

Grizzly *Industrial, Inc.*®

MODEL G0583Z DUST COLLECTOR OWNER'S MANUAL



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
(FOR MODELS MANUFACTURED SINCE 3/09) #JB11718 PRINTED IN TAIWAN

 **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

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

The owner of this machine/equipment 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, blade/cutter 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

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes errors do happen and we apologize for them.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.

		MODEL GXXXX MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:		Manufacture Date of Your Machine	
Specification:			
Specification:			
Specification:			
Weight:			
<input type="text"/>	Date	ing this machine: operation. s and respirator. sted/setup and suit before starting.	
<input type="text"/>	Serial Number	4. Make sure the motor has stopped and disconnect power before adjustments, maintenance, or service.	
Manufactured for Grizzly in Taiwan		5. DO NOT expose to rain or dampness.	
		6. DO NOT modify this machine in any way.	
		7. DO NOT remove safety guards.	
		8. Never leave machine running unattended.	
		9. DO NOT operate under the influence of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	

For your convenience, we post all available manuals and manual updates for free on our website at www.grizzly.com. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
c/o Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Machine Description

This machine is designed to capture dust and wood chips from woodworking machines, such as table saws, jointers, and planers. The air drawn in by the dust collector is filtered before it returns to your workspace.

A wide variety of accessories for setting up a stationary or mobile dust collection system are available through Grizzly.



G0583Z Identification

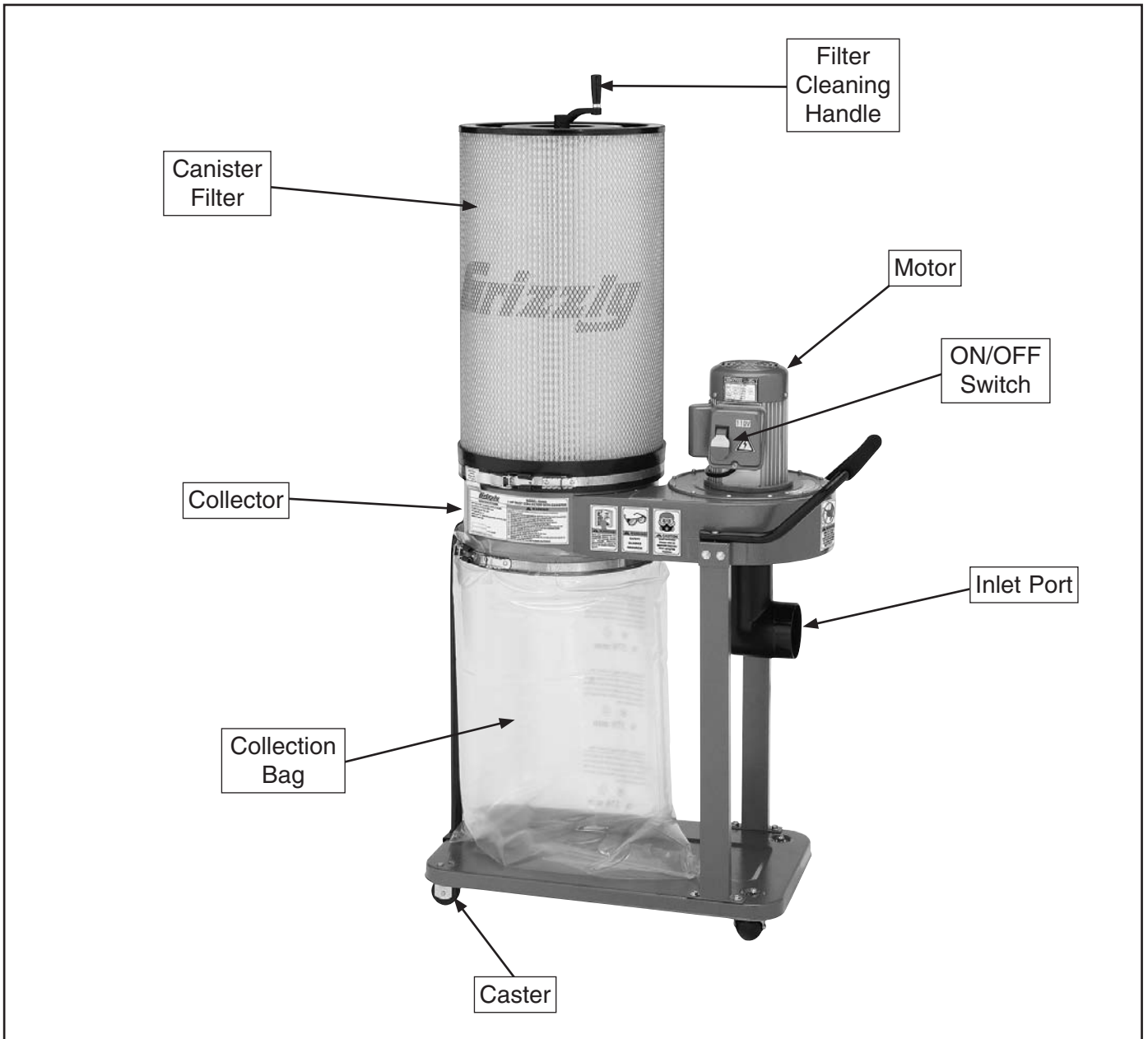


Figure 1. Model G0583Z identification.





MACHINE DATA SHEET

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

MODEL G0583Z 1HP CANISTER DUST COLLECTOR

Product Dimensions:

Weight..... 65.80 lbs.
 Length/Width/Height..... 15-3/4 x 30-3/4 x 58-5/8 in.
 Foot Print (Length/Width)..... 26 x 15-1/4 in.

Shipping Dimensions:

Carton #1

Type..... Cardboard
 Content..... Machine
 Weight..... 59 lbs.
 Length/Width/Height..... 29 x 17 x 18 in.

Carton #2

Type..... Cardboard
 Content..... Canister
 Weight..... 18 lbs.
 Length/Width/Height..... 18 x 18 x 28 in.

Electrical:

Switch..... On/Off Paddle Switch
 Switch Voltage..... 110V
 Cord Length..... 6 ft.
 Cord Gauge..... 14 gauge
 Minimum Circuit Size..... 15 amps @ 110V, 10 amps @ 220V
 Plug Included..... Yes
 Recommended Plug/Outlet Type..... 6-15 for 220V

Motors:

Main

Type..... TEFC (Aluminum Finned)
 Horsepower..... 1 HP
 Voltage..... 110/220V
 Prewired..... 110V
 Phase..... Single
 Amps..... 9/4.5A
 Speed..... 3450 RPM
 Cycle..... 60 Hz
 Number Of Speeds..... 1
 Power Transfer..... Direct Drive
 Bearings..... Sealed and Permanently Lubricated



Main Specifications:

Operation

Air Suction Cap.....	800 CFM
Maximum Static Pressure.....	3.3 in.
Main Inlet Size.....	4 in.
Manifold Included.....	Yes
Manifold Inlets.....	1
Manifold Inlet Size.....	4 in.
Maximum Material Collection Cap.....	2.1 cu. ft.
Canister Filtration.....	1 micron

Bag Information

No Of Lower Bags.....	1
Lower Bag Cap.....	2.1 cu. ft.
Lower Bags Total Area.....	2.1 cu. ft.
Lower Bag Diameter.....	14-1/2 in.
Lower Bag Length.....	22 in.

Canister Information

No Of Canister Filters.....	1
Canister Filter Diameter.....	14-1/2 in.
Canister Filter Length.....	23-5/8 in.

Impellar Information

Impeller Type.....	Radial Fin
Impeller Size.....	10 in.
Impeller Blade Thickness.....	1/8 in.

Construction

Lower Bag Material.....	Clear Plastic
Canister Material.....	Wire Reinforced Pleated Filter Paper
Base Construction.....	Sheet Metal with Casters
Frame Construction.....	Steel
Caster Construction.....	High Density Plastic
Impeller Construction.....	Balanced Steel, 7 Riveted Fins
Paint.....	Powder Coated
Blower Housing Construction.....	Steel
Body Construction.....	Sheet Metal

Other

Height With Bags Inflated.....	58-5/8 in.
--------------------------------	------------

Other Specifications:

Country Of Origin	Taiwan
Warranty	1 Year
Assembly Time	45 Minute

Features:

- Simply Turn the Handle on the Top a Half Turn in Either Direction for Cleaning the Canister
- Handle Controls Three Cleaning Flappers Inside and Shakes the Dust from the Filter
- Fine Dust from Filter Falls Directly into the Collection Bag
- Clear Plastic Collection Bag with Quick Clamp
- Heavy Duty Steel Intake Improves Rigidity
- Canister Filters Have 6 Times the Filtering Area of Regular Bags
- Includes Steel Base with Casters



SECTION 1: SAFETY

WARNING

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.



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



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



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

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine. Untrained users can be seriously hurt.

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.

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

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

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.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



WARNING

Safety Instructions for Machinery

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

INTENDED USE. Only use the machine for its intended purpose and only use recommended accessories. Never stand on machine, modify it for an alternative use, or outfit it with non-approved accessories.

STABLE MACHINE. Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

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

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

REMOVING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

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.

DANGEROUS ENVIRONMENTS. Do not use machinery in wet locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well lighted to minimize risk of injury.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine **OFF** and ensure all moving parts completely stop before walking away.

MAINTENANCE & INSPECTION. A machine that is not properly maintained may operate unpredictably. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. Regularly inspect machine for loose bolts, alignment of critical parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

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



WARNING

Additional Safety for Dust Collectors

- 1. MACHINE USE.** This machine is only intended to collect wood dust/chips from woodworking machines. Do not use this dust collector as a vacuum. Do not use this dust collector with machines producing dust/chips from metal, asbestos products, lead paint, silica or any products that are not natural wood or man-made wood products such as plywood or particle board.
- 2. SUSPENDED DUST PARTICLES AND IGNITION SOURCES.** Do not operate the dust collector in areas where explosion risks would be high if dust were dispersed into the area. Areas of high risk include, but are not limited to, areas near pilot lights or open flames.
- 3. EMPTYING DUST.** When emptying dust from the collection bags, wear a respirator and safety glasses. Empty dust into an approved container and dispose of properly.
- 4. DUST HAZARD.** Be aware that certain woods may cause an allergic reaction in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction.
- 5. AVOIDING FIRES.** Do not allow steel to strike against the impeller—this may produce a spark. Sparks can smolder in wood dust for a long time before fire or flame is detected. If you accidentally collect metal during operation, immediately turn off the dust collector, unplug the power cord from the outlet or flip the disconnect switch and wait for all moving parts to stop. Remove collection bags and empty the dust into an approved air tight metal container. Prevent any chance of accidentally collecting metal again before resuming operations.
- 6. SAFE SERVICING.** Disconnect power and allow impeller to completely stop before servicing or working on the dust collector or the ducting system, especially if clearing a clogged duct.
- 7. KEEPING FINGERS SAFE.** Do not place your hands or tools near the open inlet during operation for any reason. The powerful suction could cause accidental contact with the impeller, which will cause serious personal injury or damage to the machine.
- 8. WEAR RESPIRATOR.** This machine may blow fine dust particles into the air during operation. Always wear an approved respirator during and for a short time after machine operation!

WARNING

Like all machines there is danger associated with this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility 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.



SECTION 2: CIRCUIT REQUIREMENTS

110/220V Operation

!WARNING

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



!WARNING

Electrocution or fire could result if machine is not grounded and installed in compliance with electrical codes. Compliance **MUST** be verified by a qualified electrician!

NOTICE

The Model G0583Z is prewired for 110V. If you plan to operate the machine at 220V, the motor must be rewired (refer to Page 26).

Full Load Amperage Draw

This machine draws the following amps under maximum load:

Amp Draw at 110V (prewired)..... 9 Amps
 Amp Draw at 220V 4.5 Amps

Power Supply Circuit Requirements

The power supply circuit for your machine **MUST** be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.

Minimum Circuit Size (110V)..... 15 Amps
 Minimum Circuit Size (220V)..... 15 Amps

Power Connection Device

The Model G0583Z comes prewired with a NEMA 5-15 plug for connection to power. If you rewire the motor to 220V, we recommend using the plug and receptacle shown in **Figure 2** for 220V.

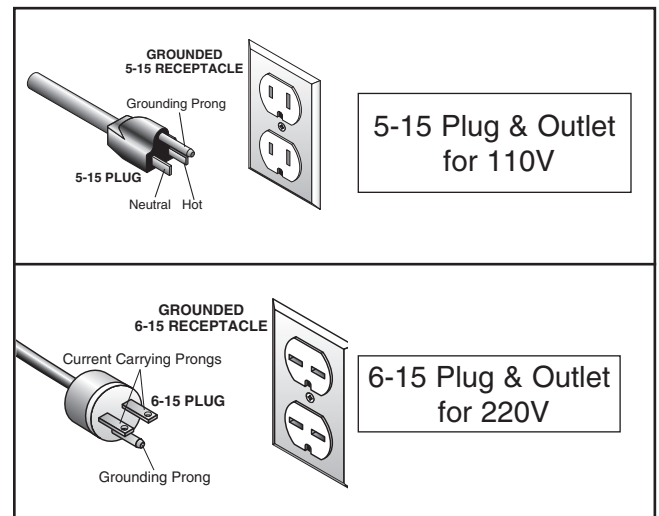


Figure 2. Recommended plug types.

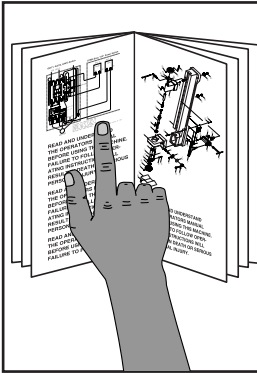
Extension Cords

Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- For 110V, use at least a 14 gauge cord that does not exceed 50 feet in length.
- For 220V, use at least a 16 gauge cord that does not exceed 50 feet in length.
- The extension cord must have a ground wire and plug pin.

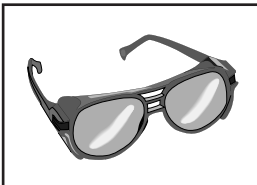


SECTION 3: SETUP



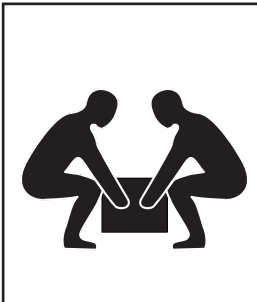
!WARNING

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



!WARNING

Wear safety glasses during the entire setup process!



!WARNING

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

Needed for Setup

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

Description	Qty
• Safety Glasses (for each person).....	1
• Wrench or Socket 12mm.....	1
• Phillips Head Screwdriver #2	1
• Hex Wrench 3mm.....	1

Unpacking

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

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

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



G0583Z Inventory

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

Note: If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for shipping purposes.

Box 1: (Figure 3)	Qty
A. Base.....	1
B. Impeller/Separator Assembly	1
C. Dust Storage Bag	1
D. Elbow 4".....	1
E. Hand Rail.....	1
F. Round Support Leg	1
G. Rectangle Support Legs	2
H. Fixed Casters	2
I. Swivel Casters	2
J. Lower Bag Clamp.....	1
K. Hardware Bag.....	1
— Hex Bolt $\frac{5}{16}$ "-18 x $\frac{1}{2}$ ".....	12
— Acorn Nut $\frac{5}{16}$ "-18.....	4
— Flat Washer $\frac{5}{16}$ ".....	2
— Flat Head Screw $\frac{5}{16}$ "-18 x 1".....	2
— Flange Screw 10-24 x $\frac{3}{8}$ ".....	1
— Open-End Wrench 10-12mm.....	1
— Hex Wrench 5mm	1
— Hex Bolt M6-1 x 10.....	4

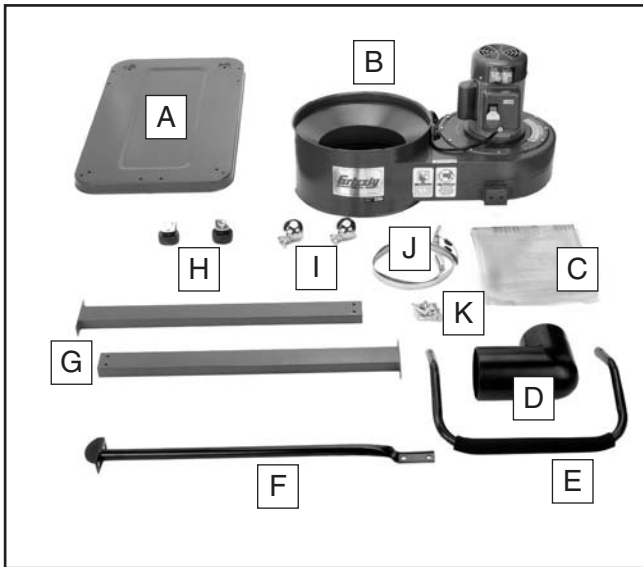



Figure 3. Model G0583Z box 1 inventory.

Box 2: (Figure 4)	Qty
L. Canister Filter	1
M. Quick Release Clamp	1
N. Foam Adhesive Bag	1
— Wide Foam Strip 5 x 42mm.....	1
— Narrow Foam Strip 4 x 20mm.....	1
O. Canister Cleaning Handle	1



Figure 4. Model G0583Z box 2 inventory.

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



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



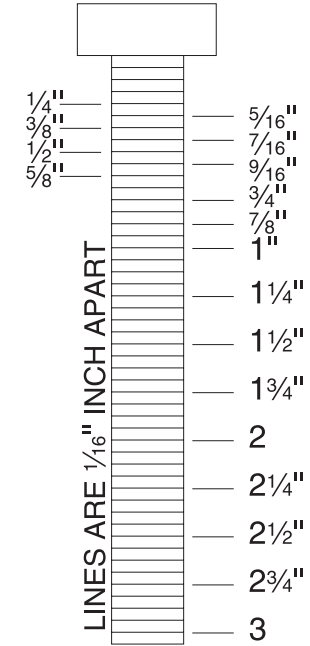
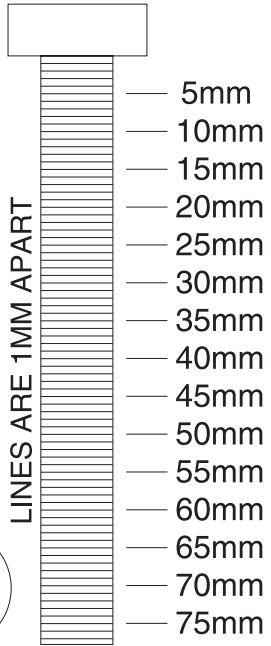
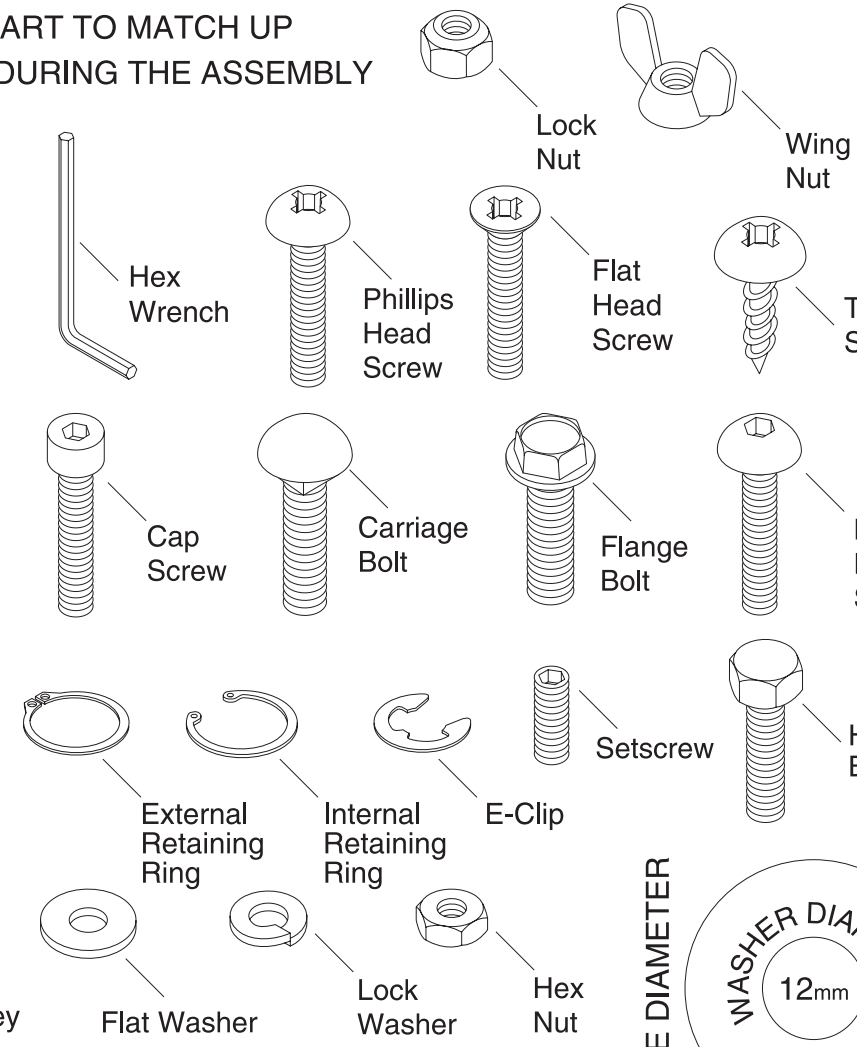
Hardware Recognition Chart

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

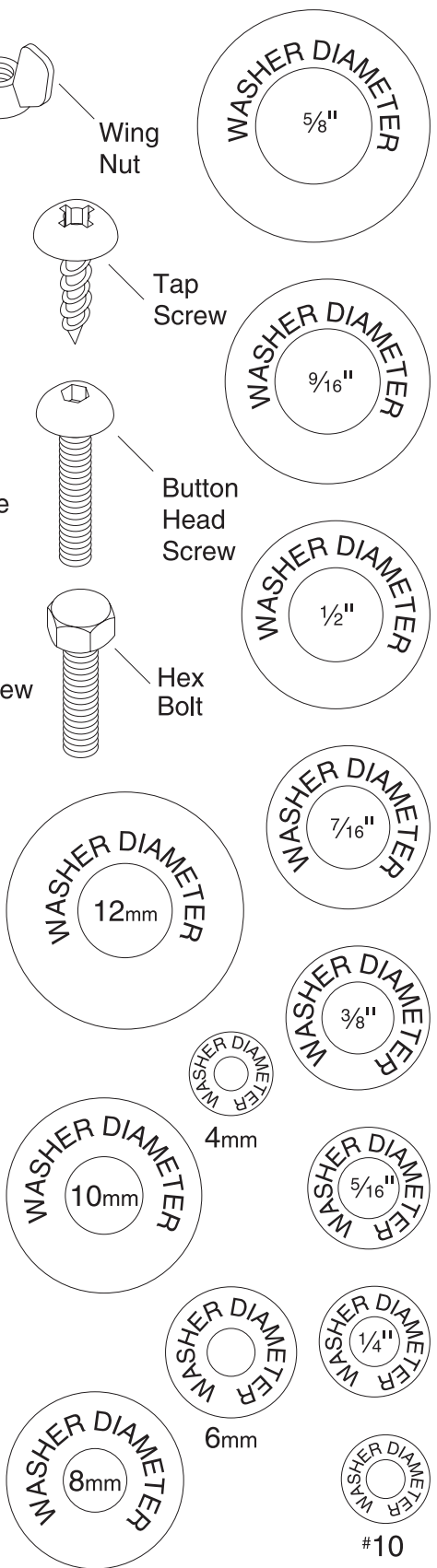
MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

- #10
- 1/4"
- 5/16"
- 3/8"
- 7/16"
- 1/2"

- 4mm
- 6mm
- 8mm
- 10mm
- 12mm
- 16mm



WASHERS ARE MEASURED BY THE INSIDE DIAMETER



Site Considerations

Floor Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine and operator.

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 5** for the minimum working clearances.

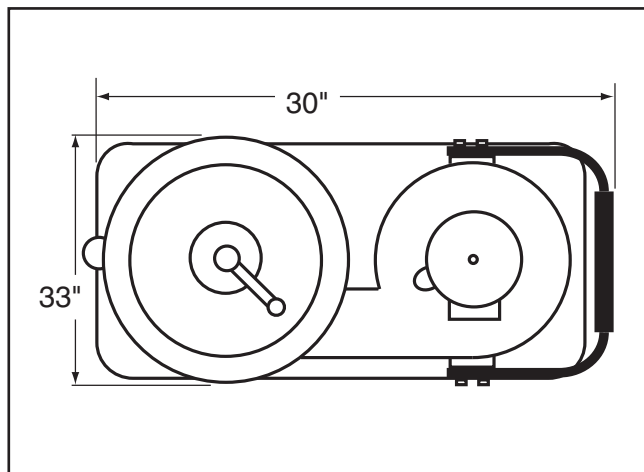


Figure 5. Minimum working clearances.

	<p>⚠ CAUTION</p> <p>Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.</p>
---	--

G0583Z Assembly

To assemble your dust collector:

1. Install the casters on to the base with (4) $\frac{5}{16}$ "-18 acorn nuts, as shown in **Figure 6**. The swivel casters can be mounted in the front or rear position, depending on your preference.

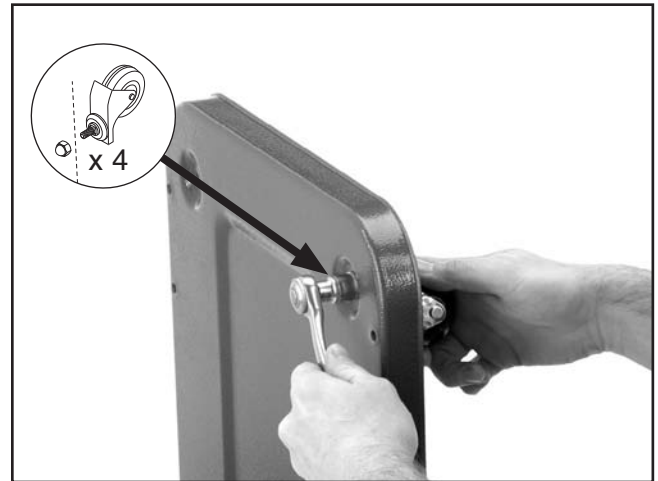


Figure 6. Caster installed onto the base.

2. Place the round and rectangle supports on the base and secure them with (6) $\frac{5}{16}$ "-18 x $\frac{1}{2}$ " hex bolts (see **Figure 7**).

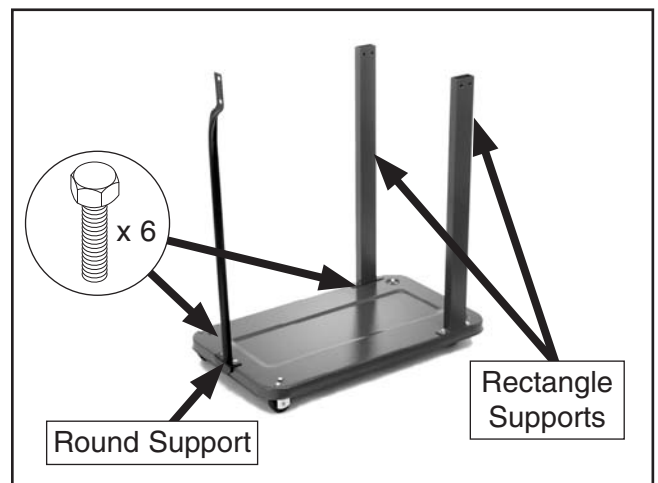


Figure 7. Round and rectangle supports installed onto the base.



- Align the impeller/separator assembly with the supports, and secure it with (6) $\frac{5}{16}$ "-18 x $\frac{1}{2}$ " hex bolts (see **Figure 8**).



Figure 8. Impeller/separator attached to base.

- Position the elbow as shown in **Figure 8**, and secure it in place with the #10-24 x $\frac{3}{8}$ " flange screw.
- Position the handle as shown in **Figure 8**, and secure it in place with two $\frac{5}{16}$ "-18 x 1" flat head screws.
- Affix the narrow foam strip around the outside top rim of the collector, as shown in **Figure 9**.



Figure 9. Narrow foam strip affixed.

- Trim the excess foam strip so the ends come together evenly, as shown in **Figure 9**.

- Install the handle onto the top of the canister and tighten the set screw against the flat of the shaft (**Figure 10**).

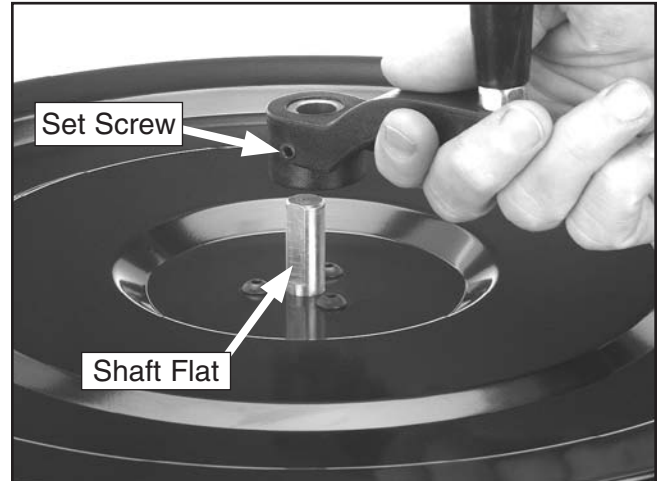


Figure 10. Installing canister handle.

- Place the canister on top of the collector.
- Position the metal canister clamp around the bottom of the canister filter, so it will compress around the foam strip (**Figure 11**), and latch the clamp closed.



Figure 11. Canister filter installed and secured.



11. Secure the wide foam strip around the outside bottom rim of the collector and trim the excess (**Figure 12**).



Figure 12. wide foam strip installed and trimmed.

12. Slide the clear collection bag around the bottom of the collector so the rim of the bag overlaps onto the foam strip.

13. Position and tighten the lower bag clamp around the wide foam strip to seal and secure the lower collection bag (**Figure 13**).



Figure 13. Dust collection bag installed.



Test Run



Once the assembly is complete, test run your machine to make sure it runs properly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review the **Troubleshooting** on **Page 24**.

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

To test run the machine:

1. Make sure you have read the safety instructions at the beginning of the manual and that the machine is set up properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Connect the machine to the power source.
4. Turn the machine **ON**.
5. Listen to and watch for abnormal noises or actions. The machine should run smoothly with little or no vibration or rubbing noises.

—Strange or unusual noises should be investigated and corrected before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
6. Turn the machine **OFF**.



SECTION 4: COLLECTION SYSTEM

General

The Model G0583Z is designed to collect dust from a single woodworking machine. Locate the dust collector where it will not interfere with the workpiece being processed, and no more than 10' of ducting is used, otherwise the CFM will be reduced. To solve dust collection questions, Grizzly offers a guide book entitled *Dust Collection Basics* that will help you design your system.

Whatever system you choose, 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 dust is dispersed into the air.

Material Selection

You have many choices regarding dust collection ducting, but flexible hose is the most common. However, be aware that there is a fire or explosion hazard if plastic duct material is used for dust collection without being grounded against static electrical charge build-up. This topic will be discussed later in the manual.

Metal Rigid Duct

Metal ducting comes in many varieties, make sure that what you use is suitable for dust collection. Advantages of metal ducting is its conductivity and that it does not contribute to static electrical charge build-up. However, static charges are still produced when dust particles strike other dust particles as they move through the ducting. Since metal ducting is a conductor, it can be grounded quite easily to dissipate any static electrical charges. However, metal ducting is generally more expensive than plastic ducting and it is not usually airtight unless specifically manufactured for dust collection. Specially manufactured metal ducting, on the other hand, is quite expensive. Metal ducting is also generally more difficult to cut and assemble.

Plastic Flexible Duct

Flexible rubber hose, polyethylene, plastic flex-hose and other flexible ribbed 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.



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.

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.

Plastic Rigid Duct

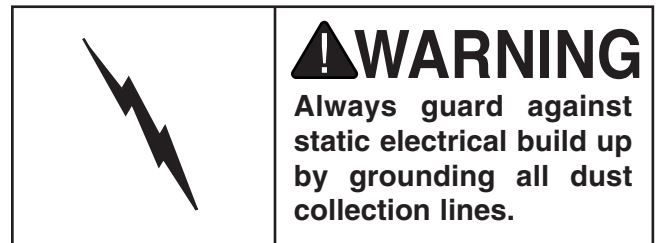
The popularity of plastic duct is due to the fact that it is an economical and readily available product. It is also simple to assemble and easily sealed against air loss. The primary disadvantage of plastic duct for canister dust collection, whether black ABS or white PVC and even rubber or polyethylene flex-hose, is the inherent danger of static electrical build-up.

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 using 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 build up. This charge will build until it discharges to a ground. If a grounding medium is not available to prevent static electrical build up, 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 build up 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.



Ducting Tips

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 (**Figure 14**) around the blast gate without interruption to the grounding system.

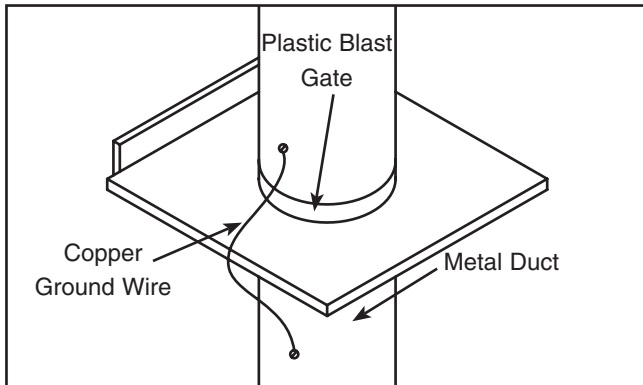


Figure 14. Ground jumper wire when using plastic blast gates and metal duct.

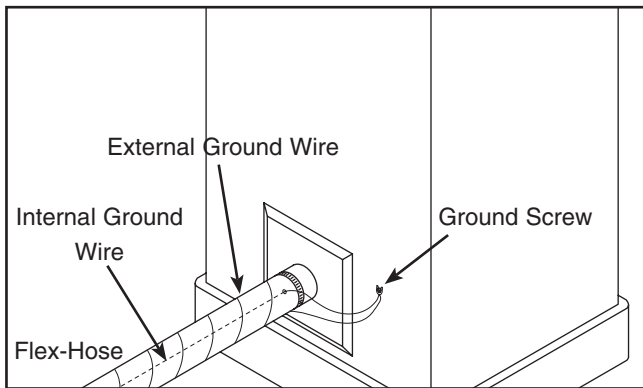


Figure 15. Flex-hose grounded to machine.

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

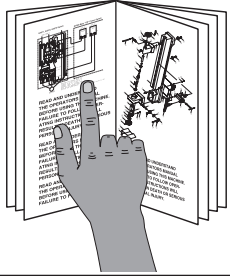
Attach the bare ground wire to each stationary woodworking machine and attach to the dust collector frame with a ground screw as shown in **Figure 15**. Ensure that each machine is continuously grounded to the grounding terminal in your electric service panel.

This dust collector is intended for collection from a single machine. It is not designed to draw dust through long runs and multiple ports simultaneously. We do not recommend using ducting any longer than 10 feet. Otherwise, dust collection efficiency will be greatly reduced. However, still consider these general guidelines for efficient dust collection:

1. Machines that produce the most sawdust should have the shortest run of ducting between the dust collector and the machine. These machines include thickness planers, shapers, sanders, and bandsaws.
2. Ideally, you should design your shop layout so machines will have the shortest possible run to the dust collector.
3. Keep ducting directional changes to a minimum. The more directional change fittings you use, the greater the loss of overall pressure.
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. The simpler the system, the more efficient and less costly it will be.

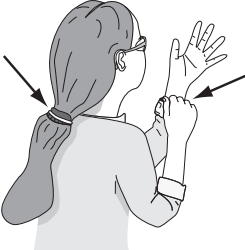




SECTION 5: OPERATIONS



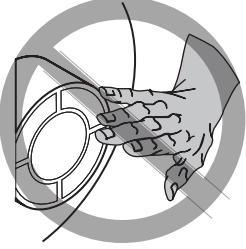
!WARNING
To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

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



!WARNING
Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.

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



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

General

Operating your Model G0583Z is simple and straightforward. Move the dust collector to the machine location, connect the duct, connect the ducting ground, and you are ready to begin.



SECTION 6: ACCESSORIES

- H2499—Small Half-Mask Respirator
- H3631—Medium Half-Mask Respirator
- H3632—Large Half-Mask Respirator
- H3635—Cartridge Filter Pair P100

If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!



Figure 16. Half-mask respirator with disposable cartridge filters.

- H1052—Clear Flexible Hose 4" x 10'
- G1536—Black Flexible Hose 4" x 10'
- G3179—Heavy-Duty Clear Flex Hose 4" x 10'
- G8830—Hose Hanger 4½"
- G1552—Y-Fitting 4" x 4" x 4"
- G1545—90° Elbow 4"
- G2482—Hose Coupler (Splice) 4"
- G2974—Wire Hose Clamp 4"
- G1843—Plastic Blast Gate 4"
- G4679—Anti-Static Grounding Kit

We've hand picked a selection of commonly used dust collection components for machines with 4" dust ports.



Figure 17. Dust collection accessories.

Model G0583Z (Mfg. 3/09+)

- T23129—Extra 1 Micron Canister For G0583Z
- Replacement canister for Grizzly G0583Z Dust Collectors.



Figure 18. Replacement canister.

- G9956—Remote Controlled Heavy-Duty Double Air Filter

- G0572—Hanging Air Filter with Remote

These Hanging Air Filters have convenient remote controls and feature a three speed motor, automatic shutoff timer and hang easily from the workshop ceiling!.

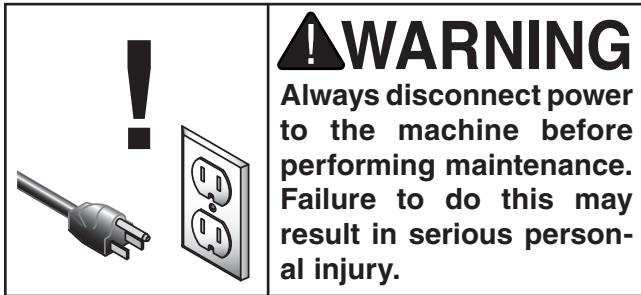


Figure 19. G0572 Dust Filter.

Call 1-800-523-4777 To Order



SECTION 7: MAINTENANCE



Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Check:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged wires.
- Clean canister filter.
- Check collection bag.
- Any other unsafe condition.

Lubrication

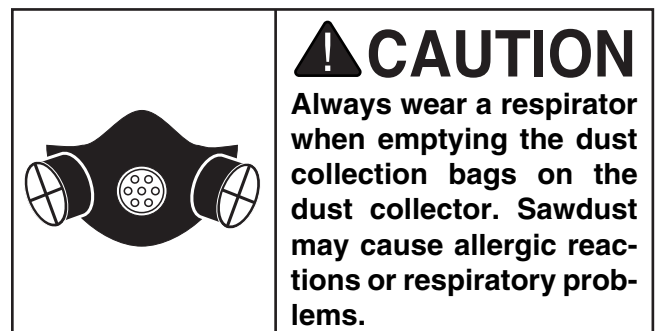
Since all bearings are shielded and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricate them.

Bag Cleaning

Always empty the collection bags on a regular basis. Emptying the collection bags allows the machine to operate at a much higher level of efficiency.

Always wear the appropriate respirator or dust mask and safety glasses when emptying the collection bags. Small dust particles can escape the bags during emptying, causing them to become airborne and easily inhaled. This microscopic airborne dust is extremely unhealthy to breathe and can cause serious health problems.

While the Model G0583Z excels at collecting the majority of wood dust produced by your machines, it is not an air filter; therefore, **we strongly recommend** the supplemental aid of a shop air filter such as the Grizzly G0572 or G9956. Air filters are designed to collect the smaller dust particles that dust collector bags cannot trap.



Emptying/Replacing Bags

To clean the canister filter on the Model G0583Z, move the canister cleaning handle back-and-forth to free the trapped dust particles from the filter pleats (see **Figure 20**). The particles will fall into the collection bag.



Figure 20. Canister cleaning handle directions.

NOTICE

The use of compressed air or liquids to clean the canister filter will damage the filtration pleats of the filter. Use **ONLY** the cleaning handle or, if necessary, a soft brush to clean the inside of the canister filter.

The Model H6899 replacement collection bag is available through Grizzly.

To replace the collection bag:

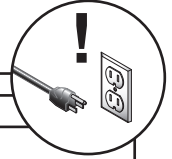
1. DISCONNECT MACHINE FROM POWER!
2. Make sure you are wearing safety glasses and a respirator.
3. Release the belt clamp securing the collection bag, then unhook the bag from the collector.
4. Securely close the top of the bag and safely dispose of it according to local and federal standards.
5. Install a new collection bag.



SECTION 8: SERVICE

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

Troubleshooting



Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Wall fuse/circuit breaker is blown/tripped. 2. Power supply switched OFF or is at fault. 3. Wiring is open/has high resistance. 4. Motor ON/OFF switch is at fault. 5. Motor is at fault. 	<ol style="list-style-type: none"> 1. Ensure circuit size is suitable for this machine; replace weak breaker. 2. Ensure power supply is switched on; ensure power supply has the correct voltage. 3. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary. 4. Replace faulty ON/OFF switch. 5. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component is loose. 2. Motor mount loose/broken. 3. Machine is incorrectly mounted or sits unevenly. 4. Motor fan is rubbing on fan cover. 5. Motor bearings are at fault. 6. Impeller is damaged and unbalanced. 7. Impeller is loose on the motor shaft. 	<ol style="list-style-type: none"> 1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Tighten/replace. 3. Tighten/replace anchor studs in floor if mounted; chock machine casters if mobile. 4. Replace dented fan cover; replace loose/damaged fan. 5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 6. Disconnect dust collector from power, and inspect the impeller for dents, bends, loose fins. Replace impeller if any damage is found. 7. Replace the motor and impeller as a set if the motor shaft and the impeller hub are damaged.





Symptom	Possible Cause	Possible Solution
Dust collector does not adequately collect dust or chips; poor performance.	<ol style="list-style-type: none"> 1. Dust collection bags are full. 2. Canister filter is dirty. 3. There is a restriction in the duct line. 4. The dust collector is too far away from the point of suction, or there are too many sharp bends in the ducting. 5. The lumber is wet and dust is not flowing through the ducting smoothly. 6. There is a leak, or a series of small leaks, in the ducting, or too many open ports. 7. The ducting and ports are incorrectly sized. 8. The dust collector is too small for the dust collection system. 	<ol style="list-style-type: none"> 1. Empty collection bags. 2. Clean canister filter. 3. Remove dust line from dust collector inlet and unblock the restriction in the duct line. A plumbing snake may be necessary. 4. Relocate the dust collector closer to the point of suction, and rework ducting without sharp bends. 5. Process lumber with less than 20% moisture content. 6. Rework the ducting to eliminate all leaks. Close dust ports for lines not being used. 7. Reinstall correctly sized ducts and fittings. 8. Install a larger dust collector to power your dust collection system.
Sawdust being blown into the air from the dust collector.	<ol style="list-style-type: none"> 1. Duct clamps or dust collection bags are not properly clamped and secured. 2. Bag clamps are loose or damaged. 	<ol style="list-style-type: none"> 1. Re-secure ducts and dust collection bag, making sure duct and bag clamps are tight and completely over the ducts and bags. 2. Retighten bag clamps.



G0583Z Wiring Diagram

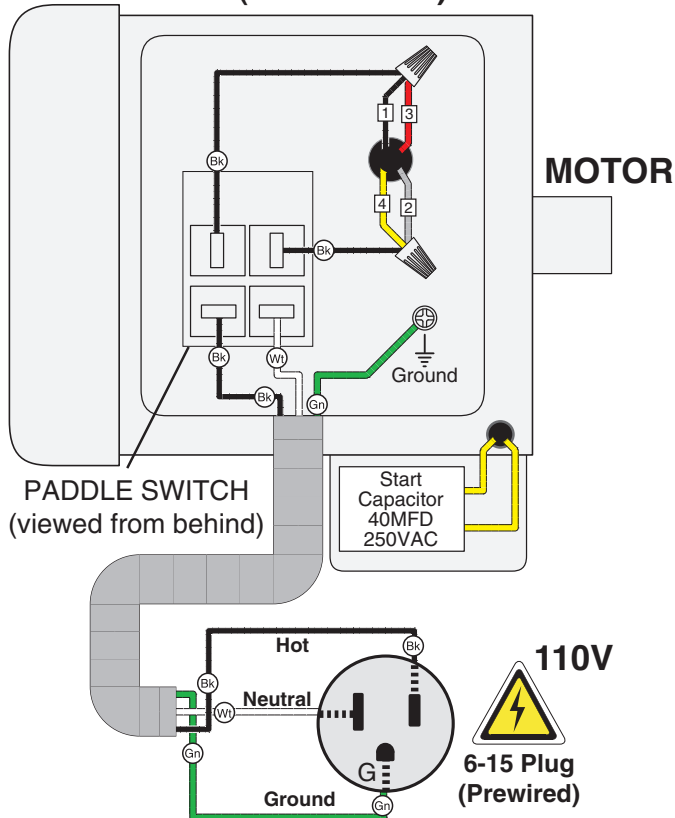


View this page in color at www.grizzly.com.

NOTICE
The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.



110 VOLT (PREWIRED)



220 VOLT (REWIRED)

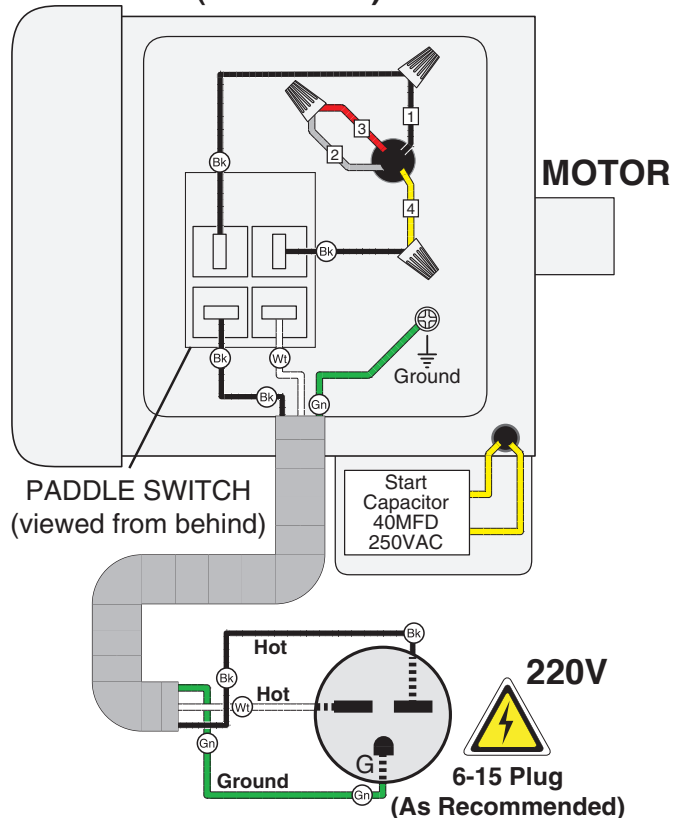


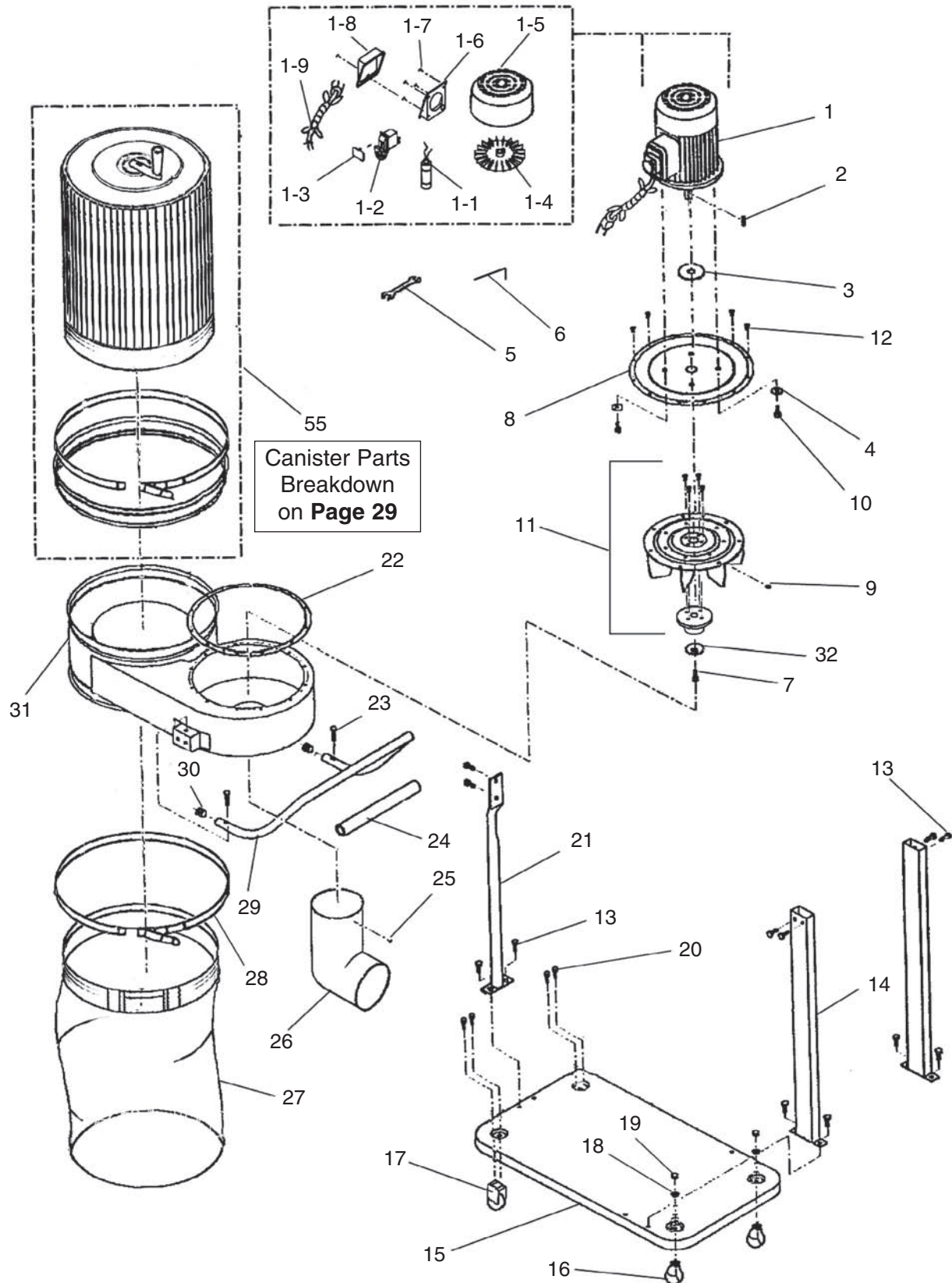
Figure 21. Motor junction box wiring.

COLOR KEY	
BLACK	Bk
GRAY	Gy
GREEN	Gn
RED	Rd
YELLOW	Yl
WHITE	Wt



SECTION 9: PARTS

G0583Z Main Breakdown



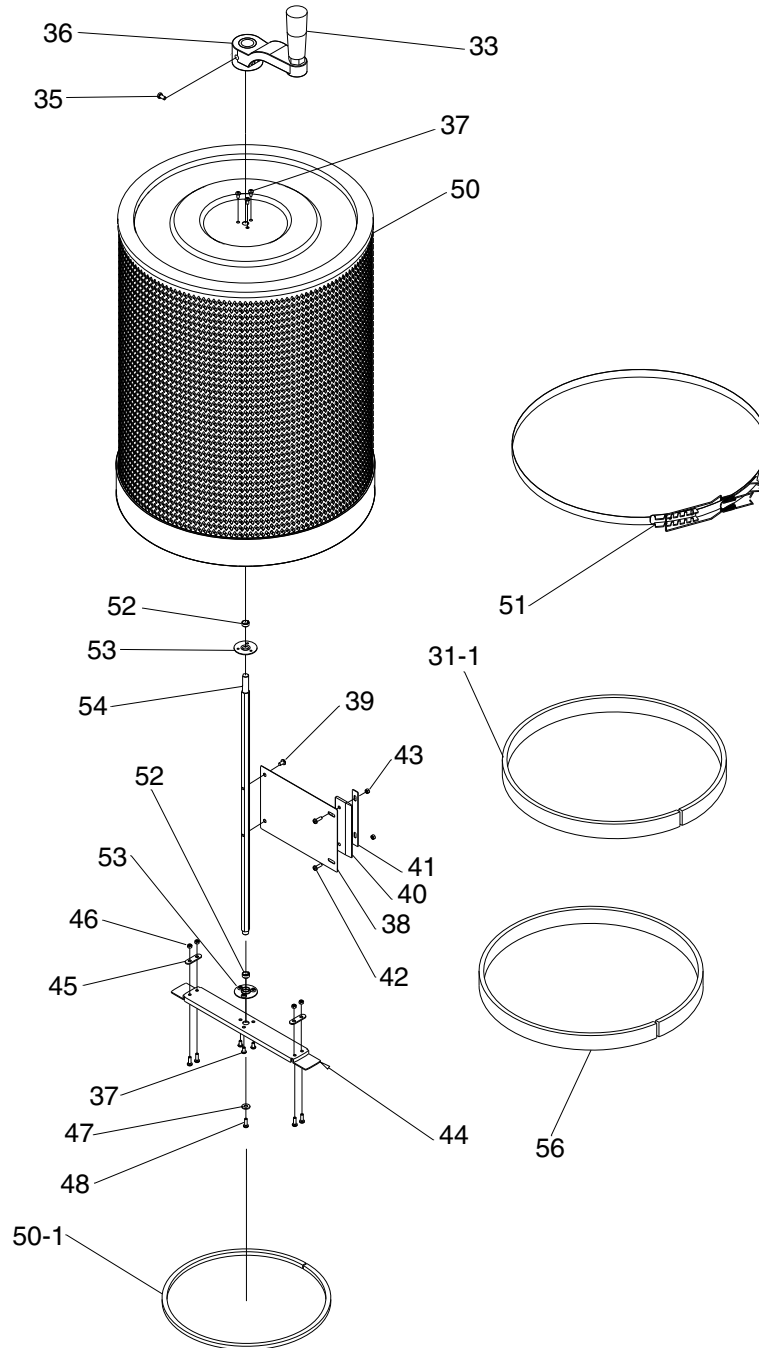
G0583Z Main Parts List

REF	PART #	DESCRIPTION
1	P0583Z001	MOTOR 1HP 110V/220V1-PH
1-1	PC030A	S. CAPACITOR 40M 250V 1-3/8 X 2-3/8
1-2	PSW06	SWITCH
1-3	PSW06-1	SWITCH KEY
1-4	P0583Z031-4	FAN
1-5	P0583Z031-5	FAN COVER
1-6	P0583Z031-6	SWITCH HOUSING
1-7	PFS03	FLANGE SCR 10-24 X 3/8"
1-8	P0583Z031-8	SWITCH COVER
1-9	P0583Z031-9	POWER CORD
2	PK01M	KEY 5 X 5 X 22
3	P0583Z003	SHAFT SEAL
4	PW06	FLAT WASHER 1/4"
5	PWR1012	WRENCH 10-12MM
6	PAW05M	HEX WRENCH 5MM
7	PSB02M	CAP SCREW M6-1 X 20
8	P0583Z008	INLET COVER
9	PSS17	SET SCREW 5/16"-18 X 5/16"
10	PB19	HEX BOLT 1/4"-20 X 1/2"
11	P0583Z011	IMPELLER ASSEMBLY10"
12	PS09M	PHLP HD SCR M5-8 X 10

REF	PART #	DESCRIPTION
13	PB09	HEX BOLT 5/16"-18 X 1/2"
14	P0583Z014	RECTANGLE SUPPORT LEG
15	P0583Z015	BASE
16	P0583Z016	SWIVEL CASTER
17	P0583Z017	FIXED CASTER
18	PW07	FLAT WASHER 5/16"
19	PN40	ACORN NUT 5/16"-18
20	PB04M	HEX BOLT M6-1.0 X 10
21	P0583Z021	ROUND SUPPORT LEG
22	P0583Z022	FOAM GASKET
23	PFH25	FLAT HD SCR 5/16"-18 X 1"
24	P0583Z024	FOAM HAND GRIP
25	PFS03	FLANGE SCR 10-24 X 3/8"
26	P0583Z026	ELBOW 4"
27	P0583Z027	DUST STORAGE BAG
28	P0583Z028	STORAGE BAG CLAMP
29	P0583Z029	HAND RAIL
30	P0583Z030	PLASTIC CAP 5/8"
31	P0583Z031	IMPELLER HOUSING
32	P0583Z032	CONCAVE WASHER 6MM
55	P0583Z055	CANISTER FILTER



Canister Filter Breakdown & List

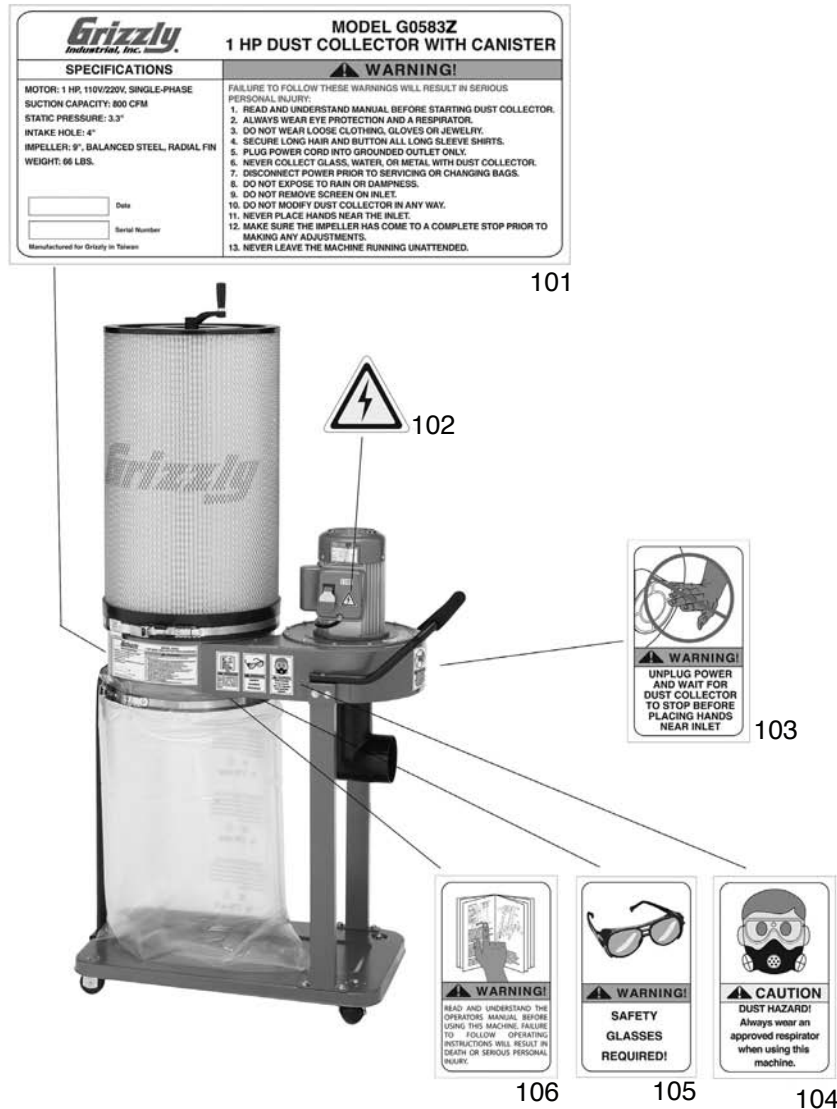


REF	PART #	DESCRIPTION
31-1	P0583Z031-1	FOAM STRIP 5 X 42MM
33	P0583Z033	HANDLE
35	PSS01M	SET SCREW M6-1 X 10
36	P0583Z036	HANDLE
37	PS09M	PHLP HD SCR M5-.8 X 10
38	P0583Z038	FLAP BOARD
39	PB04M	HEX BOLT M6-1 X 10
40	PH5783010	RUBBER FLAP
41	P0583Z041	FLAP PLATE
42	PS20M	PHLP HD SCR M5-.8 X 15
43	PLN02M	LOCK NUT M5-.8
44	P0583Z044	BOTTOM PLATE

REF	PART #	DESCRIPTION
45	P0583Z045	SUPPORT TAB
46	PN06M	HEX NUT M5-.8
47	PW06	FLAT WASHER 1/4
48	PS68M	PHLP HD SCR M6-1 X 10
50	P0583Z050	FILTER
50-1	P0583Z050-1	FOAM GASKET 10 X 15 MM
51	P0583Z051	METAL BELT CLAMP
52	PH5783005	THRUST BEARING
53	PH5783006	BEARING PLATE
54	P0583Z054	HEX SPINDLE
55	P0583Z055	CANISTER FILTER
56	P0583Z056	FOAM STRIP 4 X 20



G0583Z Labels Breakdown & List



REF	PART #	DESCRIPTION
101	P0583Z101	MACHINE ID LABEL
102	PLABEL-14	ELECTRICITY LABEL
103	PLABEL-59	HANDS NEAR INLET LABEL

REF	PART #	DESCRIPTION
104	PLABEL-61	RESPIRATOR LABEL
105	PLABEL-11A	SAFETY GLASSES LABEL
106	PLABEL-12A	READ MANUAL LABEL

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.





WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____ Invoice # _____
 Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

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

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

3. What is your annual household income?

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

4. What is your age group?

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

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

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

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

0-2 3-5 6-9 10+

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

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

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: We never use names more than 3 times. Yes No

10. Comments: _____

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Stamp
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WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

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

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

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

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

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