

# Air venturi

*The Power of Air*

## User Instruction Manual



4500 psi Air Compressor

# Contents

Parts Included.....	3
Assembly Instructions.....	3-5
Operation Instructions .....	6-7
Oil Change Intervals .....	8
Air Filter Replacement.....	9
Setting the Output Pressure.....	10
Troubleshooting.....	11
Warranty .....	12

<b>! DANGER</b>	<b>DANGER OF EXPLOSION!</b> <b>Overfilled compressed air cylinder</b>	
Do NOT exceed maximum fill pressure of your cylinder at room temperature!		

<b>! IMPORTANT</b>	YOU AND OTHERS WITH YOU SHOULD ALWAYS WEAR SAFETY GLASSES TO PROTECT YOUR EYES. READ ALL INSTRUCTIONS BEFORE USING.
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<b>! WARNING</b>	WARNING - DO NOT OVERFILL AIR CYLINDERS OR AIR GUN TANKS, AS THIS CAN CAUSE SERIOUS INJURY OR DEATH. NEVER SET THE OUTPUT PRESSURE/AUTO SHUT OFF ABOVE 4500 PSI (310 BAR).
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# Parts Included

1. Oil breathing plug
2. Test plug for hose
3. Male to male foster adapter
4. Allen key
5. Replacement output air filter
6. Spare parts
7. Pressure release valve screw



## Assembly Instructions

### Items needed:

- Phillips head screwdriver
- Cup for water
- 1/3 of a quart of Air Venturi 4500 Compressor Oil (AV-C4500-OIL)

1) Remove the cover plate (1.1) on the rear of the compressor unit. Use a phillips head screwdriver to remove all 5 screws. This will expose the water container (1.2).



2) Remove the cover plate on the right side of the compressor unit. Use a phillips head screwdriver to remove all 6 screws. This will expose the motor.



3) Remove the cover from the water container via the 5 phillips head screws using a screwdriver. Add approximately five (5) quarts of water to the container. Distilled water is recommended.



**NOTE:** Be sure the water release spout is closed before attempting to fill water container.

# Assembly Instructions (cont.)

4) Remove the red rubber oil plug by simply pulling it out (4.1). Fill with approximately  $\frac{1}{3}$  of a quart of Air Venturi 4500 Compressor Oil (AV-C4500-OIL) (4.2). Carefully follow the gauge on the oil window to fill to the proper level (4.3). Once an adequate amount of oil has been added, screw the oil breathing plug into the threaded hole (4.4).



**Replace both cover plates before attempting to operate the compressor.**

# Assembly Instructions (cont.)

5) Locate the Pressure release valve screw. Once located, thread the screw into the threaded hole labeled "Release Valve" by turning clockwise. This screw should be hand tight.



**⚠ IMPORTANT:** If you are using the compressor for the first time, do the following: Once you have filled your compressor with oil and water, and have plugged it into an active **110v outlet**, you will need to run the compressor for 10 minutes before connecting it to anything. Do not plug the hose with the test plug or connect an air cylinder. Simply turn the cooling system on, once the cooling system is running, turn the compressor on and let the unit run for 10 minutes. In the case of the **220v version** of the compressor, the same set up procedure is required. Plug the compressor into an active 220v outlet and run it for 10 minutes before connecting to any device you intend to fill. Periodically, during this 10-minute period, open the Pressure Release valve by turning the screw counter-clockwise to allow any excess oil/water to be released. Once the 10-minute period is over, turn the compressor off and allow the unit to cool before using.

# Operation Instruction

1) Connect the compressor to an electrical outlet.

**110v:** These units requires a standard 110v, three prong outlet (1.1).

**220v:** These units require a 220v outlet (1.2).



2) Set the intended max output pressure using the two prong system on the gauge (see page 10).



## **! WARNING**

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3) Close the Pressure Release Valve by turning it clockwise.



4) Connect the fill hose to the cylinder or tank you intend to fill via the quick disconnect attachment on the end of the hose.

- The hose on the compressor ends in a female quick disconnect attachment. If you are filling a tank through an existing hose that also ends in a female quick disconnect, use the included male to-male adapter to connect the two hoses (see *images 4.1 and 4.2*).



- If you are filling a regulated tank that uses a male quick disconnect nipple to fill, you can simply attach the female quick disconnect on the compressor hose directly to the male fitting on the tank.
- If you are filling an unregulated tank that is empty, open the valve on the tank at this point to allow air to begin to flow into the tank.



5) Make sure the system reset button is depressed into the "ON" position.

6) Switch the cooling system switch into the "ON" position.

7) Once the cooling system is running, switch the compressor switch into the "ON" position.

# Operation Instruction

- 8) Monitor the compressor and device you are filling. **DO NOT** leave the compressor and object being filled unattended.

**NOTE:** *If your tank already has a partial fill in it, you will want to keep the valve closed until pressure in the hose is close to the pressure already in the tank. Once the compressor fills the hose within 300 psi of the pressure already in the tank, open the valve.*

- 9) If set properly, the compressor will automatically stop when it reaches the preset output pressure.

**⚠ IMPORTANT:** Standard operating temperature while running should never exceed 95 degrees Celsius. The Compressor is equipped with an auto shut off feature should your unit go above 95 degrees Celsius. If you notice your compressor is operating at temperatures over 95 degrees Celsius and does not shut off automatically, turn it off immediately. Ensure that there are proper amounts of oil and water in the unit and that the cooling system is turned on and running.

- 10) Once the device you are filling reaches the desired fill pressure, turn the compressor switch to the "OFF" position.

- 11) If filling a tank, close the valve on the tank before bleeding the pressure via the Pressure release valve. Turn the Pressure release valve counter-clockwise to release the pressure. If filling an airgun cylinder directly, simply bleed the line via the Pressure Release Valve.

**⚠ CAUTION:** Bleeding the pressure in the compressor will also expel some oil from the Pressure Release valve, it is recommended that you put something under this area to contain or catch the oil. It is also important to note that bleeding the pressure can be loud, if you are in a close space or have sensitive ears it is recommended that you wear hearing protection when bleeding the pressure.

- 12) When all of the pressure is released, the gauge on the compressor will be back at zero (0). At this point, you can disconnect the fill hose from your tank or cylinder.

- 13) Once bled and disconnected, switch the cooling system switch to the "OFF" position.

# Oil Change Intervals

**NOTE:** Air Venturi 4500 Compressor Oil (AV-C4500-OIL) is recommended for use with this compressor.

- As mentioned in the assembly instructions section, you will need to fill your compressor with oil before using it.
- Use the oil level window on the right side of the compressor to monitor and maintain proper oil levels (1).
- It is recommended that you change the oil for the 1st time after one (1) month or 25 hours of use, whichever comes first.
  - You can drain the oil via the screw below the oil level window (2).
- After your first oil change, you should change the oil every three (3) months or 50 hours of use, whichever comes first.





# Output Air Filter Replacement

## Items needed:

- Phillips head screwdriver
- Pliers
- Crescent wrench
- Silicone grease

**NOTE:** It is recommended that you replace the Air Filter every 50 hours of use. Should you require extra Air Filters, they can be purchased through Air Venturi. (216-220-1180).

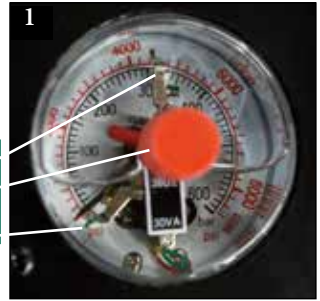
- 1) Remove front cover plate via the 5 phillips head screws using an appropriate screw driver.
- 2) Remove Air Filter cover. Turn counter-clockwise to loosen (this will require a crescent wrench to do).
- 3) Once the Air Filter cover is removed, use pliers to grab the metal pull rod and pull filter out.
- 4) Remove the metal pull rod from the used air filter.
- 5) Place metal pull rod in new air filter.
- 6) Replace air filter.
- 7) Apply silicone grease to o-ring on the Air Filter cover.
- 8) Turning clockwise, replace the Air Filter cover. Make sure this part is wrench tightened.
- 9) Replace the front cover plate.



# Setting the Output Pressure *(Auto Shut Off)*

Setting the max output pressure on your compressor is a two prong system. The green prong should always remain at the zero (0). The red prong is the one you will be adjusting. The red knob on the top of the gauge allows you to adjust the prongs.

- Fill Pressure Adjustment (red prong)
- Adjustment Knob
- Starting Pressure (green prong)



1) Using the red adjustment knob, rotate it to the left side of the red prong.

2) Press down on the adjustment knob. This will engage the adjustment and allow you to move the red prong to the right.



3) Keeping the adjustment knob depressed, move the red prong to your desired max fill pressure.



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4) Once your desired pressure is reached, release the adjustment knob. It will disengage from the red prong, leaving it at that setting.

- If you adjust the output pressure too high, you can bring it back down by simply moving the adjustment knob to the right side of the red prong and depressing it. This will allow you to reduce the intended output pressure by turning the knob to the left.

**NOTE:** DO NOT adjust the output pressure setting once the compressor is running.

5) When the compressor reaches the red prong (the intended max fill pressure) it will automatically shut off.

- Be aware that the compressor switch will still be in the “ON” position. You will need to turn it “OFF” before bleeding the pressure via the Pressure Release Valve.

# Troubleshooting

**Issue** - Cooling system will not start

- **Resolution** - Plug compressor into active electrical outlet

**Issue** - Compressor is not building pressure

- **Resolution** - Make sure bleed valve is closed. It should be hand tightened.  
If bleed valve is closed and the compressor is still not building pressure, contact Air Venturi by calling, **216-220-1180**.

**Issue** - Compressor shuts off before reaching desired pressure.

- **Resolution** - Make sure the Output Pressure (Auto Shut Off) is set properly.  
- **Resolution** - If this occurs, the System Reset button will likely pop out. You will need to close the valve of the device you are filling and bleed the line via the Pressure Release Valve on the compressor. Press the System Reset button back into the "ON" position. Begin the fill process over as detailed in the "*Operation Instruction*" section. Should this problem persist, contact Air Venturi by calling, 216-220-1180.

**Issue** - Burst disc failure

- **Resolution** - Should the burst disc fail during use of the compressor, close the valve of the device you are filling and then shut off the compressor. Open the Pressure Release Valve to let the remaining air vent from the compressor. Once you have verified the burst disc has failed (there will be a hole in it) by removing the burst disc retention screw (pictured right), remove the broken burst disc from the unit. You will find additional burst discs in the bag of spare parts that comes with the compressor. Install a new burst disc, and re-insert the burst disc retention screw by turning clockwise. If you do not have additional burst discs, contact Air Venturi for replacement at: **216-220-1180**.



**In the unlikely event that your compressor malfunctions, DO NOT ATTEMPT TO FIX THE PROBLEM YOURSELF. Please call Air Venturi's service line so we can address any issues or have you return the compressor for repair. Air Venturi Service Line: 216-220-1180**

# Warranty

## One Year Limited Warranty

Your Air Venturi Compressor is manufactured to the highest possible standards, using quality materials to give a lifetime of service. In the unlikely event that there are any defects in materials or workmanship in the first twelve (12) months after retail purchase, we will repair or replace the defective items under warranty.

### What is covered?

- Replacement Parts and labor.
- Transportation charges to consumer for repaired product.

### What is NOT covered?

- Any damage or faults caused by owner misuse, action or inaction.
- Transportation charges to Air Venturi for defective products.
- Damages caused by abuse or failure to perform normal maintenance.
- Any other expense.
- Parts subject to normal wear and tear.
- Consequential damages, incidental damages or incidental expenses including damage to property.

This warranty is in addition to your statutory rights. Retain your sales receipt as proof of purchase.

*NOTE: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.*

### Warranty claims:

Call Air Venturi at 216-220-1180 before returning any product.

### Implied Warranties:

Any implied warranties, including the implied warranties of merchantability and fitness for a particular purpose, are limited in duration to one year from the date of retail purchase.

*NOTE: Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.*

To the extent any provision of this warranty is prohibited by federal, state or municipal law, which cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights, any you may also have other rights, which vary from state to state and country to country.

Illustrations and photographs are for information purposes only and may not show the exact model you purchased.

### This warranty shall be invalid if the Compressor:

- Has been incorrectly disassembled, reassembled or maintained.
- Has been fitted with non--Air Venturi parts.
- Has been abused, misused or improperly stored.
- Original purchase receipt cannot be presented.







# Air venturi

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**AIR VENTURI**

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