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Caneau's Guide For Making Your Stock Sig Rock (Stage 2) (a.k.a. DIY

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caneau
Member



Posted May 28, 2009 09:57 PM

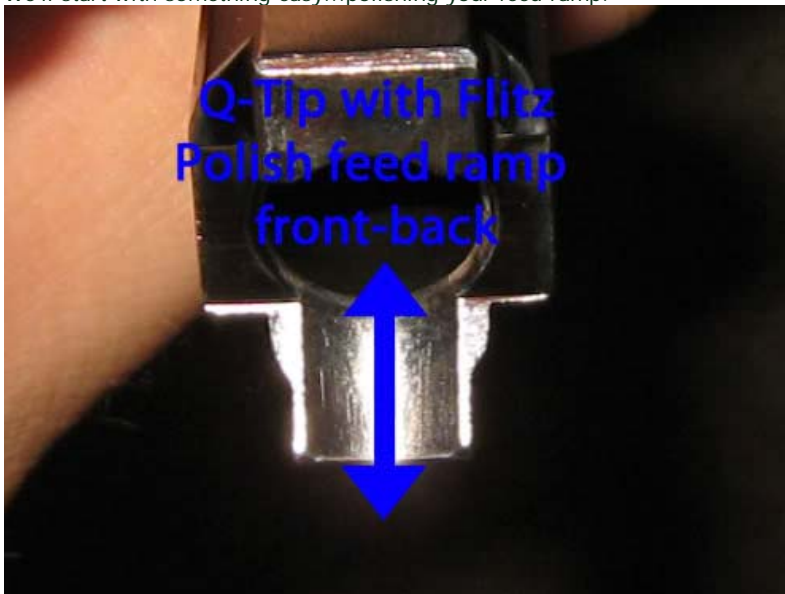
By popular demand, I've decided to continue with my series on Sig improvements. "Stage 2" has to do with improving the feel of a Sig's trigger.

Before I begin, let me make something clear. Doing this will void your Sig's warranty. No ands ifs or buts about it. Doing this wrong can also damage parts. I won't say how many hammers and sears I killed before I finally got this right, so consider yourself warned.

These steps, if done correctly, are essentially a "fluff and buff" package. If you were to send your gun off to Sig, they'd call this the Action Enhancement Package and charge you a decent amount of money for it.

Doing these steps does require a fair amount of knowledge of Sig assembly and disassembly. Sigs are not hard to take apart. At the same time they're not like a Glock where you can pretty much take the gun apart blindfolded. The Armorer's DVD is a great way to start learning about how your Sig works.

We'll start with something easy...polishing your feed ramp.



I like to use Flitz, Q-Tips, and about 10 minutes of elbow grease to polish a feed ramp. Dip your Q-Tip in the Flitz and with a decent amount of pressure, work the Q-Tip against the feed ramp in the direction of bullet travel. Even if you can't see it, polishing leaves micro-serrations in the metal which cause it to be smoother in one direction. This is why you don't just want to take a Dremel to a feed ramp. The Dremel is spinning perpendicular to bullet travel, plus it may remove too much material. Stop polishing once you have your feed ramp is shiny. You're just removing the outer bluing and surface imperfections of the metal to make the feed ramp shiny.

The next step is my take on the Sig Action Enhancement Package. I am assuming that if you're gotten this far, you are comfortable with frame stripping a Sig. First we'll start off with the trigger bar. The first thing I recommend replacing (if your gun didn't already come this way) is the old style, bent-wire trigger spring with the new style curly spring, as seen below.



I find that the newer spring has less of a chance of rubbing against the grip.

That was easy. Now onto something a bit more challenging...the trigger bar. Working on the trigger bar isn't hard.





As you can see in the pics, the part that contacts the safety and hammer is nice and shiny. This is where a Dremel really comes in handy. What you can somewhat see in the second pic is that all of the edges are also chamfered and polished. Remember, this is stamped steel that these parts were formed from, so there will be some imperfections.

Ok, so what are some tricks to getting a nice, smooth surface? I suggest investing in a nice set of gunsmith stones. I personally use and like the Spyderco ceramic stones. The shapes they come in allow me to get into some unusual spaces with some parts. There are other really good gunsmith stone sets available from places like Brownells. A good set isn't cheap though and will run you at least \$50, more if you want finer or coarser stones to add to your set.

What I usually do is first do an initial pass with a Dremel to remove the Sig phosphating (a.k.a. "bluing" even though it's really not). Phosphating, as nice of a coating that it is for rust resistance, does not make for a smooth surface. Once removed, you can see the roughness or smoothness of the metal underneath.

With the metal exposed, you can start using your stone. Remember, a little goes a long way here. Stone in the direction of friction, never perpendicular. You're making microscopic serrations in the metal which help keep it moving smooth in one direction. What you are trying to do is remove all of the ridges and valleys (imperfections) in the metal. With the trigger bar in particular, you have a bit of tolerance to play with and it is not quite as sensitive as the hammer or sear.

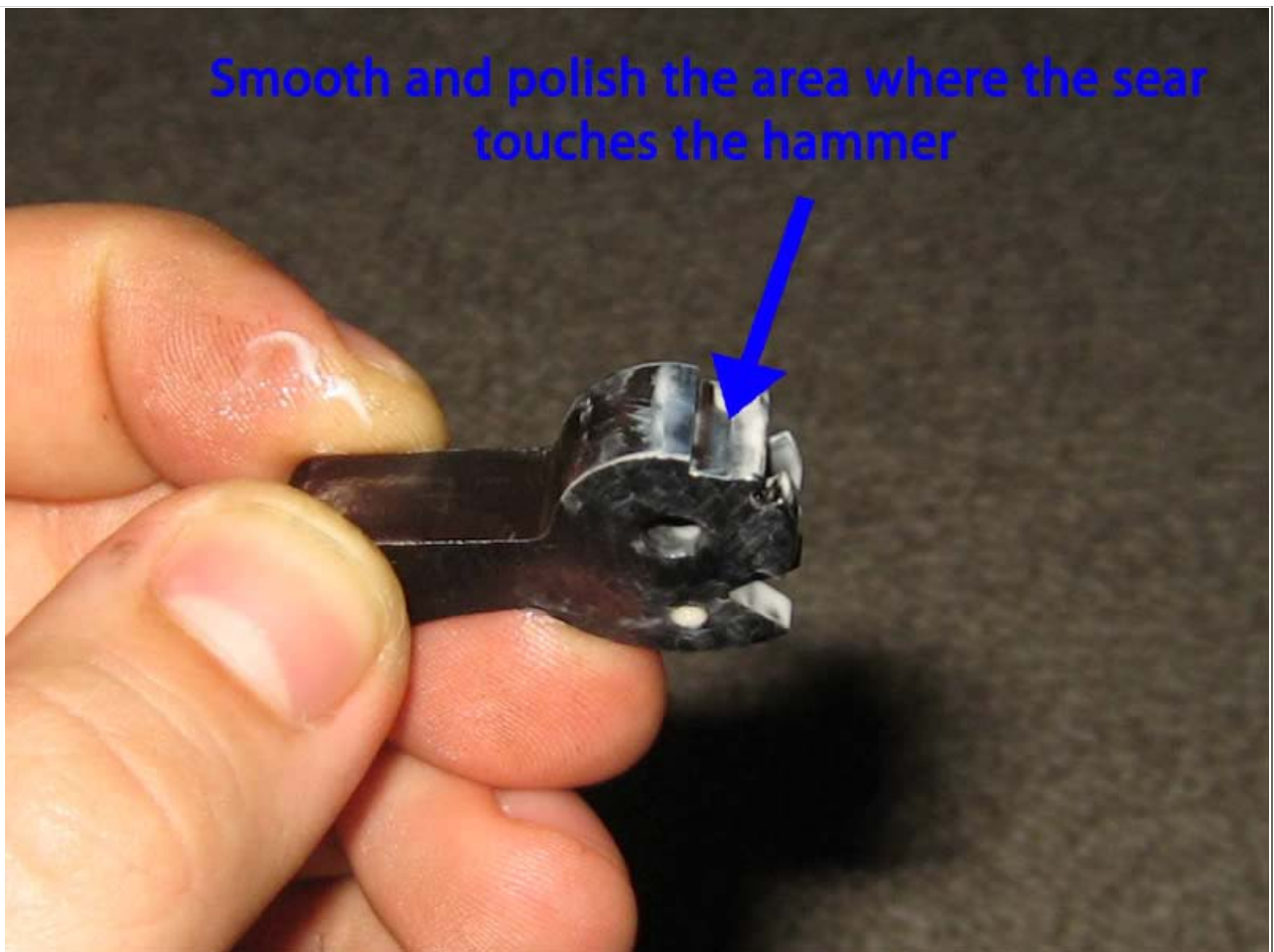
Once you have the trigger bar nice and smooth, squirt some TW-25B on it, as well as the post around which the trigger rotates. Put the trigger bar aside.

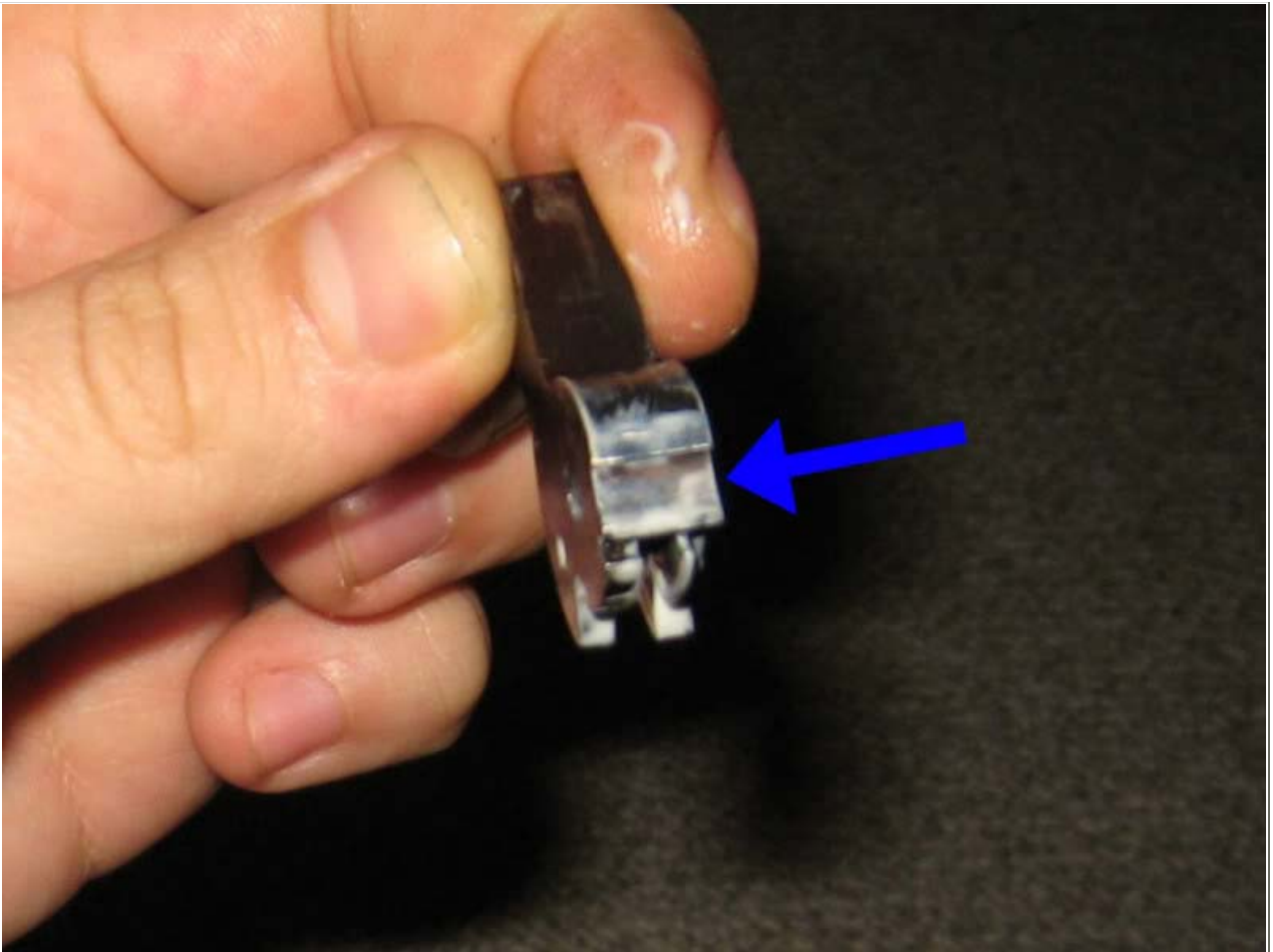
Next we'll move on to the hammer, but before the metal meets the stone, a few photos might help things along.



As you can see in the photo, the sear touches the hammer in a very specific place. That's probably the single greatest source of roughness in a Sig's action. Smoothing out the contact surface between the hammer and sear plus the trigger bar will do wonders for your action.

So, let's begin.



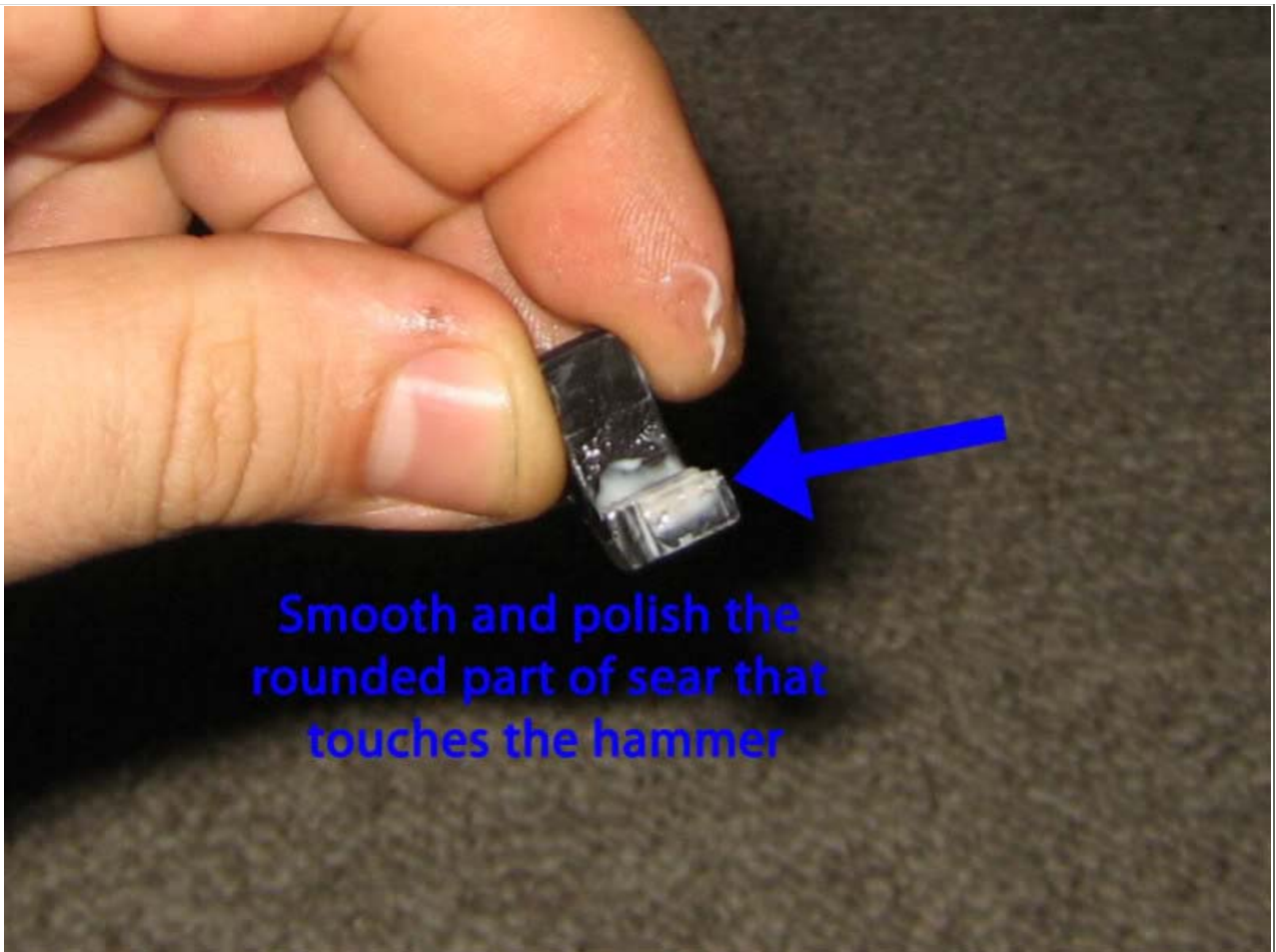


As you can see in the pictures, what you want to do is remove the imperfections in kind of that "dip" area on the hammer. If you have a well-used hammer, you can probably see where the phosphating has worn off. First, take off the phosphating with a Dremel or some sandpaper. Go slow though, you're just exposing the metal underneath. Next, take your stone and start working that surface in the direction that the sear contacts the hammer. Don't be tempted to go perpendicular (even though it is easier)!!! The feel of your stone against the metal tells you a lot about the roughness. You want to remove all of those tiny little ridges and bumps that originated when the hammer was machined. When you run your fingernail over the surface of the metal, it should be super smooth.

Once your stone feels like the metal has gone from gritty or bumpy to smooth, STOP! I know it may be tempting to continue, but probably the single hardest part of gunsmithing is knowing when to stop.

If you have a nice right angle stone, you can also smooth and sharpen the hammer hooks for a crisper single action pull. Just run your stone very lightly against the flats of the hammer hooks to make sure that right angle is sharp. This is literally just a few light passes to remove any burrs.

Ok, onto the sear.



The picture showing the hammer-sear relationship is also helpful here. The same thing applies with the sear as did with the hammer. Remove the phosphating. Then, stone in the direction of motion and stop when you feel the metal is smooth.

At this time, I usually have Flitz everywhere so a good bath in CLP doesn't hurt. You don't want any Flitz remaining on the parts after you're done working with them. Wipe the parts clean, lube generously with TW-25B, and reassemble. The two biggest places TW-25B is useful is on the contact area between the hammer and sear, and between the hammer strut and hammer. Reassemble your gun and enjoy!

I'll leave you all with a gratuitous shot of my Sig's action parts covered in TW-25B.



Finally, before people ask...

- Yes, you can also polish the safety. I didn't see much of a difference in performance when I did, but I also haven't seen much harm.
- If you can find one, get an SRT kit and install it.
- Also consider Bruce Gray's \$40(ish) action improvement kit. That kit will help the "two-stagey" feel of a Sig's single action trigger pull. That second "stage" is actually the safety pushing up on the safety plunger in the slide. Lighten the plunger and the spring weight and you reduce the trigger pull. Pretty genius if you ask me. Let me know if you have any questions.

This message has been edited. Last edited by: [caneau](#), May 29, 2009 02:58 PM

If you think gun magazines are objective or honest, when's the last time they wrote a truly negative review of a firearm? Do you really think all of those pre-production models they're shooting run as reliably and shoot as accurately as they say they do?

90% of gun malfunctions can be attributed to poor ammo (reloads, Russian, etc.), lack of maintenance, weak springs, cheap magazines, or improper technique. When a well-trained shooter using a wide variety of high quality ammunition fed from a reliable, self-leveling magazine shoots your gun after it's gone through a through inspection, spring replacement, and cleaning, and still has problems, then it's the gun. Until then, the problem usually rests with the shooter/owner.

Posts: **2808** | Location: **Las Vegas and DC Metro** | Registered: **February 20, 2005**

Nismo
Member

Posted May 28, 2009 10:16 PM

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Is it common to pack in that much lube?

Posts: **3379** | Location: **Central CA** | Registered: **April 08, 2004**

caneau
Member



Posted May 28, 2009 10:25 PM

[Hide Post](#)

quote:

Originally posted by Nismo:
Is it common to pack in that much lube?

Once you work the action it spreads around really quick. It doesn't look anything like that after you dry fire it 20-30 times.

If you think gun magazines are objective or honest, when's the last time they wrote a truly negative review of a firearm? Do you really think all of those pre-production models they're shooting run as reliably and shoot as accurately as they say they do?

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Posts: **2808** | Location: **Las Vegas and DC Metro** | Registered: **February 20, 2005**

Lame
Member

Posted May 29, 2009 12:09 AM

[Hide Post](#)

i see that the grease is strong on your rails

Posts: **639** | Location: **AZ** | Registered: **January 30, 2009**

mkiley
Member

Posted May 29, 2009 03:53 PM

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thanks for a great post, good pic's and some good info i can use. im always checking out these trigger posts hoping to find ways to make the DA pull on my 226 a little better. good note about watching the sear angle as its making its way down the DA ramp of the hammer with the grip off.

Posts: **25** | Location: **NC** | Registered: **December 21, 2008**

billpocz
Member



Posted May 29, 2009 08:33 PM

[Hide Post](#)

caneau,

Thanks for the photos and the step by step!

Do you have a source for the curled trigger spring, or if I order a replacement 'set of springs' is it now standard?

Great post!

*

**

--- Proud P6 owner, with it comfortably holstered in a SuperTuck!

--- New non-rail 228, in a beautiful MTAC

**

*

Posts: **259** | Location: **Rural Northeastern KY** | Registered: **May 07, 2009**

caneau
Member



Posted May 29, 2009 09:01 PM

[Hide Post](#)

quote:

Originally posted by billpocz:
caneau,

Thanks for the photos and the step by step!

Do you have a source for the curled trigger spring, or if I order a replacement 'set of springs' is it now standard?

Great post!

Brownells (for the P228/9)

Top Gun Supply (fair warning, they have a flat rate, \$10 shipping. I'm not sure how it applies to small parts though)

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Posts: **2808** | Location: **Las Vegas and DC Metro** | Registered: **February 20, 2005**

ScottS
Member

Posted May 29, 2009 09:15 PM

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If you have an older Sig classic (old style grips), doesn't the new-style trigger return spring require some dremel work on the grips to make it fit? Am I remembering that wrong?

Posts: **454** | Location: **Live Free or Die** | Registered: **April 01, 2000**

caneau
Member



Posted May 29, 2009 09:22 PM

[Hide Post](#)

quote:

Originally posted by ScottS:

If you have an older Sig classic (old style grips), doesn't the new-style trigger return spring require some dremel work on the grips to make it fit? Am I remembering that wrong?

I'm not sure. My original P228 grips were rusted on and had to be Dremeled off so my current ones are about three or four years old. I know there have been at least two, possibly three versions of P228 grips, three versions of P226 grips, three or four of P220 grips.

The trigger spring is usually a fairly minor part of the roughness of the trigger pull, especially on older Sigs though. They do sometimes get bent though and the new-style springs seem to have a crisper return, but then again I'm comparing a 16+ year old spring to a 2 or 3 year old one.

If you think gun magazines are objective or honest, when's the last time they wrote a truly negative review of a firearm? Do you really think all of those pre-production models they're shooting run as reliably and shoot as accurately as they say they do?

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Posts: **2808** | Location: **Las Vegas and DC Metro** | Registered: **February 20, 2005**

AZSigs
Member

Posted May 30, 2009 04:46 PM

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Thanks for posting the follow up to your first guide. This is great stuff and another reason why this forum is top notch.

Posts: **1575** | Location: **Phoenix, Arizona** | Registered: **April 02, 2007**

caneau
Member



Posted May 30, 2009 06:14 PM

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quote:

Originally posted by AZSigs:

Thanks for posting the follow up to your first guide. This is great stuff and another reason why this forum is top notch.

You're welcome.

If anyone has suggestions for further Sig how-to guides, let me know.

If you think gun magazines are objective or honest, when's the last time they wrote a truly negative review of a firearm? Do you really think all of those pre-production models they're shooting run as reliably and

shoot as accurately as they say they do?

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Posts: **2808** | Location: **Las Vegas and DC Metro** | Registered: **February 20, 2005**

Jerod
Member



Posted May 31, 2009 10:01 PM

[Hide Post](#)

Thanks for the tips ! Great read.

Posts: **121** | Registered: **March 28, 2007**

Cobra64
Member



Posted June 12, 2009 04:10 AM

[Hide Post](#)

quote:

Originally posted by Nismo:
Is it common to pack in that much lube?

I wonder as well since I couldn't tell what he was pointing at with all the TW-25b slathered all over everything. This approach would make it easier to see...




Otherwise, a very informative write up. Thanks Caneau!

"Facts are stubborn things; and whatever may be our wishes, our inclination, or the dictates of our passions; they cannot alter the state of facts and evidence." -- John Adams 1770

"Socialism is a philosophy of failure, the creed of ignorance, and the gospel of envy, its inherent virtue is the equal sharing of misery." -- Winston Churchill

"One of the methods used by statists to destroy capitalism consists in establishing controls that tie a given industry hand and foot, making it unable to solve its problems, then declaring that freedom has failed and stronger controls are necessary." --Ayn Rand

Posts: 3818 Registered: November 29, 2006		
SIGSense Member	<input type="checkbox"/> Posted June 12, 2009 06:28 AM	Hide Post
Very informative and the pics are great.		
Posts: 461 Location: Louisville, KY Registered: April 20, 2005		
YABA Member	<input type="checkbox"/> Posted June 12, 2009 10:54 PM	Hide Post
Where do I get this Flitz, to polish the feed ramp? I dont recall seeing it up here. I have Barasso...will it work?		
Posts: 228 Location: North West Ontario Registered: July 03, 2006		
caneau Member	<input type="checkbox"/> Posted June 12, 2009 11:53 PM	Hide Post
Ok, so just to add some clarity to where you polish on the hammer...		
		
Blue = polish the hammer there. Remember, go slow and don't polish or stone laterally.		
<hr/>		
If you think gun magazines are objective or honest, when's the last time they wrote a truly negative review of a firearm? Do you really think all of those pre-production models they're shooting run as reliably and shoot as accurately as they say they do?		
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Posts: 2808 Location: Las Vegas and DC Metro Registered: February 20, 2005		
rcsig619 Member	<input type="checkbox"/> Posted June 22, 2009 11:13 AM	Hide Post
Great post - but which stones do you suggest we use?		
Posts: 48 Location: Richmond Va. Registered: April 11, 2009		

jlemmy Member		Posted June 22, 2009 05:05 PM	Hide Post
	Great write up and timing . I had my 245 torn down today to replace the sights when I came across your post . I gave it a whirl on the trigger bar , hammer and sear . Now I cant wait to fire it as dryfiring shows a noticable improvement . Thanks !		
	Posts: 807 Location: Northern , Illinois Registered: March 07, 2008		
YABA Member		Posted June 22, 2009 05:50 PM	Hide Post
	Still wondering about the "FLITZ" havnt been able to find it here...are there any substitutes for it?		
	Posts: 228 Location: North West Ontario Registered: July 03, 2006		
armsmaster270 Member 		Posted June 22, 2009 06:46 PM	Hide Post
	Flitz is a metal polish that comes in a tube try a police uniform store or an army surplus store I wouldn't use Brasso its too thin flitz is a paste.		
	----- Past President, Sacramento Veteran Police Officers Assn. F.B.I Certified Rangemaster/Firearms Instructor, Retired Armorer, M.P., Squad Leader, Senior M.P. Investigator. of the 270th Military Police Company California Army National Guard 1983-1997		
Posts: 400 Location: CA Registered: October 22, 2008			
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