ASSEMBLY INSTRUCTIONS FOR THE Howell Old West Conversion GATED CONVERSION KIT

DO NOT DRY FIRE!

INSPECT BASE REPLICA REVOLVER PRIOR TO FITTING CONVERSION RING

Before you begin converting your Uberti or Pietta percussion revolver, first insure the weapon is ***UNLOADED***, and is in good working order. The Howell Old West Conversion Kit consists of precisely made parts that are designed to function properly with your particular revolver. If your revolver is worn, out of time, or not in good working order, this will affect the finished project. If your revolver is out of time, or not in good working order, seek the services of a qualified gunsmith to correct any defect in the revolver's action.

HOWELL OLD WEST CONVERSION KIT consists of the cylinder, 2 (6-32)mounting screws, the conversion ring and gate assembly.

ADDITIONAL ITEMS YOU WILL NEED: Vise, Electric Drill, Tap Wrench, Center Punch, Hammer, and Light Machine Oil (3 in 1), extended length #35 drill bit (MSC #83239376,) a long shanked 6-32 tap (MSC# 63328496,) dremel or diegrinder, sanding drum or grinding stone.

Howell Old West strongly recommends you use our drilling and tapping fixture to properly align the conversion ring's mounting holes on your frame. The Howell Old West fixture can be purchased for $50, or the Drill Fixture Kit (Drill Fixture, Drill Bit, and Tap) can be rented for a $100 fee with a refundable $ 70.00 deposit for 30 days. This fixture is designed to make the conversion process quick and easy. When using the Howell Old West fixture, you will also need a six-inch # 35 drill bit (MSC part no. 83239376) and a long shanked 6-32 tap (MSC part no. 63328496). The drill bit and tap can be purchased through MSC Industrial Supply.

CONVERTING YOUR REVOLVER

1. **Disassemble your revolver completely.** If you do not have the parts schematic, go to VTI's web page as you will find detailed parts schematics listed by revolver model. (www.vtigunparts.com)
2. Secure the stripped frame in the vise. You may reattach the triggerguard for a better mount. Make sure you protect the frame and/or trigger guard with leather or you may use Duct Tape.
3. There are four holes in the drill fixture marked with a "D" or a "T" . "D" is the DRILL marking, and "T" is the Tap Marking. Mount the fixture on the frame as shown in Fig. 1 with the holes marked "D" facing out. These holes are used to guide the # 35 drill. Mark the drill holes for center punching by using the blunt end of the drill bit and dab the end with a marking substance that will transfer the mark to the frame. (Lipstick, Whiteout, etc.) After marking the drill hole locations, remove the fixture and center punch the marked holes to assist in breaking through the case hardening. Remount the fixture with the "D" facing out. Insert bit until it is against the frame, measure 1/4 inch above the face of the fixture and wrap tape around the drill bit at that height: this is the depth you need to drill. Remove the bit and chuck it in your drill. Apply a liberal dose of oil into the drilling hole, insert drill into fixture, and drill hole 1/4 inch in depth. If you experience binding during the drilling process, remove drill and clean, then re-oil and continue drilling. Do this for both small "D" holes.

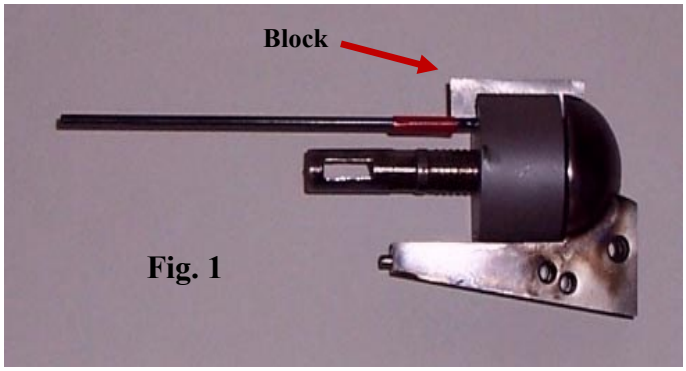

Fig. 1

*****NOTE** On Pietta frames, you may need to shim the block (Fig.1) that aligns the fixture to the hammer slot.***

4. After drilling the holes, reverse the fixture so that the "T" is visible. With 6-32 Tap in a Tap Wrench, oil the tap, insert it into the fixture, and turn CLOCKWISE. Back the tap out every 1/4 to 1/2 turn, clean any metal chips off, re-oil, and resume tapping. Use extreme caution not to bottom out the tap in the drilled hole.
5. Remove fixture and install conversion ring using the screws that were included. The longer screw should be inserted in the top of the ring and may need shortening due to tap depth. The shorter screw should be inserted at the bottom of the ring; it may need to be shortened to prevent interference with the bolt. We recommend you use Locktite Threadlocker # 222MS on the screws during "FINAL ASSEMBLY (Step #16)."
6. Using the conversion ring as a template mark the frame where the groove will be cut.
7. **Fig. 2** shows a groove being cut using a Dremel tool and a coarse sanding drum; a grinding wheel of 3/8 inch diameter may also be used to rough cut the groove.
8. Cut groove to the depth of the conversion ring. You only need enough clearance to load/unload cartridges. **Grind slowly** and do not allow the frame to get hot, letting it cool when it does become hot. Grind the groove in a "U" shape.
9. **Fig. 3** shows a completed loading groove.
10. With an EMPTY cartridge case, check the groove for ease of loading and unloading. If the case head binds, use a sanding drum and polish the loading groove and retry the cartridge. Repeat as needed until the case can easily be inserted and removed from the cylinder, as seen in **Fig. 4**.
11. Once you have the groove cut correctly, polish it with 400 grit Wet/Dry Emery cloth.
12. Touch up the loading groove with cold blue solution.
13. Install Hammer.
14. With the hammer down, scribe a line on the hammer where it extends beyond the face of the frame. Remove the extra material from the hammer face with a file or grinder. (**see Fig. 5**)
15. Hold the conversion ring in place and lower the hammer against the ring and check for clearance between the bottom of the sight nose and top of the conversion ring near the firing pin. (**see Fig. 6**.) If the bottom of sight nose hits the ring, remove excess material to create clearance.
16. To avoid damage to the firing pin, weld the slot in the face of the hammer or fill the slot of the hammer with J-B Weld or similar compound. (**see Fig. 7**)
17. Assemble your revolver and check for proper function.


Fig. 2

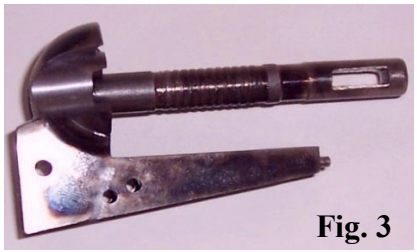
Fig. 3


Fig. 4

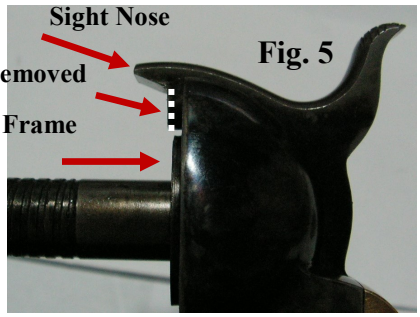

Fig. 5

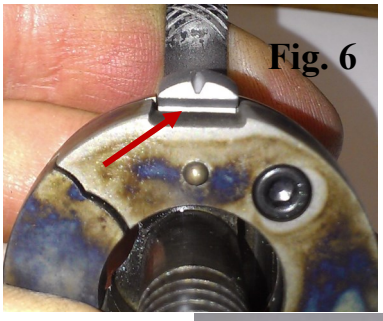
Fig. 6

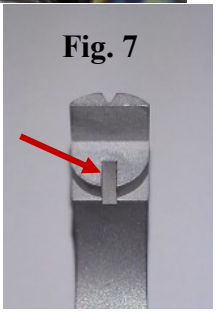
Fig. 7

Note: If you have a problem during the conversion process, STOP and call 608.676.2518 or e-mail Howell Old West Conversions at info@howelloldwestconversions.com for technical assistance.