

SURPRISE, SURPRISE!

THE SMALLEST CHANGE IN GUN FIT CAN LEAD TO INCONSISTENCY, SAYS MICHAEL BRUNTON

It can happen to anyone! You're a Master class competitor and have been shooting the same gun for several years – in this case a Krieghoff K-80. You win some, you lose some, but inconsistent performances from one Big Blast to the next becomes ever more frustrating.

At the top level of competition, the difference of one or two targets separates the winner from the runner-up – and that is exactly the scenario that 28 year-old Mr A found himself in last season. The will to win was always there, but certain targets – typically long flat crossers and high battues – increasingly became a problem resulting in too many zeros on his scorecard.

Every aspect of his style, mental approach and technique was closely re-examined. After exhaustive evaluation and numerous coaching sessions, Mr A stumbled on the reason for his inconsistency. Over an extended period of time his upper body had changed – his long term three times a week visits to the gym had

resulted in wider shoulders, and enhanced pectoral and deltoid muscles in the chest and shoulders which had slightly changed the position of the shoulder pocket. His perfect gun fit of several years ago was now no longer perfect. So, it was off to the pattern plate!



Pictured here is the convincing evidence of a gun fit that saw Mr A invariably shooting high and right, clearly a problem when addressing flat crossers and battues. The only

solution was to have the stock adjusted. Enter Bob James!

Bob has long been involved in shooting sports and quality guns – ever since his teenage years and subsequently as a trap and skeet shooter. “Now my passion is sporting clays and beautiful guns,” says Bob. Previously known as Bob's Custom Shop (now trading as Montana LongGuns Inc.) the company undertakes all sorts of projects – some 80 percent of which involve stock fitting and modifications for US and overseas clients while the balance of sales surrounds restoration and customized work.

After several sessions at the pattern plate with Mr A, followed by numerous gun fit sessions, Bob set about producing a new stock for the Krieghoff K-80. The following pictures and storyboard

record his work over a period of several months – and the latest reports from Mr A are that those crossers and battues are no longer a problem! “The lesson learned,” says Mr A, “is that it's always worth checking your gun fit on an annual basis – any slight change in fit is more likely to be the cause of inconsistency than any other factor.”

NEW STOCK MAKING PROCESS – BOB EXPLAINS

The wood is selected for grain flow, density and color, keeping in mind the job it has to perform as a competition gun – standing up to 100's of thousands of rounds in all kinds of weather. Grain flow and density are determining factors. Color is a matter of personal taste. In this instance, the color and figure was chosen to enhance the light colored receiver and engraving.

◆ Lay out on the blank to get the best grain, color and figure.



◆ The blank is now prepared for the carver. The mounting hole is precisely located and drilled. The carving machine is hand operated and traces a pattern held in the left hand spindle.

The cutting tool duplicates the image on the right hand spindle or on the stock blank which will become the new butt stock. Because we are creating a one of a kind custom dimension, we leave excess wood on the new stock which will later be shaped by hand.



◆ The machine inletting has been completed and we are now ready to start fitting the wood to the receiver. We use a blue grease base high spot blue to show us where the wood is making contact with the metal. The wood will not fit the receiver at this stage, so it will be slipped on and then removed, thus leaving blue spots on the wood where it touched. This will then carefully be removed by hand with one of several tools – chisel, gauge, small file or pen file.

The process will be repeated many times until a perfect fit is achieved with 100 percent contact. Glass bedding is done to each competition gun as it helps to prevent the metal from “set back”. Setting the metal back into the wood can cause cracking. We use devcon liquid steel, it takes longer but is well worth it.





◆ We now have the wood fit to the receiver and are ready to start hand shaping the stock to the shooter's precise dimensions. The shaping is achieved with chisels, scrapers, hand planes, files and a 14 disc sander.

◆ The making of the forearm is basically the same process. Rough sanding is achieved with a random orbital sander. Finish sanding is to 320 grit finish.



◆ The entire stock is then hand sanded to achieve correct detail and fit. Note: The pad was installed prior to final sanding thus giving us a perfect fit.



◆ Complete assembly. Check all dimensions one more time, fitting and sand checked for imperfections. The gun is function tested and test fired, disassembled and prepared for finishing.



◆ All finishing is not the same. Once again, finish is determined by the need or use and personal desire. Remember, this is a competition gun and needs a very durable finish. For this we have chosen one of my favorites – Stain Poly Oil. This is the best I have seen any way you want to measure it. This finish is wet sanded into the pores until they are totally filled and then a couple of coats for a tough shield are added. (Normal time 7 days). Although we can create any design or pattern, we chose a nice classic fleur pattern for this job. All of our checkering is cut by hand – one line at a time, each line is cut several times. After the checkering passes inspection, it is ready to go back to the finishing department for a couple of coats of sealer to protect those beautiful diamonds.



◆ The wood has now been painstakingly created with great attention to every detail and is ready for final assembly. The entire gun is cleaned, lubed and inspected. The wood is prepared by scraping the finish from the fitting surfaces thus ensuring a perfect fit. After final assembly the gun is test fired again (10 rounds) and taken back to the bench, cleaned again, and weighed and balanced.



We are now ready for final inspection and then on to the shipping department. Another satisfied customer! ■



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