AAVIX OUTDOORS™

OWNER'S MANUAL A12101

3 GALLON PANCAKE AIR COMPRESSOR OIL FREE

FOR SERVICE CALL: (USA)1-866-591-8921/(CANADA)1-514-885-0916

WARNING : To reduce the risk of injury, user must read this manual before assembling, operating and maintaining this unit. You are responsible for operating the product properly & safely.

Version: V1.20171222

WARNING!

Read and understand this manual thoroughly before operating your compressor. **Failure to follow instructions could result in electric shock, fire,serious injury or death !**

Save all warnings and instructions for future reference. Please familiarize yourself with the following information to prevent damage to your compressor and injury to the operator.

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SAFETY RULES

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Work area safety

1. **Keep work area clean and well lit.**
   Cluttered or dark areas invite accidents.
2. **Do not operate the compressor in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
   Compressor motors produce sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away from an operating compressor.**

Electrical safety

a. **Compressor plugs must match the outlet. Never modify the plug in any way.Do not use an adapter to connect this compressor to a different outlet.**
   Standard plugs and matching outlets will reduce risk of electric shock.
b. **Do not expose compressor to rain**

or wet conditions. Water entering a compressor will increase the risk of electric shock.

c. Do not abuse the cord. Never use the cord for unplugging the compressor.Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

Personal safety

a. Stay alert, watch what you are doing and use common sense when operating this compressor. Do not use this compressor while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating a compressor may result in serious personal injury.

b. Use personal protective equipment. Always wear ANSI-approved eye. Protection during setup and use.

c. Prevent unintentional starting. Ensure the power Switch is in the off-position before connecting to power source or moving the compressor.

d. Always wear safety glasses or goggles when using compressed air.It is not practical or possible to warn you about all of the hazards associated with operating or maintaining this equipment. You must use your own good judgement.

Compressor use and care

a. Do not use the compressor if the power Switch does not turn it on and off. Any compressor that cannot be controlled with the power Switch is dangerous and must be repaired.

b. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the compressor. Such preventive safety measures reduce the risk of starting the compressor accidentally.

c. Store an idle compressor out of the reach of children and do not allow persons unfamiliar with the compressor or these instructions to operate it. A compressor is dangerous in the hands of untrained users.

d. Maintain the compressor. Keep the compressor clean for better and safer performance. Follow instructions for lubricating and changing accessories.
Keep dry, clean and free from oil and grease. check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the compressor's operation. If damaged, have the compressor repaired before use. Many accidents are caused by a poorly maintained compressor.

e. Use the compressor in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the compressor for operations different from those intended could

result in a hazardous situation.

Service

Have your compressor serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the compressor is maintained.

AIR COMPRESSOR SAFETY WARNINGS

1. **Risk of bursting - do not adjust regulator higher than marked maximum pressure of attachment.**
2. **Risk of injury - do not direct air stream at people or animals.**
3. **Keep compressor well-ventilated. Do not cover compressor during use.**
4. Drain tank daily and after use. Internal rust causes tank failure and explosion.
5. Do not remove the valve cover or adjust internal components.
6. **Do not use the air hose** to move the compressor.
7. Release the pressure in the storage tank before moving.
8. The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
9. All air line components, including hoses, pipe, connectors, filters, etc., must be rated for a minimum working pressure of 150 PSI, or 150% of the maximum system pressure, whichever is greater.
10. Industrial applications must follow OSHA guidelines.
11. Maintain labels and nameplates on the compressor. These carry important safety information. If unreadable or missing, contact our customer service center for a replacement.
12. This product is not a toy. Keep it out of reach of children.
13. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
14. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
15.  DANGER: Risk Of Fire Or Explosion

1) **WHAT CAN HAPPEN:** It is normal for electrical contacts within the motor and pressure switch to spark.

HOW TO PREVENT IT: Always operate the compressor in a well ventilated area free of combustible materials, gasoline, or solvent vapors.

2) **WHAT CAN HAPPEN:**If electrical sparks from compressor come into contact with flammable vapors, they may ignite, causing fire or explosion.

HOW TO PREVENT IT:

- Do not spray flammable liquid in a confined area or towards a hot surface. Spray area must be

well-ventilated.

- Do not smoke while spraying or spray where spark or flame is present.
- Keep compressor at least 20 feet away from explosive vapors, such as when spraying with a spray gun.
- If spraying flammable materials, locate compressor at least 20’ (6.1m) away from spray area. An additional length of air hose may be required.
- Store flammable materials in a secure location away from compressor.

3) WHAT CAN HAPPEN: Restricting any of the compressor ventilation openings will cause serious overheating and could cause fire.

HOW TO PREVENT IT:

- Never place objects against or on top of compressor.
- Operate compressor in an open area at least 12" (30.5 cm) away from any wall or obstruction that would restrict the flow of fresh air to the ventilation openings.
- Operate compressor in a clean, dry well ventilated area. Do not operate unit in any confined area. Store indoors.

4) WHAT CAN HAPPEN: Unattended operation of this product could result in personal injury or property damage.To reduce the risk of fire, do not allow the compressor to operate unattended.

HOW TO PREVENT IT:

- Always remain in attendance with the product when it is operating.
- Always turn off and unplug unit when not in use.**Do not leave compressor unattended for an extended period while plugged in.**

16.  DANGER: Risk To Breathing

 WARNING: Compressed air from the unit may contain hazardous fumes. Air produced by this compressor is not suitable for breathing purposes. Never use air obtained directly from the compressor to supply air for human consumption. The compressor is not equipped with suitable filters and in-line safety equipment for human consumption. Always use a respirator when spraying paint or chemicals, or when sandblasting.

1) The compressed air directly from your compressor is not safe for breathing. The air stream may contain carbon monoxide, toxic vapors, or solid particles from the air tank. Breathing these contaminants can cause serious injury or death.

2) Never use air obtained directly from the compressor to supply air for human consumption. The compressor is not equipped with suitable filters and in-line safety equipment for human consumption.

3) Exposure to chemicals in dust created by power sanding, sawing, grinding, drilling, and other

construction activities may be harmful Sprayed materials such as paint, paint solvents, paint remover, insecticides, weed killers, may contain harmful vapors and poisons.

4) Work in an area with good cross ventilation. Read and follow the safety instructions provided on the label or safety data sheets for the materials you are spraying. Always use certified safety equipment: NIOSH/OSHA respiratory protection or properly fitting face mask designed for use with your specific application.

17.  DANGER: Risk Of Rursting Air Tank: compressor tank safety: Air compressor receiver tanks do not have an infinite life. Tank life is dependent upon several factors, some of which include operating conditions, ambient conditions, proper installations, field modifications, and the level of maintenance. The exact effect of these factors on air receiver life is difficult to predict.

If proper maintenance procedures are not followed, internal corrosion to the inner wall of the air receiver tank can cause the air tank to unexpectedly rupture allowing pressurized air to suddenly and forcefully escape, posing risk of injury to consumers.

Your compressor air tank must be removed from service by the end of the year shown on your tank warning label.

The following conditions could lead to a weakening of the air tank, and result in a violent air tank explosion:

1) WHAT CAN HAPPEN: Failure to properly drain condensed water from air tank, causing rust and thinning of the steel air tank

HOW TO PREVENT IT: Drain air tank daily or after each use. If air tank develops a leak, replace it immediately with a new air tank or replace the entire compressor.

2) WHAT CAN HAPPEN: Modifications or attempted repairs to the air tank.

HOW TO PREVENT IT: Never drill into, weld, or make any modifications to the air tank or its attachments. Never attempt to repair a damaged or leaking air tank. Replace with a new air tank.

3) WHAT CAN HAPPEN: Unauthorized modifications to the safety valve or any other components which control air tank pressure.

HOW TO PREVENT IT: The air tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.

18. Attachments&accessories: **WHAT CAN HAPPEN:** Exceeding the pressure rating of air tools, spray guns, air operated accessories, tires, and other inflatables can cause them to explode or fly apart, and could result

in serious injury.

HOW TO PREVENT IT: Follow the equipment manufacturers recommendation and never exceed the maximum allowable pressure rating of attachments. Never use compressor to inflate small low pressure objects such as children's toys, footballs, basketballs, etc.

19. Tires:

WHAT CAN HAPPEN:

Over inflation of tires could result in serious injury and property damage.

HOW TO PREVENT IT: Use a tire pressure gauge to check the tires pressure before each use and while inflating tires; see the tire sidewall for the correct tire pressure.

NOTE: Air tanks, compressors and similar equipment used to inflate tires can fill small tires very rapidly. Adjust pressure regulator on air supply to no more than the rating of the tire pressure. Add air in small increments and frequently use the tire gauge to prevent over inflation.

20.  RISK OF ELECTRICAL SHOCK

1) **WHAT CAN HAPPEN:** Your compressor is powered by electricity. Like any other electrically powered device, if it is not used properly it may cause electric shock.

HOW TO PREVENT IT: Never operate the compressor outdoors when it is raining or in wet conditions. Never operate compressor with protective covers removed or damaged.

2) **WHAT CAN HAPPEN:** Repairs attempted by unqualified personnel can result in serious injury or death by electrocution.

HOW TO PREVENT IT: Any electrical wiring or repairs required on this product should be performed by authorized service center personnel in accordance with national and local electrical codes.

3) **WHAT CAN HAPPEN:** Electrical Grounding: Failure to provide adequate grounding to this product could result in serious injury or death from electrocution. Refer to Grounding Instructions paragraph in the Installation section.

HOW TO PREVENT IT: Make certain that the electrical circuit to which the compressor is connected provides proper electrical grounding, correct voltage and adequate fuse protection.

21.  RISK FROM FLYING OBJECTS

WHAT CAN HAPPEN: The compressed air stream can cause soft tissue damage to exposed skin and can propel dirt, chips, loose particles, and small objects at high speed, resulting in property damage or personal injury.

HOW TO PREVENT IT: Always wear certified safety equipment: ANSI Z87.1 eye protection (CAN/CSA Z94.3) with

side shields when using the compressor .
Never point any nozzle or sprayer toward any part of the body or at other people or animals.
Always turn the compressor off and bleed pressure from the air hose and air tank before attempting maintenance, attaching tools or accessories.

22.  RISK OF HOT SURFACES

WHAT CAN HAPPEN: Touching exposed metal such as the compressor head, engine head, engine exhaust or outlet tubes, can result in serious burns.
HOW TO PREVENT IT: Never touch any exposed metal parts on compressor during or immediately after operation.
Compressor will remain hot for several minutes after operation.
Do not reach around protective shrouds or attempt maintenance until unit has been allowed to cool.

Compressor head gets hot during operation.**Do not touch it** or allow children nearby during or immediately following operation.

23.  RISK FROM MOVING PARTS

1) **WHAT CAN HAPPEN:** Moving parts such as the pulley, flywheel, and belt can cause serious injury if they come into contact with you or your clothing.

HOW TO PREVENT IT: Never operate the compressor with guards or covers which are damaged or removed.
Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
Air vents may cover moving parts and should be avoided as well.

2) **WHAT CAN HAPPEN:** Attempting to operate compressor with damaged or missing parts or attempting to repair compressor with protective shrouds removed can expose you to moving parts and can result in serious injury.

HOW TO PREVENT IT: Any repairs required on this product should be performed by authorized service center personnel.

24. 

RISK OF UNSAFE OPERATION

WHAT CAN HAPPEN: Unsafe operation of your compressor could lead to serious injury or death to you or others.
HOW TO PREVENT IT:

- Review and understand all instructions and warnings in this manual.
- Become familiar with the operation and controls of the air compressor.
- Keep operating area clear of all persons, pets, and obstacles.

- Keep children away from the air compressor at all times.
- Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times.
- Never defeat the safety features of this product.
- Equip area of operation with a fire extinguisher.
- Do not operate machine with missing, broken, or unauthorized parts.
- Never stand on the compressor

25. RISK OF FALLING

WHAT CAN HAPPEN: A portable compressor can fall from a table, workbench, or roof causing damage to the compressor and could result in serious injury or death to the operator.

HOW TO PREVENT IT: Always operate compressor in a stable secure position to prevent accidental movement of the unit. Never operate compressor on a roof or other elevated position. Use additional air hose to reach high locations.

26. RISK FROM NOISE

WHAT CAN HAPPEN: Under some conditions and duration of use, noise from this product may contribute to hearing loss.

HOW TO PREVENT IT: Always wear proper hearing protection during use.

27. AIR RECEIVER

Over pressurizing the air receiver could cause personal injury or material damage. To protect from over pressurizing, a factory pre-set safety valve is installed.

WARNING: **NEVER WELD, DRILL, OR CHANGE THE AIR RECEIVER IN ANY WAY.**

Any replacement parts should be purchased with the same specifications as the original equipment. Please contact the authorized dealer for replacement parts or specifications.

28. SAFETY VALVE

This valve is factory installed to prevent over pressurizing of the air receiver.

It is factory set at a specific limit for your particular model, and should never be tampered with. Adjustment by user will automatically void the warranty.

WARNING: **DO NOT REMOVER, MAKE ADJUSTMENTS TO OR SUBSTITUTE THIS VALVE!**

EXTENSION CORDS

THE USE OF EXTENSION CORDS IS NOT RECOMMENDED. If the use of an extension cord is unavoidable, be sure

it is:

Minimum gauge for extension cords				
Volts	Total length of cord in feet			
120V	25	50	100	150
Ampere rating more than-not more than	AWG			
0-6	18	16	16	14
6-10	18	16	DO NOT USE	
10-12	16	16		
12-16	14	14		

Table A

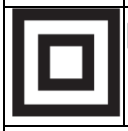
a. Make sure your extension cord is in good condition.

b. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the compressor's plug on the product in good condition. No longer than 50 feet (15.2 m).

c. Be sure to use an extension cord which is heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

NOTE: Risk of Property Damage. The use of an undersized extension cord will cause voltage to drop resulting in power loss to the motor and overheating. Instead of using an extension cord, increase the working reach of the air hose by attaching another length of hose to its end. Attach additional lengths of hose as needed.

GLOSSARY

PSI	Pounds per square inch of pressure
CFM	Cubic Feet per Minute flow
SCFM	Cubic Feet per Minute flow at standard conditions
NPT	National pipe thread, tapered
NPS	National pipe thread, straight
	Double Insulated
Cut-In Pressure:While the motor is off, air tank pressure drops as you continue to use your accessory. When the tank pressure drops to a certain lower level the motor will restart automatically. The low pressure at which the motor automatically restarts is called "cut-in" pressure.	
Cut-Out Pressure: When an air compressor is turned on and begins to run, air pressure in the air tank begins to build. It builds to a certain high pressure before the motor automatically shuts off, protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called "cut-out" pressure.	
Branch Circuit: Circuit carrying electricity from electrical panel to outlet.	

DUTY CYCLE: This air compressor pump is capable of running continuously. However, to prolong the life of your air compressor, it is recommended that a 50%-75% average duty cycle be maintained; that is, the air compressor pump should not run more than 30-45 minutes in any given hour.

SPECIFICATIONS

Electrical Rating		**120V⏦/ 60Hz / 2.5Amp**
Air Outlet Size		**1/4”-18NPT**
Air Pressure	**Shut-off**	**100 PSI**
	Restart	**85 PSI**
Air Tank Capacity		**3 Gallons**
Air Flow Capacity		**0.6 SCFM @ 90 PSI 1 SCFM @ 40 PSI**

KNOW YOUR AIR COMPRESSOR

READ THIS OWNER’S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR UNIT. Compare the illustrations with your unit to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

1. Power Switch
2. Reset Button
3 Tank Air Pressure Gauge
4. Safety Valve
5. Regulator Knob
6. Air Outlet
7. Output Air Pressure Gauge

The diagrams and pictograms herewith enclosed in this manual are are a guide but not necessarily an exact copy of the actual product.

Become familiar with these controls before operating the unit.

On(I)/Off(O) Power Switch: Place this switch in the On (I) position to provide automatic power to the pressure switch and Off (O) to remove power at the end of each use.

Pressure Switch (not shown): The pressure switch automatically starts the motor when the air tank pressure

drops below the factory set "cut-in" pressure. It stops the motor when the air tank pressure reaches the factory set "cut-out" pressure.

Safety Valve : If the pressure switch does not shut off the air compressor at its "cutout" pressure setting, the safety valve will protect against high pressure by "popping out" at its factory set pressure (slightly higher than the pressure switch "cut-out" setting).

Tank Pressure Gauge: The tank pressure gauge indicates the reserve air pressure in the tank.

Outlet Pressure Gauge: The outlet pressure gauge indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator and is always less than or equal to the tank pressure.

Regulator Knob: Controls the air pressure shown on the outlet pressure gauge. Turn regulator knob clockwise to increase pressure and counterclockwise to decrease pressure.

Cooling System (not shown): This compressor contains an advanced design cooling system. At the heart of this cooling system is an engineered fan. It is perfectly normal for this fan to blow air through the vent holes in large amounts. You know that the cooling system is working when air is being expelled.

Air Compressor Pump (not shown): Compresses air into the air tank. Working air is not available until the compressor has raised the air tank pressure above that required at the air outlet.

Drain Valve : The drain valve is located at the base of the air tank and is used to drain condensation at the end of each use.

Check Valve: When the air compressor is operating, the check valve is "open", allowing compressed air to enter the air tank. When the air compressor reaches "cut-out" pressure, the check valve "closes", allowing air pressure to remain inside the air tank.

INSTALLATION

UNPACKING

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call our customer service center as soon as possible.

WARNING:

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch “OFF” and unplug the Air compressor from its electrical outlet before assembling or making any adjustments to the

compressor.

NOTE: Proper care and maintenance ensure longevity. Do not over tighten foot bolts as excessive vibration may occur. Use only in a clean, dry, and well-ventilated area. The compressor has heat dissipation fins for proper cooling. Keep the fins and other parts that collect dust clean. Do not place rags or other materials on top of the compressor, as this obstructs cooling and can be a fire hazard.

COMPRESSOR AREA SET UP

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual before set up or use of this product.

1. Locate the air compressor in a clean, dry and well ventilated area.The work area must not allow access by children or pets to prevent injury.
2. **Location of the Air Compressor:**
   - Locate the Compressor on a flat level surface to ensure proper pump lubrication and to prevent damage to the unit.
   - The air compressor should be located at least 12" (30.5 cm) away from the wall or other obstructions that will interfere with the flow of air.
   - The air compressor pump and shroud are designed to allow for proper cooling. The ventilation openings on the compressor are necessary to maintain proper operating temperature. Do not place rags or other containers on or near these openings.
   - Route the power cord from the compressor to the grounded wall outlet, along a safe path without creating a tripping hazard or exposing the power cord to possible damage.

GROUNDING INSTRUCTIONS

WARNING: TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

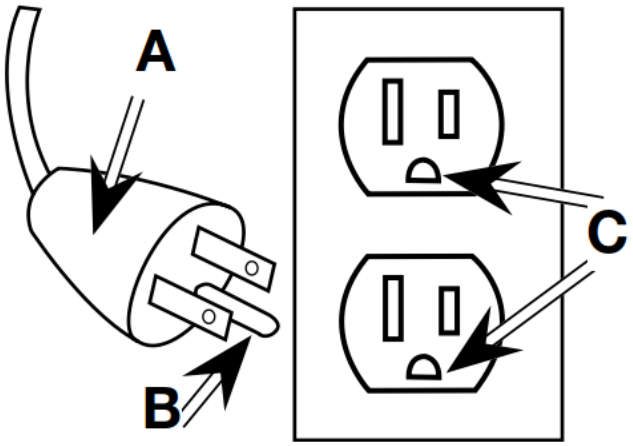
This air compressor must be properly grounded.

The portable air compressor is equipped with a cord having a grounding wire with an appropriate grounding plug (A).

1. The cord set and plug (A) with this unit contains a grounding pin (B). This plug MUST be used with a grounded outlet (C).

IMPORTANT: The outlet must be properly installed and grounded in accordance with all codes and ordinances.

110-120 VAC Grounded Compressors: Compressors with Three Prong Plugs



125 V~ 3-Prong Plug and Outlet (for up to 125 V~ and up to 15 A)

2. Make sure the outlet being used has the same configuration as the grounded plug. **DO NOT USE AN ADAPTER**.
3. Inspect the plug and cord before each use. Do not use if there are signs of damage.
4. **Check with a qualified electrician, if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the compressor.**
5. Never remove the grounding prong from the plug. Do not use the compressor if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. **If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician**.
6. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This compressor is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.Do not modify the plug provided -if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
7. Improper connection of the equipment-grounding conductor can result in a risk of electric shock.
8. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor.If repair or replacement of the electric cord or plug is necessary, do not connect the equipment- grounding conductor to a live terminal.
9. **Repair or replace damaged or worn cord immediately.**

Repairs to the cord set or plug MUST be made by a qualified electrician.

Break-in the Compressor

Break in the new Air Compressor as follows:

a) Turn the Power Switch **OFF** and unplug the unit. Insert a male coupler (not provided)into the female Quick Coupler and fully open all regulators and valves.

b) Plug in the Power Cord.

c) Turn the Power Switch **ON**.

d) Let the unit run for **30** minutes. Air will expel freely through the Coupler.

e) Turn the Power Switch **OFF**. Unplug the Power Cord and remove the male coupler.

Air Connection Setup

1. Connect a regulator valve, an inline shut off valve and a 1/4" NPT air hose to the Quick Coupler (all not provided). The air hose must be long enough to reach the work area with enough extra length to allow free

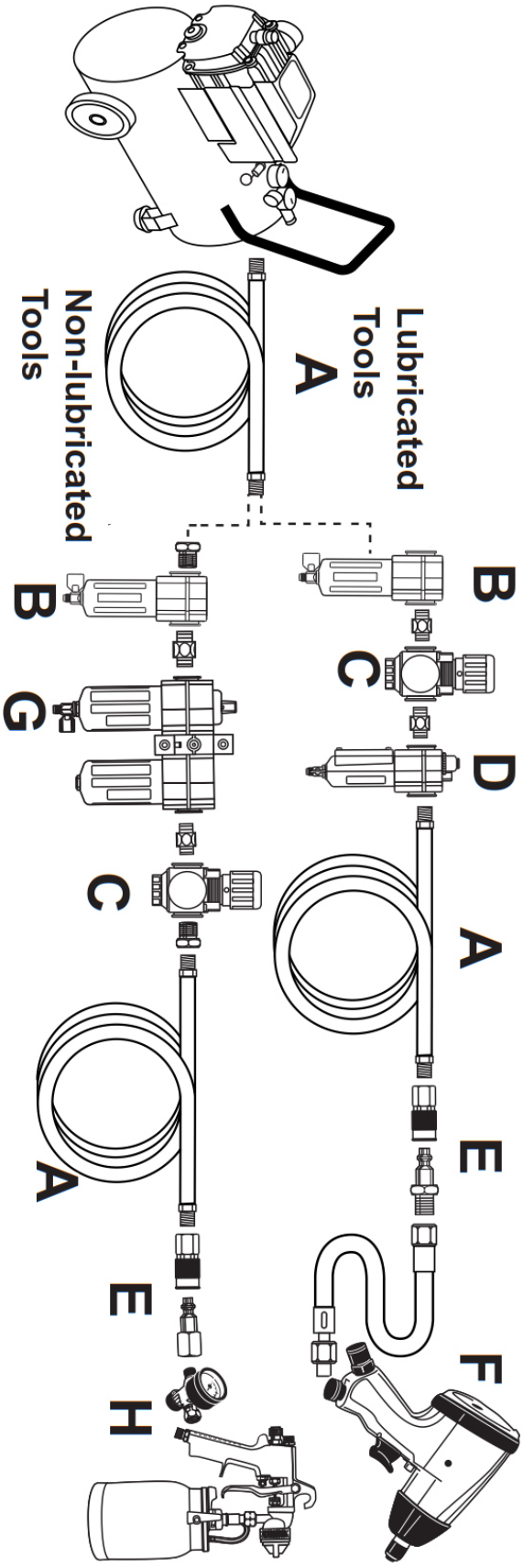
movement while working.

NOTE: **An in-line shutoff ball valve is an important safety device because it controls the air supply even if the air hose is ruptured. The shutoff valve should be a ball valve because it can be closed quickly.**

2. Depending on the tool which you will be using with this compressor, you may need to incorporate additional components, such as an in-line oiler, a filter, or a dryer (all not provided), as shown on Figure A and Figure B. Consult your air tool's manual for needed accessories.

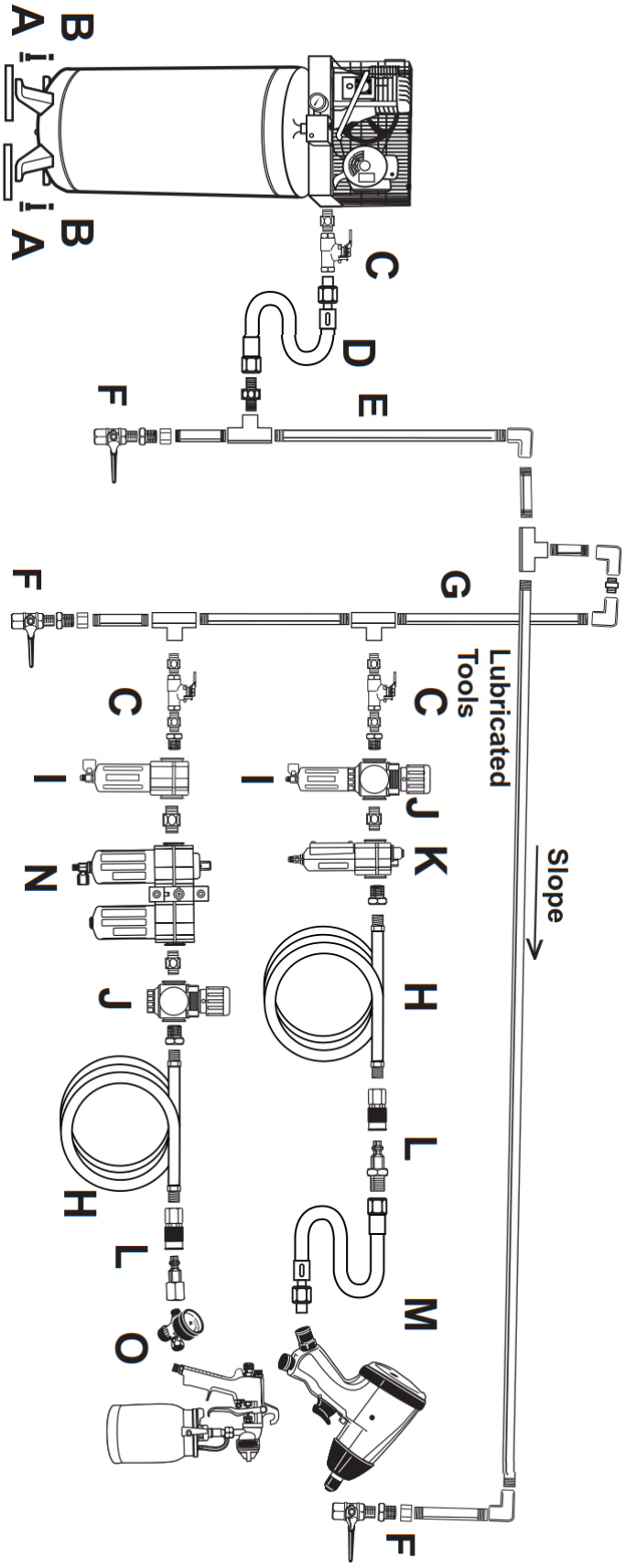
A: Portable Air Supply Setup

A	**Air Hose: Connects air to tool**
B	**Filter: Prevents dirt and condensation from damaging tool or workpiece**
C	**Regulator: Adjusts air pressure to tool**
D	**Lubricator (optional): For air tool lubrication**
E	**Coupler and Plug: Provides quick connection and release**
F	**Leader Hose (optional): Increases coupler life**
G	**Air Cleaner/ Dryer (optional): Prevents water vapor from damaging workpiece**
H	**AirAdiustina Valve (optional): For fine tunina airflow at tool**



B: Stationary Air Supply Setup

A	Vibration Pads: For noise and vibration reduction
B	Anchor Bolts: Secures air compressor in place
C	Ball Valve: Isolates sections of system for maintenance
D	Isolation Hose: For vibration reduction
E	Main Air Line - 3/4" minimum recommended: Distributes air to branch lines
F	Ball Valve: To drain moisture from system
G	Branch Air Line -1/2” minimum recommended: Brinas air to point of use
H	Air Hose: Connects air to tool
I	Filter: Prevents dirt and condensation from damaging tool or workpiece
J	Regulator: Adjusts air pressure to tool
K	Lubricator (optional): For air tool lubrication
L	Coupler and Plug: Provides quick connection and release
M	Leader Hose (optional): Increases coupler life
N	Air Cleaner/ Dryer (optional): Prevents water vapor from damaging workpiece
L	AirAdiustina Valve (optional): For fine tunina airflow at tool
O	Air Adjusting Valve (optional):For fine tunina airflow at tool



- **Thread seal tape is recommended for all threaded connections.**
- **Use of an extension cord is not recommended.**

OPARATION

 WARNING:**Do not operate this unit until you read this instruction manual for safety, operation and maintenance instructions.**

Check Before Each Starting

Before operating the air compressor, please check the following carefully:

1. Check to see that nuts and bolts are all snug.
2. If the intake filters are dirty, they should be replaced or cleaned. Check unit for any damage.

 WARNING: **EXTRA CARE SHOULD BE TAKEN TO AVOID PERSONAL INJURIES WITH AUTOMATICALLY CONTROLLED COMPRESSORS**

 WARNING: **Risk of unsafe operation. Firmly grasp air hose in hand when installing or disconnecting to prevent hose whip.**

 WARNING: **Risk of unsafe operation. Do not use damaged or worn accessories.**

 WARNING: **Risk of Bursting. Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.**

 NOTE: Risk of property damage. Compressed air from the unit may contain water condensation and oil mist. Do not spray unfiltered air at an item that could be damaged by moisture. Some air tools and accessories may require filtered air. Read the instructions for the air tools and accessories.

Oparation Steps:

1. **IMPORTANT**: **First, set the On/Off Power Switch to "OFF" position**.This releases tank pressure and allows the motor to start freely, without tripping the Circuit Breaker.
2. Turn regulator knob counterclockwise to set the outlet pressure to zero.
3. Close the moisture Drain Valve at the bottom of the Tank.
4. Close the in-line Shutoff Valve between the compressor and the air hose.
5. Plug the Air Compressor Power Cord into a grounded 120 V∽ electrical outlet. (Refer to “Voltage and Circuit Protection” paragraph in the Installation section of this manual.)
6. Turn the Power Switch to “**ON**” position.

If Compressor does NOT start:

a) Turn the Power Switch **OFF** position.

b) Press reset button.
c) Turn the Power Switch **ON** position.

7. Allow the Air Compressor to build up pressure until it cycles off. Motor will stop when tank pressure reaches "cut-out" pressure.

Electric motor should now start and fill air receiver(s) with compressed air until cut-out pressure is reached. Compressor should stop and remain stopped until air receiver pressure reaches the cut-in pressure. The unit will continue to cycle in this automatic operation until the pressure switch is turned to the "**OFF**" position.

NOTE: At the beginning of the day's first use of the Air Compressor, check for air leaks by applying soapy water to connections while the Air Compressor is pumping and after pressure cut-out. Look for air bubbles. If air bubbles are present at connections, tighten connections. Do not use the Air Compressor unless all connections are air tight, the extra air leaking out will cause the compressor to operate too often, increasing wear on the compressor.

NOTE: As long as the Power Switch is **ON**, the operation of the Air Compressor is automatic, controlled by an internal pressure switch. The Compressor will turn on automatically when the air pressure drops to 85 PSI, and will turn off automatically when the air pressure reaches 100 PSI.

WARNING:**TO PREVENT SERIOUS INJURY AND DEATH FROM EXPLOSION:**

Do not adjust the internal pressure switch. Any change to the automatic pressure levels may cause excess pressure to accumulate, causing a hazardous situation.

8. Turn regulator knob clockwise to increase pressure and stop when desired pressure is reached.

WARNING: Risk of unsafe operation. If any unusual noise or vibration is noticed, stop the compressor immediately and have it checked by a trained service technician.

AFTER the compressor builds up enough pressure and shuts off, adjust the Air Compressor's Regulator Knob so that the air output is enough to properly power the tool, but the output will not exceed the tool's maximum air pressure at any time. Turn the knob clockwise to increase the pressure and counter-clockwise to decrease pressure. Adjust the pressure gradually, while checking the air output gauge to set the pressure. **The compressor is ready for use.**

9. Make sure the air tool's throttle or switch is in the off position. Connect the air tool to the air hose.

10. Open the in-line Shutoff Valve.

NOTE:

Allow adequate time when filling tires.

The larger the tire, the more time to fill is needed.

NOTE: This product is designed for inflation, stapling, brad nailing and air brushing.

11. Use the air tool as needed.

12. After the job is complete, turn the compressor Power Switch **"OFF"**.

Note: **Turn the Power Switch off before unplugging the compressor.**

13. Unplug the Air Compressor.

14. Close the in-line Shutoff Valve.

15. Bleed air by pulling ring on safety valve, to bleed from the tool then disconnect the tool.

16. Turn the Drain Valve, at the bottom of the tank, two turns to release any built-up moisture and the internal tank pressure.Close the valve after moisture has drained out. Do not remove the Drain Valve.

17. Clean, then store the Air Compressor indoors.

Emergency Depressurization

If it is necessary to quickly depressurize the compressor, turn the Power Switch **OFF**. Then, pull on the ring on the Safety Valve to quickly release stored air pressure.

Motor Overload Protector (Automatic Shut Off System not shown): The motor has a thermal overload protector. If the motor overheats for any reason, the overload protector will shut off the motor. The motor must be allowed to cool down before restarting. If the compressor automatically shuts off before reaching its normal cutoff pressure.

1. **To restart:**

a) Shut off all tools.

b) Allow the motor to cool (about 10 minutes).

c) If the unit does not start up again on its own,press the Reset Button to start the compressor

d) Resume operation.

2. **Possible causes** of repeated automatic shut off of the compressor are:

a) Using an **extension cord** that is **too long or narrow.**

b) An **air leak** or open hose causing the compressor to cycle too often and build up heat.

3. **Correct any issues** before further use to avoid damage to the compressor.

MAINTENANCE

PROCEDURES NOT SPECIFICALLY EXPLAINED IN THIS MANUAL MUST BE PERFORMED ONLY BY A QUALIFIED TECHNICIAN.

Before doing any maintenance or adjustments to your air compressor, the following safety precautions should be taken:

WARNING:

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

TURN THE POWER SWITCH "OFF" AND UNPLUG POWER CORD

before performing any inspection, maintenance, or cleaning procedures.

 WARNING: **Risk of unsafe operation. Unit cycles automatically when power is on.**

When performing maintenance, you may be exposed to voltage sources，compressed air, or moving parts. Personal injuries can occur. Before performing any maintenance or repair, disconnect power source from the compressor and bleed off all air pressure and allow the air compressor to cool.

NOTE: **See Operation section for the location of controls.**

DRAIN AIR RECEIVER AND AIR LINES OF AIR PRESSURE

TO PREVENT SERIOUS INJURY FROM COMPRESSOR FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Maintenance Schedule

Following are general guidelines for maintenance checks of the Air Compressor.

NOTE: The environment in which the compressor is used, and the frequency of use can affect how often you will need to check the Air Compressor components and perform maintenance procedures.

DAILY OR BEFORE EACH USE

Inspect the general condition of the air compressor.Check for:

a. Safety Valve.
b. Drain moisture from air tank.
c. Loose hardware, make sure all nuts and bolts are tight.
d. Misalignment or binding of moving parts.
e. Cracked or broken parts.
f. Damaged electrical wiring, and
g. Any other condition that may affect its safe operation.
h. Check for abnormal noise or vibration.
i. Check for air leaks.*
j. Wipe off any oil or dirt from the compressor .**

* To check for air leaks, apply soapy water to joints while the Air Compressor is pressurized. Look for air bubbles.

** To clean the compressor surface, wipe with a damp cloth, using a mild detergent or mild solvent.

 WARNING: **If the supply cord of this compressor is damaged, it must be replaced only by a qualified service technician.**

AFTER EACH USE

1. Drain Tank.
2. Wipe external surfaces of the

compressor with a clean cloth.

WEEKLY

1. Turn off power disconnect electrical supply. Clean dust and foreign matter from cylinder head, motor, fan blades, intercooler and air receiver.

MONTHLY

1. Inspect Safety Valve
2. Inspect unit for leaks.
3. Tighten joints if leaks are observed.
4. QUARTERLY OR 300 HOURS (Whichever comes first)
5. Inspect the air receiver for corrosion or other damage.

TO CHECK SAFETY VALVE

 WARNING: **Risk of Bursting. If the safety valve does not work properly, over- pressurization may occur, causing air tank rupture or an explosion.**

 WARNING: **Risk from Flying Objects. Always wear certified safety equipment: ANSI Z87.1 eye protection (CAN/CSA Z94.3) with side shields.**

Before starting compressor, pull the ring on the safety valve to make sure that the safety valve operates freely. If the valve is stuck or does not operate smoothly, it must be replaced with the same type of valve.

TO DRAIN TANK

 WARNING: **Risk of Unsafe Operation. Air tanks contain high pressure air. Keep face and other body parts away from outlet of drain. Use ANSI Z87.1 eye protection (CAN/CSA Z94.3) when draining as debris can be kicked up into face.**

 WARNING: **Risk from noise. Always wear proper hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.**

NOTE: All compressed air systems generate condensate that accumulates in any drain point (e.g., tanks, filter, aftercoolers, dryers). This condensate contains lubricating oil and/or substances which may be regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

 WARNING:**Risk of Bursting. Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.**

 NOTE: **Risk of Property Damage. Drain water from air tank may contain oil and rust which can cause stains.**

The moisture Drain Valve is located under the Tank. It must be used daily to release all trapped air and moisture from the Tank. Doing this will eliminate condensation which can cause tank corrosion.

1. Set the **ON/OFF** power Switch to "**OFF**".
2. Turn the regulator knob counterclockwise to set the outlet pressure to zero.
3. Remove the air tool or accessory.
4. Place a suitable container under the drain valve to catch discharge.
5. Pull ring on safety valve allowing air to bleed from the tank until tank pressure is approximately 20 psi. Release safety valve ring.
6. Drain water from air tank unthreading the Drain Valve two or three turns **ONLY**.
7. **After the water has been released, close the drain valve**.

 CAUTION! Do not open the Drain Valve so that more than four threads .

The air compressor can now be stored.

TO REPLACE REGULATOR

 WARNING: **Risk of unsafe operation. Unit cycles automatically when power is on.**
When performing maintenance, you may be exposed to voltage sources，compressed air, or moving parts. Personal injuries can occur. Before performing any maintenance or repair, disconnect power source from the compressor and bleed off all air pressure and allow the air compressor to cool.

1. Release all air pressure from air tank. See To Drain Tank in the Maintenance section.
2. Unplug unit.
3. Remove the console cover.
4. Using an adjustable wrench remove the safety valve from the regulator manifold.
5. Remove the hose by removing the hose clamp.
   NOTE: The hose clamp is not reusable. You must purchase a new, standard hose clamp at a local hardware store.
6. Remove pump mounting screws securing pump (one on each side).
7. Carefully slide pump from brackets and out of the way.
8. Using an adjustable wrench remove the regulator manifold .
9. Apply pipe sealant to new regulator manifold and assemble, tighten with wrench.
10. Reapply pipe sealant to safety valve.
11. Reassemble all components in reverse order of removal. Make sure to orient gauges to read correctly and use wrenches to tighten all components.

STORAGE

Before you store the air compressor, make sure you do the following:

1. Review the **Maintenance** section on the preceding pages and perform scheduled maintenance as necessary.
2. Drain water from air tank. See **To Drain Tank** under **Maintenance.**

 WARNING: **Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.**

3. Protect the electrical cord and air hose from damage (such as being stepped on or run over). Wind air hose loosely around the compressor handle. Wrap electrical cord onto the cord wrap.
4. Store the air compressor in a clean and dry location.

TROUBLESHOOTING

WARNING: **Risk of unsafe operation. Unit cycles automatically when power is on. When performing maintenance, you may be exposed to voltage sources， compressed air, or moving parts. Personal injuries can occur. Before performing any maintenance or repair, disconnect power source from the compressor and bleed off all air pressure and allow the air compressor to cool.**

IMPORTANT: If trouble persists, please call our customer service center.

Follow all safety precautions whenever diagnosing or servicing the compressor. **Disconnect power supply before service.**

PROBLEM	SOLUTION
Compressor does not start or restart	
1.Tank(s) already pressurized	1.No problem,compressor will start when needed.
2.Power cord not plugged in properly,loose electrical connections	2.Check that cord is plugged in securely.Disconnect the other electrical appliances from circuit or operate the compressor on its own branch circuit. Check the extension cord. Check wiring connection inside terminal box.
3.Incorrect power supply	3.Check that circuit matches compressor requirements
4.No power at outlet	4.Reset circuit breaker, or have outlet serviced by a qualified technician
5.Motor overload switch tripped	5.Turn off Compressor and wait for it to cool down. Press reset button. Resume operation.If motor overload protection trips frequently,contact a trained service technician.
6.Fuse blown, circuit breaker tripped.	6.Check fuse box for blown fuse and replace as necessary. Reset circuit breaker. Do not use a fuse or circuit breaker with higher rating than that specified for your particular branch circuit. Check for proper fuse. You should use a time delay fuse. Check for low voltage conditions. It may be necessary to disconnect other electrical appliances from the circuit or move the compressor to its own circuit.

7.Extension Cord wire size is too small or cord is too long to properly power compressor.	7.Use larger diameter or shorter extension cord or eliminate extension cord. See RECOMMENDED WIRE GAUGE FOR EXTENSION CORDS in “Safety rules” section.
8.Compressor needs	8.Have unit inspected by a qualified technician
Motor stalls	
1.Faulty unloader / check valve	1.Replace unloader check valve
2.Valves incorrectly	2.Install valves correctly
Compressor Stops and Starts Excessively	
1.Leaks in air system	1.Replace worn components as necessary
2.Pressure switch differential adjusted too close	2.Make necessary adjustments
3.Defective compressor valves	3.Replace valves
4.Automatic overload switch tripped	4. Wait 20 minutes, if the unit does not start up again on its own. See “Motor Overload Protector” in “OPERATION” section.contact a trained service technician.
5.Loose fittings	5.Reduce air pressure, then check all fittings with a soap solution for air leaks and tighten as needed. **Do not overtighten.**
6.Compressor not large enough for job	6.Check if accessory CFM is met by Compressor. If Compressor doesn’t reach accessory CFM, you need a larger Compressor
Compressor builds pressure too slowly	
1.Incorrect power supply	1.Check that circuit matches compressor requirements
2.Working environment too cold	2.Move compressor to a warmer location
3.Safety valve leaking	3.Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced with identical valve with same rating.**DO NOT SEAL OR TAMPER WITH SAFETY VALVE.**
4.Loose fittings	4.Reduce air pressure, then check all fittings with a soap solution for air leaks and tighten as needed. **Do not overtighten.**

Compressor is not supplying enough air to operate accessories	
1.Clogged inlet and outlet filters	1.Clean inlet and outlet filters or replace as necessary
2.Leaks in air lines, air valves, fittings, etc	2.Have technician clean or replace worn components, as needed
3.Compressor is not large enough for air requirement	3.Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, you need a larger compressor
4.Drain valve left open	4.Close drain valve
5.Defective pressure gauge	5.Replace pressure gauge
6.Loose fittings,air leaks	6.Reduce air pressure, then check all fittings with a soap solution for air leaks and tighten as needed. **Do not overtighten**
7.Leaking head gasket	7.Replace head gasket
8.Hose or hose connections too narrow.	8.Replace with wider hose and/or hose connections
9.High altitude reducing air output	9.Higher altitudes require compressors with greater output
10.Pressure switch adjusted too low, or	10.Make necessary adjustments
11.High altitude reducing air output	11.Higher altitudes require compressors with greater output
12.Check Valve restricted needs service	12.Have a Trained Service technician clean or replace, as needed
13.Worn piston work out ring	13.Replace worn parts,contact a trained service technician.
14.Prolonged excessive use of air	14.Decrease amount of air usage
15.Hole in hose	15.Check and replace if required
Pressure reading on the regulated pressure gauge drops when an accessory is used	
It is normal for "some" pressure drop to occur	If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator following the instructions in the Know Your Air Compressor Section. **NOTE:** Adjust the regulated pressure under flow conditions (while accessory is being used)

Regulator knob has continuous air leak	
Damaged regulator.	Replace
Regulator will not shut off air outlet	
Damaged regulator.	Replace
Overheating	
1.Inlet and outlet filters need cleaning / replacing	1.Check inlet and outlet filters. Clean and/or replace as needed
2.Unusually dusty environment	2.Clean and/or replace filters more often or move unit to cleaner environment
3.Extension cord used	3.Eliminate extension cord.Instead of using an extension cord by attaching another length of hose to its end.
4.Unit not on level surface	4.Reposition unit on a level surface
5.Cord is too small of a gauge or too long to handle compressor	5.Increase cord size or use shorter length extension cord, or eliminate extension cord. See Recommended Wire Gauge for Extension Cords
6.Dirty compressor, head, cylinder, intercooler	6.Clean with compressed air
7.Operating pressure too high	7.Reduce operating pressure
8.Compressor cycle too long. it is recommended that a 50%-75% average duty cycle be maintained	8.Allow for longer rest between cycles, See “duty cycle” in “glossary” section.
9.Valve is faulty	9.Contact a trained service technician.
10.Insufficient air flow to cool Unit,Blocked air circulation at the Unit	10.Check the air circulation in and around the Unit,contact a trained service technician.
11.Ambient temperature too high	11.contact a trained service technician
12.Faulty Temperature Switch	12.contact a trained service technician
Excessive Vibration	
1.Loose compressor, motor components	1.Tighten components
2.Excessive discharge pressure	2.Reduce operating pressure

3.Worn rods, wrist pin or main bearings	3.Check and replace worn parts
Knocking Noise	
1.Compressor valves loose or broken	1.Check and replace worn or broken valves
2.Inspect check valve, it may knock at low pressures	2.Remove and clean check valve
3.Possible defect in safety valve	3.Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced
Excessive noise	
1.Loose fittings	1.Reduce air pressure, then check all fittings with a soap solution for air leaks and tighten as needed Do not overtighten
2.Unit not on level surface	2.Reposition unit on a level surface
Moisture in discharge air	
Too much moisture in air	Install inline air filter/dryer, and/or relocate to less humid environment
Excessive tank pressure - safety valve pops off	
1.Safety valve needs service	1.Pull on test ring of safety valve. If it still pops, replace
2.Pressure switch does not shut off motor when compressor reaches "cut-out" pressure	2.Set On/Off power Switch to the "**OFF**" position, if the outfit does not shut off contact a Trained Service Technician
3.Pressure switch "cut-out" too high	3.Contact a Trained Service Technician
Air leaks from pump or fittings	
Loose fittings	Reduce air pressure, then check all fittings with a soap water solution for air leaks and tighten as needed.**Do not overtighten**.
Air leaks in air tank or at air tank welds	
Defective or rusted tank	1. Air tank must be replaced. Do not repair the leak.**Risk bursting. Do not drill into, weld or otherwise modify air tank or it will weaken. The tank can rupture or explode.** 2.Have tank replaced by a qualified technician. Drain moisture from tank daily to prevent future corrosion.

Air leaks between head and valve plate	
Leaking seal	Contact a Trained Service Technician

PART LIST

Refe#	Description	Qty	Stock#	Refe#	Description	Qty	Stock#
1	Bolt	3	A12101-1	33	Plain Washer	4	A12101-33
2	Foot Support	3	A12101-2	34	Cylinder Head	1	A12101-34
3	Quick Coupler	1	A12101-3	35	Gasket	2	A12101-35
4	Gasket	1	A12101-4	36	Valve Plate Gasket	2	A12101-36
5	Coupler	1	A12101-5	37	Gasket	1	A12101-37
6	Pressure Regulator	1	A12101-6	38	Bearing	1	A12101-38
7	Safety Valve	1	A12101-7	39	Bolt	1	A12101-39
8	Pressure Gauge	1	A12101-8	40	Noise Shield	1	A12101-40
9	Pressure	1	A12101-9	41	Screw	4	A12101-41
10	Rubber Damper	4	A12101-10	42	Screw	2	A12101-42
11	Rectifying Plate	1	A12101-11	43	Spring	1	A12101-43
12	Screw	1	A12101-12	44	Rubber Stopper	1	A12101-44
13	Plain Washer	1	A12101-13	45	Bolt	4	A12101-45
14	Fan	1	A12101-14	46	Bolt	3	A12101-46
15	Screw	2	A12101-15	47	Plain Washer	3	A12101-47
16	Ground Wire	1	A12101-16	48	Pressure Switch	1	A12101-48
17	Washer	2	A12101-17	49	Lower Cover	1	A12101-49
18	Exhaust Tube	1	A12101-18	50	On/Off Switch	1	A12101-50
19	Nut	2	A12101-19	51	Protector	1	A12101-51
20	Gasket	2	A12101-20	52	Wire	1	A12101-52
21	Connector	2	A12101-21	53	Bolt	4	A12101-53
22	Motor	1	A12101-22	54	Storage Cover	1	A12101-54
23	Screw	1	A12101-23	55	Plain Washer	2	A12101-55
24	Crankshaft	1	A12101-24	56	Bolt	2	A12101-56
25	Circlip	1	A12101-25	57	Handle	1	A12101-57
26	Connecting Rod	1	A12101-26	58	Upper Cover	1	A12101-58
27	Cylinder	1	A12101-27	59	Screw	1	A12101-59
28	Piston Ring	1	A12101-28	60	Cord Clamp	1	A12101-60
29	Valve Plate	1	A12101-29	61	Power Cord	1	A12101-61
30	Gasket	2	A12101-30	62	Drain Valve	1	A12101-62
31	Spring Washer	4	A12101-31	63	Tank	1	A12101-63
32	Bolt	4	A12101-32				

EXPLODED VIEW