

WWW.GRIZZLY.COM AIR COMPRESSORS MODEL G8694 2HP / G8695 2.5HP / G8889 2HP INSTRUCTION MANUAL



OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.

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Table Of Contents

SAFETY SAFETY RULES FOR POWER TOOLS2-3 CIRCUIT REQUIREMENTS SETTING UP AND OPERATING PREPARING FOR USE 8 MAINTENANCE EACH USE11 AFTER FIRST 50 HOURS12 EVERY 300 HOURS

PAGE

SAFETY

AWARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are 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, <u>WILL</u> result in death or serious injury.

Indicates a potentially hazardous situation which, if not avoided, <u>COULD</u> result in death or serious injury.

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

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

AWARNING Safety Instructions For Power Tools

- 1. KEEP GUARDS IN PLACE and in working order.
- 2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.
- **3. KEEP WORK AREA CLEAN**. Cluttered areas and benches invite accidents.
- DON'T USE IN DANGEROUS ENVIRON-MENT. Don't use power tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.

- 5. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
- 6. MAKE WORK SHOP CHILD PROOF with padlocks, master switches, or by removing starter keys.
- 7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

AWARNING Safety Instructions For Power Tools

9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. Conductor size should be in accordance with the chart below. The amperage rating should be listed on the motor or tool nameplate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

	LENGTH		
AMP RATING	25ft	50ft	100ft
0-6	18	16	16
7-10	18	16	14
11-12	16	14	12
13-16	14	12	12
17-20	12	12	8
21-30	10	10	No

Minimum Gauge for Extension Cords

- **10. WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- **12. SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

- **13. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **15. DISCONNECT TOOLS** before servicing and changing accessories, such as blades, bits, cutters, and the like.
- 16. REDUCE THE RISK OF UNINTENTION-AL STARTING. Make sure switch is in off position before plugging in.
- **17. USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- **18. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- **19. NEVER LEAVE TOOL RUNNING UNAT-TENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

Additional Safety Instructions For Air Compressors

- 1. Operate the compressor in a well-ventilated area free of acids, vapor, explosive gases and flammable or unstable materials.
- 2. Use compressor only with air, never use with any other type of gas.
- **3.** Never aim the air nozzle directly at yourself or others. The air stream can be quite forceful and can damage skin.
- **4.** Do not pull on rubber hoses to move the compressor.

- 5. Do not use compressed air for filling breathing or diving apparatus. Compressed air from this compressor cannot be used for pharmaceutical, food or health requirements without further treatment.
- 6. Never transport the compressor under pressure. Always make sure the pressure in the storage tanks has been released before loading or moving the air compressor.
- 7. Never attempt to adjust the pressure safety valve on the air tanks. This is preset to 150 PSI.

Operating this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

Like all power tools, there is danger associated with the operation of air compressors. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this equipment with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

ACAUTION

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.

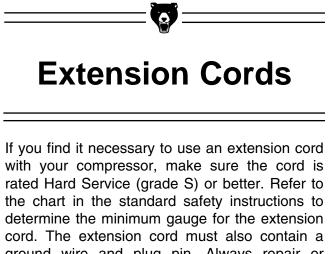
CIRCUIT REQUIREMENTS

110V Operation

These air compressors are wired for 110/120V. single phase operation only. The chart below shows the maximum amperage draw and recommended fusing level for each of the machines.

Model	HP	Amperage	
		Max	Fuse
G8694	2.0	12	15
G8695	2.5	17	20
G8889	2.0	12	15

It is generally best to operate a compressor on a dedicated circuit, i.e. a circuit where there are no other electrical appliances plugged in. The fuse requirements above assume the use of a circuit breaker or a slow-blow fuse. If an unusual load does not exist and the compressor still breaks the circuit, contact a qualified electrician or our service department.

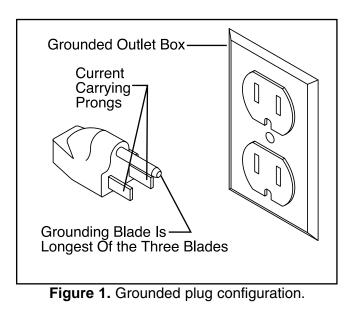


ground wire and plug pin. Always repair or replace extension cords when they become worn or damaged.

Grounding

In the event of an electrical short, grounding reduces the risk of electric shock by providing a path of least resistance to disperse electric current. These machines are equipped with power cords having an equipment-grounding conductor. See Figure 1. The outlet must be properly installed and grounded in accordance with all local codes and ordinances.

This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. If it is not, it will be necessary to run a separate 12 A.W.G. copper grounding wire from the outlet to a known ground. Under no circumstances should the grounding pin from any three-pronged plug be removed. Serious injury may occur.



SETTING UP AND OPERATING

Commentary

We are proud to offer the Grizzly Models G8694/G8695/G8889 Air Compressors. These compressors are part of the growing Grizzly family of heavy-duty machinery for the home workshop. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The G8694 is a 2.0 HP unit with a 7 gallon tank capacity and delivers 3.0 CFM@90 PSI. The G8695 is a 2.5 HP unit and has an 11 gallon tank capacity and delivers 3.5 CFM@90 PSI. The G8889 is an upright style portable 2.0 HP with a 4 gallon tank providing 4.2 CFM@90 PSI. All three of these units include integral wheels allowing easy movement of the compressor to wherever air power is needed.

We are also pleased to provide this manual with your new air compressor. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible. If you have any comments regarding this manual, please write to us at the address below:

> Grizzly Industrial, Inc. ^c/_o Technical Documentation P.O. Box 2069 Bellingham, WA 98227-2069

Most importantly, we stand behind our machines. If you have any service questions or parts requests, 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 Web Site: http://www.grizzly.com

The specifications, drawings, and photographs illustrated in this manual represent the Models G8694/G8695/G8889 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, we urge you to insert the new information with the old and keep it for reference.

To operate this, or any power tool, safely and efficiently, it is essential to become as familiar with its characteristics as possible. The time you invest before you begin to use your air compressor will be time well spent. DO NOT operate this machine until you are completely familiar with the contents of this manual. Make sure you read and understand all of the safety procedures. If you do not understand something, DO NOT operate the machine.

Unpacking

This air compressor is shipped from the manufacturer in a carefully packed carton. If you discover the machine is damaged after you've signed for delivery, and the truck and driver are gone, you will need to file a freight claim with the carrier. Save the containers and all packing materials for possible inspection by the carrier or its agent. Without the packing materials, filing a freight claim can be difficult. *If you need assistance determining whether you need to file a freight claim, or with the procedure to file one, please contact our Customer Service.*



Site Considerations

When determining where to set up the compressor in the shop, or when taking the air compressor to a job site, the most important consideration is access to an adequate and properly fused power supply. Refer to Section 2: Circuit Requirements for the needs for your particular compressor.

Also make sure the compressor is not operating in an environment where there are any explosive, flammable or caustic fumes or gases. A clear and well-ventilated area is best for its safe operation.

Place the compressor on a solid and level surface. Make sure that the hoses you attach to supply your pneumatic device will be unrestricted in movement and not subject to being run over by vehicles or punctured by any other sharp objects in the area.

And since air compressors are often used for a sustained period of time, sometimes in restricted areas, it is also best to wear ear protection to avoid the long-term exposure to the sound of the electric motor and piston.

NOTICE

These compressors should always be run in the positions shown on the cover of this manual. Never continue to operate the machine if it has fallen over on its side. The compressor will not receive adequate oil flow in these positions, and continued operation can lead to early failure of the compressor.

Preparing For Use

Before using your Grizzly Air Compressor, follow these steps before the first use:

- 1. Remove all packing materials and any protective plastic plugs from the cylinder head or oil plug.
- **2.** Be sure the air filter is attached to the side of the cylinder head.
- 3. Check the oil level in the motor crankcase. For the G8694 and G8889 the oil is checked by removing the filler cap and checking to make sure the oil level is between the two marks on the end of the dipstick. For the G8695 the oil can be checked using the clear plastic sight gauge. The oil level should be close to the center of the gauge. See Figure 2.

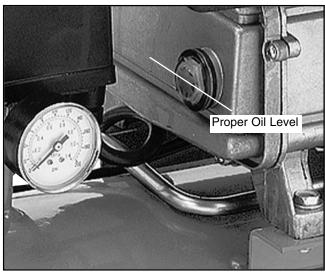


Fig 2. G8695 oil level indicator.

- **4.** Make sure drain valve(s) on the air tanks is closed.
- Make sure the power switch is in the OFF position, fully pushed in. Connect the power cord(s) to a properly protected power source.

NOTICE

The machine should never be run without a full oil reservoir. The oil provides lubrication to the cylinder rings which deliver the compressed air. Severe damage to the internal parts can occur if there is not adequate oil flow. Check the oil level frequently, and change the oil on a regular schedule.

Operating this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

WARNING

Operating this equipment has the potential for hearing damage to occur, especially if operated for a long period of time. Use ANSI (American National Standards Institute) approved ear muff or ear plugs when using this equipment. Always wear proper hearing protection, cotton balls or tissue paper in the ear canal do not provide adequate noise reduction.

Starting

Make sure the compressor switch is in the OFF position (the red button on top of the control box should be in the fully depressed position, **see Figure 3**) before connecting to the power supply. Close the drain cock on the tank. Pull the switch to the ON position.

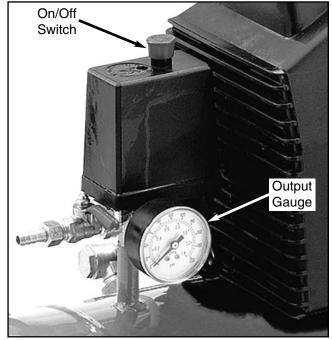


Fig 3. Start switch and gauges.

Check the pressure gauge to see that the tank pressure gets up to approximately 110-115 PSI.



Pressure Regulator

The pressure gauge will indicate the amount of pressure that will be delivered from the tank. To adjust the delivery pressure, remove the black On/Off switch cover by removing the screw which is in the recess on the top of the cover. Pull the black cover up and set it aside. Turn the pressure adjustment screw (See Figure 4) clockwise to decrease pressure and counterclockwise to increase pressure. Replace the cover when the adjustment is complete.

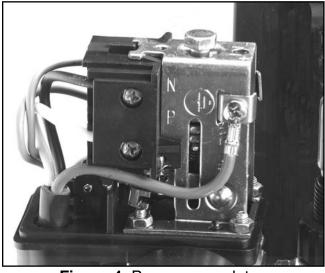


Figure 4. Pressure regulator.

Always wear safety glasses and use extreme caution when working around compressed air. The force of the air stream can cause small bits of debris to become airborne and cause potential injury to the eyes or other parts of the body. Never let the full force of the air stream come in direct contact with the skin as it can cause abrasions or bruising.

Connecting Tools

Make sure the compressor model you use has sufficient cubic feet per minute (CFM) output for the air tool you plan to connect. Most air tools will have an air requirement stated in terms of a specific CFM at a specific pressure (PSI). Consult the chart below to determine the output of your compressor model.

Model	HP	CFM @ 90 PSI	Tank Cap.
G8294	2.0	3.0	7 gal
G8295	2.5	3.5	11 gal
G8889	2.0	4.2	4 gal

The compressor should put out a higher CFM than the tool requires. If connecting multiple tools which will be used simultaneously, then the CFM for each tool should be added together and compared to the compressor output value.

Consideration should also be given to the type of usage. A nailer or staple gun uses air in short bursts and it is easier for the compressor to maintain pressure. A paint sprayer or grinder tends to use a more continuous stream of air as these tools are run for longer time periods. It is always better to oversize a compressor to allow for variation in the type of usage and the number of tools to be powered. Air tools being operated with insufficient air volume will not perform their function satisfactorily.

Connect the tool using a good quality air line with an adequate length to reach from the compressor to the point of use. Quick-connect couplers are a good option for fast and sure connection of tools and air hoses. Make certain the air hose will not be placed in a position where it can become constricted or cut by a sharp object. Having a hose run over by heavy vehicles may not cause an immediate leak, but it will shorten the life of the hose.



The air control valve lever is located just next to the On/Off switch near the air outlet fitting. When the lever is turned so it is in line with the fitting, the valve is OPEN. When it is at a 90° position relative to the fitting, the valve is CLOSED. (See Figure 5).

The air outlet supplied is a brass barb fitting over which an air hose can be slipped. This will be suitable for low pressure uses. If you will be operating at higher pressure, or running air tools, you should replace this fitting with a quick connect coupler which you can find at your local hardware store.

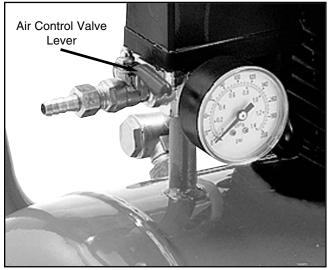


Fig 5. Air control lever in closed position.

There is also a pressure release valve which can be used when decompression of the storage tank is needed quickly and efficiently. Pull the metal ring to release the pressure.



MAINTENANCE

Each Use

Regular periodic maintenance on your Air Compressor will ensure its optimum performance. Make a habit of inspecting your compressor each time you use it. Check the following items:

- 1. Check oil level.
- 2. Drain tanks of any condensation by opening the drain cocks on the bottom of both tanks. See Figure 6. Depending upon the amount of use and the weather conditions, a certain amount of condensed water may be released. For longevity of the compressor seals and the air tools you connect, it is best to keep the tanks free of water. The tanks are best drained if the drain cocks are opened when the system is pressurized. Once water has stopped coming out, you can close the drain cocks.

Always wear safety glasses and use extreme caution when working around compressed air. The force of the air stream can cause small bits of debris to become airborne and cause potential injury to the eyes or other parts of the body. Never let the full force of the air stream come in direct contact with the skin as it can cause abrasions or bruising.

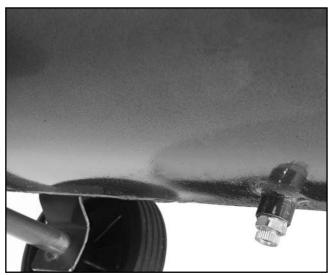


Fig 6. Typical location of drain cocks.

- **3.** Clean off cylinder head cooling fins of any dirt which might hamper air flow.
- 4. Check for worn or damaged cords and plugs.
- **5.** Check for any other condition that could hamper the safe operation of this machine.

After First 50 Hours

After the first 50 working hours, or 30 days, whichever comes first, replace the oil in the motor with compressor oil (use ISO 100 or SAE 30W viscosity, non-detergent type).

Also after this initial operation period, check to make sure that all the fittings are tight. Remove the air filter foam element and rinse it out in water. Allow it to dry and reinstall.

Blow out any accumulated dirt between the cylinder cooling fins.



If the compressor is used on a regular daily basis, perform the following checks each week:

- 1. Rinse the air filter foam element in water.
- 2. Check for loose bolts or fittings.



Every 300 Hours

After every 300 hours or 3 months of regular operation, perform the following maintenance items:

- 1. Change compressor motor oil.
- 2. Rinse the air filter foam element in water.
- 3. Check for air leaks and correct as needed.
- 4. Clean cylinder head fins for proper cooling.
- 5. Check for loose bolts or fittings.



The Model G8694/G8695/G8889 Air Compressors are specifically designed for air tool operation. DO NOT MODIFY AND/OR USE THIS MACHINE FOR ANY OTHER PUR-POSE. Modifications or improper use of this tool will void the warranty. If you are confused about any aspect of this machine, DO NOT use it until you have answered all your questions. Serious personal injury may occur.

WARNING

Like all power tools, there is danger associated with operating this equipment. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this tool with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

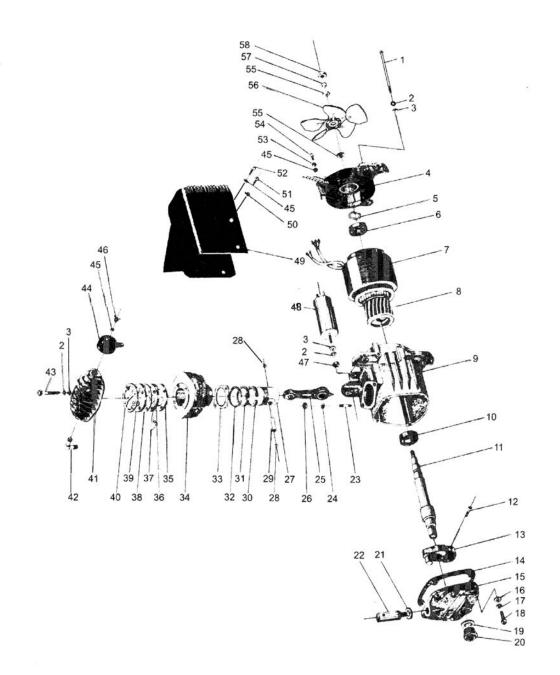
TROUBLESHOOTING

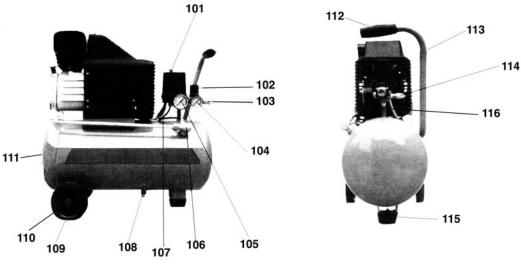
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Pump Motor Will Not Start	 Low voltage. Open circuit in motor, switch or cord. Tank already pressurized. Thermal overload switch. 	 Check power line for proper voltage. Inspect all lead connections on motor, switch and cord for loose or open connections. Motor will not start if tank pressure is too high. Thermal overload switch has tripped, wait for motor to cool, then reset switch by pressing red button.
Pump Motor Starts; But Fuses Blow or Circuit Breakers Trip		 Inspect cord or plug for damaged insulation and shorted wires. Inspect all connections on motor for loose or shorted terminals or worn insulation. Install correct fuses or circuit breakers.
Low Pressure At The Tool	 Air leaks in flexible hoses. Pressure gauge bad Pressure regulator bad. 	 Check air hoses and all connections for leaks. Check pressure in line with known good gauge. Adjust pressure regulator, if no improvement inspect regulator for leaks or replacement.
Low Pressure At The Tanks	 Air leaks in tanks or delivery pipes. Drain cock open Safety valve releasing below 125 PSI. Air filter clogged. Gaskets leaking Worn rings. 	2. Close drain cock.
Compressor Knocking	 Improper oil level. Air filter clogged. Piston assembly loose. 	 Check oil level and add oil. Inspect and clean air filter. Inspect and repair piston and connecting rod.
Air Leaks From Pressure Switch	 Faulty check valve. Faulty pressure switch. 	 Clean dirt or debris from rubber membrane of check valve after removing top nut. Repair or replace pressure switch.
Air Is Dirty Or Has Excessive Moisture	 Tanks not drained. Delivery pipes are dirty. 	 Open drain cocks on both tanks and make certain all condensation water is drained out. Remove delivery pipes, clean out and replace.
Motor Runs Hot	 Cooling Fins Dirty. Air filter clogged. 	 Clean cylinder head fins and also remove any accumulated dirt or grease from motor area. Inspect and clean air filter.
Pressure Relief Valve Stays Open And Motor Won't Stop Running	 Faulty pressure switch, unit is trying to overpressure the tank Faulty pressure relief valve. 	 Turn compressor off, unplug from power supply drain tank. DO NOT USE until switch is repaired of replaced. Relief valve is relieving pressure too early, test pres- sure relief and repair or replace,

PARTS LIST G8694/G8695 AIR COMPRESSOR

Ref. #	Part #	Description
001	P8694001	Bolt M6 x 155mm
002	P8694002	Spring Washer 6 mm
003	P8694003	Washer 6mm
004	P8694004	Rear Cover
005	P8694005	Corrugated Washer
006	P8694006	Bearing 180203
007	P8694007	Stator
008	P8694008	Rotor
009	P8694009	Crankcase
010	P8694010	Bearing 108205
011	P8694011	Shaft
012	P8694012	Cap Screw M8 x 30 mm
013	P8694013	Crank
014	P8694014	Rubber Gasket
015	P8694015	Front Cover
016	P8694016	Washer 5 mm
017	P8694017	Spring Washer 5 mm
018	P8694018	Screw M6 x 20 mm
019	P8694019	Oil Leveler Washer
020	P8694020	Oil Leveler
021	P8694021	Breather pipe washer
022	P8694022	Breather pipe
023	P8694023	Stud M8 x 15 mm
023A	P8694023A	Stud M8 x 20 mm
024	P8694024	Spring Washer 8 mm
025	P8694025	Connecting Rod
026	P8694026	Nut M8
027	P8694027	Piston
028	P8694028	Piston Pin Retaining Clip
029	P8694029	Piston Pin
030	P8694030	Oil Scraper Ring
031	P8694031	Piston Ring
032	P8694032	Piston Ring
033	P8694033	Cylinder Gasket
034	P8694034	Cylinder
035	P8694035	Valve Gasket
036	P8694036	Valve Plate
037	P8694037	Check Valve
038	P8694038	Valve Inner Gasket
039	P8694039	Valve Plate
040	P8694040	Cylinder Head Gasket
041	P8694041	Cylinder Head
042	P8694042	Right Angle Connector
043	P8694043	Hex Bolt M6 x 50
044	P8694044	Air Filter
045	P8694045	Washer 4 mm
046		Wing Nut M4

Ref. #	Part #	Description
047	P8694047	Nut M6
048	P8694048	Capacitor
049	P8694049	Fan Cover
050	P8694050	Big Washer 5 mm
051	P8694051	Screw M5 x 12 mm
052	P8694052	Screw M4 x 12 mm
053	P8694053	Spring Washer 4 mm
054	P8694054	Screw M4 x 8 mm
055	P8694055	Washer 12 mm
056	P8694056	Fan
057	P8694057	Spring Washer 12 mm
058	P8694058	Nut M12 x 1.5 mm
101	P8694101	Pressure Regulator
102	P8694102	Regulator Control Knob
103	P8694102	Outlet Valve
104	P8694104	Output Pressure Gauge
105	P8694105	Tank Pressure Gauge
106	P8694106	One-Way Check Valve
107	P8694107	Discharge Pipe
108	P8694108	Drain Cock
109	P8694109	Wheel
110	P8694110	Wheel Hub
111	P8694111	Pressure Tank
112	P8694112	Handle Grip
113	P8694113	Handle
114	P8694114	Safety Relief Valve
115	P8694115	Rubber Pad
116	P8694116	Power Cord





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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