

# NINJA LOW-PRESSURE REGULATOR V2 OWNER'S MANUAL

Part number: NINJA-LPRV2

**WARNING:** THIS IS NOT A TOY IMPROPER USE CAN RESULT IN INJURY OR DEATH DO NOT USE THE LPR PRIOR TO READING THIS MANUAL IN ITS ENTIRET.

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# The Ninja LPRV2 is a low pressure regulator for Airsoft markers.

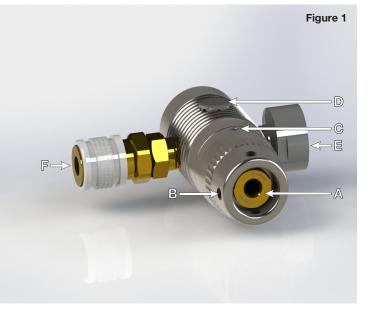
- Construction: Aluminum.
- Inlet Pressure: Max 1000 PSI.
- Adjustment Range: 0 -160 PSI.
- · Resetting Relief Valve: 140-150 PSI.

### (NOT SERVICEABLE DO NOT REMOVE OR TAMPER WITH).

- Lubrication: Any Silicone based,
- NON-PETROLEUM LUBRICANT.
- Adjustment: 3/16" Allen wrench.
- Tournament Legal: Can be locked out with a zip tie.
- Pressure Gauge: 0-160 PSI.
- Piston: 015-90 red urethane oring for ease of maintenance.
- Break In Period: 1000-3000 Cycles.
- Maintenance kit included (Quantity (2) of #7 red O-ring 015)

The Ninja LPRV2 is designed to be used with a standard regulated paintball air source, available in 3000 and 4500 psi bottles.

# WARNING: The paintball tank must have a regulator, which regulates the air source the optimal regulator output is 500 psi. Ninja offers a full line of air systems, visit www.ninjapaintball.com



## Features:

- **A.** Pressure adjustment.
- B. Tournament Lock zip tie holes.
- C. Maintenance only access lock set screw.
- D. Pressure Relief Valve assembly.
- E. Low Pressure Reference Gauge.
- F. Low Pressure Quick Disconnect.

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## QUICK START GUIDE (reference figure 1):

• Verify Adjuster (Figure 1: A.) is at the maximum, turning counter clockwise until it stops, using a 3/16 Allen (hex) key.

• Completely attach the regulated air source with a verified output pressure of 500 psi.

• The pressure gauge is for reference only. The velocity should be set following the engine manufacturers specifications utilizing a chronograph designed for airsoft use.

• Rotating the adjuster CLOCKWISE will INCREASE the output pressure.

 Rotating the adjuster COUNTER CLOCKWISE will DECREASE the output pressure.

• In General, increasing the output pressure will increase the velocity of the airsoft engine.

• Using small 5° Clockwise adjustments (right hand) to increase velocity and verify using a chronograph.

• Small Counter Clockwise adjustments to reduce velocity must be followed by several clearing shots.

• If the air pressure is increased beyond the factory Resetting Pressure Relief Valve (Figure 1: D.) set point (140-150psi), the Resetting Pressure Relief Valve will begin to vent. Quickly turn the adjuster at least one full turn Counter Clockwise to decrease the pressure output and the Resetting Pressure Relief Valve will reset.

• Due to the Ninja LPRV2 design, the air source tank and regulator should turn easily, unthread from the Ninja LPRV2 smoothly and de-gas with a small vent of air after unthread-ing two full turns and before three full turns are completed.

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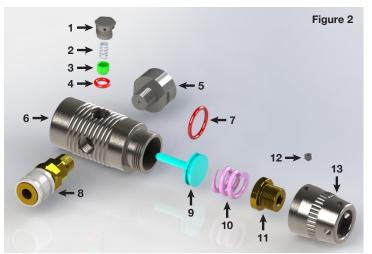


WARNING: The cylinder valve can fly off with enough force to kill if the valve unscrews from the cylinder. LOOK at valve when removing cylinder. STOP if the valve starts to unscrew from the cylinder. Screw it back on and contact the manufacturer for instructions to repair.

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NOTE: COMPONENT COLOR FOR ILLUSTRATION PURPOSES ONLY ACTUAL PRODUCT COLOR MAY VARY.



#### PARTS DIAGRAM:

- 1. LPRV2 Pressure Relief Housing
- 2. LPRV2 Pressure Relief Spring
- 3. LPRV2 Pressure Relief Piston
- 4. LPRV2 Pressure Relief Piston 009-70 Buna O-ring
- 5. LPRV2 Low Pressure Gauge
- 6. LPRV2 Body
- 7. LPRV2 Piston 015 90 Red Urethane O-ring
- 8. Low Pressure Fosters Quick Disconnect
- 9. LPRV2 Piston
- LPRV2 Main Spring
  LPRV2 Adjuster
- 10 LDDV/2 Mainter
- 12. LPRV2 Maintenance Access Locking set screw 13. LPRV2 Cap

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**WARNING:** NEVER OPERATE OR ADJUST THE LPRV2 WITH THE MAINTENANCE SET SCREW #12 LOOSE OR REMOVED. NEVER ATTACH AN AIR SOURCE WITH THE LPRV2 CAP #13 NOT FULLY INSTALLED WITH THE MAINTENANCE SCREW #12 FIRMLY INSTALLED. IF THE LPRV2 CAP IS LOOSE OR REMOVED THE LPRV2 PISTON IS UNDER PRESSURE AND CAN TRAVEL AT VELOCITIES, WHICH MAY CAUSE PERSONAL INJURY TO THE USER OR BYSTANDERS.

#### MAINTENANCE AND SERVICE (reference figure 2):

Maintaining the Ninja LPRV2 for optimum performance requires occasional Piston O-ring #7 replacement.

Replacing and silicone greasing oring #7 will solve a number of common air pressure regulation issues:

1. Inconsistent pressure output.

2. Slow loss of pressure while under pressure but not using the regulated air.

3. Slow recharging of set pressure.

4. Leaking from LPRV2 cap #13, LPRV2 adjuster #11, LPRV2 Maintenance set screw #12.

**WARNING:** THE LPRV2 RESETTING PRES-SURE RELIEF #1-4 IS NOT USER SERVICABLE. DO NOT REMOVE OR TAMPER WITH THE LPRV2 PRESSURE RELIEF.

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#### DISASSEMBLY (reference figure 2):

1. Remove Air Source.

2. Using a 3/16" Allen (hex) key rotate the LPRV2 Adjuster #11 fully Counter Clockwise.

3. Using a 5/64" Allen (hex) key remove the LPRV2 Maintenance Access Locking set screw #12 by rotating Counter Clockwise using a flat, non-ball end of the Allen.

4. Rotate LPRV2 cap #13 Counter Clockwise to remove LPRV2 cap and Adjuster.

5. Remove LPRV2 Main Spring #10

6. Remove LPRV2 Piston #9 by light pressing an Allen key through the center hole on the Air Source Attachment side (Figure 3: X)

7. Remove and replace oring #7, lightly lube the O-ring with silicone grease.



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# **REASSEMBLY** (reference figure 2):

1. Reinsert LPRV2 piston # 9 pin- side first. Be certain the pin enters the center hole (Figure 3: X)

2. Reinsert LPRV2 Main Spring #10, roughly center the spring on the piston.

3. Verify the LPRV2 Adjuster is fully threaded into the LPRV2 Cap, fully turned counterclockwise.

4. Thread, clockwise, the LPRV2 Cap onto the LPRV2 Body NO GAP BETWEEN LPRV2 BODY AND LPRV2 CAP.

5. Reinstall the LPRV2 Maintenance Access Locking set screw #12, DO NOT OVER TIGHTEN!

6. Re-chronograph using the quick start guide in this manual.



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