



**PCP Airgun Charging  
Station**  
**100 cu.in. / 74 cu.ft.**  
**/ 98 cu. ft.**  
**Carbon Fiber Tank &  
Accessories**

## **User Operation Manual and Safety Instructions**



**BRAND:** Air Venturi  
**DESCRIPTION:** PCP Airgun Charging System  
**FILL PRESSURE:** 4,500 psi (310 bar)

### **Contents:**

- Carbon fiber tank
- Hose with 1/8" BSPP threads on both ends
- Female quick-disconnect adapter at output end of hose (includes patented technology that automatically restricts the flow rate into the airgun)
- Valve with inline pressure gauge
- Seal washer

**READ AND UNDERSTAND THIS ENTIRE MANUAL BEFORE USE! THIS INFORMATION  
COULD SAVE YOUR LIFE AND THE LIVES OF OTHERS.**

***DEALERS:** This owner's manual must be given to the retail customer with the tank at the time of purchase.*

***CUSTOMERS:** Shooters are advised to keep this manual and associated instructions for future reference by all users of this high-pressure air tank even if it's resold or loaned.*

**! WARNING: IMPROPER USE, FILLING, STORAGE, DISPOSAL OR FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY OR DEATH. NEVER MODIFY THE AIR CYLINDER IN ANY WAY.**

**! WARNING:** IF YOU SUSPECT THAT YOUR CARBON FIBER (COMPOSITE) CYLINDER HAS BEEN HEATED TO TEMPERATURES OF 132.8° F/56°C OR MORE, IT MUST BE HYDROSTATICALLY RETESTED AND FULLY RE-QUALIFIED BEFORE FURTHER USE. COMPOSITE CYLINDERS EXPOSED TO, OR WITH EVIDENCE OF EXPOSURE TO HEAT IN EXCESS OF 161.6° F/72°C MUST BE CONDEMNED AND REMOVED FROM SERVICE.

**! WARNING:** FILL YOUR AIR VENTURI AIRGUN CHARGING SYSTEM USING COMPRESSED AIR OR NITROGEN GAS ONLY. USE OF OTHER GASES, INCLUDING OXYGEN, CAN CAUSE A FIRE OR EXPLOSION THAT MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY OR DEATH.

**! WARNING:** DO NOT INTRODUCE PETROLEUM BASED PRODUCTS TO THE VALVE OR CYLINDER, OR IT MAY CAUSE AN EXPLOSION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY OR DEATH.

~~ALWAYS~~ ALWAYS YOUR AIR VENTURI AIRGUN CHARGING SYSTEM IN A SAFE LOCATION OUT OF THE REACH OF CHILDREN AND ANYONE UNFAMILIAR WITH ITS PROPER USE OR CARE.

~~NOTE:~~ THE BOX YOUR UNIT WAS SHIPPED IN FOR FUTURE STORAGE WHILE NOT IN USE OR FOR LATER SHIPMENT OF THE UNIT. VALVE MUST BE REMOVED FOR TRANSPORT BY AIR SHIPMENT! (SEE INSTRUCTIONS BELOW)

Congratulations on your purchase of the **Air Venturi PCP Airgun Charging System**. Please read this instruction manual completely. Always carefully follow the safety instructions found in this manual and keep this manual in a safe place for future use.

If you have any questions regarding your new PCP Airgun Charging System, please contact the Air Venturi service line at 216-220-1180.

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# 1. Safety Instructions

- **ALWAYS** wear eye protection when working with compressed gas
- **ALWAYS** have the cylinder inspected and/or hydrostatically retested if it shows signs of corrosion, gouges, indents, bulges and/or heat damage, or if it has been dropped or otherwise damaged.
- **ALWAYS** fill your Air Venturi PCP Airgun Charging System using compressed air or nitrogen gas **ONLY**.
- **ALWAYS** store your Air Venturi PCP Airgun Charging System in a cool, dry location with adequate ventilation and out of the reach of children and anyone unfamiliar with its proper use.
- **NEVER** let a person who has not completely read this manual use this product.
- **NEVER** ask for a cylinder to be filled beyond its rated capacity. Overfilling is **DANGEROUS**.
- **NEVER** add or introduce petroleum-based products to the valve or cylinder.
- **NEVER** expose your cylinder to excessive heat.
- **NEVER** overfill or have your cylinder filled beyond its rated capacity. Overfilling may result in property damage, personal injury or death.
- **NEVER** tamper with or alter the cylinder valve, safety relief device or other cylinder attachments.
- **NEVER** use this cylinder for applications other than charging your PCP airgun.
- **NEVER** use caustic paint strippers or corrosive cleaners, which will damage the cylinder.
- **NEVER** use heat-activated paint (such as baked enamel or powder coating) on your cylinders. Use only air-drying paints.

**Composite cylinders must be hydrostatically tested every 5 years. Plus, composite cylinders have a maximum life of 15 years from their original hydrostatic test date.**

***ALWAYS make sure your cylinder is within its retest period.***

## 2. Customer Service

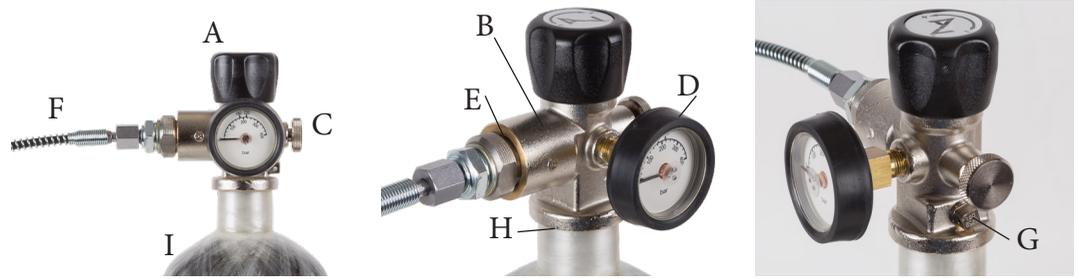
- Do not use this PCP Airgun Charging System until you have read and understood this owner's manual.
- In the unlikely event your PCP Airgun Charging System malfunctions or exhibits reduced performance, **DO NOT** attempt to fix the problem yourself. Please call Air Venturi to address any issues.

**Air Venturi service line: 216-220-1180**

## 3. Learning the Parts of the Air Venturi PCP Airgun Charging System

Learning the names of the parts of your new PCP Airgun Charging System will help you to understand the instruction manual.

- (A) Hand Wheel
- (B) Valve Body
- (C) Bleed Screw
- (D) Gauge
- (E) Connector
- (F) High Pressure Hose w/ Female Quick Disconnect Fitting
- (G) Safety Relief Valve
- (H) Valve O-Ring
- (I) Tank



**Figure 1**

## 4. Setup and Inspection Prior to Use

**! WARNING: HIGH PRESSURE AIR IS DANGEROUS – TREAT IT WITH RESPECT!**

**! WARNING: ALWAYS WEAR EYE PROTECTION WHEN WORKING WITH COMPRESSED GAS! VENTING GAS CAN AND DOES ACCELERATE PARTICLES OF DIRT AND DEBRIS TO HIGH VELOCITY. KEEP ALL PERSONS WITHOUT EYE PROTECTION OUT OF THE IMMEDIATE AREA!**

**NOTE: ALWAYS** think about safety first. Take your time. If you are uncertain how to proceed, stop and contact Air Venturi for assistance! **Air Venturi service line: 216-220-1180**

**NOTE: ALWAYS** have the cylinder inspected and/or hydrostatically retested if it shows signs of corrosion, gouges, indents, bulges and/or heat damage or if it has been dropped or otherwise damaged.

- 4.1 Make sure that the Bleed Screw (C) is closed by turning in a clockwise direction, only finger tight, DO NOT over tighten.
- 4.2 Check that the Connector (E) is securely screwed into the main Valve Body (B) using the grip around the outside of the fitting.
- 4.3 Make sure that the High Pressure Hose with Quick Disconnect Fitting (F) is securely attached to item (E), check the hose for any signs of external damage.
- 4.4 Inspect the Gauge (D) for damage and that the indicator is on the zero (0) stop position.
- 4.5 Connect the High Pressure Hose with Female Quick Disconnect Fitting (F) to your PCP Airgun.

## 5. Airgun Charging Process

**NOTE: ALWAYS** think about safety first. Take your time. If you are uncertain how to proceed, stop and contact Air Venturi for assistance! **Air Venturi service line: 216-220-1180**

**NOTE: ALWAYS** have the cylinder inspected and/or hydrostatically retested if it shows signs of corrosion, gouges, indents, bulges and/or heat damage or if it has been dropped or otherwise damaged.

**NOTE:** Many PCP airguns have a built in pressure gauge. You may use this gauge to confirm your PCP airgun is filled to the level as recommended by the gun manufacturer.

**NOTE:** Disconnecting the fill hose from the airgun without first bleeding the air may result in injury from hose whip as a result of pressure in the fill hose.

- 5.1 Close the Bleed Screw (C) by turning in a **clockwise** direction, only finger tight.
- 5.2 Open the Hand Wheel (A) slowly and with care using your finger and thumb only in a **counterclockwise** direction. Control the filling flow with finger and thumb so that air enters the PCP Airgun pressure chamber slowly.
- 5.3 Observe the Gauge (D) reading as it rises and STOP the flow when the gauge reaches the gun manufacturer's recommended working pressure for your particular PCP Airgun by turning the Hand Wheel (A) in a **clockwise** direction. Only use finger tight to shut the valve off. Over-tightening of the valve may damage its operation. **NOTE: If the valve is not shut off before the pressure is too great your gun can sustain damage and possibly not function correctly.**
- 5.4 **NEVER disconnect the hose from your PCP airgun at this stage as the valve and hose still contains air at high pressure.**
- 5.5 Prior to disconnecting the hose from the gun, open the Bleed Screw (C) by turning in a **counterclockwise** direction. The design of the bleed screw is such that only a small movement to open is sufficient to discharge the trapped air. The Gauge (D) will then indicate zero and only then is it safe to disconnect the hose from the PCP Airgun.

## 6. Recharging the Air Cylinder

**! WARNING:** FILL YOUR AIR VENTURI PCP AIRGUN CHARGING SYSTEM USING COMPRESSED AIR OR NITROGEN GAS ONLY. USE OF OTHER GASES, INCLUDING OXYGEN, CAN CAUSE A FIRE OR EXPLOSION THAT MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY OR DEATH.

**! WARNING:** DO NOT FILL CYLINDER WITH OXYGEN OR ANY GAS OTHER THAN AIR! FILLING WITH ANYTHING OTHER THAN AIR IS DANGEROUS AND WILL VOID YOUR WARRANTY.

**! WARNING:** DO NOT EXCEED MAXIMUM FILL PRESSURE OF 300 bar/4500 psi AT ROOM TEMPERATURE!

**! WARNING:** USE DIVER'S SILICONE GREASE ONLY WHERE LUBRICATION IS INDICATED IN THIS MANUAL. ANY OTHER TYPE OF GREASE WILL VOID THE WARRANTY AND MAY BE FLAMMABLE OR EXPLOSIVE.



**CAUTION:** USE ONLY DRY, FILTERED COMPRESSED AIR OR NITROGEN IN THE CYLINDER. USE NO OTHER GAS, INCLUDING OXYGEN, WHICH

CAN CAUSE A FIRE OR EXPLOSION THAT MAY RESULT IN SERIOUS INJURY OR DEATH.

**CAUTION:** WHEN FILLING THE COMPRESSED AIR CYLINDER, THE COMPRESSED AIR **MUST NOT CONTAIN OIL, WATER OR ANY OTHER CONTAMINANT.**

**CAUTION:** COMPRESSED AIR CYLINDERS MUST NEVER BE OPENED OR MODIFIED MECHANICALLY BY UNAUTHORIZED SPECIALISTS.

**CAUTION:** THE COMPRESSED AIR CYLINDER MUST BE PROTECTED FROM FORCEFUL IMPACTS.

**CAUTION:** THE COMPRESSED AIR CYLINDER IS NOT INTENDED FOR TRANSPORT OF OTHER GASES.

**NOTE:** ALWAYS think about safety first. Take your time. If you are uncertain how to proceed, stop and contact Air Venturi for assistance! **Air Venturi service line: 216-220-1180**

**NOTE:** ALWAYS have the cylinder inspected and/or hydrostatically retested if it shows signs of corrosion, gouges, indents, bulges and/or heat damage or if it has been dropped or otherwise damaged.

- 6.1 **ALWAYS** fill your Air Venturi PCP Airgun Charging System using compressed air or nitrogen gas **ONLY.**
- 6.2 Refer to the rules at the charging station for instructions.
- 6.3 **NOTE:** Some charging stations submerge cylinders in water as a method to keep them cool while filling. **If this is the case, then warn them not to submerge the Gauge (D) as this may cause damage to the gauge.**

**CAUTION:**

- **NEVER** ask for a cylinder to be filled beyond its rated capacity. Overfilling is **DANGEROUS.**
- **NEVER** use or have your cylinder filled if it leaks or if you suspect that your cylinder has been damaged.
- **NEVER** fill a cylinder on which the safety relief device has been altered in any way.
- **NEVER** fill a cylinder that is outside its periodic inspection period.
- **NEVER** modify your cylinder in any way or add attachments that are not authorized. Unauthorized modifications are illegal and could make you cylinder **DANGEROUS.**

## 7. Valve Removal from the Cylinder

**CAUTION:** DO NOT PROCEED UNTIL YOU HAVE READ AND UNDERSTAND ALL THE INSTRUCTIONS LISTED BELOW!

**! WARNING:** UNSCREWING THE VALVE FROM A CHARGED CYLINDER CAN CAUSE THE VALVE TO FLY OFF WITH ENOUGH FORCE TO CAUSE PROPERTY DAMAGE, SERIOUS INJURY OR DEATH.

- 7.1 To transport your Air Venturi PCP Airgun Charging System by air-freight or as a luggage item on an airline you will be **required** to prove the system is not pressurized by removing the filling valve assembly.
- 7.2 First remove the complete hose assembly using the chromed knurled part of the Connector (E) from the main Valve Body (B).
- 7.3 Your Air Venturi PCP Airgun Charging System has a slow flow feature built into the valve to reduce the risk of high pressure air entering your PCP Airgun too quickly and causing damage to the Airgun. As a result, your system may take up to 30 minutes to empty depending on how far you open the valve and the existing pressure level in the cylinder.
- 7.4 Place and secure your Air Venturi PCP Airgun Charging System in a location so the valve opening is pointing in a safe direction, away from people, pets and items that could be damaged by the flow of exiting air. Never try to restrict the flow of air from your unit by using your hand to cover a port or leak. High pressure air can cause serious physical injury if directed against the surface of your skin.
- 7.5 Close the Bleed Screw (C) and open the Hand Wheel (A) slowly and with care. Use your finger and thumb only in a **counterclockwise** direction. Control the filling flow with your finger and thumb so that air is released from your Air Venturi PCP Air Charging System.
- 7.6 You **cannot** use the Gauge (D) to monitor the pressure during this operation as it only provides an accurate reading when attached to a PCP airgun. Listen to the flow of air and open the valve up to the maximum level over a few minutes.
- 7.7 When the sound of air stops the Air Venturi PCP Airgun Charging System should be empty. To ensure this is true you can attempt to fill your PCP Airgun as instructed in the fill section. You will notice the Gauge (D) will read zero when you open the valve if the unit is empty.
- 7.8 Prior to removing the valve from your cylinder make certain you have closed the Bleed Screw (C) and opened the Hand Wheel (A).
- 7.9 The Valve Body (B) is only hand tightened into the Cylinder (I). To remove the valve, begin by orienting the valve away from your body, other people and any objects in the area.
- 7.10 Rotate the valve slowing in a **clockwise** direction when the valve is oriented away from your body. **YOU SHOULD NOT HEAR ANY ESCAPING AIR WHILE COMPLETING THIS ACTION. IF YOU DO BEGIN TO HEAR THE SOUND OF ESCAPING AIR – STOP - PLACE THE UNIT IN A SAFE LOCATION UNTIL THIS SOUND STOPS!** You may then repeat steps 7.9 through 7.11 until the valve is removed.
- 7.11 The threads in the Cylinder (I) and on the stem of your Valve Body (B) can be easily damaged and may become no longer usable if treated improperly. Accordingly, after removing the valve body it is recommended that you transport it in its own individual padded container separate from your cylinder.

## 9. Maintenance of Cylinder

**NOTE: ALWAYS** keep the threads and inside of your cylinder dry and free from oil, dirt and other contaminants.

**NOTE: ALWAYS** make sure your cylinder is within its retest period.

Your Air Venturi PCP Airgun Charging System features a lightweight carbon fiber (composite) wrapped cylinder approved by the Department of Transportation (DOT) for production and sale in the United States. This cylinder uses advanced design technology and materials to provide a very light and durable product. The DOT requires all cylinders of this type to be hydrostatically tested.

- **ALWAYS** keep the fill adapter clean and dry.
- **ALWAYS** keep the threads of the valve body and cylinder free from oil, dirt and other contaminants. You may wipe these with a clean dry cloth if required.
- **NEVER** overfill or have your cylinder filled beyond its rated capacity. Overfilling may result in property damage, personal injury or death.
- **NEVER** tamper with or alter the cylinder valve, safety relief device or other cylinder attachments.
- **NEVER** use this cylinder for applications other than charging your airgun.
- **NEVER** use caustic paint strippers or corrosive cleaners, which will damage the cylinder.
- **NEVER** use heat-activated paint (such as baked enamel or powder coating) on your cylinders. Use only air-drying paint.
- **NEVER** use lubrication, Teflon tape or thread-locking compound.
- **NEVER** alter or modify the cylinder in any way.
- **NEVER** try to restrict the flow of air from your unit by using your hand to cover a port or leak. High-pressure air can cause serious physical injury if directed against the surface of your skin.
- Improper use, filling, storage, disposal or failure to follow instructions may result in property damage, serious injury or death.
- Periodically check the valve and fill hose for thread integrity, cracks or other wear. Immediately replace any suspect part.

## 10. Cylinder Testing Requirements

**Test composite cylinders every 5 years**

**Note: Composite cylinders have a maximum life of 15 years from their original hydrostatic test date**

The date of manufacture is listed on the label that is permanently attached to your cylinder. The date is below the label text that lists DOT information and is listed in a month-and-year format. For example if your cylinder reads “01-CL-15” that means your cylinder was manufactured in January of 2015, requiring its first re- test on or before January 2020 and again on or before January 2025. The last date your cylinder would be usable would be January 2030, which is the end of the 15th year. At that time the cylinder would have to be replaced. Many scuba diving shops can perform the retesting required. If you require assistance finding a service provider contact Air Venturi customer service. Your filling valve does not require any retesting.

## CAUTION:

- **ALWAYS** keep the outside of your cylinder clean, using mild soap or a neutral detergent cleaning solution when necessary. Thoroughly dry the cylinder after cleaning.
- **ALWAYS** store the cylinder in a cool, dry area with adequate ventilation.
- **ALWAYS** have your cylinder serviced by trained personnel
- **ALWAYS** make sure that all cylinder attachments are maintained, serviced, inspected and handled in strict accordance with manufacturer's instructions.
- **NEVER** alter or obscure cylinder markings.
- **NEVER** allow your cylinder to roll around while traveling.
- **NEVER** drop, strike or heat your cylinder.
- **NEVER** expose your cylinder to excessive heat (see temperature guidelines above).
- **NEVER** attempt to modify the threads or force a valve into your cylinder.
- **NEVER** modify your cylinder by adding extra openings for gauges or filling ports.

## 11. Warranty

### **One-Year Limited Warranty:**

Your Air Venturi carbon fiber tank and accessories are manufactured to the highest possible standards, using the finest materials to give a lifetime of service. In the unlikely event 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.

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:**

Warranty claims for U.S. and Canadian customers.

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 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, and 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.

## **The warranty shall be invalid if the PCP Airgun Charging System:**

- Has been incorrectly disassembled, reassembled or maintained.
- Is found to have lubrication not recommended by Air Venturi.
- Has been fitted with non-Air Venturi parts.
- Has been abused, misused or improperly stored.
- Original purchase receipt cannot be presented.

## **12. Repair Service**

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

## **13. Company Contact Information**



**Air Venturi**  
**5135 Naiman Parkway**  
**Solon, OH 44139**  
**216-220-1180**  
[www.airventuri.com](http://www.airventuri.com)

**For assistance, technical support or warranty claims,  
contact the Air Venturi service line: 216-220-1180**

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AV-Carbon-Fiber-Tank – 2.0



# Air venturi

*The Power of Air*

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