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Fitting A Webley Side-By-Side Outside Hammer Action

Resurrecting the stock of an old side-by-side action brings on a new set of challenges.

by Dominick Pisano

My web site produces a number of weird requests that I usually politely refuse with the explanation that I prefer to do full custom projects from beginning to end. Occasionally I get a request so interesting that it bears a further look. This is one.

The request was for me to fit a Webley side lock action with outside hammers. I haven't seen one of these in some years and was, quite frankly, intrigued. Truth be told I relished this sort of odd-ball challenge and, after trading several emails with the prospective customer, I agreed to take on the project.

The customer had acquired a stock machined by Ed Shulin of Trinidad, Colorado. This was good news as I have worked with Ed Shulin for more than twenty-five years. Since I knew his capabilities I sensed this was a doable project. The machined stock and action arrived a few days later. Sure enough, I was unfamiliar with the action so I took it to Don's Gunshop and to find out more about it. Don Bottom, the shop's owner, is one of those real-deal, "old timey" gunsmiths who is never in doubt about any action you might hand him. I asked him to remove the side plates so I could begin the process of fitting the action. He jokingly asked me if I would be able to reassemble the action and I told him to expect me to return. He also suggested that should I want to further disassemble I should put the action inside a large plastic bag to catch any springs or other parts which might come loose.



Above: The inletted stock and Webley action as received.

This turned out to be good advice because when I later removed the top lever a large vee spring popped out and would have fallen to the floor, likely to never be seen again.

I laid out all the parts and visualized their placement in the stock. Two things quickly caught my attention. There were two screw holes in the machined stock that would serve as guides during the inletting process. One was for a horizontal screw which would serve to line up the side plates and the other was a vertical screw which would serve to align the upper tang of the frame

and the trigger plate. I then secured all the parts not immediately needed in a safe place so as to not lose or misplace them.

My first step was to begin fitting the frame itself using the top tang as a guide. I carefully coated the tang and the rear of the frame with black marking agent and began the process of trying and fitting by carefully placing the part in the machined stock and giving it a light tap with a plastic tipped hammer, thus marking high spots on the wood. Next, I lifted the frame and then removed the marks left where the metal



touched the wood. I use a Dremel tool for this work using a variety of diamond bits of various grits. I know that many professional stock makers decry the use of the Dremel because it has a tendency to get out of control and “walk across the work” but I see it as very useful and, like all tools, it will not do the job by itself. You must learn to use it and be absolutely comfortable with your capability in performing the needed task.

Fitting the frame to the stock was much simplified due to the vertical screw I mentioned earlier. When it appeared I was close to having the part fully inletted I checked it by fitting the screw to verify alignment. I

***Above left:** View of machined inletting on left side of stock. Note the horizontal screw hole and the channel in the frame into which the forward part of the sidelock fits. **Above right:** Top view of action and stock with an awl in the horizontal screw hole. The action is almost fully inletted at this point.*

discovered the screw hole was a bit undersized and opened it up using my hand drill and correct bit. Once the screw would pass through the hole without binding I completed the task of fitting the frame and top tang. It took many tries and fits before I was satisfied that all was as it should be.

The next step was to fit the trigger plate in the machined stock and see that it would align with the previously-fitted top tang and frame. There is a slot machined in the bottom of the frame to fit the forward portion of the trigger plate. Using this as a guide I began the try and fit process again. This meant repeat-

***Below left:** Left inletted sidelock with arrows pointing to black marks indicating high spots to be carefully removed. **Below right:** Stock showing high spots being removed with a Dremel tool and diamond rotary rasp.*





edly placing and removing the part and carefully removing wood from any high spots as determined by the marking agent. Now it was a matter of fine tweaking both the frame and trigger plate for the perfect fit. This was done by screwing the vertical screw in place and tightening it down as much as possible. I was surprised at how much work was still to be done by the numerous black marks left by the marking agent.

When I was satisfied with my progress I turned my attention to fitting the side plates. This is a much more critical task than fitting the prior parts as there is no room for error. There are moving parts attached to

***Above left:** Awl placed into vertical screw hole which was used to correctly align the stock to the action. **Above right:** Vertical screw being seated. Note close fit of the action in the stock.*

the side plates, namely, the outside hammers and hammer vee springs. If the inletting is not perfect here these parts fail to function. That's the challenge I spoke of earlier. Fortunately, the machine inletting was very well done, giving me an excellent guide to getting the task accomplished.

The right side plate had an opening for the horizontal screw but I had to begin with the left side plate as the screw hole was countersunk to allow the screw to fully seat. The right side plate hole had the screw threads to accept the screw from the other side. I lined up the left side

***Below left:** Marking agent showing where hammer touches the wood alongside of the top tang. The hammer was eventually heated and bent to allow correct fit. **Below right:** Interior of the lock showing vee springs in the cocked (closed) position. These springs must be fully inletted into the stock in both the cocked and fired (open) position to allow action to function.*





plate by aligning it with the hole and fitting the screw into the hole in the stock. I also used the forward portion of the side plate by comparing it to the machined slot in the frame. I could not yet fit the forward portion of the side plate as this would tilt the side plate and cause false readings with the markings on the wood, thus causing the inletting to be skewed and oversized. The idea here is to remove as little wood as possible while insuring clearance for the moving parts attached to the side plate.

In addition to identifying the high spots and removing them I also used the rub marks left on the inter-

Above left: Hammer in the fired position with vee springs fully opened.
Above right: Right side view of action fully in letted.

nal parts of the side plate as an indication of wood needing removal. By the way, when I use the term "wood removal" I mean removing just minute amounts. There is no wholesale hewing here. The Dremel is perfect for this process.

As I continued to work I noted there were no high spots left to remove. This puzzled me as I could plainly see that the side plates were

not fully seated. I stepped away from the work to gain a different perspective and then noticed that the hammer was bearing on the wood along side of the top tang. I completely missed this as I was focused elsewhere on the task. The excellent lesson learned here is needing to recognize fatigue. It was time to set the work aside and turn my attention to some other task, preferably on a different gun.

Below left: Left side view of fully in letted action.

Below right: Trigger guard loop impinges on the rear trigger disallowing proper function.





Above: The trigger guard loop has been opened up allowing full movement of the rear trigger.

Both of the side hammers were bearing on the wood next to the tang on top of the frame. As I began to remove wood, I realized that the hammers were pressing against the wood based on the impressions left by the making agent. If I continued wood removal from the area above the side plates the wood would be skewed and not look right. After thinking on this I decided it was time for another trip to Don's Gunshop and have Don get a look-see. He took one look, tinkered with the mechanism and then said the only way to get a correct fit would be to heat the hammers and bend them out a bit. Ordinarily I wouldn't consider approving such a drastic move, but I had full confidence in Don and told him to go ahead.

Now I could complete the fitting as it should be using the aforementioned technique of fitting both side plates and then relieving excess wood till they were both fully seat-

ed. As the left side plate was slowly fitted to the stock I was ready to begin work on the right side plate. This is where the horizontal screw comes into play. In addition to correctly aligning the two side plates it serves as a method of tightening the side plates for a perfect fit. Care needs to be taken against over tightening the screw as this can bend the side plates. You will know when it's right by feel. When this is done both sides plates can be worked, first one and then the other, until both are fully seated. The aforementioned slots in the frame are a perfect guide for this task. At this point it is advisable to cock and uncock the hammers to be certain that the internal parts are free and clear to operate. And don't forget to keep an eye on the side hammers to make certain that they are clear of the wood and able to function.

Next I turned my attention to seating the trigger guard and lower

tang. I quickly discovered that the trigger guard impinged on the triggers and prohibited their function. That required another trip back to Don's. He noted the problem and called me the following day to tell me that the work was accomplished but that the lower tang was too long. He suggested that I complete the fitting as much as possible so that he could then trim the tang and drill and countersink the screw hole for a tang screw. I reported all this to my customer and he told me that the trigger guard was originally designed for a much shorter tang and he had added to it achieve a tang that would extend almost all the way down the wrist. Not a bad idea as this would add considerable strength to the attachment of the action to the stock. I called Don and told him to go ahead and shorten the tang and, while at it, to drill and counter bore the screw hole. With this accomplished it was an easy matter to complete the inletting of the trigger guard tang.

I returned the disassembled action to Don's Gunshop for reassembly. Upon my return to his shop, Don told me I had additional inletting to do since the hammers were in the cocked position during the inletting. With their powerful vee springs compressed they could not operate until additional wood was removed allowing room to function. With this task accomplished one of the challenges I faced when inletting this unfamiliar action was satisfied. The only thing remaining to complete the task was to remove excess wood that was standing proud of the side plates. This was done using a sanding block and various grits of abrasive paper beginning with 100 grit and working up to 320.

The project was now complete and awaiting collection by the customer. He was pleased with my efforts and soon thereafter rewarded me with two more projects. I too was pleased. This was a challenge worth pursuing. 