Disassembly Manual

Dan Wesson 744 Silhouette 10"

Saturday, November 16, 2019



Page 1 of 20

Big Picture View	3
Remove grip	4
Remove barrel & shroud assembly	5
Frame Subassembly	6
Orientation	6
Capture the mainspring	7
Remove the hammer pin	8
Remove Trigger Group	9
Locate trigger group latch	9
Major subassemblies	10
Trigger group	11
Detail	11
Hand/Transfer bar subassembly detail	12
Crane & cylinder removal	13
Details	13
Removal	14
Crane & cylinder details	15
Remove the extractor rod	16
Crane & cylinder subassembly details	17
Extractor details	17
Red dot mount notes	18
Mount	18
Red Dot	18
New mount idea	19
Reassembly Notes	19
Bolt & Cylinder Reassembly	19
Trigger Group Reassembly	20
Cylinder gap setting	20

Big Picture View



Remove grip

In this step, the grip is removed (socket bolt in base of grip); the indicated socket bolt will be used to capture the main spring. See notes later - there is a better way.



Remove barrel & shroud assembly

The barrel nut uses a special Dan Wesson wrench. After the barrel nut is removed, the shroud slips off, and the barrel is unscrewed from the frame.



Frame Subassembly

Orientation

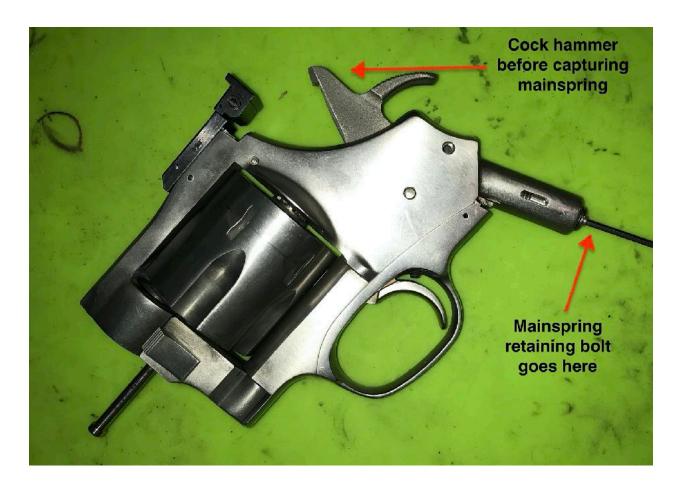
Note the hammer pin & mainspring retaining bolt. Remove the mainspring retaining bolt at this



time. **UPDATE**: use 3-48 threaded rod & nut. Much better!

Capture the mainspring

Cock the hammer, and thread the mainspring retaining bolt through the grip attachment hole into the mainspring strut. This captures the mainspring. A better tactic than using the retaining screw Is to use a longer 3-48 screw to engage more threads. If you have to remove / replace the mainspring, use a 3-48 threaded rod & nuts.



Remove the hammer pin

The hammer pin will slide out from left to right (looking from rear of gun) - the right head is much bigger! Hand force with the proper size punch will remove it. The hammer will be loose at this time.



Remove Trigger Group

Locate trigger group latch

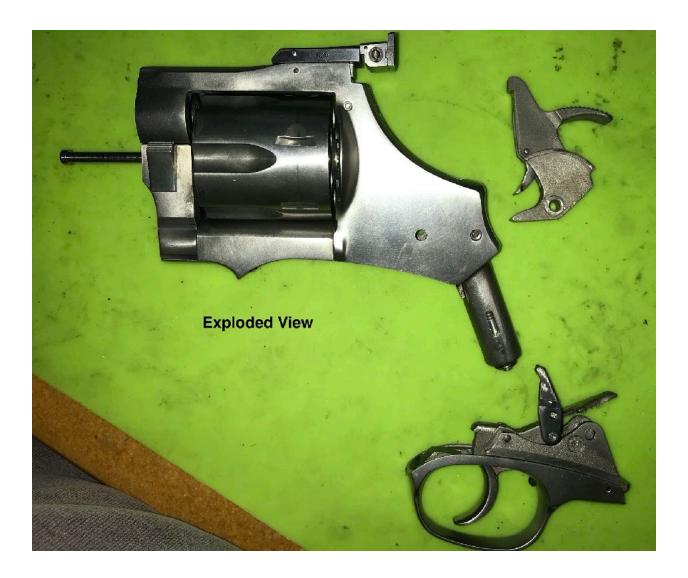
The latch is located on the bottom of the gun, and is normally covered by the grip. Use a brass punch, and, with hand pressure, release the latch and draw the trigger group out of the frame.





Major subassemblies

Note orientation of major parts. The trigger group is oriented properly, and the hand/ transfer bar is still attached. The double action sear is attached to the hammer.



Trigger group

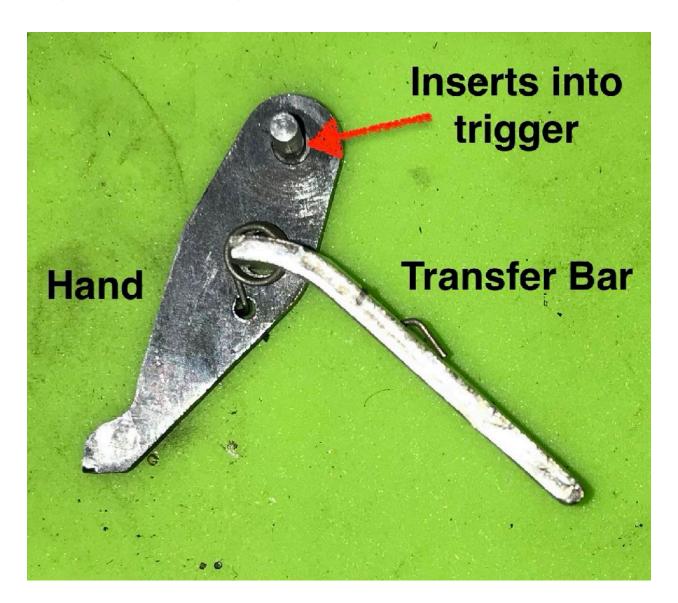
Detail

Note the hammer pin was reinstalled for this picture. Obviously it cannot be put into the frame like this, as the hammer comes in from the top, and the trigger group from the bottom. The hand/transfer bar assembly pin rides in a hole on the tail of the trigger.



Hand/Transfer bar subassembly detail

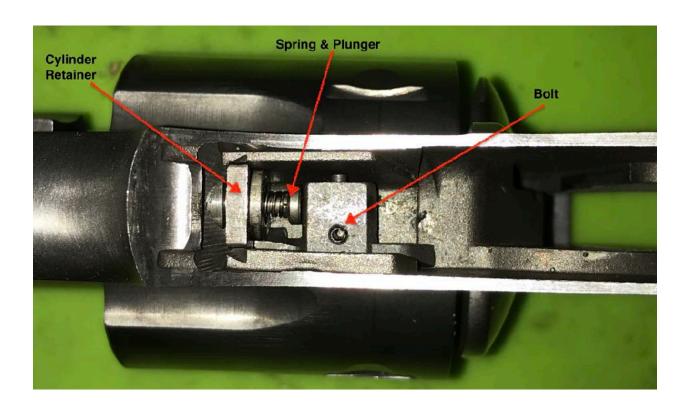
Note this is upside down and backwards from the picture above (the pin is at the top & is facing up). This shows the spring that pushes the transfer bar into position.



Crane & cylinder removal

The cylinder is retained by a clip. There are several small parts (spring, plunger & bolt) in addition to the clip. The rear of the gun is to the right.

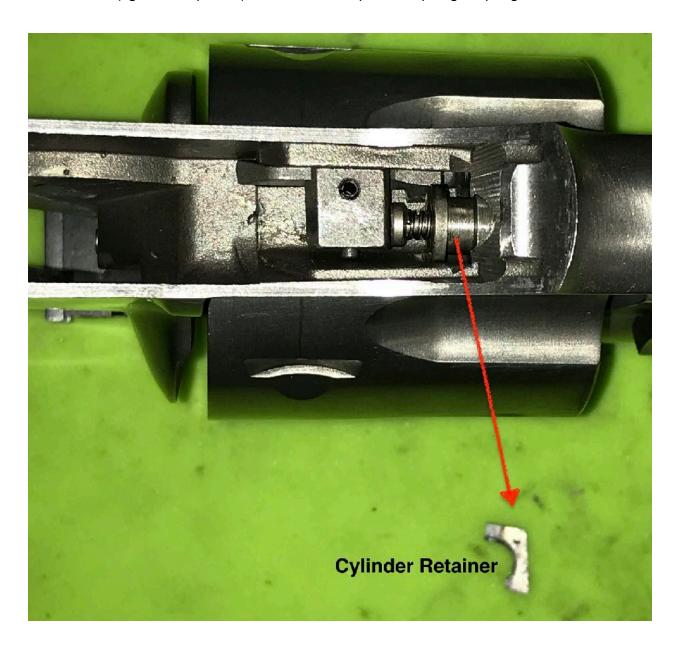
Details





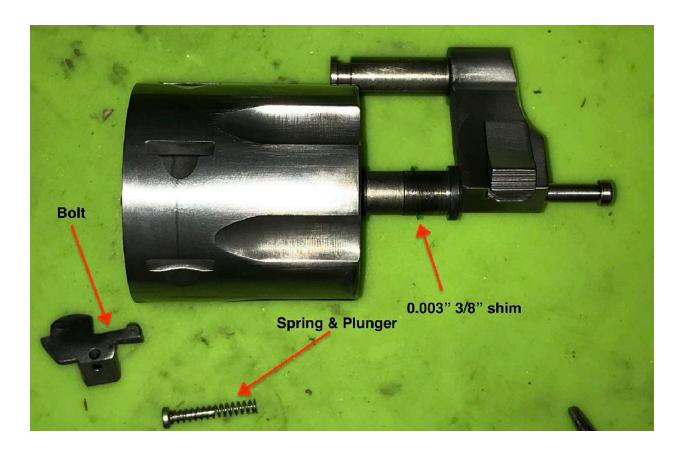
Removal

Remove the retainer (forceps work well). Note that it isn't symmetric. The crane & cylinder will slide forward (right in this picture). Make sure to capture the plunger, spring & bolt.



Crane & cylinder details

In this picture, there is a 0.003" shim for headspacing the cylinder. This may not be present depending on how the gas ring stretch exercise goes - there could be no shim, our a different sized one. Update - I stretched the gas ring & eliminated the spacer.



Remove the extractor rod

This is a normal (right hand tightens) thread unlike Smith & Wesson extractor rods. Use some sort of padding and a vise grip to remove. Blue loctite helps keep this tight.



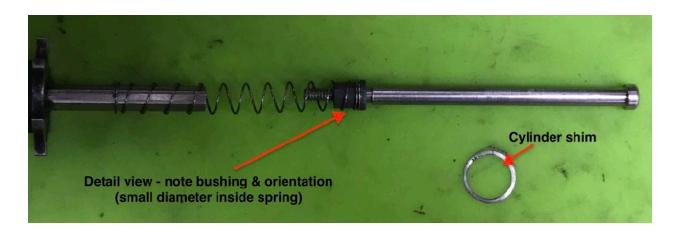
Crane & cylinder subassembly details

The extractor assembly is not fully disassembled yet.



Extractor details

Note the small bushing especially the orientation. It serves to locate one end of the spring, as well as a spring guide. The headspace shim is also shown, for no apparent reason.



Red dot mount notes



Mount

It's a modified Weigand mount for Ruger revolvers. I had to relieve & bed the forward part to clear the DW frame. Currently its held down with the single 6-48 screw that came with the mount (same thread as the DW rear sight) torqued to 25 in-lbs using blue LocTite. It came loose after a couple hundred rounds of full bore loads (300 grain bullet, max H110), so I redid it using the torque spec noted.

If needed, my next step is some combination of

- · Longer screw, trimmed to length; there is a little bit of thread left in the frame
- 2nd screw
- Bigger screw(s)

I have brass shim stock between the DW frame & mount recoil lug to tighten up the fit.

I could also drop the mount a little bit lower (see the gap between the mount & frame at the rear).

https://www.jackweigand.com/Ruger-Revolver-Mini-Mount.html

Red Dot

Leupold DeltaPoint Pro using their Picatinny rail adapter.

New mount idea



Use Griffon Hill Super Redhawk mount https://griffonhill.com/product/ruger-blackhawk-super-blackhawk-super-blackhawk-gp100-security-six-single-six-mount/

- Trim bottom
- · Possibly some glass bedding
- Rear sight screw 6-48 screw
- 2nd screw using a 6-32 tap & screw
- · Use Ruger Super Redhawk cross pin
- Holosun 508T

I had to shim between the red dot & base because of the angle between the base & barrel. It looks like a 0.025" shim works for now. I intend to make a more formal shim or bed it with epoxy at a later date.

Reassembly Notes

Bolt & Cylinder Reassembly

Put the bolt in 1st, then the cylinder w/the plunger & spring. Secure the cylinder, then put the retainer in (oriented properly!).

Trigger Group Reassembly

Hardest part is getting hand & transfer bar back in place. Put hammer in (mainspring captured), use a punch to retain it. Start the hand/transfer bar up, then link to trigger group. Pull trigger back all the way and work up (hammer tail has to hook under rear of trigger). Pull punch holding hammer then keep working up.

Another tactic - put hammer in last & from the top. I don't know why I never realized I could do this before. Probably helped to manipulate the trigger to line everything up.

Cylinder gap setting

Good functionality with gap 0.004-0.005". Too tight & run risk of pushing rubbing front of cylinder to rear of barrel especially with fouling.

Since all the components have tolerances, the gap may vary slightly by feel between cylinders.

Best practice I've found so far is:

- Empty cylinder
- Tighten barrel against feeler gage. Make sure you can move gage in/out. This is forcing the cylinder back as far as it can go.
- Check for binding cylinder/barrel by ensuring that a 0.002" feeler gage passes when pushing the cylinder forward (taking out slack).
- Put original gage back in.
- Put shroud on & tighten barrel nut.
- · Check clearance on each cylinder.

For extra credit:

- Put empty, fired cases (with fired primer) in all chambers.
- Cock & dry fire. Hold trigger; the firing pin pushes the cartridge / cylinder forward a little.
- Check gap to make sure it is at least 0.002".
- Release trigger
- · Check gap; it should be same as original gage.
- Repeat for each chamber.

Look at the clearance between the fired cases & the recoil shield. Tightest spots are on right side. It can vary significantly between cases. If cases are rubbing, it makes the action feel tight as the cylinder rotates.