

# MODEL T27156 BENCHTOP SANDBLAST CABINET

#### **OWNER'S MANUAL**

(For models manufactured since 01/18)



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#WK17149 PRINTED IN CHINA



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.



Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

# **Table of Contents**

INTRODUCTION	2
Manual Accuracy	2
Machine Data Sheet	2
Contact Info	
SECTION 1: SAFETY	3
Safety Instructions for Machinery	
Additional Safety for Sandblasters	
SECTION 2: SETUP	
Unpacking	
Needed for Setup	
Assembly	7
SECTION 3: OPERATIONS	
Operation Safety	
Basic Operation	
Abrasive Options	
Nozzle/Jet Options	
SECTION 4: MAINTENANCE	
Maintenance	
SECTION 5: PARTS	
Main Parts Breakdown	
WARRANTY & RETURNS	



#### INTRODUCTION

#### **Manual Accuracy**

We are proud to offer this document 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 we still make an occasional mistake.

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, immediately call our technical support for updates or clarification.

For your convenience, we post all available documentation on our website at www.grizzly.com. Any updates to this document will be reflected on our website as soon as complete.

#### **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



# MACHINE DATA SHEET

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

#### MODEL T27156 SANDBLASTING CABINET

Design Type	Benchtop Model
General Specifications:	002/11
Width	
Height	19"
Depth	19"
Operating Air Pressure Range	
Recommended Air Supply	
Net Weight	
Abrasive Capacity	10 lbs.
Abrasive Type	Dry Only
Lighting Type	
Load & Unload Access	
Power Supply	

Specifications, while deemed accurate, are not guaranteed.



#### **SECTION 1: SAFETY**

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

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



Indicates an imminently hazardous situation which, if not avoided, ! DANGER Indicates an infinite fitty flazardous of WILL result in death or serious injury.

**AWARNING** 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.



## **AWARNING**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



## **Additional Safety for Sandblasters**

#### **AWARNING**

**USE CORRECT ABRASIVES.** Never use wet abrasives in this sandblaster, it is designed for dry abrasives only.

**PROTECT LUNGS.** Make sure that you always use a respirator when using or cleaning the sand-blaster.

**LEAVING THE AREA.** Always disconnect air supply when leaving the sandblaster.

**PROTECT EYES.** Make sure that you always use safety glasses when using or cleaning the sandblaster.

**PROTECT ENVIRONMENT.** Always close and latch shut the sandblaster doors when not in use.

**MAINTAIN COMPONENTS.** Prior to each use, inspect nozzles, hoses, lenses, and gloves. To reduce the risk of respiratory damage or sand penetrating skin, all components MUST be free of cracks, leaks, or unacceptable wear. Immediately replace worn or leaking components.

**MAINTAIN MACHINE.** Check cabinet for any leaks, and reseal immediately.

**USE SAFETY WHEN SANDBLASTING.** Do not use system over the rated PSI. Always secure the door(s) before beginning sandblasting operations.

**USE CORRECT LIGHTING.** Do not use a light that uses over 60 watts.

**USE SAFETY LOADING & UNLOADING.** Disconnect the air supply before loading or unloading the workpiece from the sandblaster cabinet.

**USE SAFETY DURING MAINTENANCE.** Disconnect air supply and electrical before doing maintenance.

MAINTAIN WORK AREA SAFETY. Clean dust collector and filters often, and repair any suction hose leaks immediately.

#### **AWARNING**

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.



# **SECTION 2: SETUP**

#### 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.



#### **AWARNING**

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

#### **Needed for Setup**

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

De	scription	Qty
•	Phillips Head Screwdriver #2	1
•	Standard Screwdriver #2	1
•	Wrench 19mm	1
•	Wrench 14mm	1
•	Wrench 10mm	1
•	Wrench 7mm	1



#### **Assembly**

#### To assemble the sandblaster:

1. Install the two lamp holders with the two screws (**Figure 1**).

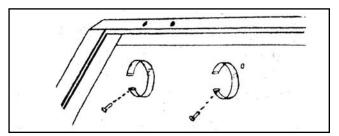


Figure 1. Lamp holder.

2. Connect electrical wires and install electrical box with screws (see Figure 2).

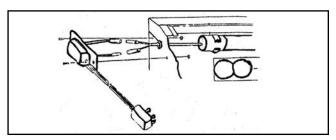


Figure 2. Light assembly.

3. Install filter with screws and nuts (Figure 3).

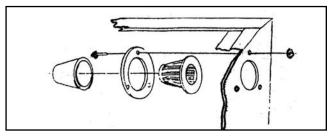


Figure 3. Filter installation.

4. Install gloves as shown in Figure 4.

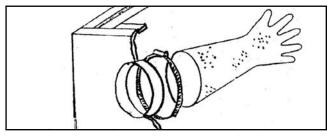


Figure 4. Glove installation.

**5.** Install window, hinges, lock latches, and the knob (**Figure 5**).

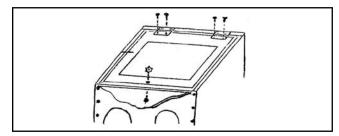


Figure 5. Hinge and knob assembly.

**6.** Install the chain to the window and cabinet with the screws and nuts (**Figure 6**).

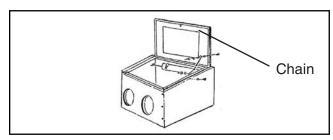


Figure 6. Window chain.

Install the bulkhead fitting with gasket. Attach
the air supply hose and suction hose to the
bulkhead fittings and suction pipe with hose
clamps (Figure 7).

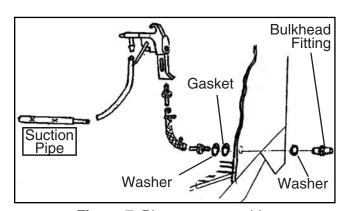


Figure 7. Blast gun assembly.

**8.** Plug in the AC/DC adapter (**Figure 8**).

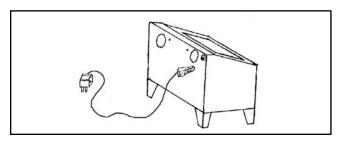


Figure 8. Light assembly.



# **SECTION 3: OPERATIONS**

#### **▲**WARNING

Sandblasting presents a real hazard of silicosis and other lung contamination injuries! These Injuries are permanent and can get worse over time. If you use sandblasting equipment without the proper protection, your lungs and eyes may become irreversibly contaminated. DO NOT use this sandblaster unless you know how to use it and protect yourself correctly. For types of protective equipment and acceptable respirator types, contact your local OSHA or NIOSH office.

#### **Operation Safety**

#### **NOTICE**

If you have never used this type of machine or equipment before, WE STRONGLY REC-OMMEND 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.

#### **Basic Operation**

The Model T27156 Sandblaster is equipped with an industrial-duty blast gun with ceramic tip, a siphon hose, a built-in light, large viewing window, and sealed rubber gloves. The hopper recycles and stores the sandblasting media for reuse or easy removal. Safely blast away paint and rust without making a mess around your shop.

#### To use the sandblaster:

- Wear safety glasses and respirator at all times when running and maintaining your sandblaster!
- 2. Plug in AC/DC transformer and turn *ON* light.
- Install correct nozzle and air jet into gun for abrasive type you will use. Refer to Page 9 for options.

- 4. Carefully, without causing a hazardous dust cloud, pour or spade-in 10 lbs of abrasive into sandblaster. DO NOT over-fill, or sandblasting will be sluggish and very cloudy inside of cabinet.
- 5. Insert workpiece, close and lock loading door.
- **6.** Adjust air supply regulator to 60-100 PSI at 5-14 CFM.
- 7. Turn *ON* your dust collection/vacuum system and air compressor, insert your hands in the gloves, and begin sand blasting in a slow circular motion.

**Note:** A good starting point for tip distance is two inches away from the workpiece. Start out with a low air pressure setting to avoid excess peening and abrasive wear.

**Note:** Experiment with different pressures, abrasives, tips and jets to gain practical experience.

**Note:** Keep the sandblasting abrasives moisture-free, otherwise; the blast gun tip will frequently clog.

#### **AWARNING**

NEVER sand blast with the doors open, point the gun at yourself or anyone else, or attempt to service any part of this machine while it is plugged in or connected to air pressure. ALWAYS disconnect the blast cabinet from power and air pressure when not in use, or during maintenance or adjustments. Ignoring this warning may lead to severe injury.



#### **Abrasive Options**

#### **Blasting Media from Grizzly.Com**

#### PART #

G6535: 15 lbs. Aluminum Oxide 220 Grit. G6536: 15 lbs. Aluminum Oxide 120 Grit. G6537: 15 lbs. Aluminum Oxide 60 Grit. G6538: 15 lbs. Glass Bead 50-Micron Grit.

Below is a basic introduction to some of the most common blasting abrasives. Refer to magazines, trade articles, professionals, and the abrasive manufacturer for the specific surfaces that can be addressed with a type of abrasive. All abrasives have benefits and drawbacks like quality of surface finish, abrasive life, toxicity, and what precautions you must take to prevent environmental damage or personal injury to your respiratory system.

#### **Steel Type Abrasives**

This aggressive abrasive creates a rough finish that accepts paint well. The abrasive is very durable and has a long life, however; it MUST be kept very dry to prevent rusting.

#### **Alumina Type Abrasives**

This multi-purpose abrasive creates a smoother finish than the steel abrasives, but has a shorter life span. Less of the workpiece surface is removed with this more forgiving abrasive.

#### **Glass and Garnet Type Abrasives**

Typically this abrasive works well for soft metals and addressing surface issues with machine parts where tolerances cannot be affected. The life of this abrasive is limited and not well suited for repetitively recycling.

#### Sand Type Abrasives

This abrasive is easy to find, and gives an average finish that is acceptable for most projects. Sand has a good recycling life and is very economical.

#### **Plastic Type Abrasives**

Applied at low pressures of 30 to 50 PSI, plastic abrasives should be harder than the coating being removed, but softer than the workpiece to avoid damage. Plastic abrasive is excellent for addressing surface issues on aluminum, magnesium, copper, brass, thin steel, titanium, and composite surfaces and fiberglass.

#### **Other Types of Abrasives Available**

Ground walnut or peanut shells. Ground corn cob. Sodium bicarbonate. Wheat starch.

## **Nozzle/Jet Options**

Below is the suggested air jet and nozzle combination for an approximate abrasive flow. Refer to magazines, trade articles, professionals, and the abrasive manufacturer for the best combination that is required for your particular abrasive use.

#1	Air Jet Orifice Diameter: Nozzle Orifice Diameter: Abrasive Flow @ 60 PSI:	<sup>5</sup> / <sub>64</sub> " <sup>3</sup> / <sub>16</sub> " 0.11 L/Min.
#2	Air Jet Orifice Diameter: Nozzle Orifice Diameter: Abrasive Flow @ 60 PSI:	<sup>7</sup> / <sub>64</sub> " <sup>13</sup> / <sub>64</sub> " 0.18 L/Min.
#3	Air Jet Orifice Diameter:	1/8"

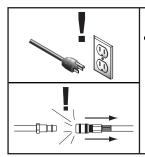
Nozzle Orifice Diameter: 15/64"
Abrasive Flow @ 60 PSI: 0.25 L/Min.

#4 Air Jet Orifice Diameter: 5/32"
Nozzle Orifice Diameter: 9/32"
Abrasive Flow @ 60 PSI: 0.36 L/Min.



# **SECTION 4: MAINTENANCE**

#### **Maintenance**



#### **AWARNING**

Always disconnect power and the air supply to the machine before performing maintenance. Failure to do this may result in serious personal injury.

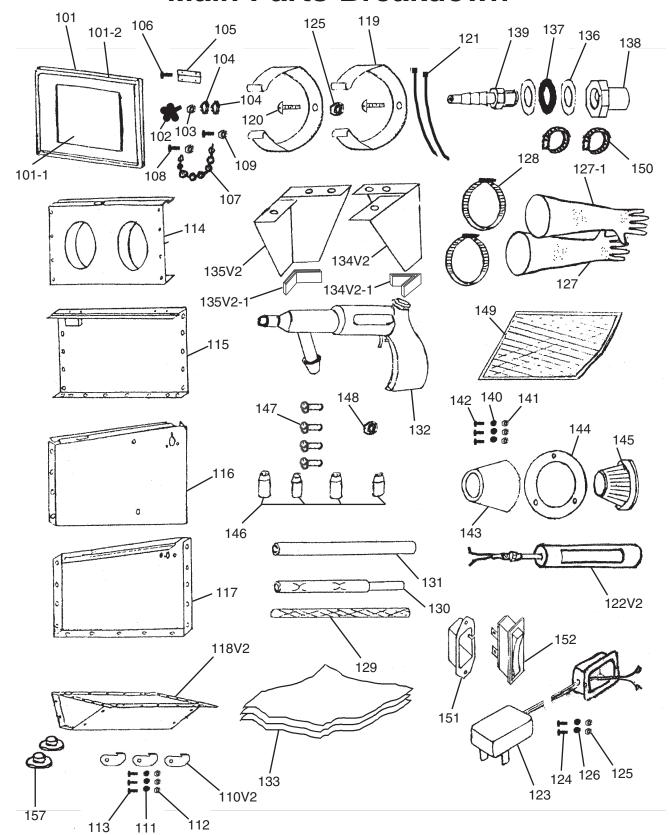
Depressurize the sandblaster, and check the following items each time you use the sandblaster and replace any parts immediately if found to be worn:

- Look for excessively worn or cracked nozzles.
- Look for leaking thread fittings with soapy water and a spray bottle.
- Look at the sand blasting hose for thin walls and bubbling.
- Look for worn or leaking ball valves with soapy water and a spray bottle.



# **SECTION 5: PARTS**

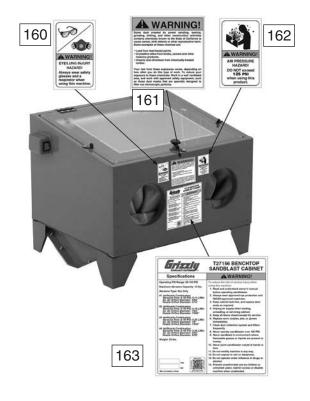
#### **Main Parts Breakdown**



# **Main Parts List**

REF	PART #	DESCRIPTION
101	PT27156101	WINDOW FRAME
101-1	PT27156101-1	WINDOW PLEXIGLASS
101-2	PT27156101-2	WINDOW SEAL
102	PT27156102	KNOB
103	PT27156103	HEX NUT M6-1
104	PT27156104	FLAT WASHER 6MM
105	PT27156105	HINGE
106	PT27156106	TAP SCREW M4 X 10
107	PT27156107	CHAIN
108	PT27156108	PHLP HD SCR M6-1 X 12
109	PT27156109	HEX NUT M6-1
110V2	PT27156110V2	LOCK LEVER (PLASTIC) V2.01.18
111	PT27156111	FLAT WASHER 6MM
112	PT27156112	LOCK NUT M6-1
113	PT27156113	PHLP HD SCR M6-1 X 12
114	PT27156114	PANEL-FRONT
115	PT27156115	PANEL-REAR
116	PT27156116	PANEL-RIGHT
117	PT27156117	PANEL-LEFT
118V2	PT27156118V2	HOPPER CONE SHAPE V2.01.18
119	PT27156119	LAMP CLAMP
120	PT27156120	PHLP HD SCR M47 X 10
121	PT27156121	ZIP TIE
122V2	PT27156122V2	COMPLETE LAMP ASSEMBLY V2.11.16
123	PT27156123	AC/DC ADAPTER
124	PT27156124	PHLP HD SCR M47 X 10
125	PT27156125	HEX NUT M47
126	PT27156126	FLAT WASHER 4MM
127	PT27156127	GLOVE-RIGHT

REF	PART #	DESCRIPTION
127-1	PT27156127-1	GLOVE-LEFT
128	PT27156128	HOSE CLAMP
129	PT27156129	PRESSURE SUPPLY HOSE
130	PT27156130	SUCTION TUBE
131	PT27156131	SUCTION HOSE
132	PT27156132	BLAST GUN
133	PT27156133	CLEAR ADHESIVE FILM 4-PC
134V2	PT27156134V2	SHORT LEG (FRONT-LEFT REAR-RIGHT) V2.01.18
134V2-1	PT27156134V2-1	RUBBER FOOT (FRONT-LEFT REAR-RIGHT)
135V2	PT27156135V2	SHORT LEG (FRONT-RIGHT REAR-LEFT) V2.01.18
135V2-1	PT27156135V2-1	RUBBER FOOT (FRONT-RIGHT REAR-LEFT)
136	PT27156136	FLAT SPACER
137	PT27156137	FLAT GASKET
138	PT27156138	BULKHEAD FITTING
139	PT27156139	HOSE NIPPLE
140	PT27156140	FLAT WASHER 4MM
141	PT27156141	HEX NUT M47
142	PT27156142	PHLP HD SCR M47 X 10
143	PT27156143	FOAM FILTER
144	PT27156144	RING
145	PT27156145	FILTER ELEMENT
146	PT27156146	NOZZLE SET
147	PT27156147	JET SET
148	PT27156148	JET SEAL NUT
149	PT27156149	SCREEN
150	PT27156150	HOSE CLAMP
151	PT27156151	SWITCH HOUSING
152	PT27156152	SWITCH
157	PT27156157	HOPPER PLUG



REF	PART #	DESCRIPTION
160	PT27156160	EYE/LUNG WARNING LABEL
161	PT27156161	DUST HAZARD LABEL
162	PT27156162	PSI LABEL 125 MAX
163	PT27156163	MACHINE ID LABEL



## **WARRANTY & RETURNS**

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

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

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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