

MODEL G0942/G0943 EXTREME-SERIES AIR COMPRESSORS

OWNER'S MANUAL

(For models manufactured since 03/21)



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WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
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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.

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INTRODUCTION

Contact Info

If you have questions, need help, need warranty information, or need to order parts, contact MEGA with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label.

MEGA Compressor Technical Support Phone: (832) 415-6995 Email: cs@megacompressor.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

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.

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.

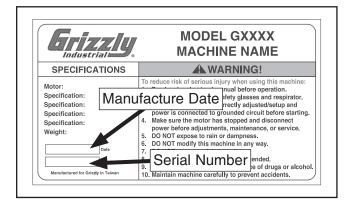
Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that sometimes the machine you receive is slightly different than shown in the manual.

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

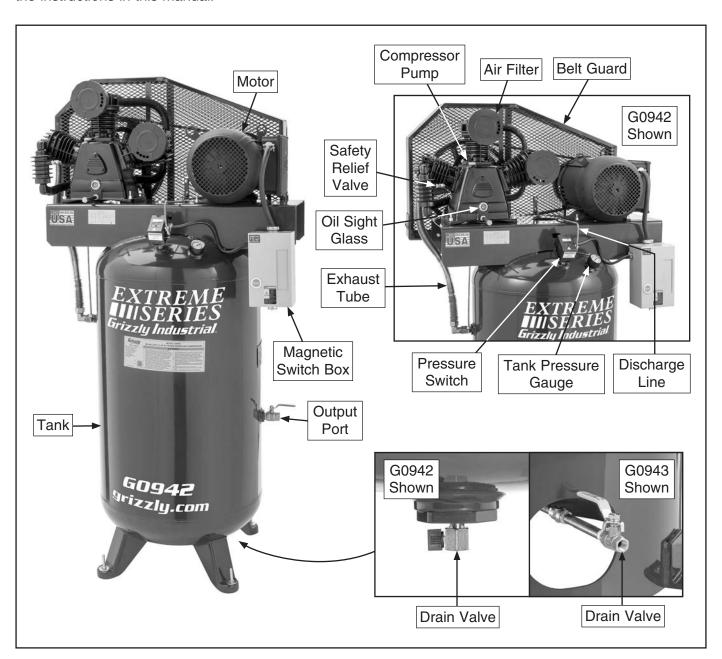
Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **manufacture date** and **serial number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation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

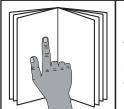




Identification

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

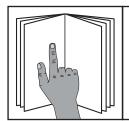




AWARNING

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

Controls & Components



AWARNING

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

Refer to the following figures and descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and minimize your risk of injury when operating this machine.

Air Input

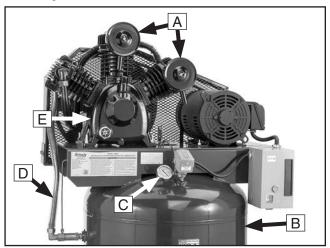


Figure 1. Front air input components (Model G0943 shown).

- **A. Air Filters:** Clean air entering compressor pump.
- B. Tank: Holds pressurized air.
- C. Tank Pressure Gauge: Indicates pressure of air in tank.
- **D. Exhaust Tube:** Transfers compressed air from pump to tank.
- E. Compressor Pump: Uses pistons to draw in and compress air before transferring air into tank.

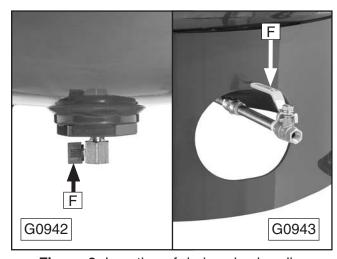


Figure 2. Location of drain valve handle.

F. Drain Valve: Drains built-up moisture from tank when ball valve is opened.

Automatic Pressurization

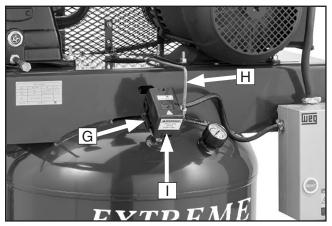


Figure 3. Pressurization components (Model G0942 shown).

- G. Pressure Switch Lever: Toggles pressure switch between OFF and AUTO/ON modes. Machine is OFF in OFF mode, and will continue to pressurize when in AUTO/ON mode.
- H. Discharge Line: Releases air from compressor pump and outlet line when tank pressure exceeds 175 PSI (cut-out pressure).
- I. Pressure Switch: Turns motor ON when tank pressure drops below 145 PSI (cut-in pressure) and switch is in AUTO/ON position. Switch contains pressure relief valve that will activate discharge line when tank pressure exceeds 175 PSI (cut-out pressure) or pressure switch is turned OFF.



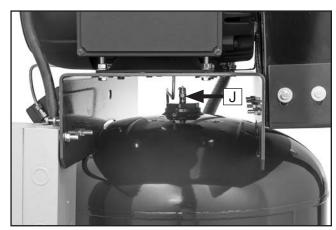


Figure 4. Location of tank safety relief valve (Model G0942 shown).

J. Tank Safety Relief Valve: Pops open to release tank pressure in the event that pressure switch fails to stop motor at cut-out pressure.

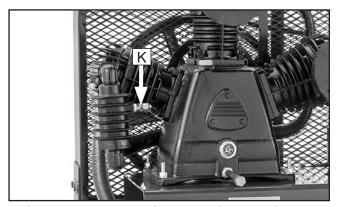


Figure 5. Location of pump safety relief valve.

K. Pump Safety Relief Valve (G0942 Only): Pops open to release pump pressure in the event of overpressurization during 2nd stage of pressurization.

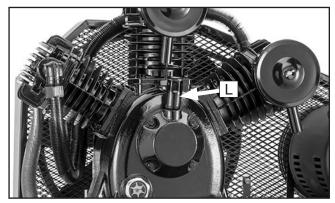


Figure 6. Location of crankcase breather.

L. Crankcase Breather (G0943 Only): Releases air from crankcase in the event that piston gaskets wear and air passes into oil compartment.

Air Output/Delivery

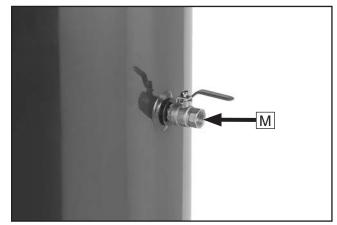


Figure 7. Location of outlet port.

M. Outlet Port: Delivers air from tank to air delivery system. Shut-off valve stops air from entering system.

Magnetic Switch Box

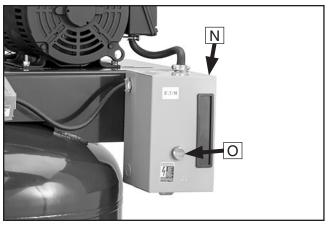


Figure 8. Location of magnetic switch (Model G0943 shown).

- N. Magnetic Switch: Controls motor operation with thermally protected magnetic switch.
- O. Reset Button: Restores power to motor when pressed after thermal overload relay has been tripped. To reset, place pressure switch lever in OFF position, wait a few minutes for motor to cool, then press reset button. If motor does not reset, allow motor to cool longer, than try again.



MACHINE DATA SHEET

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

MODEL G0942 80-GALLON 7.5 HP EXTREME-SERIES AIR COMPRESSOR

Product Dimensions:	
Weight	565 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	
Footprint (Length x Width)	
Shipping Dimensions:	
Type	Wood Crate
Content	
Weight	620 lbs.
Length x Width x Height	44 x 35 x 76 in.
Must Ship Upright	Yes
Electrical:	
Power Requirement	230V, Single-Phase, 60 Hz
Full-Load Current Rating	
Minimum Circuit Size	
Connection Type	Permanent (Hardwire to Shutoff Switch)
Switch Type	Magnetic Switch w/Overload Protection
Motors:	
Main	
Horsepower	Single-Phase31A
Centrifugal Switch/Contacts Type	,
Main Specifications:	
Operation Information	
Compressor Style	Vertical
Pump Type	
Max. Airflow/Delivery (at 40 PSI)	
Max. Airflow/Delivery (at 90 PSI)	
Max. Pressure	
Cut-Out Pressure	
Cut-In Pressure	
Duty Cycle	
Tank Size	
Number of Cylinders	
Pump LubricationGrizzly Model T28041 or 100% Fully Drain Valve Type	
Regulator	
1 10yulal01	INO



Output Port Information

Number of Connections	Female Threaded Valve3/4" NPT1
Construction Information	
Valves	SteelBrass/Brass-Coated SteelEnamel
Country of Origin	

Features:

80-Gallon Tank with Maximum Airflow of 23 CFM at 90 PSI Ball-Valve Drain Control Fan Pulley and Cooling Fin Design to Keep Compressor Cool Oil Sight Glass 2-Stage Compressor for Optimum Output W-Cylinder Cast-Iron Air Compressor Pump





MACHINE DATA SHEET

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

MODEL G0943 120-GALLON 10 HP EXTREME-SERIES AIR COMPRESSOR

Product Dimensions:	
Weight	950 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	
Footprint (Length x Width)	24 x 24 in.
Shipping Dimensions:	
Type	Wood Crate
Content	Machine
Weight	980 lbs.
Length x Width x Height	
Must Ship Upright	Yes
Electrical:	
Power Requirement	230V or 460V, 3-Phase, 60 Hz
Prewired Voltage	
Full-Load Current Rating	24A at 230V, 12A at 460V
Minimum Circuit Size	, ·
Connection Type	
Switch Type	Magnetic Switch w/Overload Protection
Motors:	
Main	
Horsepower	10 HP
Phase	3-Phase
Amps	24A at 230V, 12A at 460V
Speed	1760 RPM
Туре	
Power Transfer	
Bearings	Shielded & Permanently Lubricated
Main Specifications:	
Operation Information	
Compressor Style	Vertical
Pump Type	Two-Stage
Max. Airflow/Delivery (at 40 PSI)	
Max. Airflow/Delivery (at 90 PSI)	
Max. Pressure	
Cut-Out Pressure	
Cut-In Pressure	
Duty Cycle	
Tank Size	
Number of CylindersGrizzly Model T28041 or 100% F	
Drain Valve TypeGrizziy Model 128041 of 100% i	
Regulator	



Output Port Information

Connection Type	
Construction Information	
Tank	Brass/Brass-Coated Steel
Country of Origin	

Features:

120-Gallon Tank with Maximum Airflow of 40 CFM at 90 PSI Ball-Valve Drain Control Fan Pulley and Cooling Fin Design to Keep Compressor Cool Oil Sight Glass 2-Stage Compressor for Optimum Output W-Cylinder Cast-Iron Air Compressor Pump



SECTION 1: SAFETY

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

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



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

AWARNING

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

ACAUTION

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

AWARNING

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 Air Compressors

AWARNING

Serious impact injury or death can occur from bursting tank, attachment tool, distribution line, or hose. Contact with hot compressor parts can result in burns. Operating this tool in an environment without proper ventilation or near combustible materials can lead to explosions or fires. Eyes and other soft tissues can be easily injured by air streams and debris projected by compressed air or attachment tools. To reduce the risk of these hazards, operator and bystanders MUST completely heed hazards and warnings below.

TANK INTEGRITY. Inspect tank, attachment tools, pump, air lines, and valves for rust, damage, weakness, leaks, looseness, or excessive wear and repair/replace damaged components before operating. Replace a damaged tank immediately. DO NOT attempt to weld on, modify, or repair tank. Modifying tank can affect tank integrity and cause tank to burst.

ATTACHMENT TOOLS. Always wear ANSI-approved eye protection and any additional personal protective equipment required by attachment tools. Pneumatic tools can propel objects and debris at high speeds or even explode. Never use damaged tools—they are even more likely to rupture. DO NOT exceed pressure ratings of tools or attachments as lines and seals may burst. Use proper air hose for tool and confirm air hose is long enough to reach work area without stretching. Do not carry attachment tool with hand on trigger to reduce risk of accidental firing. Always relieve outlet air line and hose before attaching/removing tools. Disconnect hose or tool from compressor when not in use.

MODIFICATIONS. DO NOT adjust or remove safety relief valve, pressure switch, or otherwise modify machine. Do not install shut-off valve between compressor pump and tank. Check, safety, and pressure valves are adjusted at factory for correct tolerances and abilities of compressor and are designed to keep tank and other components from bursting.

INTENDED USE. DO NOT use compressed air as breathable air supply and DO NOT aim compressed air or air tools at body parts or people. Compressed air can injure or propel debris into eyes or other soft tissues. Do not use compressor to inflate low-pressure objects that are likely to burst (like children's toys).

DAILY MAINTENANCE. Test safety relief valve daily to dislodge any blockages and confirm it is working correctly. Drain moisture from tank daily to prevent internal corrosion that could weaken tank.

DISTRIBUTION LINES. Use only stainless steel, copper, or aluminum for air delivery/distribution lines. NEVER use PVC because it cannot withstand the pressure, heat, condensation, and oils of compressed air and may shatter, creating dangerous shrapnel.

VENTILATION. Only operate in well-ventilated environment that is less than 100°F and keep compressor at least 18 inches from nearest wall. DO NOT obstruct airflow to air filters and ventilation openings. Regularly check and change air filters to avoid buildup of impurities and reduce risk of fire.

COMBUSTION. Compressor motor, pressure switch, and some pneumatic attachment tools often produce sparks. Only operate compressor in area free of combustible materials to prevent fires and explosions. When spraying, locate air compressor at least 20 feet from spray area, do not smoke, and do not spray flammable material in confined area near flame/compressor. Turn compressor *OFF* when unattended. Motor could overheat and create fire hazard.

HOT PARTS. Discharge line and other compressor pump parts heat up during operation. Do not touch these parts during or immediately following operation to prevent burns.

MOVING AND SERVICING. Disconnect power, allow compressor to cool, bleed air from system, and disconnect attachment tools and hoses before moving or servicing to prevent impact injuries, soft tissue injuries, and burns.



SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.



AWARNING

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

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

G0942 Full-Load Current Rating at 230V..31A G0943 Full-Load Current Rating at 230V..24A G0943 Full-Load Current Rating at 460V..12A

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

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

Circuit Information

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



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

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

Circuit Requirements for 230V

Models G0942/G0943 are both prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage	.208V, 220V, 230V, 240V
Cycle	60 Hz
Phase	
G0942	Single-Phase
G0943	3-Phase
Power Supply Circuit	
G0942	40 Amps
G0943	30 Amps

Circuit Requirements for 460V

Model G0943 can be converted to operate on a power supply circuit that has a verified ground and meets the requirements listed below. (Refer to **Voltage Conversion** instructions for details.)

Nominal Voltage	440V, 460V, 480V
Cycle	60 Hz
Phase	3-Phase
Power Supply Circuit	15 Amps



Connection Type

A permanently connected (hardwired) power supply is typically installed with wires running through mounted and secured conduit. A disconnecting means, such as a locking switch (see following figure), must be provided to allow the machine to be disconnected (isolated) from the power supply when required. This installation must be performed by an electrician in accordance with all applicable electrical codes and ordinances.

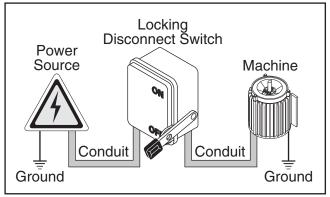


Figure 9. Typical setup of a permanently connected machine.

Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. A permanently connected machine must be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor. All grounds must be verified and rated for the electrical requirements of the machine. Improper grounding can increase the risk of electric shock!

AWARNING

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

Extension Cords

Since this machine must be permanently connected to the power supply, an extension cord cannot be used.

Model G0943 Voltage Conversion

The Model G0943 can be converted to 460V operation. This conversion consists of: 1) Disconnecting the machine from power, 2) replacing the magnetic switch, and 3) rewiring the motor for 460V operation.

All wiring changes must be inspected by a qualified electrician or service personnel before the machine is connected to the power source. If, at any time during this procedure you need assistance, call Grizzly Tech Support at (570) 546-9663.

Items Needed	Qty
Flat Head Screwdriver 1/4"	1
Phillips Head Screwdriver #2	1
Wrench or Socket 13mm	1
Open or Closed-End Wrench 13mm	1
Magnetic Switch 460V (#118 on Page 58)	1
Wire Nuts	3
Electrical Tape As Ne	eded

To convert Model G0943 to 460V operation:

- DISCONNECT MACHINE FROM POWER!
- 2. Turn lock screw shown in **Figure 10** 90° counterclockwise to remove magnetic switch cover.

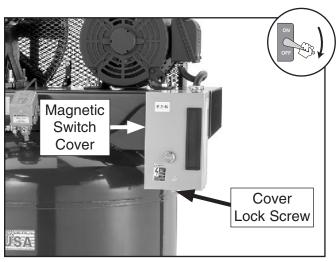


Figure 10. Location of magnetic switch cover and lock screw.



3. Remove (2) screws on each strain relief clamp to remove clamps (see **Figure 11**).

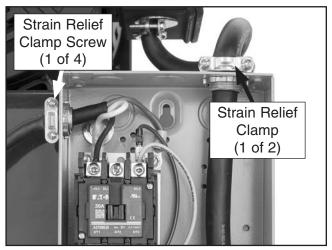


Figure 11. Location of strain relief clamps and screws.

- Disconnect all wires from contactor, overload relay, and ground terminals inside 230V magnetic switch box, then remove motor and pressure switch cords from strain relief holes.
- 5. Remove (2) hex nuts, (2) lock washers, (4) flat washers, and (2) hex bolts shown in Figure 12 to remove 230V magnetic switch box from machine saddle.

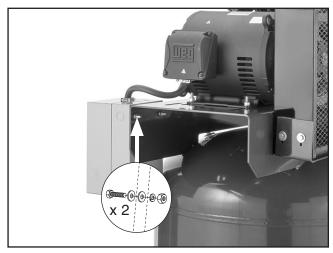


Figure 12. Location of magnetic switch box fasteners.

- **6.** Remove cover on 460V magnetic switch box, and install box on saddle.
- 7. Insert motor and pressure switch cords through 460V magnetic switch box strain relief holes, then attach wires to terminals according to wiring diagram on Page 50.
- **8.** Install 460V magnetic switch cover.
- **9.** Remove (4) bolts shown in **Figure 13** to remove motor junction box cover.

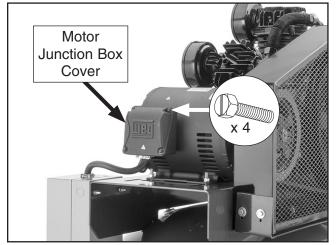


Figure 13. Location of motor junction box cover and bolts.

10. Rewire motor for 460V operation (refer to wiring diagram on **Page 50**).

Note: If there is a diagram on motor/inside junction box that conflicts with the one in this manual, motor may have changed since manual was printed. Use diagram provided on motor/in junction box.

11. Install motor junction box cover with bolts removed in **Step 9**.

AWARNING

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

SECTION 3: SETUP

Unpacking

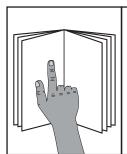
This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. *If items are damaged, please call us immediately at (570) 546-9663.*

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.

Needed for Setup

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

Des	scription	Qty
•	Additional People	1
•	Safety Glasses (for each person)	1
•	Open-End Wrench 9/16"	1
•	Lifting Equipment (rated for 1200 lbs.)	1
•	Mounting Hardware As Nee	eded
•	Flat Head Screwdriver 1/4"	1
•	Phillips Head Screwdriver #2	1
•	Air Compressor Oil SAE 30 As Nee	eded
•	Hearing Protection	1



AWARNING

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



AWARNING

Wear safety glasses during the entire setup process!

Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

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

Inv	entory (Figure 14)	Qty
A.	Air Compressor	1



Figure 14. Inventory (G0942 shown).

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.



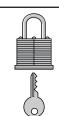
Site Considerations

Weight Load

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

Space Allocation

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



ACAUTION

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

Physical Environment

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

Electrical Installation

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

Lighting

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

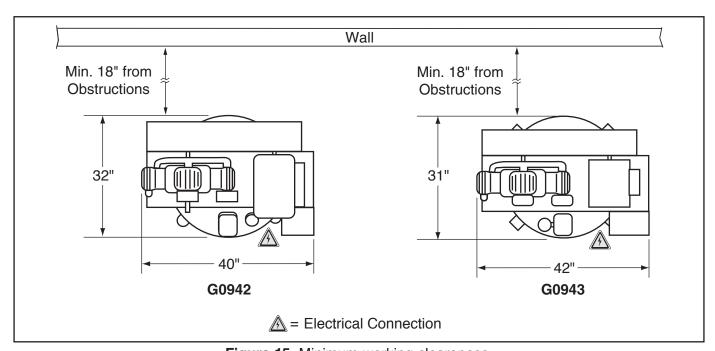


Figure 15. Minimum working clearances.



Lifting & Placing



AWARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

Use lifting equipment rated for at least 1200 lbs. to lift machine off the pallet and onto a suitable location, then secure the machine to the shop floor.

The air compressor must be located at least 18 inches from the nearest wall as described in Additional Safety for Air Compressors on Page 12.

Before anchoring the machine to the floor, you should also consider how you plan to design the air delivery system (see **Distribution System Design** on **Page 26**).

To lift and place machine:

1. Place pallet near final machine mounting location.

- **2.** Remove top and sides of crate from shipping pallet.
- 3. Unbolt machine from pallet.
- Place lifting sling under machine saddle (see Figure 16), then attach sling securely to forklift (or other power lifting equipment).

Note: Be sure sling does not put pressure on exhaust tube, discharge line, motor, pump, or belt guard or they can become damaged from force while lifting.

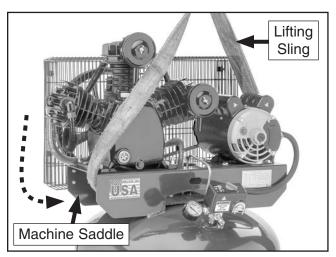


Figure 16. Example of lifting sling placed under machine saddle.

5. With another person to help steady machine, lift machine just enough to clear pallet and any floor obstacles, then place machine in its final position on shop floor.



Anchoring to Floor

Number of Mounting Holes	4
Diameter of Mounting Hardware	5/8"

Anchoring machinery to the floor prevents tipping or shifting and reduces vibration that may occur during operation, resulting in a machine that runs slightly quieter and feels more solid. Since this machine is extremely top heavy, anchoring it to the floor will also prevent injury and property damage.

If the machine will be installed in a commercial or workplace setting, or if it is permanently connected (hardwired) to the power supply, local codes may also require that it be anchored to the floor.

Anchoring to Concrete Floors

Lag shield anchors with lag screws (see below) are a popular way to anchor machinery to a concrete floor, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. However, anytime local codes apply, you MUST follow the anchoring methodology specified by the code.

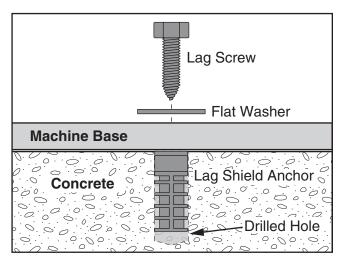


Figure 17. Popular method for anchoring machinery to a concrete floor.

IMPORTANT: DO NOT tighten lag screws so much that they may cause stress to the tank.

Tip: Install vibration pads between the lag screws and floor to further cut down on vibration and noise.

Power Connection

Before the machine can be connected to the power source, an electrical circuit and connection device must be prepared per the **POWER SUPPLY** section in this manual; and all previous setup instructions in this manual must be complete to ensure that the machine has been assembled and installed properly. The disconnect switch installed by the electrician (as recommended) is the primary means for disconnecting or connecting the machine to the power source.

AWARNING

Connecting power supply wires to machine without first disconnecting power supply may result in serious injury or death.

Connecting Incoming Power Wires

Tools Needed	Qty
Flat Head Screwdriver 1/4"	Ì
Phillips Head Screwdriver #2	1

To connect incoming power wires:

- DISCONNECT POWER SUPPLY WIRES OR LOCK DISCONNECT SWITCH BOX IN OFF POSITION!
- 2. Turn lock screw shown in **Figure 18** 90° counterclockwise to remove magnetic switch cover.

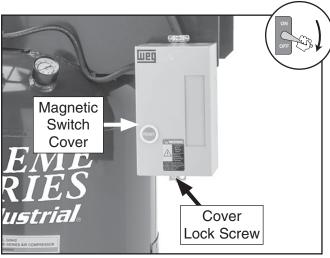


Figure 18. Location of magnetic switch cover and lock screw (Model G0942 shown).



3. Remove (2) screws shown in **Figure 19** to remove strain relief clamp, then insert incoming power conduit through strain relief.

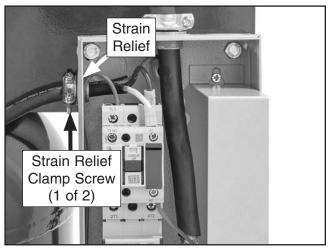


Figure 19. Location of magnetic switch box strain relief and clamp screws (Model G0942 shown).

AWARNING

During next step, make sure incoming ground wire is connected to correct terminal to ensure machine will be properly grounded (see "Ground" in Figure 20). An ungrounded or improperly grounded machine can cause electrocution if live electrical wires make contact with parts touched by operator.

4. G0942 Only: Connect incoming power wires to 1L1, 3L2, and ground terminals shown in **Figure 20**.

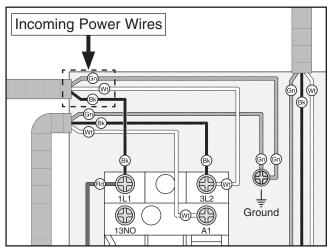


Figure 20. Incoming power wires connected to 1L1, 3L2, and ground terminals for Model G0942.

G0943 230V Only: Connect incoming power wires to 1/L1, 3/L2, 5/L3, and ground terminals shown in **Figure 21**.

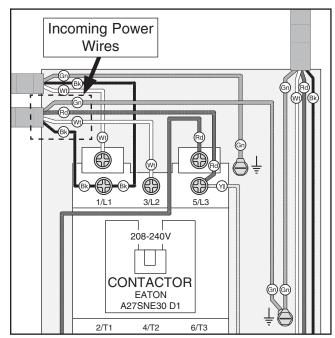


Figure 21. Incoming power wires connected to 1/L1, 3/L2, 5/L3, and ground terminals for Model G0943 wired for 230V.

G0943 460V Only: Connect incoming power wires to 1/L1, 3/L2, 5/L3, and ground terminals shown in **Figure 22**.

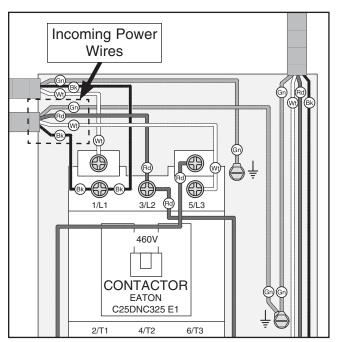


Figure 22. Incoming power wires connected to 1/L1, 3/L2, 5/L3, and ground terminals for Model G0943 wired for 460V.



- 5. Install strain relief clamp with screws removed in **Step 3** to clamp incoming power conduit in place.
- **6.** Install magnetic switch cover.

NOTICE

We do not recommend connecting G0943 to a phase converter to supply 3-phase power as it could damage or decrease life of sensitive electrical components.

Connecting to Power Source

Move the disconnect switch handle to the ON position, as illustrated below. The machine is now connected to the power source.

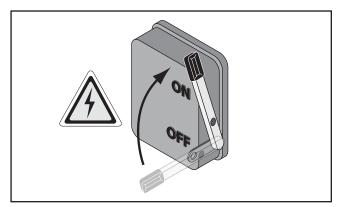


Figure 23. Connecting power to machine.

Disconnecting from Power Source

Move the disconnect switch handle to the OFF position, as illustrated below. The machine is now disconnected from the power source.

Note: Lock the switch in the OFF position to restrict others from starting the machine.

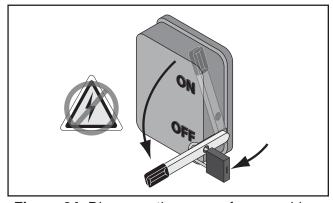


Figure 24. Disconnecting power from machine.

Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The Test Run consists of verifying the following: 1) The compressor oil level is sufficient, 2) the motor powers up and runs correctly, 3) the 3-phase power supply polarity is correct (Model G0943 only), 4) the pump safety relief valve works correctly (Model G0942 only), 5) the motor and pump turn *OFF* when the cut-out pressure is reached, and 6) the tank safety relief valve works correctly.

AWARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.



AWARNING

Eye injury hazard! Always wear safety glasses when handling pressurized air system.



To test run machine:

- **1.** Check oil level (refer to **Lubrication** beginning on **Page 33** for instructions).
- 2. Clear all setup tools away from machine.
- 3. Move pressure switch lever to OFF position (see **Figure 25**).

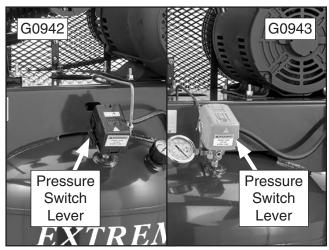


Figure 25. Location of pressure switch controls.

4. Turn drain valve handle to open position to open drain valve (see **Figure 26**).

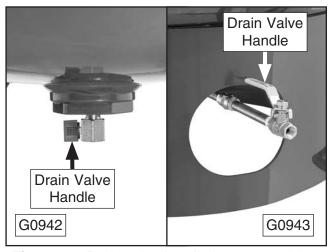


Figure 26. Drain valve handle in open position.

5. Turn output port shut-off valve handle all the way counterclockwise to open (see Figure 27).

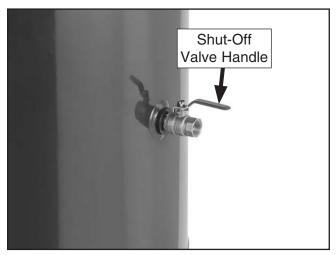


Figure 27. Shut-off valve handle in open position.

- **6.** Connect machine to power supply.
- Move pressure switch lever to AUTO/ON position to turn machine ON and verify motor operation.

Motor should run smoothly and without unusual problems or noises.

- For G0942: Proceed to Step 13.
- For G0943: Verify that motor pulley, pump flywheel, and V-belt rotate clockwise when viewed from front of machine. If they rotate clockwise, power supply polarity is correct, proceed to Step 14. If they rotate counterclockwise, proceed to Step 8.
- **8.** Move pressure switch lever to OFF position.
- 9. DISCONNECT MACHINE FROM POWER!



10. Turn lock screw shown in **Figure 28** 90° counterclockwise to remove magnetic switch cover.

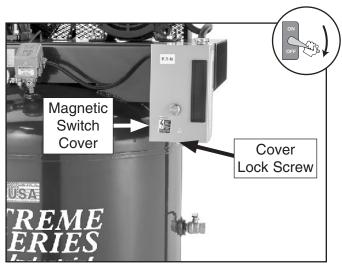


Figure 28. Location of magnetic switch cover and lock screw.

11. G0943 230V Only: Swap black wire connected ed to 1/L1 terminal with white wire connected to 3/L2 terminal on contactor (see Figure 29).

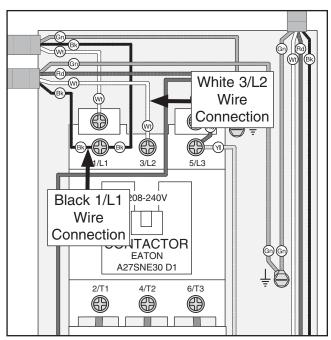


Figure 29. Location of black 1/L1 and white 3/L2 wire (wired for 230V operation).

G0943 460V Only: Swap black wire connected to 1/L1 terminal with red wire connected to 3/L2 terminal on contactor (see **Figure 30**).

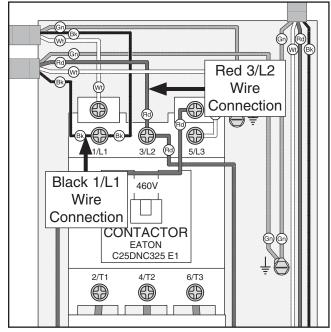


Figure 30. Location of black 1/L1 and red 3/L2 wire (wired for 460V operation).

12. Install magnetic switch cover and reconnect machine to power, then repeat **Step 7**.



AWARNING

Do not touch compressor head or discharge line during use or immediately after compressor is active. These hot parts may cause burns.

ACAUTION

Releasing air through safety relief valve can be loud. Protect hearing with ANSI-approved ear protection in following step.

13. G0942 Only: While pump is running, slowly pull pump safety relief valve ring to bleed pressure from pump (see **Figure 31**).

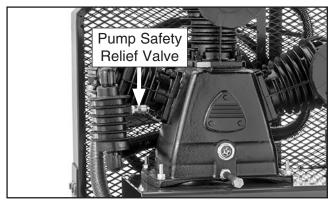


Figure 31. Location of G0942 pump safety relief valve.

- If pump safety relief valve bleeds pressure, and air stops leaking when ring is released, then safety relief valve is working correctly. Proceed to Step 14.
- If safety relief valve is stuck or leaks after releasing ring, immediately turn *OFF* machine and disconnect it from power. Safety relief valve must be replaced before using machine.
- **14.** After running compressor for 20 minutes, move pressure switch lever to OFF position to turn machine *OFF*
- **15.** Turn drain valve handle and shut-off valve handle to closed position.
- **16.** Turn machine *ON* and observe tank pressure gauge (see **Figure 32**) while tank fills.

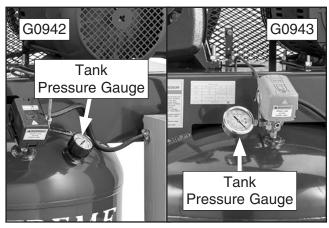


Figure 32. Location of tank pressure gauge.

- If machine turns *OFF* when tank pressure reaches cut-out pressure (175 PSI), then safety feature of check valve is working correctly. Proceed to **Step 17**.
- If machine does not turn OFF when tank pressure reaches cut-out pressure, then immediately turn OFF machine and disconnect it from power. Safety feature of check valve is NOT working properly and must be replaced before using machine.

CAUTION

Releasing air through safety relief valve can be loud. Protect hearing with ANSIapproved ear protection in following step.

 Turn machine *OFF* and slowly pull tank safety relief valve ring to bleed pressure from tank (see Figure 33).

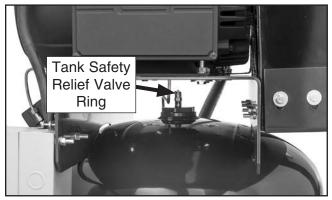


Figure 33. Location of tank safety relief valve ring (Model G0942 shown).

- If tank safety relief valve bleeds pressure, and air stops leaking when ring is released, then safety relief valve is working correctly. Proceed to Step 18.
- If safety relief valve is stuck or leaks after releasing ring, immediately turn *OFF* machine and disconnect it from power. Safety relief valve must be replaced before using machine.
- **18.** Open drain valve to drain moisture from tank.
- **19.** Recheck oil level before proceeding with operations.

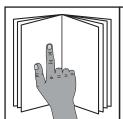


SECTION 4: OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



AWARNING

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



AWARNING

Eye injury hazard! Always wear safety glasses when using this machine.



AWARNING

Do not touch compressor head or discharge line during use or immediately after compressor is active. These hot parts may cause burns.

To complete a typical operation, the operator does the following:

- 1. Puts on safety glasses.
- 2. Pulls safety valve ring(s) to test valve(s) and clear any obstructions.

- **3.** Puts on any additional personal protective equipment required by operation and attachment tool.
- 4. Connects machine to power and turns it ON.
- 5. Allows machine to run until cut-out pressure has been reached and tank is full.
- **6.** Adjusts in-line regulator in air supply line to 0 PSI.
- **7.** Connects air hose to quick-connect coupler in air delivery system.
- **8.** Connects attachment air tool to air hose.
- **9.** Opens output port shut-off valve to release air into distribution system.
- **10.** Adjusts in-line regulator so line pressure at hose is lower than or equal to air tool rating.
- **11.** While being careful not to create a tripping hazard with hose, performs operation.
- **12.** Closes output port shut-off valve and bleeds air from delivery system.
- Turns compressor power OFF and disconnects it from power.
- **14.** Uses tank safety relief valve to reduce tank pressure to less than 10 PSI.
- **15.** Opens drain valves to drain any condensation from tank and delivery system, then closes drain valves.

NOTICE

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



Distribution System Design

When designing your air distribution system, consider how many and what types of tools you intend to use, and what requirements those tools will have (see **Connecting Air Tools** on **Page 29**). The length of hose you use to connect tools to the system may affect how far the system needs to reach (see **Choosing Air Hoses** on **Page 28**).

Determine what methods you will use to remove moisture, oil, and dirt from the compressor air (see **Distribution System Components** on **Page 27**).

Plan to add a regulator for each supply line, and determine if you will need to add a lubricator. Installing quick-connect couplers will allow you to easily connect and disconnect air tools.

The compressor must be anchored at least 18 inches away from the nearest wall and 20 inches away from any combustible spraying operations.

Once you know how large your system will be, and what components you will install, choose a material for the distribution lines. Stainless steel, copper, and aluminum can withstand the force and heat of compressed air.

Decide how you will route the distribution lines. Forcing air flow up, against gravity, after it leaves the compressor, will naturally prevent moisture from proceeding through the line and reaching your tool.

Build your system using your desired pipes, fittings, filters, drains, and regulators, then use a flexible conduit or coupling to connect your air compressor. This will decrease any structural pressure on the tank and distribution pipes that could stress and damage the components. The Model G0942/G0943 has a shut-off valve to stop the airflow when attaching tools or servicing individual components.

Further information about air distribution systems is out of the scope of this manual. Consult outside resources and books for more suggestions.

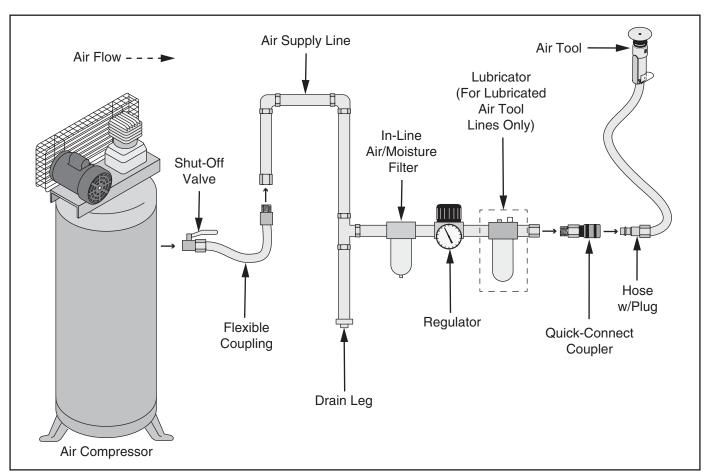


Figure 34. Typical air distribution system.



Distribution System Components

The distribution system is what delivers the air from your compressor to the tool you wish to use. Air delivery components can be damaged if dirt, oil, or water enter the air supply line. An air distribution system allows you to clean the air, remove moisture and heat, and regulate the pressure, all after the air leaves the compressor tank and before it enters the air tool.

Air Dryer

Before the air reaches an air tool, it must be dried by some method or another. One option is to install a moisture trap, which provides a place for moisture to collect where it can be easily drained (see **Figure 34** on **Page 26**).

Another option is to install a moisture filter (see **Figure 35**). The filter can be cleaned and replaced, while any accumulated moisture is drained from a drain valve. Many of these can filter dirt, oil, and moisture at the same time.

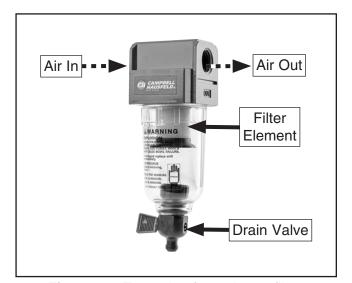


Figure 35. Example of a moisture filter.

The last option is to install an actual air dryer. These are better suited for large industrial applications.

Air Filter

Ensuring clean air reaches your air tools will also extend tool life. If your method of moisture removal does not also filter out oil, dirt, and debris, we recommend also adding an in-line air filter (see **Figure 36**).

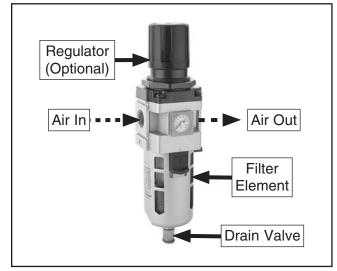


Figure 36. Example of an air filter.

Regulator

A regulator (see **Figure 37**) is what adjusts the air supply line to your desired operating pressure. The operating pressure should always be equal to or less than the pressure that your air tool is rated for. An air tool recommended for 70 PSI should never be connected to a hose or system set to higher than that operating pressure, as the tool or valves could burst. A regulator allows tools with a lower rating than the system to still be attached, because the line can be adjusted to a safe level.

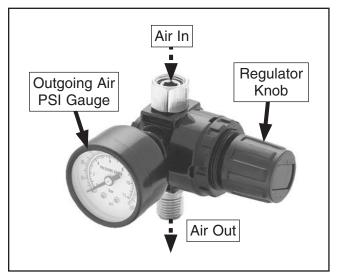


Figure 37. Example of a regulator.



Lubricator

After water, debris, and oil from the compressor and environment have been removed, some air tools require lubrication be added back into the system to perform their job properly. Air line oil can be added directly to the tool before and during use, or an in-line lubricator (see **Figure 38**) can be added to the air supply line so oil is added automatically. **Only use a lubricator for tools that require it.** Adding lubrication to a paint sprayer, for instance, can contaminate the tool and paint and prevent a proper application.

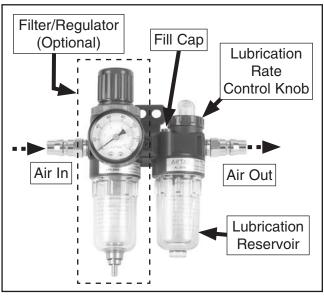


Figure 38. Example of an in-line lubricator.

Choosing Air Hoses

There are many options when it comes to hoses. The most important aspects for an air compressor are going to be length, diameter, and fittings. The material of the hose is also an important consideration, but this will depend more on your application and preference.

Length

Consider your applications before deciding on a hose length. Longer hoses, or hose connections to extend hose length, can increase your mobility, but will probably result in some pressure loss.

If your work area will be small, you may be able to use a shorter hose without stretching the hose. Never put any unnecessary stress on the hose, valves, fittings, or air delivery system.

An air compressor becomes very hot during operation, and the pressure switch and motor often produce sparks. Some applications, like spraying or sanding, involve flammable material that create a fire or combustion hazard when they are performed too close to a compressor. The hose length must allow for the air compressor to remain at least 20 feet away from the operation.

Diameter

A larger inner diameter will allow for higher airflow delivery. Refer to **Airflow Delivery (CFM)** for more information. The higher CFM a tool requires, the larger the inner diameter of the hose will need to be (see **Figure 39**).

Airflow Delivery	Required ID
0-3 CFM	½" (3mm)
3.1-5.9 CFM	¹ / ₄ "– ³ / ₈ " (3mm–10mm)
6+ CFM	3/8"+ (10mm+)

Figure 39. Recommended hose inner diameters.



Fittings

Many hoses come with fittings installed (see **Figure 40**). The simplest option is to find a hose with two fittings: one that matches the air line output port, and one that matches your intended attachment tool. If the hose does not match the port, a coupler may be needed.

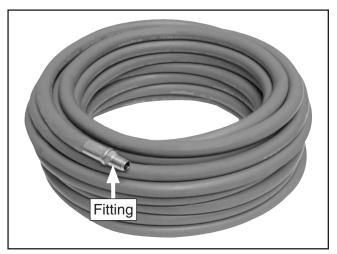


Figure 40. Air hose with fitting installed.

You will need to determine the size of the fittings and whether they are male or female (see **Figure 41**). A male fitting can only attach to a female fitting, and vice versa. There are also a number of coupler/plug styles on the market, so be sure the two match or you will likely not have an airtight connection.

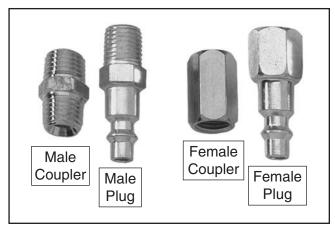


Figure 41. Example of male and female fittings.

Connecting Air Tools

There are various air tools that can be connected to your air compressor by means of the air distribution system, and the setup will vary little across tools, but there are a couple things to keep in mind before connecting a tool or hose.

Airflow Delivery (CFM)

The first consideration when choosing an air tool is whether or not the air delivery is compatible with your compressor. Smaller compressors, capable of less than 5 CFM, only supply enough pressure for smaller air tools like nailers, staplers, chippers, chisels, grinders, sanders, tire inflators, and paint sprayers. Air hammers, impact wrenches, impact hammers, and blow guns will probably require a larger compressor capable of 10-110 CFM.

Duty Cycle

The duty cycle of your compressor will also have an effect on how efficient the airflow delivery is. Refer to **Figure 42** for some common duty cycles and what they mean.

50/50	Compressor can be used for up to half of its cycle (spends same amount of time resting as it does working).
60/40	Compressor can be used for up to 60% of its cycle; spends 40% of time resting.
75/25	Compressor can be used for up to 75% of its cycle; spends 25% of time resting.
85/15	Compressor can be used for up to 85% of its cycle; spends 15% of time resting.
100	Compressor does not need to rest. Engine/motor has a cooling component allowing for constant air delivery.

Figure 42. Common duty cycles.

Compressing air produces a lot of heat, so the pump and motor require some resting time in order to cool down. The "cycle" of an air compressor refers to how long it takes for the compressor to be used and subsequently cooled. The duty cycle dictates what percentage of the cycle you can spend using air before it must rest.

Connecting Air Tool

Use the following steps as a guide for attaching an air tool. As there are a wide variety of tool and hose options, your connections may differ slightly from this simple outline.

Items Needed	Qty
Air Tool	1
Air Hose	1
Additional Connection Fittings	As Needed



AWARNING

Eye injury hazard! Always wear safety glasses when handling pressurized air system.

WARNING

Always wear personal protective equipment required by air tool you are using. Pneumatic grinders, sanders, paint sprayers, etc., require respirator to protect against long-term respiratory damage. Prolonged exposure to loud tools can result in hearing loss without the use of hearing protection.

To connect air tool:

- Adjust in-line regulator in air supply line to 0 PSI.
- **2.** Insert air hose male plug into quick-connect coupler.
- 3. Connect other end of hose to air tool.

Note: Refer to air tool instructions for specifications, method of connection, and proper use of tool

Disconnecting Air Tool



AWARNING

Eye injury hazard! Always wear safety glasses when handling pressurized air system.

ACAUTION

Pressurized air escaping through valves/ fittings can be extremely loud. Protect hearing with ANSI-approved hearing protection in following steps.

To disconnect air tool:

- Adjust in-line regulator in air supply line to 0 PSI.
- 2. Disconnect air tool from hose.
- **3.** Push coupler sleeve away from plug to release hose plug.

Note: Air will escape when connection is broken if air supply line is still pressurized.



SECTION 5: ACCESSORIES

WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

T32079—Paint & Body Respirator Kit - Medium T32080—Paint & Body Respirator Kit - Large

This kit includes (1) silicone rubber half mask respirator, (2) T32088 organic vapor cartridges, (2) P100 pancake filters with organic vapor/AG nuisance odor relief, and (4) P95 particulate filter pads and filter retainers.



Figure 43. Paint & Body Respirator Kit.

Basic Eye Protection

T32323—Woodturners Face Shield
T32401—EDGE Brazeau Safety Glasses, Clear

T32402—EDGE Khor G2 Safety Glasses, Tint

T32404—EDGE Mazeno Safety Glasses, Clear



Figure 44. Assortment of basic eye protection.

T28041—Primrose Air Compressor Oil

This oil is a blend of the highest quality solvent refined, paraffinic, and naphthenic petroleum mineral oils and additives which prevent rust and oxidation. It's formulated for clean, trouble-free air compressor lubrication and effective control of carbon deposits for longer life. 1 quart size.



Figure 45. T28041 236 Primrose Plus Air Compressor Oil.



SECTION 6: MAINTENANCE



AWARNING

Compressor will turn *ON* automatically when pressure switch is set to *ON* or AUTO. To reduce risk of shock/accidental startup, always disconnect machine from power before adjustments, maintenance, or service.



WARNING

Eye injury hazard! Always wear safety glasses when maintaining pressurized air system.



▲WARNING

Do not touch compressor head or discharge line during use or immediately after compressor is active. These hot parts may cause burns. Allow compressor to cool before handling.



AWARNING

Do not use flammable cleanser to clean machine. Compressor components often produce sparks that could ignite once machine is connected to power and turned *ON*.

Schedule

For optimum performance from this machine, this maintenance schedule must be strictly followed.

Ongoing

To minimize your risk of injury and maintain proper machine operation, shut down the machine immediately if you ever observe any of the items below, and fix the problem before continuing operations:

- Low oil level.
- Damaged safety relief valve, pressure switch, or drain valve.
- Worn or damaged wires, cords, and plugs.
- Tank rust/corrosion.
- Any other unsafe condition.

Daily Maintenance

- Open drain valve to drain any condensation.
- Check oil level.
- Test function of safety relief valve(s) and clear any obstructions.



Releasing air through safety relief valve or drain valve can be extremely loud. Protect hearing with ANSI-approved hearing protection when testing/draining valves.

Weekly Maintenance

- Check air filters.
- Clean/vacuum dust buildup off compressor.

Monthly Maintenance

Check V-belt tension, damage, or wear.

Quarterly (3 Month/300 Hour) Maintenance

Change compressor oil.

Semi-Annual (6 Month) Maintenance

 Check hoses/connections for leaks. If soapy water at suspected leak creates bubbles, air is escaping. Repair or replace affected parts.



Draining Tank

Some water may accumulate in the tank and air delivery system depending on usage and humidity. Drain water from the tank, and any attached delivery system, daily to increase the lifespan of the compressor and air tools and to prevent tank and pipe corrosion.

To drain tank:

DISCONNECT MACHINE FROM POWER!

ACAUTION

Releasing air through safety relief valve can be extremely loud. Protect hearing with ANSI-approved hearing protection in following step.

- 2. Use tank safety relief valve to reduce tank pressure to less than 10 PSI.
- 3. Move drain valve handle to open position (see Figure 46) to open drain valve.

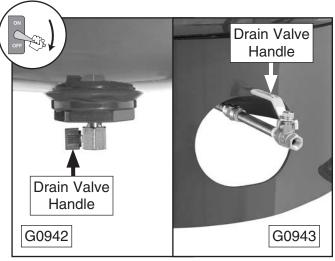


Figure 46. Drain valve handle in open position.

Lubrication

The oil level in the Model G0942/G0943 should be checked daily to prevent overheating and damage to the compressor. Change the oil every 300 hours of use.

Checking Oil Level

Item Needed Qty
Model T28041 or SAE 30 Equiv. As Needed

To check oil level:

 Check oil sight glass (see Figure 47). Oil level should be kept between bottom and top of red circle.

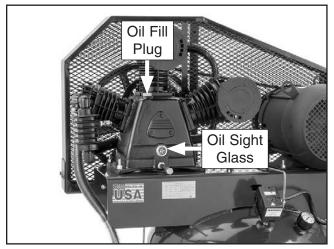


Figure 47. Location of oil sight glass and oil fill plug (Model G0942 shown).

- If oil level is between top and bottom of red circle, no additional oil is needed.
- If oil level is below bottom of red circle, proceed to **Step 2**.
- 2. DISCONNECT MACHINE FROM POWER!
- 3. Remove oil fill plug (see Figure 47).
- Add compressor oil until oil level is between bottom and top of red circle, then install fill plug.



Changing Oil

Items Needed	Qty
Drain Pan	1
Shop Rags As	Needed
Wrench or Socket 11/16" (G0942 Only)	1
Wrench or Socket 14mm (G0943 Only)	1
Wire Brush	1
Thread Sealing Tape As	Needed
Model T28041 or SAE 30 Equivalent	
G0942	1.5 Qt.
G0943	4 Qt.

To change oil:

- 1. DISCONNECT MACHINE FROM POWER!
- 2. Remove oil fill plug (see Figure 48).
- **3.** Place drain pan under oil drain plug, then remove oil drain plug (see **Figure 48**).

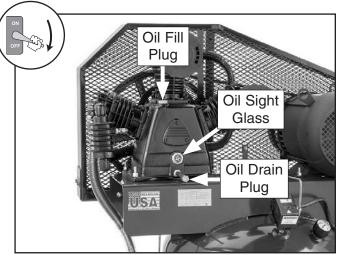


Figure 48. Location of oil fill plug, oil drain plug, and oil sight glass (Model G0942 shown).

- **4.** Clean drain plug threads.
- When oil is fully drained, wrap drain plug threads with thread sealing tape, then install drain plug.
- 6. Add compressor oil until oil level is between bottom and top of red circle on oil sight glass (see **Figure 48**), then install fill plug.

Checking Air Filters

The air filters help prevent impurities and dust from entering the compressor and reduce noise. A dirty filter will result in a less efficient system and could become a fire hazard.

Items Needed	Qty
Replacement Filters	As Needed

To check air filters:

1. DISCONNECT MACHINE FROM POWER!

ACAUTION

Releasing air through safety relief valve can be extremely loud. Protect hearing with ANSI-approved hearing protection in following step.

- **2.** Use tank safety relief valve to reduce tank pressure to less than 10 PSI.
- G0942 Only: Rotate filter cap shown in Figure 49 counterclockwise to remove filter cap and access filter.

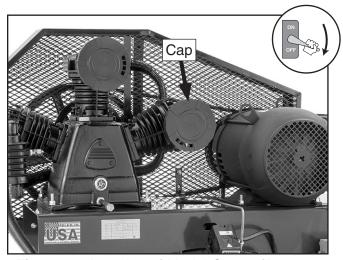


Figure 49. Location of Model G0942 filter cap.

- If filter is fairly clean and there has not been a drop in efficiency of compressor, replace cap. No replacement is required.
- If filter is dirty or clogged, or there has been a drop in efficiency of compressor, replace cap. Proceed to Step 4.

G0943 Only: Remove wing nut shown in **Figure 50** to remove filter cap and access filter.

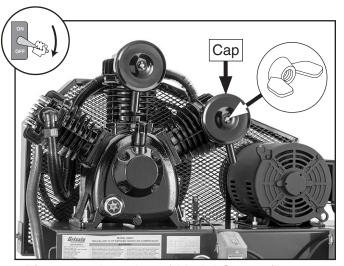


Figure 50. Location of Model G0943 filter cap and wing nut.

- If filter is fairly clean and there has not been a drop in efficiency of compressor, replace cap. No replacement is required.
- If filter is dirty or clogged, or there has been a drop in efficiency of compressor, replace cap. Proceed to Step 4.
- 4. G0942 Only: Replace old filter with new filter element (refer to Part #64 on Page 52), then install filter cap.

G0943 Only: Replace old filter with new filter element (refer to Part #63 on **Page 54**), then install filter cap.

5. Repeat **Step 3** for remaining filter(s).

Adjusting Belt Tension/ Pulley Alignment

The V-belt transfers power from the motor to the compressor pump. To ensure efficient transfer of power, make sure the V-belt is always properly tensioned and in good condition. If the V-belt is worn, cracked, or damaged, replace it.

Pulley alignment is another important factor in power transmission and belt life. The motor pulley should be parallel to the pump flywheel and they should be in the same plane (coplanar) for optimum performance.

The belt tension and motor pulley alignment are both adjusted by repositioning the motor on the saddle. Be advised that these items cannot be adjusted independently.

Items Needed	Qty
Wrenches or Sockets 13, 14mm, 9/16"1	Ea.
Open or Closed-End Wrench 13mm	1
Replacement Belt As Need	beb
Another Person	1
Straightedge 36"	1
Measuring Tape	1

To adjust belt tension/pulley alignment:

- DISCONNECT MACHINE FROM POWER!
- 2. Remove hex nut, lock washer, and hex bolt shown in **Figure 51**.

Note: Model G0942 has an additional (2) fender washers on hex bolt.



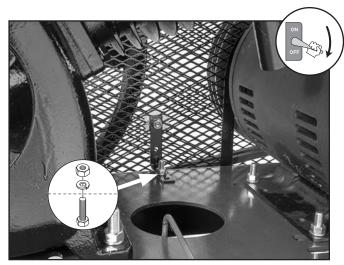


Figure 51. Location of belt guard bracket fasteners.

3. Remove (4) hex bolts and flat washers shown in **Figure 52** to remove belt guard.

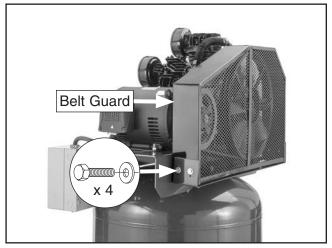


Figure 52. Location of belt guard and fasteners (Model G0943 shown).

ACAUTION

Belt, pulley, and flywheel will be hot after operation. Allow them to cool before handling.

4. Press belt in center to check belt tension. Belt is correctly tensioned when there is approximately ½" deflection when it is pushed with moderate pressure, as shown in **Figure 53**.

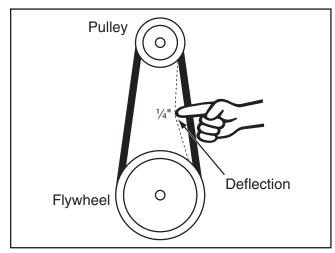


Figure 53. Checking V-belt tension.

- If V-belt is not cracked, torn, excessively worn, or damaged, and there is ¼" of deflection, belt does not need to be adjusted or replaced. Proceed to Step 10.
- If V-belt is cracked, torn, excessively worn, damaged, or there is not 1/4" of deflection, proceed to **Step 5**.
- 5. Loosen (4) hex nuts on hex bolts shown in **Figure 54**, then push motor towards pump to release belt tension.
 - If V-belt is damaged, replace belt (refer to Part #126 on Page 56 for G0942 or Page 58 for G0943).

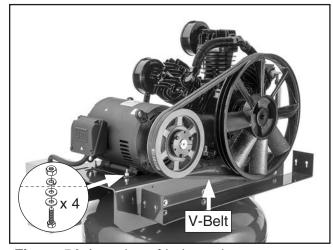


Figure 54. Location of belt tension components (Model G0943 shown).



- 6. Have another person push motor away from pump so there is approximately ½" deflection, then tighten hex nuts from **Step 5**.
- Place straightedge so it is flush against pump flywheel and it extends over motor pulley (see Figure 55).

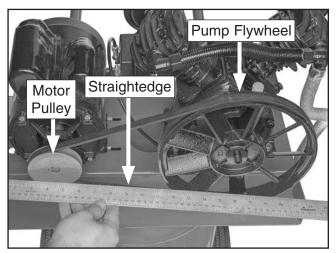


Figure 55. Example of using straightedge to check pulley alignment.

8. Measure distance between straightedge and V-belt at "A", "B", and "C" locations shown in Figure 56.

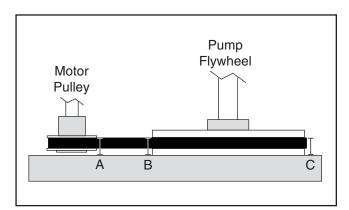


Figure 56. Distances to measure.

- If measurements are all within 1/16" of each other, pulley and flywheel are coplanar and do not need to be adjusted. Proceed to Step 10.
- If measurements are not all within 1/16" of each other, pulley and flywheel are not coplanar. Proceed to Step 9.

- **9.** Loosen (4) hex nuts from **Step 5** and, while maintaining correct belt tension, have assistant adjust motor until pulley and flywheel are coplanar, then tighten hex nuts to secure.
- **10.** Install belt guard with flat washers and hex bolts removed in **Step 3**.
- **11.** Install hex nut, washer(s), and hex bolt removed in **Step 2**.

Checking for Leaks

Air leaks will cause low air output and increase the time the compressor must run. Use the following method to check the valves and fittings on your compressor and air delivery system.

Checking for Leaks

 Close output port shut-off valve (see Figure 57).



Figure 57. Location of shut-off valve.

- **2.** Turn **ON** compressor and allow tank to fill until cut-out pressure is reached.
- DISCONNECT MACHINE FROM POWER!
- **4.** Listen for sound of air to find possible leak at compressor.
 - If you do not hear air escaping, and pressure in tank does not change, there is no leak at compressor.



- If you do hear air escaping, or pressure in tank drops even with safety relief valve(s) and drain valve closed, proceed to Step 5.
- Spray suspected air leak with soap and water solution and look for air bubbles.
 - If bubbles do not form, repeat at different location.
 - If bubbles do form, refer to Fixing Leaks to stop compressor leak before proceeding to check delivery system.
- **6.** Disconnect any tools and hoses from quick-connect couplers of delivery system.
- 7. Open compressor output port shut-off valve.
- Connect compressor to power, turn it ON, and allow tank and air delivery system to fill until cut-out pressure of compressor is reached.
- 9. DISCONNECT MACHINE FROM POWER!
- **10.** Listen for sound of air to find possible leak.
 - If you do not hear air escaping, and pressure in tank does not change, there is no leak at delivery system.
 - If you do hear air escaping, or pressure in tank drops even with safety relief valve(s) and all drain valves closed, proceed to Step 11.
- **11.** Spray suspected air leak with soap and water solution and look for air bubbles.
 - If bubbles do not form, repeat at different location.
 - If bubbles *do* form, refer to **Fixing Leaks**.

Fixing Leaks

Items Needed	Qty
Wire Brush	1
Thread Sealing Tape or Pipe Dope	As Needed

To fix leaks:

1. DISCONNECT MACHINE FROM POWER!

ACAUTION

Releasing air through safety relief valve can be extremely loud. Protect hearing with ANSI-approved hearing protection while performing following step.

- 2. Use tank safety relief valve to reduce tank pressure to less than 10 PSI.
- **3.** Open drain valve(s) to relieve any remaining air.
- **4.** Remove fitting, valve, conduit, or filter that is leaking.
- **5.** Clean threads, apply thread sealing tape or pipe dope to threads, then re-install part.

Note: If a fitting, valve, conduit, or filter continues to leak after preceding steps, replace part.



Machine Storage

All machinery will develop serious rust problems and corrosion damage if it is not properly prepared for storage. Use the steps in this section to ensure that your machine remains in good condition.

To bring machine out of storage, perform the **Test Run** beginning on **Page 21**.



AWARNING

Eye injury hazard! Always wear safety glasses when handling pressurized air system.

Items Needed		Qty
Cleaner/Degreaser	As	Needed
Rags	As	Needed
Tarp or Plastic Sheet		1

To prepare machine for storage:

DISCONNECT MACHINE FROM POWER!



Releasing air through safety relief valve can be extremely loud. Protect hearing with ANSI-approved hearing protection while performing following step.

- 2. Use tank safety relief valve to reduce tank pressure to less than 10 PSI.
- **3.** Open drain valve to drain any condensation from tank.
- 4. Close output port shut-off valve.
- **5.** Disconnect conduits from output port.
- 6. Clean machine.



AWARNING

Do not use a flammable cleanser to clean machine. Compressor components often produce sparks that could ignite once machine is connected to power and turned *ON*.

- **7.** Close drain valve.
- 8. Cover machine with tarp or plastic sheet that will keep out dust and resist liquid or moisture. If machine will be stored in/near direct sunlight, use cover that will block UV rays.



SECTION 7: SERVICE

Review the troubleshooting procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting

Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does	Tank already pressurized.	Motor will not start if tank is fully pressurized.
not start, or power supply	2. Incorrect power supply voltage or circuit size.	2. Ensure correct power supply voltage and circuit size (Page 13).
breaker immediately	3. Incoming power wires wired incorrectly.	3. Test for good contacts/correct wiring (Page 46).
trips after startup.	Pressure switch cut-in/cut-out settings have been adjusted incorrectly.	4. Adjust settings (Page 44). Do not exceed cut-in/cut- out pressures listed on data sheet (Page 6) or inside pressure switch.
	Power supply circuit breaker tripped or fuse blown.	5. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse.
	6. Motor wires connected incorrectly.	6. Correct motor wiring connections (Page 46).
	7. Thermal overload relay has tripped/at fault.	7. Reset. Adjust or replace if at fault.
	8. Start capacitor at fault (G0942 only).	8. Test/replace if at fault.
	9. Centrifugal switch adjustment/contact points at fault (G0942 only).	9. Adjust centrifugal switch/clean contact points. Replace either if at fault.
	10. Contactor not energized/at fault.	10. Test all legs for power; replace if necessary.
	11. Wiring broken, disconnected, or corroded.	11. Fix broken wires or disconnected/corroded connections (Page 46).
	12. Tripped motor thermal overload; compressor is exceeding its duty cycle.	12. Reduce load on compressor and allow longer cool down periods.
	13. Check valve components are dirty/damaged.	13. Clean/replace check valve components.
	14. Pressure switch at fault.	14. Turn compressor <i>OFF</i> , disconnect from power, and empty tank. DO NOT USE until switch is replaced.
	15. Motor or motor bearings at fault.	15. Replace motor.
Machine	Air filter(s) dirty/clogged.	1. Replace air filter(s) (Page 34).
stalls or is	2. Pump/motor have restricted airflow.	2. Clean cylinder fins, motor fan, and vent area.
underpowered.	3. Belt slipping/pulley misaligned.	3. Clean/tension/replace belt (Page 35); ensure pulley is aligned to pump flywheel (Page 35).
	4. Motor wires connected incorrectly.	4. Correct motor wiring connections (Page 46).
	Pressure switch cut-in/cut-out settings have been adjusted incorrectly.	5. Adjust settings (Page 44). Do not exceed cut-in/cut- out pressures listed on data sheet (Page 6) or inside pressure switch.
	6. Incoming power wires wired incorrectly.	6. Test for good contacts/correct wiring (Page 46).
	7. Pulley/flywheel slipping on shaft.	7. Tighten/replace loose pulley/flywheel/shaft.
	8. Tripped motor thermal overload; compressor is exceeding its duty cycle.	Reduce load on compressor and allow longer cool down periods.
	9. Crankcase oil is not correct type.	Drain and replace with correct oil (Page 34).
	10. Run capacitor at fault (G0942 only).	10. Test/repair/replace.
	11. Contactor not energized/at fault.	11. Test all legs for power; replace if necessary.



Motor & Electrical (Cont.)

Symptom	Possible Cause	Possible Solution
Machine stalls or is underpowered.	 12. Check valve components are dirty/damaged. 13. Centrifugal switch/contact points at fault (G0942 only). 14. Motor or motor bearings at fault. 15. Worn valves or rings/compressor pump at fault. 	 12. Clean/replace check valve components. 13. Adjust centrifugal switch/clean contact points. Replace either if at fault. 14. Replace motor. 15. Rebuild/replace.
Machine has vibration or noisy operation.	 Motor or component loose. Loose mounting hardware/feet need shims or vibration pads. V-belt worn, loose, pulley misaligned, or belt slapping guard. Pulley/flywheel loose. Motor fan rubbing on fan cover. Centrifugal switch needs adjustment/at fault (G0942 only). Motor bearings at fault. Compressor pump at fault. 	 Replace damaged or missing bolts/nuts or tighten if loose. Tighten fasteners/add shims or vibration pads. Inspect/replace belt (Page 35). Realign pulley to pump flywheel if necessary (Page 35). Secure pulley/flywheel on shaft. Fix/replace fan cover; replace loose/damaged fan. Adjust/replace if at fault. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. Compressor piston rod/bearing/crankshaft is worn. Rebuild or replace pump.
Motor pulley and pump flywheel do not rotate clockwise when viewed from front of machine (G0943 only).	Power connections wired out of phase.	Correct phase polarity (Page 22).
Motor runs continuously.	 Machine is undersized. In-line regulator(s) needs to be adjusted for lower airflow delivery. Air leak in tank or delivery pipes. Pressure switch at fault. 	 Use smaller attachment tool(s) or larger air compressor. Adjust regulator(s) to decrease line PSI. Check air tank, pipes, and all connections for leaks (Page 37). Do not attempt to repair leaking/damaged tank, only replace. Turn compressor <i>OFF</i>, disconnect from power, and empty tank. DO NOT USE until switch is replaced.
Pressure relief valve stays open and motor will not stop running.	 Pressure switch cut-in/cut-out settings have been adjusted incorrectly. Pressure switch at fault, unit is trying to overpressurize tank. Pressure relief valve at fault/relieving pressure too early. 	 Adjust settings (Page 44). Do not exceed cut-in/cut-out pressures listed on data sheet (Page 6) or inside pressure switch. Turn compressor <i>OFF</i>, disconnect from power, and empty tank. DO NOT USE until switch is replaced. Replace.

Operation

Symptom	Possible Cause	Possible Solution
Air leaks from	Check valve components are dirty/damaged.	Clean/replace check valve components.
pressure	2. Pressure switch at fault.	2. Turn compressor <i>OFF</i> , disconnect from power, and
switch.		empty tank. DO NOT USE until switch is replaced.



Operation (Cont.)

Symptom	Possible Cause	Possible Solution
Low pressure	Drain valve or output shut-off valve is open.	Close valve.
in tank, or	2. Air filter(s) dirty/clogged.	2. Replace air filter(s) (Page 34).
tank pressure drops after	In-line regulator(s) needs to be adjusted for lower airflow delivery.	3. Adjust regulator(s) to decrease line PSI.
compressor is	Pressure switch cut-in/cut-out settings have	4. Adjust settings (Page 44). Do not exceed cut-in/cut-
turned <i>OFF</i> .	been adjusted incorrectly.	out pressures listed on data sheet (Page 6) or inside pressure switch.
	5. Air leak in tank or delivery pipes.	5. Check air tank, pipes, and all connections for leaks (Page 37). Do not attempt to repair leaking/damaged tank, only replace.
	6. Check valve components are dirty/damaged.	6. Clean/replace check valve components.
	Pressure relief valve releasing below cut-out pressure.	7. Replace pressure relief valve.
	8. Gasket(s) leaking.	8. Check gaskets on cylinder head assemblies, repair or
	·	replace as needed.
	9. Worn pump piston rings.	Inspect and replace pump piston rings.
Air leaks from	Check valve components are dirty/damaged.	Clean/replace check valve components.
air filter(s).	2. Reed valve(s) not sealing.	2. Remove cylinder head and replace reed valve(s).
Compressor	Drain valve or output shut-off valve is open.	1. Close valve.
does not build	2. Tank needs to be drained.	2. Open drain valve to drain condensation, then close.
pressure, or does not reach	3. Air filter(s) dirty/clogged.	3. Replace air filter(s) (Page 34).
full pressure.	4. Air leak in tank or delivery pipes.	4. Check air tank, pipes, and all connections for leaks (Page 37). Do not attempt to repair leaking/damaged tank, only replace.
	5. Check valve components are dirty/damaged.	5. Clean/replace check valve components.
	6. Reed valve(s) not sealing.	6. Remove cylinder head and replace reed valve(s).
	7. Head gasket or valve body gasket leaking.	7. Remove cylinder head and replace gasket(s).
	8. Worn pump piston rings.	8. Inspect and replace pump piston rings.
	Broken crankshaft or connecting rod.	Replace or rebuild compressor pump.
Air tools have	Tank needs to be drained.	Open drain valve to drain condensation, then close.
oily discharge.	2. Air filter(s) dirty/clogged.	2. Replace air filter(s) (Page 34).
	3. Too much oil in crankcase.	3. Drain oil to proper level (Page 34).
	4. In-line oiler is out of adjustment (if used).	4. Adjust in-line oiler drip ratio or use correct viscosity oil.
	5. In-line filter(s) is damaged or missing (if used).	5. Replace filter(s) or in-line filter assembly.
	6. Crankcase oil is not correct type.	6. Drain and replace with correct oil (Page 34).
	7. Crankcase breather clogged/obstructed (G0943 only).	7. Clear obstructions from crankcase breather.
	8. Compressor pump at fault.	8. Worn compressor piston, rings, or valves. Rebuild or replace pump.
Air tools	Tank needs to be drained.	Open drain valve to drain condensation, then close.
have watery	In-line water separator(s) is full (if used).	2. Drain water separator(s).
discharge or get cold and freeze up with ice during use.	3. Ambient environment has too much humidity.	3. Install in-line air dryer(s) and water separator(s).
Air tool has low	1. Air hose is too long.	Use shorter hose.
supply pressure	2. In-line regulator(s) needs to be adjusted for	2. Adjust regulator(s) to increase line PSI. DO NOT
but compressor	higher airflow delivery.	exceed pressure rating of attached tool.
has sufficient air pressure.	3. Machine is undersized.	3. Use smaller attachment tool(s) or larger air
p. 0000010.		compressor.



Operation (Cont.)

Symptom	Possible Cause	Possible Solution
Air tool has low supply pressure but compressor has sufficient air pressure. Tank safety	 In-line filter(s) is damaged or clogged (if used). In-line water separator(s) is full (if used). Pressure switch cut-in/cut-out settings have been adjusted incorrectly. Air leaks in hose or delivery system. In-line regulator(s) at fault. Pressure gauge(s) at fault. Pressure switch cut-in/cut-out settings have 	 Replace filter(s) or in-line filter assembly. Drain water separator(s). Adjust settings (Page 44). Do not exceed cut-in/cut-out pressures listed on data sheet (Page 6) or inside pressure switch. Check air hoses and all connections for leaks (Page 37). Inspect in-line regulator(s) for leaks. Replace if at fault. Replace pressure gauge(s). Adjust settings (Page 44). Do not exceed cut-in/cut-
relief valve leaks.	been adjusted incorrectly. 2. Safety relief valve at fault. 3. Pressure switch at fault.	out pressures listed on data sheet (Page 6) or inside pressure switch. 2. Test/replace. 3. Turn compressor <i>OFF</i> , disconnect from power, and empty tank. DO NOT USE until switch is replaced.
Pump safety relief valve leaks (G0942 only).	 Check valve is stuck or obstructed. Blockage or failure during 2nd stage of pressurization. Safety relief valve at fault. 	 Clean/replace check valve components. Inspect 2nd stage fittings, cylinder head, and exhaust tube, and replace any failing 2nd stage components. Test/replace.
Delivered air is dirty or has excessive moisture.	 Tank needs to be drained. In-line filter(s) or water separator(s) needed in air supply line. Delivery pipes are dirty (if used). 	 Open drain valve to drain condensation, then close. Install in-line air filter(s) and water separator(s). Remove delivery pipes, clean out, and replace.
Compressor knocking.	 Air filter(s) dirty/clogged. Crankcase oil is low. Pulley/flywheel loose. Excess carbon build-up on piston or valves. Piston assembly loose. 	 Replace air filter(s) (Page 34). Add crankcase oil (Page 34). Secure pulley/flywheel on shaft. Take compressor to authorized service center. Inspect and repair piston and connecting rod.
Excessive noise while running.	Crankcase oil is not correct type.	Drain and replace with correct oil (Page 34).
Oil leaks onto compressor or floor.	 Oil spilled when filling. Air filter(s) dirty/clogged. Too much oil in crankcase. Crankcase oil is not correct type. Oil fill plug/gasket is worn or damaged. Pump gasket(s) worn or damaged. Cylinder head cap screws loose. Valve, plate, or ring is loose/damaged. Damaged crankcase seal. Damaged crankshaft. 	 Wipe unit clean with non-flammable cleanser. Replace air filter(s) (Page 34). Drain oil to proper level (Page 34). Drain and replace with correct oil (Page 34). Replace gasket or fill plug. Replace gasket(s). Install cap screws with thread sealing tape. Tighten or replace valve/plate/ring. Replace crankcase or seal. Repair/replace crankshaft.
Excessive air leaks from breather (G0943 only).	Some air leaking through breather during operation is normal. If breather is leaking enough air that fill time is affected, piston ring may be damaged.	Replace piston ring.



Adjusting Cut-In/Cut-Out Settings

The pressure switch ensures the compressor will turn *ON* when the tank pressure drops to the cut-in pressure, and will turn *OFF* when the pressure cut-out is reached. Should the pressure switch fail to turn *OFF* the machine, the tank safety relief valve will open shortly after the pressure exceeds the cut-out pressure and prevent over-pressurization.

AWARNING

Cut-in and cut-out settings have been factory set at proper PSI range. Only adjust pressure switch settings if compressor is cutting-in or cutting-out at incorrect pressures. Tank could burst if filled with more pressure than it is designed for.



AWARNING

Eye injury hazard! Always wear safety glasses when handling pressurized air system.

Adjusting Cut-In/Cut-Out Settings

If the minimum and maximum tank pressure settings both have to be raised or lowered at the same time, then follow these steps.

Tools Needed	Qty
Phillips Head Screwdriver #2 (G0942 Only)	1
Flat Head Screwdriver 1/4" (G0942 Only)	1
Wrench or Socket 8mm (G0943 Only)	1

To adjust cut-in/cut-out settings:

- Operate compressor and record cut-in and cut-out pressures.
- 2. DISCONNECT MACHINE FROM POWER!

ACAUTION

Releasing air through safety relief valve can be extremely loud. Protect hearing with ANSI-approved hearing protection while performing following step.

- Use safety relief valve to reduce tank pressure to less than 10 PSI.
- G0942 Only: Remove Phillips head screw shown in Figure 58 to remove pressure switch cover.

G0943 Only: Remove acorn nut shown in **Figure 58** to remove pressure switch cover.

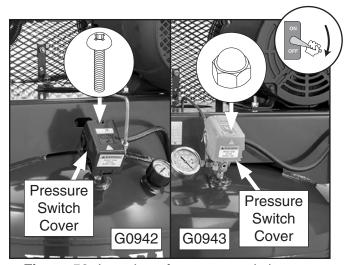


Figure 58. Location of pressure switch cover and fastener.

G0942 Only: Adjust screw shown in Figure
 to change minimum and maximum tank pressure settings.

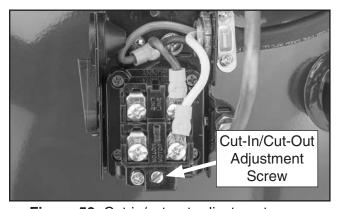


Figure 59. Cut-in/cut-out adjustment screw (Model G0942 shown).



G0943 Only: Adjust nut shown in **Figure 60** to change minimum and maximum tank pressure settings.

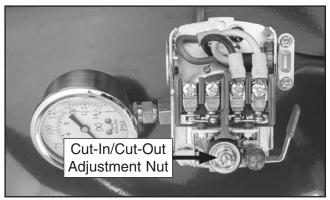


Figure 60. Cut-in/cut-out adjustment nut (Model G0943 shown).

- Turn screw or nut half turn clockwise to increase both settings.
- Turn screw or nut half turn counterclockwise to decrease both settings.
- 6. Install pressure switch cover.
- 7. Connect machine to power, start compressor, and cycle compressor through cut-in/cut-out pressures. If compressor does not automatically turn *OFF* at 175 PSI, turn machine *OFF* before pressure reaches 180 PSI. Adjust pressure switch settings until cut-out pressure is 175 PSI or lower.

Adjusting Only Cut-Out Setting

The Model G0943 has a fixed differential of 30 PSI and therefore the cut-out setting cannot be adjusted separate from the cut-in setting.

For the Model G0942, if only the maximum tank pressure setting needs to be adjusted, then follow these steps. Keep in mind that the allowable pressure differential between cut-in pressure and cut-out pressure must be kept between 30–40 PSI. Exceeding this range can cause the compressor to overheat.

Tool Needed	Qty
Phillips Head Screwdriver #2	1

To adjust cut-out setting:

- Operate compressor and record cut-in and cut-out pressures.
- 2. DISCONNECT MACHINE FROM POWER!

ACAUTION

Releasing air through safety relief valve can be extremely loud. Protect hearing with ANSI-approved hearing protection while performing following step.

- Use safety relief valve to reduce tank pressure to less than 10 PSI.
- Remove Phillips head screw shown in Figure
 on Page 44 to remove pressure switch cover.
- **5.** Adjust screw shown in **Figure 61** to change maximum tank pressure setting.

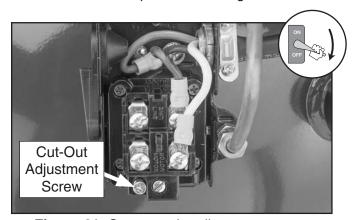


Figure 61. Cut-out only adjustment screw.

- Turn screw half turn clockwise to increase tank pressure.
- Turn screw half turn counterclockwise to decrease tank pressure.
- **6.** Install pressure switch cover.
- 7. Connect machine to power, start compressor, and cycle compressor through cut-in/cut-out pressures. If compressor does not automatically turn *OFF* at 175 PSI, turn machine *OFF* before pressure reaches 180 PSI. Adjust pressure switch settings until cut-out pressure is 175 PSI or lower.



SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.

▲WARNING Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

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

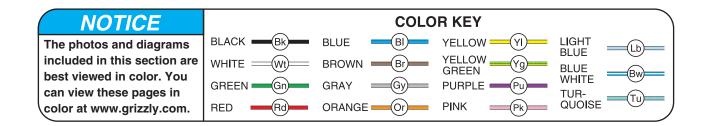
CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

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

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

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

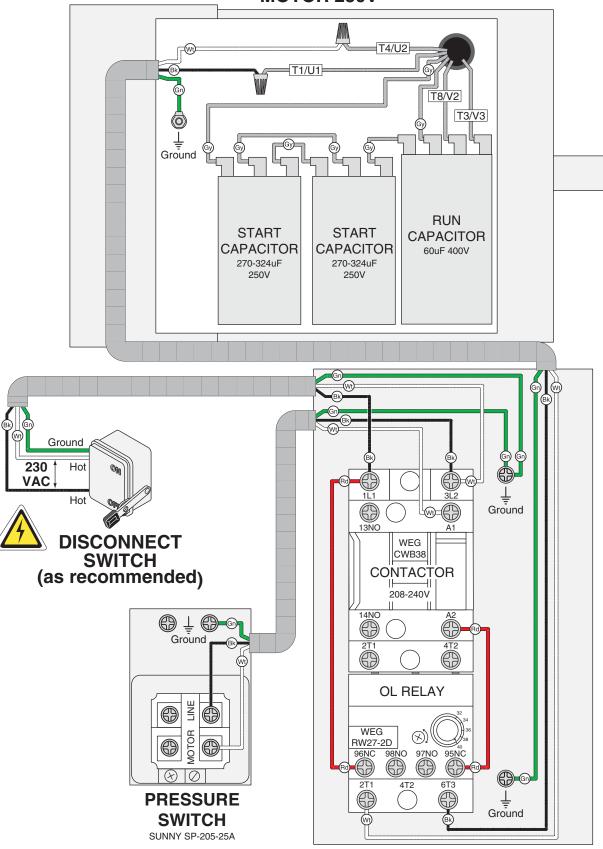
EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.





G0942 Wiring Diagram

MOTOR 230V



MAGNETIC SWITCH

WEG ESWS-B38V24E-RM35

G0942 Electrical Component Photos



Figure 62. Pressure switch wiring.

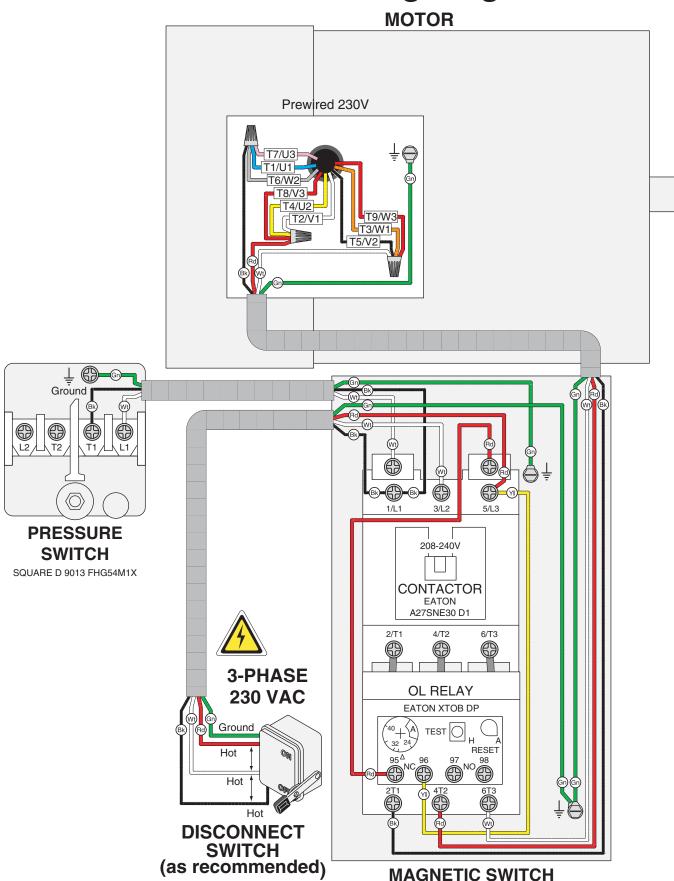


Figure 63. Motor junction box wiring.



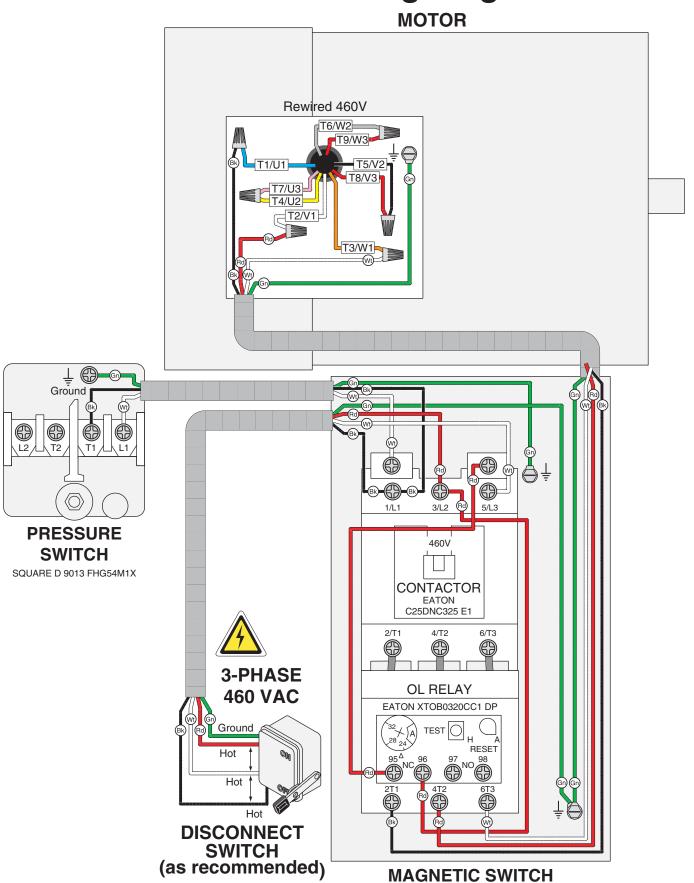
Figure 64. Magnetic switch box wiring.

G0943 230V Wiring Diagram



EATON A27SGE30B040

G0943 460V Wiring Diagram



G0943 Electrical Component Photos

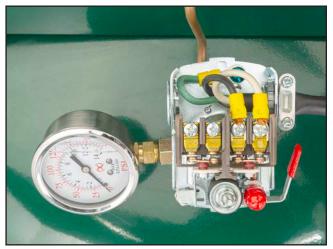


Figure 65. Pressure switch wiring.



Figure 66. Motor junction box wiring (230V).

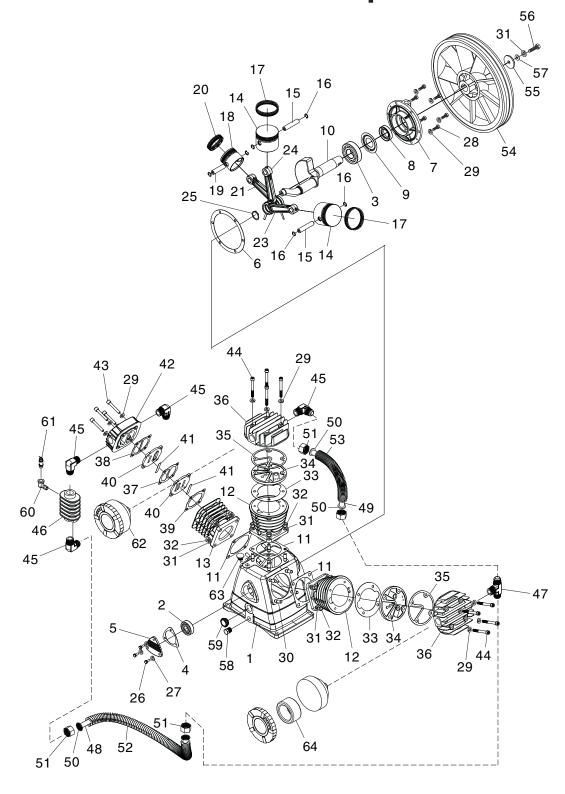


Figure 67. Magnetic switch box wiring (230V).

SECTION 9: PARTS

To order parts, contact MEGA by phone at (832) 415-6995 or email at CS@megacompressor.com.

G0942 Pump



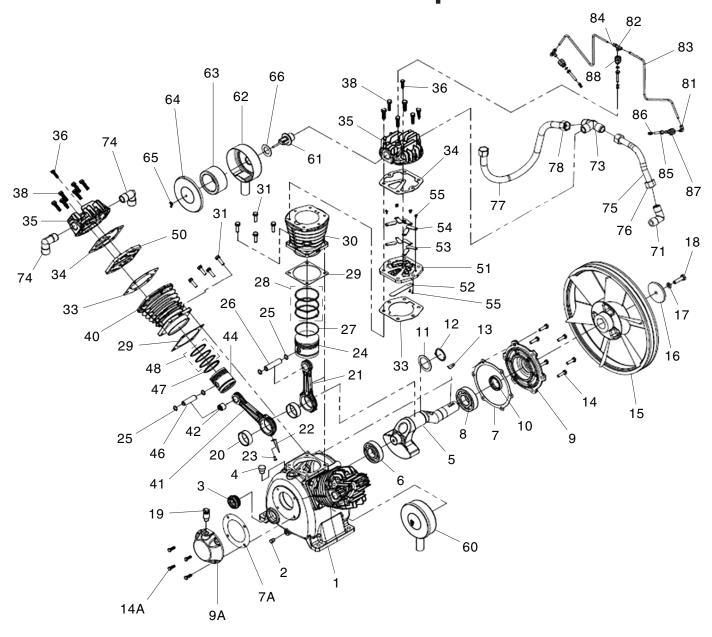
G0942 Pump Parts List

REF	DESCRIPTION	QTY
1	CRANKCASE	1
2	BALL BEARING 6304-OPEN	1
3	BALL BEARING 6307-OPEN	1
4	BEARING COVER GASKET	1
5	CRANKSHAFT BEARING COVER 4MM	1
6	BEARING SEAT GASKET	1
7	CRANKSHAFT BEARING SEAT	1
8	OIL SEAL 35 X 56 X 12	1
9	PLATE 79.5 X 36	1
10	CRANKSHAFT	1
11	CYLINDER GASKET (LOWER)	3
12	CYLINDER (STAGE 1)	2
13	CYLINDER (STAGE 2)	1
14	PISTON (STAGE 1)	2
15	PISTON PIN (STAGE 1)	2
16	INT RETAINING RING 15MM	6
17	PISTON RING SET (STAGE 1) 3 PC	2
18	PISTON (STAGE 2)	1
19	PISTON PIN)STAGE 2)	1
20	PISTON RING SET (STAGE 2) 3 PC	1
21	CONNECTING ROD (LEFT)	1
23	CONNECTING ROD (RIGHT)	1
24	CONNECTING ROD (CENTER)	1
25	EXT RETAINING RING 30MM	1
26	HEX BOLT M6-1 X 16	3
27	LOCK WASHER 6MM	3
28	HEX BOLT M8-1.25 X 25	6
29	LOCK WASHER 8MM	18
30	STUD-SE M10-1.5 X 20, 15	12
31	LOCK WASHER 10MM	13
32	HEX NUT M10-1.5	12
33	CYLINDER GASKET (UPPER) (STAGE 1)	2

REF	DESCRIPTION	QTY
34	VALVE PLATE ASSEMBLY (STAGE 1)	2
35	CYLINDER HEAD GASKET (STAGE 1)	2
36	CYLINDER HEAD (STAGE 1)	2
37	VALVE PLATE GASKET (UPPER)	1
38	CYLINDER HEAD GASKET (STAGE 1)	1
39	VALVE PLATE GASKET (LOWER)	1
40	VALVE PLATE	2
41	REED VALVE	2
42	CYLINDER HEAD (STAGE 2)	1
43	HEX BOLT M8-1.25 X 55	4
44	HEX BOLT M8-1.25 X 75	8
45	ELBOW FITTING 90-DEG R 3/4" G 3/4"	4
46	INTERCOOLER	1
47	TEE FITTING 180-DEG R 3/4" 2 X G 3/4"	1
48	EXHAUST COPPER PIPE (LONG)	1
49	EXHAUST COPPER PIPE (SHORT)	1
50	COPPER PIPE LINING	4
51	EXHAUST NUT M27	4
52	COPPER PIPE FIN (LONG)	1
53	COPPER PIPE FIN (SHORT)	1
54	PUMP FLYWHEEL	1
55	FLAT WASHER 10 X 52 X 5MM	1
56	HEX BOLT M10-1.5 X 40 LH	1
57	FLAT WASHER 10MM	1
58	OIL DRAIN PLUG Z 3/8"	1
59	OIL SIGHT GLASS G 3/4" ALUMINUM	1
60	ELBOW FITTING 90-DEG R 1/4"	1
61	SAFETY RELIEF VALVE R 1/4"	1
62	AIR FILTER ASSEMBLY	2
63	OIL FILL PLUG	1
64	FILTER ELEMENT	1



G0943 Pump



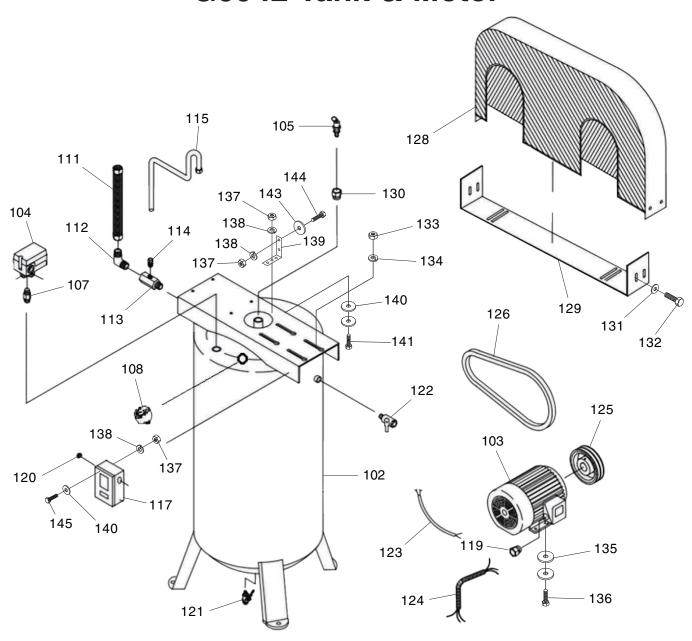
G0943 Pump Parts List

REF	DESCRIPTION	QTY
1	CRANKCASE	1
2	OIL DRAIN PLUG	1
3	OIL SIGHT GLASS	1
4	OIL FILL PLUG	1
5	CRANKSHAFT	1
6	BALL BEARING 6308-OPEN	1
7	BEARING SEAT GASKET	1
7A	BEARING COVER GASKET	1
8	BALL BEARING 6309-OPEN	1
9	CRANKSHAFT BEARING SEAT	1
9A	CRANKSHAFT BEARING COVER	1
10	OIL SEAL	1
11	FLAT WASHER 51 X 70 X 1.5MM	1
12	EXT RETAINING RING 50MM	1
13	WOODRUFF KEY 8 X 32MM	1
14	HEX BOLT M10-1.5 X 25	6
14A	HEX BOLT M8-1.25 X 25	4
15	COMPRESSOR PULLEY	
16	FLAT WASHER 12.5 X 75 X 7MM	1
17	LOCK WASHER 12M	1
18	HEX BOLT M12-1.75 X 45	1
19	BREATHER CAP	1
20	ROD INNER RING	3
21	CONNECTING ROD (STAGE 1)	2
22	OIL SPLASH PLATE	2
23	HEX BOLT M6-1 X 12	2
24	PISTON (FIRST STAGE)	2
25	INT RETAINING RING 20MM	6
26	PISTON PIN (FIRST STAGE)	2
27	COMPRESSOR OIL RING (STAGE 1)	2
28	PISTON RING SET (STAGE 1) 3 PC	6
29	CYLINDER GASKET (LOWER)	3
30	CYLINDER (STAGE 1)	2
31	HEX BOLT M10-1.5 X 30	12
33	CYLINDER GASKET (UPPER)	3
34	CYLINDER HEAD GASKET	3
35	CYLINDER HEAD	3

REF	DESCRIPTION	QTY
36	HEX BOLT M8-1.25 X 30	3
38	HEX BOLT M10-1.5 X 45	18
40	CYLINDER (STAGE 2)	1
41	CONNECTING ROD (STAGE 2)	1
42	NEEDLE ROLLER BEARING NK 20/20	1
44	PISTON (STAGE 2)	1
46	PISTON PIN (STAGE 2)	1
47	COMPRESSOR OIL RING (STAGE 2)	1
48	PISTON RING SET (STAGE 2) 3 PC	3
50	VALVE SEAT ASSEMBLY (STAGE 2)	3
51	VALVE SEAT ASSEMBLY (STAGE 1)	3
52	INLET VALVE PLATE	3
53	OUTLET VALVE PLATE (LOWER)	15
54	OUTLET VALVE PLATE (UPPER)	15
55	HEX BOLT M35 X 13	36
60	AIR FILTER ASSEMBLY	2
61	FILTER MOUNT	2
62	FILTER BASE	2
63	FILTER	2
64	FILTER COVER	2
65	WING NUT M6-1	2
66	FILTER GASKET	2
71	ELBOW FITTING 90-DEG	1
73	TEE FITTING	1
74	ELBOW FITTING 90-DEG	2
75	FIN PIPE ASSEMBLY (STAGE 1)	1
76	STRAIGHT PIPE CONNECTOR PT 7/8"-14	2
77	FIN PIPE ASSEMBLY (STAGE 2)	1
78	STRAIGHT PIPE CONNECTOR PT 1"-11	2
81	ELBOW FITTING 90-DEG	1
82	TEE FITTING	2
83	DISCHARGE PIPE	2
84	STRAIGHT PIPE CONNECTOR PT 1/4"-19	5
85	UNLOADER VALVE	3
86	UNLOADER VALVE SPRING	3
87	OIL RING	3
88	STRAIGHT FITTING	3



G0942 Tank & Motor



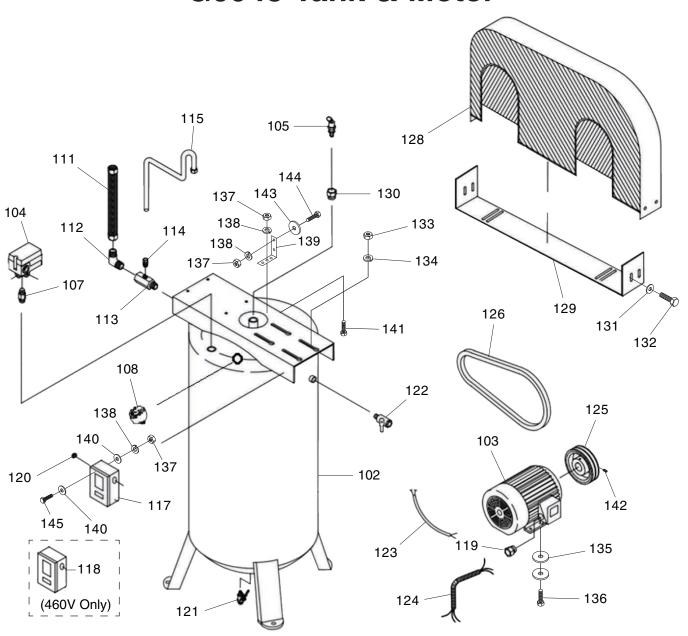
G0942 Tank & Motor Parts List

REF	DESCRIPTION	QTY
102	TANK	1
103	MOTOR 7.5HP 230V 1-PH	1
104	PRESSURE SWITCH SUNNY SP-204	1
105	SAFETY RELIEF VALVE	1
107	PIPE NIPPLE	1
108	PRESSURE GAUGE	1
111	PUMP DISCHARGE LINE	1
112	ELBOW FITTING 90-DEG	1
113	THREADED CHECK VALVE	1
114	DISCHARGE FITTING	1
115	DISCHARGE PIPE	1
117	MAG SWITCH EATON	1
119	STRAIN RELIEF TYPE-1 3/4"	1
120	CHECK VALVE 3/4"	1
121	BALL DRAIN VALVE	1
122	OUTLET VALVE	1
123	MAG SWITCH CORD 12G 3W 10"	1
124	MOTOR CORD 8G 3W 10"	1
125	MOTOR PULLEY ASSEMBLY	1

126	V-BELT B74	1
128	BELT GUARD	1
129	BELT GUARD MOUNTING BRACKET	1
130	REDUCING ADAPTER 3/4" X 1/4"	1
131	FLAT WASHER 8MM	4
132	HEX BOLT M8-1.25 X 16	4
133	HEX NUT M10-1.5	4
134	LOCK WASHER 10MM	4
135	FLAT WASHER 10.5 X 38.3 X 1.2MM	8
136	HEX BOLT M10-1.5 X 38	4
137	HEX NUT M8-1.25	4
138	LOCK WASHER 8MM	4
139	BELT GUARD MOUNTING BRACKET	1
140	FENDER WASHER 8MM	4
141	HEX BOLT M8-1.25 X 12	1
143	FLAT WASHER 8.2 X 38 X 1MM	1
144	HEX BOLT M8-1.25 X 8	1
145	HEX BOLT M8-1.25 X 30	2



G0943 Tank & Motor



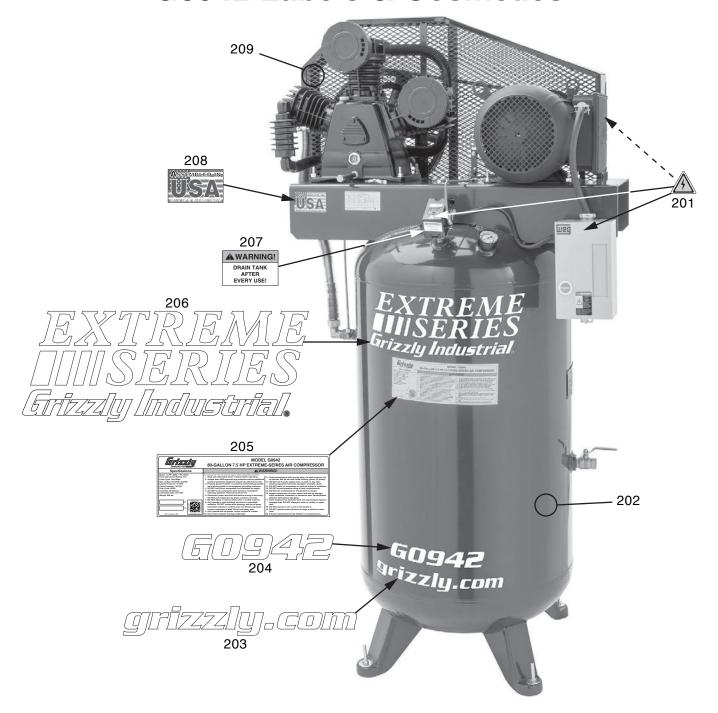
G0943 Tank & Motor Parts List

REF	DESCRIPTION	
102	TANK	1
103	MOTOR 10HP 230V/460V 3-PH	1
104	PRESSURE SWITCH SQUARE D4 PORT	1
105	SAFETY RELIEF VALVE	1
107	PIPE NIPPLE	1
108	PRESSURE GAUGE	1
111	PUMP DISCHARGE LINE	1
112	ELBOW FITTING 90-DEG	1
113	THREADED CHECK VALVE	1
114	DISCHARGE FITTING	1
115	DISCHARGE PIPE	1
117	MAG SWITCH EATON 230V	1
118	MAG SWITCH EATON 460V	1
119	CONNECTOR 3/4"	1
120	CONNECTOR 3/8"	1
121	BALL DRAIN VALVE	1
122	OUTLET VALVE	1
123	MAG SWITCH CORD 12G 3W 12"	1
124	MOTOR CORD 8G 4W 12"	1
125	MOTOR PULLEY ASSEMBLY	1

REF	DESCRIPTION	
126	V-BELT B90	1
128	BELT GUARD	1
129	BELT GUARD MOUNTING BRACKET	1
130	REDUCING ADAPTER 3/4" X 1/4"	1
131	FLAT WASHER 8MM	4
132	HEX BOLT M8-1.25 X 16	4
133	HEX NUT M10-1.5	4
134	LOCK WASHER 10MM	4
135	FLAT WASHER 10.5 X 38.3 X 1.2MM	8
136	HEX BOLT M10-1.5 X 38	4
137	HEX NUT M8-1.25	4
138	LOCK WASHER 8MM	4
139	BELT GUARD MOUNTING BRACKET	1
140	FENDER WASHER 8MM	4
141	HEX BOLT M8-1.25 X 12	1
142	SET SCREW 5/16-18 X 6	2
143	FLAT WASHER 8.2 X 38 X 1MM	1
144	HEX BOLT M8-1.25 X 8	1
145	HEX BOLT M8-1.25 X 30	2



G0942 Labels & Cosmetics



DEE	PART#	DESCRIPTION
KEF	PARI#	DESCRIPTION

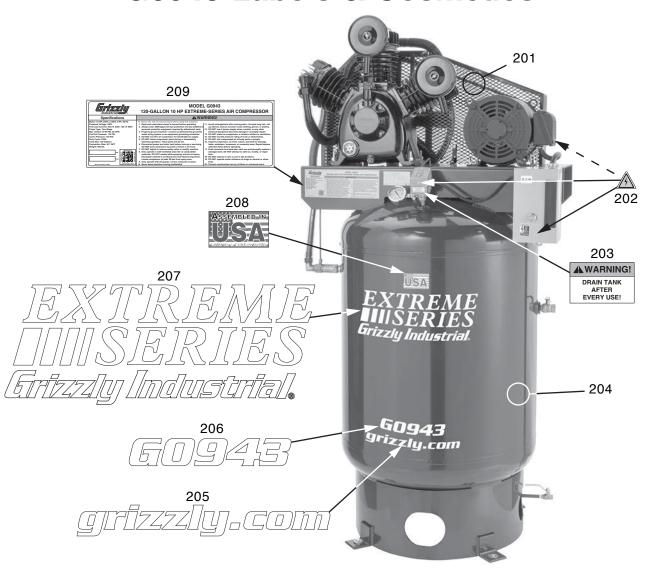
201	P0942201	ELECTRICITY LABEL
202	P0942202	TOUCH-UP PAINT, GRIZZLY GREEN
203	P0942203	GRIZZLY.COM LABEL
204	P0942204	MODEL NUMBER LABEL
205	P0942205	MACHINE ID LABEL

REF PART#	DESCRIPTION
-----------	-------------

206	P0942206	EXTREME SERIES LABEL
207	P0942207	DRAIN TANK LABEL
208	P0942208	ASSEMBLED IN USA LABEL
209	P0942209	TOUCH-UP PAINT, GRIZZLY BLACK



G0943 Labels & Cosmetics



201	P0943201	TOUCH-UP PAINT, GRIZZLY BLACK
202	P0943202	ELECTRICITY LABEL
203	P0943203	DRAIN TANK I ABFI
200	1 00 10200	DIVINA IMINA EMBEE
204	P0943204	TOUCH-UP PAINT, GRIZZLY GREEN
207	1 0040204	10001101 TAINT, GITELLY
205	P0943205	GRIZZLY.COM LABEL
203	1 0340203	GI 1122L I . GOINI LADLL

KEF	PARI#	DESCRIPTION

206	P0943206	MODEL NUMBER LABEL
207	P0943207	EXTREME SERIES LABEL
208	P0943208	ASSEMBLED IN USA LABEL
209	P0943209	MACHINE ID LABEL

WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.





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