

# Grip Fitting 104

By SFC Richard Merrill and the USAMU International Pistol Team



In our previous discussions on grip fitting, we have moved from the logic of properly fitting a grip, to tools and shaping, to important terminology. Now we will conclude the series with a focus on fine tuning your grip from the rear forward.

Working from the rear of the grip around to the fingers brings us to the palm ridge line and the ball of the grip. If you look at your hand, the palm ridge line is the line that extends from your wrist towards your fingers. The ball is at the end of this line. In your hand the ball is a concave depression, but on the grip it is the round protrusion that fits into our palm. Most commercial grips already have this line and you only need a minor adjustment to fit it to your hand. The easiest way to fit this part is to add filler to the grip and grab the grip starting from the back with the hand getting as high and into the grip as possible, then reaching around with the fingers. From now on, this is how you should grip your pistol to guarantee consistency.

If filled correctly, you will form a knuckle-looking feature on top of the ball. This forms from the tendon for the middle finger, which also happens to be the deepest part of the ball. To know if you have added enough filler, you should not feel high points on your palm from the ball. The ball is on the side of the grip. If the ball is too large then you will feel it push into your hand and this push will cause sight misalignment. If you feel a gap in your palm, then you need more filler to provide a proper index to ensure you have a proper grip. You can test if the ball is in the right spot by holding the pistol for at least an hour without taking your hand out of the grip. When you release the grip there should be a red mark in the deepest part of the ball on your hand. If this red mark is not in the deepest part then you need to move the ball to the deepest spot.

The next index is the finger ridgeline. The valley under your fingers goes along with the finger ridgeline. The finger ridgeline is easy to set, and next to the ball, is the best index to make sure your hand is in the same place on the grip every time. To form the ridge line simply add filler in a line between the middle finger shelf and the palm shelf. After filler is added grab the pistol from the rear going forward again. The filler should be where your fingers and palm meet. Do not make this ridge too pronounced. This ridge is on the side of the grip, and if you make it large, then it will push your hand to the side causing sight misalignment. Again, you should not feel this ridge. If you feel it, then you have used too much filler. If you feel a gap, add more filler.

After the finger ridgeline has set, adjust the valley. The valley is the area between the finger ridge line and the ball. Simply remove enough wood so that your hand is not squished into the grip. Avoid making

this valley too deep because this will produce the same problem as having a finger ridgeline that is too pronounced.

Last on the grip are the fingers. To keep the grip pressure aligned from front to rear, the fingers must be placed so that the middle segment of the middle finger and ring finger are perpendicular to the axis of the barrel. Form a grip feature that allows fingertips to lie, but not a place to push into. If the middle segments of the fingers are incorrectly placed, the fingertips will be pushing from the side causing sight misalignment. So, like the thumb, the finger tips just lie there, but do not add pressure. The pinky finger hardly ever fits because on most people, it is too short. In order to remove enough wood to fit the pinky, you would be grinding the frame. Just give the pinky a good natural place to lie that will not place any unwanted pressures to the grip.

Some grips have ridgelines between every segment and every finger, such as a Steyr air pistol. These ridgelines are fine to have, but not necessary. Since our hands expand and contract every day, these ridgelines will usually be in a different place every day. For example, if your hand expands one millimeter every day, then each finger will expand one millimeter giving your fingers an overall expansion of four millimeters compared to the one millimeter of your hand. If you think your grip feels different from day to day, your fingers definitely will. If you have finger ridgelines, keep them rounded so you can barely feel them.

The middle finger shelf hardly ever has to be adjusted, but some people need to move their middle finger closer to the trigger. This means you need to make this shelf thinner. The middle finger shelf should also extend all the way over the top of the middle finger since this is one of the two spots supporting the weight of the pistol.

After you have adjusted the grip to fit your hand, then adjust your trigger. The tip segment of your trigger finger should be placed on the trigger shoe so that the segment is perpendicular to the barrel axis when taking up the second stage of the trigger. This will allow you to pull the trigger straight back. If you have inconsistent trigger squeeze, it will effect your sights less if the trigger comes straight back. Some people like none of their trigger finger touching the grip and some like the bottom segment of the trigger finger touching the grip. This is personal preference.

Fitting a grip does not need to be a daunting task. If you know what to look for, you can personalize all your grips. Be patient and stick to the basic principles we've discussed, and you will be shooting a lot more tens. My hope is that this series has helped you progress in your shooting career. Until next time STAY ARMY STRONG!