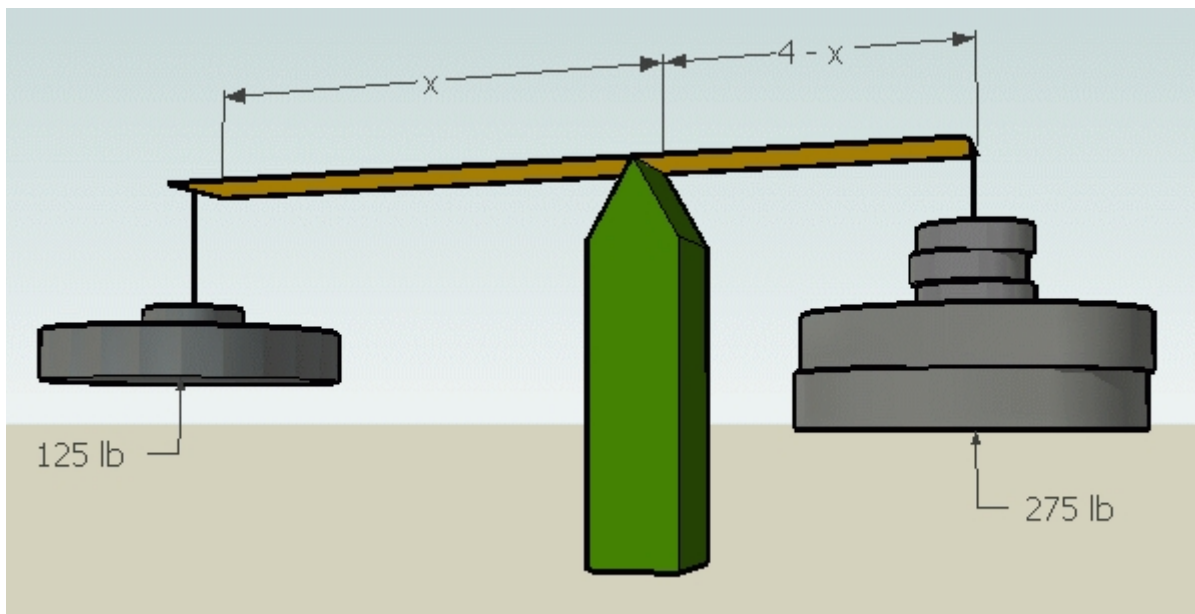


## Install Instruction and A3 Cam /Hammer Tutorial

The “3” designation signifies the part comes from the *A3 model NCO* pistol. For those who want to jump technology to a safer and different feeling 3-4 pound trigger this is the one to buy for their 1911 model or clone.

The A3 Cam/Hammer does not fire like conventional Sear design. A design I might add that began with the bow and arrow and remains unchanged even today. In fact the Sear and Hammer ledge no longer have a part **IN FIRING** the pistol but rather become instead another form of Safety. The new A3 Cam (Sear) fires from a cam action near its center of balance by principle of **Anvil and Fulcrum**.



**An A3 Cam Sear is about lifting; lifting the Hammer off the Cam Nose (Sear). An A1/A2 Sear is about dragging a weight toward a point of release.**

We understand the math here surely. Add to it that the Sear Spring provides *resistance* to the underside A3 Cam Sear. When the trigger pushes against the end surface represented by X it is being resisted on the other side by a spring weight. The effect is added weight is necessary. Here shown as 125 lbs, it must be **increased to overcome the added negative resistance**. The effect is a shorter distance of X or increased weight necessary to lift. So to change our trigger pull weight (Lift weight of X) we adjust the tension of that Sear Spring resistance on X to arrive at a desired Lift Weight balance represented by what has been called “Trigger Pull weight.”

Remember, Lift and Drag weights while they be measured with the same instrument are NOT the same thing. The Lippard design *Lifts*, and the Bow & Arrow design *Drags*.

Felt weight to me of an A3 feels 1 pound less than it measures to drag weight. i.e. a 4 pound A3 trigger feels like a 3 pound A1/A2. Once in the gun it is nearly impossible to

tell which design is present except to say the A3 has no drag. It simply comes up to weight of lift and the weapon fires.

### **Understanding correct pressures and where they are:**

All 1911 should have a pull weight taken from the trigger of 1.5 to 2 pounds on and against the Disconnecter. This is measured by actuation of the Disconnecter under spring tension of the center finger of the Cam Sear Spring. We want to insure is the Disconnecter will return to position under the Sear once trigger pull weight is removed. If it doesn't, spring weight needs to be added to the Disconnecter to achieve this result for safety and function of the pistol.

Now tension of the left finger of the Cam Sear spring can be adjusted. 2 pounds for a 3 lb trigger pull weight and 3 lbs for a 4 ½ pull and so on.



**The A3 Cam Sear by patented CAM action lifts the A3 Hammer off the Sear ledge.**

While parts can be “Dropped In,” all parts of a firearm should be installed by a competent gunsmith. This information is intended to educate the process required to properly regulate a Sear and its relationship with other parts; to educate the differences in a Lippard design from the previous design originating some 26,000 years ago. The Sear nose sitting in and on a Hammer notch of an A3 is now considered a Safety, not a firing mechanism. As such if Sear nose and Hammer notch are not tampered with, the firearm will not fire except with the pull of a trigger lifting the two parts from each other. The parts cannot be dragged apart. **With no drag in which to fire, the A3 Cam is a Safety and only man can fire the weapon.**

I hope I have exposed some new technology and you will embrace the A3 Safety CAM as a superior design for function not only in this 1911 pistol but all guns made.

Karl Lippard, Firearm Designer  
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Install trouble shoot:

1. Nothing needs to be done but a swap of parts. Sear and Hammer
2. Some older guns the Grip Safety doesn't allow the Commander Hammer to come all the way back and the Grip Safety has to be modified or replaced.
3. If a harder pull is noticed this is generally caused by previous adjustment or “trigger job”. A qualified gunsmith should make an adjustment as above instructed.
4. The CAM surface of the Hammer can take a small amount of Anti-Seize for a smoother frictionless release but burnishing of the two parts by dry firing or shooting 50 times polishes the surface. At 10 rounds the difference in pull weight will remain constant. Normally that is 3 lb 11 oz. and down to 3.5.