**Titanium Pistol Suppressor — Cleaning & Care Instructions**

**Safety first:** always ensure the firearm is unloaded and follow normal range and workshop safety procedures before removing or handling a suppressor. Wear eye and glove protection when cleaning.

Titanium suppressors are extremely durable, but they respond differently to heat, carbon buildup, and certain chemicals than stainless steel. The schedule and methods below will help preserve performance, threads, and finish.

**General Guidelines**

* Inspect your suppressor visually every few range sessions for excessive carbon buildup, baffle fouling, or damage.
* Always remove the hub and end cap during cleaning and check thread faces and mating surfaces for residue or debris.
* Remove internal small parts (pistons, springs, sleeves) and clean them separately — these components are stainless steel.
* Follow the cleaner manufacturer’s directions for soak times and rinsing.
* When reassembling, verify all parts are dry and thread surfaces are lightly lubricated where appropriate.

**Approved Cleaners (examples)**

* Breakthrough Suppressor Cleaner
* Otis Suppressor Cleaner
* Simple Green® Extreme / Crystal (use formulas that are safe for metals; avoid standard household formulas that can be corrosively alkaline)
* Mild solvent baths (non-ammonia, manufacturer-recommended)

**Do not** use ammonia-based cleaners, strong acids/alkalis, or products that list aluminum corrosion on the label.

**Brushes & Tools**

* Use **nylon brushes** and non-metallic picks only. Metal brushes can damage threads, coatings, and mating surfaces.
* Ultrasonic cleaners and dedicated suppressor baths are acceptable for titanium — follow their recommended cycle times.
* Avoid harsh abrasives, steel wool, or aggressive scrubbing that can scratch or pit the finish.

**Cleaning Intervals & Procedures**

**After 150–200 rounds (light cleaning)**

* Perform a quick inspection of threads, baffles, and end cap.
* Wipe visible carbon deposits from accessible surfaces.
* Confirm finishes and coatings appear intact.

**After 400–500 rounds (thorough cleaning)**

* Remove hub and end cap; soak parts in an approved cleaner per instructions.
* Scrub with a nylon brush; clean piston/spring assemblies thoroughly.
* Inspect end cap for strikes and baffle surfaces for abnormal fouling or wear.

**After 800–1,000 rounds (deep clean / maintenance)**

* Perform an extended soak following the cleaner’s directions.
* If using an ultrasonic cleaner, keep runs moderate (recommended: 10–20 minutes per cycle).
* Rinse, dry completely, and lightly lubricate threads before reassembly.

**Additional Notes & Best Practices**

* If you run sustained high rates of fire (short barrels, rapid mag dumps), shorten cleaning intervals by ~20–30% — heat and carbon lock develop faster with rapid strings of fire.
* Do not leave parts submerged longer than recommended. Prolonged exposure can harm finishes or small components.
* Apply a light anti-seize or high-temperature grease to external threads to help prevent carbon lock; avoid filling bore paths or gas ports with grease.
* Store the suppressor dry and in a ventilated area after cleaning.
* If you notice heavy baffle erosion, cracks, unusual wear, or thread damage, discontinue use and contact the manufacturer or a qualified gunsmith.