Can You Fix a Problem Rifle?: Mossberg Patriot Problem Kickoff

Story Title	Mossberg Patriot Problem Child	
Story Description	Fixing Jim Harmer's trouble rifle	
Tags (see lists in "references", paste/customize here)	Reloading, reloading blog, Jim Harmer, Backfire, Mossberg, Mossbeg Patriot, gunsmithing, LLC, FFL, Business, Business Plan, Gunsmithing Shop, Gun Shop, Lathe, Mill, Scope Mounting, SOT, Type 01, Type 07, Precision Rifle, Colorado School of Trades, EGW, Picatinny, Longshot, Longshot LR-3, Hornady, Hornady Black Ammunition, Lyman, Lyman trigger pull gauge, Backstop recoil pad, Weaver scope, hunting, .308, Backfire TV, bolt-action rifle, Who-Tee-Who, Weaver Grand Slam, Hornady A-Max Black 168 grain .308 Winchester ammunition, DIY, Midsouth Shooters Supply, .223 trainer, rifle build, Ultimate Reloader rifle, troubleshooting, Rifle Doctor, Berger Bullets, Berger .223 77 grain OTM Factory Ammunition, Kickoff, budget shooting and reloading, Creedmoor Sports, TESTED	
Partner Highlights	Jim Harmer, Backfire, EGW, Longshot, Hornady, CST, Lyman, Midsouth Shooters Supply, Berger Bullets, Creedmoor Sports	
Production Size	Small (½ day), Medium (1 day), Large (2 days), X-Large (3+ days)	
Video Length	Small (3-5min), Medium (5-10min) Large (10-20min), X-Large (20min+)	
Category	Reloading, Gun Reviews, Optics Reviews, Components Reviews, Hunting, Defense, Handgunning, Rifle Shooting, Events/Interviews, Rifle Builds, Metalworking, Science/Reference	
Story Format	Unboxing/Overview, Shooting Adventures, "Reality" (style), Conversational/Interview, How-To (step-by-step), Promos/Updates, TESTED	

Have you ever had a rifle that just doesn't shoot and wonder if it's fixable? In this video, we take a first look at <u>Jim Harmer's troublesome</u> .308 <u>Mossberg Patriot</u>.

[youtubeembed videoid="7h_67z_Z2nQ?"]

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About Jim Harmer

Jim describes himself as a "Hunter, Recovering Attorney, Gun Rights Advocate, and Lover of All Things Outdoors." His hunting-focused content is available abackfire on YouTube and backfire.

Also be sure to watch Jim in the <u>2023 Rock Chuck Olympics!</u> He was a bit apprehensive as the field was stacked with world-class competitive shooters, but he greatly enjoyed learning from everyone.

About the Rifle

I've previously talked with Jim about what to look for in a bolt-action rifle. This particular gun is not it. He's published several stories including the gun, starting with a quest for the best hunting rifle under \$350 (pre-inflation). He couldn't get the Mossberg Patriot to stay on paper, much less group. He tried a variety of ammunition and changed the scope, but nothing seemed to fix the issue. Jim sent it back to Mossberg for a barrel replacement and they returned it with a test target of three shots in a nice, tight cluster. When Jim took it back out on the range, the same issue resurfaced. This gun showed the worst accuracy he's ever seen from a hunting gun —

making it hard to believe the test target. Due to the popularity of Backfire TV, someone from Mossberg came out to try the gun with him, who also agreed the gun doesn't shoot, but couldn't figure out why. He also brought out another .308 Mossberg Patriot with a synthetic stock that shot better, but still not great. Upon reviewing footage from other YouTube channels, it seemed he was not the only reviewer who observed poor accuracy with the .308 Patriot. Keep in mind that this was several years ago. He has since seen a number of reviews of Mossberg Patriot bolt-action rifles in other calibers that shoot well. (Check out Who-Tee-Who's 7mm PRC Mossberg Patriot video.) Something just isn't right with this rifle.

My Turn

This rifle interested me as it is an opportunity to review a rifle step-by-step and diagnose it.

I don't have many Weaver-mount options, so I landed on a Weaver Grand Slam scope. Using a rear bag, bipod, Hornady Black 168 grain .308 Winchester ammunition, and Longshot's LR-3 system, I was able to confirm Jim's experience, shooting 2.5 to 3" groups at 100 yards. I also had some feeding issues. I would have expected better results and more consistency from a rifle that had been sent back to the factory. The trigger broke at approximately two pounds as measured with a Lyman digital trigger pull gauge. I was happy with this for a hunting rifle.

I took the gun apart and reviewed my findings with Jim via videoconference. The design has similarities to a HOWA and Remington 700. The barreled action looked typical. Bolt lug to lug seat contact was excellent. What surprised me was the plastic magwell sandwiched between the stock and the action. I originally wanted to preserve the original stock, but the plastic bottom "metal" and the amount of material on the forend posed potential roadblocks to my plan for a heavier bull barrel.

Possibilities are near endless. I have some basic upgrade ideas, starting with a Picatinny rail, but there are a number of directions we can go. First off, isolating variables is key to uncovering the root of the problem. Most commonly, a problem with a gun traces back to the shooter. In a case like this, it's helpful to "sanity-check" yourself by shooting a rifle you know is a proven performer. For me, it is my .223 trainer with Berger 77 grain OTM factory ammunition.

Conclusion

Buying a troublesome rifle can be incredibly frustrating, especially if you check all the basic things — screws, ammunition, optics, and there is seemingly no solution. Stay tuned for my diagnosis of this gun! What do you think is wrong with it?

If you're interested in learning more about gunsmithing, consider attending the <u>Colorado School</u> <u>of Trades</u>. If not, consult a qualified gunsmith!

Get the Gear

Subscribe to @backfire on YouTube and backfire.tv to keep up with Jim's adventures!

Jim has also developed a cool recoil-reducing rifle buttpad called the Backstop. Check it out HERE.

Ultimate Reloader Rifles

Colorado School of Trades

Longshot LR-3 2 Mile UHD - \$899 MSRP

Hornady .308 Winchester 168 Grain A-Max Black Ammunition at Midsouth Shooters Supply

Lyman Electronic Trigger Pull Gauge at Midsouth Shooters Supply

EGW Mossberg Patriot Tactical Scope Mount

Berger .223 77 Grain OTM Ammunition at Creedmoor Sports

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Thanks,					
Gavin Gear					
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Shot List (video clips)

Include technical details and "clues" for post production.

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Shot List (photos)

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Supporting Critical Artwork

YouTube thumbnail	[description, photo filename, etc]
Featured Image (Wordpress article)	[description, photo filename, etc]
Facebook Post (can use YT thumbnail/link)	
Instagram Featured Image	
Patreon Post (new/experimental)	

Dependencies

Equipment, supplies, facilities, information from 3rd parties, weather conditions, ...

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Product Links

Links for products featured in story

References

Tag Lists

UR General (reloading)	Reloading, Reloading Blog, Reloading Videos, Reloading Press, Ultimate Reloader, Reloading Dies, Turret Press, Single Stage, Progressive Press, Hornady, LEE, Dillon, RCBS, Mark 7 Reloading, Ballistics, TESTED
Long-Range Rifle	Bolt Action Rifle, 6.5 Creedmoor, 308 Winchester, 6 ARC, 6 GT, PRS, 1000 yards, Best Long Range Rifle Caliber, Steel Targets
Pistol	Pistol, Revolver, 9mm Parabellum, 45 ACP, 10mm Auto, Glock
Hunting	Big Game Hunting, Deer Hunting, Elk Hunting, Coyote Hunting, Varmint Hunting, Rock Chuck, Marmot, Night Vision Scope, Thermal, Bipod, Tripod, 30-06, 243 Winchester
Optics/Scopes	Riflescope, Scope, Optics, Binoculars, Reticle, FFP, SFP, First Focal Plane, Second Focal Plane, Tactical Scope, Hunting Scope, Hunting Reticle, Scope Testing, Image Quality, Glass, HD, ED
Rifle Build	Creedmoor, 6 Dasher, 6 GT, 6.5 Creedmoor, 6mm Creedmoor, AICS Magazine, Barrel Chambering, BAT TR Action, Foundation Genesis 2 Stock, Hawkins Precision Bottom Metal, PM-1440GT, Precision Matthews Lathe, Precision Matthews TL-1660, PRS Rifle, Tactical Bolt Action, Threading Muzzle, TL-1640, Ultimate Reloader Rifles
Gunsmithing	Gunsmithing, LLC, FFL, Business, Business Plan, Gunsmithing Shop, Gun Shop, Lathe, Mill, Scope Mounting, SOT, Type 01, Type 07, Precision Rifle, Colorado School of Trades, CST
Cerakote	Cerakote, Painting Guns, Firearms Coatings, H-Series, C Series, Cerakote Training, Cerakote Certified Applicator, E Series, Elite Cerakote, Microslick, Glacier Cerakote, V Series, Cerakote Oven, Powder Coating Oven, IWATA LPH-80, Cerakote Gun, Paint Gun, Laser Engraving Cerakote, How To Apply Cerakote, Sandblasting, Built American