



Assembly & Instruction Manual

ITEM 1221

VENDOR: A SERIES: 1



4 Gallon Twin Stack Air Compressor

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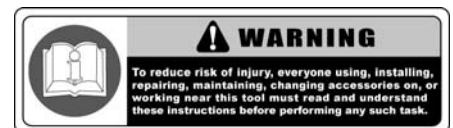
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Your new 4 Gallon Twin Stack Air Compressor has been engineered and manufactured to Cummins Industrial Tools high standards for dependability, ease of operation, and operator safety. Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your machine properly and only for what it is intended, you will enjoy years of safe, reliable service.

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INTRODUCTION

- THIS PRODUCT has many features for making the use of this product more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.


 **WARNING:** Do not attempt to use this product until you thoroughly read and completely understand the operator's manual. Pay close attention to the safety rules, including Dangers, Warnings, and Cautions. If you use your product properly and only as intended, you will enjoy years of safe, reliable service.

 **Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.**




 **WARNING:** The operation of any tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.

GENERAL SAFETY RULES

 **WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment. Read all instructions before using the tool.

- **Work area condition.** Cluttered areas invite injuries.
- **Additional work area conditions.** Do not use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted.
- **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
- **Use eye protection.** Always wear ANSI approved impact safety glasses underneath a full face shield during use. Also wear heavy duty work gloves.
- **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
- **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. The handles must be kept clean, dry, and free from oil and grease at all times.
- **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before starting work.
- **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Any part that is damaged should be replaced.
- **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Cummins Industrial Tools.
- **Do not operate tools if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

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

SPECIFIC SAFETY RULES

Read all instructions before using this product

Electrical shock hazard

- Never use the compressor without connection to a properly grounded outlet with the specified voltage and fuse protection.
- Do not use the compressor in a wet or explosive environment.
- Never attempt maintenance or adjustment with power connected or the equipment in operation.

Tank safety valve

- This valve is factory installed to prevent the air receiver from damage should a malfunction occur in the compressor pump.
- It is factory set at a specified limit for your particular model. Any adjustment tampered by user will automatically void the warrant.

Pressure switch

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

Motor and compressor pump

- Air compressor get hot while in operation. Never touch the motor, discharge tubing, or compressor pump while in operation.
- The compressor operates automatically while the power is connected.
- Never attempt any adjustment with the power on.

Compressed air caution

- Compressors 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.
- Always wear safety glasses or goggles when spraying air.

Air receiver

- Over pressurizing the air receiver could cause an explosion or rupture. To protect from over pressurizing a factory preset safety valve is included. Do not remove, make adjustments or substitutions for this valve.
- Occasionally pull the ring on the valve to make sure that the valve operates freely. If the valve does not operate freely it must be replaced. Never weld to, drill into, or change the air receiver in any way.
- If any of the above conditions are changed or tampered with, this will result in voiding of the manufacture's warranty. Be advised that any replacement parts should be purchased with the same specifications as the original equipment. Please contact an authorized dealer for replacement parts or specification.

Others

- Do not smoke while operating the air compressor. To avoid the ignition of a fire or explosion, never spray where sparks or flame is present.
- Keep the compressor away from children and those who are unfamiliar with the unit operation.

GENERAL INFORMATION

General description of operation

To compress air, the pistons move 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 up stroke, air is compressed. The inlet valve closes and compressed air is forced out through the discharge valve through the check valve and into the receiver. Working air is not available until the compressor has raised the air receiver's pressure above the required compression 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 a wall or any other obstruction that would interfere with the air flow through the fan blade belt wheel. Place the compressor on a firm level surface. The compressor is designed with heat dissipation fins that allow for proper cooling. Keep the fins and other parts that 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.

Assembly

1. Remove air filter from plastic bag and screw it into the thread hole. Be sure to always clean air filter before and after each use.
2. This compressor is completely assembled. It does not need further settings.

FEATURES

- Twin stack tanks
- 50% Duty cycle
- Single phase
- Single stage
- Tank with one regulator, one coupler and two gauges
- Oil lubrication for long life
- Direct drive compressor pump
- Thermal overload protection for safety and reliability

PRODUCT SPECIFICATIONS


- 1.5HP
- 4 gallon
- 4.2 SCFM @ 90 PSI, 5.2 SCFM @ 40 PSI
- 115 maximum PSI
- 115V, 60 Hz, 15 Amp

UNPACKING

INSTRUCTIONS

When unpacking the tool:

- Carefully remove the tool and accessories from the box.
- Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

 **WARNING:** If any part is missing do not operate the tool until the missing part is replaced. Failure to do so could result in possible serious personal injury.

PACKING LIST

- Twin Stack Air Compressor
- Air Filter

APPLICATIONS

Depending on the C.F.M. draw of the tools being operated, your new air compressor can be used for operating:

- Paint Sprayers
- Air tools
- Grease guns
- Airbrushes
- Caulking guns
- Sandblasters
- Inflating tires and plastic toys
- Spraying weed killer and insecticides
- Etc.

An air pressure regulator is usually necessary for most of these applications.

OPERATION

Starting the compressor


1. Make sure the amount of oil is adequate before each use.
2. Check all nuts and screws for secured tightness.
3. Make sure wiring fuse and power supply is correctly installed.
4. Make sure all pressure and water is released from tank.
5. Turn on power switch. Then pressure inside the tank will increase until it reaches 90 PSI. The system will then automatically shut down at this point.

6. Connect air tool and start the compressor to begin use. Note: be sure to check manufacturer's maximum pressure rating for air tools and accessories. Compressor outlet pressure must be regulated to never exceed the maximum pressure rating of the tool.
7. Use the regulator knob to control the amount of air pressure for the attached air tool. Turn the knob clockwise to increase air pressure and counterclockwise to reduce air pressure.
8. To enable the best air pressure release and avoid air leakage, use Teflon tape to wrap around hose and coupler thread.

Air release

1. Turn the power switch off after each use of the compressor.
2. Open drain valve underneath the tank and release all the air and moisture inside.
3. The pressure gauge should now fall back to 0 PSI.
4. Release all the air from the attached air tool, then disconnect hose from the quick coupler.

MAINTENANCE

 **CAUTION:** Before performing any maintenance to your air compressor, disconnect electrical power and drain air tank of pressure.

CHECKLIST

Daily or before each use

1. Check oil level
2. Drain condensation from tank
3. Check for any unusual noise or vibration

Weekly

1. Clean air filter by opening air filter cap. Remove the filter element and clean thoroughly with soap and water. Rinse thoroughly and allow to dry completely before assembling.
2. Clean breather holes on oil check dipstick.

Monthly

1. Inspect air system for leaks by applying soapy water to all joints. Tighten those joints if leakage is observed.

250 hours or six (6) months (whichever comes first)

1. Change compressor oil.
2. Replace oil more often if compressor is used near paint spraying operations or in dusty environments.

COMPRESSOR LUBRICATION

⚠ ATTENTION: Check the oil quantity and quality before operating the compressor. Do not add or change oil while the compressor is in operation. Use only SAE20 or SAE30 weight non-detergent oil.

Compressor with oil level sight glass

1. Sit air compressor on level surface. The oil level should be at the red dot on the oil level sight glass.
2. If oil level is low, remove oil fill plug, add enough oil to bring level to the red dot in the oil level sight glass.

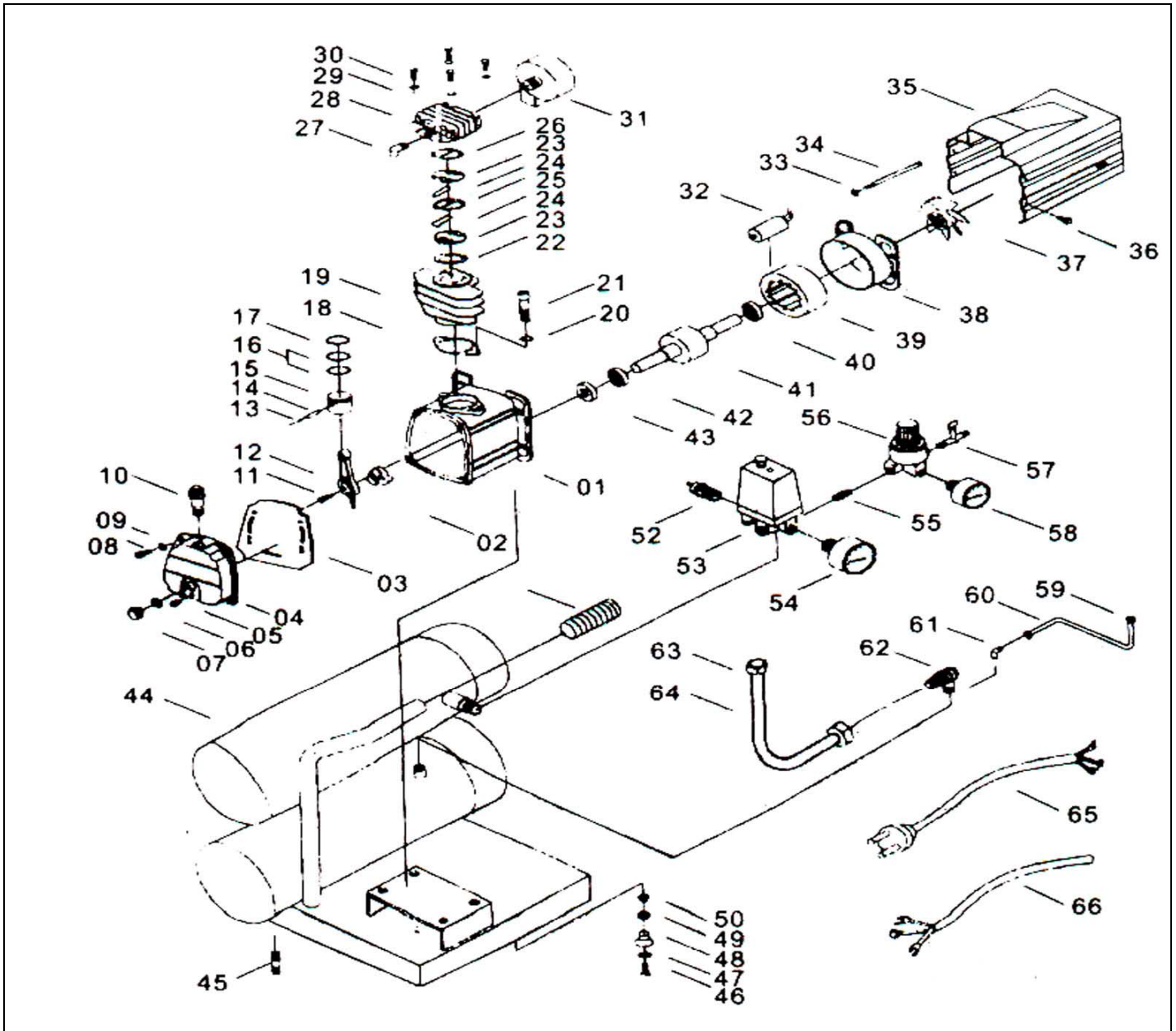
Draining the oil

1. Remove the oil drain plug. Allow oil to drain completely.
2. Replace the oil drain plug (we recommend the use of a sealing compound or Teflon tape to avoid leakage).
3. Refill with the recommended oil to the red dot in the oil level sight glass.

TROUBLESHOOTING

Trouble	Possible cause	Corrective action
No start condition	<ul style="list-style-type: none">■ Fuse blown or circuit breaker tripped■ Loose electrical connections■ Overheated motor	<ul style="list-style-type: none">■ Check for cause of blown fuse/breaker and replace or reset■ Check wiring connections■ Press the reset button or wait for automatic reset
Low pressure	<ul style="list-style-type: none">■ Air leak in safety valve■ Restricted air filter■ Defective check valve	<ul style="list-style-type: none">■ Check valve manually by pulling upward on rings. If condition persists replace valve■ Clean or replace as necessary■ Replace check valve
Safety valve releasing	<ul style="list-style-type: none">■ Defective pressure switch or improper adjustment	<ul style="list-style-type: none">■ Check for proper adjustment and if problem persists, replace pressure switch
Oil discharge in air	<ul style="list-style-type: none">■ Improper oil viscosity■ Too much oil in crankcase■ Compressor overheated■ Restricted air filter	<ul style="list-style-type: none">■ Replace oil with SAE30 or SAE20 weight non-detergent oil■ Drain crankcase and fill to proper level■ Air pressure regulated too high■ Clean or replace filter

EXPLODED DIAGRAM



PARTS LIST

For assistance in solving parts problems please refer to the parts and components for our air compressors by number. When a new replacement is needed, include the model number of the air compressor, part number and quantity required.

If a new assembly is required, include the model number of the air compressor undergoing repair (according to the nameplate), the part name, part number and quantity required according to the number of the parts diagram.

During the break-in period, nuts and bolts have a tendency to loosen up. Tighten all nuts and bolts including head bolts after two weeks, then check everything once a month to make sure all nuts and bolts stay tight.

INDEX #	PART #	DESCRIPTION	QTY.
1	90002-01	Crankcase	1
2	90002-02	Crank	1
3	90002-03	Gasket	1
4	90002-04	Crankcase cover	1
5	90002-05	Oil plug	1
6	90002-06	Gasket	1
7	90002-07	Oil glass	1
8	90002-08	Bolt	1
9	90002-09	Spring washer	1
10	90002-10	Breather	1
11	90002-11	Bolt	1
12	90002-12	Connecting rod	1
13	90002-13	C-clip	1
14	90002-14	Piston pin	1
15	90002-15	Piston	1
16	90002-16	Oil ring	2
17	90002-17	Air ring	1
18	90002-18	Cylinder gasket	1
19	90002-19	Cylinder	1
20	90002-20	Spring washer	1
21	90002-21	Bolt	1
22	90002-22	Valve plate gasket	1
23	90002-23	Valve seat	1
24	90002-24	Valve plate	1
25	90002-25	Aluminum gasket	1
26	90002-26	Cylinder head gasket	1
27	90002-27	Elbow	1
28	90002-28	Cylinder head	1
29	90002-29	Spring washer	4
30	90002-30	Bolt	4
31	90002-31	Muffler	1
32	90002-32	capacitor	1

INDEX #	PART #	DESCRIPTION	QTY.
34	90002-34	Bolt	1
35	90002-35	Plastic cover	1
36	90002-36	Bolt	1
37	90002-37	Fan	1
38	90002-38	Back bearing cover	1
39	90002-39	Motor stator	1
40	90002-40	Bearing	1
41	90002-41	Motor rotator	1
42	90002-42	Bearing	1
43	90002-43	Oil seal	1
44	90002-44	Air tank	1
45	90002-45	Drain valve	1
46	90002-46	Bolt	4
47	90002-47	Washer	4
48	90002-48	Rubber foot	4
49	90002-49	Washer	4
50	90002-50	Screw nut	4
51	90002-51	Handle grip	1
52	90002-52	Safety valve	1
53	90002-53	Pressure switch	1
54	90002-54	Pressure gauge	1
55	90002-55	Nipple	1
56	90002-56	Regulator	1
57	90002-57	Air valve	1
58	90002-58	Pressure gauge	1
59	90002-59	Unloading pipe nut	2
60	90002-60	Unloading pipe	1
61	90002-61	Elbow	1
62	90002-62	Check valve	1
63	90002-63	Exhaust pipe unit	2
64	90002-64	Exhaust pipe	2
65	90002-65	Plug	1
66	90002-66	Power cable	1