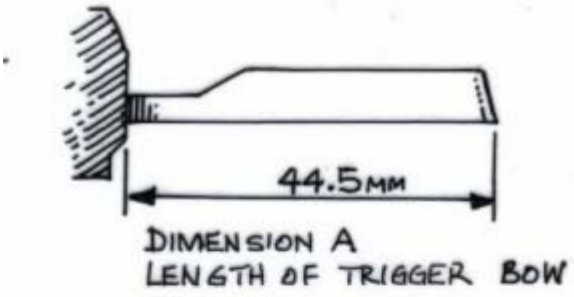
WA SVI Trigger tuning - *by Matthew Dean (aka MobiusStrip)* written Friday, May 17, 2002

NOTE: All part no's refer to the WA SV manual.

The following parts need to be separated from the rest of the Frame

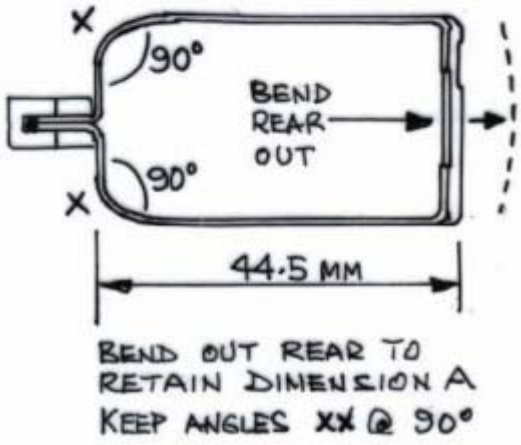
- Trigger Bow # 27 and pad
- Leaf Spring # 72
- Hammer Strut # 38 (with hammer attached)
- Beavertail # 30
- Valve plate connector # 36



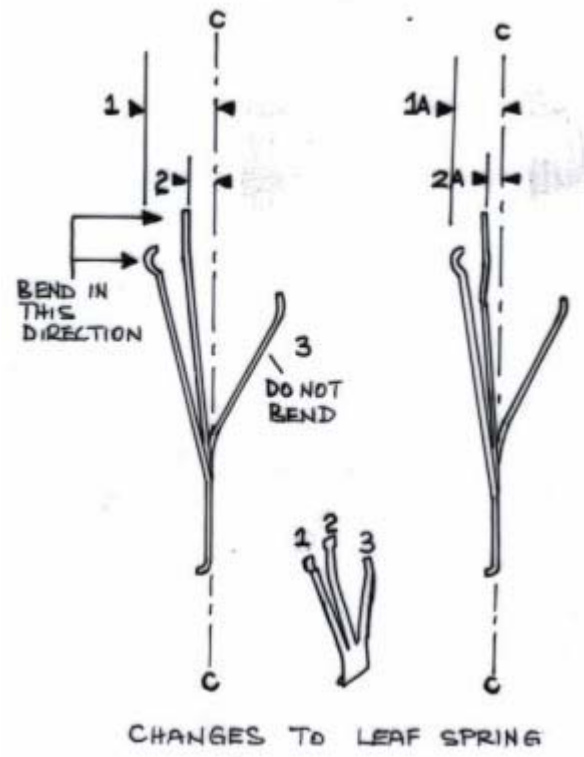
Trigger Bow # 27 The outside edge is normally quite smooth, but the inside is often rough with a burred edge. Lightly break the rough edge with 800 grade abrasive paper.
Now the trigger should be fitted into the grip frame.You will notice that with the trigger unit in the grip, that there is some sideways slop, this will be felt as "creep" when the trigger is pulled, and it is even more noticeable when the pull is lighter.

To cure this firstly measure from the back of the trigger bow to the back face of the trigger pad (approximately 44.5mm). What ever the measurement is - write it down!

Now, a very small amount at a time, you have to slightly bend the trigger bow side arms (from the inside), and put it back in the gun, until there is practically no sideways movement of the trigger bow in the grip frame, but it must still be able to slide freely.



Once you have accomplished this, measure the distance from the back of the trigger bow to the back face of the trigger pad again. The distance will most probably have changed, if it has, it needs to be brought back to the original length, or the trigger over travel screw # 79 will not function correctly.This is done by bending the front (trigger attached) and rear straps so that you regain the length you originally had. It is tricky to do this and the finished item should slide in and out of the trigger slot without binding or slopping from side to side.



CHANGES TO LEAF SPRING

Leaf Spring # 72 This will have rough edges on each of the individual tabs, use 800/1000 grade abrasive paper to break these edges so that they are nice and smooth.

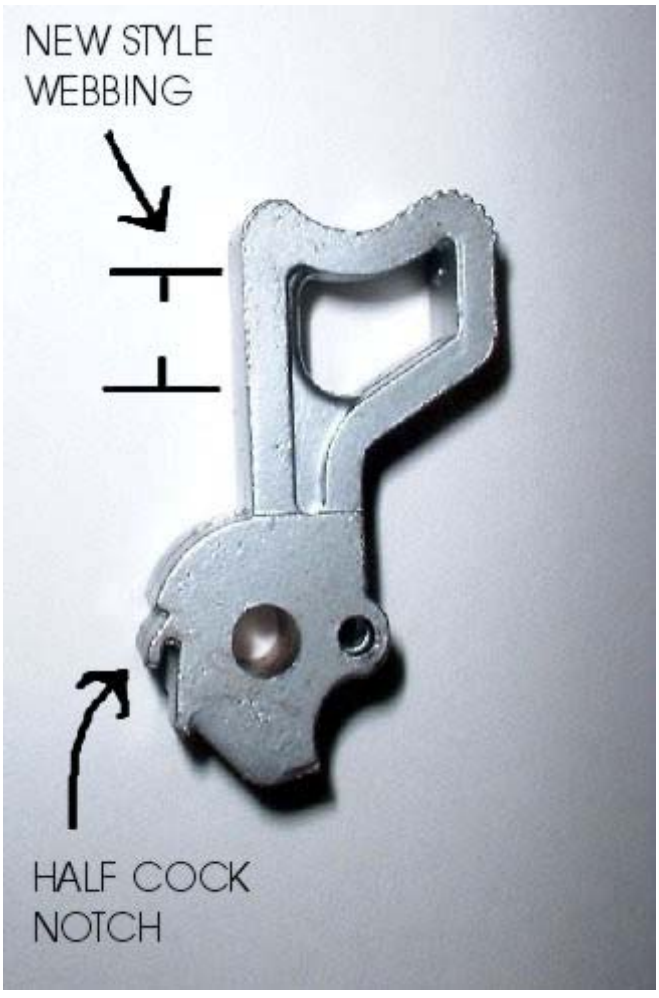
For a lighter pull, bend back the sear tab - 2, and trigger return tab - 1, slightly. How much? It is very hard to specify the exact amount and of course, individual preference, but if you go too far you can end up with other problems such as trigger bounce, where the hammer falls to half cock as the slide slams forward or a situation where the Hammer has slack at rest.

Hammer Strut # 38 Separation is optional, but provides the best results. Once separated from the hammer, this part too, should be de-burred, especially in the lower part where it rides inside the mainspring housing # 31. In fact on some of the custom hammer struts you see for the "real thing", the lower part of the hammer strut is cylindrical!

When finished reassemble to hammer for the next step.

Hammer # 29 This part has undergone modification, as can be seen by the photo, a new section of reinforcement webbing now runs up the front of the hammer, where as the old style has reinforcement only at the bottom. My experience is that the new style can have a problem with the Half Cock Notch lip catching on the inside of the frame.

To see if your gun has this problem, assemble the gun but leave out the Sear # 24 and the Disconnector (bottom half) # 25, Sear Pin # 24 and Beavertail # 30. Now rock the Hammer gently back and forth and feel for a slight catching as the Hammer moves through its arc of travel. If it does, chances are this is the Half Cock Notch Lip hitting the frame, as shown on the photo. Use some sort of marker pen/water-soluble paint to lighten/darken (dependent on original colour) this edge, then after a few Hammer rocks, remove the Hammer and look to see if the pen mark/paint has been scraped off. If it has, a gentle "kiss" with a fine file on this area should be enough to solve this. - Do not go too far only a small amount of material should need to be removed.



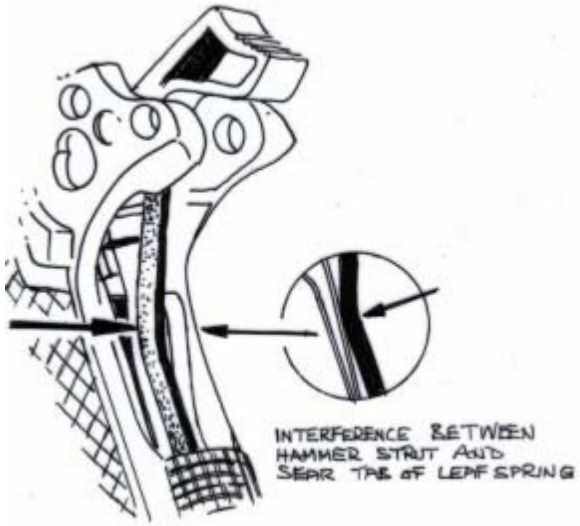
Beavertail # 30 Modification to this part is partly optional, an area that can cause problems is for this part to be only partially depressed when gripping the gun, and thus not unblocking the trigger bows path, leading to a locked trigger. Gripping the gun tightly is the obvious way to avoid this, but people with small hands (like me) are especially susceptible to this, and the lack of "meat" on our hands makes this sometimes hard to do.It might only happen occasionally, but usually in the middle of a shootout! Increase the tolerance for error by removing material from the underside of the part of the Beavertail that protrudes furthest into the gun. Before modification

this part measures at 4.75 to 4.5mm, (there is a slight taper). After removing material it measures 4.55 to 4.0mm. A small change but a significant one, and it has helped myself and others who find that this has given them trouble.

Valve plate connector # 36 Once removed from the frame, this part again has rough edges to it, by now the phrase, "break the edges with 800/1000 grade abrasive" paper should be springing to mind.

Post Assembly Tuning Time to set the Trigger over travel screw, # 79. With the magazine out of the gun, hold the trigger back and ease the hammer back and forth, and slowly screw in the over travel screw a bit at a time until a "bump" is felt, this means you are hitting the half cock notch and the over travel screw then needs to be backed out. Continuing to hold the trigger back and ease the hammer back and forth, keep backing out the screw until the bump is no longer felt, then back out another half turn and lock in place.

Now strip the gun, and reassemble, minus the Beavertail. Now looking at the left side of the gun, in the exposed are where you can see the Hammer Strut, Leaf Spring and Trigger Bow, once again, hold the trigger back and rock the hammer back and forth. What you are looking for is unwanted contact between the Sear tab of the Leaf spring and the Hammer Strut. If there is contact, the Sear tab will have to be bent so that it clears but still operates as intended. See Leaf Spring diagram for slight change in shape of tab 2.



Also look for scratch marks on the inside of the Beavertail where the Hammer strut may have rubbed. If it has rubbed, and the Hammer Strut is already de-burred, (see above), relieve the inside of the Beavertail where there are rub marks with a half round needle file, then blacken up with a marker pen, reassemble, hold back trigger and move Hammer back and forth. Disassemble and check for marks. Repeat this process until no contact is made.

Make sure the gun is lightly lubricated with a good quality oil, in all the internal moving areas.
