



MODEL G0990 CYCLONE DUST COLLECTOR OWNER'S MANUAL

(For models manufactured since 11/24)



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#JALW23225 PRINTED IN TAIWAN

V1.12.24

*****Keep for Future Reference*****



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

WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



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:		Manual before operation.	
Specification:		Safety glasses and respirator.	
Specification:		Correctly adjusted/setup and	
Weight:		power is connected to grounded circuit before starting.	
		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. ended.	
		10. Use of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	

Manufactured for Grizzly in Taiwan



Identification

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



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.

Main



Figure 1. Main controls and components.

- A. Filter Cleaning Handle:** Turns paddles inside canister filter, knocking dust off filter pleats to help maintain good air flow.
- B. Inlet Adapter:** Allows connection of two 4" ducts to main dust port inlet.

- C. Lock Handle:** Secures dust collection drum to lid when pressed down. Releases collection drum when lifted.
- D. Collection Drum Bag:** Collects wood chips and dust during operation.
- E. Collection Drum Inspection Window:** Allows operator to see when collection drum needs to be emptied.
- F. Collection Drum:** Secures collection drum bag and prevents bag from collapsing during operation.
- G. Filter Bag:** Collects fine dust from filter area.

Control Panel

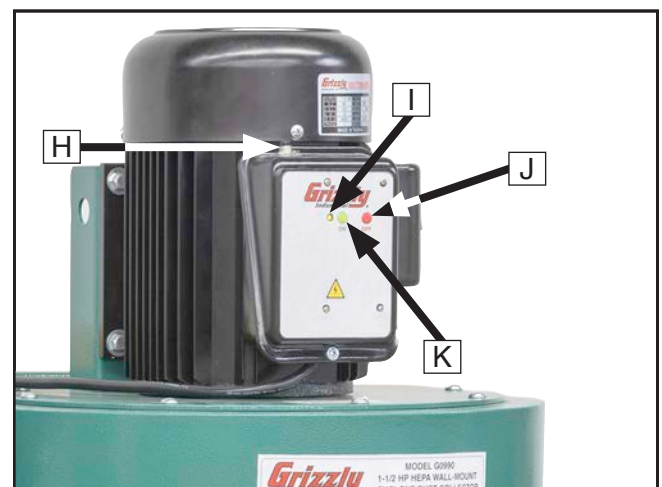


Figure 2. Control panel.

- H. Reset Button:** Allows machine to be restarted after thermal overload protection has tripped. To reset, press OFF button, wait a few minutes for motor to cool, then press reset button. If button does not stay depressed, allow motor to cool longer, then try again.
- I. Power Indicator:** Illuminates when machine is connected to power.
- J. OFF Button:** Turns motor **OFF**.
- K. ON Button:** Turns motor **ON**.



Remote Control

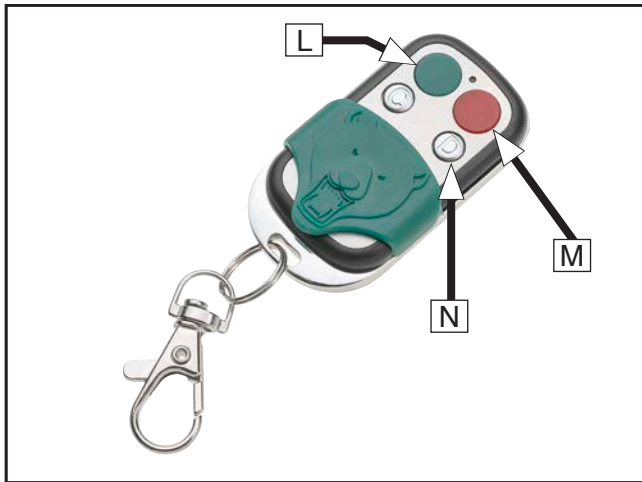


Figure 3. Remote control components.

L. ON Button: Turns motor **ON**.

M. OFF Button: Turns motor **OFF**.

N. D Button: Pairs remote with control panel.

Note: Remote control requires a 12V, A27 battery.

Note: The remote control operates on radio frequency and has a 75-ft. range. It does not need to be aimed at the control panel to operate.





MACHINE DATA SHEET

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

MODEL G0990 1-1/2 HP HEPA WALL-MOUNT CYCLONE DUST COLLECTOR

Product Dimensions:

Weight..... 153 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 54 x 26-1/2 x 62-1/2 in.
Footprint (Length x Width)..... 17 x 17 in.

Shipping Dimensions:

Carton #1

Type..... Cardboard Box
Content..... Machine
Weight..... 155 lbs.
Length x Width x Height..... 27 x 27 x 37 in.
Must Ship Upright..... Yes

Carton #2

Type..... Cardboard Box
Content..... Filter
Weight..... 18 lbs.
Length x Width x Height..... 19 x 18 x 36 in.
Must Ship Upright..... No

Electrical:

Power Requirement..... 110V, Single-Phase, 60 Hz
Full-Load Current Rating..... 15A
Minimum Circuit Size..... 20A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 72 in.
Power Cord Gauge..... 14 AWG
Plug Included..... Yes
Included Plug Type..... 5-15
Switch Type..... Control Panel w/Remote Control

Motors:

Main

Horsepower..... 1-1/2 HP
Phase..... Single-Phase
Amps..... 15A
Speed..... 3450 RPM
Type..... TEFC Capacitor-Start Induction
Power Transfer Direct
Bearings..... Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type..... External



Main Specifications:

Operation

Dust Collector Type.....	Two-Stage (Cyclone)
Approved Dust Types.....	Wood
Filter Type.....	HEPA
Airflow Performance.....	770 CFM @ 1.80 in. SP
Max Static Pressure (at 0 CFM).....	10.1 in.
Main Inlet Size.....	6 in.
Inlet Adapter Included.....	Yes
Number of Adapter Inlets.....	2
Adapter Inlet Size.....	4 in.
Machine Collection Capacity At One Time.....	2
Maximum Material Collection Capacity.....	20 Gallons

Filter Information

Number of Filters.....	1
Filtration Rating.....	0.3 Micron @ 99.97%
Filter Surface Area.....	38.75 sq. ft.

Bag Information

Number Of Filter Bags.....	1
Number Of Collection Drum Bags.....	1
Filter Bag Diameter.....	20 in.
Filter Bag Length.....	30 in.
Collection Drum Bag Diameter.....	39 in.
Collection Drum Bag Length.....	40 in.

Canister Information

Number of Canister Filters.....	1
Canister Filter Diameter.....	15 in.
Canister Filter Length.....	33 in.
Collection Drum Size.....	20 Gallons

Impeller Information

Impeller Type.....	Cast Aluminum
Impeller Size.....	13 in.
Impeller Blade Thickness.....	1/4 in.

Construction

Upper Bag.....	Clear Plastic (Filter)
Lower Bag.....	Clear Plastic (Drum)
Canister.....	Spun Bond Polyester
Caster.....	Plastic
Impeller.....	Aluminum
Paint Type/Finish.....	Powder Coated
Blower Housing.....	Steel
Body.....	Steel
Collection Drum.....	Steel

Other

Optional Stand.....	T34242
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Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	Machine ID Label
Sound Rating	73 dB



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



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 loose clothing, gloves, neckties, 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.

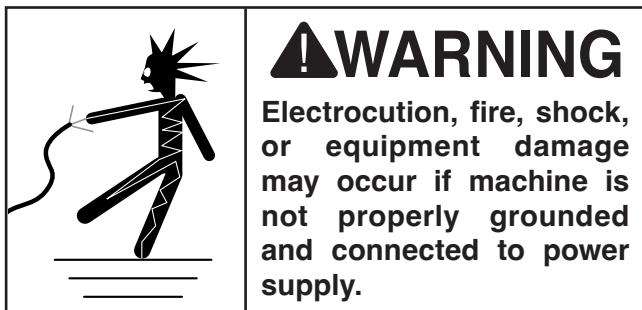
DUST ALLERGIES. Dust from certain woods will cause an allergic reaction. Make sure you know what type of wood dust you will be exposed to in case of an allergic reaction.



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 110V 15 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.

!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.

110V 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 110V, 115V, 120V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 20 Amps
Plug/Receptacle NEMA 5-15

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.*



Grounding & Plug 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!

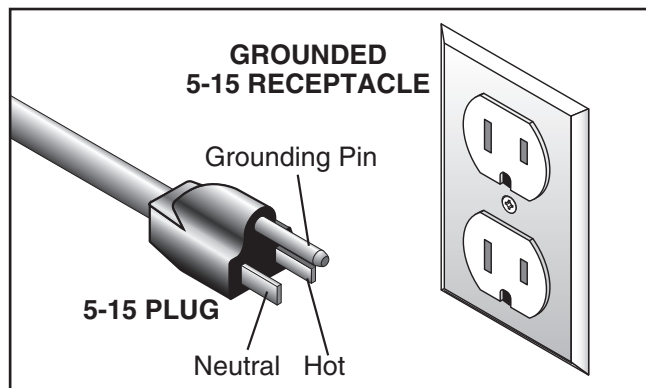
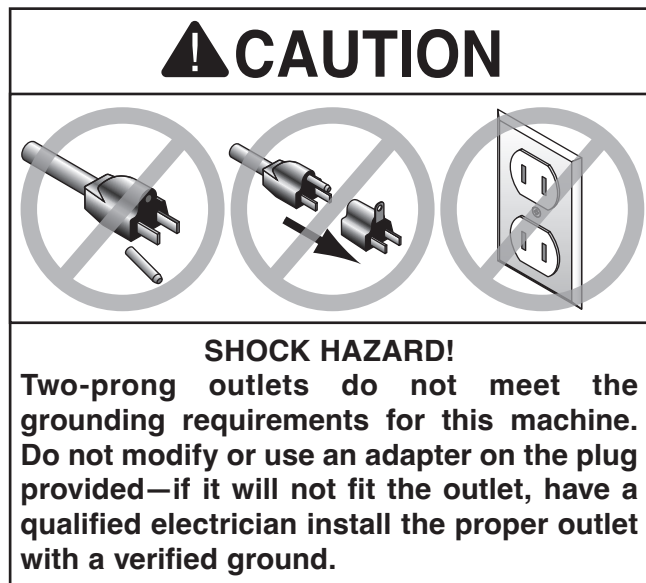


Figure 4. Typical 5-15 plug and receptacle.



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 machine 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.

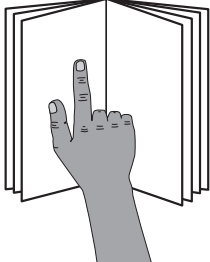
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

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 Size 14 AWG
Maximum Length (Shorter is Better).....50 ft.



SECTION 3: SETUP



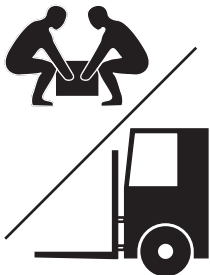
!WARNING

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.

Needed for Setup

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

Description	Qty
• Additional Person	1
• Safety Glasses (per person).....	1 Ea.
• Phillips Head Screwdriver #2.....	1
• Wrenches $\frac{7}{16}$ ", $\frac{1}{2}$ "	1 Ea.
• Hex Wrench $\frac{3}{16}$ "	1
• Lifting Straps (Rated for at least 250 lbs.)...	2
• Hoist (Rated for at least 250 lbs.).....	1

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.

Boxed Inventory (Figure 5)

	Qty
A. Impeller Housing	1
B. Band Clamp.....	1
C. Cyclone Funnel	1
D. Lock Handle	1
E. Collection Drum Lid.....	1
F. Impeller Housing Bracket	1
G. Wall Bracket	1
H. Lock Handle Guide Assemblies	2
I. Canister Filter Assembly	1
J. Filter Bag	1
K. Filter Bag Clamp.....	1
L. Collection Drum Bag	1
M. Collection Drum Handle	1
N. Collection Drum.....	1
O. Swivel Casters 2"	4
P. Filter Cleaning Handle.....	1
Q. Inlet Adapter	1
R. Vacuum Hose	1
S. Collection Drum Hose	1
T. Hose Clamps.....	2
U. Hardware (Not Shown)	
—Flange Bolts $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "	8
—Flange Nuts $\frac{5}{16}$ "-18	12
—Hex Nuts $\frac{5}{16}$ "-18.....	4
—Flat Washers $\frac{5}{16}$ ".....	4
—Phillips Head Screws $\frac{1}{4}$ "-20 x $\frac{5}{8}$ "	2
—Acorn Nuts $\frac{1}{4}$ "-20.....	2
—Flange Screw #10-24 x $\frac{3}{8}$ "	1
—Flange Bolts $\frac{5}{16}$ "-18 x $\frac{1}{2}$ "	4
—Hex Nuts $\frac{1}{4}$ "-20.....	3
—T-Bolts $\frac{1}{4}$ "-20 x $\frac{3}{4}$ "	3

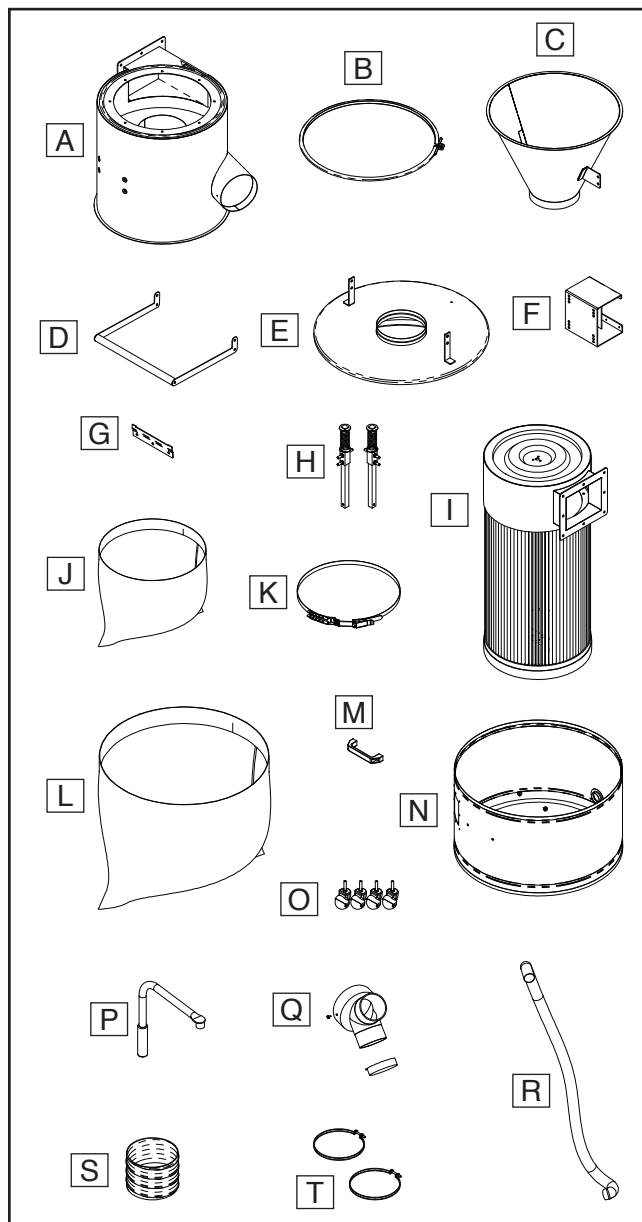


Figure 5. Boxed inventory.

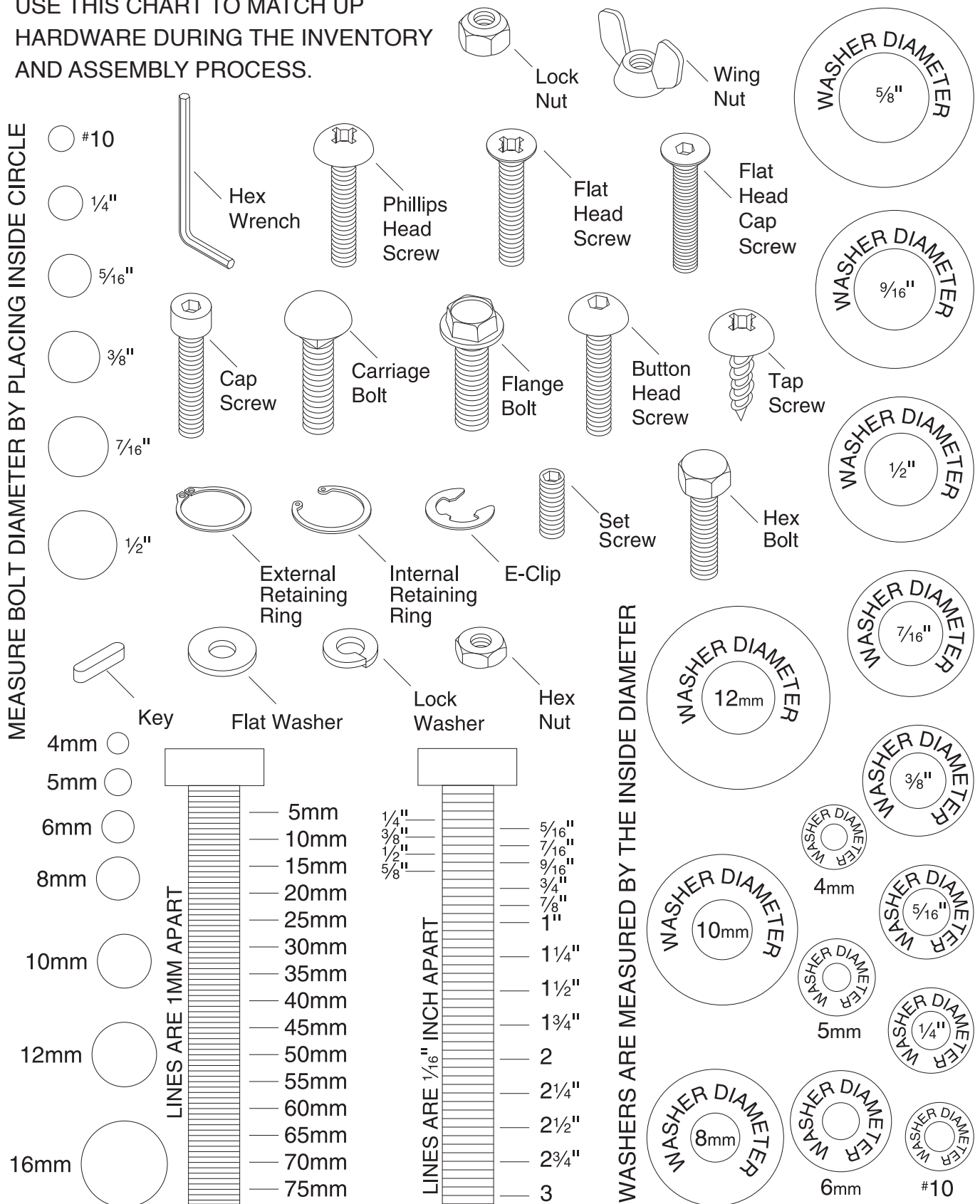
NOTICE

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.



Hardware Recognition Chart

USE THIS CHART TO MATCH UP
HARDWARE DURING THE INVENTORY
AND ASSEMBLY PROCESS.



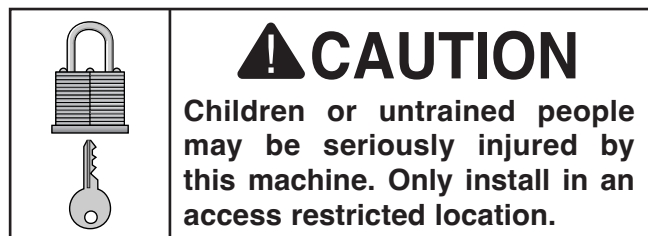
Site Considerations

Weight Load

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

Space Allocation

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



Physical Environment

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

Electrical Installation

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

Lighting

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

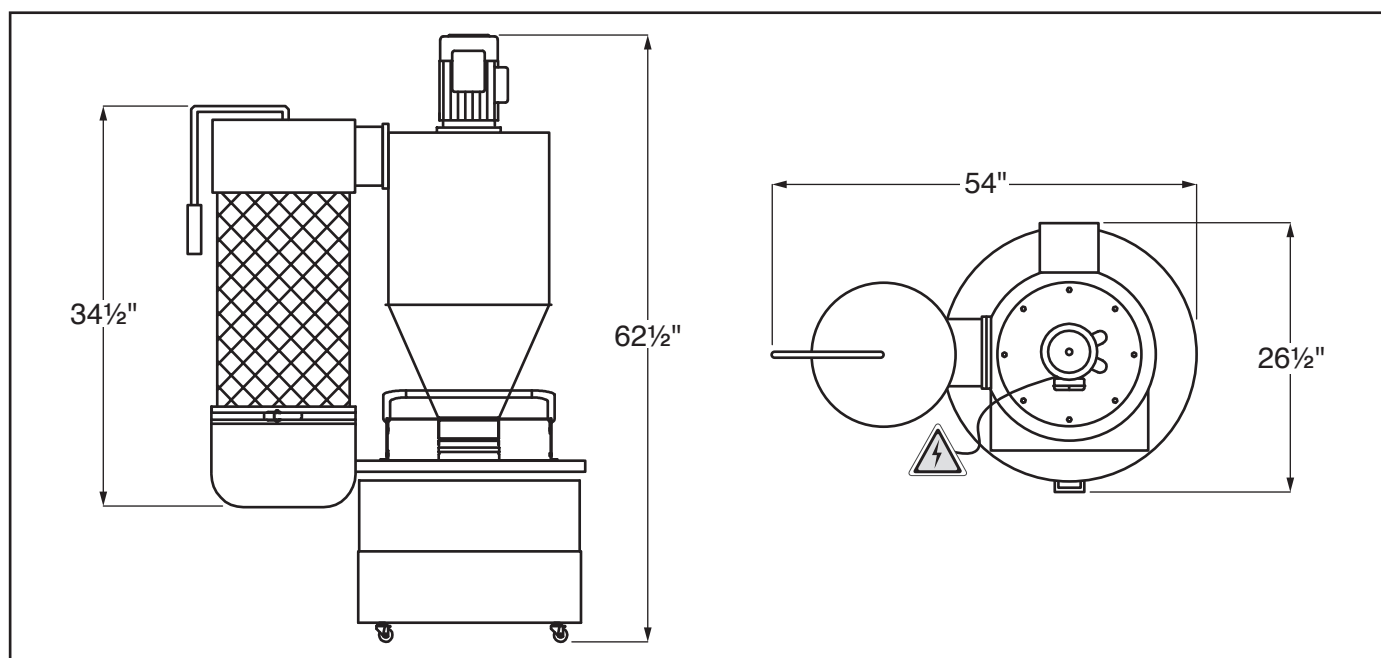


Figure 6. Minimum working clearances.



Wall Mounting

Before mounting, make sure you locate your dust collector away from any open flames or potential ignition sources, as fine dust can easily ignite.

If you are mounting your dust collector to a wood framed wall, see the instructions below.

If you are mounting your dust collector to a concrete or masonry wall, skip to **Page 18**.

Mounting Impeller Housing to Wood-Framed Wall

Items Needed	Qty
• Mounting Board 2" x 8" x 36"	1
• Level 4'	1
• Pencil.....	1
• Measuring Tape.....	1
• Lag Bolts $\frac{3}{8}$ " x 5" (Board/Wall)	8
• Flat Washers $\frac{3}{8}$ " (Board/Wall)	8
• Lag Bolts $\frac{5}{16}$ " x 2" (Machine/Board)	3
• Flat Washers $\frac{1}{2}$ " (Machine/Board)	3
• Lag Bolts $\frac{5}{16}$ " x 2"	3*
• Flat Washers $\frac{5}{16}$ ".....	3*
• Drill	1
• Drill Bit $\frac{1}{4}$ " (For $\frac{3}{8}$ " Pre-Drill)	1
• Drill Bit $\frac{1}{2}$ " (For $\frac{5}{16}$ " Pre-Drill).....	1
• Stud Finder.....	1

**These fasteners will be used to mount impeller housing during assembly.*

To mount impeller housing to wood-framed wall:

1. Attach mounting board to wall approximately 44" from floor using (8) $\frac{3}{8}$ " x 5" lag bolts and (8) $\frac{3}{8}$ " flat washers (see **Figure 7**).

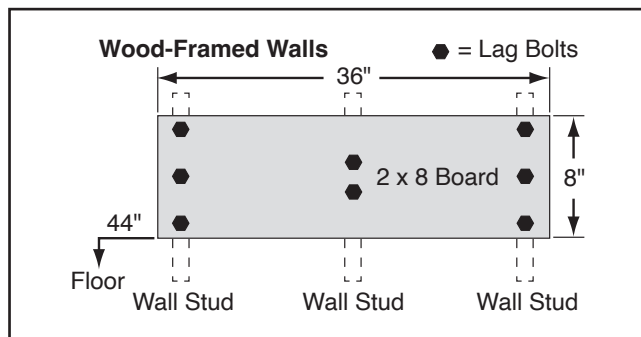


Figure 7. Wall mounting board layout.

2. Secure wall mounting bracket to mounting board with (3) $\frac{5}{16}$ " x 2" lag bolts and (3) $\frac{5}{16}$ " flat washers, aligning bracket with top of board (see **Figure 8**).

IMPORTANT: There MUST be 50" between floor and bottom of mounting bracket or collection drum and lifting handle assembly will not fit correctly under dust collector.

3. Insert top lip of impeller housing bracket into mounting bracket, use a pencil to mark holes for impeller housing bracket, then drill pilot holes (see **Figure 8**).

Note: Pilot holes should be about 4 $\frac{1}{4}$ " from holes in mounting bracket.

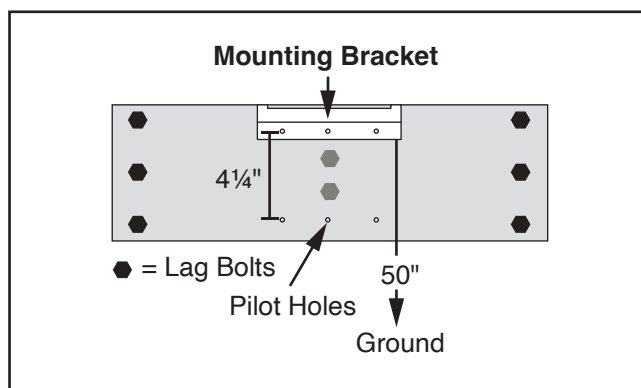


Figure 8. Mounting bracket secured to top of mounting board.

4. Proceed to **Assembly** on **Page 19**.



Mounting Impeller Housing to Concrete/Masonry

Items Needed	Qty
• Concrete Anchor Studs $\frac{5}{16}$ " x $2\frac{3}{4}$ "	3
• Hex Nuts $\frac{5}{16}$ "	3
• Flat Washers $\frac{5}{16}$ "	3
• Concrete Anchor Studs $\frac{3}{16}$ " x $2\frac{3}{4}$ "	3*
• Hex Nuts $\frac{3}{16}$ "	3*
• Flat Washers $\frac{3}{16}$ "	3*
• Hammer Drill	1
• Masonry Drill Bit $\frac{5}{16}$ "	1
• Masonry Drill Bit $\frac{3}{16}$ "	1
• Level 4'	1
• Pencil	1
• Measuring Tape	1

**These fasteners will be used to mount impeller housing during assembly.*

To mount motor/impeller housing to concrete or masonry wall:

1. Copy mounting hole layout pattern from wall mounting bracket to your wall, making sure there is 50" between mounting bracket and floor.

IMPORTANT: There MUST be 50" between floor and bottom of mounting bracket or collection drum and lifting handle assembly will not fit correctly under dust collector.

2. Mount (3) $\frac{5}{16}$ " x $2\frac{3}{4}$ " concrete anchor studs to wall in mounting hole locations.
3. Secure wall mounting bracket to anchor studs with (3) $\frac{5}{16}$ " hex nuts, and (3) $\frac{5}{16}$ " flat washers (see **Figure 9**).

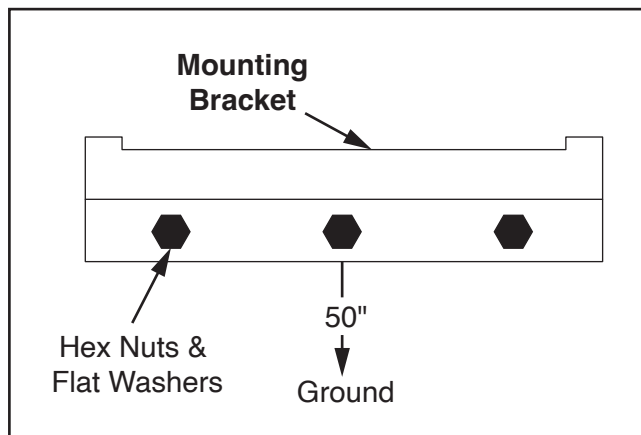


Figure 9. Wall bracket mounted to concrete wall.

4. Insert top lip of impeller housing bracket into mounting bracket, use a pencil to mark holes for impeller housing bracket, then drill pilot holes (see **Figure 10**).

Note: Holes should be about $4\frac{1}{4}$ " from holes in mounting bracket.

5. Mount (3) $\frac{3}{16}$ " x $2\frac{3}{4}$ " concrete anchor studs to wall in mounting hole locations (see **Figure 10**).

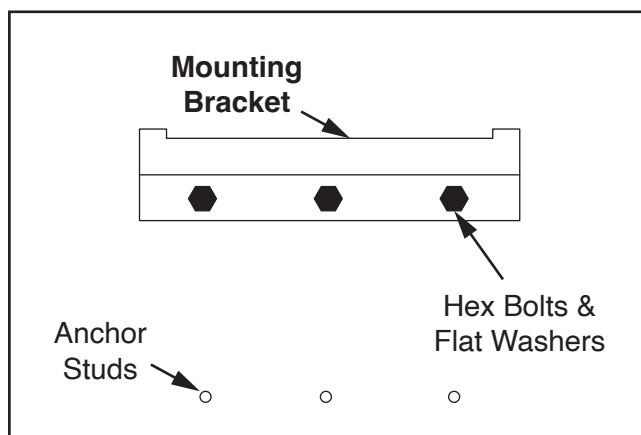


Figure 10. Anchor studs mounted to wall.

6. Proceed to **Assembly** on **Page 19**.



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 dust collector:

1. Attach impeller housing bracket to back of impeller housing with (4) $\frac{5}{16}$ "-18 x $\frac{1}{2}$ " flange bolts (see **Figure 11**).

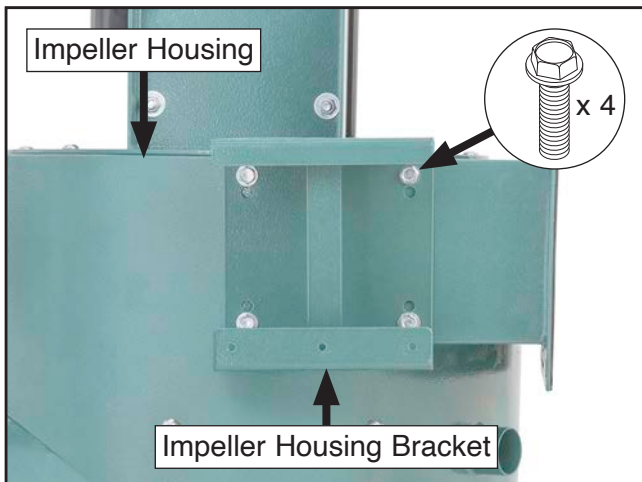
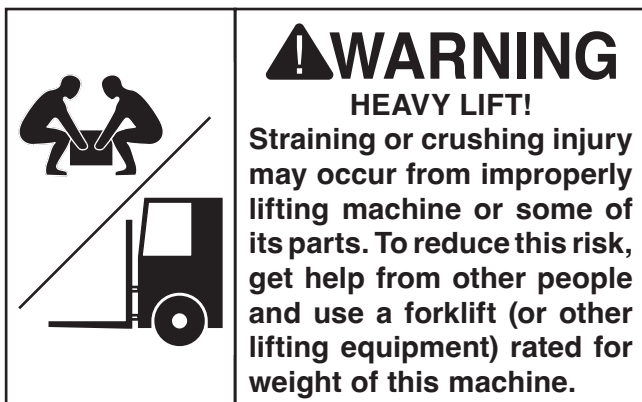


Figure 11. Attaching impeller housing bracket to impeller housing.



2. With help from an assistant, or a hoist, lift impeller housing and rest top lip of impeller housing bracket into wall bracket.

3. Secure impeller housing to wall.

- For securing to wood framed walls, thread (3) $\frac{3}{16}$ " x 2" lag bolts and (3) $\frac{3}{16}$ " flat washers into bottom three holes of impeller housing bracket, then tighten until snug.
- For securing to concrete masonry walls, feed bottom three holes of impeller housing bracket onto concrete anchor studs set on **Page 18**, then thread (3) $\frac{3}{16}$ " flat washers and (3) $\frac{3}{16}$ " hex nuts onto anchor studs and tighten until snug.

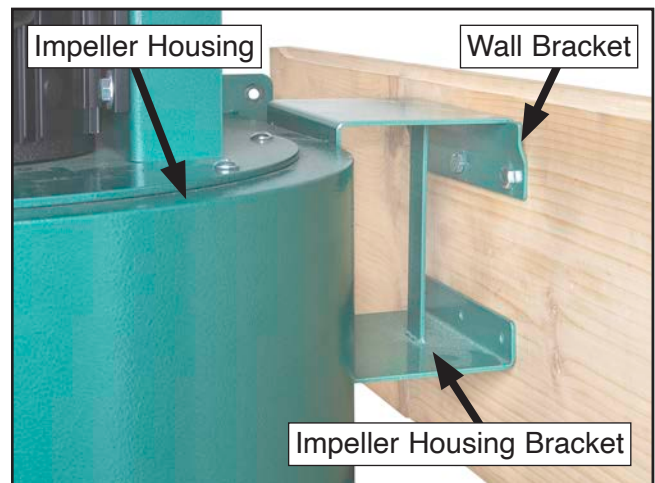


Figure 12. Mounting impeller housing to wood framed wall.

4. Secure cyclone funnel to bottom of impeller housing with band clamp (see **Figure 13**).

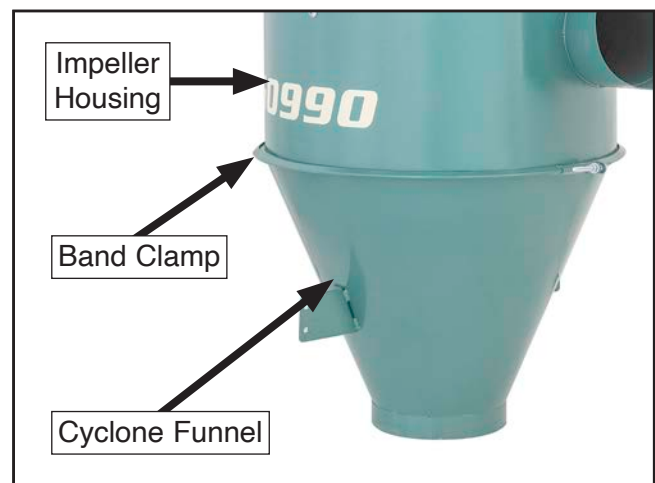


Figure 13. Attaching cyclone funnel to impeller housing.



5. Mount filter cleaning handle to canister filter assembly using pre-installed hex bolt, as shown in **Figure 14**.



Figure 14. Filter cleaning handle attached to canister filter.

6. With help from an assistant, or hoist, lift canister filter assembly and secure to impeller housing using (8) $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " flange bolts and (8) $\frac{5}{16}$ "-18 flange nuts (see **Figure 15**).

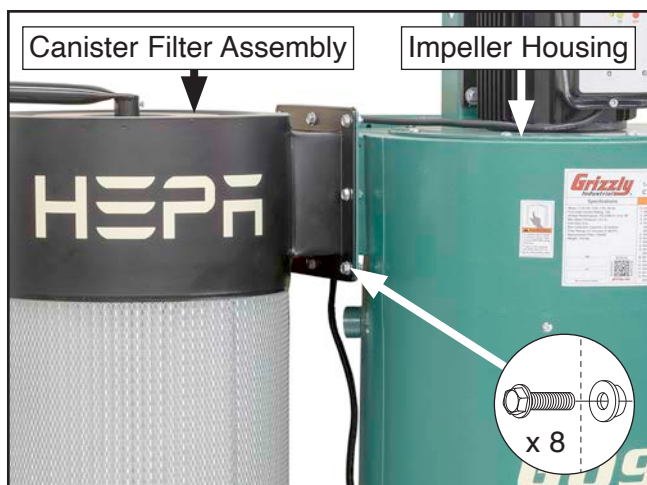


Figure 15. Canister filter assembly attached to impeller housing.

7. Attach (1) filter bag to bottom of canister filter, then secure in place with filter bag clamp, as shown in **Figure 16**.



Figure 16. Filter bag attached to canister filter.

8. Attach vacuum hose to impeller housing and secure with pre-installed hose clamp, as shown in **Figure 17**.

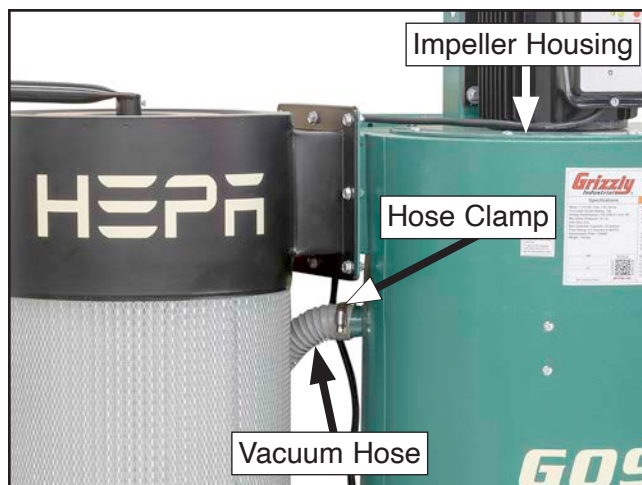


Figure 17. Vacuum hose attached to impeller housing.



9. Attach collection drum hose to bottom of cyclone funnel using (1) hose clamp, as shown in **Figure 18**.

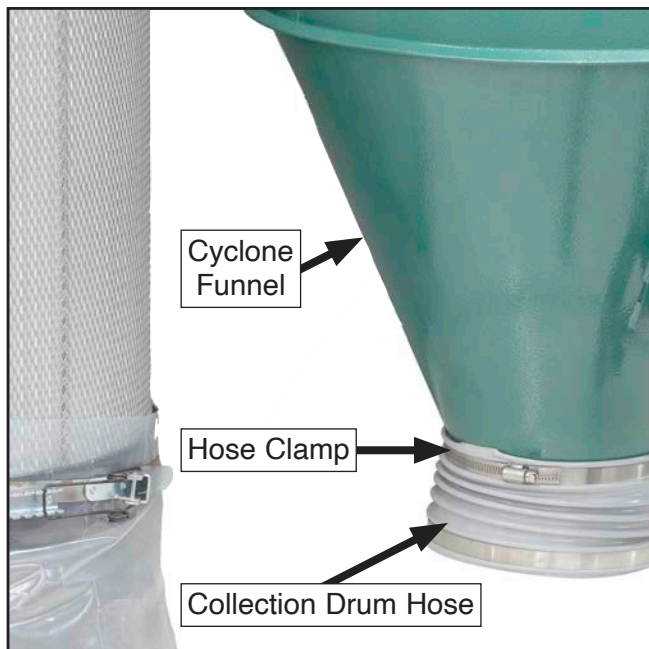


Figure 18. Attaching collection drum hose to cyclone funnel.

10. Attach (4) swivel casters to collection drum using (4) $\frac{5}{16}$ "-18 hex nuts and (4) $\frac{5}{16}$ " flat washers (see **Figure 19**).
11. Attach collection drum handle to collection drum with (2) $\frac{1}{4}$ "-20 x $\frac{5}{8}$ " Phillips head screws and (2) $\frac{1}{4}$ "-20 acorn nuts (see **Figure 19**).



Figure 19. Casters and collection drum handle attached to collection drum.

12. Place collection drum bag into collection drum and roll top of bag over top edge of collection drum, as shown in **Figure 20**.



Figure 20. Collection drum bag installed.

13. Install (2) lock handle guide assemblies to collection drum lid using (4) $\frac{5}{16}$ "-18 flange nuts, as shown in **Figure 21**.

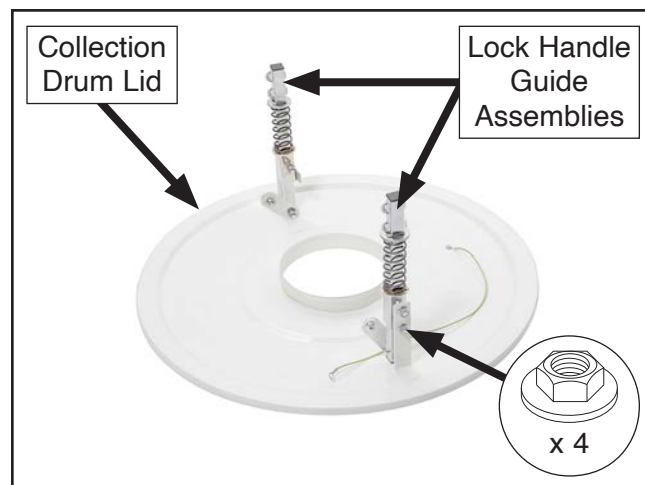


Figure 21. Lock handle guide assemblies installed on collection drum lid.



14. Install lock handle to collection drum lid assembly using (4) pre-installed lock nuts, as shown in **Figure 22**.

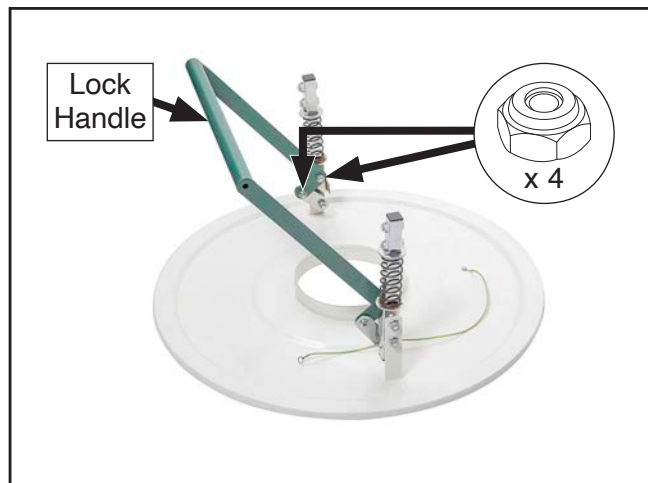


Figure 22. Lock handle attached to collection drum lid.

15. Place collection drum lid and lock handle assembly on collection drum, then roll collection drum directly below cyclone funnel.

16. Connect collection drum hose to collection drum lid assembly and secure with (1) hose clamp (see **Figure 23**).

17. Fasten collection drum lid assembly to cyclone funnel using (4) pre-installed hex bolts, hex nuts, and flat washers, as shown in **Figure 23**.

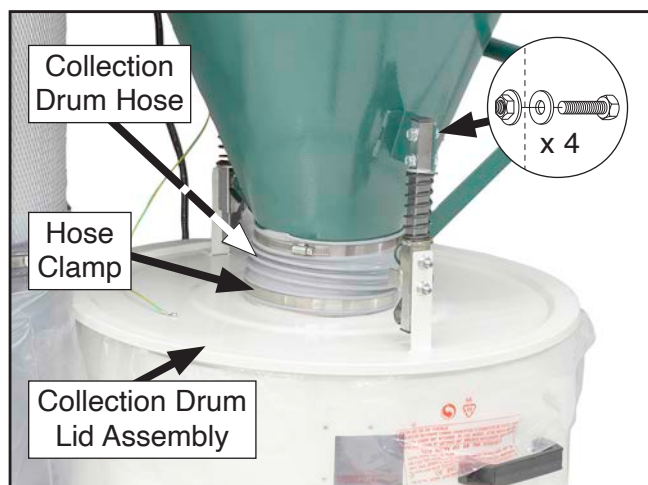


Figure 23. Collection lid and lock handle assembly attached to cyclone funnel.

18. Connect vacuum hose to collection drum and tighten pre-installed hose clamp to secure, as shown in **Figure 24**.

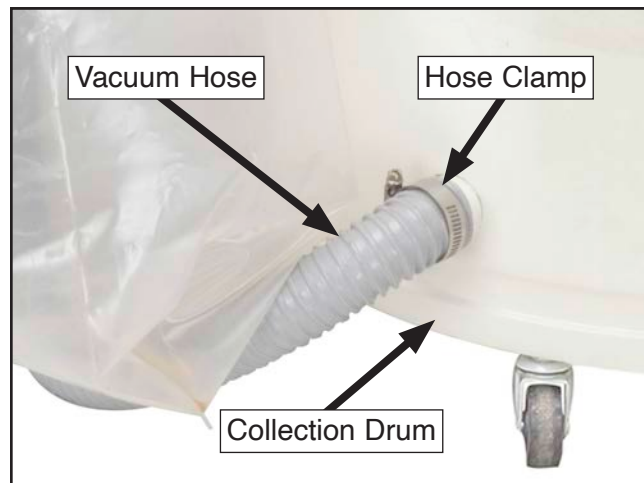


Figure 24. Vacuum hose connected to collection drum.

19. Attach inlet adapter to intake port using (1) #10-24 x $\frac{3}{8}$ " flange screw (see **Figure 25**).

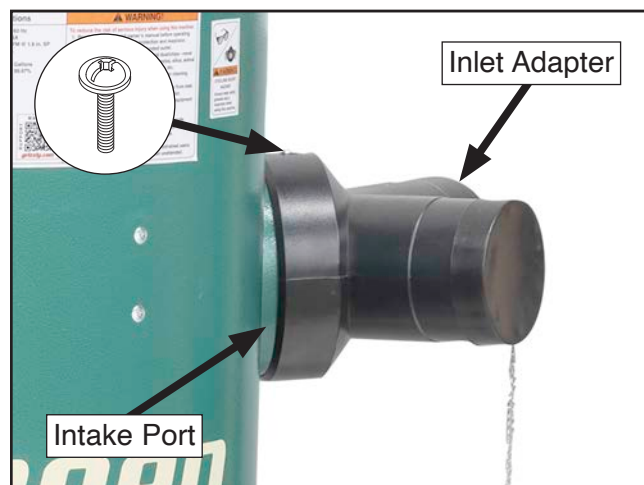


Figure 25. Inlet adapter attached to intake port.



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 motor powers up and runs correctly, and
2) the remote control works correctly.

⚠ 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.
2. Connect machine to dust-collection system or place covers over inlet adapter ports.

IMPORTANT: DO NOT operate dust collector without first connecting it to a dust-collection system or covering an inlet adapter port. Otherwise, lack of airflow resistance will cause motor to operate at full amperage load, which could trip your circuit breaker or blow a fuse.

3. Connect machine to power.

4. Standing away from intake port, press ON button (see **Figure 26**) to turn machine **ON**. Verify motor starts up and runs smoothly without any problems or unusual noises.

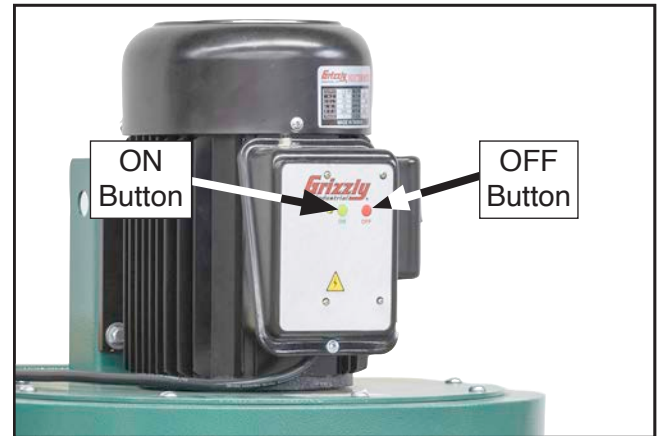


Figure 26. Location of ON and OFF buttons.

5. Press OFF button to turn machine **OFF**.
6. Press green remote button (see **Figure 27**) to turn machine **ON**. Verify motor starts up and runs smoothly without any problems or unusual noises.

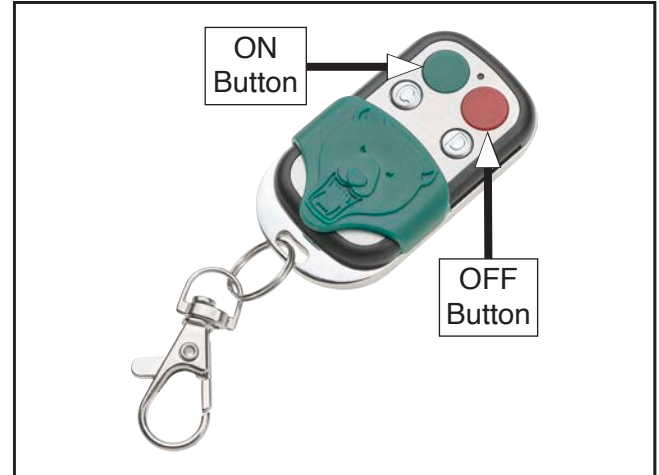


Figure 27. Location of remote control buttons.

7. Press red remote button to turn machine **OFF**.
 - If machine *does not* turn **OFF** with remote control, press OFF button on control box to turn machine **OFF**. Refer to **Troubleshooting** on **Page 41** of manual to correct any problems with remote control unit before further using it with machine.



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 build up by grounding all dust collection lines.

The Model G0990 works quite well as a point-of-use dust collector, or for collecting dust from up to two machines simultaneously.

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 28. Examples of plastic ducting components.



Metal Duct

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

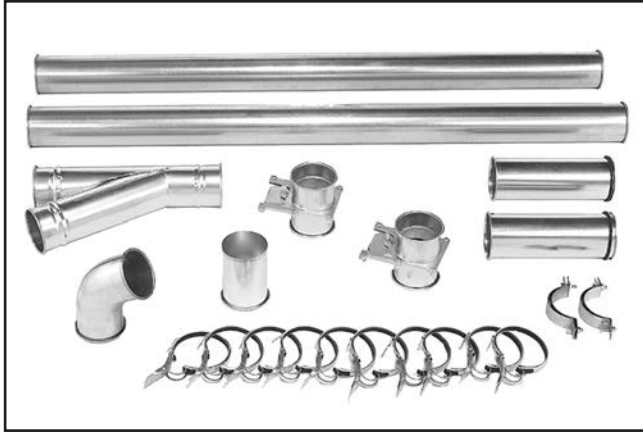


Figure 29. Examples of metal pipe and components.

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

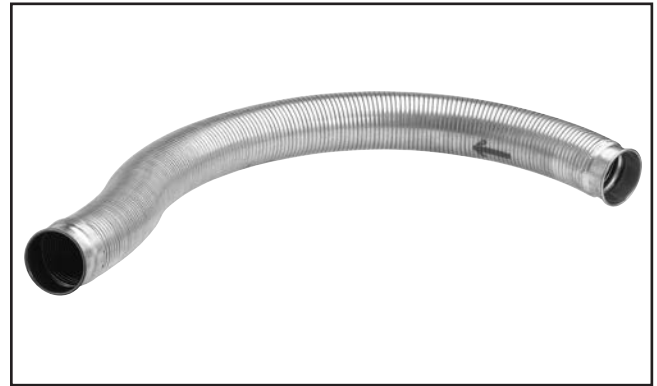


Figure 30. Example of flexible metal duct.

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

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



System Design

Decide Who Will Design

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

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

Sketch Your Shop Layout

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

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.

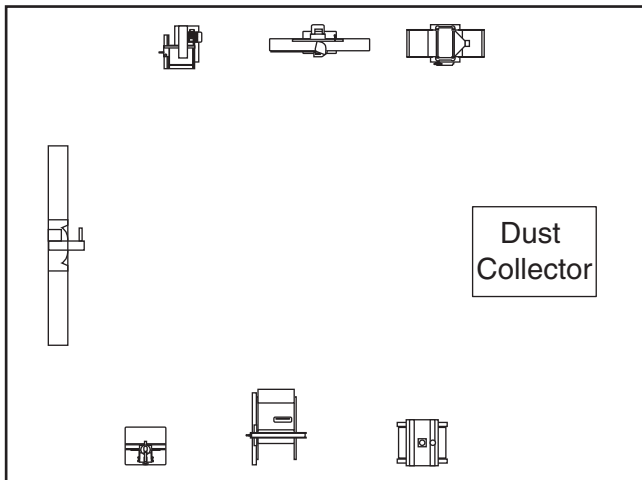


Figure 31. Basic sketch of shop layout.

Sketch a Basic Duct Layout

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

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

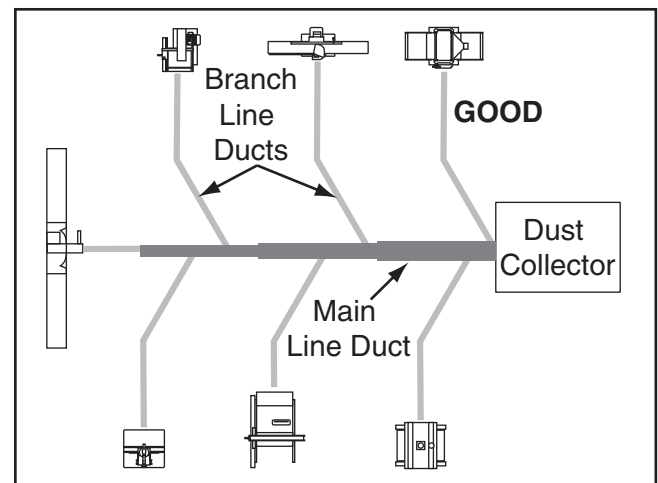


Figure 32. Efficient duct layout.

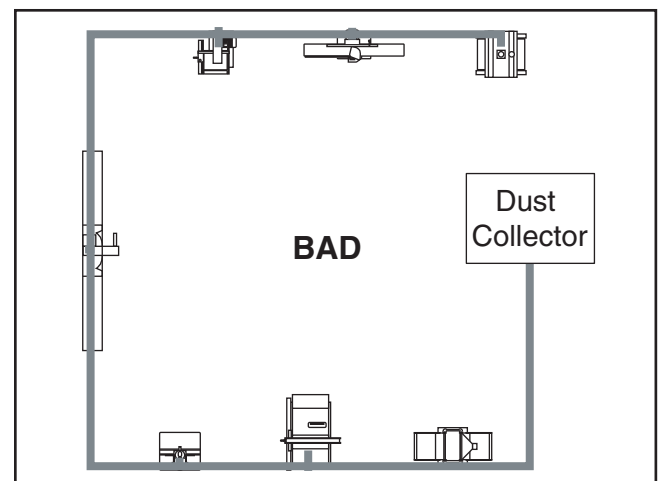


Figure 33. Inefficient duct layout.



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

Determine Required CFMs

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

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

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

Figure 34. 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 35. Dust port size and quantity per average machine.

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

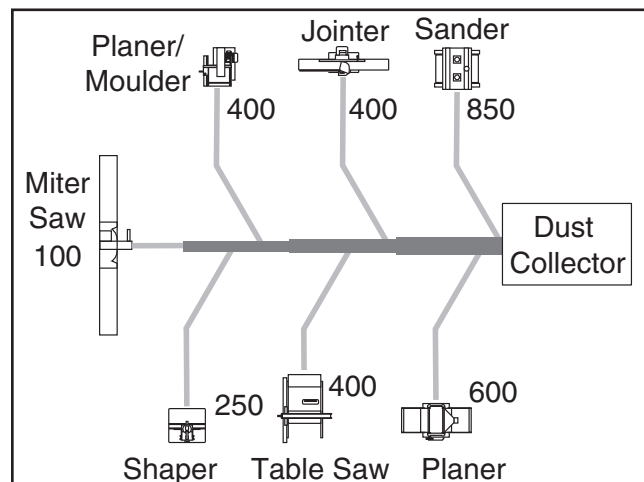


Figure 36. CFM requirements labeled for each machine.



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.

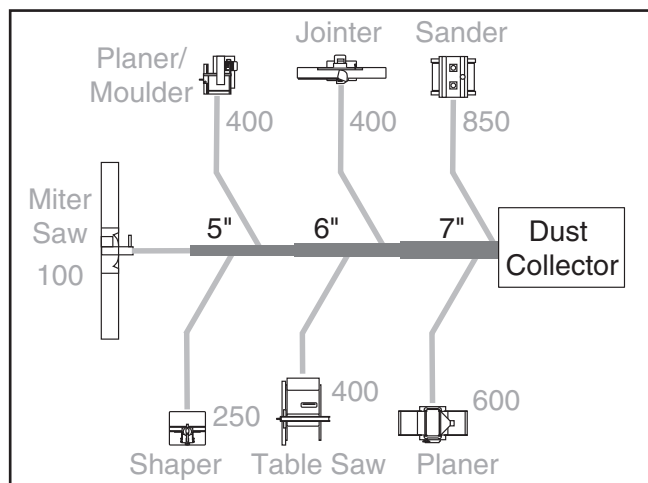


Figure 37. Main line size labeled on sketch.

Determining Branch Line Duct Size

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

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

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

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

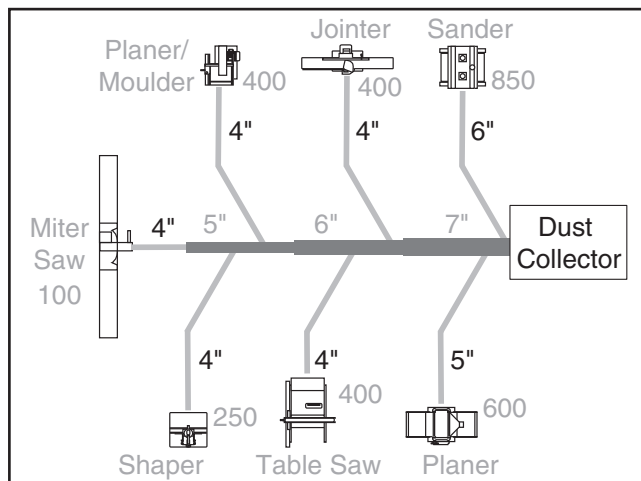


Figure 38. Branch line duct sizes labeled.

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

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

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

Figure 39. Sizing chart for multiple machines on the same branch line.



Planning Drop Downs

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

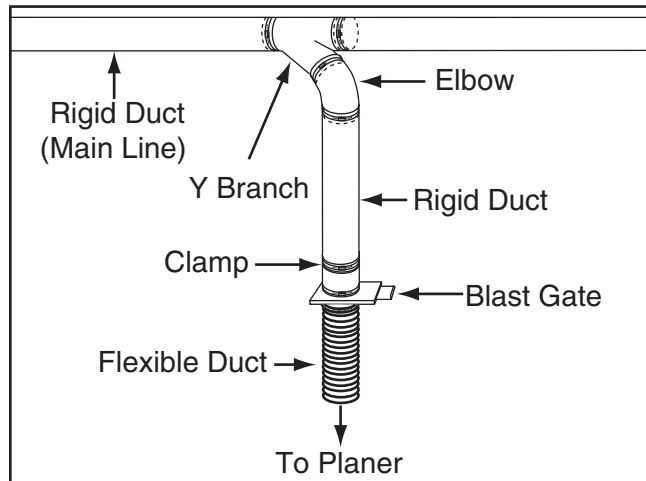


Figure 40. Drop down setup.

Calculating Duct Resistance

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

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

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

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

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

Figure 41. Static pressure loss charts.

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

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

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



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

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

Figure 42. 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 do not 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	.....	1.000
Total Static Pressure Loss	.....	4.444

Figure 43. 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 44** for your dust collector.

Example: A typical **Data Sheet Performance Curve** is illustrated in **Figure 44**. Find 4.4 on the Static Pressure axis (the amount of total static pressure loss calculated in **Figure 43**), 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.

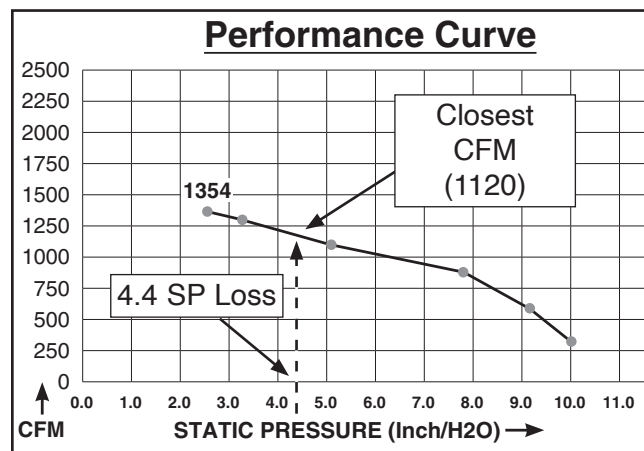


Figure 44. Example CFM for static pressure loss of line connected to a dust collector & router.

- 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 35** 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.



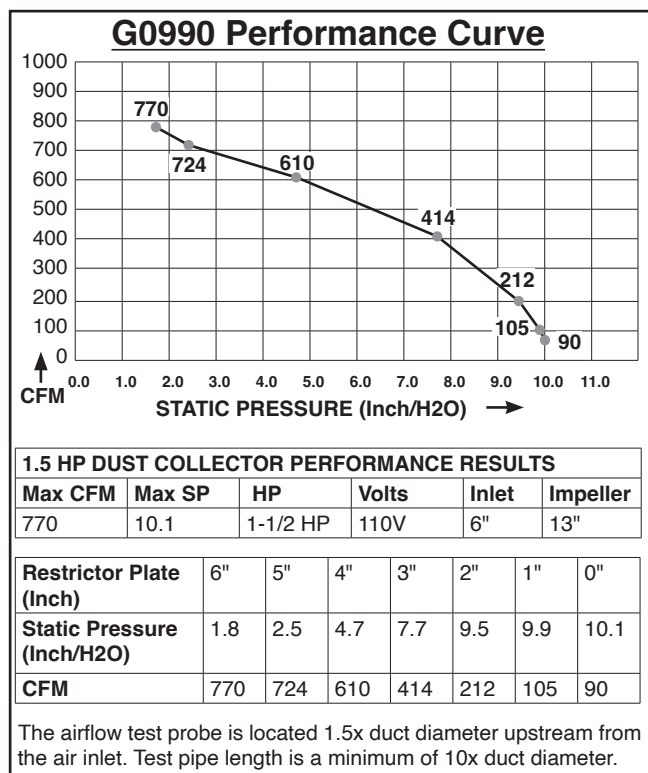


Figure 45. G0990 performance curve table and data.

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

Figure 46. Example materials list.



System Grounding

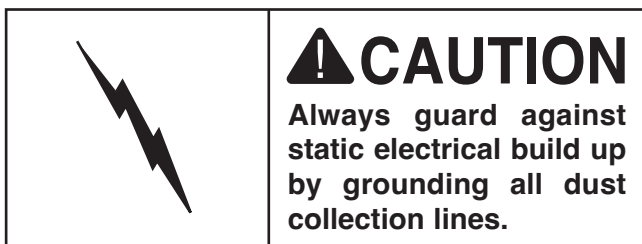
Since plastic hose is abundant, relatively inexpensive, easily assembled and air tight, it is a very popular material for conveying dust from woodworking machines to the dust collector.

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

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

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

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



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.

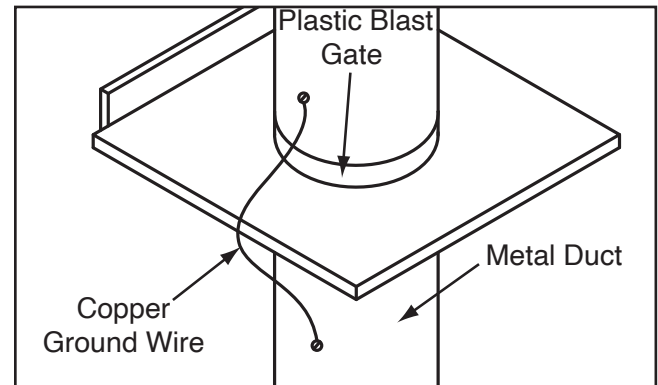


Figure 47. Ground jumper wire when using plastic blast gates and metal duct.

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

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

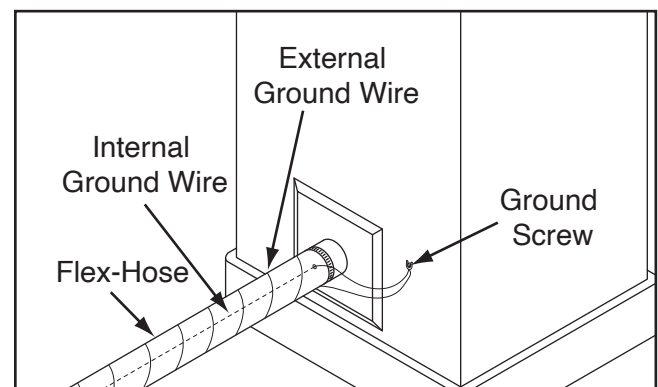


Figure 48. Flex-hose grounded to machine.

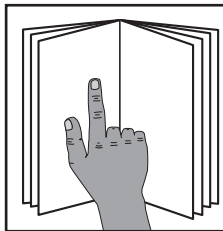


SECTION 5: OPERATIONS

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.

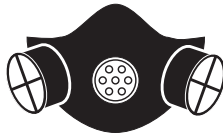


!WARNING

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

!WARNING

To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.



NOTICE

If you are not experienced with this type of machine, **WE STRONGLY RECOMMEND** that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

General 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 lined with a plastic bag.



Figure 49. Dust collector operation.

The remaining fine dust travels past the impeller and is then caught by a canister filter and deposited in the plastic collection bag below. The spun bond polyester filter catches 99.97% of particles up to 0.3 micron in size, and is pleated to provide maximum surface area for efficient airflow.

To maintain CFM during heavy dust collection operations, oscillate the filter cleaning handle periodically to brush caked on dust into the plastic collection bag.



Pairing Remote Control

The Model G0990 is equipped with a remote control receiver unit that can be programmed to operate (5) separate controllers.

Items Needed	Qty
Phillips Head Screwdriver #2	1
Small Wooden Dowel	1

⚠ WARNING

Avoid touching electrified parts inside junction box while performing the following procedure! Touching electrified parts will result in serious personal injury such as severe burns, electrocution, or death. Use a wood dowel or other non-conducting item to push button on receiver.

To pair remote control:

1. Remove flange screw from control box cover, then carefully open control box.
2. Press and hold CODE SAVE button (see **Figure 50**) on circuit board with wooden dowel until it beeps once.

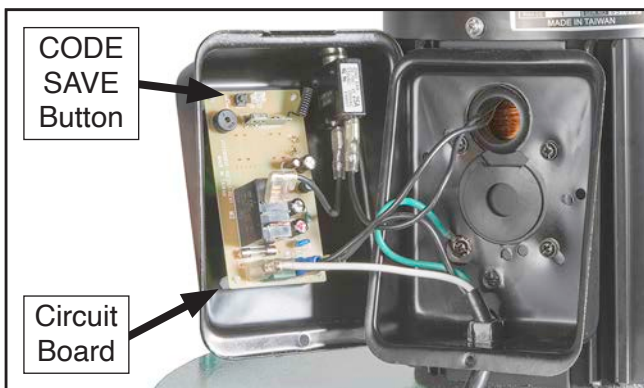


Figure 50. Location of circuit board and CODE SAVE button.

3. Press and hold D button (see **Figure 51**) on remote control until it beeps twice. Pairing is now complete.



Figure 51. Location of D button on remote control.

4. Attach control box cover and secure with flange screw removed in **Step 1**.

Replacing Remote Control Battery

The remote control is powered by a 12V type A27 battery. If the receiver stops responding to the remote control, replace the battery as the first course of action.

Items Needed	Qty
Phillips Head Screwdriver #00	1
A27 12V Battery	1

To replace remote control battery:

1. Turn remote control face down, remove (3) Phillips head screws, then remove battery cover.
2. Replace battery, then re-assemble remote control.



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.

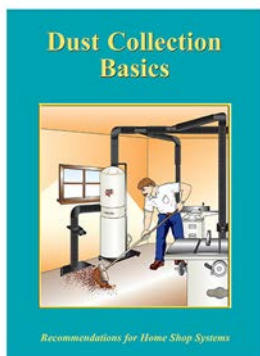


Figure 52. W1050 Dust Collection Basics Book.

H7217—6" x 5' Rigid Flex Hose

H7218—7" x 5' Rigid Flex Hose

H7219—8" x 5' Rigid Flex Hose

These rigid flex hoses with rolled collars provide just enough flexibility to make difficult connections while still keeping the inside wall smooth.

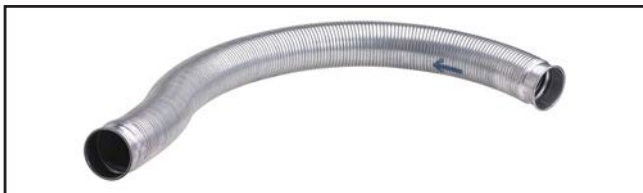


Figure 53. Rigid flex hose.

G6177—4" Metal Blast Gate

G7340—5" Metal Blast Gate

G7358—6" Metal Blast Gate

H5234—7" Metal Blast Gate

H5249—8" Metal Blast Gate

Control air flow 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.

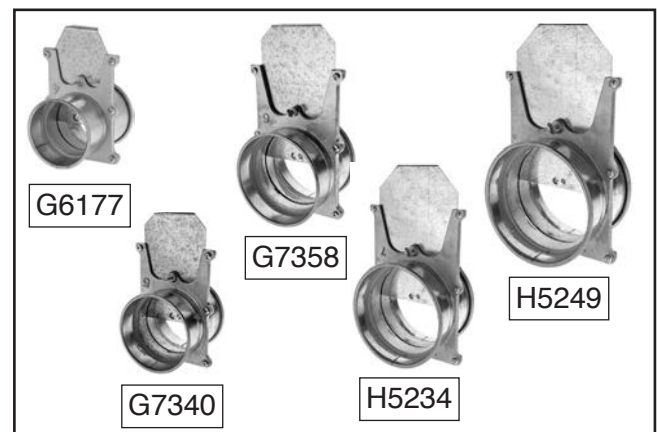


Figure 54. Metal blast gate assortment.

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".

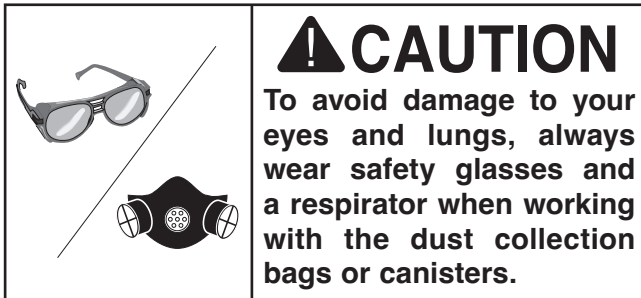
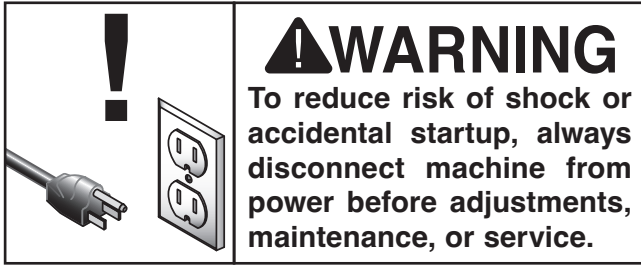


Figure 55. W1039 Universal Adapter.

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, filter 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.

Cleaning Canister Filter

This dust collector uses a manual filter brush to remove dust buildup and debris from the filter pleats. This filter brush is controlled by the filter cleaning handle shown in **Figure 56**.



Figure 56. Location of filter cleaning handle.

To clean filter:

1. Oscillate filter cleaning handle around canister filter 3–4 times to knock all dust from filter.

Note: If cleaning canister filter does not return CFM performance to machine, then filter may need to be replaced.



Removing/Replacing Collection Drum Bag

Dispose of the collection drum bag when dust fills it $\frac{3}{4}$ full. Replace the bag if it develops a leak or becomes damaged.

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

Items Needed	Qty
Collection Drum Bag T27974	1
Disposable Gloves	As Needed

To remove/replace collection drum bag:

1. DISCONNECT MACHINE FROM POWER!
2. Press lock handle down to lift collection drum lid from collection drum (see **Figure 57**).



Figure 57. Collection drum bag components.

3. Roll drum clear of machine.
4. Lift collection bag out of drum, firmly tie closed, then dispose of contents.
5. Place new collection drum bag inside collection drum, and fold excess bag length over top edge of drum.
6. Roll collection drum to front of machine and lift lock handle to lower collection drum lid onto collection drum.

Removing/Replacing Filter Bag

Remove and replace the filter bag when it is about $\frac{1}{2}$ full.

Item Needed	Qty
Filter Bag T27900	1
Disposable Gloves	As Needed

To remove/replace filter bag:

1. DISCONNECT MACHINE FROM POWER!
2. Release bag clamp from around bottom of canister filter, then remove filter bag (see **Figure 58**).

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

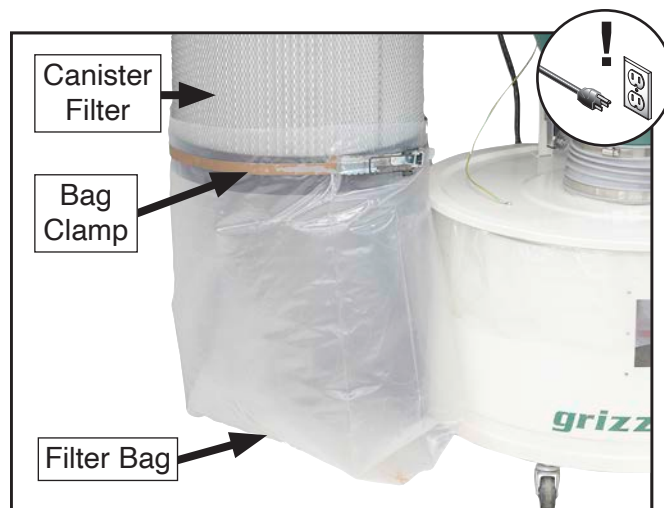


Figure 58. Filter bag attached to canister filter.

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



Removing/Replacing Canister Filter

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

Item Needed	Qty
An Assistant	1
Combination Wrenches 12mm	2
Flashlight	1
Hex Wrench 5mm.....	1
Power Drill w/Bit	1

To remove/replace canister filter:

1. Turn filter cleaning handle several times to clean dust from filter (see **Figure 59**).



Figure 59. Location of filter cleaning handle.

2. DISCONNECT MACHINE FROM POWER!
3. Release bag clamp from canister filter and remove filter bag (see **Figure 60**).



Figure 60. Location of filter bag and bag clamp.

4. Remove (8) flange bolts and (8) flange nuts, then with assistance remove filter assembly (see **Figure 61**).

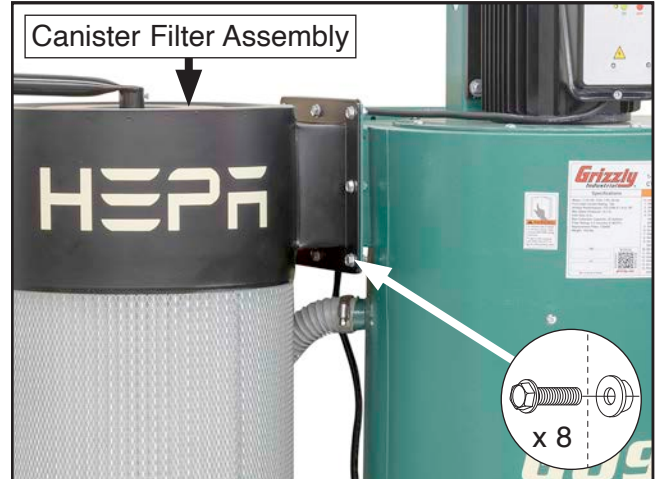


Figure 61. Location of canister filter assembly fasteners.

5. Remove filter cleaning handle (see **Figure 62**).
6. Loosen (6) flange bolts and remove canister filter cover from canister filter (see **Figure 62**).

Note: *DO NOT* completely remove flange bolts.



Figure 62. Loosening flange bolts on canister filter cover.



7. Remove (2) M6-1 x 16 cap screws and paddle handle spindle from filter assembly, as shown in **Figure 63**.

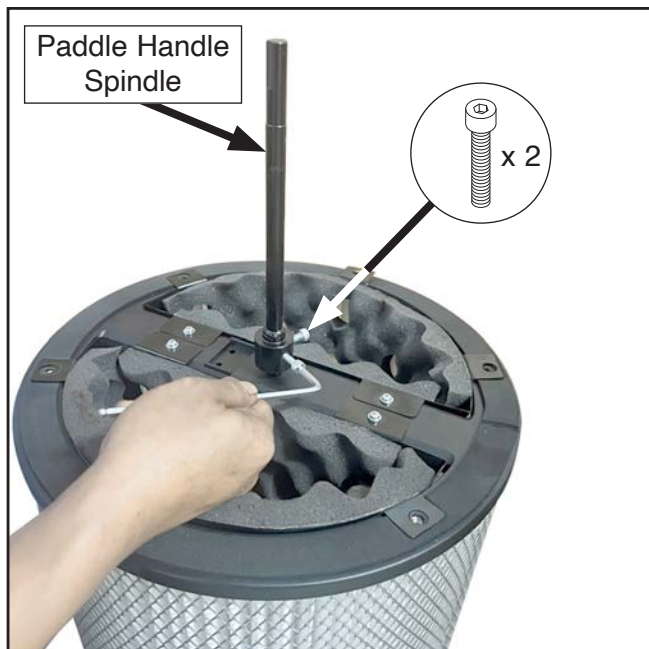


Figure 63. Removing paddle handle spindle.

8. Remove (4) M5-.8 X 10 Phillips head screws from filter assembly (see **Figure 64**).



Figure 64. Removing sound dampening wedge fasteners.

9. Remove sound dampening wedges from old canister filter (see **Figure 65**), then place sound dampening wedges in replacement canister filter.

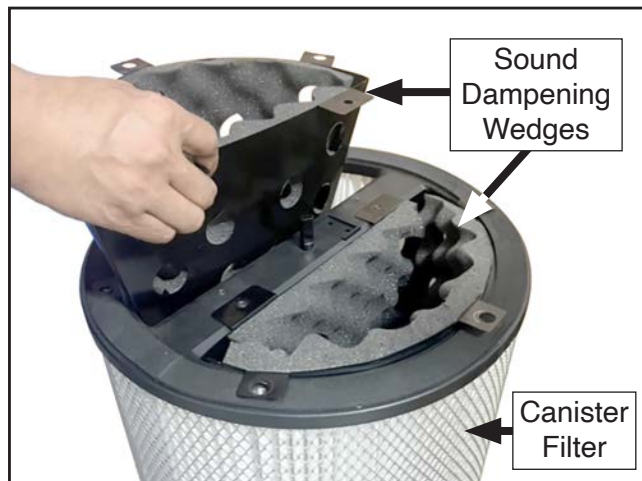


Figure 65. Removing sound dampening wedges.

10. Secure sound dampening wedges to replacement filter with fasteners removed in **Step 8**.
11. Attach paddle handle spindle to replacement filter with fasteners removed in **Step 7**.

IMPORTANT: When assembling any components with a gasket, tighten fasteners in an alternating star pattern (see **Figure 66**) to ensure an even seal and reduce the risk of air leaks.

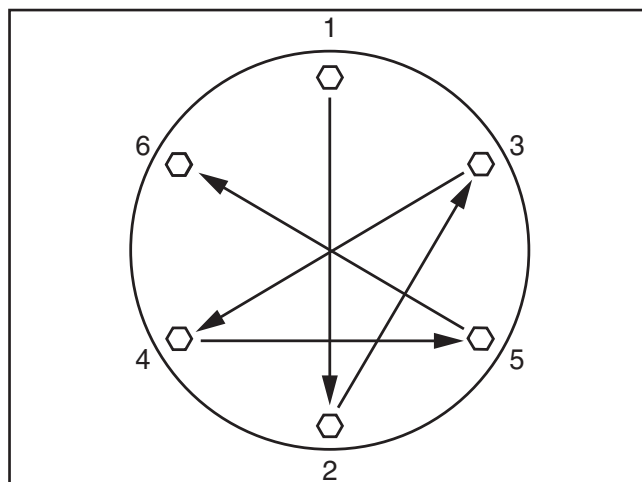


Figure 66. Alternating star pattern for tightening components assembled with a gasket.



12. Place canister filter cover on replacement filter, then tighten flange bolts in an alternating star pattern (see **Figure 67**).



Figure 67. Tightening flange bolts on canister filter cover.

13. With help from an assistant, or power lifting equipment, lift canister filter assembly and secure to impeller housing using fasteners removed in **Step 4** (see **Figure 68**).

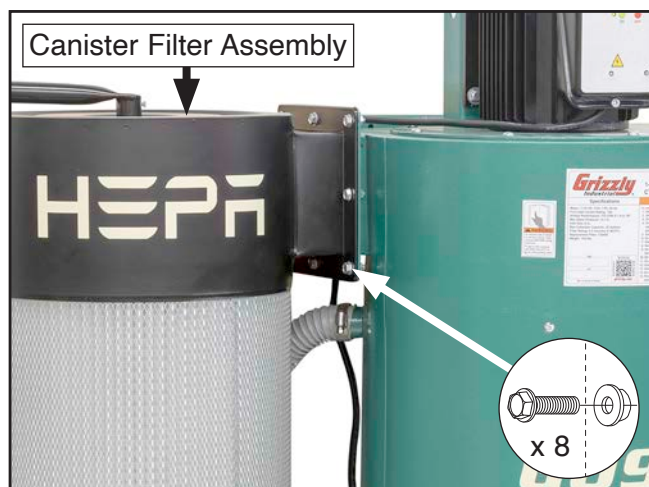


Figure 68. Canister filter assembly attached to impeller housing.

14. Attach filter cleaning handle removed in **Step 5** (see **Figure 69**).



Figure 69. Location of filter cleaning handle.

15. Attach new filter bag to bottom of canister filter and secure with clamp (see **Figure 70**).



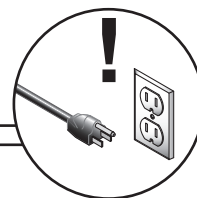
Figure 70. Filter bag attached to canister filter.



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 immediately after startup.	<ol style="list-style-type: none"> 1. Machine circuit breaker tripped or at fault. 2. Blown fuse. 3. Incorrect power supply voltage or circuit size. 4. Plug/receptacle at fault/wired incorrectly. 5. Remote control not working. 6. Remote receiver at fault. 7. Power supply circuit breaker tripped or fuse blown. 8. Motor wires connected incorrectly. 9. Start capacitor at fault. 10. Wiring broken, disconnected, or corroded. 11. ON/OFF switch at fault. 12. Circuit breaker switch at fault. 13. Circuit board at fault. 14. Motor or motor bearings at fault. 	<ol style="list-style-type: none"> 1. Reset circuit breaker on switch. 2. Replace fuse/ensure no shorts. 3. Ensure correct power supply voltage and circuit size. 4. Test for good contacts; correct the wiring. 5. Replace battery (Page 34); stay in signal range. 6. Replace. 7. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. 8. Correct motor wiring connections (Page 43). 9. Test/replace if at fault. 10. Fix broken wires or disconnected/corroded connections. 11. Replace switch. 12. Replace circuit breaker switch. 13. Inspect/replace if at fault. 14. Replace motor.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Dust-collection ducting problem. 2. Filter bags at fault. 3. Canister filter clogged/at fault. 4. Motor circuit board at fault. 5. Dust collector too far from machine or undersized for dust-collection system. 6. Motor overheated, tripping machine circuit breaker. 7. Run capacitor at fault. 8. Extension cord too long. 9. Centrifugal switch/contact points at fault. 10. Motor or motor bearings at fault. 	<ol style="list-style-type: none"> 1. Clear blockages, seal leaks, use smooth-wall duct, eliminate bends, close other branches (Page 24). 2. Empty and clean bag(s). 3. Replace canister filter (Page 38). 4. Inspect/replace if at fault. 5. Move closer to machine/redesign ducting layout/upgrade dust collector. 6. Clean motor, let cool, and reduce workload. Reset breaker. 7. Test/repair/replace. 8. Move machine closer to power supply; use shorter extension cord. 9. Adjust centrifugal switch/clean contact points. Replace either if at fault. 10. Replace motor.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component loose. 2. Motor mount loose/broken. 3. Motor fan rubbing on fan cover. 4. Centrifugal switch needs adjustment/at fault. 5. Impeller damaged, unbalanced, or loose. 6. Motor bearings at fault. 7. Motor shaft bent. 	<ol style="list-style-type: none"> 1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Tighten/replace. 3. Fix/replace fan cover; replace loose/damaged fan. 4. Adjust/replace if at fault. 5. Inspect/tighten/replace. 6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 7. Test with dial indicator. Replace motor if damaged.



Operations

Symptom	Possible Cause	Possible Solution
Loud, repetitious noise, or excessive vibration coming from dust collector (non-motor related).	<ol style="list-style-type: none"> 1. Machine incorrectly mounted to wall/ mounted unevenly. 2. Dust collector not on flat surface and wobbles. 3. Impeller loose on the motor shaft. 	<ol style="list-style-type: none"> 1. Tighten/replace mounting hardware. 2. Stabilize dust collector. 3. Secure impeller; replace motor and impeller as a set if motor shaft and impeller hub are damaged.
Dust collector does not adequately collect dust or chips; poor performance.	<ol style="list-style-type: none"> 1. Collection bag(s) full. 2. Dust collection drum full; seal installed incorrectly/damaged; lid loose; leak in drum. 3. Filter clogged/at fault. 4. Ducting blocked/restricted. 5. Dust collector too far away from point of suction; duct clamps not properly secured; too many sharp bends in ducting. 6. Wood wet/green and dust not flowing smoothly through ducting. 7. Ducting has one or more leaks, or too many open ports. 8. Not enough open branch lines at one time, causing velocity drop in main line. 9. Ducting and ports are incorrectly sized. 10. The machine dust-collection design inadequate. 11. Dust collector undersized. 12. Unused inlet adapter port(s) uncovered. 13. Canister filter clogged and at end of life. 	<ol style="list-style-type: none"> 1. Empty collection bag(s). 2. Empty collection drum; check/re-install/replace seal; secure lid; seal/eliminate leak. 3. Rotate filter brush handle to clean filter; replace when cleaning no longer restores adequate airflow. 4. Remove ducting from dust collector inlet and unblock restriction. A plumbing snake may be necessary. 5. Relocate dust collector closer to point of suction; re-secure ducts; remove sharp bends. Refer to Designing the System on Page 24. 6. Only collect dust from wood with less than 20% moisture content. 7. Seal/eliminate all ducting leaks; close dust ports for lines not being used (Page 24). 8. Open 1 or 2 more blast gates to different branch lines to increase main line velocity. 9. Install correctly sized ducts and fittings (Page 24). 10. Use dust-collection hood on stand. 11. Upgrade to larger dust collector. 12. Cover unused inlet adapter port(s). 13. Replace.
Musty odor detected during operation.	<ol style="list-style-type: none"> 1. Filter caked with dust containing excessive moisture, causing mold growth on filter. 	<ol style="list-style-type: none"> 1. Replace HEPA filter (Page 38).
Cleaning filter does not improve dust collection performance.	<ol style="list-style-type: none"> 1. HEPA filter clogged and at end of life. 	<ol style="list-style-type: none"> 1. Replace HEPA filter (Page 38).
Dust collector blows sawdust into the air.	<ol style="list-style-type: none"> 1. Duct clamp(s) or dust collection bag(s) are not properly clamped and secured; ducting loose/damaged. 2. Cylinder or funnel seals are loose or damaged. 3. Filter bag has hole(s). 	<ol style="list-style-type: none"> 1. Secure ducts and dust collection bag, making sure duct and bag clamp are tight; tighten/replace ducting. 2. Retighten all mounting and sealing points; replace damaged seals/gaskets. 3. Replace filter bag (Page 37).
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. A wall or barrier disrupts the radio frequency, or controller is too far away. 4. Remote control not paired with receiver. 	<ol style="list-style-type: none"> 1. Verify machine is connected to power source. 2. Replace battery. 3. Move machine away from barrier; use remote within 75' of machine. 4. Program receiver to accept remote control (Page 34).



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.

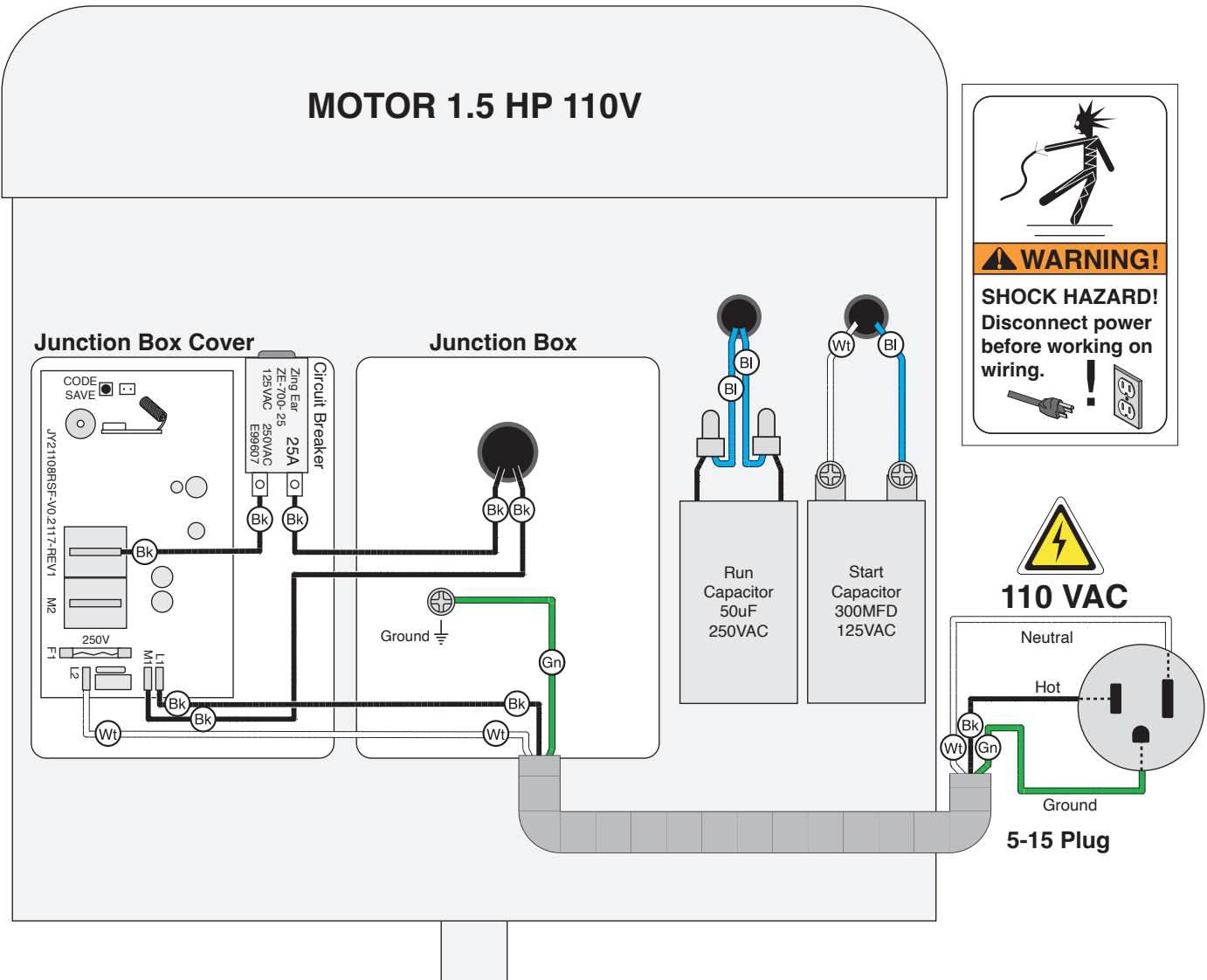
COLOR KEY

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



Wiring Diagram

MOTOR 1.5 HP 110V



Electrical Components



Figure 71. Motor junction box wiring.

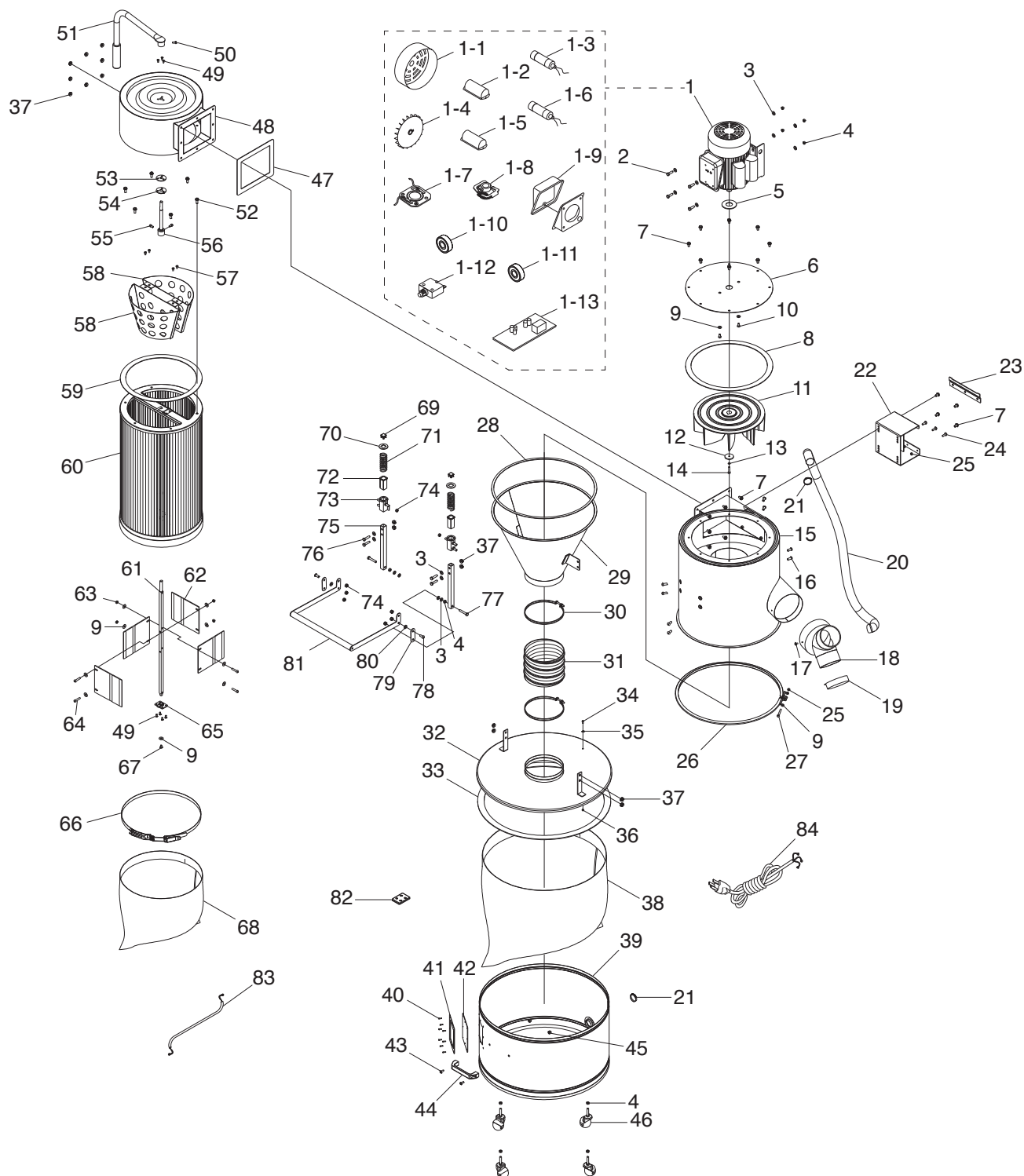


Figure 72. Capacitor wiring.

SECTION 10: PARTS

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.

Main



Main Parts List

REF	PART #	DESCRIPTION
1	P0990001	MOTOR 1.5HP 110V 1-PH
1-1	P0990001-1	MOTOR FAN COVER
1-2	P0990001-2	R CAPACITOR COVER
1-3	P0990001-3	R CAPACITOR 50M 250V 1-5/8 X 2-3/8
1-4	P0990001-4	MOTOR FAN
1-5	P0990001-5	S CAPACITOR COVER
1-6	P0990001-6	S CAPACITOR 300M 125V 1-3/8 X 2-5/8
1-7	P0990001-7	CONTACT PLATE 1-3/4 X 2-3/4 INT
1-8	P0990001-8	CENTRIFUGAL SWITCH 5/8 1783
1-9	P0990001-9	MOTOR JUNCTION BOX
1-10	P0990001-10	BALL BEARING 6205-2RS
1-11	P0990001-11	BALL BEARING 6203-2RS
1-12	P0990001-12	CIRCUIT BREAKER 25A ZING EAR ZE-700
1-13	P0990001-13	CIRCUIT BOARD JY21108RSF-V02117
2	P0990002	HEX BOLT 5/16-18 X 1
3	P0990003	FLAT WASHER 5/16
4	P0990004	HEX NUT 5/16-18
5	P0990005	RUBBER GASKET 30 X 65 X 2MM
6	P0990006	MOTOR PLATE
7	P0990007	FLANGE BOLT 5/16-18 X 1/2
8	P0990008	FOAM GASKET 25MM X 1300MM
9	P0990009	FLAT WASHER 1/4
10	P0990010	HEX BOLT 1/4-20 X 1/2
11	P0990011	IMPELLER 12-3/4"
12	P0990012	IMPELLER WASHER 6 X 38 X 4MM
13	P0990013	LOCK WASHER 6MM
14	P0990014	CAP SCREW M6-1 X 30 LH
15	P0990015	IMPELLER HOUSING
16	P0990016	BUTTON HD CAP SCR 5/16-18 X 3/4
17	P0990017	PHLP HD SCR 10-24 X 3/8
18	P0990018	INLET ADAPTER 6" X 4"
19	P0990019	INLET ADAPTER CAP 4"
20	P0990020	VACUUM HOSE 1-1/2" X 60"
21	P0990021	HOSE CLAMP 1-3/4"
22	P0990022	IMPELLER HOUSING BRACKET
23	P0990023	WALL BRACKET
24	P0990024	T-BOLT 1/4-20 X 3/4
25	P0990025	HEX NUT 1/4-20
26	P0990026	BAND CLAMP
27	P0990027	HEX BOLT 1/4-20 X 2-1/2
28	P0990028	FOAM GASKET 10MM X 1550MM
29	P0990029	CYCLONE FUNNEL
30	P0990030	HOSE CLAMP 7-1/2"
31	P0990031	FLEX HOSE 7" X 5"
32	P0990032	COLLECTION DRUM LID
33	P0990033	FOAM GASKET 30MM X 1990MM
34	P0990034	PHLP HD SCR 10-24 X 3/8
35	P0990035	EXT TOOTH WASHER #10
36	P0990036	HEX NUT 10-24

REF	PART #	DESCRIPTION
37	P0990037	FLANGE NUT 5/16-18
38	P0990038	COLLECTION DRUM BAG 30" X 41"
39	P0990039	COLLECTION DRUM
40	P0990040	RIVET 2 X 4MM BLIND AL
41	P0990041	FOAM GASKET 120 X 140MM
42	P0990042	DRUM WINDOW 120 X 140MM ACRYLIC
43	P0990043	PHLP HD SCR 1/4-20 X 5/8
44	P0990044	COLLECTION DRUM HANDLE
45	P0990045	ACORN NUT 1/4-20
46	P0990046	CASTER 2", SWIVEL
47	P0990047	FOAM GASKET
48	P0990048	CANISTER FILTER COVER
49	P0990049	PHLP HD SCR M5-.8 X 12
50	P0990050	HEX BOLT M6-1 X 16
51	P0990051	FILTER CLEANING HANDLE
52	P0990052	FLANGE BOLT 5/16-18 X 3/4
53	P0990053	RUBBER GASKET
54	P0990054	PADDLE HANDLE SPINDLE RETAINER
55	P0990055	CAP SCREW M6-1 X 16
56	P0990056	PADDLE HANDLE SPINDLE
57	P0990057	PHLP HD SCR M5-.8 X 10
58	P0990058	SOUND DAMPENING WEDGE
59	P0990059	FOAM GASKET 30MM X 1240MM
60	P0990060	CANISTER FILTER
61	P0990061	FILTER PADDLE SPINDLE
62	P0990062	FILTER PADDLE
63	P0990063	LOCK NUT 1/4-20
64	P0990064	PHLP HD SCR 1/4-20 X 1-1/4"
65	P0990065	FILTER PADDLE SPINDLE PLATE
66	P0990066	BAG CLAMP 15"
67	P0990067	PHLP HD SCR M6-1 X 10
68	P0990068	FILTER BAG 20" X 23"
69	P0990069	PIPE PLUG SLEEVE CAP
70	P0990070	SPRING RETAINER
71	P0990071	COMPRESSION SPRING 3 X 32 X 85MM
72	P0990072	COPPER SLEEVE
73	P0990073	SPRING BRACKET
74	P0990074	LOCK NUT 5/16-18
75	P0990075	LOCK HANDLE GUIDE
76	P0990076	HEX BOLT 5/16-18 X 1-1/4
77	P0990077	HEX BOLT 5/16-18 X 1-3/4
78	P0990078	BUTTON HD CAP SCR 5/16-18 X 3/4
79	P0990079	LOCK HANDLE LINK
80	P0990080	FLAT WASHER 3/8 PLASTIC
81	P0990081	COLLECTION DRUM LOCK HANDLE
82	P0990082	REMOTE CONTROL
83	P0990083	GROUND WIRE 18G 18"
84	P0990084	POWER CORD 14G 3W 72" 5-15P



Labels and Cosmetics



REF	PART #	DESCRIPTION
101	P0990101	MACHINE ID LABEL
102	P0990102	DISCONNECT POWER LABEL
103	P0990103	ELECTRICITY LABEL
104	P0990104	CONTROL PANEL LABEL
105	P0990105	RESPIRATOR & GLASSES LABEL
106	P0990106	READ MANUAL LABEL

REF	PART #	DESCRIPTION
107	P0990107	MODEL NUMBER LABEL
108	P0990108	TOUCH-UP PAINT, POLAR BEAR WHITE
109	P0990109	GRIZZLY.COM LABEL
110	P0990110	TOUCH-UP PAINT, GRIZZLY GREEN
111	P0990111	HEPA LABEL
112	P0990112	TOUCH-UP PAINT, GLOSSY BLACK

⚠ 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.



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.

For further information about the warranty, visit <https://www.grizzly.com/forms/warranty> or scan the QR code below to be automatically directed to our warranty page.





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