G7S Hand Pump
Owner’s Manual
Specifications
24.80 inches long—closed 4500 psi/310 bar max pressure
43.31 inches long—extended

Features
Integral manometer (pressure gauge)
Folding footplate
Test plug
Comfortable, ergonomic handles
Micro-bore hose
Easy accessible bleed valve
Flexible hose with spiral steel cage
Quick-disconnect with female coupling
One-year warranty

Accessories
1: Spanner Wrench ................................................. 1 pc
2: High-pressure Stem Sealing Ring ....................... 2 pcs
3: High-pressure Piston Ring ................................... 2 pcs
4: O-ring .............................................................. 5 pcs
5: Outer Tube Piston Ring ..................................... 2 pcs
6: Check Valve Spring ......................................... 2 pcs
7: Sealing Gasket for Bleed Valve ......................... 2 pcs
8: Low-pressure Piston Ring ................................... 2 pcs
9: Seal Ball (for one-way inlet hole) ..................... 2 pcs
10: Allen Wrench .................................................. 1 pc
11: Maintenance oil ............................................... 1 pc
12: Female Quick-disconnect ................................. 1 pc
13: Test Plug .......................................................... 1 pc
14: T Wrench ............................................................. 1 pc

If you need technical or maintenance help, call Air Venturi tech support: 216-220-1180
A: Rubber grip with filters
B: Pump cylinder
C: Base plate
D: Pressure gauge
E: Hose
F: Female quick-disconnect coupling
G: Test plug
H: Bleed valve
Testing

1. Insert the test plug (G) into the female quick disconnect (F)
2. Be sure the collar on the female fitting snaps forward when installing, securing it in place. In some cases, you may have to push the collar forward into the secure position
3. Apply tension to the female fitting in an attempt to pull it off of the male fitting to make sure the connection is secure. If for any reason the male and female connectors separate during this process, contact Air Venturi tech support at 216-220-1180.
4. Open the bleed valve (H) completely
5. Pump the handle rapidly about 20 times - you should face little/no resistance during pumping. This ensures that there is no air built up in the line.
6. Tighten bleed valve (H) completely
7. Pump the handle rapidly until the gauge reads 100 bar/1450 psi
8. Open the bleed valve (H) to release air
Operation

1. Before you start pumping:
2. Make sure the bleed valve is tightened completely.
3. Stand on the pump's footplate to stabilize the unit.
4. Make sure hose is straight (no kinks or bends)
5. Connect the pump to the reservoir/airgun you want to fill with air.
6. Be sure the collar on the female fitting snaps forward when installing, securing it in place. In some cases, you may have to push the collar forward into the secure position.
7. Apply tension to the female fitting in an attempt to pull it off of the male fitting to make sure the connection is secure. If for any reason the male and female connectors separate during this process, contact Air Venturi tech support at 216-220-1180.
8. Start pumping by pulling the handle completely up, pause, then push pump handle all the way down. The pressure will initially spike, and as you continue pumping, it will rise slowly.*
9. As you continue to pump, you will experience increased resistance as the pressure in the reservoir increases.
10. Repeat pumping until the gauge shows you've reached the desired pressure. Be sure to not overheat pump.
11. Once desired pressure reached, open the bleed valve quickly to release the remaining air in the hose. You may see water vapor/water drops when bleeding out the air - this is normal.

Important: Open Bleed valve on pump quickly and fully, do not bleed slowly. This ensures the check valve on the airgun or container closes completely and immediately.

If you are filling a scuba or carbon fiber tank that has a shut-off valve, you will need to shut off the valve before opening the bleed valve on the pump.

* Several quick strokes may be required to initially seat seals in some filling adapters and valves. Once gauge shows gaining pressure, slow down to prevent overheating.
Using the spanner wrench, open the check valve in the base plate. Clean or replace the check valve.
When you bleed the air from the hose, you may hear hissing and the sound of water as the air is released. That’s the residual air left in the hose. The larger the volume of air, the louder the sound. If it’s exceptionally loud or louder than what you’ve previously experienced, the check valve of the reservoir or container may not be functioning properly.

It’s also possible the valve in the reservoir or tank may be defective, loose or not working properly. To ensure the check valve on the gun or container closes completely and immediately, fully and quickly open the bleed valve on the pump. Do not slowly or partially open the pump’s bleed valve.

To determine if it’s the pump or the device that’s being filled, use the pump to fill other tanks or reservoirs. If the other items do not exhibit the same issues, then the pump is not the cause of the problem.

Fig. 7-4

Lubricate pump with silicone oil as shown.

Pump up and down several times (without connecting to a reservoir or tank and without using the test plug) after adding the silicone oil. Any excess oil must be drained from the pump through the pumping action in order to avoid the possibility of an explosion.

When you bleed the air from the hose, you may hear hissing and the sound of water as the air is released. That’s the residual air left in the hose. The larger the volume of air, the louder the sound. If it’s exceptionally loud or louder than what you’ve previously experienced, the check valve of the reservoir or container may not be functioning properly.

It’s also possible the valve in the reservoir or tank may be defective, loose or not working properly. To ensure the check valve on the gun or container closes completely and immediately, fully and quickly open the bleed valve on the pump. Do not slowly or partially open the pump’s bleed valve.

To determine if it’s the pump or the device that’s being filled, use the pump to fill other tanks or reservoirs. If the other items do not exhibit the same issues, then the pump is not the cause of the problem.
One-year limited warranty

The G7S pump is warranted to the retail consumer for one year from the date of retail purchase against defects in material and workmanship.

**What is covered:** Replacement parts and labor. Transportation charges to consumer for repaired product.

**What is NOT covered:** (1) Transportation charges to Air Venturi for defective products. (2) Damages caused by abuse or failure to perform normal maintenance. (3) Parts subject to normal wear and tear. (4) Consequential damages, incidental damages or incidental expenses including damage to property. (5) Any other expense.

**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 for U.S. and Canadian customers:** Return product to Air Venturi. 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 purchased.

**Warranty will be invalid if:** (1) The pump has been incorrectly disassembled or reassembled. (2) The pump is found to have lubrication not recommended by Air Venturi. (3) The pump has been fitted with non-Air Venturi parts. (4) The pump has been misused or abuse. (5) The original purchase receipt cannot be presented.

**Warranty does NOT cover:** (1) Any damage or faults caused by owner misuse or action. (2) Shipment damage of the pump to or from Air Venturi.

This warranty is in addition to your statutory rights. Retain your sales receipt as proof of purchase, as it will be required to obtain warranty service.
Troubleshooting

Issue #1—The pressure gauge needle isn’t moving or seems to be moving very slowly even though you’ve been pumping for some time.

Caused: You didn’t close the bleed valve.

Solution: Close the bleed valve.

Caused: Air leak in the pump or hose.

Solution: Test for slow leaks by putting the pump base, hose and test plug in water to see if there are bubbles, which indicate leaking air.

Issue #2—While pumping, the upward stroke is light but the downward stroke is heavy...or the pump handle pushes up by itself.

Caused: Faulty o-ring.

Solution: Refer to figure 7-2 to replace o-ring.

Issue #3—During pumping, the upward pull is very heavy, and the pump handle is automatically sucked back down without manual effort.

Caused: Dirt in the check valve.

Solution: Remove dirt from check valve.

Caused: Check valve in the base plate is damaged or isn’t sealing for another reason.

Solution: Refer to figure 7-3 to replace or fix check valve.

Issue #4—Upward and downward strokes are unusually heavy.

Caused: Lack of oil.

Solution: Refer to figure 7-4 to properly lubricate.

Issue #5—Pressure gauge needle doesn’t point to zero.

Caused: Defective pressure gauge.

Solution: Replace pressure gauge.

If you need technical or maintenance help, call Air Venturi tech support: 216-220-118
Notes