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INSIDE THE ARCHIVE

BENDING AND WELDING RIFLE BOLT HANDLES

WIN CHUCK'S "MY COLD DEAD HANDS" RIFLE • GOING BEYOND THE OWNER'S MANUAL WITH THE CENTURION COACH ...

ORIGINAL METHODS. MODERN ACCESS.

ARCHIVE EDITION 008

DIGITAL ARCHIVE EDITION

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PEOPLE & COMPANIES

Win Chuck's "My Cold Dead Hands" Rifle

BY AMERICAN GUNSMITH EDITORS JULY 2004

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Former NRA President Charlton Heston has donated his Winchester Model 1866 to be used as the Grand Prize in an NRA membership drive and fundraiser. This exceptional firearm, hand-crafted in 1870, is valued at over \$25,000, and is truly one of the finest firearms ever made. Raised high in Charlton Heston's hand, it unleashed a revolution, rallying law-abiding gunowners, and defeating the Clinton-Gore anti-gun machine. The fight is not over, of course.

The Brady Campaign and their allies are unleashing a blizzard of lies hoping to capture the next election. Charlton Heston wants to make sure that doesn't happen. It's imperative that every gunowner join the fight. If you're an NRA member, renew now; if you're not a member, join now. And by all pocket and give a donation. Visit for complete details on the many valuable and the official rules. Another Very Brady Lawsuit.

Congress determined 10 years ago, in a law with an unusual provision to expire on September 13, 2004, that the only difference between a semi-automatic rifle and an "assault weapon" was a cosmetic one. In particular, a bayonet lug, pistol grip, and flash hider found on military arms were features that could also be found one at a time on a "civilian" rifle.

But, combining two or more of these "forbidden" accessories, these features make a semiautomatic into an "assault weapon." Apparently hoping to force reenactment of the law with the same kind of confusion that worked so well a decade ago, The Brady Campaign is getting media attention with a lawsuit filed against the U. S. Justice Department for "allowing gun manufacturers to make thousands of new illegal assault weapons," when manufacturers were simply following BATF regulations.

The 10-year-old ban on assault weapons is scheduled to expire unless Congress acts. But with Congress at loggerheads over gun legislation, it's likely that Republicans will let the Clinton-era ban expire on Sept. 13. There's widespread agreement that the ban is flawed, but supporters of the ban argue that it should be strengthened, not dropped. Shortly before we went to press, Sen.

Norm Coleman, R- Minn., was quoted in a Minneapolis Star Tribune interview calling the ban "more dressing than substance." In the same article, Sen. Mark Dayton, D-Minn., who voted to uphold the ban, said the banned guns' only purpose was "to slaughter indiscriminately human beings. Speaking personally, I'm not exactly sure what an "indiscriminately human being" looks like. But if one ever knocks down my front door, I'm going to shoot him. (Or her. Twice if it happens to be Rosie.) Editor Keith Lawrence Technical

MEASUREMENT & INSPECTION

Going Beyond the Owner's Manual With the Centurion Coach Gun

When we first saw it at the S. H. O. T. Show, we thought it was a percussion gun. We were fooled.

BY CHICK BLOOD JULY 2004

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In retrospect, the error was understandable. From three feet away, this 12-gauge double with twin triggers, 20-inch cylinder-bore barrels, and exposed hammers might have misled anyone. It looked like it would be right at home in the arms of an old grizzler riding shotgun on an overland stage heading out from Dodge City behind a hard-working team of six horses. But those coach guns didn't have rebounding hammers. This one does. And those coach guns used blackpowder cartridges.

This one can, too, but this one can also function just as well on modern smokeless loads. A cowboy-action prospect? Yes, that's the primary shooting discipline for which the Centurion Coach Gun, imported by International, Inc. was designed. Other use would be home-defense and short-range hunting, where its 3-inch chambers could provide extra assurance for meat on the table after a long, cold hike in the woods. You may have noticed already that no schematic accompanies this write-up. The reason why is that none exists.

What appears in the owner's manual is a blurry photo of individual parts with not all parts included. In many cases, this lack of quality graphics has eliminated a gun from coverage here. This gun is the rare exception.

First, it is a simple Anson & Deeley-style side lock. I felt it could be approached with additional descriptive photos supported by expanded and an equally descriptive text.

In fact, I believe in this case that this approach will serve to inform you as well as our normal procedure of going through disassembly/reassembly by part number on a clearly reproduced exploded drawing. Field Stripping Push in the lock button on the Centurion's forend. Pull the forend down and away from the receiver. Grasp the comb of the butt stock, and push the locking lever to the right. Open the action by tipping the barrels down.

Unhook the barrel lugs from their cross pin, being careful not to damage the lugs. In this state, the gun can be generally cleaned and lightly lubricated. Before going further, gather up the following tools: a 1/8-inch drift punch with parallel sides, two needle-nose vise-grips with duct tape attached to their jaws, a #300-2 and #210-2 Mag-Na Tip Slim Bit (from Brownells), and your roll-pin punches. Now measure the slot in the firing-pin bushings (see photo) and cut a notch in a spare, flatblade screwdriver.

YOU'LL BE USING IT

GOING BEYOND THE OWNER'S MANUAL WITH THE CENTURION COACH GUN CONTINUED

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as a spanner to undo the bushings, so make sure the notch is deep and wide enough to fit over the visible portion of the firing pins. How exactly you cut the notch is up to you. We do recommend you harden the finished product with Kasenit, however. Those bushings can be set in pretty tight. Detailed Disassembly As you go through this, keep in mind that certain components here are not interchangeable. For example, the firing pins; you can't switch the right one with the left one.

The same is true of the hammer-spring struts, the sideplate assemblies, and the hammers. Your starting position is looking down on the shotgun, and you begin with the right sideplate. You can't miss that big-headed screw staring back at you. (I have no idea why these star-slotted screw heads show up as often as they do on imports.) All but one of the slots is too narrow and shallow for a screwdriver to grab, and that one calls for a 300-2 bit like the one mentioned earlier.

You'll be using that bit more than once with the Centurian Coachgun. Read through "Reassembly Tips" before disassembling the locks for a trouble-saving shortcut and study the interfaces of the tumblers (A) and sear (B). The arrows indicate the tumbler screws.

A B The screw I've been telling you about runs clear through to hold both sideplates on the receiver. There are two ways to get those sideplates off.

The first is to completely back out the screw, then tap the front of the receiver with a hammer handle or a rawhide or wooden mallet to loosen the plates the same way you would with an S&W revolver. The second is to use the Civil-War soldier's approach. Partially undo the screw, strike it lightly to jar loose the opposite plate, back the screw all the way out, and then tap the receiver to free up the right-hand plate.

Whichever way you loosen them, both plates are lifted at the rear and pulled out toward the butt end of the shotgun. (Where the sideplates are joined to the receiver, by the way, can have very sharp edges. Be careful you don't slash a fingertip or two when working with them.) Now turn the gun upside down. A Phillips-head screw secures the trigger guard. Back it out and give the guard a 90-degree turn. Presto...the rear tang screw is now revealed. Remove it and look forward of the trigger.

You'll spot two more of those star-crossed screws. The #300-2 bit fits them; take them out. Position the gun on its side. Just under

the top lever where the sideplates once lived there's a 1/8-inch diameter pin. Drift it out all the way, grasp the buttstock, and wiggle the trigger plate free. The plate's a press fit in the receiver. A certain amount of controlled tugging may be necessary to free it. And a small amount of grease applied to the plate edges can ease future disassemblies.

The receiver's top lever still attached is about to be denuded. To the left rear of the receiver, under the tang, is what appears to be a large slotted pin (.310-inch diameter). It's really a screw. Under it is the toplever plunger and return spring. Keep the latter two in mind when you remove the screw or you'll face searching your shop for an escaped spring and plunger.

Assuming that is not your fate, lift out the top lever, tilt the receiver up, and push the locking bolt to the rear (if it has failed to slide out on its own). Grab the spanner you made and remove the firing-pin bushings, firing pins, and springs. Remember, the pins are not interchangeable. Whence they came out is whence they have to go back in. Both sideplates are disassembled in the same manner. Before going ahead with them, memorize the interfaces between the sear, tumblers, and

GOING BEYOND THE OWNER'S MANUAL WITH THE CENTURION COACH GUN CONTINUED

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Use nothing except a rollpin punch to remove it. hammer. If you have a short memory, study the photos. Okay, here we go. Cock the hammer. This causes the hammer spring to compress and the tail of hammerspring strut to protrude from its hole in the strut stud. Lock onto the tail with a set of vise grips. Notice how there are no leaf springs to deal with here? Well, coil springs can be just as pesky, but I've come up with away of handling them. I'll get into it later on. Meanwhile, the hammer remains cocked.

There are three small screws associated with the tumbler/sear assembly. The two identified in the accompanying photo secure the tumblers. The third is the sear pivot. The tumbler screws come out first. When you remove the sear pivot, beware of the sear spring. There's nothing holding it in and it can easily join the lever plunger and return spring among the lost. For the hammer screw, use bit #300-2 again, and the hammer comes off next.

A little encouragement maybe required to separate the tumblers from the hammer boss. This can be provided by inserting your 1/8-inch punch from the hammer side of the plate, positioning it against the tumblers, and tapping them off the boss. So much for the receiver and sideplates. The triggers are retained by a roll pin that drifts in either direction. The extractor is held in by a small screw located between the barrel lugs. Remove the screw and you can remove the extractor.

The forend iron is fastened to the wood by two screws. One is slotted (#210-2 bit); the other is Phillips head. Once they're out, the iron can be lifted off. With it will come the forend latch and push rod, both retained by nice, normal, deeply slotted screws. The loose block at the rear of the forend is held in place by a roll pin. There's no need to remove it unless it must be replaced. Reassembly Tips: Only One Real Surprise The surprise can come during the reinstallation of the top-lever spring screw.

Don't over tighten it; you'll restrict movement of the lever and the gun won't open. As for the rest of the job, lock a sideplate bottom-side up between padded vise jaws. The crescent end of the hammer-spring strut wears a "dimple," and the dimple faces outward from the plate. If it doesn't, you're working with a strut from the wrong side of the lock It must not be overly tightened during reassembly. works.

Slide the very strong spring on the guide, capture the crescent end in needle-nose vise grips, and push the tail of the strut through its hole in the strut boss. Compressing the spring will be difficult. As soon as you see the tail emerge enough from the hole, latch onto it with the second pair of vise grips, and release the pair doing the pushing from the crescent end.

A factory technician told me he avoids all the struggles with spring compression during reassembly by leaving a pair of vise grips attached to the tail during disassembly. Knowing this ahead of time and having no great desire to get into the twin-pliers ambi-

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Original caption: Left top: The forend iron, shown here, is held to the wood by two screws. One is a slotted head requiring a thin bit. The other is a Phillips head. Left bottom: The locking bolt (arrow) can be seen here in the receiver. When the top lever is removed, the bolt will slide out to the rear spring. It helps it stay put. When replacing an assembled sideplate in the receiver, the end away from the sear goes in first. The other end is lowered to its cutout in the wood, and the unit is gently tapped down to be flush.

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dextrous exercise, I opted to dodge the issue entirely. I drilled a #55 hole in the tail of the strut, after cocking the hammer early on in disassembly. I inserted a .05 hex key in the hole, and released the hammer. The spring remains compressed, the strut remains attached to the sideplate, and disassembly proceeds without concern for future angst. The tumblers and their screws are next to go back in.

These are followed by the sear, and you'll want to apply a dab of grease on the end of the sear

Don't get your lock-plate screw and tang screw mixed up. They look very similar, but the head of the lockplate screw is flat underneath, and the under side of the tang screw is conical. A final note: When you reunite the receiver to the stock, cock the hammers. You know, I like that idea of drilling a hole in the hammer-spring strut so much I think it should be done during manufacturing. I'd like to pass the idea along to Turkey' for a nice fee.

But, of course, Marlin, S&W, Ruger, and many others have been doing it for years. I

FINISHING

Bending and Welding Rifle Bolt Handles

When sporterizing a military-type bolt-action, reshaping the bolt can prove to be one of the biggest challenges. These tools and techniques will help to make the process go smoothly.

BY RUSSELL CORBITT JULY 2004

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Even though it's possible to purchase a commercial sporting rifle for considerably less than the cost of sporterizing an ex-military rifle, there are a good many people who want something made exactly to their taste. If you want to custombuild these rifles, bolt handle modifications will be necessary to properly mount a scope. The finished bolt handle is one of the most visible items of a custom rifle, and many will judge your worth and skill by the finished product's appearance. An old U. S.

Navy dictum comes to mind here" the "Seven Ps." Six of the seven "Ps" are: proper prior planning prevents poor performance (and you probably know what the seventh "P" is). Here are some tips and ideas to help with your "proper prior planning. Like almost everything that a gunsmith does, there are many possible ways to accomplish a modification, but only a few methods for doing it right. Working on bolt handles has the potential to cause serious problems, either immediately or down the road.

If you want to get into modifying bolt handles, you'll need the "proper" tools and some "prior" instruction to keep you and your customer out of trouble. If you already do this kind of work, I may have an idea or two here that makes the job easier (and more profitable). I am using 98 Mauser bolts for this article, mainly because I'd been commissioned to build two Mausers and this seemed as good a time as any to cover this subject.

The 98 Mauser is probably the most frequently used platform for building a custom rifle, however, these methods are readily adaptable to almost any military turn-bolt rifle. There are basically two schools of thought on bolt handles: bend the existing one; or cut it off and weld it (or anew one) back on. Both ideas have their merits, and I will present both methods, since there are times when one method or the other is not feasible or desirable.

For instance, low-mounted scopes (or scopes with large ocular-end bells) will usually require that the handle be cut off, the root shortened, and a suitably shaped

handle welded back on. Bending (or forging) is faster and easier, but it is difficult to forge a handle low enough to clear low scopes and keep the transition section between the root and the handle large enough to have sufficient strength. Forging is usually better suited to higher-mounted scopes or scopes with a small ocular end.

Note: A proper heat sink and liberal use of heat-control paste is essential. If the back of the bolt is heated too much, it will lose its surface hardening and the cocking-cam area will be subject to rapid wear and galling. Too much heat can also weaken the safety lug, rendering it incapable of doing its job should the primary lugs suffer a catastrophic failure. Before You Start See Figure 1 for bolt-part nomenclature. If you haven't done this work before, find some old stripped bolts to practice on.

Century Arms International usually has a good supply of old stripped Mauser bolts. An added bonus is that if you do these up nicely, they can be used as replacements to shorten the turn-around time on Figure 1.

BENDING AND WELDING RIFLE BOLT HANDLES CONTINUED

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scope-mounting jobs. You can often use them to correct headspace problems with rifles that may be a bit on the “no-go” side, as well. Both forging and welding take some practice to gain proficiency. Since getting a clean weld using a torch is a difficult task at first, and the welding rods are expensive, I suggest that your first few practice welding jobs be done using a brazing rod, as brazing is much easier to accomplish.

The brazing rod “wets” the base metal much easier than a steel rod, and you don’t put quite as much heat into the bolt as with welding. Unless the visible brass is objectionable, there is nothing wrong with a properly brazed handle. It’s just not quite as strong as a welded one. I’ve seen handles that were silverwill tend to flow out of the area you are trying to solder and creep onto the root and handle. Silver solder is usually best suited for applications where the parts fit relatively close together.

If you want to use silver solder, you need to use the highest-temperature solder you can. With silver solder, a higher melting temperature means greater strength, and the low-temperature solders are not up to the stress of holding a bolt handle in place. As you gain experience, you may wish to develop a distinctive style for your bolt handles, such as the wedge- The other three are forged, soldered in place. The problem with silver solder is that it is more difficult to “fill” with.

Since it is “wetter” and wicks better than brazing rods or welding rods, it shaped knob I use. It’s tapered front to back and top to bottom to allow the shooter to keep his grasp without checkering or stippling. Examples of my “style” of bolt forging and handle shaping are shown in several of the accompanying photos. Begin by opening the bolt and ensuring the rifle is unloaded. Remove the bolt and place the rifle aside.

The bolt will now need to be completely stripped to preclude any possibility of any physical or heat damage to the parts. (Exception: On Mauser-type bolts, it’s not necessary to remove the extractor collar. In fact, it’s a good idea to leave the collar alone unless you have a replacement handy.) Place the bolt’s parts in a secure container or put them in solvent to soak. They may need a good cleaning, and now’s the time. Welding Welding anew handle is definitely more difficult than forging the old one over.

However, you have the options of shaping and reusing the old handle or starting fresh with an aftermarket handle. Replacement handles in various styles are available from Brownells, Gun Parts Corp., and Midway USA, among others. You will also need several other items, also available from Brownells.

BENDING AND WELDING RIFLE BOLT HANDLES CONTINUED

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in 0.062- and 0.080-inch diameters. Either is suitable for this job. Use a hot flame with your brazing/welding tip (not the cutting head), and bring the parts to welding temperature. While heating the bolt, put the welding rod in the flame “wash” surrounding the bolt and heat the rod up. After a bit of heating, dunk the hot end of the rod into the flux and the flux will melt to the rod.

Then, turn the oxygen down just a hair to get a neutral to slightly carburizing flame (slightly starved for oxygen, not an intense blue flame) and place the fluxed rod on the gap, allowing the rod to melt and puddle. Continue adding filler metal a bit at a time, until the weld is a little larger than the handle and root. It's important to keep the rod fluxed; as you get near the end of the flux stuck on the rod, dunk it in the flux again.

Let the weld cool for a couple of minutes or so, and toss the whole thing into a Now, we're ready to weld. I use a simple, inexpensive gaswelding rig that costs about \$50. It uses MAPP ® First, you'll need a jig to hold the parts in place while welding.

It's very difficult to get the handle to stay put while welding unless it is secured somehow, and a bolt-welding jig is well worth the cost. (They come with illustrated instructions.) You'll also need heat sink for the bolt body, heat-control paste, and of course, the welding equipment. Let's talk about “welding equipment” for a moment. I don't mean electric arc-welders.

While they do a good job at general welding, it is difficult to weld a handle to the bolt root without voids or porosity that will show up as pits when the weld is shaped. If that's all you have, you can try it; you'll need some 1/16- or 3/32-inch mild-steel rods and a low heat setting. I have had better success with MIG welders, but I don't really recommend them, either. The preferred methods are TIG welding, gas welding, and brazing.

With the proper filler metal and flux, any of these will provide beautiful void-free welds that require minimal cleanup. Prepare the bolt body by cutting the old handle off, leaving the handle root protruding far enough that the new handle will clear the receiver

tang. Don't cut it too short or your new handle will not clear the tang. Shape the ends to be welded as shown in Figure 2. This will give a good fillet, much stronger than a simple butt weld that will be mostly ground off.

Clamp the various pieces together in the holding jig, arranging the handle to the desired angle and sweep. Put some heat-control paste inside the bolt and on the heat sink. Install the heat sink into the bolt and coat most of the bolt body (especially the back end and cocking-cam area) and the bolt handle with a good layer of heat control paste. The paste will keep most of the heat from your torch off the vulnerable cocking-cam area and the safety lug at the rear of the bolt body.

Additionally, any stray sparks or blobs of metal won't stick to other areas, causing a burr and/or an unsightly clean-up. gas and oxygen. An oxyacetylene torch or TIG will work even better. The best welding rod I've found is from Brownells. It's the 3-1/2-percent nickel-steel rod, and comes Figure 2.

BENDING AND WELDING RIFLE BOLT HANDLES CONTINUED

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bucket of water. You'll have to repeat this process several times before finishing the weld on all sides, but remember, you don't want to overheat the bolt. Keep your heat directed at the joint of the root and handle. After it's completely cool, remove the heat sink and the jig. Scrub off the paste and examine your weld. If it looks okay, you can use files and/ or power tools to shape and blend the welded area. Use along brush to clean the paste out of the bolt and allow the bolt to dry thoroughly.

After it's dry, use a stiff brush to remove any residue of the heat-control paste, both inside and out. Now the bolt body is reinstalled in the rifle and the stock is marked where it needs to be relieved to allow the bolt Figure 3. eyepiece. When all is well, the bolt is ready for whatever finish (if any) you are going to apply. Bending or Forging Bending a bolt handle requires the same heat sink and heat-control paste as welding, and instead of a jig to hold the parts, you need a set of bolt-handle forging blocks.

These are available from Brownells, Midway USA, and Numrich (Gun Parts Corp.). Basically, the forging blocks are clamped Heatcontrol paste is cheap. Use lots of it. The faster you can bring it to bending temperature and forge it over, the less time there is for heat to spread out and damage the bolt. to fully close. Depending on the type and shape of your bolt knob, a relief may also be necessary to allow the shooter to grasp the knob.

Test also to see that the bolt can be manipulated quickly with the scope in place. You may have to do a bit of relief grinding or bending of the handle to clear the scope's in a large vise, holding the bolt body and handle root immobile. You'll also need an intense heat source.

A propane hand torch is not intense enough, and trying to heat the root to bending temperature with one of these will result in either of two undesirable outcomes: Either you can't bring the handle to bending tempera-

ture; or you have to heat the handle so long that the bolt body becomes too hot and its surface hardening is destroyed. So don't waste time and effort with tools that can't do the job.

The small torch I have costs around \$50 at home-supply centers, and welding or forging one bolt handle should pay for the unit. As with welding, use MAPP gas for a hotter flame. To prepare a bolt for bending, I've found that it is far easier to shape, checker, stipple, or otherwise embellish the knob before bending the handle. If you are going to flatten the handle's profile (instead of leaving it round), it is easier to do before bending as well.

First, you need to remove a little metal from the bottom of the handle root so that the handle will bend cleanly and close to the root (see Figure 3). Don't relieve this area any farther than the point where the handle root touches the receiver tang when

BENDING AND WELDING RIFLE BOLT HANDLES CONTINUED

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the bolt is closed, and no more than about one-third of the root's thickness. If you have a high scope installation, such as see-through rings, it may not be necessary to relieve the root at all. (Here's another use for your practice bolts; use one as a measure to determine how low the handle needs to be forged.) Prepare the bolt as for welding by packing heat-control paste inside and using the heat sink. Cover the bolt body with the paste, and put the bolt in the forging blocks.

Clamp the blocks Next comes the bore-sighting and range testing, followed by delivery to a happy customer. tightly in a big vise and wipe away any paste that may have oozed out around the handle root. Using a large, hot flame from your brazing/welding tip, heat the area to be bent, paying the most attention to the "top" side which is the area of the part that will have to stretch when bending.

When the area is glowing a medium to bright cherry red, quickly shut off the torch (or hand it to someone) and hammer the handle

over into the notch in the bending blocks. You may have to make more than one run at it, as the heat-control paste and the blocks clamped in the vise make a large heat sink and the bolt will lose its heat quickly. If you try to bend it when it's just a tad too cold, it will break off.

When the handle is bent 90 degrees against the blocks, you can sweep the knob back to improve accessibility. It's also a good idea to heat the narrow part of the handle next to the knob and bend the knob up away from the blocks a bit, adding clearance so that the knob is accessible without scooping a big dish from the stock. Put the bolt in a bucket of water to cool, but don't put the bending blocks in the water. If your blocks are cast iron like the ones I have, cooling them this rapidly will break them.

You can use a couple of old oven mitts to handle the bolt body and the blocks. I clamp my blocks back in the vise after removing the bolt, allowing the vise to absorb the heat

from the blocks. After everything has cooled and the heat-control paste has been cleaned off, the bolt can be placed back into the blocks to hold it securely without damage while finishing and shaping the handle. If the inside of your handle was shaped and polished before you forged the handle over, it should still look pretty good.

Remove the bolt from the blocks and clamp it in a good vise, using lead or similar material to prevent marring. The handle can now be sanded and/or polished to the desired finish. Finally, reinstall the bolt body into the receiver, and mark the area that will need relief to allow the bolt to close fully. Using whatever woodworking tools you prefer, cut the relief notch in the stock until the bolthandle root touches the receiver tang with a small amount of clearance between the stock and the handle. I

MEASUREMENT & INSPECTION

New Life for Remington 11-48 Sportsman 48 Shotguns

If you've encountered problems trying to find a replacement recoil spring/friction-piece compressor assembly or a friction piece, there is a way around the lack of parts.

BY RUSSELL CORBITT JULY 2004

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Remington introduced the 11-48 in 1949, replacing the Model 11. The 11-48 has sleek contours that look more “modern” than the square-backed Model 11. Offered in 12-, 16-, 20-, and 28-gauge and in .410 bore, the only major difference between the 11-48 and Sportsman 48 was the latter’s two-round magazine capacity. The Sportsman 48 was discontinued in 1959, but the 11-48

continued in production for another 10 years until dwindling demand forced Remington to discontinue it in 1969. Figure 1. Figure 2.

The mere fact that it successfully competed against the superb Model 1100 for 6 years is testament to the fundamental soundness of its design. The biggest problems encountered with these shotguns are stock cracking and breakage of the recoil-spring assembly’s friction ring and ring compressor. Stocks can be

doweled and repaired, but what do you do about Below left and the friction piece or the friction piece compressor? Answer: Make another one. It can be accomplished on a small lathe with simple tools.

Figure 1 gives dimensions and instructions for making a 12-gauge friction-ring compressor; the information in Figure 2 will allow you to make a 16- and 20-gauge friction-ring compressor; and Figure 3 is



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a “generic” drawing for fabricating anew friction piece. After finishing the friction piece shown in Figure 3, you’ll need to obtain a Browning A-5 spring (part #PO11215) for the correct gauge“ either 12 or 16/20”and install it over the new friction piece. As an alternative, you can substitute a spring from a Remington Model 11 or a Savage/ Springfield 720, 745, 745B, 745C, or 750. The recoil spring on these shotguns is staked into the compressor ring.

It can usually be removed after The piece can also be machined from a suitable-size Oil-Lite bushing purchased from a bearing shop. Figure 3. some judicious work on the staking with a Dremel tool, and simply unscrewing the spring. If you’re dealing with a 28-gauge

or .410 bore, you’ll have to adjust dimensions accordingly after measuring your old parts. I have not had either on hand to measure. Unfortunately, if the recoil spring itself has broken, you may be out of luck.

I am not aware of anything else that could be substituted for the 11- 48s flattened-coil spring. The 16- and 20-gauge shotguns use the same recoil spring, but each of the others use a gauge-specific spring. Browning A- 5, Remington Model 11, and Savage/ Springfield springs will not work. If, however, you’re lucky and only need to make anew friction piece or friction-piece compressor, the information here will allow you return the old workhorse to the field. I

METALWORKING

Building an Essex Arms National Match Government Model Pistol

With the purchase of some select, enhanced, and match-grade parts, a home-built National-Match-type 1911 can be easily assembled.

BY KEN WINDELER JULY 2004

ORIGINAL PP. 16-18

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The expressions “Government Model” and “Model 1911” bring the names Colt and Browning to mind. That’s as it should be, as John Browning designed it and Colt manufactured it. During World War I, the U. S. Springfield Armory, Remington U. M. C. (Union Metallic Cartridge Co.), as well as Colt’s Patented Firearms Manufacturing Company all produced the M1911.

During World War II, five contractors including Colt manufactured the M1911-A1; the others were Ithaca Gun Co., Union Switch and Signal, Remington Rand Inc., and Singer Manufacturing Co. On today’s market, however, there are at least 30 different companies that manufacture or have manufactured the Model 1911-type pistol. And there are more than a few different variations of the Government Model pistol, as well as different calibers and conversion units.

And now you ask: “But I’ve heard of Springfield Armory, Detonics, AMT, Wilson, Kimber, and Colt, but not Essex Arms.” Essex Arms Essex Arms d Pond, VT 0 doesn’t actually pete pistol; they only manufacture parts, particularly frames and slides. The company has been making investment-cast replacement frames for many years now, and has supplied other companies with frames.

My Essex Arms National Match Model 1911-A1 started out as a used Essex Arms .45 ACP parts gun, with a no-name slide, and evolved into a completely new parts gun. Starting with the original pistol, I installed a Micro adjustable rear sight (no longer available). The handgun had a Springfield compensated barrel, was heavy, awkward, and didn’t shoot right. Several of the component parts left something to be desired.

The Enhanced Slide Assembly After looking in the Brownells catalog, I decided that I would make up anew slide assembly using an Essex Arms 1911 .45 Auto BM-1 enhanced slide that’s milled for a Bo-Mar sight (or any adjustable sight that fits the BM-1 sight cut). The slide has 60degree forward-facing front and rear cocking serrations, lowered and flared ejection port, and a front sight dovetail. This slide is very nice, and is also available in stainless steel.

A .38 ACP/ 9mm BM-1 carbon-steel slide is also available. When I ordered the slide, I also ordered anew barrel and a BM-1 Bo- Mar sight. Anew slide requires anew barrel in my opinion, and there are many choices when it comes to 1911 barrels. My selection was a Storm Lake Machine 1911 .45 ACP pre-fit match-grade barrel kit. This barrel kit includes a forged 5-inch stainlesssteel barrel, a stainless barrel bushing fit to the barrel, and a barrel link and pin. I think this kit is a good buy, and

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Original caption: left top: On the Essex Arms 1911-Auto Enhanced Slide, the enhanced features are front and rear sight cuts, flared ejection port, and front and rear cocking serrations. Above left bottom: The Storm Lake Machine 1911 NM Pre-fit Barrel Kit comes with a pre-fit barrel bushing and barrel link and pin, a complete sub unit. This 1911 frame has some nice features that save time and money. A stainlesssteel Select receiver is also available. you don't have to fit a barrel bushing to the barrel.

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ABOVE

Upon receiving my order from Brownells, it was time to do a little gunsmithing. "Drop-in" and "pre-fit" usually means that some fitting will be required. The breech on this slide was not finished. The barrel and slide must be fit to each other, and the front and rear sights have to be fit in their respective positions. In my case, this was done the hard way by hand. Using a pillar file, I filed and dressed the slide's breechface.

Remember now that the slide is to be fit to the barrel; don't try to fit the barrel to the slide. With the right machinery, this step could be accomplished quite easily. Be very careful not to widen the breechface or to file any more than required for a good barrel fit. Before the pistol is finished, more stoning of the breechface will be needed. I should mention that some good directions and information are essential while undertaking a project like this.

Jerry Kuhnhausen's shop manuals *The Colt .45 Automatic*, and *The U. S. M1911/1911-A1 Pistols & Commercial M1911-type Pistols* are recommended. These two volumes provide all of the information required, and in-

clude all of the specifications and dimensions for the Government Model 1911. Patience is a virtue, and one picture is worth a thousand words. The front and rear sights will need some fitting. This is not a big deal. The milling cuts are already done.

The rear sight cut is a BM-1 style, and the front sight dovetail is .330 inch by 65 degrees. Sights and cuts need to be very carefully matched up to each other. There are several sight options available, both front and rear. At this stage of the project, I now had a new upper or slide assembly. This unit was completed with the addition of a new Ed Brown extractor, firing pin, firing-pin spring, firing-pin stop; along with a Wilson Combat two-piece recoil-spring guide assembly, and a pair of recoil springs.

Because of the rear-sight cut in the enhanced slide, the top of the firing-pin stop must be sanded or milled to fit. Now that I managed to assemble and install a new slide unit to my used parts gun, it was time for the next stage in the evolution of a new frame with new parts, of course. The Select Receiver After reviewing 1911 frame/receiver options in the Brownells catalog, I decided that the Essex

enhanced slide and their select receiver would make a nice match, and they have the same finish.

The Essex Arms 1911 Auto Select Receiver is a nice choice, and like the enhanced slide, has several built-in features that save fitting time and millwork. The slide ways are dimensioned slightly oversize so that the slide and frame can be fit to each other. Other features include a beveled magazine well, a raised frontstrap (knuckle-cut receiver), and a .250-inch radius to accommodate the beavertail grip safety.

These features also eliminate a need to refinish the frame and slide, which have a very nice military-style Parkerized finish. An Essex Arms Select stainless-steel receiver is also available. On my new pistol, the Essex enhanced slide was a tight fit to the Essex Select frame, and required some elbow grease. This eliminated any need to tighten the slide, or fit the slide and frame together. The slide fit onto the frame, but needed some lapping.

Using gunslick and honing oil, I worked the two parts until the slide could be removed without difficulty. Once the slide and frame were fitted,

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I installed the barrel, and did the final fitting of the barrel and breechface. Okay so far. The next step is a little more interesting, because the receiver parts usually fit, and there is a lot to choose from. My new NM Essex Arms 1911 has a potpourri of frame parts from several different manufacturers purchased for the most part from umrich Gun Parts Corp. est Hurley, NY 12491; the Essex Arms Select frame is advertised as a stripped receiver, it came with grip-screw escutcheons already installed.

The ejector and the plunger tube have to be installed. The receiver parts I used included a checkered-nylon mainspring housing, sear, disconnector, hammer strut, and slide stop from Chip McCormick (1715 W. FM 1626, Suite 105, Manchaca, TX 78652/ 800- 328-CHIP). In addition, I bought an ejector, a Commander-style hammer, extended maga-

zine catch, and lock from Ed Brown Products (4 Tr., Perry, MO 63462; The trigger is a Colt found in the M1991-A1 pistols.

Being left-handed, I installed a Mueschke factory-style ambidextrous safety, with sear and hammer pins that came from Brownells.

Finally, I purchased a King's #204 upswept grip safety, 1911-style diamond-checkered grips, hex-head grip screws, a sear spring, mainspring housing components and retaining pin, as well as a slide-stop safety plunger. Works Glendale, CA Building or a worn 1911 Government Model-type pistol can be a fun and interesting project for anyone familiar with guns, who understands how they work, and has the ability to assemble and disassemble firearms properly.

The parts you purchase don't have to be the most expensive, but they should be of good quality manufactured by a reputable vendor, and purchased from a reliable source. Avoid

part sets that are advertised at prices too good to be true; these are usually only a good deal for the seller. Conclusions The Essex Arms 1911-A1 NM homebuilt turned out to be a very accurate and tight pistol, with a comfortable grip and a nice military appearance, and it shoots quite nicely.

The 1911-auto aftermarket receiver is a controlled item, and must be purchased by someone with an FFL. By assembling your own 1911, you could add a .22 conversion unit, or build additional caliber conversions, without sacrificing the integrity of a factory pistol. Many options are available for the 1911 GM. As a final word, it's probably more economical to start with a new or good used pistol than it is to buy all of the parts individually.

The unique advantage of building your own 1911 is the personal touch derived from your choice of aftermarket products and features.

PEOPLE & COMPANIES

A New Slant on an Old Standard: Colt's Cowboy Single-Action

With nearly 14,000 in circulation among cowboy shooters, this “modern” version of the Colt SAA will eventually cross your bench.

BY DAVID R. CHICOINE JULY 2004

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In order to fill the demand for a less-expensive and plainer version of their rugged Single Action Army, in the late 1990s Colt came up with the Cowboy model as their answer to that need. The Cowboy's price would be closer to the range of the many imported Colt copies, and its targeted market was cowboy-action shooters. This new model, prefixed with the letters CB, was introduced by Colt in 1999.

Colt's cataloged model numbers for the Cowboy were CB1840 for the 4-3/4-inch barrel, CB1850 for the 5-1/2-inch barrel, and CB1870 for the 7-1/2-inch barrel length. The official factory terminology for the finish used on these guns is “case hardened,” but like the SAA, the Cowboy actually sports a color-case-hardened frame. This one is .45 Colt with a 5-1/2-inch barrel. Author photos. with a blued barrel, cylinder, and grip straps.

The Cowboy finishes are different from the standard blue and color-casehardened Model Ps. The metal is not as highly polished and the color-case-hardening was performed using a different process. This process produces colors more reminiscent of the early Italian copies'd efinately not as brilliant or pretty as the familiar Colt SAA case colors.

Hand fitting of some areas, like the grip strap's fit to the frame and where the grips fit on the grip frame was obviously not given the kind of attention given to a Single Action Army. That's the reason Cowboys will sometimes be found with sharp edges protruding in some areas, including the front edges of the cylinder where the flutes used to be chamfered.

On the positive side, my test gun's hammer was equipped with some of the most practical, non-slip checking on its spur I've seen on any single action, and this is the easiest Colt hammer I've ever used for fast work. Incidentally, the hammer was finished in, from what I could tell, a Parkerized phosphate finish of some sort. A more modern transfer-bar ignition and a floating firing pin were also added to the new Cowboy design.

Removed from the Cowboy hammer is the first notch't he so-called “safety notch.” The familiar hammer-mounted firing pin we are so used to seeing is also gone, and the flat-faced front of the hammer looks more like a Ruger hammer. The shooter still has to draw back the hammer into the half-cock position for loading and unloading, but the Cowboy is officially considered a “two clicker,” having only the half-cock and cocked positions. Colt's Cowboy barrels are marked on their tops with the Colt

A NEW SLANT ON AN OLD STANDARD: COLT'S COWBOY SINGLE-ACTION CONTINUED

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In the opinion of the author, this is Colt's best hammer spur since early 1873. name and address and the barrel's sides are roll marked "Colt Cowboy .45 Colt". You will notice from the photo that the patent dates have been removed from the left side of the frame. Colt's representative, Amy Navitsky, told me that the Colt Custom Shop also did some work on Cowboy models, and that there is a "Z" modelnumber designation assigned, which denotes custom work on a few of the Cowboys.

There was also a Cowboy Buntline, as well as a few Cowboys produced in .38 Special. As Amy related to me in an e-mail: "I have seen nickel Cowboys and engraved Cowboys, and

Cowboys with wood grips. All of these deviations of the standard models were done through the custom shop. Although it didn't have the lovely fit and finish of the Model "P" I personally see the Cowboy model as a welcome addition to the selection of revolvers available for CAS competition.

It offers the serious shooter a genuine Colt, but one that could be "beat on" in heavy use without having to worry excessively about hurting its value. Unfortunately, the Cowboy was rather short-lived. I guess Cowboy Action Shooters didn't respond as strongly as the Colt factory would have liked to the lower priced Cowboy model, so the company decided to discontinue the Cowboy in 2003.

Their official reason for discontinuing the Cowboy is that: "Colt was responding to market signals." The factory tells me that a total of 13,984 CCB models were manufactured over the period from 1998 to 2003. Takedown Instructions 1. Always be sure your revolver is unloaded. Check to make sure this weapon is unloaded by grasping the revolver around the grip firmly, and pointing the muzzle in a safe direction.

Keeping your fingers away from the trigger (#23), open the loading gate (#14) and pull the hammer (#19) slowly to the rear until you have heard

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Colt Cowboy Single-Action Revolver 1 Barrel 2 Ejector Tube 3 Ejector Head 4 Ejector Rod 5 Ejector Spring 6 Ejector Tube Screw 7 Frame 8 Cylinder 9 Base Pin Bushing 10 Base Pin 11 Base Pin Screw one audible click. This will place the hammer in the half-cock or loading position; the cylinder (#8) should be free to spin in a clockwise direction.

Again, being cautious to keep your fingers away from the trigger, slowly rotate the cylinder two full revolutions by hand, all the while examining the cylinder's chambers through the opened loading gate at the rear of the frame (#7) to make certain that the cylinder chambers have no cartridges in them. What if there are cartridges present in the cylinder chambers? Then you are holding a loaded gun. Leave the hammer right where it is in the loading position with the loading gate opened.

Using your left hand to hold 23 Trigger 24 Bolt 25 Sear & Bolt Spring 26 Sear & Bolt Spring Screw 27 Bolt Screw 28 Trigger

Screw 29 Hammer Screw 30 Trigger Guard 31 Front Strap Screw 32 Rear Guard Screw (2) 33 Main Spring 12 Base Pin Spring 13 Base Spring Screw Nut 14 Gate 15 Gate Catch 16 Gate Spring 17 Gate Catch Screw 18 Transfer Bar 19 Hammer Assembly 20 Hammer Roll Pin 21 Hammer Roll 22 Hand the revolver securely by its grip, tilt the revolver so the barrel's muzzle (the front) is facing away from you and upwards. (Generally, it should be pointing in a direction that you determine is safe so if the gun did accidentally fire, no one would be harmed.) Using your right hand, rotate the Cowboy's cylinder slowly, one chamber at a time in a clockwise direction (viewed from the rear), pausing at each audible click to allow each cartridge to fall out of its chamber and onto the bench.

If any cartridge fails to fall out of the chamber by its own weight, you should manually operate the ejector by pushing on the ejector-rod head (#6) toward the rear of the gun with 34 Main Spring Screw 35 Stock

Pin 36 Backstrap 37 Backstrap, Lower Screw 38 Backstrap Screw (2) 39 Stock Left 40 Stock Right 41 Stock Screw 42 Firing Pin 43 Firing Pin Retainer 44 Firing Pin Spring 45 Firing Pin Spacer your right hand, until the ejector rod has pushed the cartridge out of the chamber.

Repeat this operation for each chamber. When you are absolutely sure there are no more cartridges left in the cylinder chambers, you can consider the revolver ready to be safely disassembled. 2. To remove the cylinder, the hammer should still be in the loading or half-cocked position, and the loading gate should still be open. The cylinder is rotating on apart known as the base pin (#10). This pin must first be removed through the front of the frame before the cylinder can be removed.

THE BASE PIN IS HELD IN THE GUN BY A SLIDING, SPRING-POWERED CROSS BOLT,

A NEW SLANT ON AN OLD STANDARD: COLT'S COWBOY SINGLE-ACTION CONTINUED

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Notice the steps on the hammer face to clear the transfer bar. that Colt calls the "base pin screw." The base pin can be removed by first depressing this cross bolt (#11) and then pulling the base pin (#10) straight out through the front of the frame. The cylinder can now be carefully rolled out sideways toward the right side of the frame. 3. Remove the grips and grip straps by unscrewing and removing the grip screw (#41) from the center of the grip, and then remove the two grips (#39 & 40).

Unscrew and remove the two backstrap screws (#38) from the top-rear of the backstrap (#36), and then remove the single butt screw (#37) from the butt of the backstrap. The backstrap comes off by pulling it off to the rear. Unscrew and remove the mainspring screw (#34) from the inside-lower area of the trigger guard (#30); the mainspring (#32) will now lift off.

Unscrew and remove the two rear trigger-guard screws (#32) "these face straight up" and the front trigger-guard screw (#31) which also faces up, and the trigger guard (#30) will drop off from the bottom. 4. To disassemble the action, unscrew and remove the sear and bolt-spring screw (#26) from the underside of the frame. This is the only screw that faces straight up on the in-

side of the lock frame. The sear and bolt spring (#25) can now be lifted out from the bottom of the frame.

Next you can unscrew and remove the trigger screw (#28). This is the center of the three screws that pass through the frame side. The trigger (#23) can be removed out through the bottom of the frame. Notice how the trigger connects with the transfer bar (#18). The hammer screw (#29) "the rear-most of the three screws in the frame side" can now be unscrewed and removed, after which the hammer (#19) is rotated slightly to the rear and then pulled down out of the frame.

You will find the hand assembly (#22) is connected to the hammer, and it will withdraw with the hammer. Once the hammer (#19) is out, the hand assembly (#22) is removed by lifting it up out of its socket hole on the left side of the hammer. The transfer bar will now slide down out the bottom of the frame. Be sure to make note of its relative positioning for reassembly. Next, unscrew and remove the forward-most of the three screws on the left side of the frame.

This is the bolt screw (#27) that holds the bolt (#24) in place, after which the bolt can be removed from the bottom. Be sure you keep the Cowboy's bolt screw with the bolt

while they are removed from the gun; the trigger screw (#28) can easily be mistaken for the bolt screw, which is the same diameter but slightly shorter. 5.

To complete the disassembly, unscrew and remove the ejector-tube screw (#6) from the front of the ejector tube (#2), and the entire ejector-tube assembly can be pulled to the side by the front until it moves away from the barrel slightly. From this position, the ejector-tube assembly can be withdrawn forward and off the barrel. The ejector rod (#4), ejector head (#6) and its spring (#5) can be removed by pulling them straight back out of the ejector tube.

Under the frame in the Cowboy's right-side frame rail, you will notice a small screw. This is called the gatecatch screw (#17), and it's the key to removing the loading gate. Remove this screw and its plunger (#15) along with the gate spring (#16) out through the screw hole. The loading gate (#14) can now be removed from the frame by pulling it out toward the front of the gun. Additional disassembly is not recommended for routine maintenance and normal cleaning.

And, of course, as always, you reassemble the revolver in the reverse order. I

TOOLS & FIXTURES

Reader Forum

BY AMERICAN GUNSMITH EDITORS JULY 2004

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Rechambering the Savage 99 I'm interested in rechambering one of my Savage Model 99s in .300 caliber to a .308 cartridge. The specs on the cases are very similar, and it appears that a chamber reamer would do the job. What information do you have on doing this type of job? I know that it would not improve the collector value, but it would allow the use of .308 ammo. There is a pull-through chamber reamer that Midway and Brownells carry.

This reamer is used in rifles like the M1 and M14 to obtain the correct headspace. Would this reamer work in a similar manner in the Savage 99? I would appreciate your comments. The shoulder angle of the .308 is 20 degrees. The same angle on the .300 Savage is 30 degrees. Overall case length of the .308 is 2.015; the .300 is shorter at 1.871.

Unless Brownells tells you otherwise about the pullthrough reamer, we think it is a riflespecific corrective measure and you'll need a series of reamers from rough chambering to finishing. Our best suggestion is to discuss your project with Clymer Manufacturing Pocket Pistol Takedown I have a Mauser Model 1910 Pocket Pistol. The serial number is 304498. It's a 32 caliber. On the right side of the frame, it has "Mauser 7.65." On the left side of the frame it has "Waffenfabrik Mauser A. G. Oberndorf, A. N.

Mauser's Patent." I am trying to remove the slide so I can replace the trigger spring. The slide only moves ahead an inch and then sticks. Help. If you know anything, I would appreciate any information about it. Remove the magazine and pull the slide back to its locked-open position. Push down on the

protruding part of the takedown catch, then turn the takedown rod to clear the lug on the frame. Reinstall the magazine, pull the trigger, and ease the slide off the receiver.

Be careful when you get to the trigger and trigger-bar springs; they break easily. Takedown Instructions? Where do I find detailed disassembly/assembly instructions for firearms? I have the NRA set already, but they don't even cover the guns in my own collection, much less those of others. Glaring omissions include the S&W Model 41, Savage 99, Ruger No. 1, and the Browning (Sako?) rifle I own. I have exploded drawings for many of these, which help, but are often not enough to help with sequencing.

Factory literature stops at field stripping for cleaning. Where do I look next? For the S&W Model 41, see the June 2000 issue of American Gunsmith. For the Savage Model 99, check the April 1996 issue. The Browning A- Bolt was covered in June 1996. For the Ruger #1, see Gun Digest's book on disassembly/assembly for centerfire rifles, revised edition. Mossberg Barrel Removal I have a weird (and possibly obvious) question for you concerning barrel replacement in the M44US .22 LR target rifle.

Since I recently obtained one of these beauties, and am restoring it to (hopefully) tack-driving condition, I have a query. I have to replace the existing barrel because of longitudinal burrs in the chamber, and some rifling damage at the muzzle end. The rest is in 90 percent condition at least. First, before I buy anew barrel from Numrich/GPC, I have a question concerning barrel removal. The action-mounting stud apparently pro-

trudes up into the barrel, and I surmise this is the lock. This being said, having removed the mount stud, I am hesitant to try to drive the barrel out from the receiver with a brass drift, or press it out. I was concerned that it might be threaded, although I doubt it. Could you shed some light on this matter?

Will this twist off with the barrel in a padded vice and the receiver turned with a circular wrench/ clamp? (I've made a wrench for this exact purpose. It fits around the receiver, with a milled boss to fit up into the magazine opening.) Most .22s will pretty much pull apart once the lock pin is removed, but that doesn't seem to be the case with this one. In addition, there are two "extractors," one of which is apparently also the ejector, as it has a rounded front end.

The other has a sharp triangular edge, and acts as the primary extractor. Now, since I didn't have an exploded view prior to complete disassembly and removal (the plungers were crud-covered and sticking), I forget which side the sharp extractor goes on and which way the blunt extractor/ejector goes on. Would I be correct in stating that the sharp one is on the right (looking from the receiver end, and the blunt one is on the left, acting as an ejector? Thanks for whatever help you can provide.

I've never worked on an M44US before; it's a really good rifle, and I don't want to it screw up. Your query is neither weird nor obvious. We do have some advice and information to pass along before you rush out to buy anew barrel, however. The Model 44US Mossbergs all had an email to Chick Blood, Technical Editor, at

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(continued from previous page) lead-lapped barrels, with the work being done by hand. If you purchase a “new” one, we doubt it has received such tender and particular care, and installing it will lessen the value of your rifle significantly. Furthermore, it’s quite possible the chamber on the true original barrel can be smoothed up with a finishing reamer and the barrel recrowned. If you do decide to replace the original barrel, it is pressed in.

Once the mounting stud is out of the way, a few wiggles of the receiver will usually loosen it sufficiently to be pushed out with a brass or wooden drift. Your sharp extractor lives on the right side of the bolt; the blunt one on the left. Mini-Extractor? I need to help my friend find anew extractor for his Ruger Mini-14 Series-180 rifle. Gun Parts Corp. has it listed in their catalog, but it has been out of stock for along time now.

Ruger informed my friend that they no longer make the Series 180, and they don’t have parts for it. They offered him \$120 for the rifle so he could go buy anew Mini-14. What’s the difference between the Series 180 and the new series? Can I modify the new-series extractor to fit in a Series-180 bolt? The difference between the models is a smaller bolt, a smaller extractor plunger, plus a different extractor configuration. There is no way to modify the Series-180 bolt to fit a newer model Mini.

Ruger tells us that Jack First has the old-style extractors. Feeding and Extraction I recently purchased one of Springfield Armory’s Long Slide Trophy Match 1911s. It’s an excellent pistol, very accurate, and sports top-notch craftsmanship. I would highly recommend it to anyone who gets the opportunity to buy one. The Springfield has a bull barrel, which means it also has a reverse spring plug. I am quite familiar with 1911s, but not at all with reverse plugs.

It also has a two-piece guide rod to make take-down somewhat simpler. Disassembly wasn’t too bad, but reassembly turned into a one-hour wrestling match, complete with violence and foul language. Luckily, neither of us were injured. Could you please give me some tips on how to make reassembly easier so I can clean my pistol without making an entire day of it? Also on the subject of 1911s, lately I’ve been experiencing last-round failures on a couple of mine.

Usually, the last round will bind in the chamber or the slide will not lock open after the last round. One pistol will not eject the second-to-last round if being fed hard-ball ammo. It seems to be a magazine problem as far as I can tell. I’m using two types of magazines. One is the seven-round Colt with the small dimple on the follower; these seem to work with considerably less trouble, especially with my shorter 200-

grain combat target handloads. The other is the Colt eight-round style with a flat follower.

I can expect trouble of some sort every time with these. I use the same magazines for all of my 1911s. Am I right to suspect the magazines, and what would be the best course of action? Would changing to round followers help? This is happening on more than one 1911, which is why I suspect magazine problems. Any wisdom you can pass my way will be appreciated. If you have access to the tooling, fully compress the recoil spring, mark the spot on the rod immediately muzzleward, and drill it through for a 1/32inch pin.

Installing the pin will retain the spring as you reinstall the recoil assembly back in the slide. Then pull the pin. If you don’t have the tooling, cut off the rod so it doesn’t extend past the plug. True, this will leave a hole in the front end of the gun, but will do no harm. By the way, a noted gun writer and a member of the Pistolsmith’s Guild has run an extensive test on reverse recoil plugs.

This gunsmith informed us that the 30 ten-shot groups he fired with the plugs installed were larger than the groups fired without the plug. Your magazine problems might be solved with rounded followers, but be very careful with overall cartridge length when reloading.

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