

SHP REGULATOR

REGULATOR FACTORY SET 1100 PSI (+ - 25 PSI)
ADJUST TO 950 PSI (+ - 25 PSI) SEE PAGE 4

FILLING YOUR SHP Regulator is equipped with the standard “QD Style” fill fitting, which allows your NINJA SHP REGULATOR to be refilled either on or off the marker. The regulator may be filled with either Clean, Dry Compressed Air or Nitrogen.

▲ UNDER NO CIRCUMSTANCES SHOULD ANY POWER SYSTEM BE REFILLED WITH PURE OXYGEN!!!!!!

When filling your SHP REGULATOR, do not exceed the pressure rating shown on your system’s storage bottle! A high pressure gauge showing bottle pressure is standard on your system.

Your SHP REGULATOR simply screws into your markers ASA fitting. The regulator has a “pin valve” output valve which shuts off the gas delivery when the power system is removed from the marker.

THE SAFETY SYSTEM

All SHP REGULATOR’s are equipped with an ASTM APPROVED bottle Burst Disk required by the D.O.T. Without this safety it wouldn’t be legal to fill the bottle.

In addition to the required safety burst disk, SHP REGULATOR’S have an 1800 PSI safety burst disk (stamped 1800 PSI).

If the 1800 PSI safety burst disk vents, it did so for a reason. We recommend you do the following:

- **Disassemble the regulator (refer to page 2) inspect the regulator for contamination and clean if necessary.**
- **Install a new 1800 psi burst disc. and refill the system.**
- **If the 1800 psi burst disc vents after rebuild CALL 877-NINJAUSA OR see an airsmith for help.**

ALWAYS CHECK THE TO MAKE SURE THERE IS NO GAP BETWEEN THE BOTTLE AND REGULATOR SEAL. SEE ILLUSTRATION BELOW. IF THERE IS A GAP ▲ **STOP!!! DO NOT FILL OR USE YOUR SYSTEM. PLACE THE SYSTEM ON THE GROUND AND WAIT FOR THE SYSTEM TO FULLY DEGAS! CONTACT A QUALIFIED AIRSMITH IMMEDIATELY!**



SERVICE & REBUILD PROCEDURES

SPARE PARTS & REBUILD KITS AVAILABLE AT NINJAPAINBALL.COM

PRIOR TO DISASSEMBLY FULLY DEGAS THE AIR SYSTEM BY
DEPRESSING THE PIN VALVE UNTIL NO AIR REMAINS IN THE BOTTLE!!!
IF YOU ARE NOT COMFORTABLE WITH DISASSEMBLING THE REGULATOR
BRING THE REGULATOR TO A QUALIFIED AIR SMITH!
OR CALL 1.877.NINJAUSA. • (1.877.646.5287)

1. Remove the two 10-32 set screws that lock the Bonnet (the top portion of the regulator) to the Reg Body.
2. Unscrew the Bonnet counter clockwise from the Reg Body. Bonnet should remove easily. Make sure there is no trapped air in the bonnet by depressing the pin valve.

Helpful Hint: A 10-32 bonnet removal tool (2" long screw) was included with you airtsystem, simply screw the tool into one of the bonnet set screw holes to ease the removal and reinstallation of the bonnet.

DO NOT APPLY HEAT! If the bonnet does not easily unscrew, **MAKE SURE THE SYSTEM IS COMPLETELY DEGASSED BY DEPRESSING THE PIN VALVE TO EXHAUST ANY TRAPPED GAS.**

Be careful not to lose the brass Output Pin Valve or its spring.

3. After separating the bonnet from the gas distribution body the spring pack, shims (if present), SRT piston, and Output Pin Valve components can be removed. Helpful Hint: Do not use tools to remove the SRT piston as this may damage the piston. Firmly grip the end of the piston and wiggle the piston while pulling.

4. Clean the inside of the **SHP REGULATOR** body and bonnet with a cotton swab.

5. To reassemble, lightly lubricate both SRT piston "O" rings using Ninja Lube.

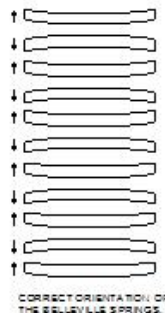
6. Re-install the Output Pin Valve & Spring.

7. Carefully push the Piston Assembly into the piston bore in the bonnet. The Piston must be properly seated in the Bonnet before proceeding further. The Piston is properly seated when it cannot be pushed in any further.

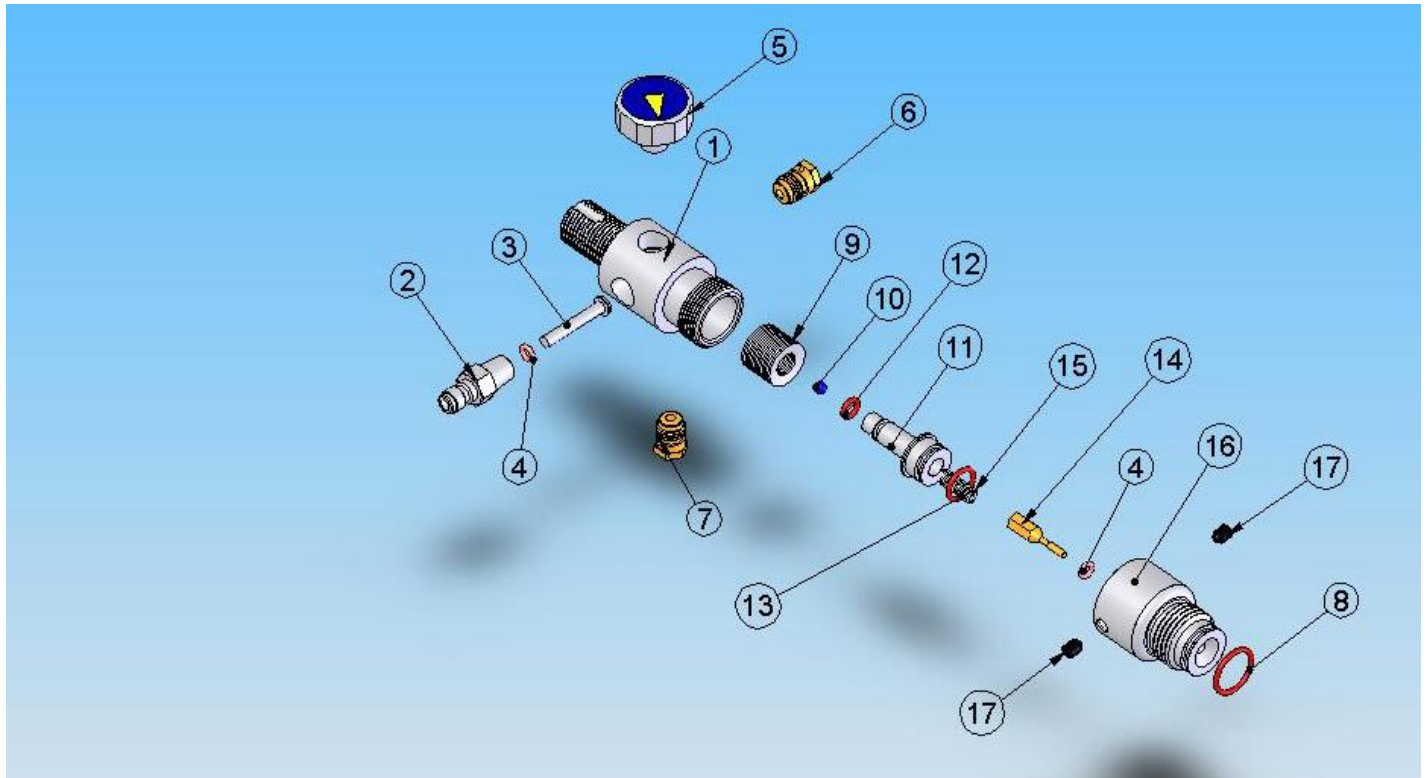
8. Reinstall the spring pack, see illustration below on how to stack, and shims, (if present).

Carefully screw the Bonnet back onto the Reg Body. Make sure the bonnet is installed fully. The bonnet should be contacting the top of the gas distribution body there should be no gap. The 2" bonnet assembly tool will help with the install. **DO NOT APPLY EXCESSIVE TORQUE!**

For reference purposes, consult the exploded parts diagram on the following page. Place the Belleville Springs over the small end of the Piston, in the correct order, see figure below. Note the head of the piston is on the bottom.



SHP PRESET REGULATOR EXPLODED VIEW



1. GAS DISTRIBUTION BODY
2. FILL FITTING
3. CHECK STRUT
4. 006-90 URETHANE ORING
5. HIGH PRESSURE GAUGE
6. HIGH PRESSURE BURST DISK
7. LOW PRESSURE BURST DISK
8. 015-90 URETHANE ORING
9. BELLEVILLE SPRING PACK
- 9A. RED SHIM IN REGULATOR BODY POCKET (NOT SHOWN)
10. REG SEAT BALL
11. PISTON
12. 008-90 URETHANE ORING
13. 012-90 URETHANE ORING
14. OUTPUT PIN VALVE
15. OUTPUT PIN VALVE SPRING
16. BONNET
17. BONNET LOCKING SCREWS

PRESSURE CONVERSION

BEFORE PROCEEDING, MAKE SURE YOUR SYSTEM HAS BEEN COMPLETELY DEGASSED VIA THE OUTPUT PIN VALVE, TO INSURE THAT NO TRAPPED COMPRESSED GAS IS PRESENT! ALWAYS WEAR EYE PROTECTION, GLOVES AND POINT THE AIR SYSTEM IN A SAFE DIRECTION PRIOR TO DEGASSING THE SYSTEM!!!

1. Remove the two 10-32 set screws that lock the Bonnet (the top portion of the regulator) to the Reg Body.
2. Unscrew the Bonnet counter clockwise from the Reg Body. Bonnet should remove easily. Make sure there is no trapped air in the bonnet by depressing the pin valve.
Helpful Hint: A 10-32 bonnet removal tool (2" long screw) was included with you Air system, simply screw the tool into one on the bonnet set screw holes to ease the removal and reinstallation of the bonnet.
Be careful not to lose the brass Output Pin Valve or its spring.

PRESSURE ADJUSTMENT:

3. To adjust to 950 psi simply remove the shim. The shim is located in the bottom "pocket" of the gas distribution body.
4. Reinstall the Belleville Spring Pack into the gas distribution body.
5. Carefully screw the Bonnet back onto the Reg Body. Make sure the bonnet is installed fully. The bonnet should be contacting the top of the gas distribution body there should be no gap. The 2" bonnet assembly tool will help with the install. Do not apply excessive torque screwing the Bonnet to the Gas Distribution body.
6. Replace the two locking set screws and tighten securely. **DO NOT OVER TIGHTEN.**