

**2-LITER** TM Regulator: Ver 1.1, July 15, 04

Model: 2-Liter Regulator

Version: A

Gas Source: Compressed air, Nitrogen or CO2

Length: 3.25 inches Width: 1.120 dia main body

Weight: .23 lbs

Externally Adjustable Output Pressure: 0-350 PSI

Max input pressure: 900 PSI

Adjusting Allen Wrench: 5/32 Allen Wrench

## **Adjusting the 2-Liter Regulator:**

**Decrease output:** 

Looking at the regulator from the bottom, turn the 5/32 allen wrench counter clockwise to decrease the pressure.

### **Increase output:**

Looking at the regulator from the bottom, turn the 5/32 allen wrench clockwise to increase the pressure.

## **Side Notes and Trouble-shooting:**

Remember to shoot the marker several times after any adjustment to the 2-Liter regulator so you can see what the velocity settles in at.

If the regulator creeps in pressure, check to make sure that there is not a piece of debris in-between the regulator seat o-ring and the regulator pin. If it continues to creep, replace the reg seat o-ring.

Make sure the vent hole in the bottom of the adjusting cap is open and clean. If it is plugged, the regulator will not function properly.

When using CO2 you must keep liquid CO2 out of the Regulator.

## **Disassembly of 2-Liter Regulator:**

To properly disassemble the 2-Liter regulator and not scratch the outside, you will need a strap wrench which can be purchased at a hardware or automotive store. The strap wrench can be used on many different things outside of paintball so it's handy to have around. Just follow the instructions and it will be easy.

- 1. Remove all air sources, and remove regulator from paintball marker.
- 2. Using the strap wrench on the 2-Liter lower body, loosen the two halves of the main upper body and the lower body. Once loose, unscrew the two pieces. Be careful not to lose the reg internals that are held in place by the 2-Liter lower body.
- 3. If the internals stay within the main upper body, carefully push the backside of the regulator pin from the ASA top of the main body, which will push the internals out of the main body.
- 4. Unscrew the adjuster from the bottom of the lower reg body. The spring will come out with it. Carefully using needle nose or tweezers, pull the piston out of the lower reg body.
- 5. The regulator is now completely disassembled. You can replace o-rings or other parts as needed.
- 6. To re-assemble place the lower reg body on the table with the piston bore to the table's surface. Take the regulator internals and place them on the lower reg body in the order shown in the drawing below. Use the reg pin to keep everything lined up correctly. The last part of the internals to be placed on the stack should be the reg seat retainer sleeve.
- 7. Take the upper body and as you look through the hole in the ASA port, lower the upper body down onto the stack of internal parts. Then gently screw the two halves of the reg bodies together.
- 8. Use a strap wrench on the lower body and tighten the two body halves together.
- 9. Place the reg piston in the bore on the lower body, and then re-install the main reg spring and adjuster finger tight until you are ready to use the reg again.

# 2-Liter Parts:

Part:	Qty:	Part No:
2-Liter Reg Main Body	1	941
-015 O-ring	1	
-009 O-ring	1	
Reg Seat Retainer Sleeve	1	938
Reg Pin Spring	1	
Reg Pin	1	937
Reg Seat Washer	1	936

#### 2-Liter Parts: (cont'd) Qty: Part No: Part: Reg Seat Disk 935 -009 O-ring 70D -010 O-ring 90D 2-Liter Reg Lower Body 1 939 -019 O-ring 2-Liter Reg Piston 934 -017 o-ring 1 Main Reg Spring 1

