NinjaPaintball

Watch the video at: www.ninjapaintball.com

NEW NINJA BALL REGULATOR SYSTEM OWNER'S MANUAL

30% INCREASED FLOW!

1.877.NINJAUSA
(1.877.646.5287)

MADE IN USA

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.

⚠WARNING:
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 OWNER'S MANUAL BEFORE USING.

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

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.

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

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.

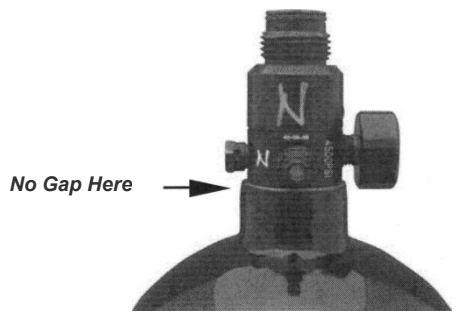
Install a new 1.8K PSI burst disc, PER THE INSTRUCTIONS SEE PAGE 6, available at **NINJAPAINTBALL.COM** and refill the system.

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)**

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. 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 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 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 Seal 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.

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 COMPLETELY 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:

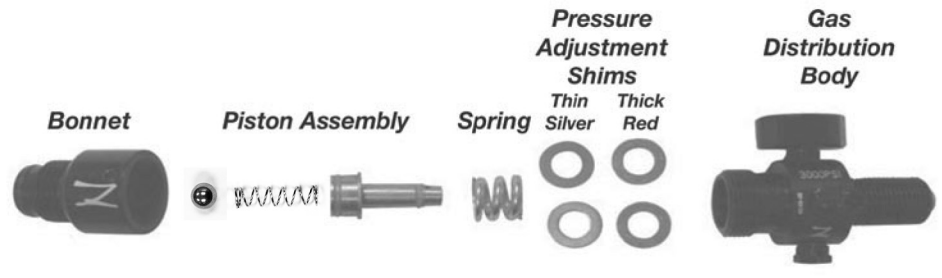
- 3/32" HEX KEY WRENCH TO REMOVE BONNET SET SCREWS
- 10-32 THREADED SCREW 2" TO 4" LONG TO REMOVE BONNET

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.

   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 (1/4 to 1/2) turn. This will prevent the screw from damaging the gas body bonnet threads. Use the inserted screw to remove the bonnet.

   Be careful not to lose the brass Output Ball Valve or its spring.
3. **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 650 PSI
   - Remove 2 red shims approximate output 500 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.**



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 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 BALL VALVE TO EXHAUST ANY TRAPPED GAS.

2. After separating the bonnet from the gas distribution body the coil spring, shims, SRT piston, and Output Ball 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.
3. Clean the inside of the NINJA 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 Ball Valve & Spring by dropping the Ball #5 into the bonnet #2 make sure the Ball #5 is seated and located in the bonnet pocket.
6. 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.
7. 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.

NINJA UNIFIED BURST DISK REPLACEMENT

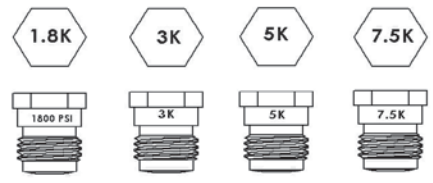
TOOLS REQUIRED: 3/8" BOX WRENCH

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 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.**
7500 PSI.	**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.**

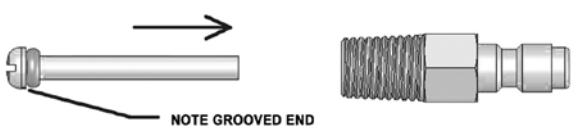
NINJA FILL CHECK VALVE REPLACEMENT
ONLY REPLACE WITH GENUINE NINJA FILL CHECK VALVE.

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:

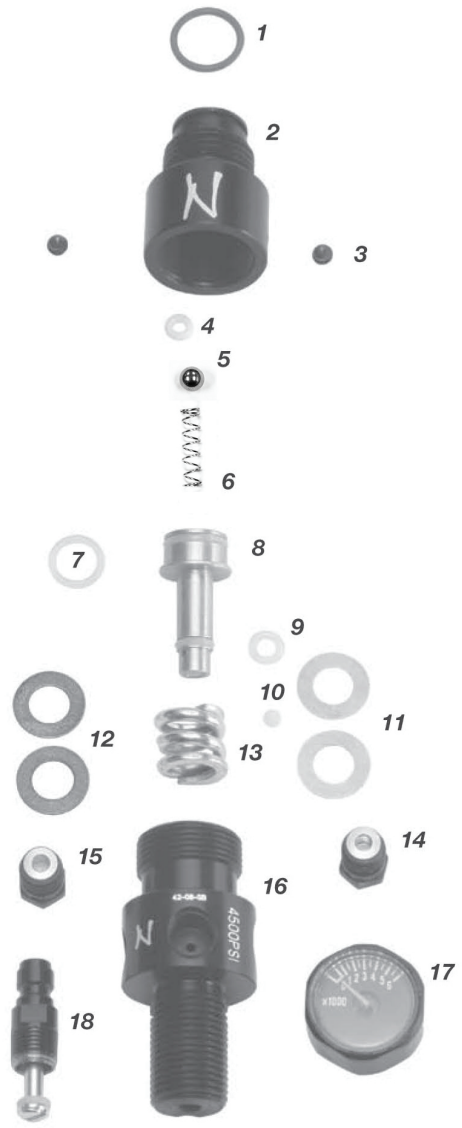
1. ALWAYS WEAR SAFETY GLASSES AND POINT THE FILL CHECK AWAY FROM YOUR SELF AND ALL BYSTANDERS.
2. MAKE SURE THE SYSTEM IS COMPLETELY DE-PRESSURIZED BY DEPRESSING THE BALL VALVE UNTIL ALL AIR HAS BEEN RELEASED.
3. Using a 7/16" wrench, remove the old Fill check assembly.
4. Clean any debris and old sealant 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 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 015-9OU-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**
    (number of shims may vary)
12. *Thick Pressure Adjustment Shims (red)**
13. *Main Springs NIJAMDW3537*
14. *Low Pressure Burst Disk: 1800BDBLK*
15. *High Pressure Bottle Burst Disk:*
    5000BDBLK
    (for 3K systems)
    7500BDBLK
    (for 4.5K systems)
16. *Gas Distribution Body: FACTORY ONLY*
17. *Gauge NINJAGAUGE*
18. *Fill Valve: NINJAMFV*



* *Included in rebuild kit; NINJARBK*

** ***NOT*** *interchangeable between* ***NINJA Ball regulator*** *and* ***NINJA Standard regulator***