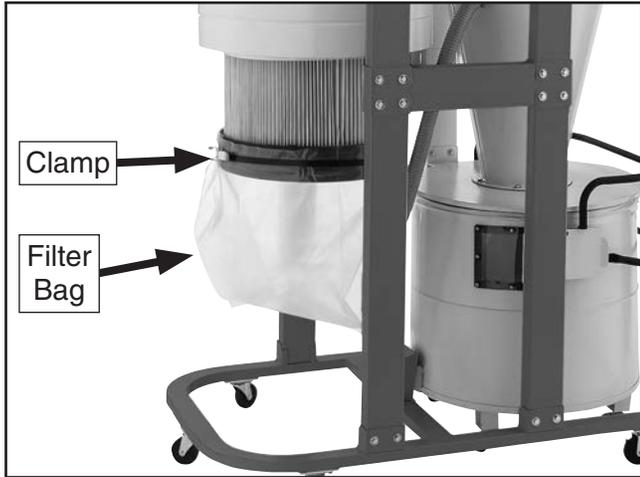


Figure 32. Filter bag installed.

34. Attach vacuum hose bracket to stand base using (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers (see **Figure 33**).
35. Install 1 $\frac{1}{2}$ " vacuum hose onto cyclone funnel port and vacuum hose bracket, then tighten pre-installed $1\frac{3}{4}$ " hose clamps on each end of vacuum hose to secure hose (see **Figure 33**).

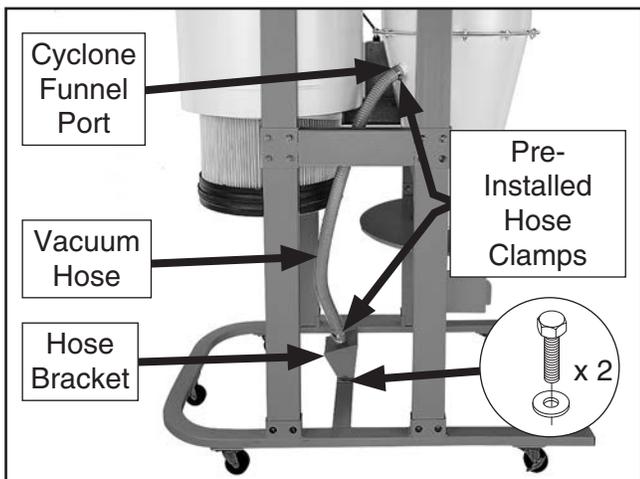


Figure 33. Vacuum hose connected to hose bracket and cyclone funnel port.

36. Adjust angle of vacuum hose bracket so it appears as shown in **Figure 33**, and then tighten (2) pre-installed $\frac{5}{16}$ "-18 lock nuts that secure angle (see **Figure 34**).

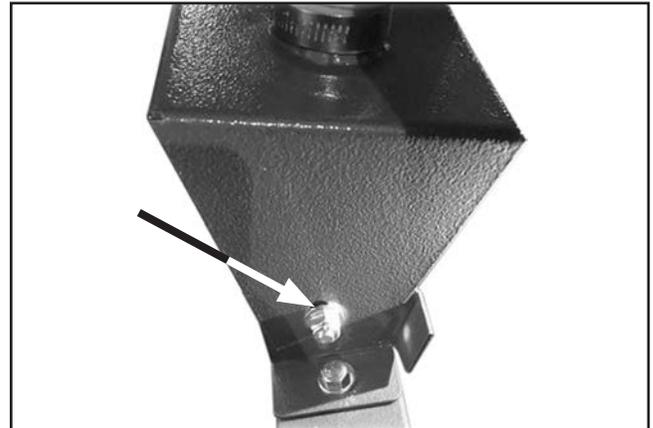


Figure 34. Location of pre-installed $\frac{5}{16}$ "-18 lock nuts that secure angle of vacuum hose bracket (1 of 2).

37. Attach control panel to right leg brace using (2) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (2) $\frac{5}{16}$ " fender washers (see **Figure 35**).

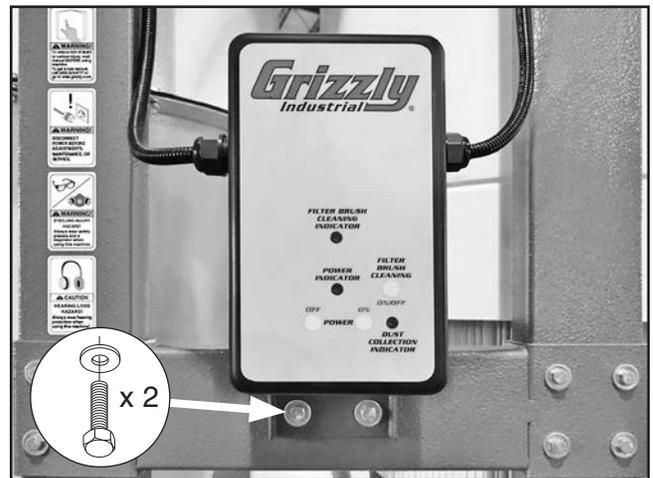


Figure 35. Control panel installed.



38. Install (4) conduit mounting blocks in locations shown in **Figure 36** using (4) 10-24 x 1/2" flange screws.

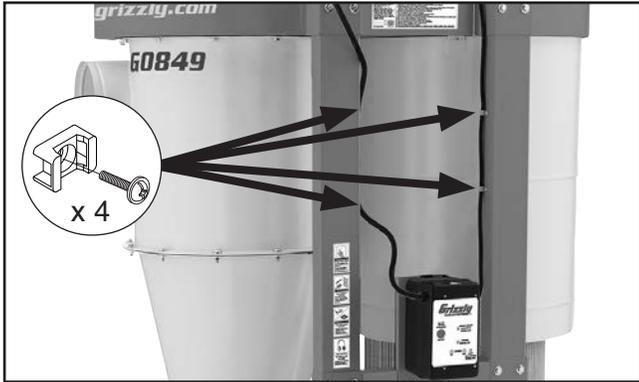


Figure 36. Locations to install conduit mounting blocks.

39. Secure conduit to mounting blocks using cable ties (see **Figure 37**).

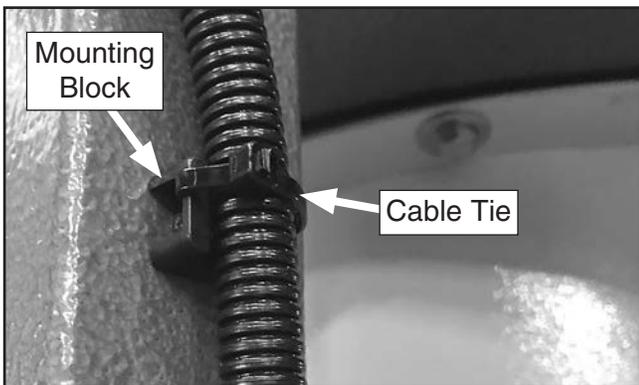


Figure 37. Conduit secured to mounting block with cable tie (1 of 4 locations shown).

40. Install (4) 2" swivel ball casters on bottom of collection drum and secure each caster with (1) 3/8"-16 hex nut (see **Figure 38**).



Figure 38. 2" caster installed on collection drum.

41. Attach handle to collection drum and secure with (2) 13mm external retaining rings (see **Figure 39**).

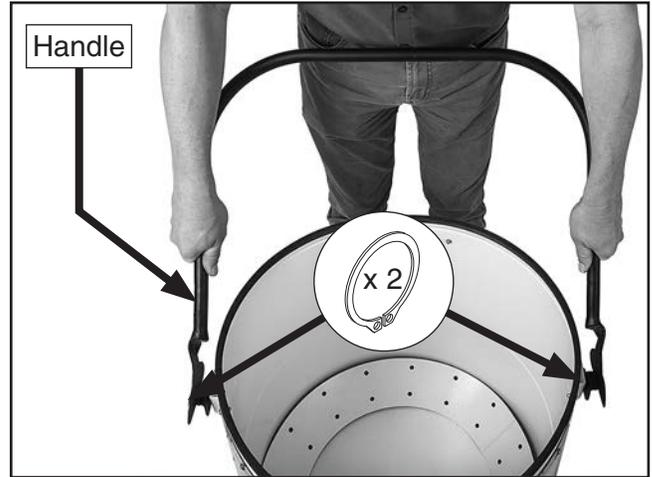


Figure 39. Installing collection drum handle.

42. Place 25" x 38" collection bag inside collection drum, rolling top of bag over top of drum.

43. To connect collection drum to machine, lift drum handle and push drum in to align handle tabs with slots on legs. Push drum handle down to engage lock handle (see **Figure 40**).

Note: When collection drum is properly seated, the drum casters will lift off floor.

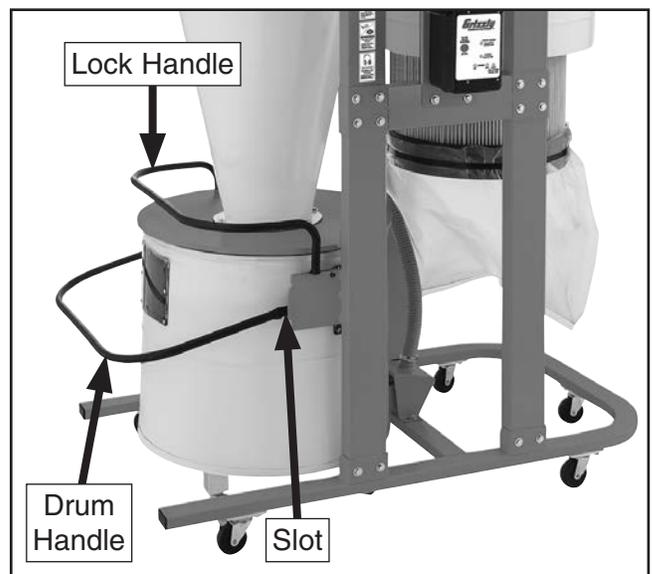


Figure 40. Collection drum secured to machine.



Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The Test Run consists of verifying the following:
1) The main motor powers up and runs correctly,
2) the main motor shuts down correctly, 3) the filter cleaning brush motors operate correctly, and
4) the remote control functions properly.

!WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

!WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Clear all setup tools away from machine and connect to power source.
2. Lock casters so machine will not move.

3. To prevent tripping circuit breaker or supply fuse, connect machine to dust-collection system and restrict airflow by partially closing blast gates to limit motor amperage draw during test run.

Note: *If a dust-collection system is not available, you may also restrict airflow by installing an 8" blast gate or reduction pipe on the dust port, or by partially blocking the dust intake port with a wooden board.*

4. Stand away from intake port, then press ON button on control panel (see **Figure 41**) to turn dust-collection motor **ON**.

— Dust Collection Indicator and Power Indicator should illuminate, and motor should run smoothly with little or no vibration or rubbing noises.

5. Press OFF button to turn dust-collection motor **OFF** (see **Figure 41**).

— If you suspect any problems, immediately turn machine **OFF** and disconnect it from power. Refer to **Troubleshooting** on **Page 42**. If you cannot resolve the problem, contact our Tech Support at (570) 546-9663 for assistance.

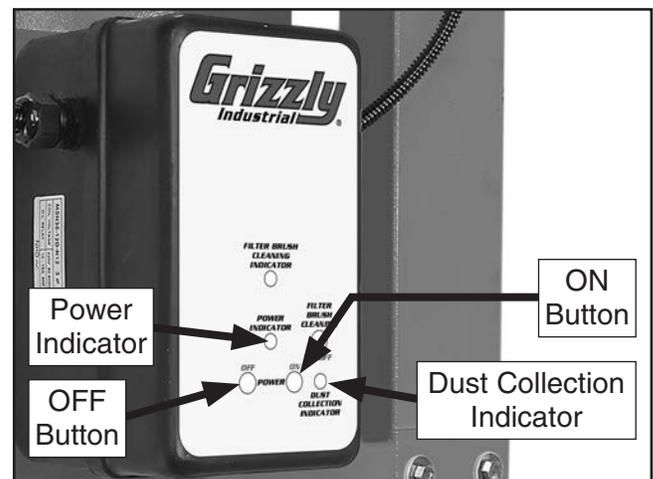


Figure 41. G0849 dust-collection motor OFF and ON buttons and indicator lights.



6. Press Filter Brush Cleaning ON/OFF button to turn filter brush motor **ON** (see **Figure 42**).

- Filter Brush Cleaning Indicator should illuminate, and filter brush motor should run smoothly as brushes turn inside filter. The filter brush motor automatically shuts off after 1 minute.



Figure 42. G0849 filter brush cleaning controls.

7. Press Filter Brush Cleaning ON/OFF button again to turn filter brush motor **ON**.

- Within 1 minute, press Filter Brush Cleaning ON/OFF button again. Filter brush motor should turn **OFF**.

8. Test remote control operation and functions (see **Figure 43**).

Note: If remote control does not operate when buttons are pressed, remove back cover and inspect battery installation.

- Press button "A" to turn dust-collection motor **ON**.

- Press button "B" to turn dust-collection motor **OFF**.

- Press button "C" to turn filter brush motor **ON**. Press button "C" again to turn filter brush motor **OFF**.

Note: Press button "D" to pair remote control with RF receiver only if the remote loses its signal or is replaced. See **Pairing Remote Control** on **Page 41** for information.

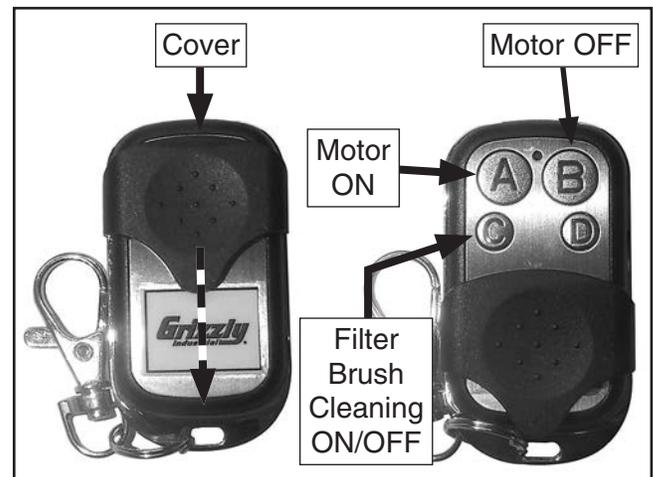


Figure 43. G0849 remote control functions.

9. Congratulations! The test run is complete.



SECTION 4: DESIGNING A SYSTEM

General

⚠ CAUTION

Always make sure there are no open flames or pilot lights in the same room as the dust collector. There is a risk of explosion if too much fine dust is dispersed into the air with an open flame present.



⚠ CAUTION

Always guard against static electrical buildup by grounding all dust collection lines.

The Model G0849 works great as a central system for a small shop or a dedicated dust collector for large production machines. The dust collector is capable of collecting dust from up to three machines running simultaneously. Grizzly offers a complete dust collection system guide book (Model W1050) entitled *Dust Collection Basics*.

Tips for Optimum Performance

- Avoid using more than 10' of flexible hose on any ducting line. The ridges inside flexible hose greatly increase static pressure loss, which reduces suction performance.
- Keep ducts between the dust collector and machines as short as possible.
- Keep ducting directional changes to a minimum. The more curved fittings you use, the greater the loss of suction at the dust-producing machine.
- Gradual directional changes are more efficient than sudden directional changes (i.e. use 45° elbows in place of 90° elbows whenever possible).
- The simpler the system, the more efficient and less costly it will be.

Duct Material

You have many choices regarding main line and branch line duct material. For best results, use smooth 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 not properly grounded to prevent static electrical buildup (refer to **System Grounding** at the end of this section). Another problem with using plastic duct is that it is less efficient per foot than metal.



⚠ CAUTION

Plastic duct generates static electrical buildup that can cause fire or shock. Properly ground it to reduce this risk.

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 44. Examples of plastic ducting components.



Metal Duct

Advantages of smooth metal duct is its conductivity, efficiency, 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.

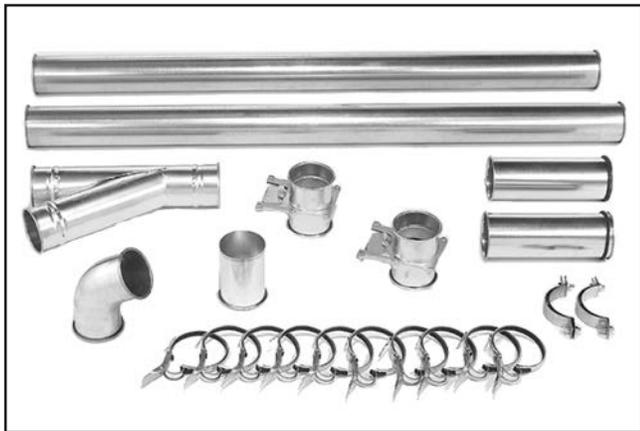


Figure 45. Examples of smooth metal duct and components.

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 in a different configuration. 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 inside to reduce static pressure loss.

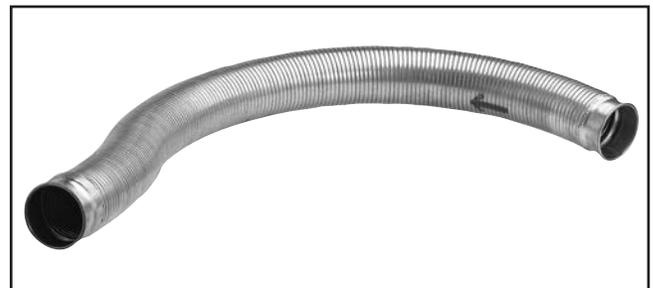


Figure 46. Example of flexible metal duct.

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

Step 1. 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.

Step 2. 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.

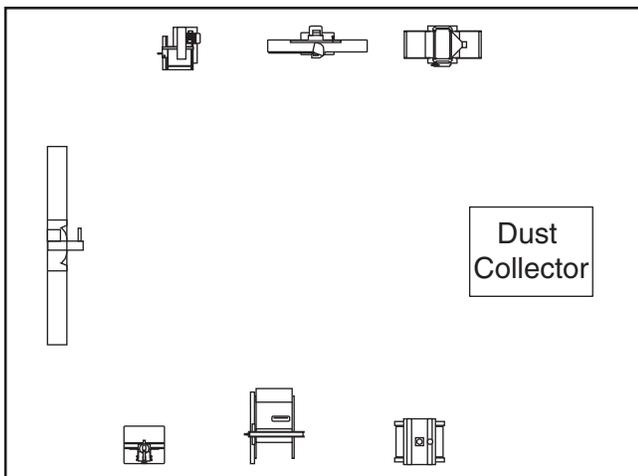


Figure 47. Basic sketch of shop layout.

Step 3. 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.

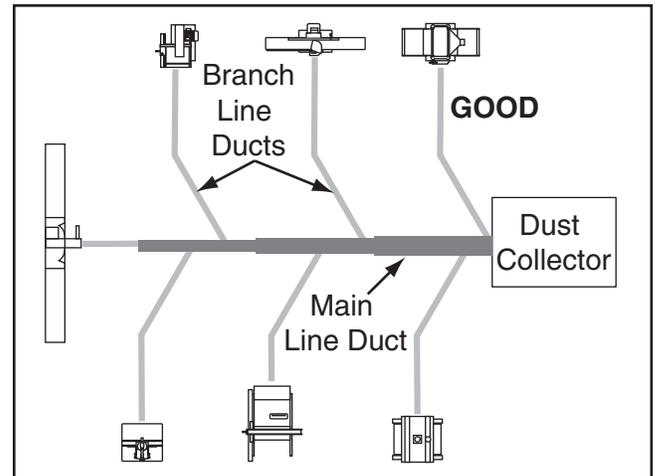


Figure 48. Efficient duct layout.

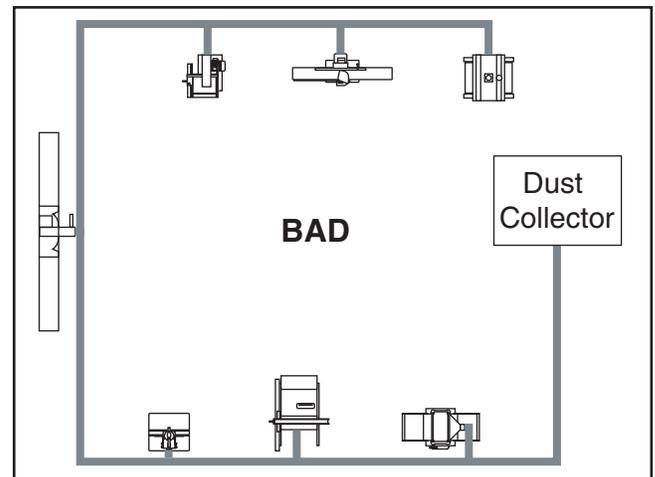


Figure 49. Inefficient duct layout.



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.

Step 4. 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 50. 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 51. Dust port size and quantity per average machine.

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

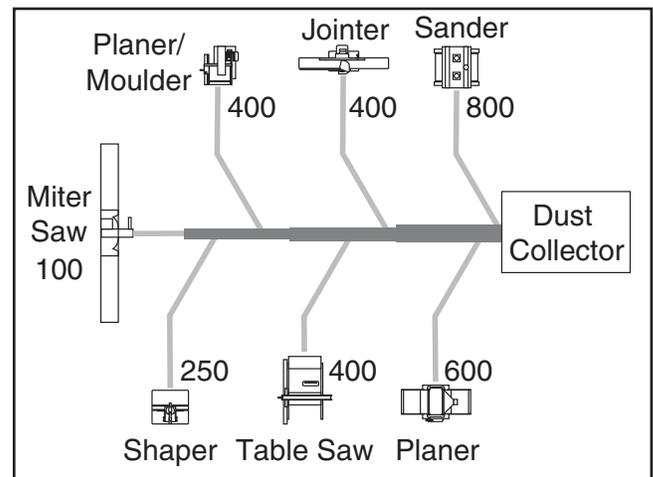


Figure 52. CFM requirements labeled for each machine.



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.

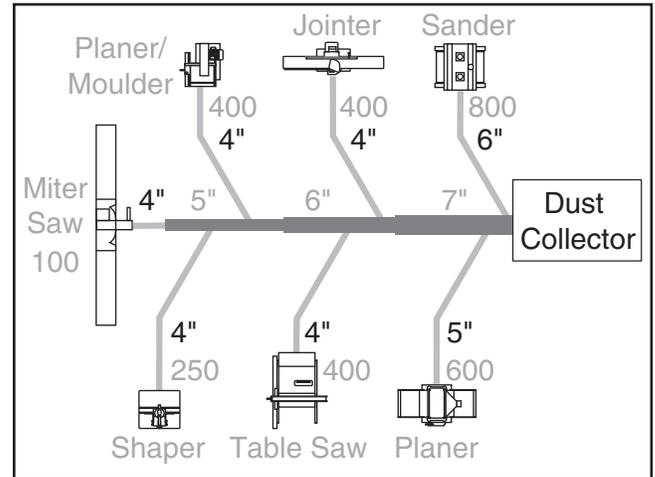


Figure 54. Branch line duct sizes labeled.

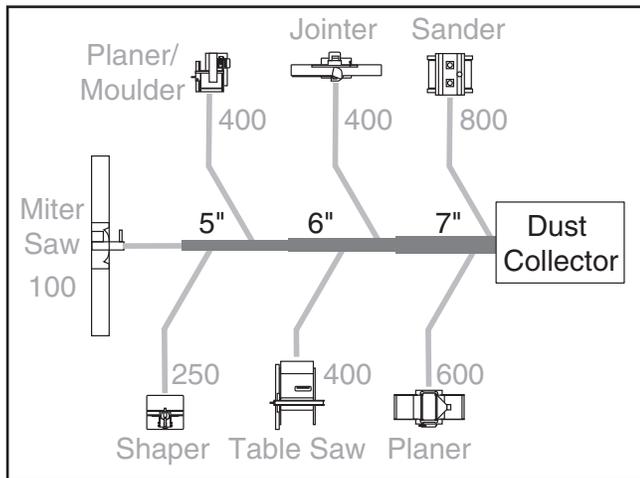


Figure 53. Main line size labeled on sketch.

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.

Planning Drop Downs

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

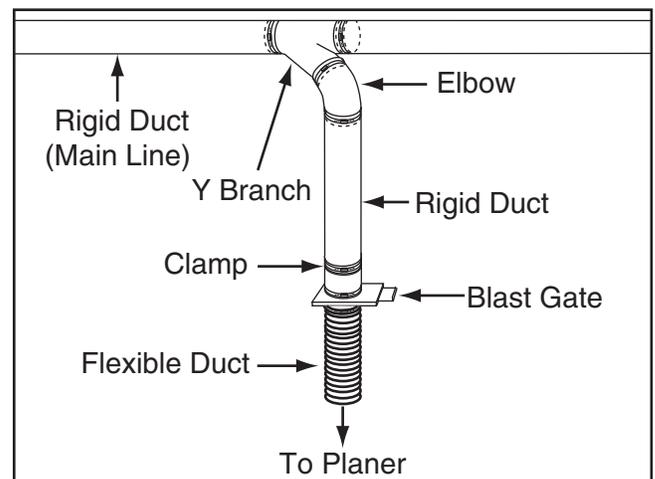


Figure 55. Drop-down setup.



Multiple Dust Ports

If your machine has multiple dust ports, add the total CFM given for each dust port size from the table provided in the earlier subsection, **Determine Required CFMs**, then find the closest CFM in the table below to determine the correct branch size. Split the branch line just before the dust ports with matching duct sizes.

Two Machines on Same Branch Line

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"

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 56. Static pressure loss tables.

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 57. 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.

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

Figure 58. 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** for your dust collector on **Page 33**.

Example: A typical **Data Sheet Performance Curve** is illustrated in **Figure 59**. Find 4.4 on the Static Pressure axis (the amount of total static pressure loss calculated in **Figure 58**), then refer to the closest value on the CFM axis—approximately 1120 CFM.

The 1120 CFM for the static pressure loss of the line connected to the router is well above the 220 CFM requirement of that machine.

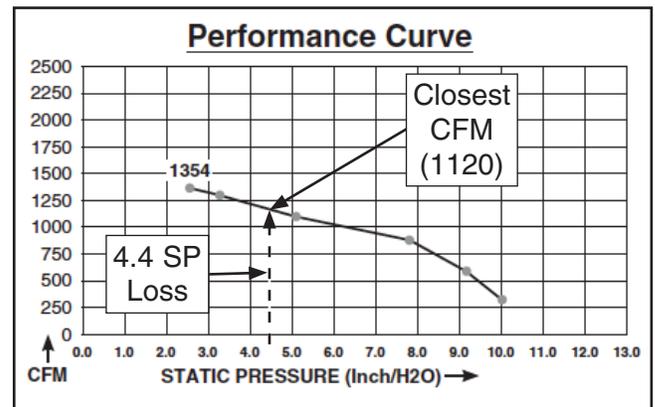


Figure 59. CFM for static pressure loss of line connected to a dust collector & router.

- 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 37** 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.



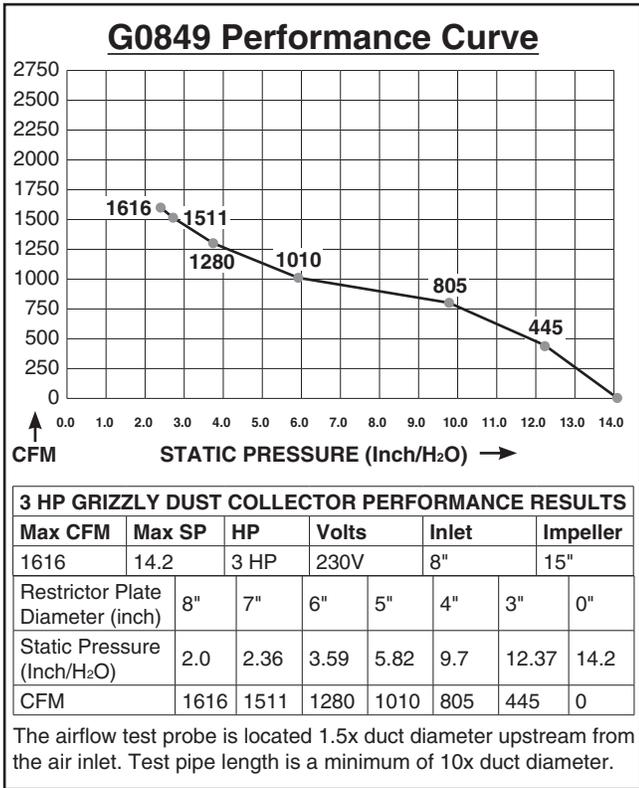


Figure 60. G0849 performance curve chart and data.

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



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.

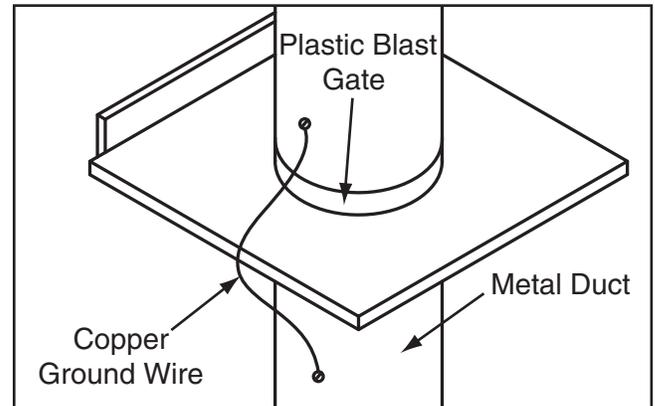


Figure 61. Ground jumper wire when using plastic blast gates and metal duct.

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.

	<p>⚠ CAUTION Always guard against static electrical build up by grounding all dust collection lines.</p>
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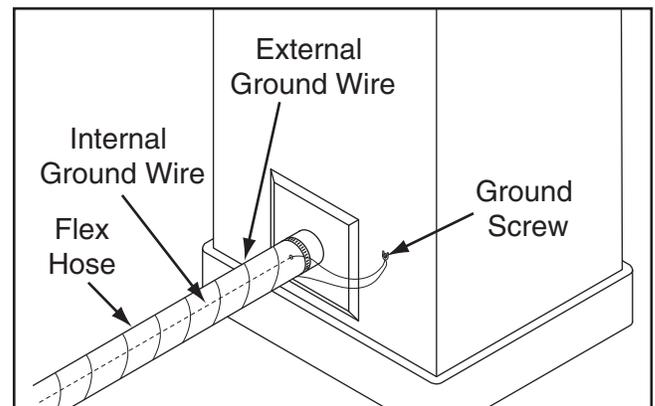


Figure 62. Flex-hose grounded to machine.

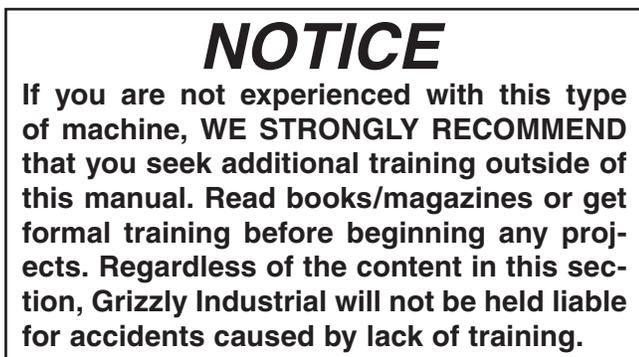
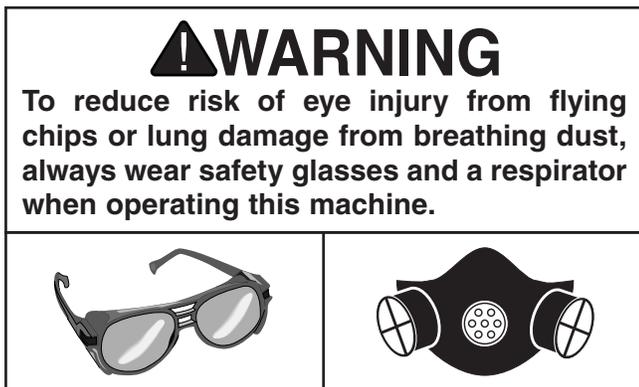


SECTION 5: OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



General Operation

This cyclone dust collector creates a vortex of incoming air that extracts heavy wood chips and large dust particles, and then drops them into the steel drum below, which is lined with a plastic bag (see **Figure 63**).

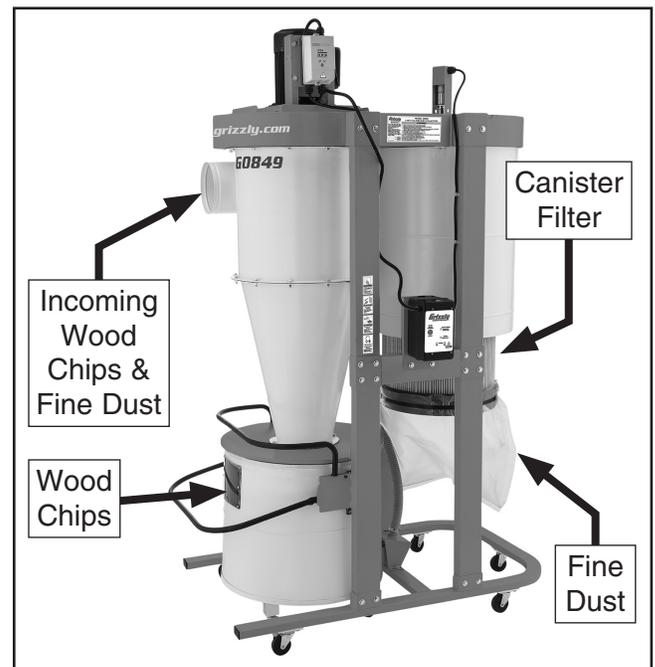


Figure 63. Dust collector operation.

The remaining dust travels past the impeller and is then caught by the canister filter and deposited in the plastic collection bag below. This spun-bond polyester filter catches 99.9% particles from 0.2 to 2 micron in size and larger, and is pleated to provide maximum surface area for efficient airflow.

To maintain CFM during heavy dust-collection operations, a filter brush motor rotates internal brushes that knock caked-on dust into the plastic collection bag.

Always lock swivel casters during operation.



Using Controls

Operating Control Panel

Refer to **Figure 64** and the following descriptions to understand the control panel functions.



Figure 64. G0849 dust-collection motor controls and indicators.

NOTICE

During operation, **DO NOT** start machine, stop it, then attempt to quickly restart it. If the magnetic switch does not have enough time to cool down between startup cycles, it may overheat and malfunction.

ON Button: Turns main motor **ON**.

OFF Button: Turns main motor **OFF**.

Power Indicator: Illuminates when machine is connected to power.

Dust Collection Indicator: Illuminates when machine is collecting dust during operation.

Filter Brush Cleaning ON/OFF Button: Manually turns filter brush motor **ON** for 1 minute; turns filter brush motor **OFF** when pressed again.

Note: *The filter brush cleaning motor starts automatically and runs for 1 minute after 8 hours of machine use.*

Filter Brush Cleaning Indicator: Illuminates when filter brush motor operates.

Operating Remote Control

Refer to **Figure 65** and the following descriptions to understand the remote control functions.

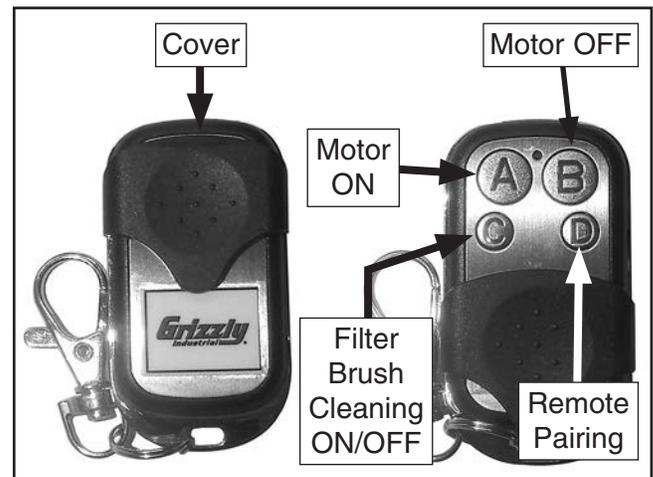


Figure 65. Remote control functions.

Motor ON Button: Turns main motor **ON**.

Motor OFF Button: Turns main motor **OFF**.

Filter Brush Cleaning ON/OFF:

- Press button "C" to manually turn filter brush cleaning motor **ON** to run for 1 minute.
- Press button "C" again to manually turn filter brush cleaning motor **OFF** before 1 minute elapses.

Remote Pairing: Press button "D" to pair remote control with RF receiver in the control panel if the remote loses its signal or is replaced (see **Pairing Remote Control** on **Page 41**).



SECTION 6: ACCESSORIES

! WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

W1050—Dust Collection Basics Book

This incisive book skillfully guides the woodworker through all the steps necessary in the design and construction of an efficient central dust-collection system and tells you what you need to know for easy installation. 64 pages.

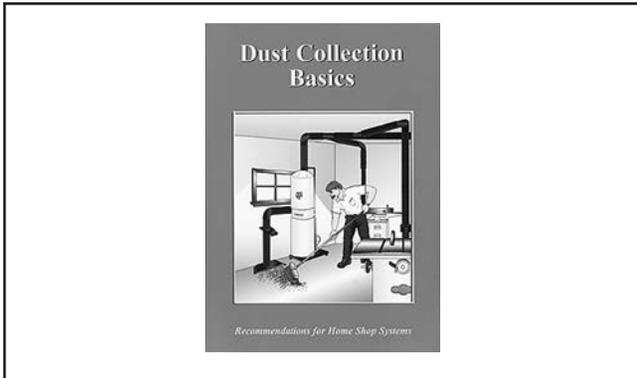


Figure 66. W1050 Dust Collection Basics Book.

H7219—8" x 5' Rigid Flex Industrial Dust Collection Hose

H7219 Rigid Flex Hose with rolled collars provides just enough flexibility to make difficult connections while still keeping the inside wall as smooth as possible.

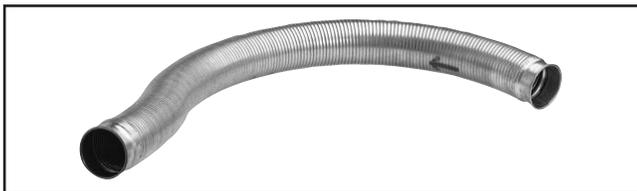


Figure 67. H7219 Rigid Flex Dust Hose.

H7465—8" x 10' Dust Hose

H7465 spiral wire reinforced clear hose allows easy inspection for locating potential clogs in your duct system. Uses RH fittings.

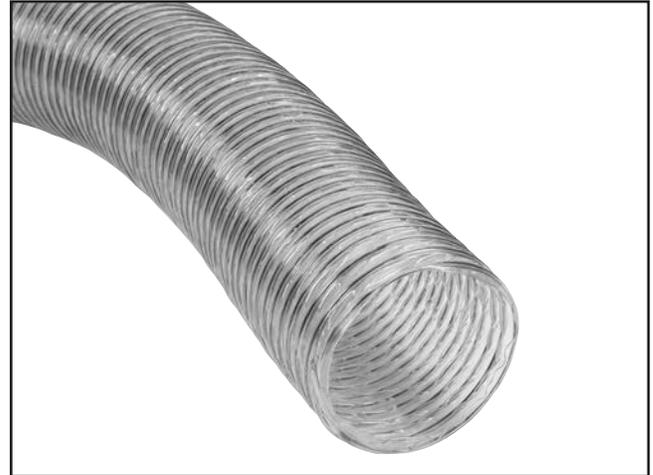


Figure 68. H7465 8" Dust Hose.

G6177—4" Metal Blast Gate

G7340—5" Metal Blast Gate

G7358—6" Metal Blast Gate

H5243—7" Metal Blast Gate

H5249—8" Metal Blast Gate

Control airflow and resistance between machines. These industrial blast gates can take the abuse of thousands of open and close cycles. Made specifically for production shops. These metal industrial dust collection fittings are simply the best you can find.

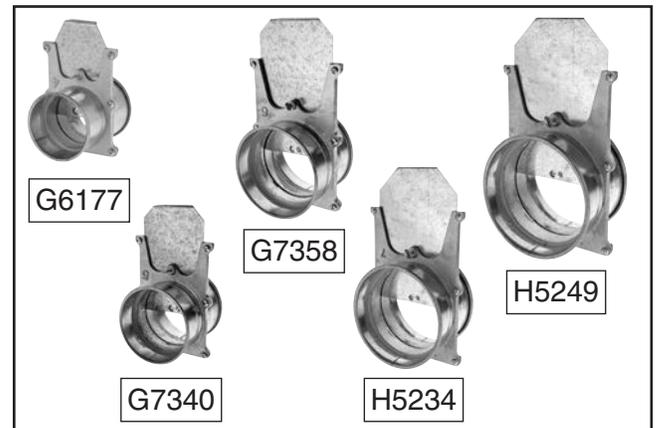


Figure 69. Metal blast gate assortment.

order online at www.grizzly.com or call 1-800-523-4777



T27422—Viewing Spool 8"

This viewing spool is a section of acrylic glass with QF ends so you can keep an eye on your material flow. Makes it a cinch to check for slow-downs or debris! Ends are 22 gauge, 8" opening. Total length 12.5".



Figure 70. T27422 Viewing Spool.

H7429—8" Industrial Dust Collection Machine Adapter

H5238—8" Industrial Dust Collection Pipe Clamp

H5239—8" Industrial Dust Collection Adjustable Nipple

H5250—8" Industrial Dust Collection Pipe Hanger

T26510—8" Industrial Dust Collection Clamp Hanger

T27054—8" Quick-Fit O-Ring, 12-Pk.

T28548—8" x 6" x 6" Industrial Dust Collection Standard Branch



Figure 71. 8" dust-collection accessories.

W1039—Universal Adapter

This adapter provides a multitude of reducing options. Simply cut off unneeded steps. Outside diameter sizes include 1", 2", 2.5", 3", 4", 5", and 6". Wall thickness is 1/8".

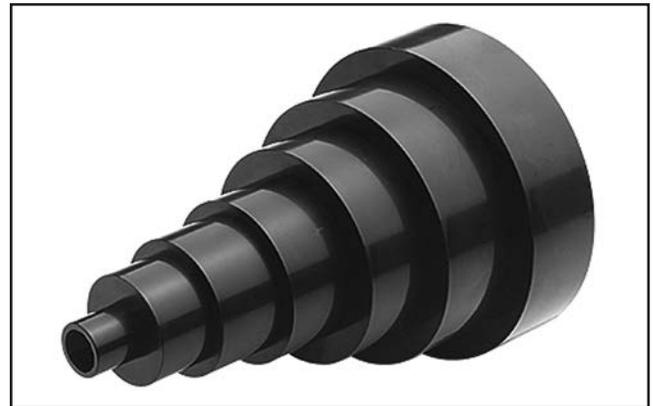


Figure 72. W1039 Universal Adapter.

D4206—Clear Flexible Hose 4" x 10'

D4256—45° Elbow 4"

D4216—Black Flexible Hose 4" x 10'

W1034—Heavy-Duty Clear Flex Hose 4" x 10'

D2107—Hose Hanger 4 1/4"

W1015—Y-Fitting 4" x 4" x 4"

W1017—90° Elbow 4"

W1019—Hose Coupler (Splice) 4"

W1317—Wire Hose Clamp 4"

W1007—Plastic Blast Gate 4"

W1053—Anti-Static Grounding Kit

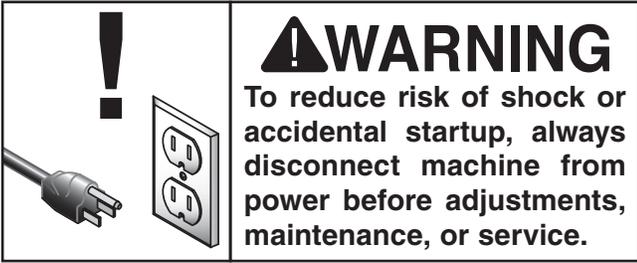


Figure 73. 4" dust-collection accessories.

order online at www.grizzly.com or call 1-800-523-4777



SECTION 7: MAINTENANCE



Schedule

For optimum performance from this machine, this maintenance schedule must be strictly followed.

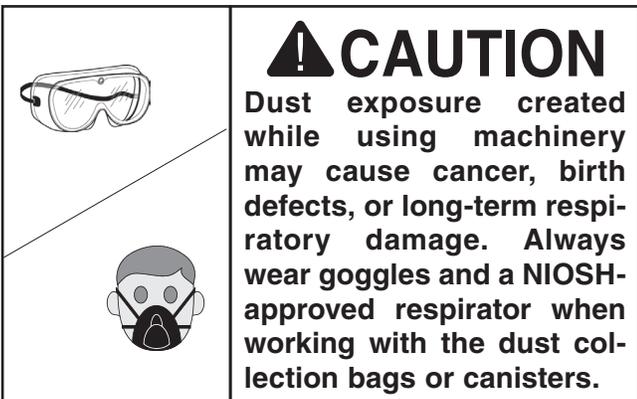
Ongoing

To maintain a low risk of injury and proper machine operation, if you ever observe any of the items below, shut down the machine immediately and fix the problem before continuing operations:

- Loose mounting bolts.
- Damaged filter canister, cleaning brush components, or collection bags.
- Worn or damaged wires.
- Suction leaks.
- Any other unsafe condition.

Monthly Check

- Clean/vacuum dust buildup off machine body and motor.



Removing/Replacing Collection Bag

Remove and replace the collection bag when it is about $\frac{3}{4}$ full. If the bag gets overfilled, the dust will be sucked into the intake barrel and passed through to the canister filter and filter bag. Avoid allowing this to happen, as it may reduce filter life.

IMPORTANT: To contain wood dust and minimize exposure risk, firmly tie bag closed.

How quickly the collection bag will fill up and require replacement is based on the type of work being done at the time:

- Fine dust from a sander or table saw will slowly fill the bag.
- Curly shavings from a planer or jointer will quickly fill the bag.

Items Needed	Qty
Collection Bag T30326.....	1

To remove and replace collection bag:

1. DISCONNECT MACHINE FROM POWER!
2. Lift collection drum lock handle, then pull drum away from machine (see **Figure 74**).

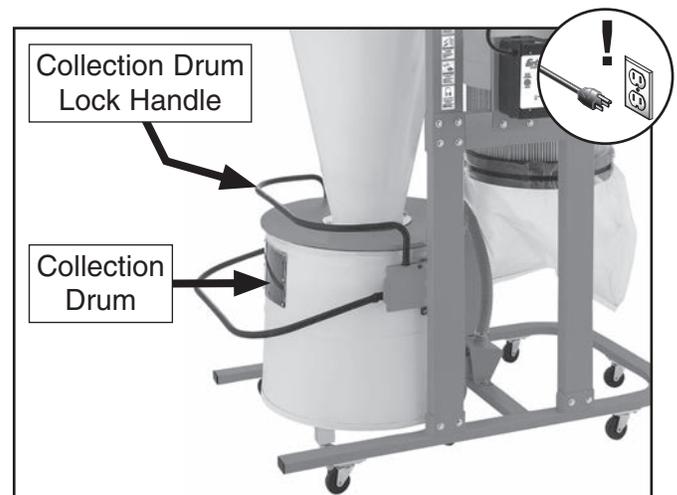


Figure 74. Collection bag components.



3. Firmly tie collection bag closed for disposal.
4. Place new collection bag in collection drum, rolling top of bag around top of drum.
5. To connect collection drum to machine, lift drum handle and push drum in to align handle tabs with slots on legs. Push drum handle down to engage lock handle (see **Figure 75**).

Note: When collection drum is properly seated, the drum casters will lift off floor.

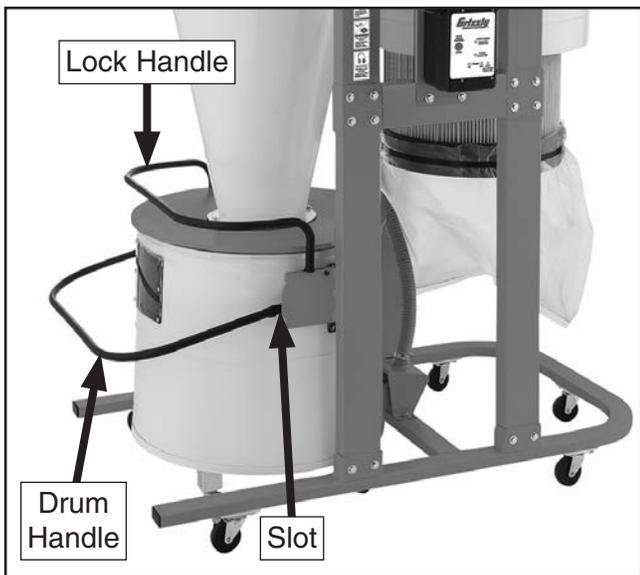


Figure 75. Collection drum properly secured to machine.

Removing/Replacing Filter Bag

Remove and replace the filter bag when it is about 1/2 full.

Items Needed	Qty
Filter Bag T28924	1

To remove & replace filter bag:

1. DISCONNECT MACHINE FROM POWER!
2. Release clamp around bottom of canister filter, then remove filter bag (see **Figure 76**).

IMPORTANT: To contain wood dust and minimize exposure risk, firmly tie bag closed.

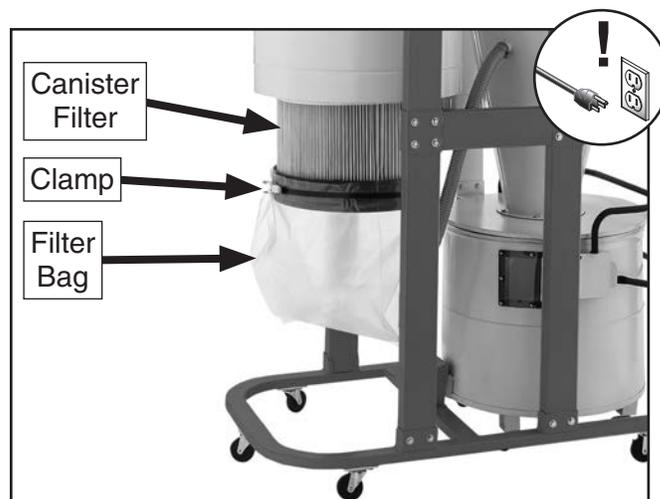


Figure 76. Filter bag components.

3. Attach new filter bag around bottom of canister filter and secure with clamp.



Cleaning Canister Filter

The Model G0849 dust collector uses a motor-driven brush system to remove dust build-up and debris from the filter pleats. The filter-cleaning motor starts automatically and runs for 1 minute after 8 hours of machine use, but you may also operate the filter cleaning brush motor manually.

For a more thorough cleaning every few months under heavy use, wash the filter by hand (see **Washing Canister Filter on Page 44**).

Dispose of the filter bag when dust fills it about 1/2 full (see **Removing/Replacing Filter Bag on Page 40**).

IMPORTANT: To contain wood dust and minimize risk of exposure, firmly tie bag closed.

To clean canister filter using motor:

1. Press Filter Brush Cleaning ON/OFF button to turn motor **ON** for 1 minute (see **Figure 77**).
2. To turn filter-cleaning motor **OFF** before 1 minute elapses, press Filter Brush Cleaning ON/OFF button again (see **Figure 77**).



Figure 77. Filter cleaning brush controls.

Pairing Remote Control

The Model G0849 dust collector uses an RF remote control to duplicate functions on the control panel. If the remote loses its signal or is replaced, pair the remote with the control panel.

To pair remote control with control panel:

1. Remove control panel cover and turn over to expose circuit board.
2. Press and hold SAVE CODE button until it beeps, then press and hold button D on remote control (see **Figure 78**).

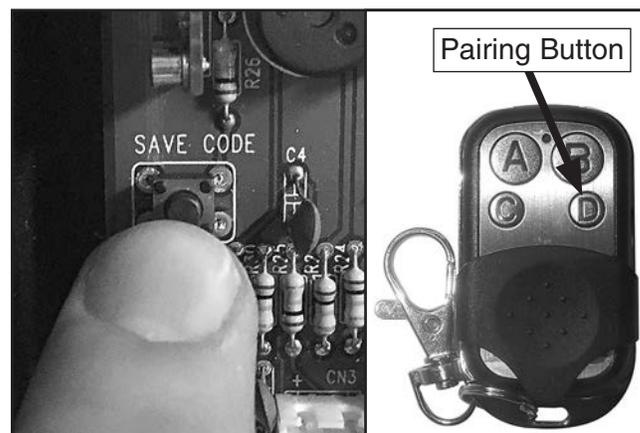


Figure 78. Controls for pairing remote control.

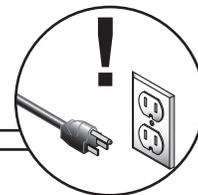
3. Pairing is complete after second audible beep.
4. Replace control panel cover.



SECTION 8: SERVICE

Review the troubleshooting procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> Dust collector not properly connected to ducting with resistance at the other end. Incorrect power supply voltage/circuit size. Power supply circuit breaker tripped or fuse blown. Remote control not working. Motor wires connected incorrectly. Wiring open/has high resistance. ON/OFF switch at fault. Start capacitor at fault. Remote receiver at fault. Machine circuit breaker has tripped. Centrifugal switch at fault. Circuit board at fault. Motor at fault. 	<ol style="list-style-type: none"> Connect dust collector to ducting with resistance at the other end (Page 26). Ensure correct power supply voltage/circuit size. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. Replace battery; stay in signal range (Page 36). Correct motor wiring connections. Check/fix broken, disconnected, or corroded wires. Inspect/replace remote control/control panel. Test/replace. Inspect/replace. Let motor cool, improve ventilation, and reset; contact tech support if relay frequently trips. Adjust/replace centrifugal switch if available. Ensure circuit board voltage matches power supply; Inspect/replace. Test/repair/replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> Motor overheated. Dust-collection ducting problem. Canister filter clogged/at fault. Dust collector undersized. Motor wired incorrectly. Run capacitor at fault. Centrifugal switch at fault. Motor bearings at fault. 	<ol style="list-style-type: none"> Allow motor to cool, reset overload if necessary. Clear blockages, seal leaks, use smooth wall duct, eliminate bends, close other branches (Page 26). Clean/replace canister filter (Page 44); wash canister filter (Page 44). Move closer to machine/redesign ducting layout/ upgrade dust collector. Wire motor correctly (Page 46). Test/repair/replace. Adjust/replace centrifugal switch if available. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> Motor or component loose. Motor fan rubbing on fan cover. Impeller is damaged or unbalanced. Impeller is loose on the motor shaft. Motor bearings at fault. Motor shaft bent. 	<ol style="list-style-type: none"> Inspect/replace damaged bolts/nuts, and retighten with thread-locking fluid. Fix/replace fan cover; replace loose/damaged fan. Inspect impeller for damage/replace. Secure impeller; replace motor and impeller as a set if motor shaft and impeller hub are damaged. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. Test with dial indicator. Replace motor if damaged.



Dust Collector Operation

Symptom	Possible Cause	Possible Solution
Dust collector does not adequately collect dust or chips; poor performance.	<ol style="list-style-type: none"> 1. Collection bag is full. 2. Canister filter is clogged/at fault. 3. Ducting blocked/restricted. 4. Dust collector is too far away from the point of suction, or there are too many sharp bends in ducting. 5. Lumber is wet and dust is not flowing smoothly through ducting. 6. Ducting has one or more leaks, or too many open ports. 7. Not enough open branch lines at one time, causing a velocity drop in main line. 8. Ducting and ports are incorrectly sized. or dust collection system is improperly designed. 9. Dust collector is undersized. 	<ol style="list-style-type: none"> 1. Empty collection bag. 2. Manually run filter cleaning brushes (Page 36); wash or replace canister filter (Page 44). 3. Unblock restriction in ducting. A plumbing snake may be necessary. 4. Relocate dust collector closer to point of suction; remove sharp bends in ducting. 5. Process lumber with less than 20% moisture content. 6. Seal/eliminate all ducting leaks; close unused lines with blast gate. 7. Open 1 or 2 more blast gates to different branch lines to increase main line velocity. 8. Install correctly sized ducts and fittings (Page 26). 9. Install a larger dust collector.
Dust collector blows sawdust into the air.	<ol style="list-style-type: none"> 1. Duct clamps or filter bag is not properly clamped and secured. 2. Cylinder or funnel seals/gaskets are loose or damaged. 	<ol style="list-style-type: none"> 1. Re-secure ducts and filter bag, making sure duct and bag clamp are tight. 2. Retighten all mounting and sealing points; replace damaged seals/gaskets.
Remote control does not operate dust collector.	<ol style="list-style-type: none"> 1. Machine is disconnected from power. 2. Remote control battery is weak or dead. 3. Receiver and remote are not registered or paired. 4. A wall or barrier disrupts the radio frequency, or controller is too far away. 	<ol style="list-style-type: none"> 1. Verify machine is connected to power source. 2. Replace battery. 3. Pair remote with receiver (Page 41). 4. Move machine away from barrier; use remote within 75' of machine.



Washing Canister Filter

For a more thorough cleaning every few months under heavy use, wash the filter by hand.

To wash canister filter by hand:

1. DISCONNECT MACHINE FROM POWER!
2. Remove canister filter (see **Removing/Replacing Canister Filter** on This Page).
3. Rinse filter outside under warm water.

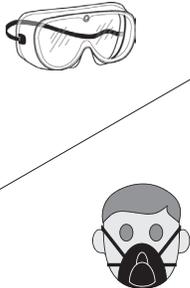
IMPORTANT: DO NOT use a pressure washer to clean the filter, or compressed air to dry it. High pressure will damage filter fibers.

4. Allow filter to air dry only.

Note: Do not leave filter in the sun to dry or apply heat to speed the process; heat exposure can damage your filter.

5. Re-install canister filter.

Removing/Replacing Canister Filter

	<p>! CAUTION</p> <p>Dust exposure created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Always wear goggles and a NIOSH-approved respirator when working with the dust collection bags or canisters.</p>
--	---

If the canister filter is clogged or dirty and cleaning it does not improve dust-collection performance, replace the canister filter.

Items Needed	Qty
An Assistant	1
Wrench or Socket 10mm	1
Wrench or Socket 12mm	1
Socket 7/16"	1
Stepladder (6' Minimum).....	1
Canister Filter T28919	1
Filter Bag T28924	1

To remove & replace canister filter:

1. DISCONNECT MACHINE FROM POWER!
2. Put on safety goggles and respirator.



3. Release clamp, then remove filter bag (see **Figure 79**).

IMPORTANT: To contain wood dust and minimize risk of exposure, firmly tie bag closed for disposal.

4. With help from an assistant, remove (3) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (3) $\frac{5}{16}$ " fender washers securing filter cover to impeller housing, then lower and remove cover (see **Figure 79**).

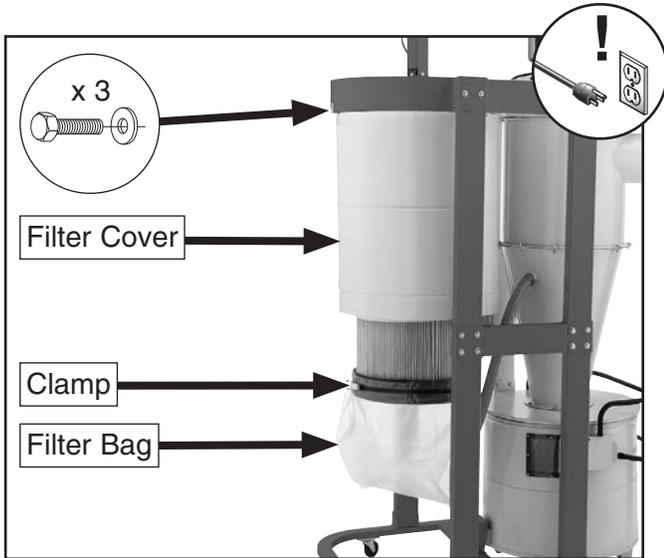


Figure 79. Location of filter bag and filter cover.

5. Loosen (3) $\frac{5}{16}$ "-18 x 1" knurled knob bolts that secure canister filter to impeller housing (see **Figure 80**).

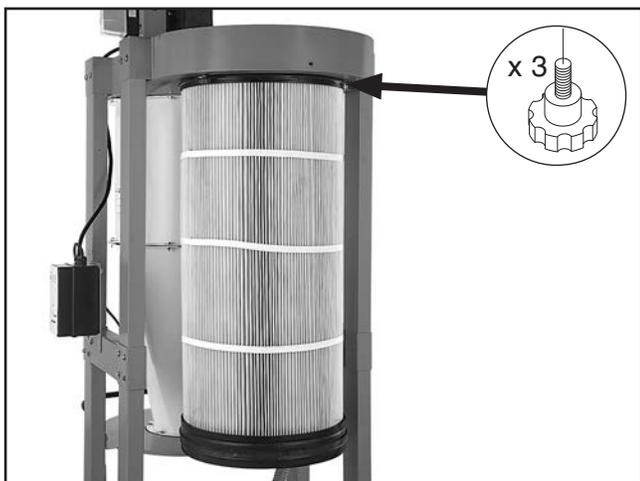


Figure 80. Canister filter fasteners.

6. Twist canister counterclockwise, then lower it past filter brush assembly to remove.
7. Vacuum loose dust from inside impeller housing and on machine.
8. To install canister filter, lift it around filter brush assembly. While lifting canister filter, have assistant work below to align filter brush assembly spindle with bearing in mounting bar (see **Figure 81**).

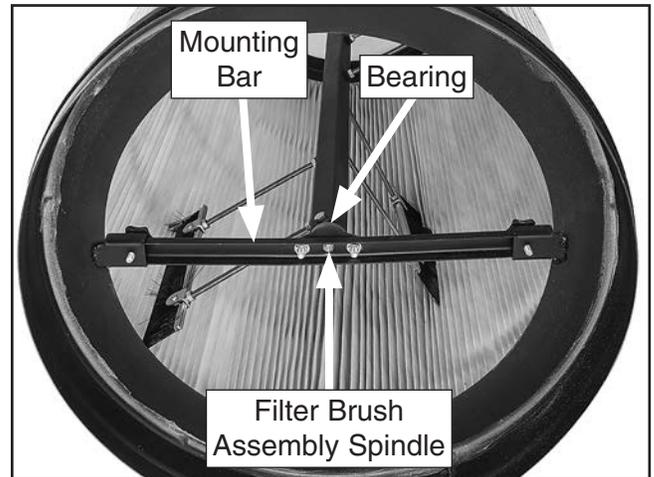


Figure 81. Alignment points for filter brush assembly and canister filter.

9. With canister filter sitting flush against impeller housing, twist canister filter clockwise onto knob bolt threads.
10. Tighten (3) $\frac{5}{16}$ "-18 x 1" knurled knob bolts to secure canister filter.
11. With help from assistant, place filter cover under canister filter, then lift cover and attach to impeller housing with (3) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts and (3) $\frac{5}{16}$ " fender washers.
12. Attach new filter bag to bottom of canister and secure bag with clamp.



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. Compare the manufacture date of your machine to the one stated in this manual, and 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. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

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 after-market 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.

COLOR KEY

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



Electrical Components

OUTPUT	3.0HP	POLE	2P
HZ	60	HEAT	
VOLT	230	WEIGHT	
A M P	22	CLASS	B
R P M	3450	DATE	2019.05
PHASE	1	SER.NO.	
MADE IN TAIWAN			

Figure 82. Motor nameplate.



Figure 85. Filter brush cleaning motor (shown upside down for clarity).



Figure 83. Motor junction box and start capacitor.

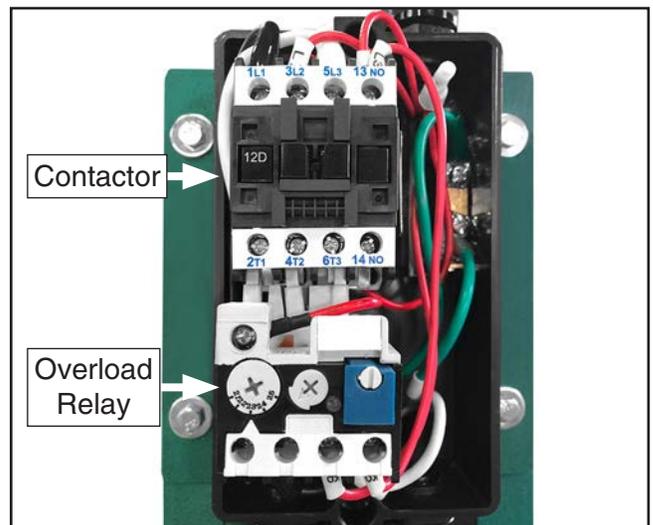


Figure 86. Magnetic switch.



Figure 84. Motor run capacitor.

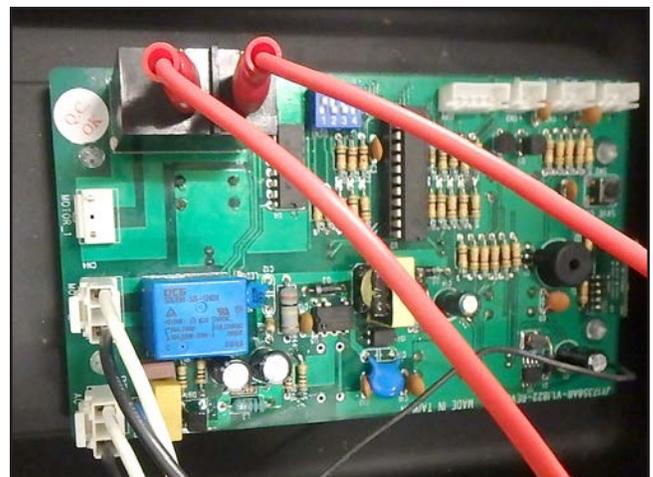
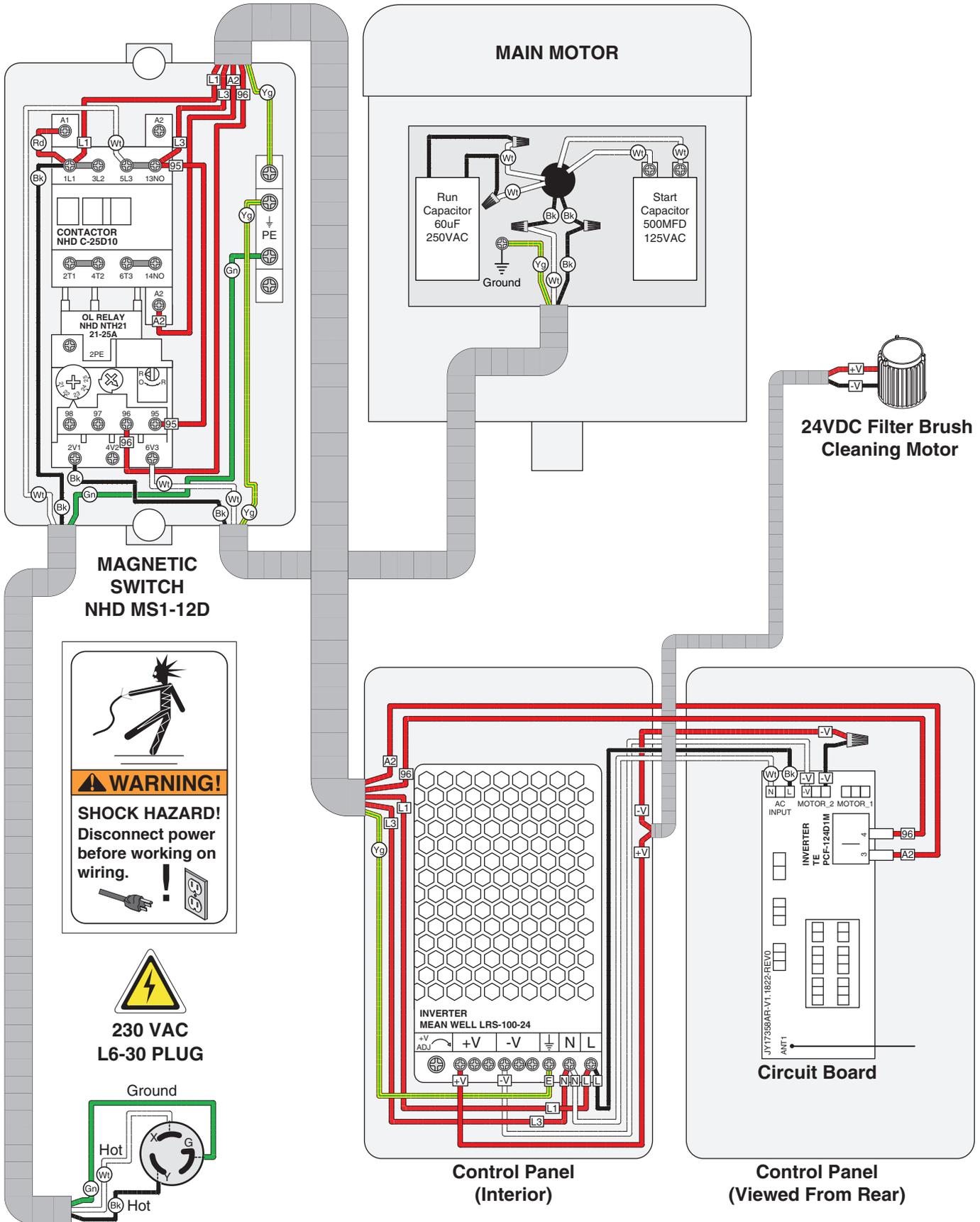


Figure 87. Control panel circuit board.

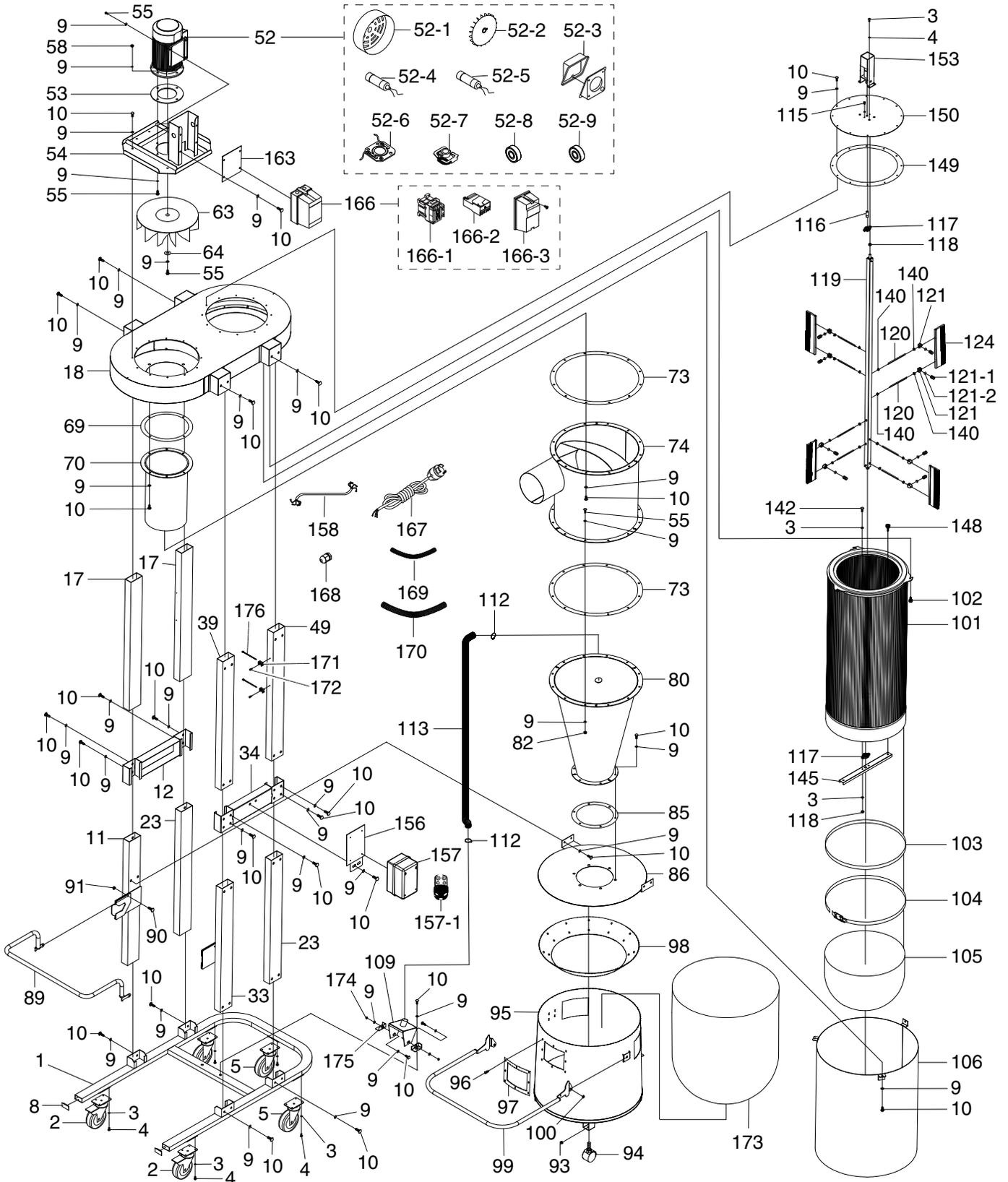


Wiring Diagram



SECTION 10: PARTS

Main



Main Parts List

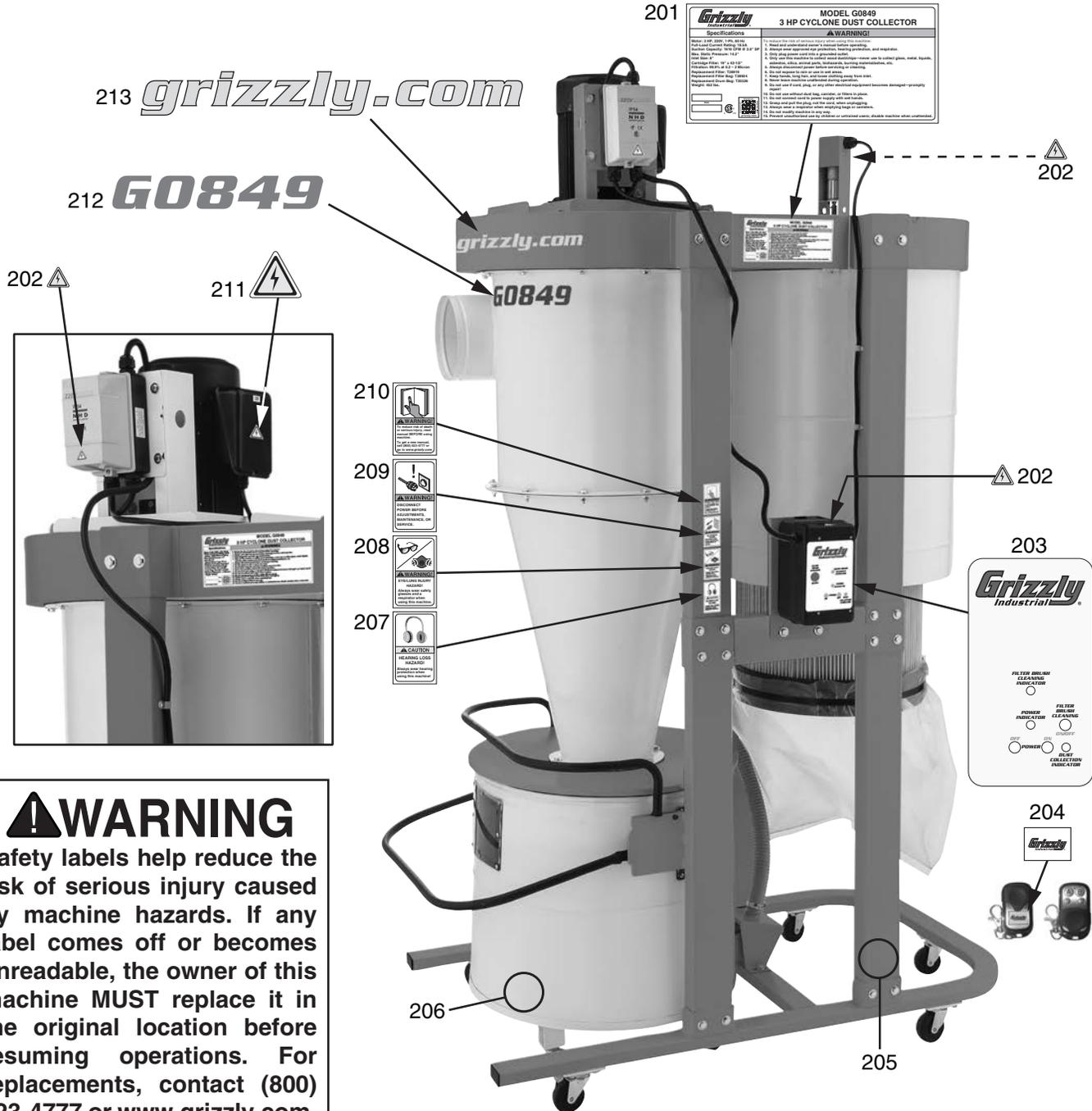
REF	PART #	DESCRIPTION
1	P0849001	STAND BASE
2	P0849002	CASTER 3" SWIVEL (LOCKING)
3	P0849003	FLAT WASHER 1/4
4	P0849004	HEX BOLT 1/4-20 X 3/4
5	P0849005	CASTER 3" SWIVEL
8	P0849008	TUBE END PLUG
9	P0849009	FENDER WASHER 5/16
10	P0849010	HEX BOLT 5/16-18 X 3/4
11	P0849011	LOWER FRONT LEG (LEFT)
12	P0849012	LEG BRACE (LEFT)
17	P0849017	UPPER LEG (LEFT)
18	P0849018	IMPELLER HOUSING
23	P0849023	LOWER LEG (REAR)
33	P0849033	LOWER FRONT LEG (RIGHT)
34	P0849034	LEG BRACE (RIGHT)
39	P0849039	UPPER FRONT LEG (RIGHT)
49	P0849049	UPPER REAR LEG (RIGHT)
52	P0849052	MOTOR 3HP 230V 1-PH
52-1	P0849052-1	MOTOR FAN COVER
52-2	P0849052-2	MOTOR FAN
52-3	P0849052-3	MOTOR JUNCTION BOX
52-4	P0849052-4	S CAPACITOR 500M 125V 1-3/4 X 3-1/2
52-5	P0849052-5	R CAPACITOR 60M 250V 1-3/4 X 3-1/2
52-6	P0849052-6	CONTACT PLATE
52-7	P0849052-7	CENTRIFUGAL SWITCH
52-8	P0849052-8	BALL BEARING 6203ZZ (FRONT)
52-9	P0849052-9	BALL BEARING 6205ZZ (REAR)
53	P0849053	MOTOR MOUNT GASKET 195 MM
54	P0849054	IMPELLER COVER
55	P0849055	HEX BOLT 5/16-18 X 1
58	P0849058	LOCK NUT 5/16-18
63	P0849063	IMPELLER 15"
64	P0849064	IMPELLER WASHER 5/16 X 1-3/16 X 3/32
69	P0849069	INTAKE CYLINDER GASKET 317 MM
70	P0849070	INTAKE CYLINDER
73	P0849073	INTAKE BARREL GASKET 570 MM
74	P0849074	INTAKE BARREL
80	P0849080	CYCLONE FUNNEL
82	P0849082	HEX NUT 5/16-18
85	P0849085	CYCLONE FUNNEL GASKET 284 MM
86	P0849086	COLLECTION DRUM LID
89	P0849089	COLLECTION DRUM LOCK HANDLE
90	P0849090	HEX BOLT 1/4-20 X 1
91	P0849091	LOCK NUT 1/4-20
93	P0849093	HEX NUT 3/8-16
94	P0849094	CASTER 2" SWIVEL BALL 3/8-16 X 1-1/2"
95	P0849095	COLLECTION DRUM 35-GAL.
96	P0849096	PHLP HD SCR 10-24 X 3/4
97	P0849097	DRUM WINDOW 172 X 210MM ACRYLIC

REF	PART #	DESCRIPTION
98	P0849098	COLLECTION DRUM VACUUM RING
99	P0849099	COLLECTION DRUM HANDLE
100	P0849100	EXT RETAINING RING 13MM
101	P0849101	CANISTER FILTER 19" X 42-1/2"
102	P0849102	KNURLED KNOB BOLT 5/16-18 X 1
103	P0849103	FILTER SEALING BAND
104	P0849104	BAG CLAMP 19-5/8"
105	P0849105	FILTER BAG 19" X 39-3/8"
106	P0849106	FILTER BARREL
109	P0849109	VACUUM HOSE BRACKET
112	P0849112	HOSE CLAMP 1-3/4"
113	P0849113	VACUUM HOSE 1-1/2" X 43-1/4"
115	P0849115	HEX BOLT 1/4-20 X 1
116	P0849116	BRUSH SPINDLE CONNECTOR
117	P0849117	PILLOW BLOCK BEARING
118	P0849118	LOCK NUT 1/4-20
119	P0849119	BRUSH SPINDLE
120	P0849120	STUD-FT 1/4-20 X 10
121	P0849121	BRUSH BRACKET
121-1	P0849121-1	SET SCREW M8-1.25 X 8 HOLLOW TIP
121-2	P0849121-2	PLASTIC TIP 6MM
124	P0849124	FILTER BRUSH (PVC)
140	P0849140	HEX NUT 1/4-20
142	P0849142	HEX BOLT 1/4-20 X 1
145	P0849145	FILTER BRUSH BASE
148	P0849148	KNOB BOLT 1/4-20 X 3/4, 6-LOBE D1-5/16
149	P0849149	FILTER COVER PLATE GASKET 445MM
150	P0849150	FILTER COVER PLATE
153	P0849153	FILTER BRUSH MOTOR 3W 24VDC
156	P0849156	CONTROL PANEL BRACKET
157	P0849157	CONTROL PANEL
157-1	P0849157-1	REMOTE CONTROL
158	P0849158	CONTROL PANEL CORD 20G 5W 48"
163	P0849163	MAGNETIC SWITCH BRACKET
166	P0849166	MAGNETIC SWITCH NHD MS1-12D 220V
166-1	P0849166-1	CONTACTOR NHD C-25D10 220V
166-2	P0849166-2	OL RELAY NHD NTH21 21-25A
166-3	P0849166-3	MAGNETIC SWITCH COVER
167	P0849167	POWER CORD 12G 3W 72" L6-30P
168	P0849168	STRAIN RELIEF TYPE-6 PG13.5
169	P0849169	CONDUIT 3/8" X 42"
170	P0849170	CONDUIT 1/2" X 48"
171	P0849171	CONDUIT MOUNTING BLOCK
172	P0849172	FLANGE SCREW 10-24 X 1/2
173	P0849173	COLLECTION BAG 25-1/4" X 37-1/2"
174	P0849174	LOCK NUT 5/16-18
175	P0849175	VACUUM HOSE BRACKET CONNECTOR
176	P0849176	CABLE TIE 100MM

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call **(800) 523-4777** or visit **www.grizzly.com/parts** to check for availability.



Labels & Cosmetics



⚠ WARNING
 Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.

REF	PART #	DESCRIPTION
201	P0849201	MACHINE ID LABEL
202	P0849202	ELECTRICITY LABEL, SMALL
203	P0849203	CONTROL PANEL LABEL
204	P0849204	REMOTE CONTROL LABEL
205	P0849205	TOUCH-UP PAINT, GRIZZLY GREEN
206	P0849206	TOUCH-UP PAINT, GRIZZLY PUTTY
207	P0849207	HEARING WARNING LABEL

REF	PART #	DESCRIPTION
208	P0849208	GLASSES/RESPIRATOR LABEL
209	P0849209	UNPLUG 220V WARNING LABEL
210	P0849210	READ MANUAL WARNING LABEL
211	P0849211	ELECTRICITY LABEL, LARGE
212	P0849212	MODEL NUMBER LABEL
213	P0849213	GRIZZLY.COM LABEL



WARRANTY & 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.

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.

In the event you need to use 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.

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.

To take advantage of this warranty, you must register it at <https://www.grizzly.com/secureforms/warranty-card>, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.



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