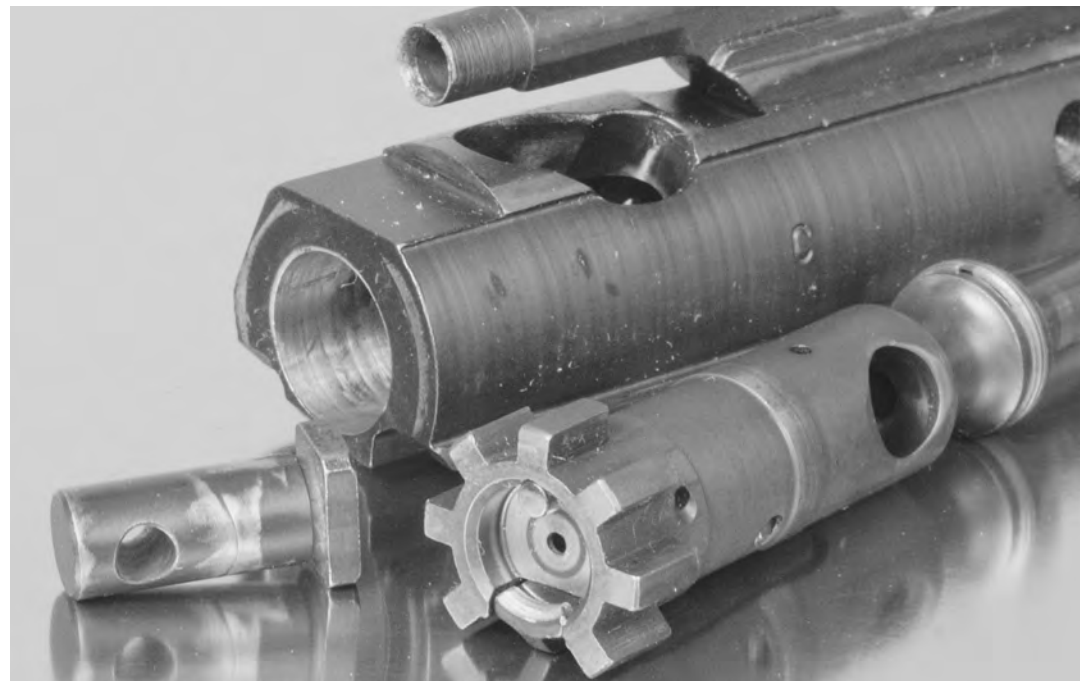


matters on a bolt rifle, and mattered on the M-14, just not on the AR15. Something in this area — bolt gap space — that does matter, and that few builders will do, gets talked about elsewhere. Talk to your builder about this, wait, and see what he says. It's worth pursuing, and so is a builder who agrees. It's very important for anyone running an AR-10, SR-25, or the like.

BOLT CARRIER

The carrier himself comes with all the same cursory "look it over" advice, and also can't be honestly determined without tech-inspection. If it looks poor, it may well be. On the list of the bolt carriers I've



Well worn but worn well. Here's a Colt phosphate-coated carrier, bolt, and cam pin set after 3000 rounds. This one never fired a shot without having all its parts lubed over and perhaps even over-lubed, and it fired some very stiff loads. See the next page.

seen that I didn't like the looks of, I've found rough spots on the exterior areas, burrs, malnormal firing pin retainer holes (some burred shut), general roughness in the interior where the bolt rides, bumps, ridges, pits, and obviously mis-surfaced finish machining. I've seen a few pretty nasty looking and poorly surfaced cam pins too.

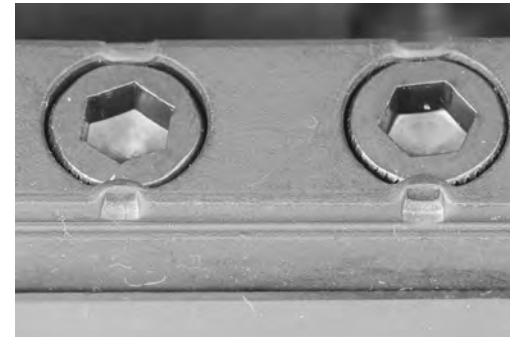
The best advice I can give on purchasing a carrier sight-unseen is to look in a direction that finds a supplier that offers genuine GI-contract parts, same

advice given on bolts, and make sure these are extras rather than rejects. Honesty matters. Otherwise, most folks will be happy, especially in the long run, if they spend up for a premium carrier at the get-go.

There are differences in bolt carriers, and the M-16 carrier is a better trap. Not only is it heavier and usually more reliably purchased as a genuine GI-quality article, it also has a shrouded firing pin slot. I call it a slot. An M-16 carrier, as well as "match" clones, as well as some uniquely-manufactured AR15 carriers, have this feature, and it's a feature worth having.

A standard-form AR15 carrier has a notch cut out to expose the firing pin collar. This is intended to

catch the hammer and prevent firing if the carrier is not fully forward when the hammer releases. This occurs if the hammer is "riding" the carrier back (because no auto-sear is holding back the hammer like it is with an M-16). It's really not necessary. With the open area as it is, the hammer hits the firing pin collar when the action cycles and that contacts the



A whole lot of malfunctions can be traced to **loose carrier keys**, and it may not be loose enough to rattle to cause a problem. The screws require a lot of torque, more than most manuals call for, and need then to be staked in place. This one has been done right. I have taken several out of rifles, and parts boxes, that either hadn't been staked or hadn't been staked as sano as this one. Shame on whoever didn't do that. An exception is that some don't stake chrome-coated carrier keys because it can damage the finish. Mil-specs call for a

sealant applied under the key, and Loctite "red" (271) is a good choice; put it on the screws too. I have disassembled very few carriers and seen evidence of sealant. And torque the fool out of those screws! I also pay attention to deburring and smoothing the key entrance, where the gas tube goes.

All this is evermore reason to have a competent builder do up your rifle. Parts quality issues should be left in his shop, not packed into a box with your address on it.



Well less worn. Here's a Smith Ent. chrome bolt and cam pin after about the same number of rounds. The bolt took a few hits from primer problems and the coating does protect the steel underneath from much routine wear. Good chrome is very hard.

pin, the hammer, and the pin retainer. This happens each stroke. Tried side by side by retracting the charging handle, a rifle with a shrouded firing pin slot feels like it runs more smoothly, and that's because it does. I don't think I've ever seen a function issue that had anything to do with running an exposed-pin AR15 carrier, but the shrouded carriers are still decidedly "nicer." It won't make or break your rifle, literally or figuratively, either way.

There honestly is no accuracy benefit from a premium carrier, or an M-16 carrier. I don't think there's ever been an accuracy increase form any carrier design. Although some have touted oversized dimensions, there's never been shown to be any advantage gained by snugging up the fit between the carrier and channel in the upper receiver where it runs. All I know who ever tried that abandoned it, and that means several learned the same lessons. I know of no such claims, meaning no attempts were made to be able to make them, by any of the carrier makers I favor.

Again, all the lock up in the AR15 is in the bolt lugs and barrel extension, and the carrier, well, just carries the bolt. I would venture that too tight a fit between carrier and upper would hurt more than it would help, and function could probably be the biggest damper. The part needs to be free to move and free to locate where the bolt wants it to go. It floats, in a way of looking at it, and it has to.