

# Palo Verde Gunworks R92SK

## Reduced Tension Rossi '92 Spring Kit

Fits Rossi '92s in .38/.357, .45 LC,  
44-40 and .44 mag.

### A Complete Kit

Includes: 5 premium quality springs,  
tension adjusters, pictured instructions  
and action smoothing tips

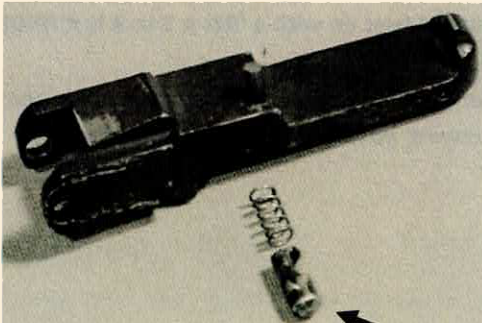
- > Adjustable main spring,
- > Carrier stop spring,
- > Friction stud spring,
- > Two ejector springs of different tensions,
- > Instructions for adjusting the trigger return spring,
- > Pictured spring installation Instructions with tips for "smoothing" your '92.

These premium quality springs are zinc plated to resist corrosion and the ends are closed and ground square to sit flush against other parts. The main spring is adjustable for 5 different tensions. Nylon bushings keep the mainspring in alignment with the hammer strut and reduce drag and friction.

These instructions assume you already know how to disassemble and reassemble your '92. If you are not completely familiar with the '92, get help from someone who is.

### Carrier Stop Spring:

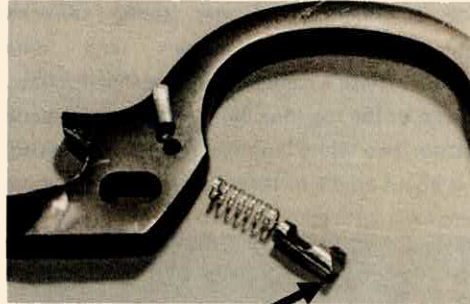
From the top, drive the pin out the bottom of the carrier. Note that the bottom end of the pin is knurled. Clean out the hole, smooth the plunger and polish the rounded end of the plunger a little if it is rough, add a drop of oil, insert



the new spring into the hole, insert the plunger with the notched side toward the pin, depress the plunger and reinsert the pin from the bottom -- smooth end of the pin in first.

### Lever Plunger (Friction Stud) Spring:

Drive out the plunger retaining pin from left to right (the right end of the pin is knurled) and remove the plunger and spring.

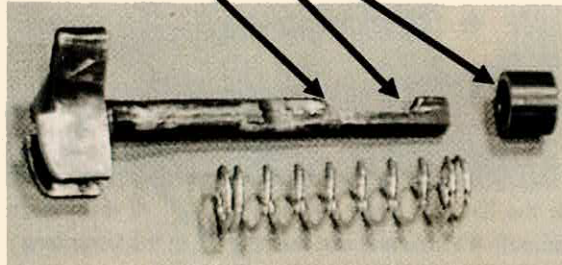


Remove any burrs from the inside of the hole and polish the plunger, including its wedge shaped end, and its "ramp" in the lower tang -- Do Not Change the shape of the wedge end or ramp! Insert the new spring with a drop of oil, insert the plunger with the notch toward the pin, depress plunger and insert the pin from the right -- put smooth end of the pin in first. Make certain the pin does not stick out of either side of the lever. You may need to remove a few thousandths from the end of the pin for it to clear on both sides.

### Ejector Spring:

The ejection mechanism consists of the ejector, the ejector spring and a collar --- all inserted into the front of the breech bolt.

It is best to de-burr/smooth the ejector a little. Smooth this "ramp" of the cut-out on the ejector as well as the inner edge of the hole through the collar. Do not alter the other ramp.



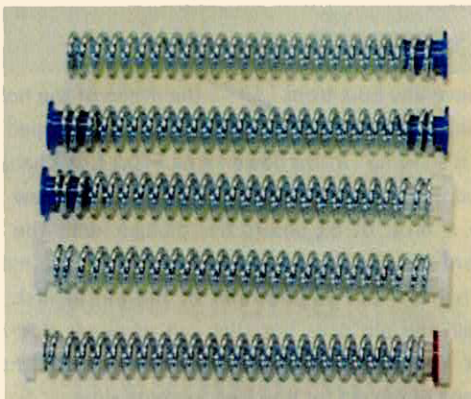
The ejector spring is critical to smooth and reliable function of a '92 and two new ejector springs of different tensions are provided. The lighter spring works well with the lighter .38/.357 brass and the heavier spring (in the separate, small plastic bag) works well with .45 and .44 brass. Either spring will work with either caliber but for the "lightest action" use the lightest spring that still gives you acceptable ejection --- try the lighter spring in your .44/.45, you may like the lighter feel of the closing action and be satisfied with the ejection.

**Note:** When you have the spring and collar on the ejector and insert it as a unit into the front of the breech bolt, sometimes the whole thing stops and it seems the spring is stopping it -- it's not the spring. It is the collar catching on the ramp of the cut-out on the ejector. Simply smooth the ramp and the inside edge of the hole in the collar a little more and insert a thin blade under the collar to straighten it slightly as you depress the ejector fully into the bolt face.

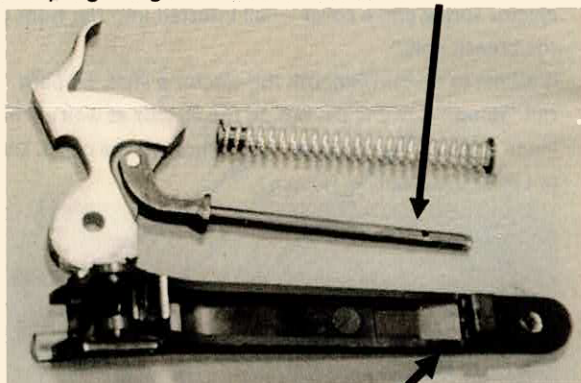
## Main Spring:

Your Palo Verde '92 Spring Kit includes a reduced tension main spring, Blue and White nylon bushings and 3 Red adjuster washers. Different combinations of these produce 5 different hammer spring tensions to accommodate different calibers and different ammunition. These 5 combinations are shown below with the **lightest at the top** (one Blue bushing) and **heaviest at the bottom** (two White bushings and one Red adjuster).

There is about an 8% increase in hammer spring tension between each setting/combination.



The Blue and White bushings fit inside the ends of the spring and, in addition to setting tension, also help keep the spring in alignment on the hammer strut.



If the hammer strut seems a little rough, smooth it a little and also the hole in the lower tang through which it slides (add a drop of oil there).

Select a starting combination of bushings and slide the new hammer spring and bushings onto the hammer strut, depress the spring and insert a paper clip or straight pin through the hole in the hammer strut to keep everything together until you re-assemble the rifle. Sometimes it helps to push the spring (while on the strut) against a slightly open vice to compress the spring enough to get the pin through the hole in the strut.

> **Two Blue is usually good for most**

**.38/.357 ammo**

> **One White plus one Blue is usually good**

**for most .45 LC and .44 mag. ammo**

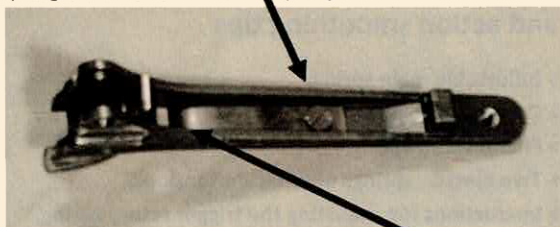
The lightest hammer spring tension will result in the lightest action. You might try lighter combinations. If your ammo needs greater hammer spring tension to

ensure that all rounds fire, look down the pictured list of bushing combinations and choose a slightly heavier combination. The Red adjuster washers go over the tube of the bushing, and against the spring --- see pictures.

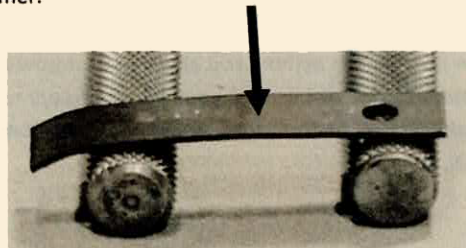
**Note:** Some of the older guns have tapered struts and bushings will only fit over the rear end of the strut -- not a problem, just build your tension with bushings and washers on the rear end of the spring ( one white = two Blue, one White plus One Red = one White plus one Blue, one White plus two Red = two White, one White plus 3 Red = two White plus one Red).

## Trigger return Spring:

The flat, factory trigger return spring works well with just a little re-shaping and no replacement spring is needed. Remove the big screw holding the trigger return spring and remove the spring.



The area of the spring from the downward curve to the screw hole usually has an upward arch bent into it. You want to take some of that upward arch out of the spring but do not over do it. Span the spring (top facing up) over the open jaws of a small vice or similar device and tap the middle of the spring gently but smartly with a small hammer.



You want to make it closer to flat, but don't overdo it! --- you can always bend it more (or bend it back the other way) until you get your desired trigger pull.

**Caution: Do not make a Hair Trigger! A very light trigger is unsafe and is unnecessary for anything you might ever do with a '92! A 3 to 3 1/2 # TRIGGER IS A GOOD TRIGGER!**

**Note: The front end of the spring curves sharply downward, do not alter or bend this end!**