

## SIDEWINDER® (Pat # 6675791) Regulator

INSTRUCTIONS, Ver 1.2, Aug 2006

**Model:** Sidewinder Regulator, Version C

**Gas Source:** Compressed Air, Nitrogen, CO2

**Length: Outside the marker:** Long – 4 \_”; Medium – 3 \_”; Short – 3 \_”

**Width:** 1” dia main body; 1 \_” dia swivel sleeve

**Weight:** .308 lbs

**Externally Adjustable Output Pressure:** 0-800 psi

**Max Input Pressure:** 800 psi

### **Adjusting the Sidewinder Regulator:**

#### **Decrease output:**

Looking at the regulator from the bottom, turn the allen wrench clockwise to decrease the pressure.

#### **Increase output:**

Looking at the regulator from the bottom, turn the allen wrench counter clockwise to increase the pressure.

### **Maintenance:**

**Do not use grease of any kind on AKA products.** Put a couple of drops of Extreme Lube in the air intake when you play.

Shoot the marker several times after any adjustment to the Sidewinder regulator to allow the velocity to stabilize.

Make sure the vent hole on the side of the regulator body middle 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. Use an anti-siphon tube in your CO2 tank and use a secondary regulator such as a Palmer Stabilizer.

After a break-in period, the Sidewinder should keep a very consistent pressure range. If the pressure range creeps, check for debris between the regulator seat and piston. If it continues, replace the Sidewinder core.

### **Disassembly of the Sidewinder:**

To disassemble the Sidewinder and not scratch the outside, you will need the following: two pieces of 2x4's about 4 inches long, a cloth strap wrench, a bench vise, an adjustable wrench, and a set of allen wrenches.

1. Remove all air sources.

2. Clamp the regulator body upper and middle between the two pieces of wood.
3. Using the adjustable wrench on the swivel nut, unscrew the swivel assembly from the bottom of the regulator. Once loose, unscrew the two pieces. Be careful not to lose the regulator washer and the o-ring that are inside this portion of the regulator.
4. Re-clamp the regulator between the wood pieces, (clamp on the regulator body upper. Using the strap wrench loosen the regulator body middle from the body upper. Inspect the o-rings for damage or wear. Replace if needed.
5. Remove the piston and springs from the body middle. Do not damage the piston or the o-rings. Remember in what order the parts came out of the regulator. Replace o-rings or springs, if needed.
6. To disassemble the swivel joint, clamp the threaded end of the swivel between the two pieces of wood. Use the adjustable wrench to loosen the swivel nut. The swivel nut has been BLUE LOC-TITED in place.
7. Using a gentle twisting action gently pull the swivel sleeve from the regulator body lower. Inspect the o-rings for damage or wear. Replace if needed.
8. Using an allen wrench, unscrew the regulator core from the body lower. The core comes out through the front of the body lower. Do not try backing it out. Be careful not to damage any o-rings. If needed, replace the o-rings. If the regulator seat is damaged, replace the entire core assembly.
9. The regulator goes back together easily. When replacing the piston, hold the regulator upside down to prevent damage to the washer and piston sealing surface. Use the strap wrench to tighten. Do not over-tighten, just snug down and use a drop of BLUE Loc-tite on the threads to keep the regulator bodies tight together.

