FCW, LLC
5370 US HWY 77, Cortland, NE 68331 402-798-8383

Thank you for purchasing **FCW's 1911 "EZ" Checkering Fixture.** You will be able to produce a quality, professional-looking checkering pattern by following the instructions and by exercising a little patience. The fixture is adjustable for various widths of checkering files. It will guide both sides of the file to keep the lines running true. A horizontal border under the trigger guard can also be cut by using the fixture and plastic bushings.

ABOUT CHECKERING FILES

Most common checkering is done using checkering files with 20 or 30 lines per inch. Checkering files vary in quality and width, even if they come from the same manufacturer. The position of the teeth rows from the edge on one face of the file may be different than on the opposite face. For this reason, **mark one face of the file and continue to use one face only** from start to finish for either the vertical or the horizontal lines.

When cutting the horizontal lines, if you begin from the left side of the frame, you must continue to do all of the horizontal lines from the left side of the frame. Switching from side to side or from face to face will change where the file teeth cut in relation to the guide.

Another problem with some files is burrs or edges of teeth that overhang the sides of the file. Use a hard stone to **deburr all four edges of the file.** This will allow the file to glide smoothly along the guides. Files are to be used to cut in one direction. Also, remember to **keep the file square to the frame.**

After reaching maximum depth with the checkering file, you may wish to sharpen the points of the checkering. A three-square 60°-bent needle fine can be used for this purpose. Using this file freehanded, follow each line of the checkering, being careful not to tilt the file to the left or right. Painting Dykym on the checkered area first will help when deepening the grooves.

OTHER TOOLS (All of the tools listed may be found at Brownell's, Inc.)

-Versa vise with tilt adapter
-Toothbrush (for cleaning file)
-Three-square 60° bent needle file
-3/16" or *1/4"* round or square file (for horizontal border cut)
-Tapping fluid
-Small Swiss half-round file (for finish-up)
-Dykym (layout fluid)

BRIEF SUMMARY OF INSTRUCTIONS

1. Install side plates
2. Install horizontal guide assembly with plastic bearings
3. Cut horizontal border (using plastic bearings)
4. Remove horizontal guide assembly and plastic bearings
5. Install end plate and vertical guide assembly
6. Begin at one side and cut deep vertical serrations on radius
7. Remove vertical guides (leave end plate attached)
8. Install horizontal guide assembly
9. Cut horizontal serrations to same depth as vertical lines
10. Repeat if deeper lines are required
11. Deepen and finish-up lines using a three-square 60° bent needle file
12. Finish up all edges and top border using a small Swiss half-round file

IN PREPARATION

Secure the left and right frame side plates onto the frame (fig. A, #1 & #2). The plates slip over the grip screw bushings and are held in place with standard 1911 grip screws (not provided). Correctly installed, the plates will rest flat against the frame with the top edge parallel to the front strap. Install the fixture into a vise or Versa-vise.

Cut a horizontal border across the front strap. On a high grip frame, the border is cut just under the trigger guard (fig. C). On a standard frame, the border can be cut farther down the frame where the radius ends (fig. D).

HORIZONTAL BORDER/RELIEF (Fig. A, C, & D)

A. Place the plastic bearings over the guide rods (#5) and install the horizontal guide assembly (#3, #4, & #5) onto the frame side plates using the four 8-32 (#7) screws provided (fig. A). Position the horizontal guide assembly so that you can use one side or the other of the plastic bearings as a guide to cut the border (fig. C).

B. Use a 3/16" or *1/4"* round or square file to cut the groove across the radius. The groove (border) on the frame should be approximately the depth of the checkering (about .035") (fig. D). The border will allow for deeper serration's to be cut, due to greater file travel.

C. After the border has been established, remove the horizontal guide assembly from the side plates and remove the plastic bearings from the guide rods.

VERTICAL SERRATIONS (Fig. B. E, & F)

A. Install the end plate (#9) onto the side plates, using two 10-24x1/2"screws.

B. Install the vertical guide assembly (#10, 11, & 12) onto the end plate, using the 1/4 "-20 screw and temporarily tighten down.

C. To adjust the adjustable arm guide (#12), first, place masking tape on one edge of the checkering file to act as a tolerance spacer between the arm guides and the file. Place the taped file between the two arm guides and flat onto the frame (fig. E). Push the adjustable arm guide (#12) against the edge of the file so the file is held firmly between the two arms. Tighten the two screws on the arm guide (#12) while firmly holding the file in place. Remove the tape and check for ease of file travel between the guides. The file should be tight enough to be guided by the arms, but loose enough to travel freely. **Do not loosen or move the fixed arm (# 11).**

D. Loosen the screw holding the vertical guide assembly and pivot the assembly to one side of the frame. Insert the locating pin (#13) through the pivot base (#10) into the extreme right (or left) locating hole on the end plate. Tighten the *1/4*-20" pivot screw.

E. Begin cutting serrations using firm, even pressure along the length of the file. Check your work often and cut to the depth of the file teeth.

F. Continue to reposition the guide assembly into the next hole in the arc until the entire front strap radius has been cut. (Each hole in the arc will allow you to cut approximately three lines.)

G. Remove the vertical guide assembly, leaving the end plate in position.

HORIZONTAL SERRATIONS (Fig. A & G)

Position the horizontal guide assembly on the side plates and secure into place with four 8-32 screws (fig. G).

B. To adjust the horizontal guides, first, place masking tape on one edge of the file to act as a tolerance spacer between the guide rods (#5), file, and adjustable horizontal guide (#4). Place the taped file onto the frame between the guide rods and the adjustable horizontal guide (fig. G). Push the adjustable guide (#4) against the edge of the file so that you are holding the file firmly between the guides. Tighten the two screws (#6) (on top of the adjustable guide) firmly in place. Remove the tape and check for ease of file travel between the guides. The file should be tight enough to be guided but loose enough to travel freely.

C. Begin cutting the horizontal lines, stopping often to check your work. If you begin on the left side of the frame, you must do all of the lines from the left side. Remember to use only one side of the file. When cutting the lower sides of the frame, the file will cut into the horizontal guide base (#3). This is to be expected and will not adversely damage anything. Cut to the full depth of the file teeth.

D. After cutting horizontal serrations in one position, continue to reposition the horizontal guide assembly into the next set of locating holes on the side plates. Approximately one line will overlap at each new position.

FINISHING If you wish to increase the depth of the checkering, you can repeat the process of using the fixture or use a three- square 60°-bent needle file. Be careful not to tip the file left or right; keep the file cutting equally on two sides. Clean up the border and the area above the border with a round and/or half-round needle file. To remove file marks, use various small stones and/or a small deburring wheel (2" x *1/4*") on a Foredom hand grinder.

Figure A

Side plates (#1 & #2) and horizontal guide assembly (#3 & #4) assembled. Plastic bearings (#8) slide over guide rods (#5).

#1 Left Side Plate
#2 Right Side Plate
#3 Horizontal Guide Base
#4 Adjustable Horizontal Guide
#5 Guide Rods (2)
#6 10-24 x 2" Screws (2)
#7 8-32 x ¾" Screws (4)

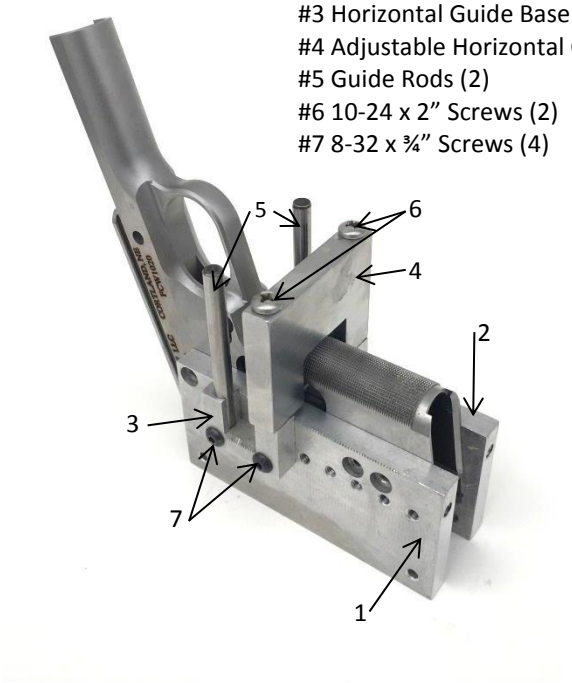


Figure B

Vertical guide assembly installed. Attach end plate (#9) to side plates (#1 & #2) with two 10-24 x ½" screws.

#9 End Plate
#10 Pivot Base
#11 Left (Fixed) Guide Arms
#12 Right Guild Arm (Adjustable)
#13 Locating Pin

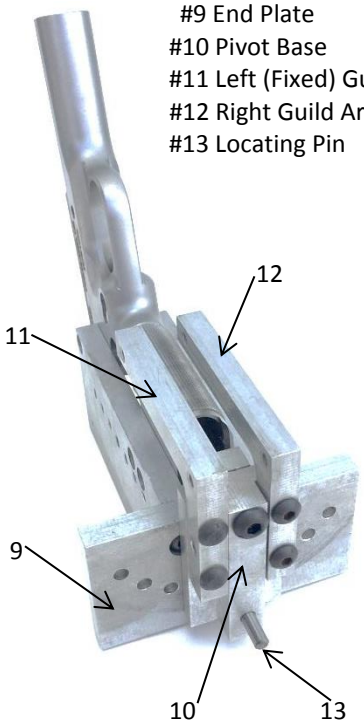


Figure C

Plastic bearings on guide rods, file in place for cutting the horizontal border on a high grip.

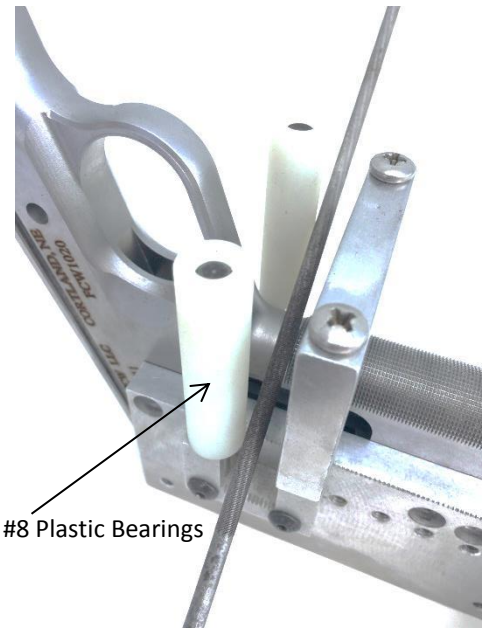
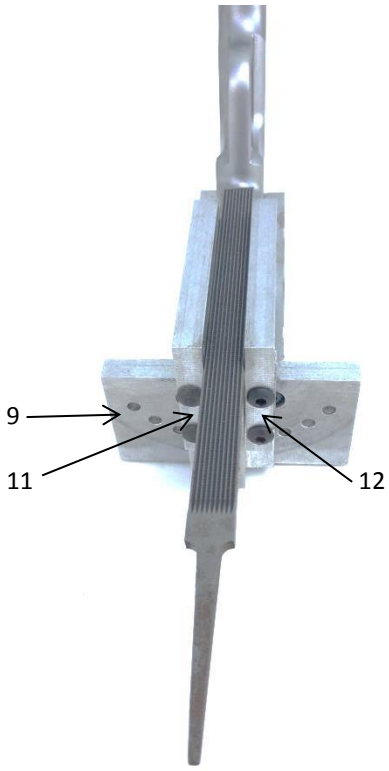


Figure D

Horizontal border cut made on the lower edge of the radius of a "non-high" grip frame.

Figure E

Adjusting the right guide arm (#12) for cutting the vertical serrations.



#9 End Plate
#10 Pivot Base
#11 Left (Fixed) Guide Arms
#12 Right Guild Arm (Adjustable)
#13 Locating Pin

Figure F

Vertical guide assembly moved to a left position.

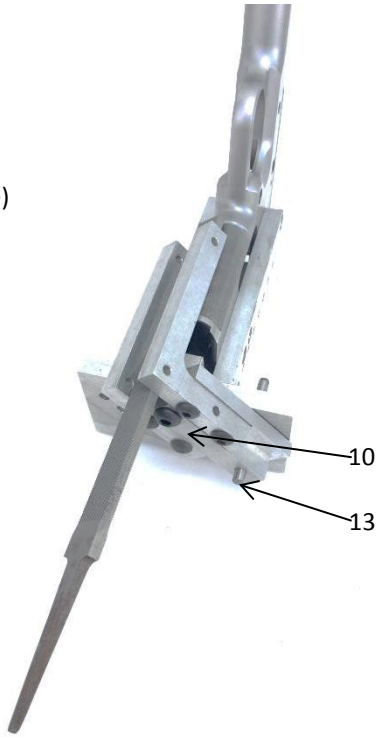
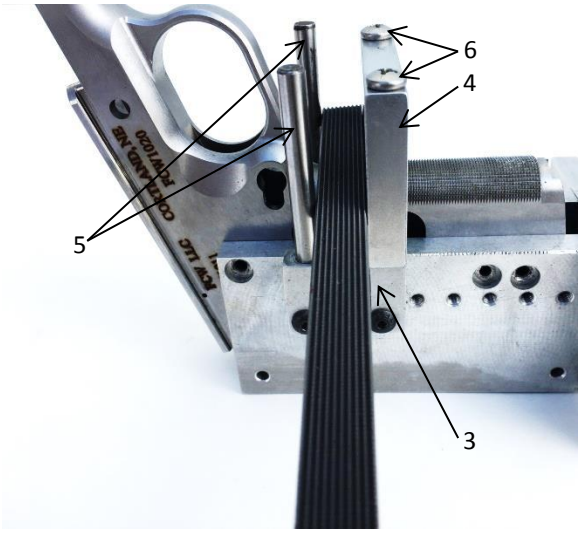


Figure G

Setting the file for horizontal serrations – first position.
The file should not bind in any position.



#3 Horizontal Guide Base
#4 Adjustable Horizontal Guide
#5 Guide Rods (2)
#6 10-24 x 2” Screws (2)