NEW NINJA BALL REGULATOR SYSTEM
OWNER’S MANUAL

30% INCREASED FLOW!
1.877.NINJAUSA (1.877.646.5287)
MADE IN USA

PATENT NUMBERS 6,851,447 / 17,059,343 / 7,051,751

ASTM compliant, NINJA Regulators can toggle from STANDARD 750-850 PSI to a medium 600-700 PSI or low 450-550 PSI output in a few minutes, eliminating the need to purchase 2 regulators or separate spring kits, see page 4.

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

If the (LP) 1.8K 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 1.8K PSI burst disc, PER THE INSTRUCTIONS SEE PAGE 6, available at NINJAPaintball.COM and refill the system.

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

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FILLING THE NINJA REGULATOR SYSTEM

The NINJA Regulator system is equipped with the industry standard “OD 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 either 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 NINJA REGULATOR 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 Ninja Lube on the NINJA Regulator bonnet threads. This simple procedure will reduce bonnet and ASA thread wear. The NINJA Regulator has 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 Ball 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.

BALL VALVE SEAT REPLACEMENT

1. The Ball Valve Seat #4 sits inside of the bonnet #2 in the bonnet pocket. To replace the Ball Valve Seat #4 use a small pick to gently pull the Ball Valve Seat from the bonnet taking care to not damage the seat.
2. When replacing the Ball 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.

MATCH THE VIDEO AT: www.ninjapaintball.com

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STOP!! DO NOT FILL OR USE YOUR SYSTEM.
Make sure the system is FULLY DEGAS prior to refilling the system.

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!

PRESSURE CONVERSION

Unless ordered otherwise, all NINJA Regulators are factory shipped at a standard 750-850 PSI output pressure. If you wish to adjust the output pressure please follow these six steps. WATCH THE VIDEO AT WWW.NINJAPaintball.COM

BEFORE PROCEEDING, MAKE SURE YOUR SYSTEM HAS BEEN FULLY DEGASSED VIA THE OUTPUT BALL 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 ARE REQUIRED AVAILABLE AT MOST HARDWARE STORES:

• 3/32” HEX KEY WRENCH TO REMOVE BONNET SET SCREWS
• 10-32 THREADED SCREW 2” TO 4” LONG TO REMOVE BONNET

1. Remove the two 10-32 set screws that lock the Bonnet (the top portion of the regulator) to the Reg Body, REFER TO DIAGRAM ON PAGE 8.
2. 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.
3. Helpful Hint: Insert the 10-32 x 2” to 4” screw into one of the bonnet set screw holes to ease the removal and realignment of the bonnet. Insert the screw into one of the bonnet screw holes until it stops or bottoms out, unscrew (1/4 to 1/2) turn. This will prevent the screw from damaging the gas body bonnet threads. Use the inserted screw to remove the bonnet.
4. Be careful not to lose the brass Output Ball Valve or its spring.
5. PRESSURE ADJUSTMENT:

The shims are located in the bottom “pocket” of the gas distribution body. Due to the NINJA Regulator being hand crafted and tested THE NUMBER OF SILVER SHIMS MAY VARY.

• Remove 1 red shim approximate output 500 PSI
• Remove 2 red shims approximate output 550 PSI

4. 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.
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 10-32 screw 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.

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### Service & Rebuild Procedures

**For Safety and Reliability Only Use Ninja Replacement Parts. Watch the Video at www.ninjapaintball.com**

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 are Required 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 Airsmith!

Or Call 1.877.NINJAUSA (1.877.646.5287)

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**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.
2. Make sure the System is Completely Depressurized by Depressing the Ball Valve to Exhaust Any Trapped Gas.
3. Using a 7/16" wrench, remove the old fill check assembly.
4. Clean any debris or 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 (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
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 shown below, and screw the new assembly into your regulator. Turn it in until it is hand tight, and then tighten a further 1/2 to 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.

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**Ninja Unified Burst Disk Replacement**

**Tools Required: 3/8" Box Wrench**

For Safety and Reliability Only Use Ninja Replacement Parts. Watch the Video at www.ninjapaintball.com

ASTM compliant Unified Burst Disks are used on Ninja regulators and CO2 valves Burst Discs are required by D.O.T. (Department Of Transportation) and TC (Transport Canada)

Four (4) most common unified burst disk:

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

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**Warning: Serious Personal Injury or Death from Improper Disc Replacement. It is absolutely essential that you replace failed units with exact replacements!!**

All European Ninja Fill Check Valve have the Pressure Identification Stamped on the top of the Unified Disk. Some may have the Pressure Identifier on the side of the unified disk. 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 counter-clockwise) 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. DO NOT APPLY HEAT!!
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.

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**Ninja Fill Check Assembly**

**Four Most Common Burst Discs.**

- **1800 PSI**
- **3000 PSI**
- **5000 PSI**
- **7500 PSI**

**Adjustment Shims**

- For 4.5K Systems: **1/8"**
- For 3K Systems: **3/32"**

**Assembly**

1. Tank O-Rings 015-9OU-RED X2
2. Bonnet **
3. Bonnet Screws**
4. Ball Valve Seat **
5. Ball Valve **
6. Ball Valve Spring **
7. Piston O-Ring **
8. SRT Piston **
9. Piston O-Ring **
10. Reg. Seat **
11. Thin Pressure Adjustment Shims **
12. Thick Pressure Adjustment Shims (red) **
13. Main Springs N14MDW5537
14. Low Pressure Burst Disk 1800BDBL
15. High Pressure Bottle Burst Disk 5000BDBL (for 3K systems)
17. Gauge NINJAGAUGE
18. Fill Valve: NINJAMFV