# NINJA LPR LOW PRESSURE REGULATOR

MADE IN USA

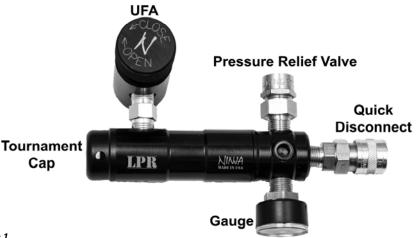


Figure 1

# The Ninja LPR is a low pressure regulator for AirSoft markers.

Construction: Aluminum sand blasted black anodize.

Inlet Pressure:Max 1000 PSIAdjustment Range:0 -160 PSIResettable Relief Valve:140-150 PSI

Lubrication: Any Silicone based, non-petroleum lubricant.

Adjustment: 3/16" Allen wrench

Tournament Cap: Can be locked out with zip tie.

Pressure Gauge: 0-160 PSI

Piston: Threaded with 1/2-20 female thread for ease

of maintenance.

Break In Period: 1000-3000 Cycles

Maintenance kit included

The Ninja LPR is designed to be used with a standard regulated paintball air source which accepts a standard paintball UFA (universal fill adapter).

Paintball air source is available in 3000 and 4500 psi bottles. The paintball tank must have a regulator which regulates the air source from 300 PSI to 900 PSI.

Ninja offers a full line of air systems, visit www.ninjapaintball.com

# **OPERATION** Figure 1 and Figure 2



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 ENTIRETY



Figure 2

# SAFETY FIRST: ALWAYS WEAR SAFETY GLASSES WHEN OPERATING OR SERVICING THE LPR.

- 1. Turn the UFA counter clock wise to the close, fully up, closed position.
- 2. The LPR is shipped with the adjusting slug in the off, full clockwise, position.
- 3. Slowly screw the air source into the UFA.
- 4. Turn the UFA on by slowly turning the UFA knob clockwise.
- 5. Reference the HPA engine owner's manual for recommended operating range.
- 6. Insert a 3/16" allen wrench into the access hole on the tournament cap see Figure 2 slowly turn the adjusting slug counter clockwise while watching the gauge, to the recommended HPA engine operating range.
- Check to make sure the LPR output pressure is set, connect the hose to the LPR, air pressure will be present when you connect the hose.
- 8. Connect the hose to the engine hose on your marker.

Note: If you adjust the LPR velocity, the market must be cycled for the adjustment to be completed.



WARNING NEVER OPERATE OR ADJUST THE LPR WITH THE TOURNAMENT CAP REMOVED THE ADJUSTMENT SLUG IS UNDER PRESSURE AND IF REMOVED UNDER PRESSURE CAN TRAVEL AT VELOCITIES WHICH MAY CAUSE PERSONAL INJURY TO THE USER OR BYSTANDERS.



**▲** WARNING: THE PRESSURE RELIEF VALVE WILL VENT AIR AT 130-140 PSI THIS IS A SAFETY FOR YOUR HPA ENGINE AND IS THERE FOR YOUR PROTECTION AND THE HPA ENGINE. NEVER TAMPER WITH OR OPERATE THE LPR WITH THE PRESSURE RELIEF VALVE ABSENT.

# **MAINTENANCE & SERVICE:**

#### REFERENCE PARTS DIAGRAM

The maintenance is simple and will keep your LPR performing at an optimal level.

The majority of LPR pressure issues will be due to a worn or dirty piston o-ring #7 or by debris on the pressure adjustment slug #14, seal.

### WARNING: SAFETY FIRST

- ALWAYS WEAR SAFETLY GLASSES WHEN SERVICING THE LPR OR **ANY GAS SOURCE**
- ALWAYS REMOVE THE LPR FROM THE AIR SORCE AND DEGASS THE LPR PRIOR TO SERVICING THE LPR!
- TO DEGASS THE LPR TURN THE UFA COUNTER CLOCKWISE POINT THE MARKKER IN A SAFE DIRECTION AND CYCLE THE AIRSOFT MARKER UNTIL THE MARKER FAILS TO CYCLE AND ALL AIR IS REMOVED FROM THE LPR HOSE AND LPR.
- REMOVE THE LPR HOSE FROM THE LPR, REMOVE LPR FROM THE SOURCE.

# **DISASSEMBLY:**

- 1. Remove, turn counter clockwise, the gas distribution cap #5. No tools required.
- 2. Remove the tournament cap #16. If the tournament cap cannot be removed by hand the holes on the tournament cap can aid in removal simply use the 3/16" allen wrench or slim screwdriver and slide the tool through the holes and turn counter clockwise.
- 3. Remove the brass adjusting slug by turning counter clockwise.
- 4. To simplify piston removal use the supplied 1/2-20 bolt.
- 5. From the distribution cap end Screw the bolt into the top of the piston.



Figure 3

- 6. Hold the LPR body #11 with the tournament cap end up. See Figure 3.
- 7. Note the position and location of the piston this will help at time of reassembly.
- 8. Slowly pull the piston out.

Note: If the Belleville springs should fall from the piston the correct orientation is noted on the parts diagram. The Belleville springs have a slight curve and must be installed on the piston correctly or the LPR will not regulate correctly.

Inspect the piston oring for damage. If there is damage replace the oring with the piston oring included with the LPR.

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Lubricate the piston o-ring with TechT Gun Sav Lubricant.

Inspect the LPR piston and adjusting slug seat for debris. Clean with a cotton swab and rubbing alcohol.

Inspect the adjusting slug oring # 15 for damage, clean and or replace.

# **Reassembly:**

- Make sure the 1/2-20 bolt holding the piston is loose, not too tight in the piston thread or it will spin the piston when you unscrew the bolt after installing the piston back into the LPR body.
- 2. Hold the LPR body upright so that you are looking down into the tournament cap end.
- 3. With the piston loosely attach to the 1/2-20 bolt push the piston into the LPR body #11 watch as the small end of the piston appears in the LPR body. Be careful not to dislodge the internal o-ring #10 from the LPR body. The piston is now fully engaged, unscrew the 1/2-20 bolt from the piston.
- 4. Install the adjusting slug and turn clockwise until fully seated.
- 5. Install the Tournament Cap # 16, hand tight.
- 6. Install the gas Distribution Cap #5, hand tight.



- 1. Quick Disconnect 2202
- 2. 1/8" NPT Plugs
- 3. Gauge
- 4. Pressure Relief Valve
- 5. Distribution Cap
- 6. Distribution Cap O-ring(015-70B)
- 7. **Piston O-ring**(016-75BV)
- 8. Belleville Springs
- 9. Piston
- 10. LPR Internal O-ring(007-90CU)
- 11. LPR Body
- 12. UFA (Universal Fill Adapter)
- 13. 1/8" NPT Hex Nipple
- 14. Pressure Adjustment Slug
- 15. Pressure Adjustment Slug O-ring(010-75BV)
- 16. Tournament Cap



CORRECT
ORIENTATION
OF LPR
BELLEVILLE SPRING

If you have any questions or require help please call our 877-NINJA-USA for assistance.