## Diana 34P Kit ARH GSX OS tune results

Problems with trigger(felt very stiff). Found sear was pitted by 1<sup>st</sup> stage trigger adjustment screw.



Removed Sear from trigger assembly and polished the pitted area thoroughly to reduce the drag. Also clipped off ½ a coil on the sear spring. Upon re-assembly the rifle would not fire. I had adjusted the trigger outside the action and had to turn the screws in more.



Since I was already this far into the air rifle I checked the barrel and cocking arm for roughness. There was still some roughness in the travel and In addition to that, the piston travel was checked and the travel did not feel like it should. There were areas the piston seemed to almost hang, and felt "grabby" for lack of better wording. There was no way around removing the barrel and piston now. Using fine grit sandpaper I removed the sharp edges inside the cocking slot in the receiver (I had already done this before but obviously more had developed.



The factory Diana seal was a real mess. The picture really doesn't do justice to how bad the seal was. It explained a lot of that piston travel oddness I felt. So now it was time to replace the seal it seemed.



This is the new seal installed. It's the ARH Apex Seal. I used powdered Moly and burnished it into the seal and piston surface. This particular step took a little time but I sure did like the way it looked afterwards, the seal looks almost metallic with the moly embedded into it. It also put a nice gray sheen on the piston itself. When this was done I applied a very small amount of MicroLubrol M77 Moly paste with a hobby paint brush on the side of the piston seal and also at the piston skirt. I also cleaned out the compression tube and then reapplied some powdered moly, wipe it in a bit the removed excess. I did not size the new piston seal, and it slid right into the compression tube without the need of any helpers (tiny screwdriver blade, hard plastic, etc.) It was time to prep the new ARH tune kit materials. I applied M77 moly paste with the hobbyist paint brush again in a light coating. I was careful to get the spring inside and outside, the tophat and back guide along with the metal rotation washer.

After this I-reassembled the air rifle using small amount of blue Loctite on stock screws and a small drop on the barrel pivot screw also. The barrel pivot tension was adjusted to where the barrel just dropped under its own pressure. This is an opposite approach to what the majority says you should do- tighten the barrel pivot until it just holds. Reinstalled the scope mount, scope, etc.

Before these changes this air rifle shot well with the Air Arms Diablo Field pellet. After these changes however it changed its mind and now seems to like the H&N Field Target Trophy. Cocking the air rifle is easier now, and firing it there is no "sproing" noise or twang. It is simply a thump upon firing. Although

the kit is supposed to offer less energy it feels like to me there is more and there seems to be more energy at the target now also. I ran approximately 100 rounds through it today. After making trigger adjustments, scope adjustments, and also finding what pellet it liked Here is a 10 shot group at 15 yards with the H&N FTT.



Different shot, the target dot was removed from the backstop box and set onto brighter paper.

