

The Smith Shop

The Winchester '97 Pump Shotgun was designed 115 years ago. It was primarily a hunting piece and saw fewer rounds run through it in a year than today's Cowboy Action Shooters put through it in a few weeks. The '97 is a marvel of mechanical design but was not meant to be actuated as frequently nor as roughly as we do now. There is one weak part in the old pump that has a tendency to break. It is the Action Hook Screw.

This screw serves 2 purposes in the '97 design. The screw has a head on one end with a screwdriver slot, a threaded body like most screws and a nose end that is like a dowel. It is the screw that passes through the bolt from the right side and its nose end is inserted into a hole in the Action Hook. The Action Hook is the part that slides back and forth in the frame when the action slide is pumped to eject an empty and insert a fresh round. The nose or dowel end receives a goodly amount of stress while it is transferring the motion of the Action Hook to the Bolt.

The original Action Hook Screws and replacements were/are made of some oil hardening steel and were meant to suffice to transfer the loads from slide to bolt. However with the shock delivered to these fine old shotguns in today's competitive world they have been known to break. Well all things have a possibility of breaking but the flaw in the '97 design is that when the Hook Screw breaks it does so right where the threads end and the "dowel" begins. The guns action sometimes becomes erratic. When one removes the Hook Screw to replace it many times the screw portion comes out but the "dowel" end remains. Usually no amount of shaking, tapping, poking or anything else will get the broken piece out. You also can not further disassemble the gun without removing that broken piece.

The usual solution has been to drill a small hole in the frame on the left side so that a small drift pin can be inserted to knock out the broken piece. Sure can make the gun look ugly.

The Smith Shop now offers a replacement screw that is made from S-7 Tool Steel. S-7 is a shock-resistant air hardening tool steel, designed for high impact resistance at relatively high hardness. It offers toughness to withstand chipping and breaking, combined with high attainable hardness and good wear resistance.

Replace your Hook Screw today before you need to drill that access hole in the frame of your favorite '97.

Oh by the way the other job the Hook Screw provides is the portion of the head that protrudes from the right side of the bolt pushes the Cartridge Guide down when the bolt is brought forward.