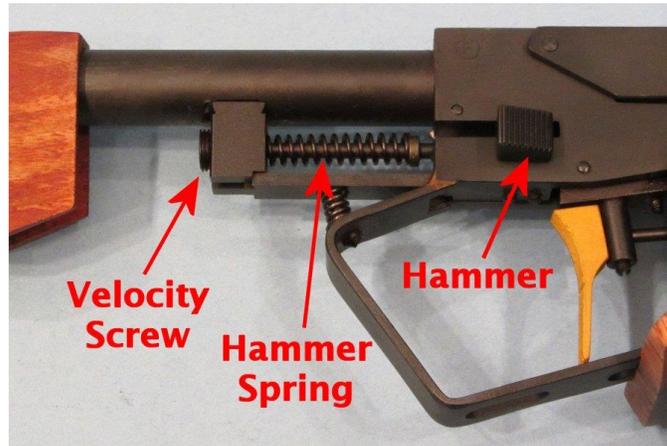


Tau-7 Air Pistol Velocity Screw Adjustment

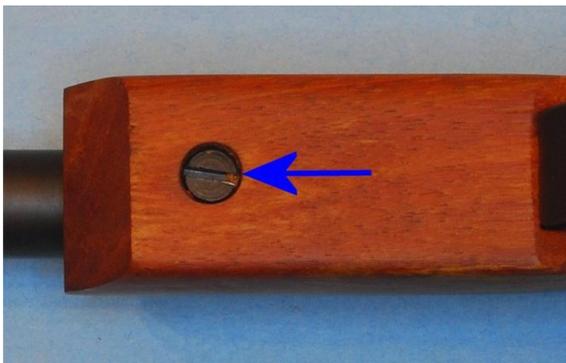
Velocity Adjustment Operation: The velocity setting in the Tau-7 is controlled by how hard the hammer hits the firing valve when the trigger is pulled. The hammer force is determined by the adjustment of a screw which varies the compression of the hammer spring (see figure below).



What Goes Wrong: Ordinarily the screw is under a fair amount of force from the spring, but over time, the combination of the spring pressure and vibration tends to back out the adjusting screw on some pistols. The weaker the spring force, the faster the screw backs out, and the velocity can drop fairly dramatically over a short period of time.

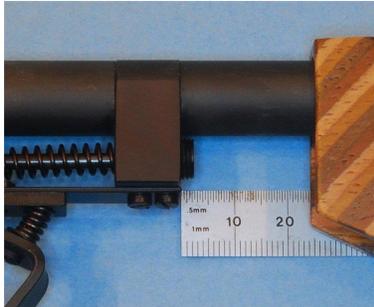
NOTE: Before getting too carried away, make sure both breech seals are in place. If one went missing, it will leak enough that you will also get a significant drop in velocity.

Readjusting the Velocity: The first step is to loosen the forend. The screw that holds it in place is located on the bottom of the fore-end. The Tau-7 uses a large slotted screw (see below, left), while the Tau-7 Jr's use a set screw that takes a 1.5 mm hex key (below, right). NOTE: the screw does NOT thread into the barrel, it operates a clamp. You only need to loosen it less than a full turn. The forend won't come off completely because of the sight mount, but unless there are several barrel weights installed, you should be able to slide it forward far enough to clear the adjustment screw & then rotate it out of the way.



Once you have exposed the innards, examine the location of the velocity screw, and compare it with the photos below. These are from three different pistols that haven't shifted noticeably from the factory velocity setting. On the Tau-7's (on left & center), the end of the screw sticks out about 2 to 2.5 mm. On the Tau-7 Jr (on right), the end is actually screwed into the block by several threads. If the screw has backed out to the point where the velocity is noticeably low, it's usually unscrewed by at least a couple of

turns. If so, turn the screw in until it roughly matches the appropriate photo. You should feel a significant increase in the spring tension. You can test fire the pistol and listen to the sound to see if that is having the desired effect. I've done this by ear on a couple pistols, and have at least gotten the shooter back into a match in short order.



Tau-7 #1



Tau-7 #2



Tau-7 Jr.

Ideally, the velocity should be set with a chronograph & the groups checked with a rest. The nominal factory velocity is supposed to be ~ 470 feet-per-second (FPS), but some people have reported good results as low as 400 FPS. The group size can vary a bit with velocity, and there may be multiple "nodes" where equal accuracy is achieved at several different velocities. About 420 FPS seems to be a good compromise between accuracy & CO2 usage. The screw adjusts the velocity at a rate of about 40 fps/revolution.

Once you are convinced the velocity is set correctly, a little thread locking compound of some sort will prevent it from backing out again. A small dab of either blue or purple LockTite, or nail polish, on the screw should take care of it without making future adjustments too difficult.

Once you are all finished, slide the forend back in place and tighten the clamping screw. Return to shooting 10's...