

3901726



## 4 Gallon Air Compressor Assembly & Operating Instructions



READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. **We reserve the right to change this product at any time without prior notice.**

IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE, DO NOT OPERATE THIS PRODUCT!

HAVE QUESTIONS OR PROBLEMS? DO NOT RETURN THIS PRODUCT TO THE RETAILER - CONTACT CUSTOMER SERVICE.

If you experience a problem or need parts for this product, visit our website <http://www.buffalotools.com> or call our customer help line at **1-888-287-6981**, Monday-Friday, 8 AM - 4 PM Central Time. A copy of the sales receipt is required.

FOR CONSUMER USE ONLY - NOT FOR PROFESSIONAL USE.

KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE.

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## RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

### What You Need to Know About Safety Instructions

Warning and Important Safety Instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when assembling or using this product.

Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand.

**⚠ WARNING** This is a safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

**⚠ CAUTION** This is a safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

## GENERAL PRODUCT SPECIFICATIONS

### FEATURES:

- Required Oil For Lubrication
- Includes air Regulator & Quick Coupler
- Lightweight Design With Easy-To-Read Gauges
- Pancake Tank Design With Water Drain Valve & Rubber Feet

### SPECIFICATIONS

- 5 CFM @ 90 PSI
- 13.8 AMP
- 2 HP MOTOR
- 120V / 60 Hz
- 115 PSI
- Requires SAE 5W-30 motor oil



KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE.

READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

When unpacking, check to make sure all parts listed are included. If any parts are missing or broken, please call Customer Service at 1-888-287-6981.

FOR CONSUMER USE ONLY – NOT FOR PROFESSIONAL USE

## IMPORTANT SAFETY RULES

COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO ANY PRODUCT. THESE FACTORS MUST BE SUPPLIED BY THE OPERATOR.

### **WARNING**

**Keep your work area clean and well lit.** Cluttered work benches and dark work areas may cause accidents or injury.

**Keep bystanders, children and visitors away while operating the compressor.** Distractions can cause you to lose control.

### **CAUTION**

**Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

**Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

### **WARNING**

**Use common sense while operating this compressor.**

Do not use this tool if you are:

- Feeling tired or are under the influence of alcohol or drugs.
- Wearing loose clothing or jewelry. Keep long hair pulled back and away from moving parts.
- Overreaching or have improper footing. Handling the tool in this way could cause serious injury.
- Wear the proper safety equipment, such as safety goggles, dust masks, non-skid shoes, etc.
- Check to be sure all adjusting keys or wrenches have been removed before use.

### **WARNING**

**Safety glasses and ear protection must be worn during operation.**

Read the manual carefully. Learn the tool's applications and limitations, as well as specific potential hazards peculiar to it.

Ground all tools. If the tool is equipped with three-pin plug, it should be plugged into a three-pin electrical socket. Never remove the ground pin.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.

Do not expose tool to moisture. Don't use this tool in damp or wet locations: Keep out of rain.

Do not abuse cord. Never use the cord to carry tools or pull the plug from an outlet. Keep cord away from heat, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

Remove adjusting keys or wrenches before turning the tool on. A wrench or key that is left attached to a moving part of the tool may result in personal injury.

Don't overreach. Keep proper footing and balance at all times when operating this tool.

Disconnect the tool from power source before making any adjustments, storing, servicing, or changing accessories. This will reduce the risk of starting the tool accidentally. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it was designed.

Do not use the tool if the switch does not turn it on and off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Check for damage. Check your tool regularly. If part of the tool is damaged it should be carefully inspected to make sure that it can perform its' intended function correctly. If in doubt, the part should be repaired. Refer all servicing to a qualified technician. Consult your dealer for advice.

Keep away from flammables. Do not attempt to operate this tool near flammable materials or combustibles. Failure to comply may cause serious injury or death.

Store idle tools out of the reach of children and untrained persons. Tools may be dangerous in the hands of untrained users.

Maintain tools with care. Keep tools sharp and clean. Properly maintained tools, with sharp cutting edges, are less likely to bind and are easier to control.

Never exceed the pressure rating of any component in system.

Protect material and air lines from damage or puncture. Keep hose and power cable away from sharp objects, moisture, chemicals, oil, etc.

Check condition of hoses before each use. Do not use a damaged hose. If hose is damaged, replace immediately.

Read, understand and comply with all warning labels on unit.

Drain tank of moisture after each use. If Compressor is not to be used for extended periods of time, leave tank drain valve open to allow moisture to completely drain from tank.

Do not tamper with Safety Valve. The Safety Valve is factory set for your model air compressor. Any user adjustments to Safety Valve will automatically void warranty.

Air compressors get hot while in operation. NEVER touch the motor, discharge tubing or compressor pump while in operation.

The Compressor operates automatically while the motor is turned on.

Compressed air from the unit may contain carbon monoxide. Air produced is not suitable for breathing purposes.

Always use a respirator when spraying paint or chemicals.

The air pressure switch is set at the factory for optimum performance of your equipment. Never attempt to bypass or remove this switch as serious damage to equipment or personal injury could result from excessive air pressure.

## SERVICE

**Tool service must be performed only by qualified repair personnel.** Service or maintenance by unqualified personnel could result in a risk of injury.

**When servicing a tool, use only identical replacement parts and follow instructions in the manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

## SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

This manual contains important information regarding safety, operation, maintenance and storage of this product. Before use, read carefully and understand all warnings, cautions, instructions and labels. Failure to do so could result in serious personal injury, property damage or even death.

## IMPORTANT SAFETY INSTRUCTIONS

### **⚠ WARNING**

**Before using this tool, you need to become familiar with its operation.** If you are unsure about the operation of the tool, or have any questions about its proper use, call the Customer Service Department at 1-888-287-6981. Follow these instructions for safe handling of the tool:

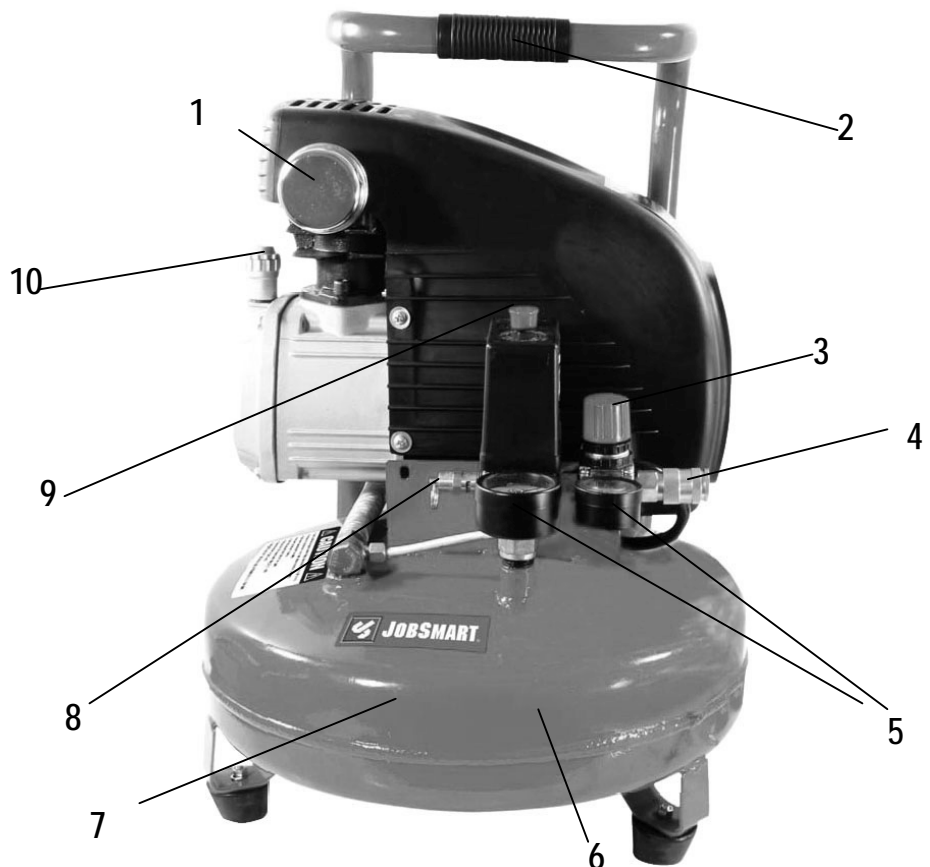
- **Be sure your work area is clean and secure.** Be sure the area is free from all foreign material, nails, staples, or any other material.
- **Always use the appropriate safety gear when operating.** Including but not limited to, goggles, dust mask or respirator.

## PACKAGE CONTENTS

- Air Compressor
- Air Filter
- Air Chuck
- Oil Breather Cap

## COMPONENTS

1. Air Filter
2. Handle
3. Air Regulator
4. Air Chuck
5. Pressure Gauges
6. Tank Drain Valve (Under Compressor)
7. Air Tank
8. Safety Valve
9. Power Switch
10. Oil Breather Cap



**Handle:** Rubber gripped handle for easy transport.  
**Air Regulator:** Controls the air flow pressure. Turn regulator clockwise to increase air pressure, counter-clockwise to decrease.  
**Air Chuck:** Allows for fast, easy connection to an air hose.  
**Tank Drain Valve:** Open to allow moisture and compressed air to be released from the Air Tank.  
**WARNING The Tank Drain Valve should always be opened slowly to avoid damage to equipment and possible injury.**  
**Oil Breather Cap:** As the compressor motor operates pressurized air must be released from the crank case. The oil breather cap allows built up air to escape, while shielding your air compressor from airborne impurities.  
**Air Tank:** Powder coated steel tank, with a 4 gallon capacity, stores the compressed air until it is needed.

**Power Switch:** Red tipped power switch turns the air compressor on and off. When switch is pulled up, compressor is turned ON. When switch is pushed down, compressor is turned OFF.  
**Note:** Always make sure that compressor Power Switch is in the OFF position before performing any maintenance or plugging the compressor into a power supply.  
**Pressure Gauges:** Dual gauges indicate the amount of air pressure built up in the air tank, as well as the air pressure being delivered to the air chuck.  
**Safety Valve:** Relieves pressure from the Air Tank in the event of excessive pressure build up. Preset at factory. Do not attempt to make any adjustments to the Safety Valve. Periodically pull ring on the Safety Valve end to check that it is working properly.  
**Air Filter:** Heavy duty metal air filter keeps your compressor running clean by filtering out impurities.

## ASSEMBLY

### **⚠ WARNING**

Before performing any assembly or maintenance, make sure compressor is turned off and unplugged from the power supply.

Your air compressor is shipped without oil in the crankcase. **YOU MUST ADD OIL TO THE CRANKCASE BEFORE STARTING THE AIR COMPRESSOR.**

1. Place compressor on level ground.
  2. Remove the Oil Shipping Plug from the Oil Fill hole, located on the top of the crankcase cover at the rear.
  3. Pour the oil into the Oil Fill hole, until the oil level rises to the center of the red dot on the Oil Sight Glass.
- Note:** This compressor uses only SAE 5W-30 motor oil.
4. Install the Oil Breather Cap into the Oil Fill hole.
  5. Firmly hand-tighten the Oil Breather Cap by turning clockwise.

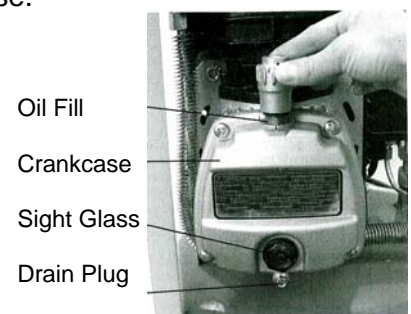
### Installing the Air Chuck

- Note:** Use a sealant tape on the threads of the Air Chuck to prevent air leakage.
1. Thread the Air Chuck into the Air Regulator by turning the Air Chuck clockwise.
  2. Securely tighten the Air Chuck in place with a wrench.
- Note:** DO NOT over tighten Air Chuck.

### Installing the Air Filter

- The metal Air Filter is installed into the threaded port of the cylinder head.
1. Thread the Air Filter into the Cylinder Head by turning Air Filter clockwise.
  2. Securely tighten the Air Filter in place with a wrench. (See Figure 4)
- Note:** DO NOT over tighten Air Filter.

**Figure 2**  
Installing the Oil & Oil Breather Cap



**Figure 3**  
Installing the Air Chuck



**Figure 4**  
Installing the Air Filter



# OPERATION

## CAUTION

BEFORE OPERATING YOUR NEW AIR COMPRESSOR please read manual carefully.

- 1 Check that all nuts and bolts are secure.
2. Make sure oil has been properly added to compressor.

### Initial Start-up Procedure

1. Open the Air Tank Drain Valve to permit air to escape, preventing air pressure buildup in the air tank.
2. Run the compressor for a minimum of 20 minutes in this "no-load" position to lubricate the piston and bearings.
3. Close Air Tank Drain Valve. Your compressor is ready for use.

Depending on the CFM draw of the tools being operated, your new Air Compressor can be used for operating paint sprayers, air tools, grease guns, airbrushes, caulking guns, abrasive blasters, tire & plastic toy inflation, spraying weed killer and insecticides, etc. Proper adjustment of the Air Pressure Regulator is necessary for all of these operations. Refer to the air pressure specifications provided with the tool you are using.

### General Overview

To compress air, the piston moves up and down in the cylinder. On the down stroke air is drawn in through the valve inlet. The discharge valve remains closed. On the upstroke of the piston air is compressed. The inlet valve closes and air is forced out through the discharge valve, through the check valve, and into the air tank. Working air is not available until the compressor has raised the tank pressure above that required at the air service connection. The air inlet filter openings must be kept clear of obstructions, which could reduce air delivery of the compressor.

### Installation and Location

Locate the compressor in a clean, dry and well ventilated area. The compressor should be located 12 to 18 inches from walls or any other obstruction, which would interfere with airflow. Compressor should be located in a temperature controlled area between 32" and 95" fahrenheit. Place the compressor on a firm, level surface. The compressor is designed with heat dissipation fins which allow for proper cooling. Keep the fins (and 911 other parts which collect dust or dirt) clean. A clean compressor runs cooler and provides longer service. Do not place rags, containers or other material on top of the compressor.

### Connecting to Power Source

This air compressor is designed to operate on a properly grounded 120 volt, 60Hz, single phase, alternating current (AC) power source with a fused 20 amp time delayed fuse or circuit breaker. It is recommended that a qualified electrician verify the ACTUAL VOLTAGE at the receptacle into which the unit will be plugged and confirm that the receptacle is properly fused and grounded. The use of the proper circuit size can eliminate nuisance circuit breaker tripping while operating your air compressor.

### Extension Cords

For optimum Air Compressor performance an extension cord should not be used unless absolutely necessary. If necessary, care must be taken in selecting an extension cord appropriate for use with your specific Air Compressor. Select a properly grounded extension cord which will mate directly with the power source receptacle and the Air Compressor power cord without the use of adapters. Make certain that the extension cord is properly wired and in good electrical condition. Maximum length of extension cord should be 50 feet. Minimum wire size of extension cord should be 12 gauge.



## Attaching an Air Hose

Your Air Compressor is supplied with a 1/4" Quick Disconnect Air Chuck. Once you have correctly installed the Air Chuck your compressor will be ready to accept air hoses equipped with 1/4" male air couplers. (Figure 5)

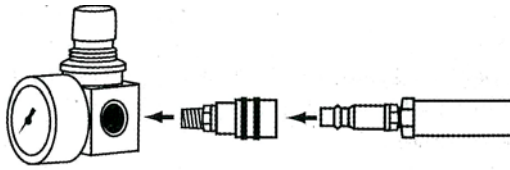


Figure 5

**Note:** Use only air hoses rated for use with 115 PSI air pressure or higher.

To install an air hose, equipped with a 1/4" male coupler:

1. Pull back on Air Chuck outer sleeve to allow coupler to be fully inserted into Air Chuck.
2. Insert coupler into Air Chuck.
3. Release outer sleeve of Air Chuck.
4. Verify that air hose is securely connected to Air Chuck by pulling on air hose.

## Adjusting the Air Pressure

Your Air Compressor is supplied with an Air Pressure Regulator. This Regulator adjusts the air pressure.

To increase air pressure, turn Air Regulator clockwise.

To decrease air pressure, turn Air Regulator counterclockwise. (Figure 6)

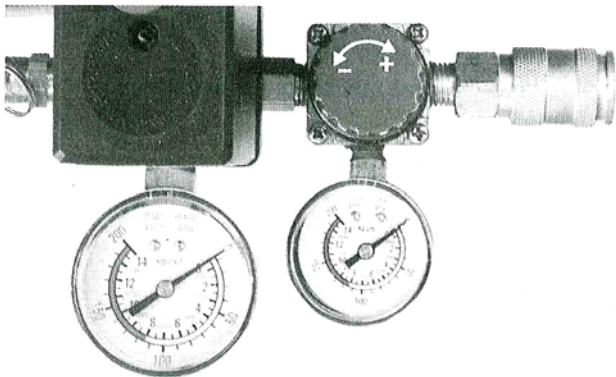


Figure 6

## Cold Weather Starting

Temperatures below freezing (32°F) cause the metal parts of your Air Compressor to contract and that makes starting more difficult. To assist the Air Compressor in starting in cold weather, follow these tips:

1. Try to keep Air Compressor stored in temperatures above 32 °F.
2. Open the Air Tank Drain Valve and release all air pressure from the Air Tank before attempting to start in cold weather. (After air is released from Air Tank, close Drain Valve.)
3. Plug Air Compressor directly into a 120 volt electrical outlet. Do not use an extension cord when starting your Air Compressor in cold weather.

## MAINTENANCE

### Daily (or before each use)

1. Check oil level
2. Drain condensation from the air tank.
3. Check for any unusual noise or vibration.
4. Be sure all nuts and bolts are tight.

### Weekly

1. Clean breather hole on Oil Breather Cap.

### Monthly

1. Inspect air system for leaks by applying soapy water to all joints. Tighten these joints if leaks are discovered.

### 6 Months (or after 250 hours of operation - whichever comes first)

1. Change Air Compressor Oil. Note: Change oil more often if Air Compressor is used near paint spraying operations or in dusty environments.

### Checking the Air Compressor Oil

1. Place Air Compressor on level surface. The oil level should be at the red dot on the Oil Sight Glass.
2. If oil level is low, remove Oil Breather Cap and add enough oil to bring the oil level to the red dot on the Oil Sight Glass.
3. Replace Oil Breather Cap before starting compressor.

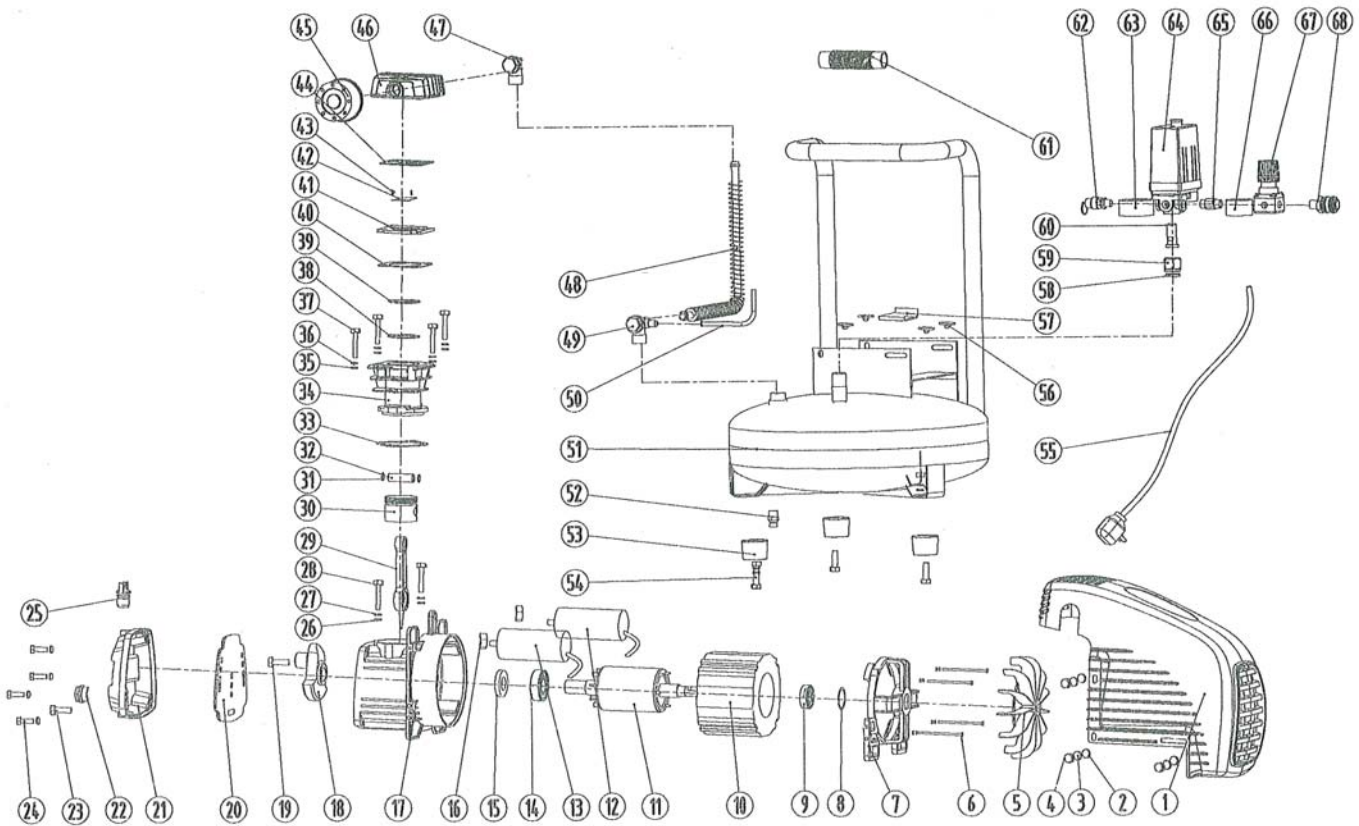
### Changing the Air Compressor Oil

Note: This compressor uses only SAE 5W-30 motor oil.

1. Remove the Drain Plug under the Oil Sight Glass by turning the nut counterclockwise with wrench.  
Note: Oil will begin to drain as Drain Plug is loosened. Place a funnel and oil pan in place BEFORE loosening Drain Plug.
2. Once Drain Plug is removed, tilt Air Compressor backwards to allow all of the oil to drain out of the crankcase.
3. Once oil is drained, replace Drain Plug and securely tighten in place with a wrench. Be careful not to overtighten the Drain Plug, as this could damage the rubber seal.
4. Place Air Compressor on level surface.
5. Remove the Oil Breather Cap.
6. Slowly pour the oil into the oil fill hole, until the oil level rises to the center of the red dot on the Oil Sight Glass.
7. Install the Oil Breather Cap into the oil fill hole.
8. Firmly hand tighten the Oil Breather Cap by turning clockwise.

Always inspect the tool before use, and make sure it is in good working condition. Make sure all air vents are clear, (use compressed air to clean the machine where possible). Check the power cable to make sure it is intact and free from cracks, bare wires etc. Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from the various types of commercial solvents.

## PARTS DIAGRAM



## PARTS LIST

Part #	Description	QTY			
AC410001	Plastic Housing	AC410025	Oil Breather Cap	AC410049	Check Valve
AC410002	Spring Washer	AC410026	Spring Washer 8	AC410050	Unload Pipe
AC410003	Washer	AC410027	Washer 8	AC410051	Air Tank
AC410004	Screw M5x14	AC410028	Screw M8x20	AC410052	Tank Drain Valve
AC410005	Fan	AC410029	Connecting Rod	AC410053	Rubber Feet
AC410006	Screw M5x115	AC410030	Piston	AC410054	Screw M6x20/nut M6
AC410007	Rear Cap ,	AC410031	Spring Washer 12	AC410055	Power Cord
AC410008	Washer	AC410032	Piston Pin	AC410056	Rubber Gasket
AC410009	Bearing 6202	AC410033	Cylinder Gasket	AC410057	Centrifugal Switch
AC410010	Stator	AC410034	Cylinder	AC410058	Seal Washer
AC410011	Rotor	AC410035	Spring Washer 6	AC410059	Nut
AC410012	Starting Capacitor	AC410036	Washer 6	AC410060	Connector Seat
AC410013	Running Capacitor	AC410037	Screw M6x40	AC410061	Rubber Grip
AC410014	Bearing 6204	AC410038	Gasket	AC410062	Safety Valve
AC410015	Oil Seal	AC410039	Sealer Ring	AC410063	Pressure Gauge
AC410016	Nut M8	AC410040	Valve Gasket	AC410064	Pressure Switch
AC410017	Crankcase	AC410041	Valve Plate Assy	AC410065	Connector
AC410018	Crankshaft	AC410042	Air Intake Valve	AC410066	Pressure Gauge
AC410019	Screw M8x16 (left)	AC410043	Limit Pin	AC410067	Regulator
AC410020	Gasket	AC410044	Cylinder gasket	AC410068	Air Chuck
AC410021	Crankcase Cover	AC410045	Metal Air Filter		
AC410022	Oil Sight Glass	AC410046	Cylinder Head		
AC410023	Drain Plug	AC410047	Elbow Exhaust		
AC410024	Pan Head Screw	AC410048	Exhaust Pipe		

## Troubleshooting

If Compressor won't start

1. Blown Fuse or circuit breaker tripped-Replace or reset fuse/circuit breaker
2. Loose electrical connections-Check wiring connections

Low Pressure

1. Restricted air flow-Replace Air Filter
2. Defective check valve-Replace check valve
3. Air Leak in safety valve-Check valve by pulling on ring. If condition persists, replace valve.

Safety valve releasing

1. Defective pressure switch-Replace pressure Switch

Oil Discharge in air

1. Too much oil in crankcase-Drain crankcase and refill to proper level on oil sight glass.
2. Compressor overheated-Reduce air pressure regulation
3. Restricted oil breather cap-Clean or replace oil breather cap