THROTTLE PRE-SET INSTRUCTIONS

THROTTLE PRESET AIR SYSTEM

With performance and reliability in mind, the Throttle Preset air system utilizes an advanced design that is hassle-free and performs above the expectations of even the most demanding player.

The Throttle Preset has a factory-set output pressure of approximately 800 psi, eliminating the need for setup or player adjustment. Simply screw the Throttle Preset into the gun's ASA (CA adapter) as you would a standard CO2 tank. Be sure to apply a small amount of grease to the CA threads and bottle o-ring. The Throttle Preset utilizes a Schrader valve system for output airflow control. When the air system is under pressure but not in use, the Schrader valve shuts off the flow of air. When the Throttle Preset is screwed into the gun, the ASA pin will depress the Schrader valve pin and allow a free flow of air into the gun.

To remove the Throttle Preset from your marker while there is still air in the tank, simply unscrew the air system from the ASA. As you unscrew the Throttle Preset the Schrader valve closes, shutting off the airflow. The remaining air in the marker will vent back out the ASA while you unscrew the Throttle Preset.

Filling the Throttle Preset

Your Throttle Preset air system can be filled either on or off the gun. The Throttle Preset is supplied with an industry standard quick disconnect fill nipple. The fill nipple is mounted on the side of the Throttle Preset housing. Be sure to use compressed air or nitrogen only. Be sure that the compressor and air system supplying the air have the proper filters and moisture separators installed and working. Virtually all regulator failures are due to dirty, contaminated air. It is important to keep the fill nipple clear of dirt and debris. Make sure to keep the fill nipple dust cover on at all times unless in the process of filling.

Maintenance and Repair

DYE's Throttle Preset was designed and built from the ground up to provide the longest service life possible, with the least amount of maintenance needed. All basic preventative maintenance can be performed without removing the regulator from the air bottle or disassembling the regulator housing.

1. Care should be taken to make sure that every time the Throttle Preset is screwed into the gun's ASA a small amount of grease or oil is applied to the air system's threads.

2. Be sure to keep the fill nipple cover on at all times when not filling. This will help prevent any dirt or debris for entering the regulator and damaging the regulator seat.

Additional Maintenance: *The fill nipple o-ring and/or the Schrader valve may need replacement after time and wear.*

COMPLETELY VENT ALL AIR OUT OF THE BOTTLE BEFORE WORKING ON THE AIR SYSTEM.

Schrader Pin Valve Replacement

If, for some reason, the Schrader pin valve begins to leak and is no longer able to retain the air in the Throttle Preset, the Schrader valve can be quickly replaced.

1. Use a standard car tire valve tool to remove the old Schrader.

2. Install the new Schrader. Be careful not to over-tighten the new Schrader valve as it might break under excessive force.

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Servicing the Fill Nipple

1. To replace the fill nipple o-ring simply use a 7/16 wrench and unscrew the fitting from the regulator housing.

2. Once you have removed the fill nipple from the housing you will need to knock the piston out of the fill nipple.

3. The o-ring is on the piston. Remove the old o-ring and replace it with a new UR90 #006 o-ring.

4. Once you have the new o-ring in place and the nipple and piston reassembled, apply thread sealant to the male threads of the fill nipple and thread it back into the regulator housing.

5. Be sure not to over-tighten the fitting, as this will cause insufficient piston travel, which can result in o-ring failure.

The Throttle Preset also has a filter installed underneath the fill nipple to help prevent any contaminants from gaining access into the regulator system and damaging the reg seat or any internal o-rings. While you have the fill nipple off, it is a good idea to remove any debris that the filter has collected.

Housing Disassembly

If disassembly of the Throttle Preset becomes necessary, it should be done by a certified DYE Throttle System repair center. The DYE certified repair center will have the proper tools to avoid damage to the external body of the regulator. The Throttle Preset does not need to be disassembled unless the regulator has failed in some way (e.g., supplying an improperly regulated PSI). This will more than likely be due to contaminated air damaging the seat or o-rings.

The Throttle Preset is built into a two-piece housing. The top and bottom sections of the housing are threaded together using left-hand threads (opposite of standard threads). For safety, the top cap and main body are set together with a specialized glue. As a secondary precaution there are two 6-32 set screws locking the top cap in place onto the main body. There is no reason to ever remove the Throttle Preset regulator from the tank.

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To access all internal parts including the reg seat the top cap must be removed from the main body. Consult the exploded drawing below for reference.

1. Remove the two 6-32 set screws from the side of the top cap. Failure to do this could result in permanently damaging the main body threads.

2. Unscrew the top cap from the main body using one of DYE's special assembly collets. If you don't have one, use a set of soft jaws in a vise.

3. Once the top cap has been removed, the Belleville springs and piston can be removed.

4. Replace both o-rings UR90 #006 and UR90 #012.

5. Replace the reg seat, which can be pushed out from the top of the piston. Be sure that the new seat is fully inserted into the bottom of the piston. Also make sure not to damage the sealing surface of the new seat when pressing it into the piston.

6. To reassemble, arrange the Belleville discs in the proper order (see diagram) and drop into the main body of the Throttle Preset.

7. Grease both o-rings on the piston. Push the piston down into the main body through the Belleville springs.

8. Make sure the cap threads are clean before screwing the cap tightly back onto the main body. Lock the setscrews down to make sure the cap does not come loose during use.