MODEL G0991
1-1/2 HP ULTRA-QUIET HORIZONTAL CYCLONE DUST COLLECTOR
OWNER'S MANUAL

(For models manufactured since 03/25)

#JA23464 PRINTED IN TAIWAN V1.05.25

******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.

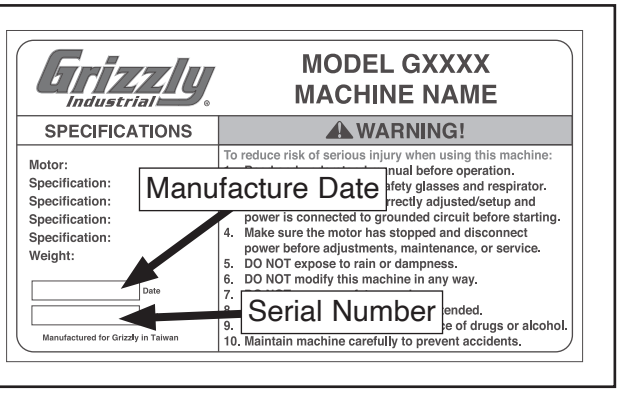
Manual Accuracy

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**.

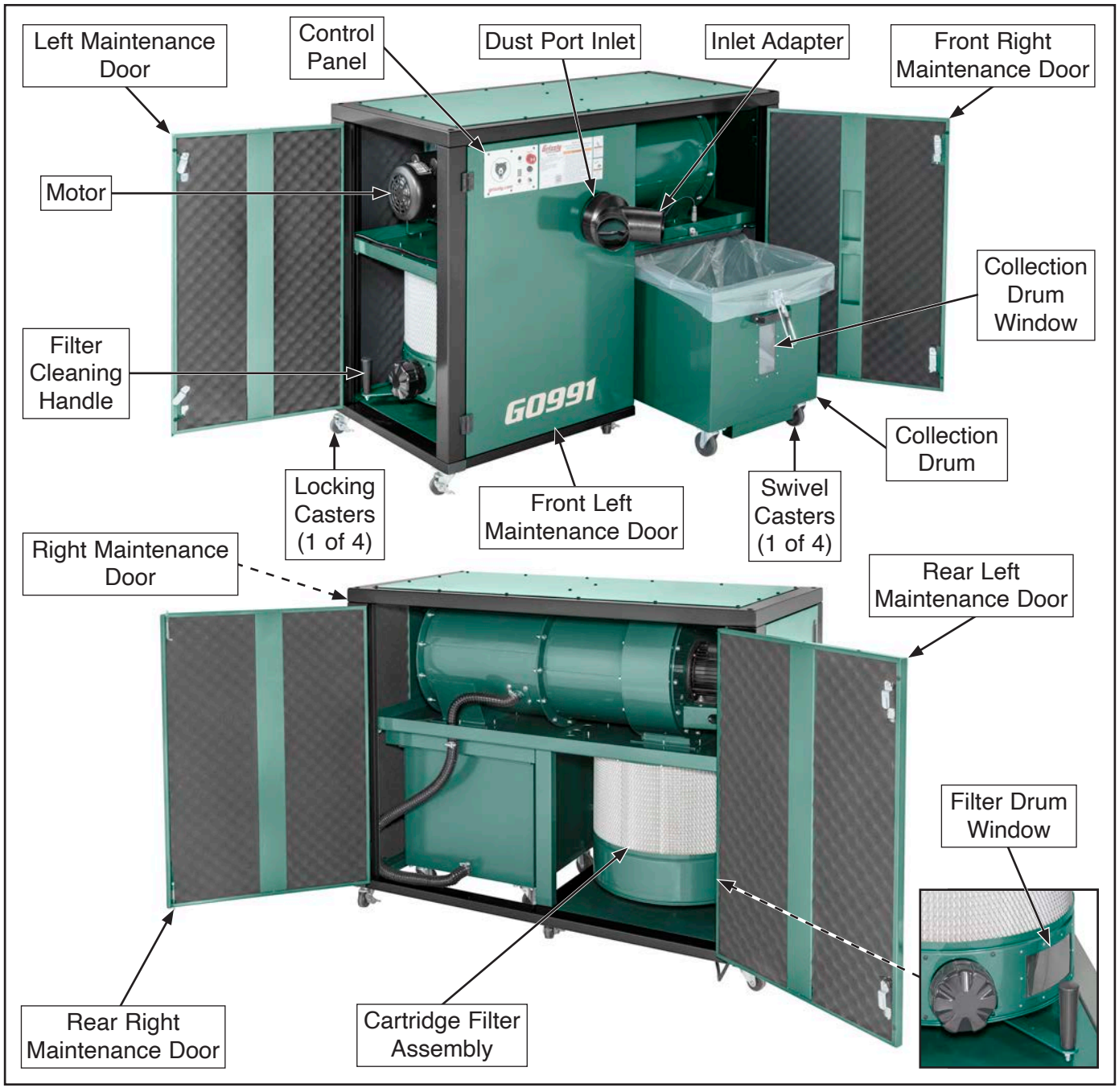
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

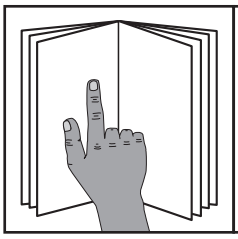
Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **manufacture date** and **serial number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation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



Identification

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

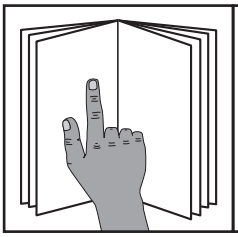




⚠WARNING

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

Controls & Components



⚠WARNING

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

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

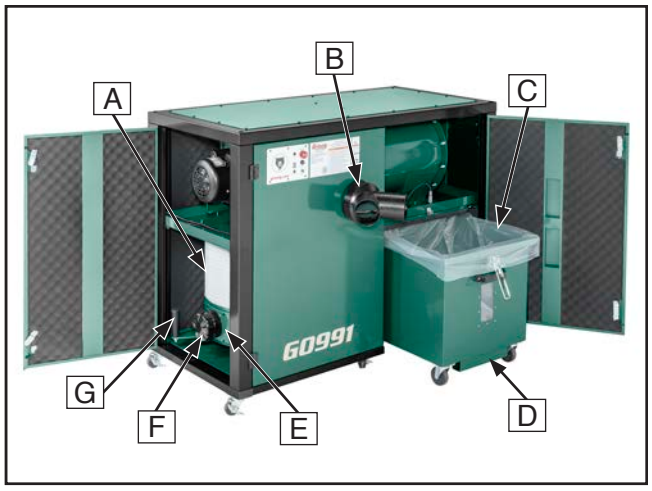


Figure 1. Main components.

A. Filter: Filters 99.97% of 1 micron particles.

B. Inlet Adapter: Allows connection of two 4" ducts to main dust port inlet.

C. Collection Drum Bag: Collects wood chips and dust during operation.

D. Collection Drum: Collects large dust particles. Equipped with vacuum equalizer for using plastic collection bags, and an inspection window to see when drum is full.

E. Filter Drum: Collects fine dust from filter area.

F. Filter Cleaning Port: Cap screws off, providing easy access to filter drum for cleaning.

G. Filter Cleaning Handle: Turns paddles inside cartridge filter, knocking dust off filter pleats to help maintain good air flow.

Control Panel

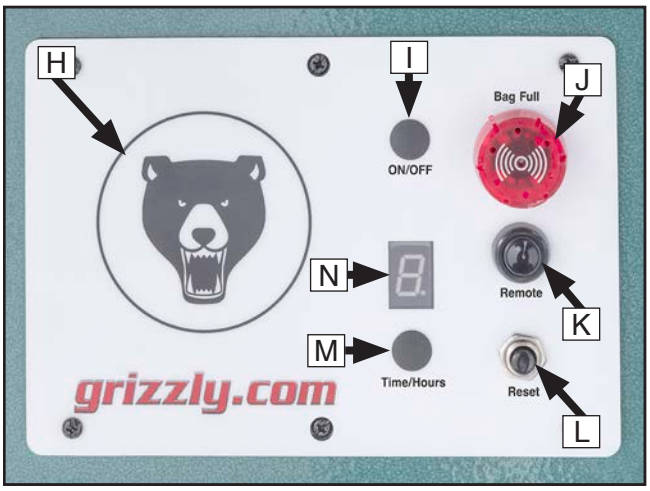


Figure 2. Control panel components

H. Dust Collection Indicator: Illuminates when machine is operating.

I. ON/OFF Button: Turns motor ***ON*** and ***OFF***.

J. Bag Full Indicator: Illuminates and alarm sounds when collection drum bag is full. Indicator resets after replacing collection drum bag.

K. Remote Button: Syncs remote control to machine.

L. Reset Button: Allows machine to be restarted after thermal overload protection has tripped. To reset, 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.

M. Time/Hours Button: Cycles through available timer settings (1–9 hrs).

N. Digital Readout: Displays time setting.

Note: *When time setting duration has passed, machine will automatically turn off.*

Remote Control

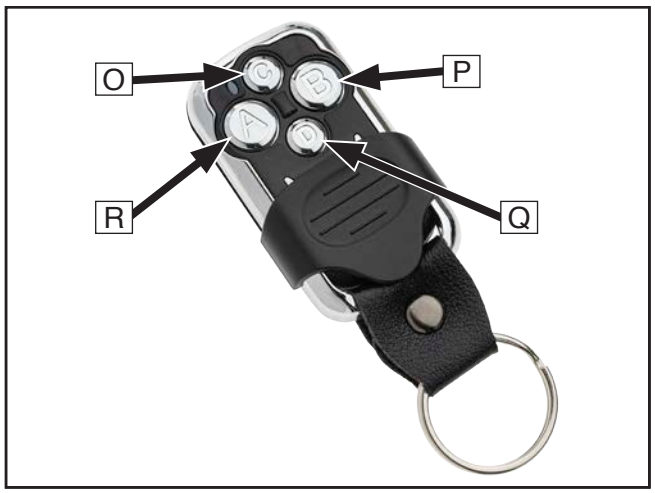


Figure 3. Remote control components.

O. C Button: Cycles through available timer settings (1–9 hrs).

P. B Button: Turns motor ***OFF***.

Q. D Button: Pairs remote with control panel when control panel is in pairing mode.

R. A Button: Turns motor ***ON.***

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

Note: *Remote control operates on radio frequency and has a 50-ft. range. It does not need to be aimed at control panel to operate.*

MACHINE DATA SHEET

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

MODEL G0991 1-1/2 HP ULTRA-QUIET HORIZONTAL CYCLONE DUST COLLECTOR

Product Dimensions:

Weight..... 408 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 53 x 27-1/2 x 40-1/2 in.
Footprint (Length x Width)..... 53 x 26 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 510 lbs.
Length x Width x Height..... 57 x 32 x 48 in.
Must Ship Upright..... Yes

Electrical:

Power Requirement..... 110V or 220V, Single-Phase, 60 Hz
Prewired Voltage..... 110V
Full-Load Current Rating..... 15A at 110V, 7.5A at 220V
Minimum Circuit Size..... 20A at 110V, 15A at 220V
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 for 110V
Recommended Plug Type..... 6-15 for 220V
Switch Type..... Control Panel w/Remote Control

Motors:

Main

Horsepower..... 1-1/2 HP
Phase..... Single-Phase
Amps..... 15A/7.5A
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 (Horizontal Cyclone)
Approved Dust Types	Wood
Filter Type	MERV-16 Pleated Cartridge
Airflow Performance	735 CFM @ 1.3 in. SP
Max Static Pressure (at 0 CFM)	10 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	99.97% @ 1 Micron
Filter Surface Area	20 sq. ft.
Filter Drum Capacity	6-1/2 Gallons

Bag Information

Number Of Collection Drum Bags	1
Collection Drum Bag Diameter	25 in.
Collection Drum Bag Length	31-1/2 in.

Canister Information

Number of Canister Filters	1
Canister Filter Diameter	20 in.
Canister Filter Length	18-1/4 in.
Collection Drum Size	20 Gallons

Impeller Information

Impeller Type	Radial Fin
Impeller Size	12-1/2 in.
Impeller Blade Thickness	3/32 in.

Construction

Canister	Spun Bond Polyester
Base	Steel
Frame	Steel
Caster	Zinc-Plated Steel & Nylon
Impeller	Steel
Paint Type/Finish	Powder Coated
Blower Housing	Steel
Body	Steel
Collection Drum	Steel
Collection Drum Bag	Clear Plastic

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	Machine ID Label
Sound Rating	71 dB
ISO 9001 Factory	Yes

SECTION 1: SAFETY

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

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

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

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

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

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

Safety Instructions for Machinery

⚠WARNING

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

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

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

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

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

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

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

⚠WARNING

WEARING PROPER APPAREL. Do not wear 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.

⚠WARNING

Electrocution, fire, shock, or equipment damage may occur if machine is not properly grounded and connected to power supply.

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
Full-Load Current Rating at 220V .... 7.5 Amps

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

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

Circuit Information

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

⚠CAUTION

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

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

Circuit Requirements for 110V

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

Circuit Requirements for 220V

This machine can be converted to operate on a power supply circuit that has a verified ground and meets the requirements listed below. (Refer to **Voltage Conversion** instructions for details.)

Nominal Voltage 208V, 220V, 230V, 240V
Cycle ..... 60 Hz
Phase ..... Single-Phase
Power Supply Circuit ..... 15 Amps
Plug/Receptacle ..... NEMA 6-15

Grounding Requirements

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

For 110V operation: This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (see following figure). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.

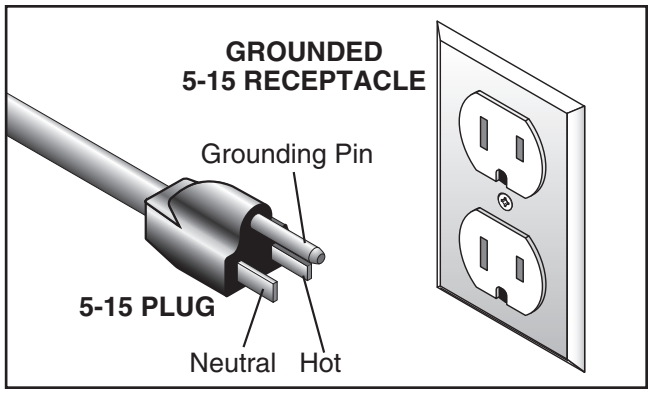
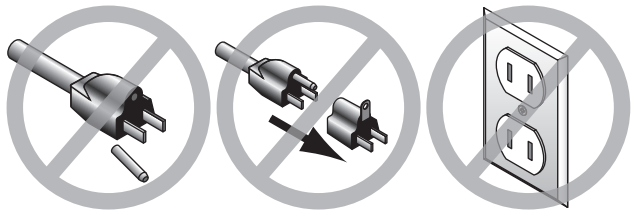


Figure 4. Typical 5-15 plug and receptacle.

⚠CAUTION



SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

For 220V operation: The plug specified under "Circuit Requirements for 220V" on the previous page has a grounding prong that must be attached to the equipment-grounding wire on the included power cord. The plug must only be inserted into a matching receptacle (see following figure) that is properly installed and grounded in accordance with all local codes and ordinances.

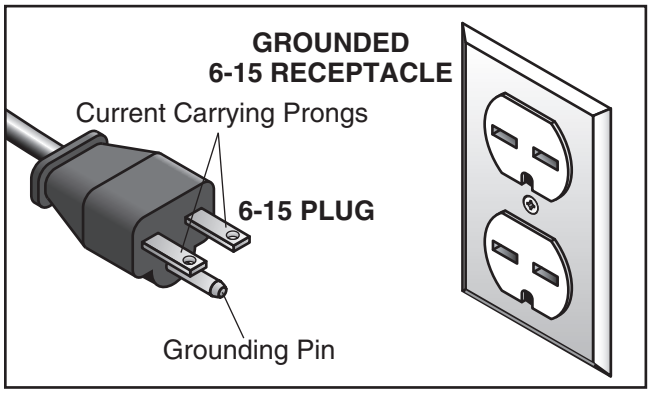


Figure 5. Typical 6-15 plug and receptacle.

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 (110V).....12AWG
Minimum Gauge Size (220V).....14AWG
Maximum Length (Shorter is Better).....50 ft.

Converting Voltage to 220V

Voltage conversions MUST be performed by an electrician or qualified service personnel.

To perform voltage conversion, rewire the motor, move the hot incoming power wires connected to the circuit board from the 110V to the 220V terminals, replace the circuit breaker, and install the correct plug.

IMPORTANT: If the diagram included on the motor conflicts with the one in this manual, the motor may have changed since the manual was printed. Use the diagram provided on the motor.

Items Needed	**Qty**
Phillips Head Screwdriver #2	1
Circuit Breaker 15A (P0991028X)	1
Plug NEMA 6-15	1
Wire Cutter/Stripper	1
Wrench 14mm	1

To convert voltage to 220V:

1. DISCONNECT MACHINE FROM POWER!

2. Cut 5-15 plug off end of power cord.

3. Open motor junction box, then loosen three terminals indicated in **Figure 6**.

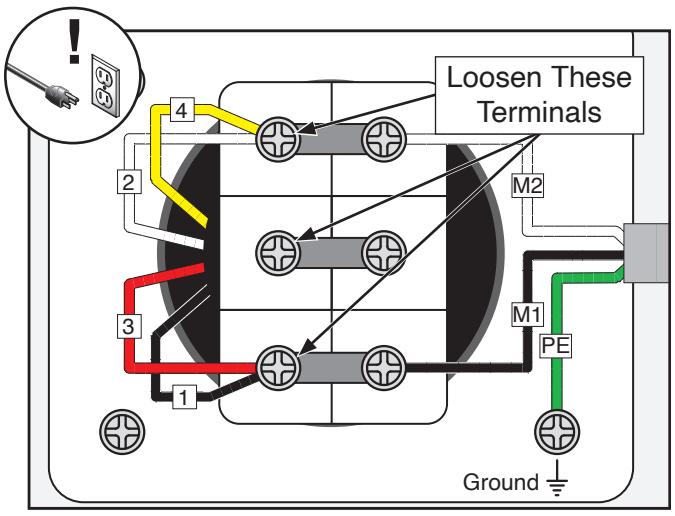


Figure 6. Motor junction box (110V).

4. Move wire 2 and wire 3 to middle terminal (see **Figure 7**), then tighten terminals from **Step 3**.

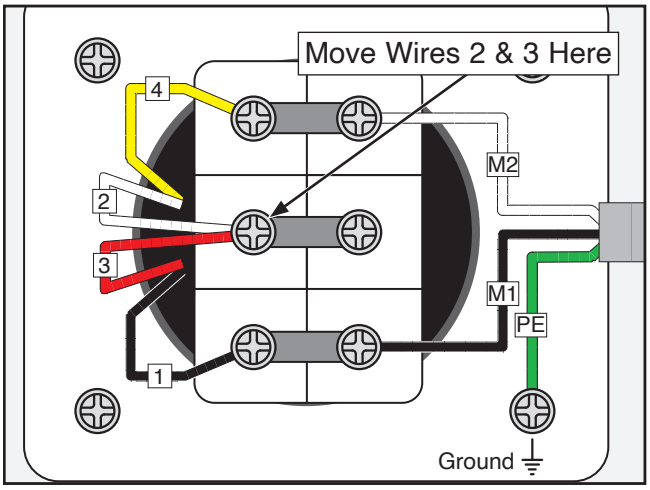


Figure 7. Motor wiring (220V).

5. Remove (6) screws to remove control panel, then move wires from L1 and M1 110V terminals (see **Figure 8**) to L1 and M1 220V terminals, as shown in **Figure 9**.

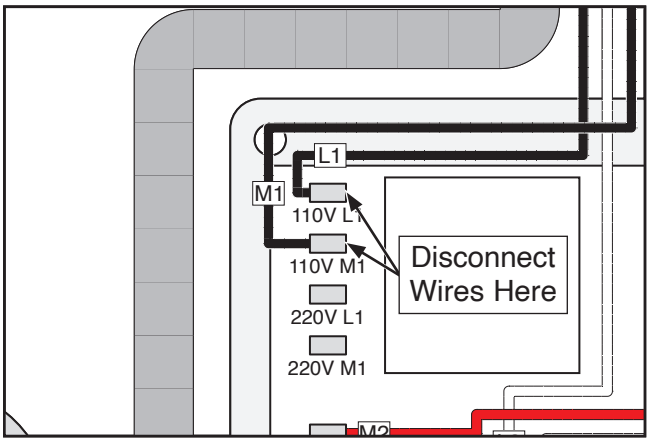


Figure 8. Circuit board incoming power wire terminals (110V).

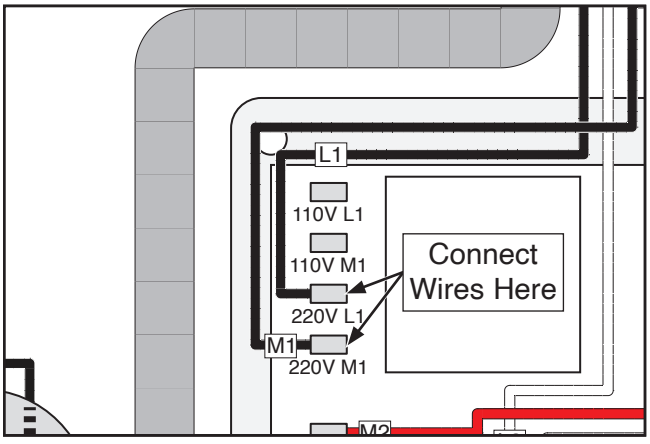


Figure 9. Circuit board incoming power wire terminals (220V).

6. Disconnect wires from 25A circuit breaker (see **Figure 10**).

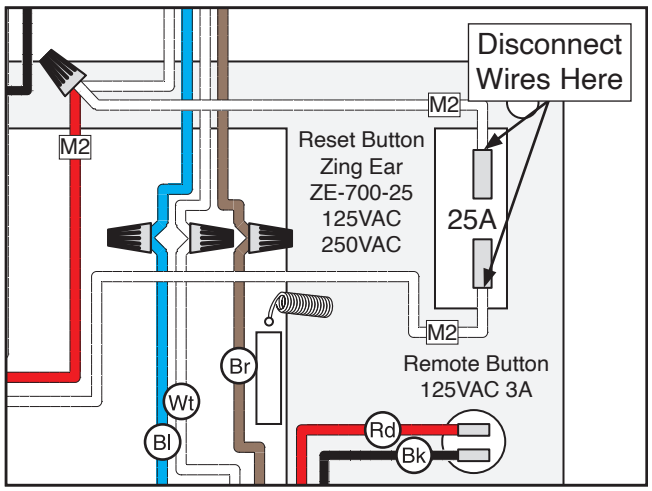


Figure 10. Circuit breaker wiring (110V).

7. Remove 25A circuit breaker (see **Figure 11**) and replace with 15A circuit breaker.

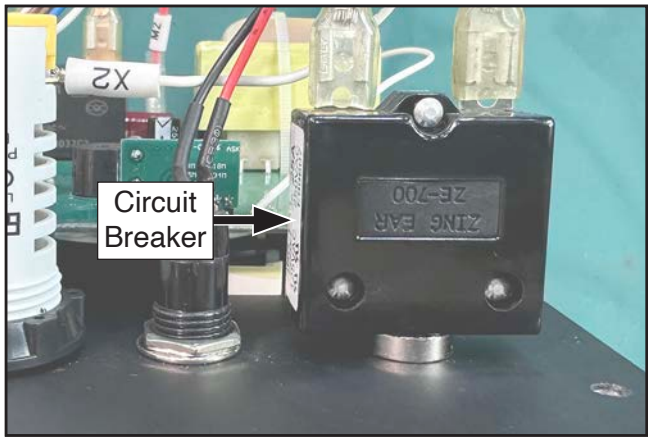


Figure 11. Location of circuit breaker.

8. Connect wires disconnected in **Step 6** to 15A circuit breaker, as shown in **Figure 12**.

   Note: *Ensure wires are connected to correct corresponding terminals.*

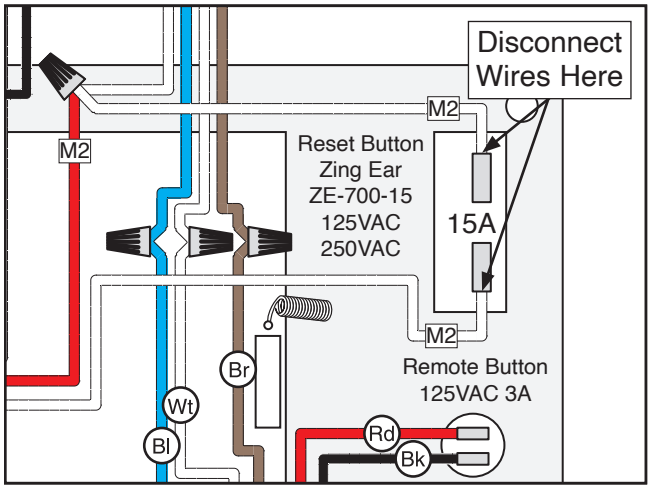
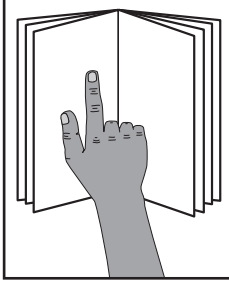


Figure 12. Circuit breaker wiring (220V).

9. Install 6-15 plug on end of power cord, according to plug manufacturer's instructions.

   — If plug manufacturer did not include instructions, wiring of generic NEMA 6-15 plug is illustrated on **Page 42**.

SECTION 3: SETUP

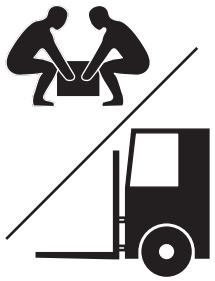


⚠WARNING

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
• Safety Glasses	1
• Lifting Straps or Chains (Rated for at Least 650 lbs.)	4
• Lifting Equipment (Rated for at least 650 lbs.)	1
• Phillips Head Screwdriver #2	1
• Dust Collection System	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.

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.

Box 1 (Figure 13)		**Qty**
A.	Inlet Adapter 6" x 4" x 2	1
B.	Tap Screws M4 x 12	3
C.	Inlet Adapter Port Cover	1
D.	Remote Control	1
E.	Dust Collection Bag	1
F.	Lifting Eye Bolts M12-1.75	4

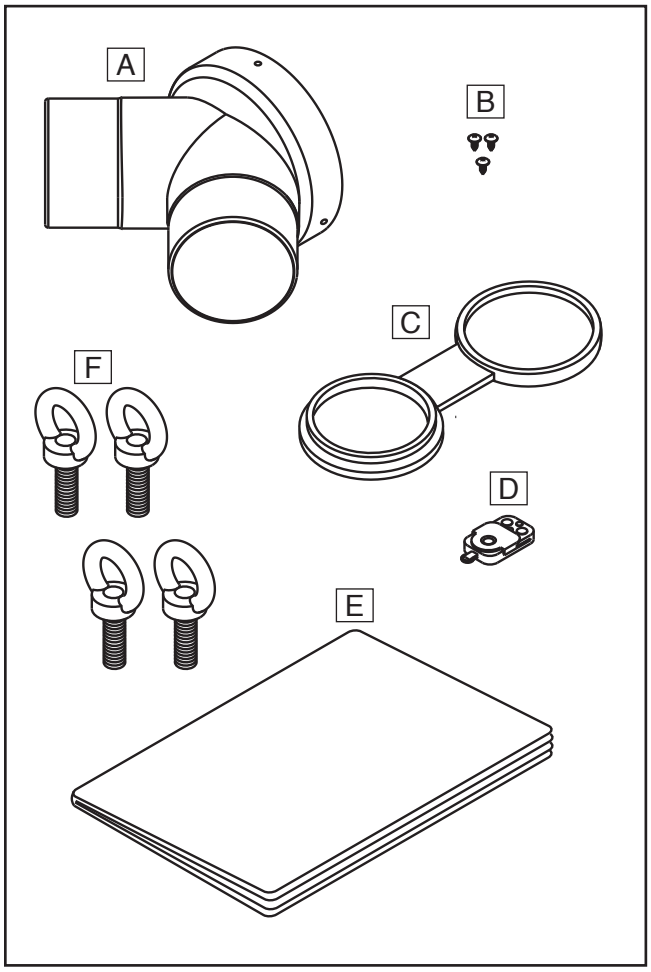


Figure 13. Inventory.

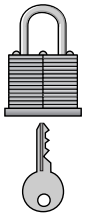
Site Considerations

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.**



⚠CAUTION

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

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.

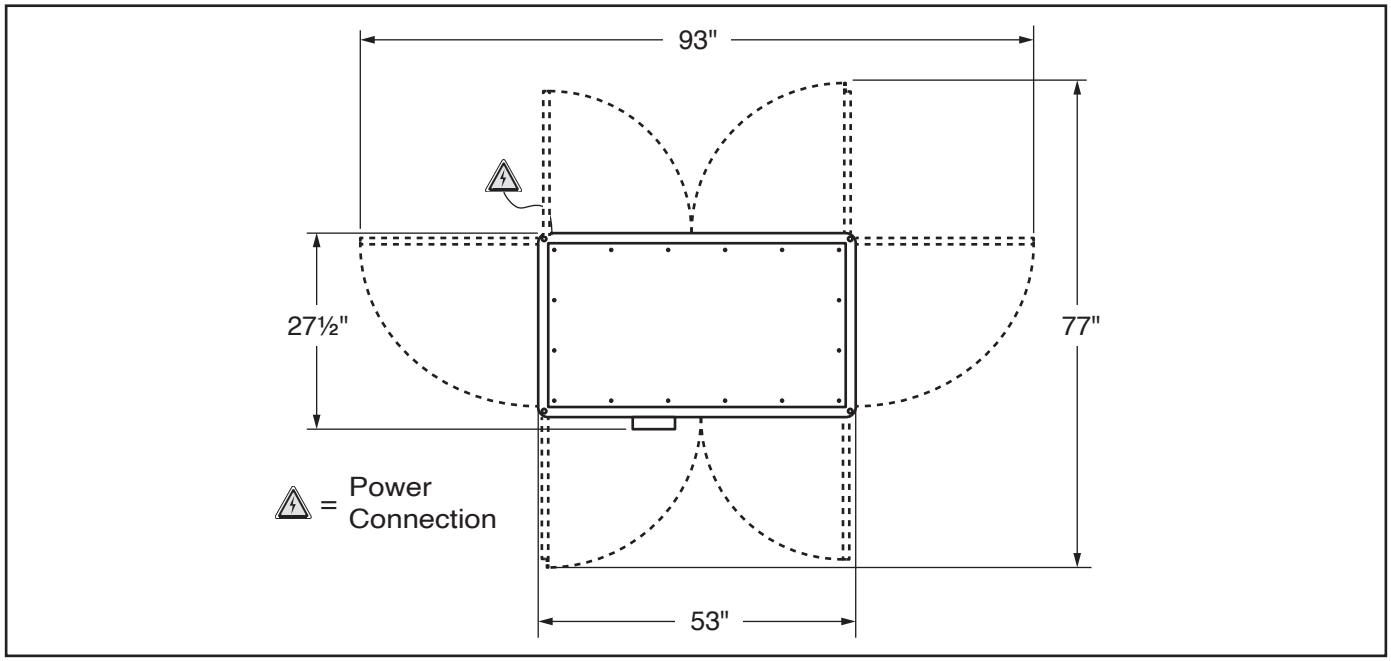
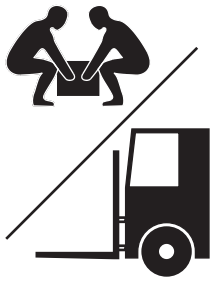


Figure 14. Minimum working clearances.

Lifting & Placing



⚠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.

The Model G0991 is mostly pre-assembled. Just lift the machine from the pallet and place carefully on the ground, then roll dust collector into desired location.

To lift and place machine:

1. Remove top and sides of crate from shipping pallet, then remove any small components and packing materials from pallet.

2. Remove plastic plugs from each corner of machine, then install (4) M12-1.75 eye bolts (see **Figure 15**).

Figure 15. Location of lifting eye bolts.

3. Attach lifting straps or chains (rated for at least 650 lbs.) to each lifting eye bolt.

4. With a forklift or hoist, lift machine just enough to clear pallet, then remove pallet.

5. Lower machine to ground.

6. Unlock locking casters (see **Figure 16**), and roll machine into desired location, then lock casters once in position.

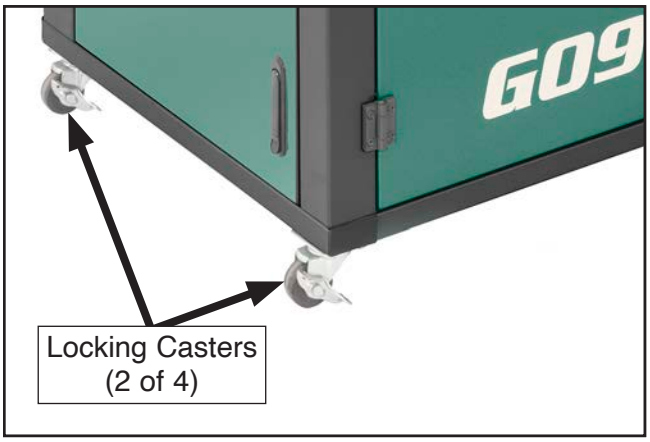


Figure 16. Location of locking casters.

Assembly

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

To assemble machine:

1. Attach inlet adapter to machine body with (3) M4 x 12 tap screws (see **Figure 17**).

Figure 17. Inlet adapter attached to dust 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. Lock casters so machine will not move during test.

3. Connect machine to dust-collection system or place port covers over both 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.

4. Connect machine to power supply.

5. Press ON/OFF button (see **Figure 18**) to turn motor ***ON***.

   Dust collection indicator light should illuminate, and motor should run smoothly and without unusual problems or noises.

Figure 18. Location of ON/OFF button and dust collection indicator.

6. Press ON/OFF button again to turn motor ***OFF***.

7. Press A button on remote control to turn motor ***ON*** (see **Figure 19**). Motor should run smoothly with little or no vibration or rubbing noises.

8. Press B button to turn motor ***OFF*** (see **Figure 19**).

   — If motor does not turn ***OFF*** with remote control, press OFF button on control panel to turn motor ***OFF***. Refer to **Troubleshooting** on **Page 38** to correct any problems with remote control before further using it with machine.

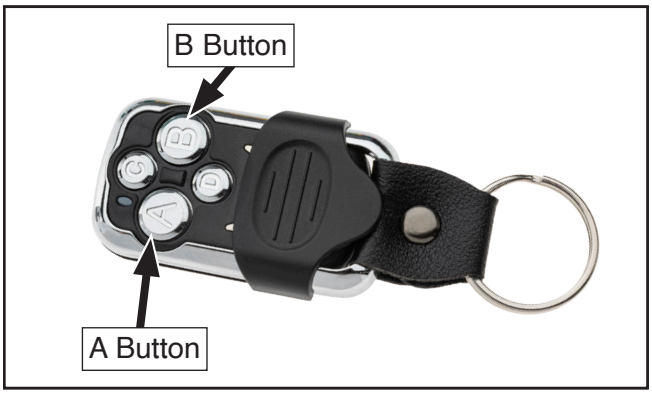


Figure 19. Remote control components.

Congratulations! The Test Run is complete.

SECTION 4: DESIGNING A SYSTEM

General

⚠CAUTION

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

⚠CAUTION

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

The Model G0991 works quite well as a point-of-use dust collector, or for collecting dust from up to two machines simultaneously. The locking swivel casters make it easy to move around the shop near the machine being used.

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).

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 20. Examples of plastic ducting components.

Metal Duct

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

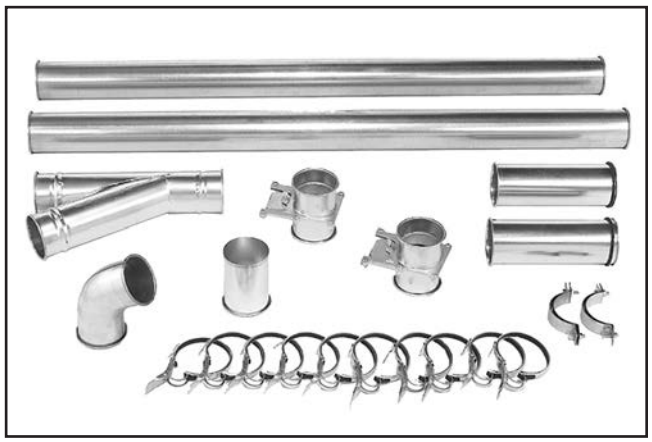


Figure 21. Examples of metal pipe and components.

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

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.

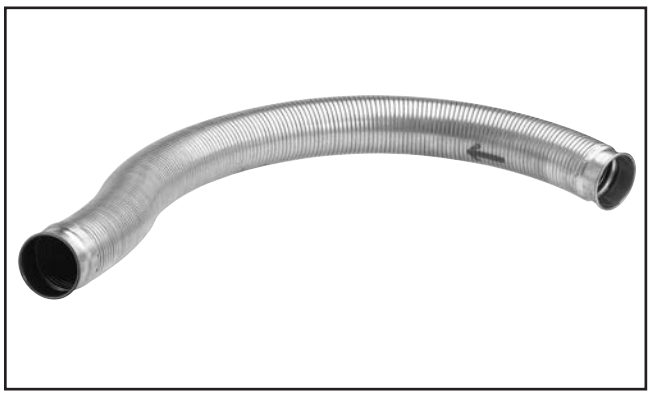


Figure 22. Example of flexible metal duct.

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

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

System Design

Decide Who Will Design

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

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

Sketch Your Shop Layout

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

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

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

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

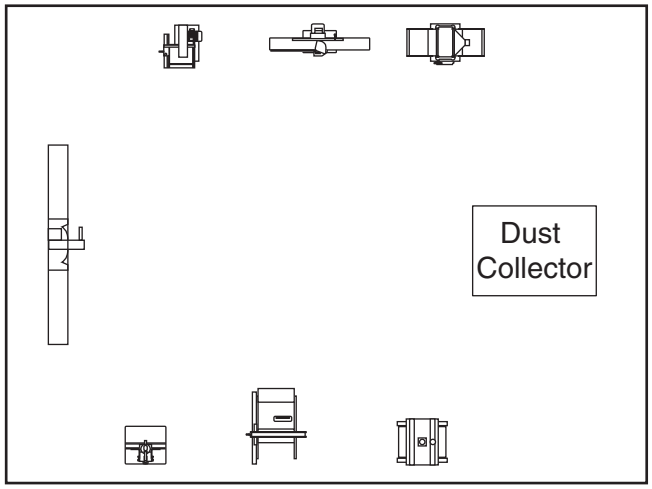


Figure 23. Basic sketch of shop layout.

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.

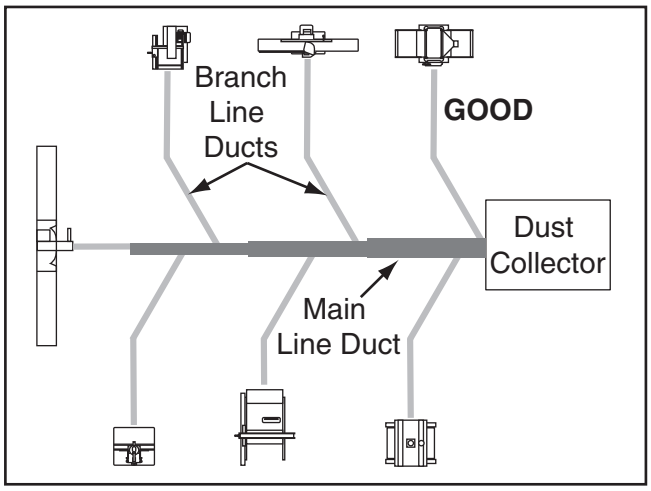


Figure 24. Efficient duct layout.

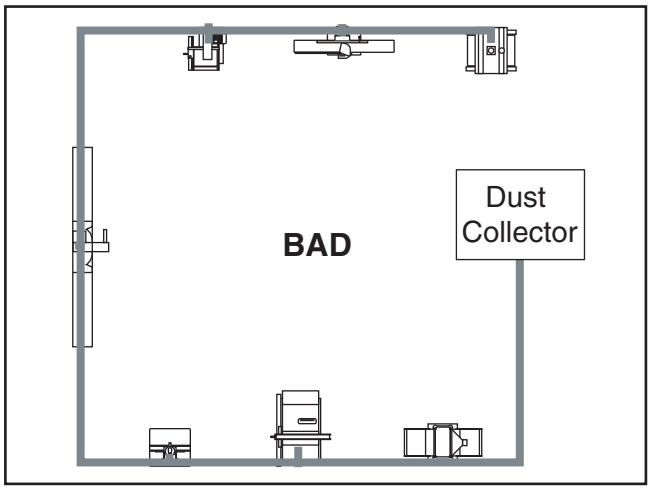


Figure 25. Inefficient duct layout.

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 26. 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 27. Dust port size and quantity per average machine.

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

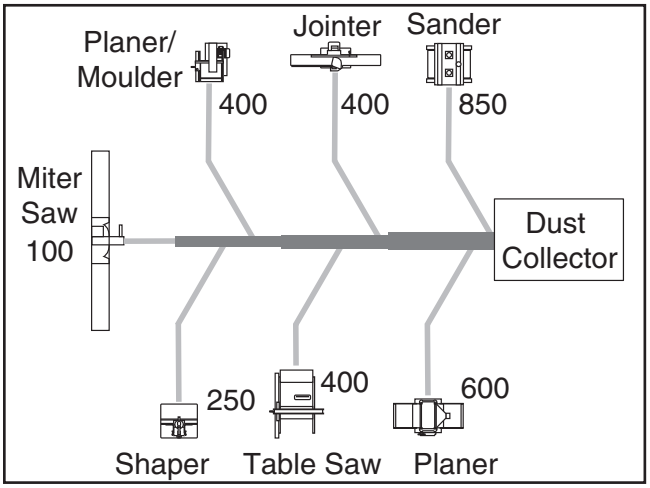


Figure 28. CFM requirements labeled for each machine.

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.

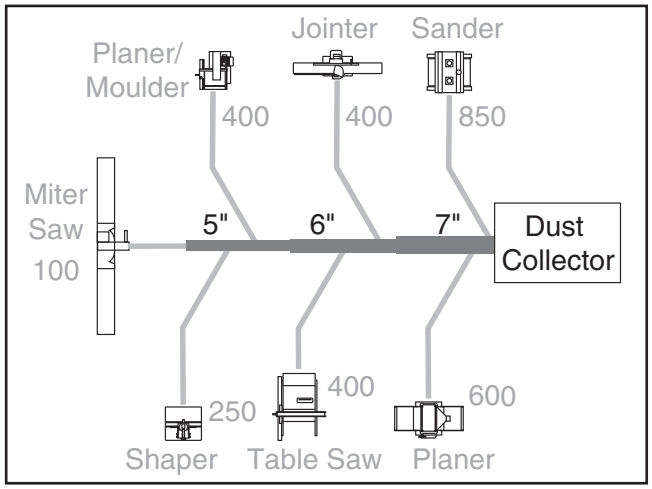


Figure 29. Main line size labeled on sketch.

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.

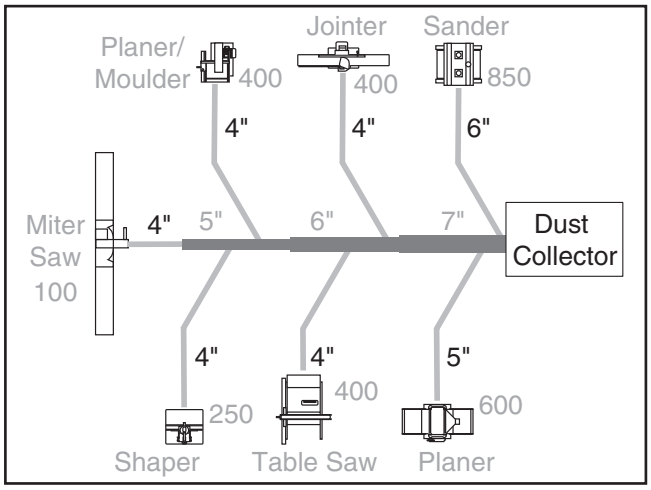


Figure 30. Branch line duct sizes labeled.

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 31. 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.

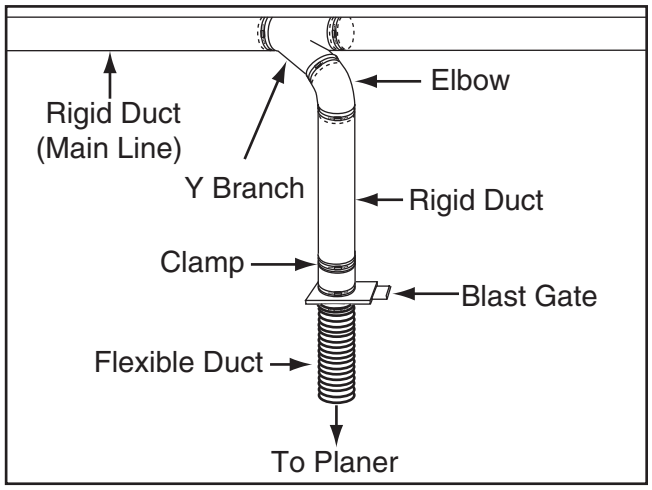


Figure 32. Drop down setup.

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 33. 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 34. Additional factors affecting static pressure.

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

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

Main Line
6" Rigid Duct (0.037) at 20' 0.740

Branch Line
4" Rigid Duct (0.075) at 10' 0.750
4" Flexible Duct (0.28) at 5' 1.400

Elbows/Branches
6" 45˚ Y-Branch 0.329
4" 45˚ Elbow 0.225

Additional Factors
Seasoned Filter 1.000

Total Static Pressure Loss 4.444

Figure 35. 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 36** for your dust collector.

Example: A typical **Data Sheet Performance Curve** is illustrated in **Figure 36**. Find 4.4 on the Static Pressure axis (the amount of total static pressure loss calculated in **Figure 36**), 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.

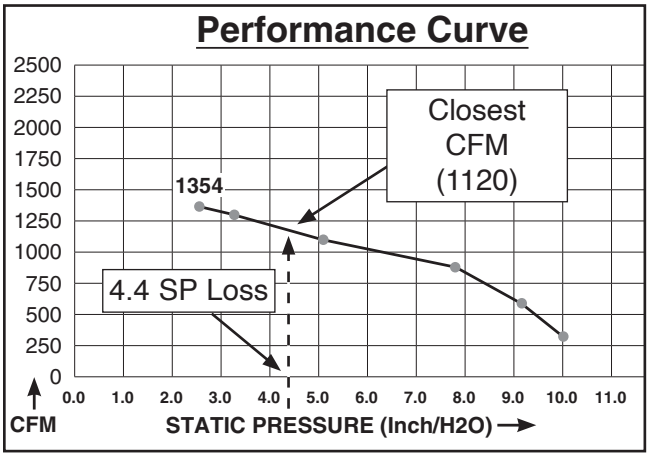
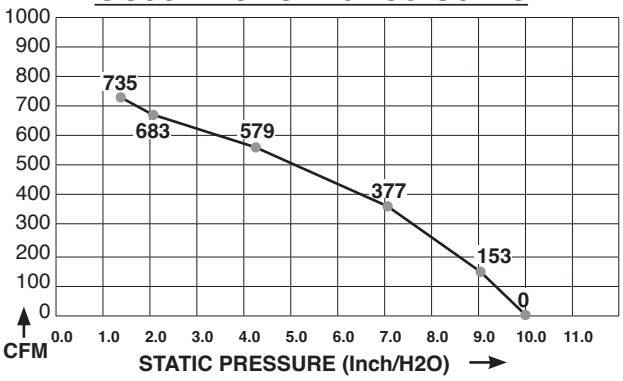


Figure 36. Example CFM for static pressure loss of line connected to a dust collector & router.

— 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 31** 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.



1.5 HP DUST COLLECTOR PERFORMANCE RESULTS					
Max CFM	**Max SP**	**HP**	**Volts**	**Inlet**	**Impeller**
735	10	1½ HP	110V	6"	12½"

Restrictor Plate (Inch)	6"	5"	4"	3"	2"	0"
Static Pressure (Inch/H2O)	1.3	2.1	4.2	7.1	9.1	10
CFM	735	683	579	377	153	0

The airflow test probe is located 1.5x duct diameter upstream from the air inlet. Test pipe length is a minimum of 10x duct diameter.

Figure 37. G0991 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 38. 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.

⚠CAUTION

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

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.

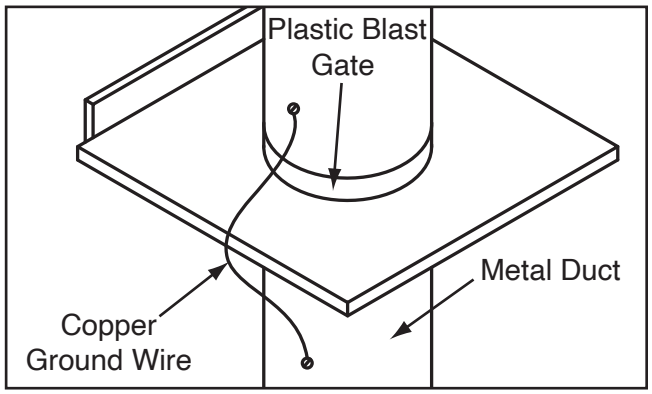


Figure 39. Ground jumper wire when using plastic blast gates and metal duct.

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.

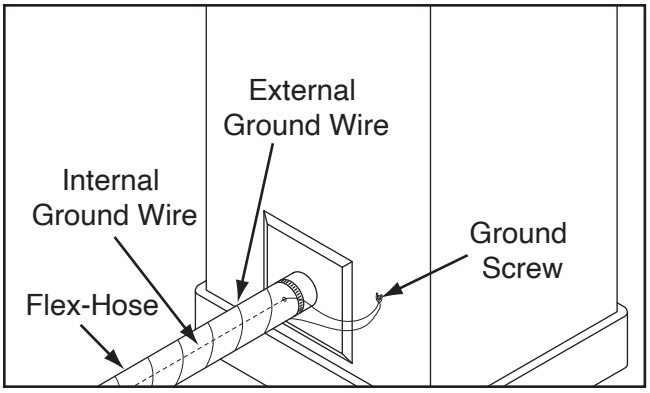


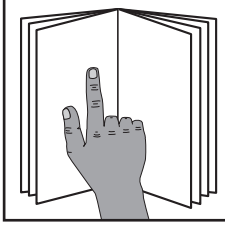
Figure 40. Flex-hose grounded to machine.

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.

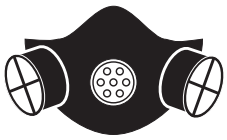


⚠WARNING

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 horizontal cyclone dust collector creates a vortex of incoming air that extracts heavy wood chips and large dust particles, and then drops them into the collection drum below lined with a plastic dust collection bag.

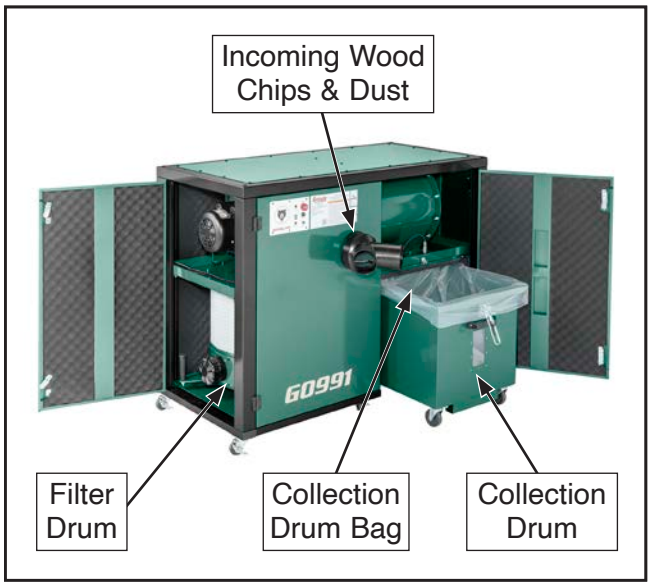


Figure 41. Horizontal Dust Collector Operation

The remaining fine dust travels past the impeller and is then caught by a cartridge filter and deposited in the filter drum below. The MERV-16 cartridge filter catches 99.97% of particles 1 micron in size, and is pleated to provide maximum surface area for efficient airflow.

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

Always lock the swivel casters before operation.

Pairing Remote Control

The included remote control requires one 12V A27 battery and has a range of approximately 50 feet. The receiver and remote control must be paired when the batteries are changed, or if the remote control begins to function erratically.

To pair remote control:

1. Turn machine ***ON***.

2. Press and hold Remote button on control panel (see **Figure 42**) until it beeps twice to signal control panel is in pairing mode. Continue to hold Remote button through the next step.

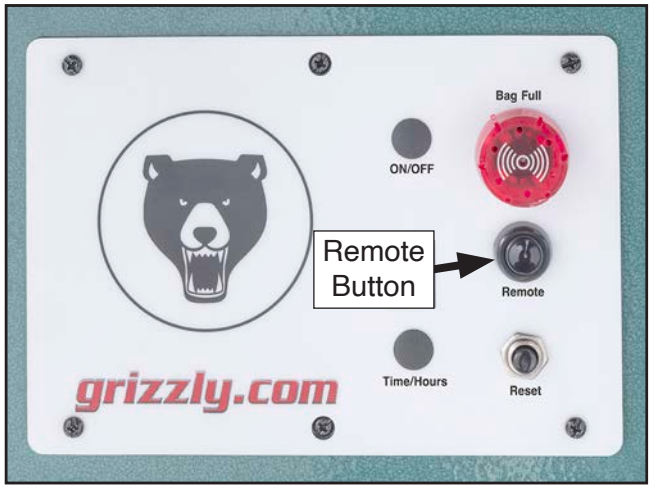


Figure 42. Location of Remote button on control panel.

3. Simultaneously press and hold D button on remote control and Remote button on control panel (see **Figure 43**) until remote beeps (3) times. Remote should now be paired.

4. Test connection by pressing B button to turn motor ***OFF,*** then press A Button to turn motor ***ON*** (see **Figure 43**).

5. Press C button (see **Figure 43**) to cycle through (3) timer settings (1–9 hrs).

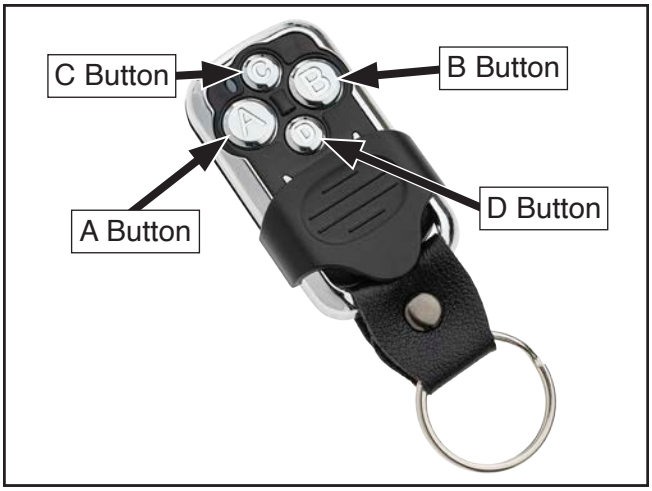


Figure 43. Location of remote control buttons.

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.

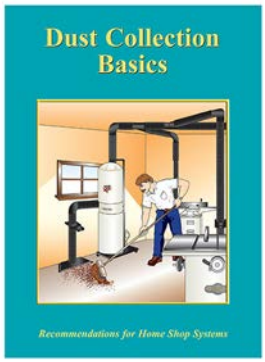


Figure 44. W1050 Dust Collection Basics Book.

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 45. Rigid flex hose.

T34442—1-Micron Replacement Filter
This MERV-16 cartridge filter captures 99.97% of 1-micron particles.

T34443—HEPA Filter Upgrade
This MERV-17 cartridge filter captures 99.97% of 0.3 microns particles.

T34444—Collection Bag (G0991)

Figure 46. Replacement collection bags.

D4206—Clear Flexible Hose 4" x 10'
D4256—45° Elbow 4"
W1317—Wire Hose Clamp 4"
W1007—Plastic Blast Gate 4"
W1017—90° Elbow 4"
W1053—Anti-Static Grounding Kit

Figure 47. 4" dust-collection accessories.

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.

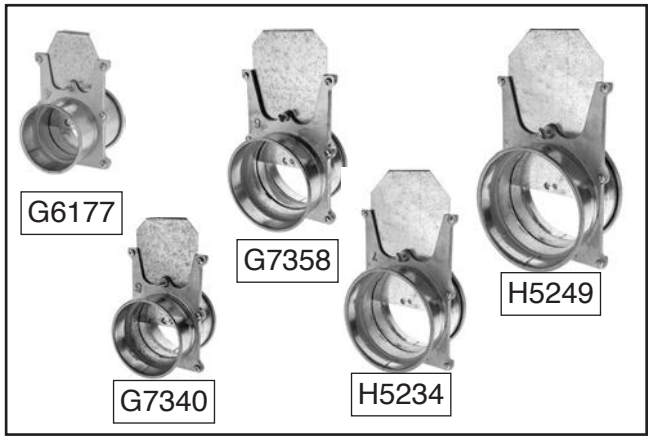


Figure 48. Metal blast gate assortment.

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 ⅛".

Figure 49. W1039 Universal Adapter.

H5293—4" Metal Duct Starter Kit
H5297—6" Metal Duct Starter Kit
Save over 20% with this great starter kit. Includes: (2) machine adapters, (10) pipe clamps, (3) 5' straight pipes, (1) branch, (3) pipe hangers, (1) end cap, (3) adjustable nipples, (1) 90˚ elbow, and (1) 60˚ elbow.

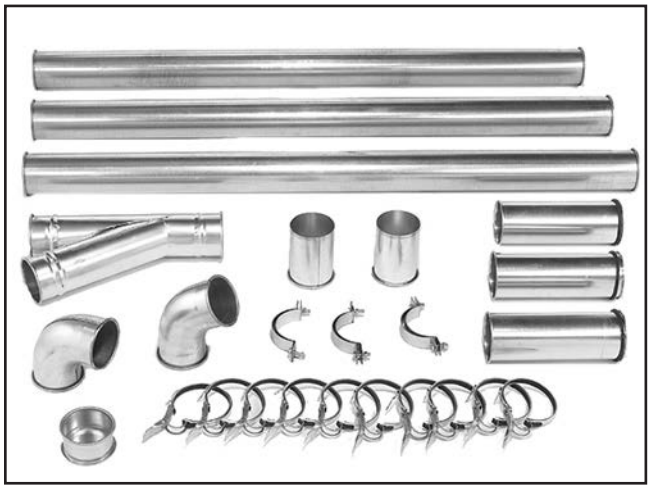


Figure 50. Metal duct starter kit.

H5294—4" Metal Duct Machine Addition Kit
H5298—6" Metal Duct Machine Addition Kit
Save over 20% with this great machine addition kit. Includes: (2) blast gates, (1) machine adapter, (10) pipe clamps, (2) pipe hangers, (2) 5' straight pipes, (2) adjustable nipples, (1) branch, and (1) 60˚ elbow.

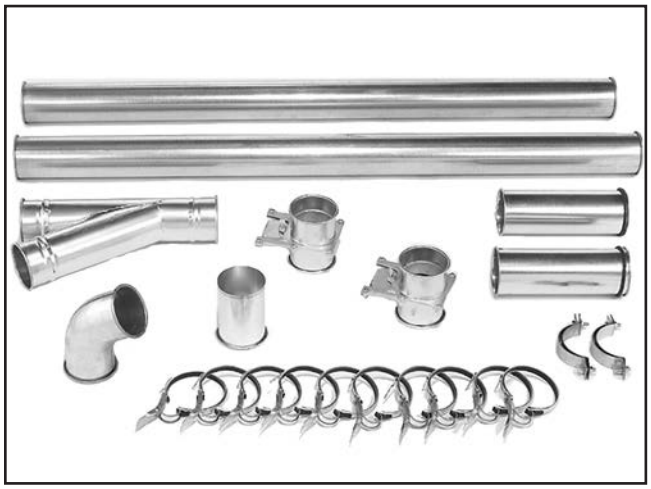
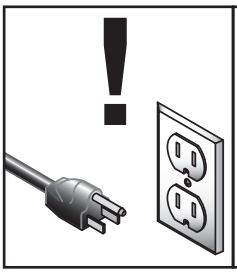


Figure 51. Metal duct machine addition kit.

SECTION 7: MAINTENANCE



⚠WARNING

To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

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:

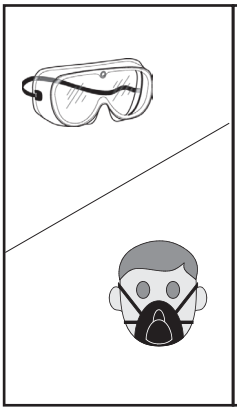
- Loose mounting bolts.
- Damaged filter, cleaning paddle components, or collection bags.
- Worn or damaged wires.
- Suction leaks.
- Any other unsafe condition.

Daily Check

- Check filter drum and clean as needed.

Monthly Check

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



⚠CAUTION

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

Cleaning Cartridge Filter

This dust collector uses a manual cleaning paddle to remove dust buildup and debris from the filter pleats. This cleaning paddle is controlled by the filter cleaning handle shown in **Figure 52**.

Figure 52. Location of filter cleaning handle.

To clean the filter, oscillate the filter cleaning handle around the cartridge filter three to four times to knock dust from the filter.

Note: *If cleaning the cartridge filter does not return CFM performance to the machine, then the filter may need to be replaced (see **Removing/Replacing Cartridge Filter** on **Page 35**).*

IMPORTANT: DO NOT use water or high pressure to clean the cartridge filter. Doing so will damage the filter and reduce filtration.

Vacuum any excess dust from the filter collection drum when it is about ½ full (see **Cleaning Filter Drum** on **Page 34**).

Removing/Replacing Collection Drum Bag

Dispose of the collection drum bag when the Bag Full indicator sounds and illuminates. Replace the bag if it develops a leak or becomes damaged.

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

Item Needed	Qty
Collection Drum Bag (T34444)	1

To remove/replace collection drum bag:

1. DISCONNECT MACHINE FROM POWER!
2. Open front right door, disengage latch lock, then lift collection drum latch (see **Figure 53**) to lower collection drum onto casters.
3. Roll drum clear of machine (see **Figure 53**).

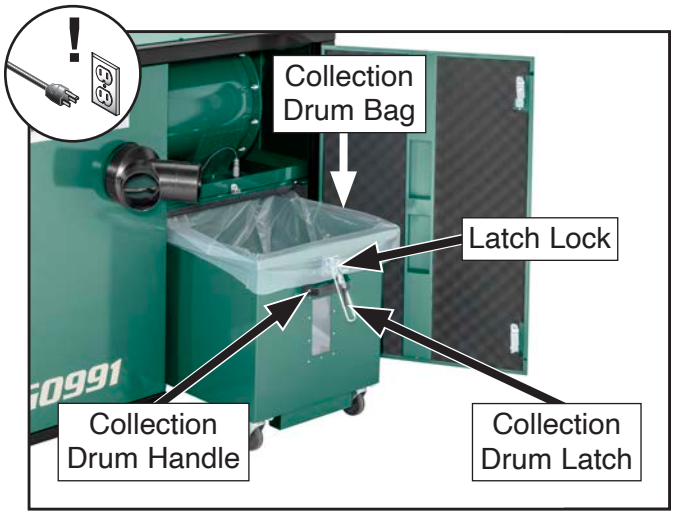


Figure 53. Location of collection drum latch.

4. Firmly tie collection bag closed, then lift collection bag out of drum and dispose of it.
5. Place new collection drum bag inside collection drum, and fold excess bag length over top edge of drum.
6. Roll collection drum back into cabinet, lift latch lock, then latch collection drum to secure it to machine and close maintenance door.

Cleaning Filter Drum

Clean excess dust from the filter drum when the drum is about ½ full.

Item Needed	Qty
Vacuum w/HEPA filter	1

To clean filter drum:

1. DISCONNECT MACHINE FROM POWER!
2. Open left maintenance door.
3. Clean cartridge filter (refer to **Cleaning Cartridge Filter** on **Page 33**).
4. Remove filter port cap (see **Figure 54**), then vacuum excess fine dust from inside filter drum.

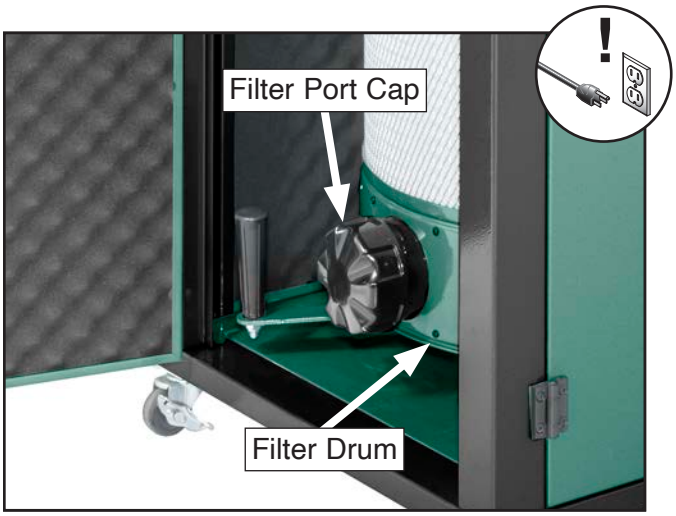


Figure 54. Location of filter port cap.

5. Install filter port cap, then close maintenance door.

Removing/Replacing Cartridge Filter

The cartridge filter assembly is comprised of the pleated cartridge filter, cleaning handle, and rotation shaft assembly. If the cartridge filter assembly is clogged or dirty and cleaning it does not improve dust-collection performance, the filter must be replaced.

Items Needed	Qty
Assistant	1
Wrenches 8, 10, 12mm	1 ea.
Phillips Head Screwdriver #2	1
Pleated Cartridge Filter	1

To remove/replace cartridge filter:

1. DISCONNECT MACHINE FROM POWER!

2. Remove inlet adapter, then open front maintenance doors, left maintenance door, and rear maintenance doors.

3. Complete **Cleaning Filter Drum** steps on **Page 34**.

4. With help from an assistant, brace bottom of filter assembly, then remove (8 of 12) hex bolts and flat washers attaching filter assembly to dust collector frame (see **Figure 55**). Retain fasteners for later use.

5. Loosen (4 of 12) remaining hex bolts (see **Figure 55**), then rotate filter assembly counter clockwise and allow filter assembly to detach from dust collector frame.

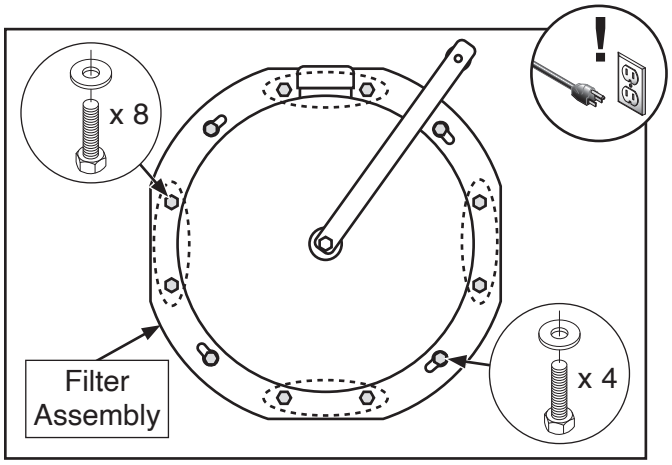


Figure 55. Location of filter assembly fasteners viewed from bottom.

6. Remove filter assembly, then turn upside down so filter drum is facing up (see **Figure 56**).

7. Remove cleaning handle from filter (see **Figure 56**). Keep fasteners, they will be used in later steps.

8. Remove (4) hex bolts, flat washers, and plastic flange (see **Figure 56**).

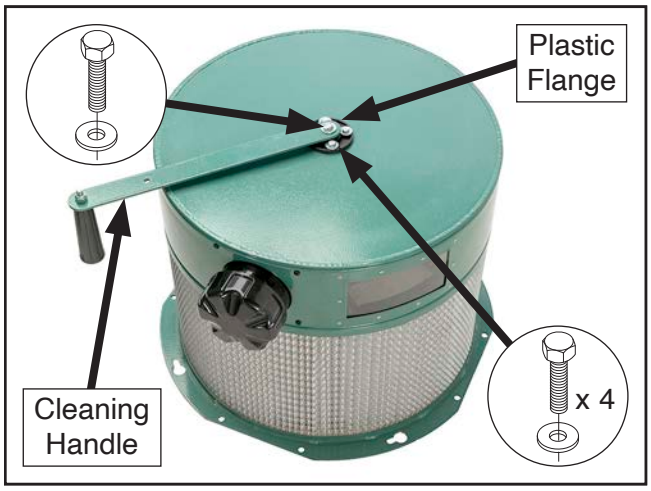


Figure 56. Location of filter cleaning arm and plastic flange fasteners.

9. Turn filter right side up, remove (4) flat head screws and hex nuts (see **Figure 57**), then lift rotation shaft assembly out of cartridge filter.

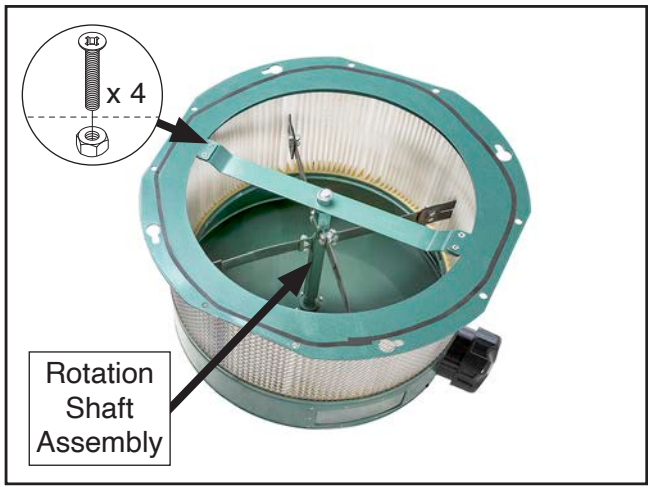


Figure 57. Location of rotation shaft assembly and fasteners.

10. Place rotation shaft assembly into replacement filter and secure with fasteners removed in **Step 9**.

Note: *Ensure edges of rotation shaft bracket are positioned below filter brackets (see **Figure 58**).*

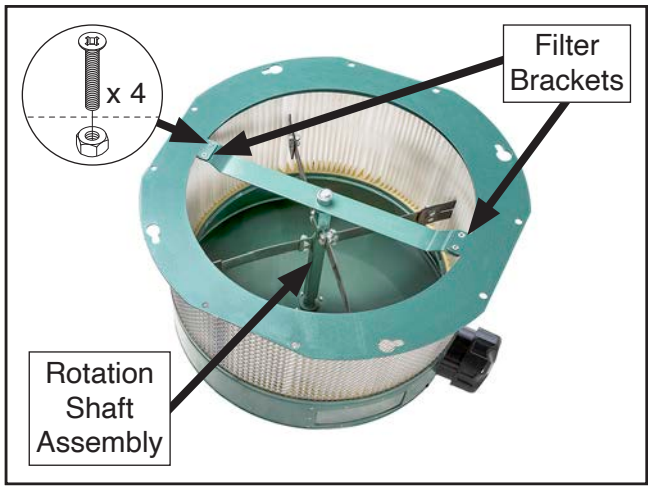


Figure 58. Rotation shaft assembly installed in replacement filter.

11. Turn filter assembly upside down, then attach plastic flange to bottom of filter assembly with fasteners removed in **Step 8** (see **Figure 59**).

12. Attach filter cleaning handle to filter assembly base with fasteners removed in **Step 7** (see **Figure 59**). Slot in cleaning handle must fit over end of rotation shaft.

Note: *Ensure filter cleaning handle faces top of filter.*

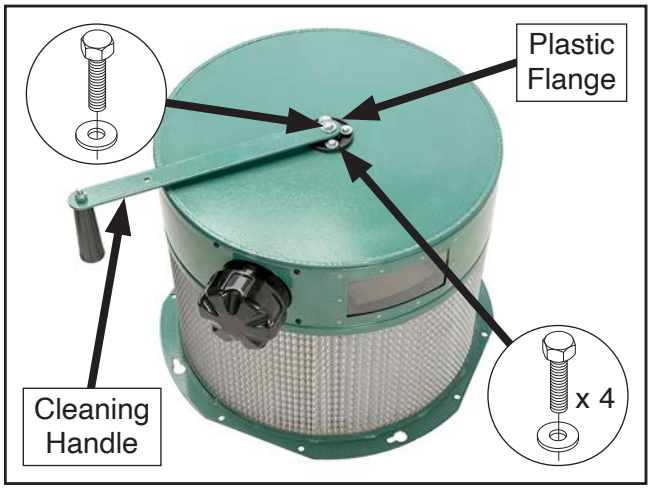


Figure 59. Cleaning handle attached to filter assembly.

13. Turn filter right side up and install 3 x 6mm foam gasket tape around circumference of filter, as shown in **Figure 60**.

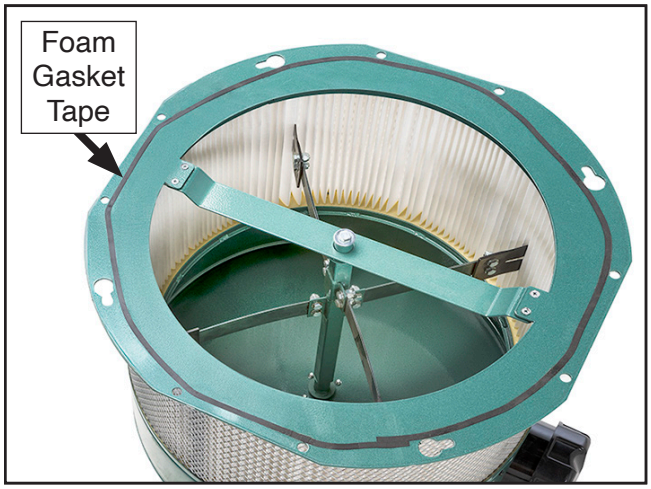


Figure 60. Foam gasket tape installed on filter.

14. Position assembly inside machine so cleaning handle and drum port face left maintenance door (see **Figure 61**).

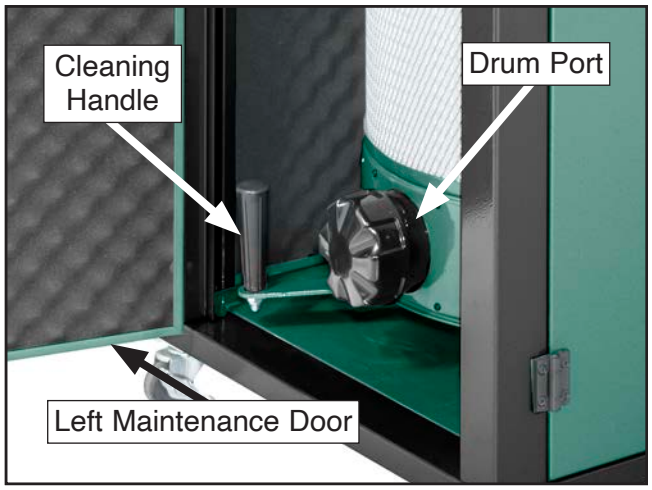


Figure 61. Drum port and cleaning handle facing left maintenance door.

15. Lift filter assembly and align (4) key holes (see **Figure 62**) with installed hex bolts. Rotate assembly clockwise to seat assembly in place.

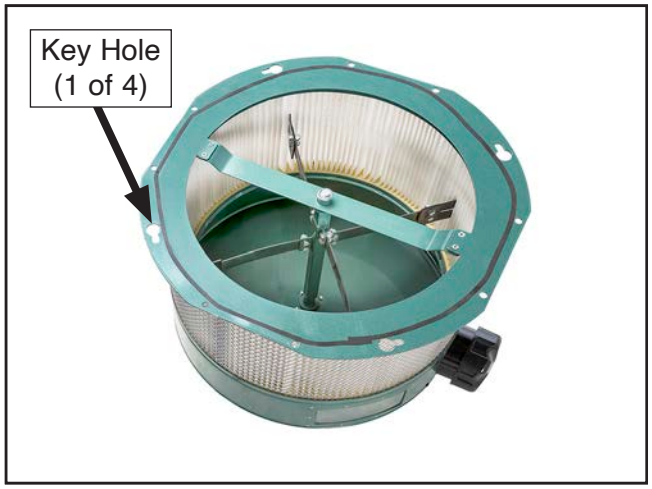


Figure 62. Location of filter assembly key holes.

16. Thread (8) flat washers and hex bolts from **Step 4** into (8) holes in dust collector frame (see **Figure 63**).

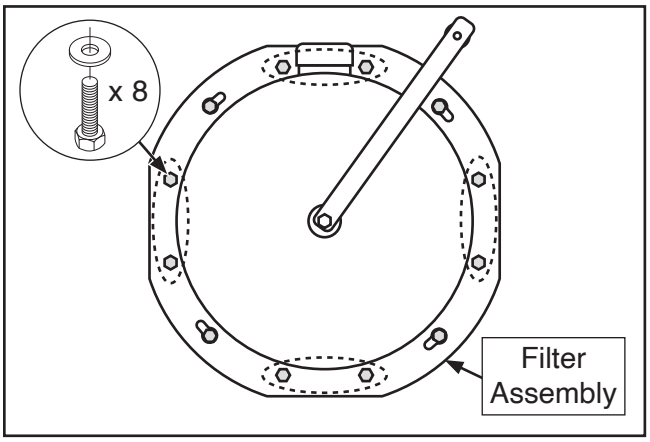


Figure 63. Location of filter assembly fasteners viewed from bottom.

17. Tighten filter assembly fasteners.

IMPORTANT: When assembling any components with a gasket, tighten fasteners in an alternating star pattern (see **Figure 64**) to ensure an even seal and reduce risk of air leaks.

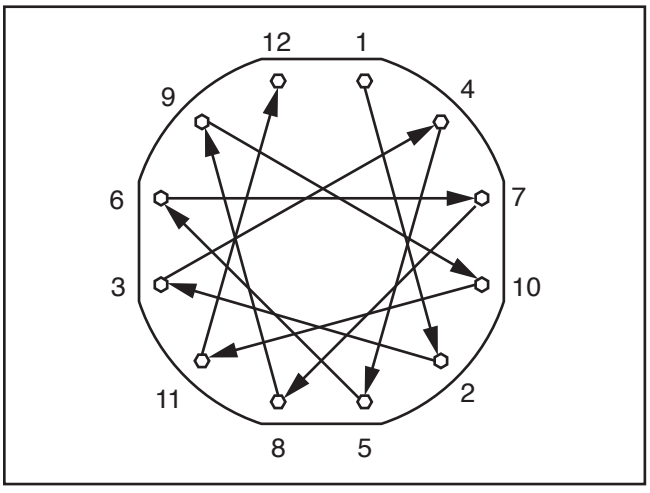
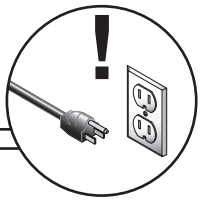


Figure 64. Alternating star pattern for tightening components assembled with a gasket.

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 power supply breaker immediately trips after startup.	1. Drum sensor tripped. 2. Machine circuit breaker tripped. 3. Incorrect power supply voltage or circuit size. 4. Plug/receptacle at fault/wired incorrectly. 5. Remote control improperly paired/not working. 6. Attempting to start machine without filter installed. 7. Power supply circuit breaker tripped or fuse blown. 8. Motor wires connected incorrectly. 9. Centrifugal switch needs adjustment/contact points dirty. 10. Wiring broken, disconnected, or corroded. 11. Motor or motor bearings at fault.	1. Empty dust collection drum. 2. Reset circuit breaker on switch. 3. Ensure correct power supply voltage and circuit size. 4. Test for good contacts; correct the wiring. 5. Replace batteries; stay in signal range; pair remote to machine (**Page 30**). 6. Filters must be installed before machine is turned ***ON***. Starting machine without filters can cause circuit overload or machine electrical damage. 7. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 8. Correct motor wiring connections (**Page 40**). 9. Adjust centrifugal switch/clean contact points. 10. Fix broken wires or disconnected/corroded connections (**Page 40**). 11. Replace motor.
Machine stalls or is underpowered.	1. Dust collection ducting problem. 2. Filter element at fault. 3. Motor wires connected incorrectly. 4. Dust collector undersized. 5. Plug/receptacle at fault/wired incorrectly. 6. Motor overheated, tripping machine circuit breaker. 7. Extension cord too long. 8. Centrifugal switch needs adjustment/contact points dirty. 9. Motor or motor bearings at fault.	1. Clear blockages, seal leaks, use smooth wall duct, eliminate bends, close other branches. 2. Clean filter/empty filter drum (**Page 34**). 3. Correct motor wiring connections. 4. Move closer to machine/redesign ducting layout/ upgrade dust collector. 5. Test for good contacts/correct wiring. 6. Clean motor, let cool, and reduce workload. Reset breaker. 7. Move machine closer to power supply; use shorter extension cord. 8. Adjust centrifugal switch/clean contact points. 9. Replace motor.
Machine has vibration or noisy operation.	1. Motor or component loose. 2. Motor fan rubbing on fan cover. 3. Centrifugal switch needs adjustment. 4. Motor bearings at fault.	1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Fix/replace fan cover; replace loose/damaged fan. 3. Adjust switch. 4. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.

Motor & Electrical (Cont.)

Symptom	Possible Cause	Possible Solution
Digital readout does not work/ display is incorrect.	1. Wiring broken, disconnected, or corroded.	1. Fix broken wires or disconnected/corroded connections (**Page 40**).

Operations

Symptom	Possible Cause	Possible Solution
Loud, repetitious noise, or excessive vibration coming from dust collector (non-motor related).	1. Dust collector not on flat surface and wobbles/casters not locked. 2. Impeller damaged and unbalanced. 3. Impeller loose on motor shaft.	1. Stabilize dust collector; lock casters. 2. Disconnect dust collector from power; inspect impeller for cracks or damage; replace impeller if damaged. 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.	1. Dust collection bag 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. Machine dust collection design inadequate. 11. Dust collector undersized. 12. Unused inlet adapter port uncovered.	1. Replace collection bag (**Page 34**). 2. Empty collection drum; check/re-install/replace seal; secure lid; seal/eliminate leak. 3. Rotate filter cleaning handle to clean filter; replace when cleaning no longer restores adequate airflow or after 1 year of regular use. 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 a System** on **Page 20**. 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. Refer to **Designing a System** on **Page 20**. 8. Open 1 or 2 more blast gates to different branch lines to increase main line velocity. 9. Install correctly sized ducts and fittings. Refer to **Designing a System** on **Page 20**. 10. Use dust collection hood on stand. 11. Move closer to machine/redesign ducting layout/ upgrade dust collector. 12. Cover unused inlet adapter port.
Cleaning canister filter does not improve dust collection performance.	1. Canister filter clogged and at end of life.	1. Replace (**Page 35**).
Dust collector blows sawdust into the air.	1. Duct clamp(s) or dust collection bag not properly clamped and secured; ducting loose/ damaged. 2. Cylinder or funnel seals loose/damaged.	1. Secure ducts and dust collection bag, making sure duct clamp(s) are tight; tighten/replace ducting. 2. Tighten all mounting and sealing points; replace damaged seals/gaskets or use silicon to seal.

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 aftermarket parts.

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

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

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

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

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

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

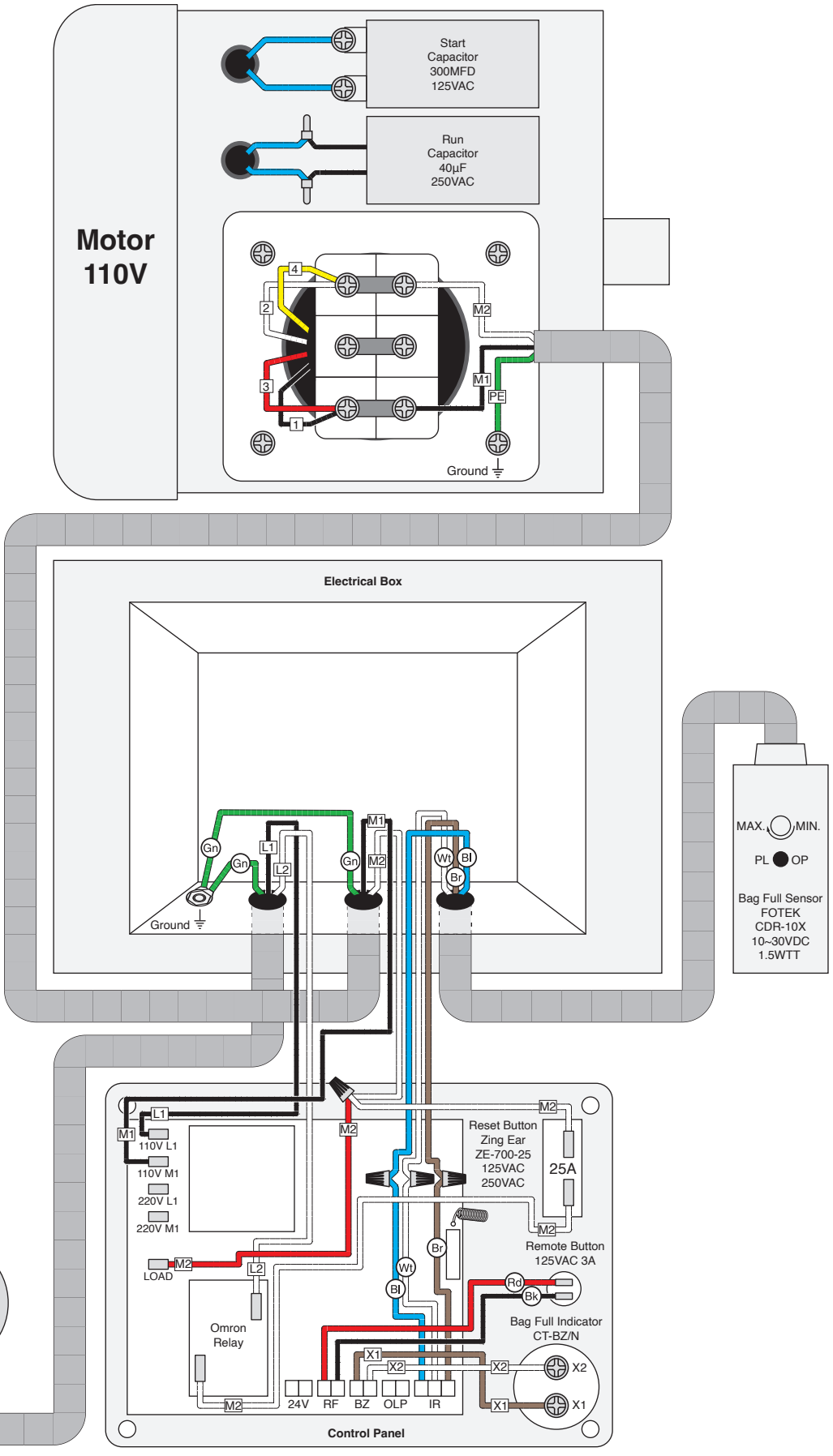
NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

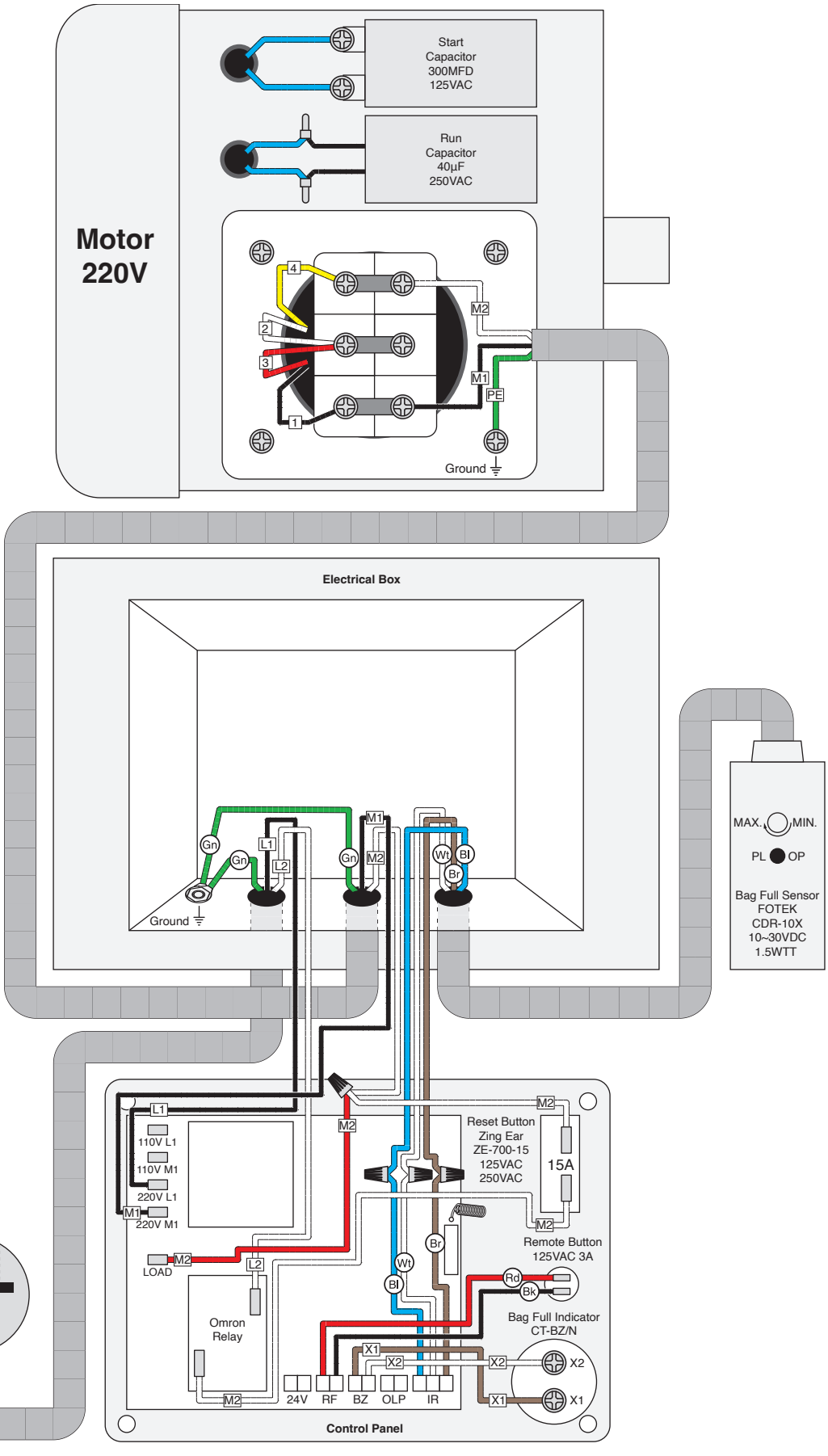
COLOR KEY

BLACK	Bk	BLUE	Bl	YELLOW	Yl	LIGHT BLUE	Lb
WHITE	Wt	BROWN	Br	YELLOW GREEN	Yg	BLUE WHITE	Bw
GREEN	Gn	GRAY	Gy	PURPLE	Pu	TURQUOISE	Tu
RED	Rd	ORANGE	Or	PINK	Pk		

Wiring Diagram 110V



Wiring Diagram 220V



STOP ***READ ELECTRICAL SAFETY ON PAGE 40!***

Electrical Components

Figure 65. Control panel wiring.

Figure 68. Start capacitor wiring.

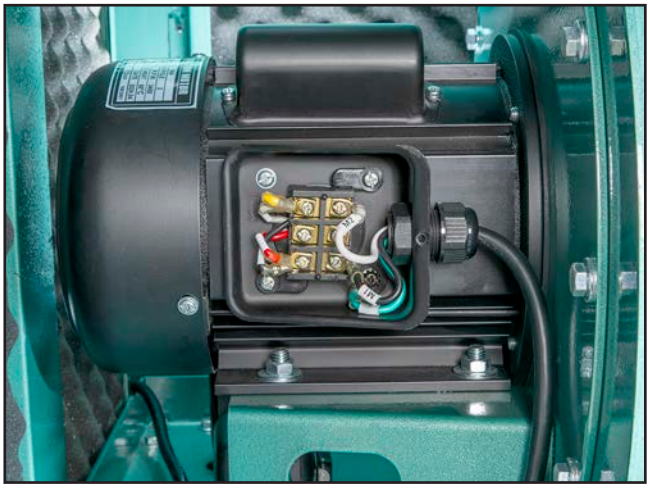


Figure 66. Motor wiring (110V).

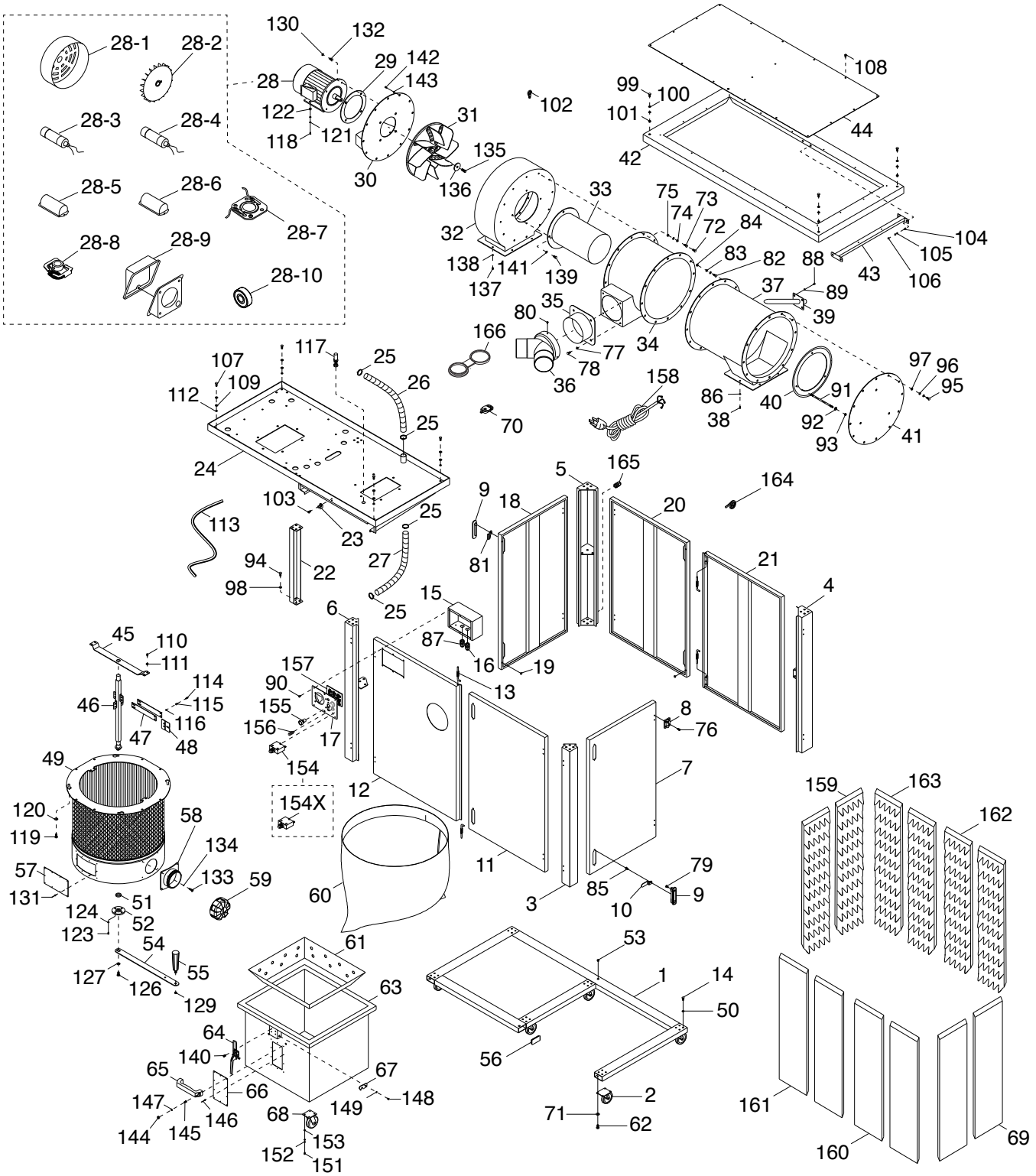
Figure 69. Drum sensor.

Figure 67. Run 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	P0991001	BASE
2	P0991002	CASTER 2", LOCKING SWIVEL
3	P0991003	FRAME STAND, FRONT RIGHT
4	P0991004	FRAME STAND, REAR RIGHT
5	P0991005	FRAME STAND, REAR LEFT
6	P0991006	FRAME STAND, FRONT LEFT
7	P0991007	DOOR, SIDE RIGHT
8	P0991008	HINGE
9	P0991009	DOOR LOCK HANDLE
10	P0991010	DOOR LOCK CAM, RIGHT
11	P0991011	DOOR, FRONT RIGHT
12	P0991012	DOOR, FRONT LEFT
13	P0991013	L-HANDLE SPRING PLUNGER
14	P0991014	HEX BOLT 5/16-18 X 3/4
15	P0991015	CONTROL BOX
16	P0991016	STRAIN RELIEF M10-1.5
17	P0991017	CONTROL PANEL
18	P0991018	DOOR, SIDE LEFT
19	P0991019	DOOR STOPPER
20	P0991020	DOOR, REAR LEFT
21	P0991021	DOOR, REAR RIGHT
22	P0991022	SHELF SUPPORT
23	P0991023	BASE, LATCH HOOK
24	P0991024	SHELF
25	P0991025	HOSE CLAMP 1-1/4"
26	P0991026	FLEX HOSE 1-1/4 X 12"
27	P0991027	FLEX HOSE 1-1/4 X 40"
28	P0991028	MOTOR 1-1/2HP 110V/220V 1-PH
28-1	P0991028-1	MOTOR FAN COVER
28-2	P0991028-2	MOTOR FAN
28-3	P0991028-3	S CAPACITOR 300M 125V 1-3/8 X 2-3/4
28-4	P0991028-4	R CAPACITOR 40M 250V 1-3/8 X 2-3/8
28-5	P0991028-5	S CAPACITOR COVER
28-6	P0991028-6	R CAPACITOR COVER
28-7	P0991028-7	CONTACT PLATE 25 X 38MM EXT
28-8	P0991028-8	CENTRIFUGAL SWITCH 14MM 2400
28-9	P0991028-9	MOTOR JUNCTION BOX
28-10	P0991028-10	BALL BEARING 6205ZZ
29	P0991029	GASKET 133 X 197 X 2MM RUBBER
30	P0991030	IMPELLER COVER
31	P0991031	IMPELLER 12-1/2"
32	P0991032	IMPELLER HOUSING
33	P0991033	INTAKE CYLINDER
34	P0991034	INTAKE BARREL
35	P0991035	INTAKE PORT
36	P0991036	INLET ADAPTER 6" X 4" X 2
37	P0991037	CYCLONE FUNNEL BARREL
38	P0991038	HEX BOLT 5/16-18 X 3/4
39	P0991039	BARREL VACUUM SUCTION TUBE

REF	PART #	DESCRIPTION
40	P0991040	CYCLONE FUNNEL PLATE
41	P0991041	FUNNEL COVER
42	P0991042	UPPER HOUSING FRAME
43	P0991043	CROSS SUPPORT BRACE
44	P0991044	UPPER FRAME PANEL
45	P0991045	PADDLE SHAFT BRACKET
46	P0991046	PADDLE SHAFT
47	P0991047	CLEANING PADDLE HANDLE
48	P0991048	CLEANING PADDLE
49	P0991049	PLEATED CARTRIDGE FILTER
50	P0991050	FLAT WASHER 5/16
51	P0991051	SEAL 30 X 20 X 5MM
52	P0991052	FLANGE 70 X 20.5 X 7MM, PLASTIC
53	P0991053	PLUG 10MM
54	P0991054	FILTER CLEANING ARM
55	P0991055	FIXED HANDLE 3/8-16 X 22
56	P0991056	PLUG 30 X 60MM
57	P0991057	FILTER DRUM WINDOW 182 X 107MM
58	P0991058	FILTER PORT, PLASTIC
59	P0991059	FILTER PORT CAP, PLASTIC
60	P0991060	COLLECTION BAG 670 X 800MM
61	P0991061	DRUM VACUUM SUCTION RING
62	P0991062	HEX BOLT 1/4-20 X 1/2
63	P0991063	COLLECTION DRUM
64	P0991064	COLLECTION DRUM LATCH
65	P0991065	DRUM HANDLE
66	P0991066	DRUM WINDOW 182 X 107MM
67	P0991067	DRUM LATCH LOCK
68	P0991068	CASTER 3", SWIVEL
69	P0991069	FOAM, DOOR SIDE RIGHT 200 X 860 X 25MM
70	P0991070	REMOTE CONTROL
71	P0991071	FENDER WASHER 1/4
72	P0991072	HEX BOLT 5/16-18 X 3/4
73	P0991073	HEX BOLT 5/16-18 X 1
74	P0991074	FLAT WASHER 5/16
75	P0991075	HEX NUT 5/16-18
76	P0991076	BUTTON HD CAP SCR M5-.8 X 10
77	P0991077	FLAT WASHER 5/16
78	P0991078	HEX BOLT 5/16-18 X 3/4
79	P0991079	PHLP HD SCR M4-.7 X 6
80	P0991080	TAP SCREW M4 X 12
81	P0991081	DOOR LOCK CAM, LEFT
82	P0991082	HEX BOLT 5/16-18 X 1
83	P0991083	FLAT WASHER 5/16
84	P0991084	HEX NUT 5/16-18
85	P0991085	PHLP HD SCR M5-.8 X 7
86	P0991086	FLAT WASHER 5/16
87	P0991087	STRAIN RELIEF M20-1.5
88	P0991088	HEX BOLT 5/16-18 X 3/4

Main Parts List (Cont.)

REF	PART #	DESCRIPTION
89	P0991089	FLAT WASHER 5/16
90	P0991090	PHLP HD SCR M4-.7 X 10
91	P0991091	STUD-DE 5/16"-18 X 200, 25
92	P0991092	FLAT WASHER 5/16
93	P0991093	HEX NUT 5/16-18
94	P0991094	HEX BOLT 5/16-18 X 3/4
95	P0991095	HEX BOLT 5/16-18 X 1
96	P0991096	FLAT WASHER 5/16
97	P0991097	HEX NUT 5/16-18
98	P0991098	FLAT WASHER 5/16
99	P0991099	HEX BOLT 5/16-18 X 3/4
100	P0991100	FLAT WASHER 5/16
101	P0991101	HEX NUT 5/16-18
102	P0991102	EYE BOLT 1-3/16", M12-1.75 X 22
103	P0991103	PHLP HD SCR 10-24 X 1/2
104	P0991104	HEX BOLT 5/16-18 X 1
105	P0991105	FLAT WASHER 5/16
106	P0991106	HEX NUT 5/16-18
107	P0991107	HEX BOLT 5/16-18 X 3/4
108	P0991108	PHLP HD SCR M5-.8 X 10
109	P0991109	FLAT WASHER 5/16
110	P0991110	FLAT HD SCR 10-24 X 5/8
111	P0991111	HEX NUT 10-24
112	P0991112	HEX NUT 5/16-18
113	P0991113	DRUM SEAL TYPE-R 11 X 21 X 2000MM
114	P0991114	HEX BOLT 1/4-20 X 5/8
115	P0991115	FLAT WASHER 1/4
116	P0991116	LOCK NUT 1/4-20
117	P0991117	PHOTOELECTRIC SENSOR FOTEK CDR-10X
118	P0991118	HEX BOLT 3/8-16 X 1
119	P0991119	HEX BOLT 5/16-18 X 3/4
120	P0991120	FLAT WASHER 5/16
121	P0991121	FLAT WASHER 3/8
122	P0991122	HEX NUT 3/8-16
123	P0991123	HEX BOLT 1/4-20 X 5/8
124	P0991124	FLAT WASHER 1/4
126	P0991126	HEX BOLT 5/16-18 X 3/4
127	P0991127	FENDER WASHER 5/16

REF	PART #	DESCRIPTION
129	P0991129	LOCK NUT 3/8-16
130	P0991130	FLAT WASHER 5/16
131	P0991131	RIVET 3 X 2MM BLIND AL
132	P0991132	HEX BOLT 5/16-18 X 3/4
133	P0991133	PHLP HD SCR 10-24 X 1/2
134	P0991134	HEX NUT 10-24
135	P0991135	HEX BOLT 5/16-18 X 3/4
136	P0991136	FLAT WASHER 5/16 X 1-3/16 X 1/8
137	P0991137	HEX BOLT 5/16-18 X 3/4
138	P0991138	FLAT WASHER 5/16
139	P0991139	HEX BOLT 5/16-18 X 3/4
140	P0991140	PHLP HD SCR 10-24 X 1/2
141	P0991141	FLAT WASHER 5/16
142	P0991142	HEX BOLT 5/16-18 X 3/4
143	P0991143	FLAT WASHER 5/16
144	P0991144	ACORN NUT 5/16-18
145	P0991145	PHLP HD SCR 5/16-18 X 3/4
146	P0991146	RIVET 3 X 2MM BLIND AL
147	P0991147	FLAT WASHER 5/16
148	P0991148	HEX BOLT 1/4-20 X 5/8
149	P0991149	LOCK NUT 1/4-20
151	P0991151	HEX BOLT 5/16-18 X 5/8
152	P0991152	FLAT WASHER 5/16
153	P0991153	HEX NUT 5/16-18
154	P0991154	CIRCUIT BREAKER 25A ZING EAR ZE-700-25
154X	P0991154X	CIRCUIT BREAKER 15A ZING EAR ZE-700-15
155	P0991155	INDICATOR LAMP CT-BZ/N 24V
156	P0991156	REMOTE CONTROL BUTTON 12MM 125V 3A
157	P0991157	CIRCUIT BOARD SF-HC150
158	P0991158	POWER CORD 14G 3W 78" 5-15P
159	P0991159	FOAM, DOOR SIDE LEFT 200 X 860 X 25MM
160	P0991160	FOAM, DOOR FRONT RIGHT 250 X 860 X 25MM
161	P0991161	FOAM, DOOR FRONT LEFT 275 X 860 X 25MM
162	P0991162	FOAM, DOOR REAR RIGHT 250 X 860 X 25MM
163	P0991163	FOAM, DOOR REAR LEFT 250 X 860 X 25MM
164	P0991164	FOAM GASKET TAPE 3 X 6 X 10000MM
165	P0991165	STRAIN RELIEF M20-1.5
166	P0991166	INLET COVER 4"

Labels & Cosmetics

REF	PART #	DESCRIPTION
201	P09911201	MACHINE ID LABEL
202	P09911202	READ MANUAL LABEL 1.5 X 2.5H
203	P09911203	RESPIRATOR/GLASSES LABEL 1.5W X 2.5H
204	P09911204	GRIZZLY PRO LABEL
205	P09911205	ELECTRICITY LABEL 0.7W X 0.6H

REF	PART #	DESCRIPTION
206	P09911206	GRIZZLY.COM
207	P09911207	MODEL NUMBER LABEL
208	P09911208	QUIET SERIES LABEL
209	P09911209	TOUCH-UP PAINT, GLOSSY BLACK
210	P09911210	TOUCH-UP PAINT, GRIZZLY GREEN

⚠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.

WARRANTY

grizzly.com