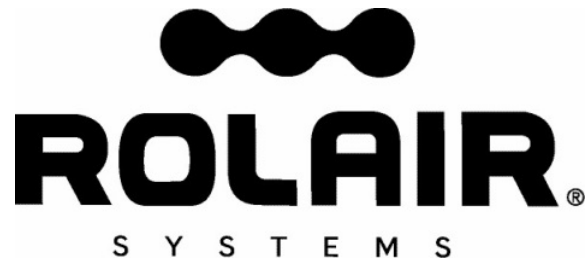


# PORTABLE AIR COMPRESSOR OWNER'S MANUAL

MODEL: AB5

SERIAL NUMBER: \_\_\_\_\_



## WARNING

**COMPRESSOR DISCHARGE AIR MAY CONTAIN HYDROCARBONS AND OTHER CONTAMINANTS! DO NOT USE DISCHARGE AIR FOR BREATHING!**

## PARTS

Genuine ROLAIR® replacement parts are sold nationwide through a network of authorized dealers and service centers. Please contact the dealership where your air compressor was purchased or our factory Customer Service Department if you need help troubleshooting, obtaining parts, or locating an authorized ROLAIR® service representative.

- To order replacement parts:
1. Give compressor model number
  2. Give compressor serial number
  3. Name of part
  4. Part number
  5. Quantity required

## RECORD OF PERTINENT INFORMATION

Make a permanent record of the model and serial number of your new air compressor here. You'll save time and expense by including this reference information when requesting service or replacement parts.

Place & Date of Purchase		Volts
Model		HZ
Serial #		HP

With the tank gauge at 0 PSI and air line(s) disconnected, close drain valve(s) and record the amount of time it takes to build tank pressure on the space provided. Periodically test your air compressor against this pump-up time to determine if it is operating correctly. If time test is considerably off, contact your local ROLAIR® representative to arrange service.

From 0 to _____ *PSI		
Date	Min	Sec

From 0 to _____ *PSI		
Date	Min	Sec

\*Factory top pressure settings vary. Write down the top pressure setting of your machine after performing the initial pump-up time test.

# TABLE OF CONTENTS

Introduction and Definitions of Safety Warnings	3
Safety Warnings	4-5
System Controls	6-7
Pre-Start Checklist	7-8
Specifications and Operation	8-9
Maintenance	9
Troubleshooting	10
Guarantee	11
Schematics – AB5	12-13

## INTRODUCTION




Congratulations on the purchase of your new ROLAIR® air compressor!

With over 50 years experience building ROLAIR® air compressors specifically designed for the professional, Associate Engineering Corporation has earned a reputation for providing a product unsurpassed in quality and reliability. We are committed to continuing this tradition by analyzing and adapting to the changing needs and rigorous demands of your industry. You can depend on ROLAIR® because they are built to last.

This manual was compiled for the benefit of the operator. Do not use or allow anyone else to use your air compressor until this manual is read and all safety/operating instructions are understood. By reading and following the instructions contained in this manual, you can achieve years of trouble free service from your new air compressor. If you have any additional safety or operating questions after reading this manual, please contact your distributor or our customer service department. Do not remove or paint over any of the warning decals attached to the compressor.

### Definitions – Safety Warnings

Safety symbols are used throughout this manual to alert you to potentially hazardous situations. The following definitions describe the level of severity for each signal word.

- |  |                 |  |
|--|-----------------|--|
|  | <b>DANGER:</b>  | Indicates an imminently hazardous situation which, if not avoided, <u>WILL</u> result in <u>death or serious injury</u> .                                |
|  | <b>WARNING:</b> | Indicates a potentially hazardous situation which, if not avoided, <u>COULD</u> result in <u>death or serious injury</u> .                               |
|  | <b>CAUTION:</b> | Indicates a potentially hazardous situation which, if not avoided, <u>MAY</u> result in <u>minor or moderate injury</u> or damage to the air compressor. |



**WARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.







**WARNING**

Do not start, operate or service machine until you read and understand operator's manual. Failure to do so could result in serious injury.

## **SAFETY WARNINGS**

**READ AND UNDERSTAND ALL SAFETY WARNINGS BEFORE USING AIR COMPRESSOR**

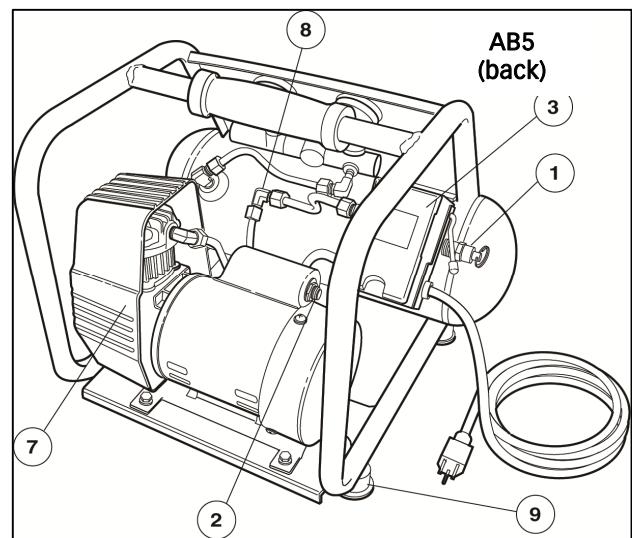
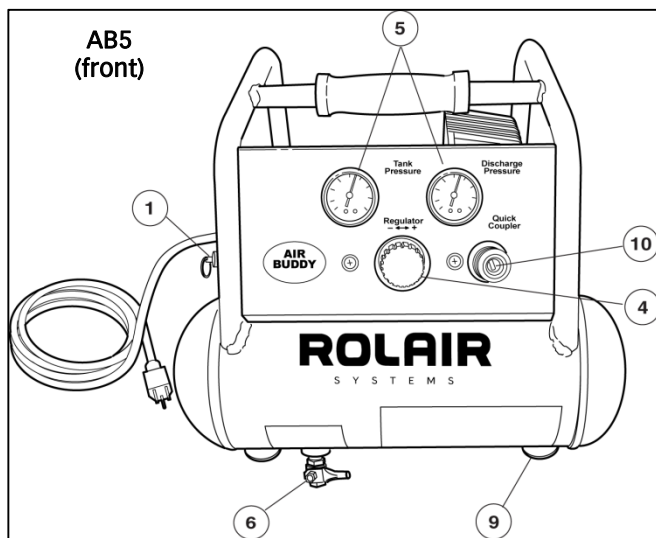
Hazard Level	Potential of Hazard	How to Avoid Hazard
<div style="text-align: center;">   <b>Risk of Asphyxiation</b> </div>	Serious injury or death may occur from inhaling compressed air. The air stream may contain carbon monoxide, toxic vapors, or solid particles.	Never inhale compressed air directly from the pump, receiver, or from a breathing device connected to the air compressor.
	Sprayed materials such as paint, stucco, insecticides, solvents, etc., contain harmful vapors and poisons that may cause serious injury or death if inhaled.	Operate compressor only in a well-ventilated area. Use a respirator device and follow the manufacturer's recommendations for their spray equipment. Keep compressor at least 25 feet away from spray equipment.
	Serious injury or death may occur if the exhaust from gas-powered small engines is inhaled. Engine exhaust fumes contain poisonous, carbon monoxide which is odorless and colorless.	Operate gas-powered compressors only in a well-ventilated area. Avoid inhaling engine exhaust fumes, and never run a small gas-powered engine in a closed building or confined area without adequate ventilation.
<div style="text-align: center;">   <b>Risk of Bursting</b> </div>	Serious injury or death may occur from an air tank explosion if the air tanks are not properly maintained or if modifications, alterations or repairs are attempted to the air receivers.	Drain air tanks daily or after each use. Never drill into, weld, patch or modify the air tanks. If a leak develops, replace the tank immediately or replace the entire compressor.
	Serious injury or death may occur if modifications are made to the pilot unloader valve, pressure switch, safety relief valve or other components that control the tank pressure.	Never make adjustments to the components that control tank pressure. Do not make alterations to the factory operating pressure settings. Check operation of the safety valve on a regular basis and never operate without a factory approved safety valve.
	Serious injury may occur if accessories or attachments are operated above the manufacturer's recommended pressure ratings, causing them to explode or fly apart.	Do not use air tools or attachments before reading the owner's manual to determine the maximum pressure recommendations. Never exceed the manufacturer's maximum allowable pressure ratings. Do not use compressor to inflate small low pressure objects such as toys.
<div style="text-align: center;">   <b>Risk of Electrocution or Electrical Shock</b> </div>	Serious injury or death could occur if the air compressor is not properly grounded.	Always plug compressor into a properly grounded outlet which provides correct voltage, proper grounding and adequate fuse protection.
	Electrical shock may occur if compressor is not properly operated.	Never operate air compressor in wet conditions or outdoors when it's raining. Do not allow electric cords to lay in water. Do not operate with damaged power cord or with protective electrical covers removed. Do not touch plug with wet hands. Do not pull on electric cord to disconnect from the outlet.
	Serious injury or death may occur if electrical repairs are attempted by unqualified personnel.	Any electrical repairs or wiring performed on this compressor should only be performed by authorized service personnel in accordance with the National and Local Electric Codes.
<div style="text-align: center;">   <b>Risk of Explosion or Fire</b> </div>	Serious injury or death may result from normal electrical sparks that occur within the motor and/or pressure switch.	Always operate compressor in a well-ventilated area free of combustible materials, gasoline, flammable solvents or vapors. Always locate compressor at least 20 feet away from work area if spraying flammable materials.
	Serious injury may occur if a fire is caused by overheating due to inadequate ventilation or restrictions to any of the compressors ventilation openings.	Never place objects against or on top of an air compressor. Always operate air compressor at least 18" away from any wall or obstruction. Always operate in a clean, dry and well-ventilated area.
	Serious injury or death may occur from a fire or explosion if spilled gas or vapors come in contact with hot engine parts and ignite.	Never attempt to fill the gas tank while the engine is hot or running. Add fuel outdoors in a well-ventilated area. Do not fill gas tank near lit cigarettes or near other sources of ignition.

SAFETY WARNINGS (con't)		
Hazard Level	Potential of Hazard	How to Avoid Hazard
 <b>Risk from Moving Parts</b>	Serious injury may occur from moving parts such as belts, pulleys, flywheels or fans if they come in contact with you or your clothing.	Never operate the air compressor without protective belt guards installed. Replace damaged protective covers or guards immediately.
	An electric air compressor with automatic controls can restart at any time and cause bodily injury when least expected.	Always unplug air compressor and drain air tanks completely before attempting any repairs or performing maintenance. Never allow children or adolescents to operate air compressor.
	Serious injury may occur if repairs are attempted with damaged, missing or removed protective guards, shrouds or missing covers.	All repairs to the air compressor should be made only by authorized or trained service personnel.
 <b>Risk of Burn</b>	Serious burn injuries could occur from touching exposed metal parts such as the compressor head, copper/braided discharge lines and engine exhaust muffler during operation, and even after compressor is shut down for sometime.	Never touch any of the exposed metal parts during operation and for an extended period of time after the air compressor has shut down. Do not attempt maintenance on the unit until it has been allowed to completely cool.
 <b>Risk of Injury from Lifting</b>	Serious injury can result from attempting to lift an object that is too heavy.	Always obtain assistance from others before attempting to lift any object that is too heavy for one person.
 <b>Flying Objects</b>	Serious injury may occur from loose debris being propelled at high speeds from the compressed air stream.	<p>Always wear OSHA required ANSI Z87.1-1989 safety glasses to protect the eyes during operation of the air compressor. Never point the air stream or tools at any point of your body, other people or animals.</p> <p>Always turn off the air compressor and drain tank pressure completely before attempting maintenance or attaching air tools.</p>
 <b>Warning</b> <b>Risk of Unsafe Operation</b>	Serious injury or death may occur to you or others if air compressor is used in an <u>unsafe</u> manner.	Review and understand all instructions and warnings in your owner's manual. Know how to stop the air compressor. Do not operate until you are thoroughly familiar with all of the controls. Do not operate the compressor if fatigued or under the influence of alcohol or drugs. Stay alert while operating the compressor and pay close attention to the task at hand.
 <b>Caution</b> <b>Risk of Damage to Air Compressor or Property</b>	Failure to transport or operate the air compressor properly may result in major repair expenses. Oil leaks will damage carpets, painted surfaces, flooring and other items.	<p>Check oil levels daily and maintain proper oil levels. Always run compressor in a level, secure position that keeps it from tipping or falling during use. Do not operate without an air filter or in a corrosive environment.</p> <p>Always transport in a level position and use protective mats to keep truck beds clean, etc. Check drain bolts regularly and do not overfill machinery with oil.</p>

Please note that this product may not be equipped with a spark arresting muffler. If the compressor is operated around flammable materials or agricultural crops, brush, forests, and grasslands an approved spark arrestor must be installed, maintained and in good working order. An approved spark arrestor is legally required in the State of California under sections 4442 and 4443 of the California Public Resources Code Statute section 130050.

This product contains chemicals, including lead, known to the state of California to cause cancer, birth defects, and other reproductive harm. Always wash hands after handling this product.

# SYSTEM CONTROLS



**1. SAFETY-RELIEF VALVE** Every ROLAIR® air compressor is equipped with a safety-relief valve which is designed to discharge tank pressure at a predetermined setting when a systems failure occurs. Check the safety valve periodically by pulling on the ring only when the tank pressure is completely drained. The spring loaded valve should move freely within the safety valve body. An inoperable safety valve could allow an excessive amount of tank pressure to build causing the air tank to catastrophically rupture or explode.



**Do not tamper with or attempt to eliminate the safety relief valve.**

**2. MANUAL OVERLOAD / MOTOR RESET** Every ROLAIR® electric air compressor is built with manual overload protection. If the motor overheats, the overload sensor will *trip* the reset button to protect the motor. If this occurs, please allow the motor to cool for approximately five minutes. Locate and push in the reset button. The use of an undersized or excessive length of extension cord may be the cause of overheating. Re-evaluate the power source and gauge/length of extension cord being used. (Refer to chart on page 8)

**3. PRESSURE SWITCH** Most electric air compressors are operated by the use of a pressure switch. Always make sure the lever is in the "Off" position before plugging in the power cord. By moving the lever to the "On/Auto" position, the compressor will start and stop automatically within the settings of the pressure switch which are typically 95 - 125 PSI. Do not attempt to stop the compressor by unplugging the power cord. To stop, simply move the lever to the "Off" position. The lever operates a relief valve that dumps off head pressure and allows the compressor to restart without load the next time it is used.

**4. REGULATOR – WORKING PRESSURE** To adjust the output/line pressure, simply rotate the regulator adjustment knob clockwise to increase working pressure or counterclockwise to decrease. Never exceed the manufacturer's maximum allowable pressure rating of the tool being used or item being inflated. Always relieve pressure from coupler by rotating adjustment knob completely counter-clockwise before removing air hose.

**5. PRESSURE GAUGE(S)** Typically, most compressors are designed with a gauge to measure tank or storage pressure and another gauge that indicates output or working pressure.

**6. DRAIN VALVE(S)** One or more drain valves are installed to allow moisture to be drained on a daily basis from the compressor storage tank(s). Open drains carefully and slowly to prevent scale, rust, or debris from becoming expelled at a high rate of speed.

## SYSTEM CONTROLS (con't)

**7. AIR INTAKE FILTER** Air intake filters are installed to prevent foreign matter from entering the engine or compressor pump. Check intake elements on a regular basis and either clean or replace as needed. Warm soapy water or low compressed air may be used to clean the elements. Remove the four Phillips-head screws that secure the shroud to access the intake filter located on side of crankcase.

**8. CHECK VALVE** Every ROLAIR® air compressor is built with a check valve to seal off and maintain tank pressure after the top end pressure setting of pilot valve or pressure switch is reached. The check valve works in conjunction with the pressure switch relief valve to provide a *loadless* start for the compressor system. A quick burst of air escaping from the pressure switch relief valve after the machine reaches top end indicates the check valve is working properly. If the compressor has a mysterious leak after stopping that cannot be traced elsewhere, the check valve may require servicing/replacing. Always drain tank pressure completely before attempting to remove or service any component.

**9. VIBRATION DAMPENER(S)** The rubber pads installed beneath every portable ROLAIR® tank assembly are very important to the proper operation of the air compressor. They provide protection from vibration that left unchecked could cause damage to many system components.

**10. QUICK DISCONNECT** A universal or 3-way quick disconnect is installed on your AB5 air compressor. Simply push a 1/4" male plug into coupler to snap hose fitting into coupler. Always relieve pressure from coupler before installing or removing hose. See instructions for regulator (#4 above). Pull back on collar to remove air hose after pressure is relieved.

## PRE-START CHECKLIST

Read the owner's manual thoroughly. Make sure that you completely understand all of the safety warnings, system controls and instructions provided before attempting to operate this air compressor. Every effort has been made to provide you with the information needed to obtain many years of reliable and trouble-free service out of your new air compressor. It is your responsibility to operate the air compressor properly. To obtain the longest possible service life from your air compressor you must always keep the following instructions in mind.

**1. OPERATE IN A CLEAN, DRY AND WELL VENTILATED AREA**

Allow at least 18" behind the belt guard for proper cooling of pump from flywheel blast. Do not operate in the rain or in areas of standing water. Never operate in an area where other gases, fumes or vapors are present which may become explosive when compressed. Do not operate compressor in an enclosed area or with any of the ventilation openings covered.

**2. INSPECT/CLEAN/CHANGE INTAKE ELEMENTS ON A REGULAR BASIS**

The ingestion of dirt into the pump and engine is the primary cause of premature wear. Pay special attention to the intake filters. Check intake filters daily.

**3. USE LONGER PROPERLY SIZED AIR HOSE RATHER THAN EXTENSION CORDS**

If an extension cord must be used, please refer to the chart on the following page for the proper gauge and maximum length that can be used. The use of inadequately sized air hose will also lead to frictional pressure drops that could affect the proper performance of your air tools.

**4. DO NOT USE A GENERATOR AS THE POWER SOURCE**

Air compressors use inductive motors that require 3-5 times the full-load amp draw to properly start. Most generators will not provide the wattage needed to properly start this type of electric motor.

**5. CHECK TENSION OF BOLTS, BELTS, AND HARDWARE ON A REGULAR BASIS**

Operation of any equipment with loose bolts and/or fittings will lead to excessive vibration and the premature failure of the compressor system control components.



## PRE-START CHECKLIST (con't)

### **7. MAINTAIN RUBBER VIBRATION PADS**

Excessive vibration is a major cause of premature compressor failure. Always maintain the rubber vibration pads located beneath tank assembly. Operation without them will void your warranty.

### **8. DRAIN MOISTURE FROM AIR TANKS DAILY**

Water is a natural byproduct of compressed air. Drain air tank(s) after each use to combat internal tank corrosion. Keep drain valve(s) closed if storing compressor for any length of time.

**ELECTRIC EXTENSION CORD TABLE**

Minimum Wire Size		
Extension Cord Length	Motor 1/2 and 3/4 HP	Motor 1, 1-1/2, and 2 HP
Up to 25 ft.	14 Ga.	12 Ga.
25 – 50 ft.	12 Ga.	10 Ga.
50 – 100 ft.	10 Ga.	8 Ga.

## SPECIFICATIONS

Model AB5			
Horsepower	.5 HP	Tank Capacity	1 Gallon
Voltage	115 V	Pump-Up Time (0-125 PSI)	1 min. 50 seconds
Hertz	60 hZ	Recovery Time (95-125 PSI)	31 seconds
Phase	Single	CFM Displacement	1.4
Motor RPM	3450	Cu. Ft. Delivered @ 40 PSI	1.0
Stages	Single	Cu. Ft. Delivered @ 90 PSI	.7
Amperage	4.0 @ 125 PSI	Dimensions (LxWxH)	14.25" x 13.25" x 11.75"
Thermal Protection	Manual	Weight	22 lb.
Factory Settings	95 – 125 PSI	Noise Level	68 dBA

## OPERATION

**WARNING** – Your safety and the wellbeing of others during the operation of every ROLAIR® compressor is our main concern. Do not operate or permit anyone else to operate your air compressor until the information contained in this manual is read and completely understood. Please contact your distributor or our customer service department if you have any questions on the proper use of your air compressor.

1. Inspect machine to make sure bolts are tight, vibration pads are secure, power cord is solid and compression fittings are tight.
2. Position compressor in a clean, dry location with plenty of ventilation and away from volatile vapors and gases. Never start machine with any of the ventilation openings covered.
3. Slowly open tank drain to remove any condensate that has accumulated. Keep drain open for 20 – 30 seconds after starting compressor to "warm-up" motor and pump.
4. Make sure pressure switch lever is in the "Off" position before plugging machine into a properly grounded outlet. Never unplug machine until moving lever to "Off" position.
5. Move lever to "On" position and close tank drain to build tank pressure after allowing machine to warm up for a few seconds with the drain open.
6. Attach air hose only after rotating regulator adjustment knob counter-clockwise to relieve any pressure that has built up.
7. Rotate regulator adjustment knob clockwise until desired working pressure is reached.



## OPERATION (con't)

8. When task is complete, rotate regulator adjustment knob counter-clockwise to relieve pressure prior to removing air hose. Open drain slowly to drain moisture and prepare for next start. Rotate pressure switch lever to "Off" position before unplugging.
9. Store compressor in a warm/dry location and perform maintenance as indicated in manual.

### HIGH-ALTITUDE OPERATION:

Due to a decrease in atmospheric pressure air compressor pumps produce less CFM at higher elevations. As a rule of thumb the output will decrease approximately three percent per 1000 feet of elevation. Also, because air at higher elevations is less dense and does not cool as well, electric motors cannot be subjected to the full nameplate service factor amp rating and may need to be upgraded to avoid repeated overheating.

Direct drive or hand-carry compressors built with cold-start valves may need to be modified when operated in higher elevations. Contact our factory Customer Service Department if your normally reliable air compressor fails to operate correctly at higher elevations.

## MAINTENANCE

Your new air compressor represents the finest engineering and construction available. Even the best machinery requires periodic maintenance. Please stick to the maintenance schedule and consider the suggestions that follow to keep your compressor in peak condition.

**NOTE:** Always unplug or shut down your compressor and drain the air tanks completely before attempting any type of maintenance. Wait for compressor to cool before servicing.

**IMPORTANT:** Replace the oil after the first 50 hours of operation.

### **MAINTENANCE HINTS:**

- 1) Use a soap/water solution to check for air leaks.
- 2) Never clean filters with a flammable solvent.
- 3) Retorque head bolts only after pump has cooled.
- 4) Never weld on air tank(s).
- 5) Use heat to loosen Loctite seal on drains and other fittings before attempting to remove.

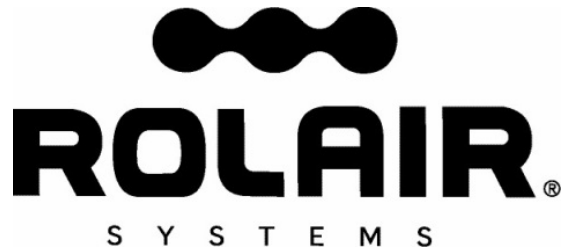
### MAINTENANCE SCHEDULE

Recommendation	Daily	Weekly	Monthly	Quarterly
Drain Moisture from Tank(s)	X			
Inspect Air Filter(s)	X			
Check for Unusual Noise or Vibration	X			
Check for Air Leaks	X			
Clean Exterior of Air Compressor		X		
Check Condition of Vibration Pads		X		
Tighten/Retorque Bolts		X		
Check Operation of Safety Valve		X		
Clean/Change Air Filter			X	
Perform Pump Up Time Test			X	
Check Operation of System Controls				X
Check Air Tanks for Dents/Leaks				X

# TROUBLESHOOTING

**WARNING** - Make sure you completely understand all of the safety warnings and operation of each system control component before attempting any maintenance or repair. Always drain the tank pressure completely, make sure the power cord is unplugged, and unit has time to cool before performing any maintenance or service operations.

PROBLEM	CAUSE	SOLUTION
Pump is slow to build tank pressure	Excessive leaks in system	Correct air leaks
	Blown gasket	Replace head gaskets
	Broken reed valve	Replace reed valves
	Obstructed intake filter	Clean or replace intake element
	Leaking regulator	Replace regulator
Knocking noise	Internal pump problem	Take unit in for service
Overheating compressor	Poor ventilation	Relocate compressor
	Internal pump problem	Take unit in for service
Electric motor dead, will not even hum	Thermal overload tripped	Locate and push reset button
	Reset physically broken	Replace overload/reset
	Loose motor leads or electrical connection	Locate and correct loose electrical connection(s)
	Short in power cord	Replace power cord
Motor trips overload/reset button	Motor is starting/stopping excessively	Install constant speed or dual control kit
	Overload is defective/weak	Replace overload
	Improper gauge of extension cord	Use longer lengths of air hose or heavier cord
	Stripped or poorly tightened motor thru bolts	Retighten or replace stripped thru bolts
	Cracks in end bell or housing	Take unit in for service



### Guarantee

Associate Engineering Corporation warrants that all ROLAIR® compressors will be free of defects in material and workmanship for a period of twelve months from the date of initial retail purchase, or eighteen months from the date of manufacture, whichever may occur first.

Should any failure to conform to this warranty be reported to the company within said period, the company shall, upon purchaser shipping the compressor to our plant transportation prepaid, correct such nonconformity by suitable repair or, at its option, furnish a replacement part F.O.B. our plant.

Associate Engineering Corporation shall not be liable for any unauthorized repairs, replacements, adjustments to the compressors, or the costs of labor performed by the purchaser.

**This warranty is expressly in lieu of all other warranties expressed, implied or statutory (including, but not limited to, warranties of merchantability and fitness for purpose) and of any other obligations, and/or liabilities on the part of Associate Engineering Corporation. Associate Engineering Corporation neither assumes nor authorizes any other person to assume for it any other obligations or liability in connection with or with respect to any compressor.**

Associate Engineering Corporation shall in no event be liable neither for any consequential, incidental or special damages nor for the improper selection of any compressor for a particular application.

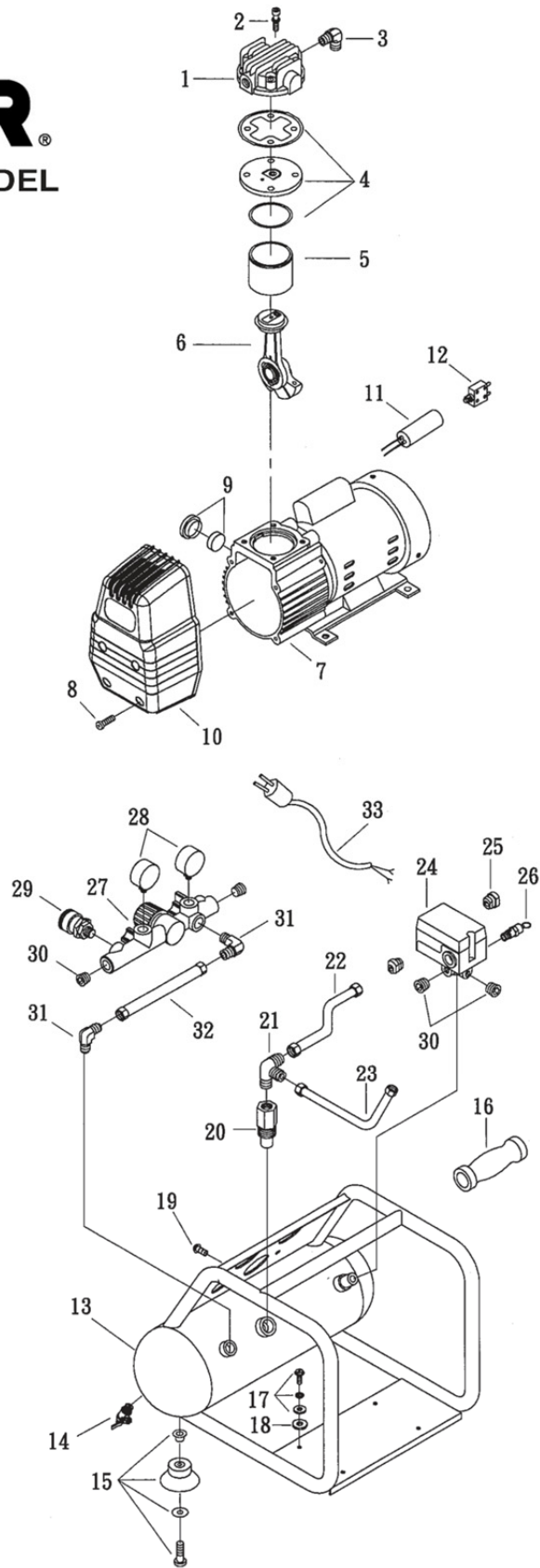
### Quality

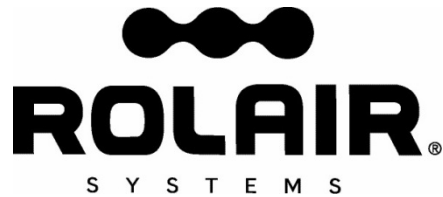
Associate Engineering Corporation is devoted to continual quality control and thorough research of the products we build. It is our creed to give you, the user, all of the experience and engineering available in the production of every piece of equipment we produce.

Our line covers the complete needs of today's varied air requirements. Rely on ROLAIR® for all the newest and finest features that are available for the modern compressor.



**ROLAIR®**  
SCHEMATIC FOR MODEL  
AB5





### PARTS LIST FOR MODEL AB5

Schematic #	Description	Part #	Qty.
1	Cylinder Head	AB500-1	1
2	Allen Bolt	AB500-2	4
3	Elbow	AB500-3	1
4	Valve Plate Assembly	AB500-4	1
5	Cylinder	AB500-5	1
6	Piston/Connecting Rod Assembly	AB500-6	1
7	Motor Assembly	AB500-7	1
8	Bolt	AB500-8	4
9	Intake Filter	AB500-9	1
10	Shroud	AB500-10	1
11	Capacitor	AB500-11	1
12	Manual Reset	AB500-12	1
13	Tank Assembly	AB500-13	1
14	Drain Valve	AB500-14	1
15	Rubber Pad Assembly	AB500-15	4
16	Handle Grip	AB500-16	1
17	Mounting Bolt Assembly	AB500-17	4
18	Spacer	AB500-18	4
19	Bolt – Manifold	AB500-19	2
20	Check Valve	AB500-20	1
21	Brass Tee	AB500-21	1
22	Unloading Tube Assembly	AB500-22	1
23	Discharge Tube Assembly	AB500-23	1
24	Pressure Switch	AB500-24	1
25	Box Connector	AB500-25	2
26	Safety Relief Valve	AB500-26	1
27	Manifold	AB500-27	1
28	Pressure Gauge	AB500-28	2
29	Quick Disconnect	AB500-29	1
30	Plug	AB500-30	4
31	Elbow	AB500-31	2
32	Unloader Line	AB500-32	1
33	Cord with Plug	AB500-33	1