

NINJA PIN REGULATOR OWNERS

MANUAL Standard or SLP or SHP

1.877.NINJAUSA (1.877.646.5287)



PROUDLY MADE IN THE USA

Due to the high flow characteristics of the Pin regulator you may experience connection / activation difficulties with certain markers ASA. To eliminate simply reduce the regulator output pressure to 500 psi by removing (2) red shims (#12) see page 4. Pressure Conversion. We also have videos showing adjustment on our YouTube channel name is NINJA PAINTBALL OFFICIAL

AWARNING: This Is not a toy. Misuse may cause serious injury or death. Eye protection designed specifically for paintball must be worn by the user and persons within range. Recommend 18 years or older to purchase. Persons under 18 must have adult supervision. READ OWNERS MANUAL BEFORE USING.

1

FILLING THE NINJA REGULATOR SYSTEM

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



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

When filling your NINJA Regulator system do not exceed the pressure rating shown on the 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 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 Regulator system .If you use compressed air, make sure that the compressor providing that air is equipped with WORKING filters and moisture separators.

CONNECTING YOUR NINJA REGULATOR

SLOWLY Screw your NINJA Regulator system into your markers ASA fitting. It is recommended that you apply Lube on the NINJA Regulator bonnet threads. This simple procedure will reduce bonnet and ASA thread wear. The NINJA Regulator may have a "Ball Valve" output valve which shuts off the gas delivery when the power system is removed from the marker.



Due to the high flow characteristics and 30% increased flow of the NEW NINJA Pin Seal Regulator you may experience connection / activation difficulties with certain markers ASA. To eliminate simply reduce regulator output pressure by removing (1 or 2) shims, see page (4), Pressure Conversion.

PIN VALVE SEAT REPLACEMENT

- The Pin Valve Seat #4 sits inside of the bonnet #2 in the bonnet pocket. To replace the Pin Valve Seat #4 use a small pick to gently pull the Ball Valve Seal from the bonnet taking care to not damage the bonnet.
- When replacing the Pin Valve Seat #4 into the bonnet #2 place the seal within the inner bonnet pocket and gently push it into place using the eraser end of a pencil or similar small blunt ended object.

THE SAFETY SYSTEM

The NINJA 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 1.8K).

The 1.8K safety burst disk is there to protect you and your marker in the unlikely event that the NINJA Regulator fails.

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

If the (LP) 1.8K 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 1.8K burst disc, PER THE INSTRUCTIONS SEE PAGE 6, available at most paintball shops and refill the system.

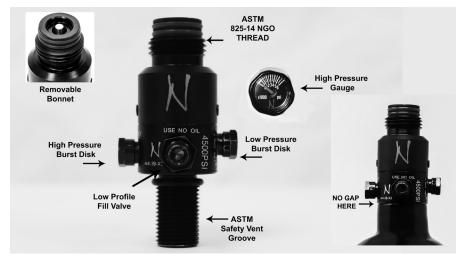
If the (LP) 1.8K burst disc vents after rebuild see an airsmith for help or call: 1.877.NINJAUSA (1.877.646.5287)

NINJA REGULATORS have a Safety Vent Groove on the stem (As shown in above image). This lifesaving feature allows 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

Safely Drain your system and wait for the system to FULLY DEGAS! Contact a qualified airsmith IMMEDIATELY OR CALL 1.877.NINJAUSA



2

PRESSURE CONVERSION - SLP is not adjustable

Unless ordered otherwise, all Standard NINJA Regulators are factory shipped at a standard 750-850 PSI output pressure (SHP at 1100 PSI), if you wish to adjust the output pressure please follow these six steps. WATCH THE VIDEO AT NINJAPAINTBALL.COM



BEFORE PROCEEDING, MAKE SURE YOUR SYSTEM HAS BEEN COMPLETELY DEGASSED VIA THE OUTPUT PIN VALVE, TO INSURE THAT NO TRAPPED COMPRESSED GAS IS PRESENT!



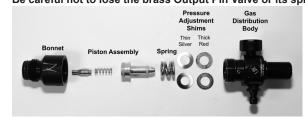
ALWAYS WEAR EYE PROTECTION, GLOVES AND POINT THE AIR SYSTEM IN A SAFE DIRECTION AWAY FROM YOURSELF AND ALL **BYSTANDERS PRIOR TO DEGASSING THE SYSTEM!**

NOTE: THE FOLLOWING TOOLS MAY BE REQUIRED AND ARE AVAILABLE AT **MOST HARDWARE STORES:**

- 3/32" HEX KEY WRENCH TO REMOVE BONNET SET SCREWS
- 10-32 THREADED MACHINE SCREW 2" TO 4" LONG TO HELP REMOVE BONNET
- Remove the two 10-32 set screws that lock the Bonnet (the top portion of the regulator) to the Regulator Body, REFER TO DIAGRAM ON PAGE 8.
- Unscrew the Bonnet counter clockwise from the Reg Body. (It has normal right hand threads.) Bonnet should remove easily. Make sure there is no trapped air in the bonnet by depressing the pin valve.
- PRESSURE ADJUSTMENT FOR THE STANDARD NINJA REGULATOR. The shims are located in the bottom "pocket" of the gas distribution body. THE NUMBER OF SILVER OR OTHER COLOR SHIMS MAY VARY.
- Remove 1 red shim approximate output 600-700PSI
- Remove 2 red shims approximate output 450-550 PSI
- For the SHP remove the 3 silver shims for 900-1050PSI
- Reinstall the remaining shims first into the bottom pocket of the gas distribution body, then install the main spring into the gas distribution body on top of the shims.
- 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 10-32 threaded machine screw will help with the install. Do not apply excessive torque screwing the Bonnet to the Gas Distribution body
- Replace the two locking set screws and tighten securely. DO NOT OVER TIGHTEN

Helpful Hint: Insert the 10-32 x 2" to 4" screw into one of the bonnet set screw holes to ease the removal and reinstallation of the bonnet. Insert the screw into one of the bonnet screw holes until it stops or bottoms out, unscrew (1/8 to 1/4) turn. This will prevent the screw from damaging the gas body bonnet threads. Use the inserted screw to remove the bonnet. Be careful not to strip the bonnet hole or damage the body threads.

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



3

SERVICE & REBUILD PROCEDURES

FOR SAFETY AND RELIABILITY ONLY USE NINJA REPLACEMENT PARTS. WATCH THE VIDEO AT WWW.NINJAPAINTBALL.COM OR ON YOUTUBE. For reference purposes, consult the exploded parts diagram page 8.



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 MAY BE REQUIRED AND ARE AVAILABLE AT MOST HARDWARE STORES:

- 3/32" HEX KEY WRENCH TO REMOVE BONNET SET SCREWS
- 10-32 THREADED MACHINE SCREW 2" TO 4" LONG TO HELP REMOVE BONNET

PRIOR TO DISASSEMBLY FULLY DEGAS THE AIR SYSTEM

- POINT THE BOTTLE AWAY FROM YOURSELF AND BYSTANDERS.
- DEPRESS THE BALL OR 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. All internal parts are accessed by unscrewing the Bonnet from the Gas Distribution Body, see page 4 for details.
- 2. After separating the bonnet from the gas distribution body the coil spring, shims, SRT piston, and 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 with your fingers.
- 3. Clean the inside of the NINJA REGULATOR body and bonnet with a cotton swah
- 4. To reassemble, lightly lubricate the SRT piston "O" rings using Silicone Lube.
- 5. Re-install the Output Pin Valve & Spring by dropping the Pin #5 into the bonnet #2 make sure the Pin #5 is seated and located in the bonnet pocket.
- 6. Place the Pin spring #6 into the piston cavity. Then carefully push the Piston Assembly #8 into the piston bore in the bonnet #2. 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.
- Reinstall the coil spring #13 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.

5

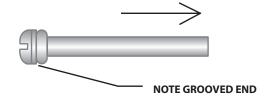
NINJA FILL CHECK VALVE REPLACEMENT ONLY REPLACE WITH GENUINE NINJA FILL CHECK VALVE.

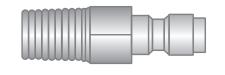
The Fill check valve assembly on your Ninja regulator is one of the items that will require periodic replacement, either due to leakage or mechanical damage to the OD portion, follow the procedure below:

- 1. ALWAYS WEAR SAFETY GLASSES AND POINT THE FILL CHECK AWAY FROM YOUR SELF AND ALL BYSTANDERS.
- MAKE SURE THE SYSTEM IS COMPLETELY DE-PRESSURIZED BY DEPRESSING THE BALL 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 the fill valve is still leaking STOP and contact an Airsmith or call877-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





BURST DISK REPLACEMENT

ASTM compliant Unified Burst Disks are used on paintball regulators and CO2 valves for both the D.O.T. (Department Of Transportation) required bottle protection and downstream over-pressure protection.

THE 3000 PSI (3k) BURST DISC IS FOR CO2 BOTTLES ONLY!!!

Four (4) most common bust disc.

1800 PSI. Used for downstream over-pressure safeties on regulators.

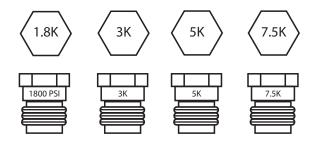
3000 PSI. Used for the D.O.T. required safety on CO2 storage bottles.

5000 PSI. Used for the D.O.T. required safety on 3000 PSI N2/HPA storage bottles and on X PCP regulators as the downstream safety

7500 PSI. 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 ONLY REPLACE FAILED UNITS WITH EXACT REPLACEMENTS!!! ASTM UNIFIED BURST DISC HAVE THE PRESSURE IDENTIFICATION STAMPED ON THE HEAD OF THE DISC. SOME DISC MAY HAVE THE PRESSURE IDENTIFIER ON THE SIDE OF THE DISC. SEE ILLUSTRATION above. If you are unsure do not guess see a qualified airsmith or call 815-477-0007 for assistance.



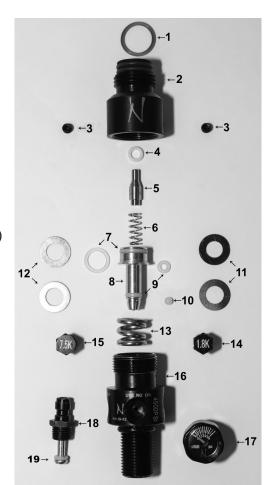
TO REPLACE A UNIFIED BURST DISK ASSEMBLY:

- Unscrew (tum counterclockwise) the failed unit, and discard it. They are not serviceable.
- 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
- 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.

6

- 1. Tank O rings (015-90U x 2)
- 2. Bonnet**
- 3. Bonnet Screws
- Pin Seat 008**
- 5. Pin**
- 6. Pin Spring**
- 7. 012 O ring*
- 8. Piston*
- 9. 008 O ring*
- 10. Reg seat*
- 11. Thin silver shims*(Number of shims may vary)
- 12. Thick red shims*
- 13. Main Spring
- Low Pressure Burst Disk* (1.8k)
- 15. High Pressure Burst Disk (5k for 3000 bottles) (7.5k for 4500 bottles)
- 16. Gas Distribution Body
- 17. Mini Gauge
- 18. Mini Fill Valve
- 19. Fill rivet and O-ring
- *Included in NINJARBK

 ** Not interchangeable with
 Ball Regulators



7