

NINJA PCP 3000 PSI OUTPUT REGULATOR SYSTEM OWNER'S MANUAL

1.877.NINJAUSA (1.877.646.5287)



PATENT NUMBERS 6,851,447 / 7,059,343 / 7,051,751



THE SAFETY SYSTEM

The NINJA PCP Regulator is equipped with an ASTM COMPLIANT bottle Burst Disk required by the Department Of Transportation. (D.O.T.)

In addition to the required safety burst disk, the regulator has a Low Pressure (LP) safety burst disk (stamped 5K).

The 5K PSI safety burst disk is there to protect you and your marker in the unlikely event that the **NINJA PCP Regulator** fails.



REMEMBER, most regulator failures are the result of contaminated air.

If the 5K PSI safety burst disk vents, it did so for a reason. We recommend you do the following:

Disassemble the regulator (refer to Service and Rebuild procedures), inspect the regulator for contamination and clean if necessary.

Install a new 5K PSI burst disc, PER THE INSTRUCTIONS SEE PAGE 6, available at **NINJAPAINTBALL.COM** and refill the system.

If the (LP) 5K PSI burst disc vents after rebuild see an airsmith for help or call: 1.877.NINJAUSA (1.877.646.5287)

NINJA PCP REGULATORS have a Safety Vent Groove and Safety Snubber on the stem (As shown in above image). These lifesaving features allow for the venting of the bottle, in the event that the regulator is unscrewed from the bottle with pressure present in the bottle.

ALWAYS CHECK 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!
OR CALL 1.877.NINJAUSA (1.877.646.5287) for assistance



FILLING THE NINJA PCP REGULATOR

The **NINJA PCP Regulator** system is equipped with the industry standard "QD Style" fill fitting, which allows your **NINJA PCP Regulator** system to be refilled either on or off the marker. The **NINJA Regulator** system may be filled with either <u>Clean, Dry</u> Compressed Air or nitrogen.



UNDER NO CIRCUMSTANCES SHOULD THE NINJA PCP REGULATOR SYSTEM BE FILLED WITH PURE OXYGEN. OXYGEN WILL IGNITE CAUSING INJURY OR DEATH

When filling your **NINJA PCP Regulator** system do not exceed the pressure rating shown on **NINJA PCP REGULATOR System** CYLINDER'S LABEL.



DO NOT APPLY OR INJECT OIL OF ANY TYPE TO THE FILL OR BURST DISC PORTS. OIL WILL VAPORIZE AND POSSIBLY IGNITE DURING THE FILL PROCEDURE CAUSING INJURY OR DEATH

It is important to keep dirt, oil and water out of your **NINJA PCP Regulator** system. Most regulator failures are due to dirt or contamination. Always keep a cover on the fill nipple when you are not filling the **NINJA PCP Regulator** system. If you use compressed air, make sure that the compressor providing that air is equipped with <u>WORKING</u> filters and moisture separators.

CONNECTING YOUR NINJA PCP REGULATOR SYSTEM

SLOWLY Screw your **NINJA PCP Regulator** system into the Series 3000 PCP Station UFA. Reference the fill station owner's manual.

SERVICE & REBUILD PROCEDURES

FOR SAFETY AND RELIABILITY ONLY USE NINJA REPLACEMENT PARTS.

For reference purposes, consult the exploded parts diagram.



ALWAYS WEAR EYE PROTECTION, GLOVES AND POINT THE AIR SYSTEM IN A SAFE DIRECTION PRIOR TO DEGASSING THE SYSTEM!!!

SPARE PARTS & REBUILD KITS AVAILABLE AT YOUR NINJA DEALER

NOTE: THE FOLLOWING TOOLS ARE REQUIRED AVAILABLE AT MOST HARDWARE STORES:

- · 10-32 THREADED SCREW 2" TO 4" LONG
- · 3/32" HEX KEY WRENCH

PRIOR TO DISASSEMBLY FULLY DEGAS THE AIR SYSTEM

- POINT THE BOTTLE AWAY FROM YOURSELF AND BYSTANDERS.
- DEPRESS THE BALL 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. All internal parts are accessed by unscrewing the Bonnet from the Gas Distribution Body, see page 4 for details.



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.

- 2. After separating the bonnet from the gas distribution body the piston spring pack, shims, and Output Pin Valve components can be removed. **Helpful Hint:** Do not use tools to remove the piston spring pack as this may damage the piston. Firmly grip the end of the piston and wiggle the piston while pulling.
- 3. Clean the inside of the NINJA PCP REGULATOR body and bonnet with a cotton swab.
- 4. To reassemble, lightly lubricate the SRT piston "O" rings using **Ninja Lube**.
- 5. Re-install the Output Pin Valve & Spring.
- 6. 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.
- 7. Reinstall the coil spring and shims as described on page 4. Do not apply excessive torque when screwing the Bonnet and Gas Distribution together. Replace and securely tighten the (2) 10-32 bonnet retaining screws with the 3/32" hex key wrench.

NINJA PCP UNIFIED BURST DISK REPLACEMENT

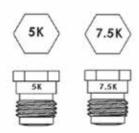
TOOLS REQUIRED: 3/8" BOX WRENCH

FOR SAFETY AND RELIABILITY ONLY USE NINJA REPLACEMENT PARTS.

ASTM compliant Unified Burst Disks are used on NINJA PCP regulators Burst Discs are required by D.O.T. (Department Of Transportation) and TC (Transport Canada)

5000 PSI. Used for the D.O.T. required safety on 3000 PSI N2/HPA storage bottles.

<u>7500 PSI.</u> These are used for the D.O.T. required safety on 4500 PSI rated N2/HPA storage bottles.



WARNING SERIOUS PERSONAL INJURY OR DEATH FROM IMPROPER DISC REPLACEMENT. IT IS ABSOLUTELY ESSENTIAL THAT YOU REPLACE FAILED UNITS WITH EXACT REPLACEMENTS!!! ASTM UNIFIED BURST DISC HAVE THE PRESSURE IDENTIFICATION STAMPED ON THE HEAD OF THE UNIFIED DISC. SOME MAY HAVE THE PRESSURE IDENTIFIER ON THE SIDE OF THE UNIFIED DISC. SEE ILLUSTRATION ABOVE. IF YOU ARE UNSURE DO NOT GUESS SEE A QUALIFIED AIRSMITH OR CALL 877-646-5287 FOR ASSISTANCE.

TO REPLACE A UNIFIED BURST DISK ASSEMBLY:

- 1. Unscrew (turn counterclockwise) the failed unit, and discard it. **They are not serviceable.**
- 2. Visually inspect the female port on for damage or debris and blow out if necessary. If the port is damaged, do not replace the disc. Consult an airsmith or call 877-646-5287 for assistance. We recommend the female port be checked with a 3/8-24-UNF-2B go/ no go gauge available at www.mscdirect.com
- 3. Screw in the new replacement unit and torque to a minimum 55 inch-pounds and maximum 95 inch-pounds. **UNIFIED BURST DISC MUST BE ASSEMBLED WITH AN INCH POUND TORQUE WRENCH!**
- 4. If the Burst Disk Assembly does not seal at 95 inch-pounds, the valve should be inspected by an airsmith or call 877-646-5287 for assistance.

NINJA PCP REGULATOR FILL CHECK VALVE REPLACEMENT ONLY REPLACE WITH GENUINE NINJA FILL CHECK VALVE.

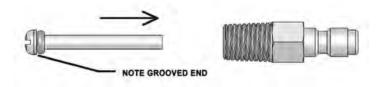
The Fill check valve assembly on your Ninja regulator is one of the items that will require periodic replacement, either due to leakage or mechanical damage to the OD portion, follow the procedure below:

- 1. ALWAYS WEAR SAFETY GLASSES AND POINT THE FILL CHECK AWAY FROM YOUR SELF AND ALL BYSTANDERS.
- 2. MAKE SURE THE SYSTEM IS COMPLETELY DE-PRESSURIZED BY DEPRESSING THE PIN VALVE UNTIL ALL AIR HAS BEEN RELEASED.
- 3. Using a 7/16" wrench, remove the old Fill check assembly.
- 4. Clean any debris and old sealant out of the port.
- 5. Inspect the female 1/8" NPT fill check port threads on the gas distribution body for any damage. IF THREADS ARE DAMAGED OR WORN STOP! DO NOT USE THE REGULATOR SEE AN AIRSMITH OR CALL 877-NINJAUSA It is recommended that a go/no-go thread gauge be used to verify these threads AVAILABLE AT WWW.MSCDIRECT.COM
- 6. A thread sealant has been applied to the threads on the new NINJA Fill check. Do not use any additional sealant or PTFE tape.
- 7. Make sure the strut is inserted into the NINJA Fill check as show below, and screw the new assembly into your regulator. Turn it in until it is hand tight, and then tighten a further 1 & 1/2. turns. It should not be necessary to exceed 100 inch-pounds of torque to achieve sealing. If leaks still occur STOP contact an Airsmith or call 877-NINJAUSA (646-5287) FOR ASSISTANCE.



NEVER INJECT OIL INTO THE REGULATOR THROUGH THE FILL CHECK OR ALLOW OIL TO ENTER THE BOTTLE OIL DROPLETS WILL IGNITE DURING THE FILL PROCESS WHICH MAY LEAD TO INJURY OR DEATH.

NOTE: You will notice that the strut in our NINJA Fill check Valve has a groove across the "O" Ring end. This groove is essential for proper gas flow. Always replace the complete assembly. Only replace with NINJA FILL CHECK ASSEMBLY



- 1. Tank O-Rings 015-90U x 2
- 2. Bonnet
- 3. Bonnet Screws
- 4. Ball Valve Seat
- 5. Ball Valve
- 5a. Pin Valve Variations
 - 6. Pin Valve Spring
 - 7. Piston O-Ring
 - 8. Piston Spring Pack
 - 9. Cast Urethane Piston
 O-Ring (Black)
- 9a. Urethane Piston
 O-Ring (Red)
- 10. Reg. Seat
- 11. Thin Pressure
 Adjustment Shims
 (number of shims may vary)
- Thick Pressure
 Adjustment Shims (red)
 (may or may not be present)
- 13. Belville Springs and shim
- 14. Low Pressure Burst Disk: 5000 BDBLK
- 15. High Pressure Bottle Burst Disk:

5000BDBLK

(for 3K systems)

7500BDBLK

(for 4.5K systems)

- 16. Gas Distribution Body
- 17. Gauge NINJAGAUGE
- 18. Fill Valve: NINJAMFV
- 19. Restrictor

