



The Value of the

VIPER

Phil Sanders

For those of you that had an opportunity to read the January edition of VHP you were likely impressed with the accounts of strength of the Viper XL-50. While the folks at Bluegrass Armory easily managed to destroy the barrel, they were unable to push the action into submission in spite of some truly extraordinarily harsh testing. You really have to have faith in the positive attributes of your rifle to allow photographs of it published in such a state of disrepair. This is hardly the typical publicity we've come to expect from manufacturers. However impressive as brute strength can be,

it doesn't count for much if it won't shoot.

The test rifle was supplied in 50 BMG with a grey stock, a standard chamber and a 29" barrel. Although, it's also available in black as well as olive drab, if you prefer. Other options include your choice of either match or standard chamber, as well as the 408 Cheyenne chambering.



At no additional cost a left handed version is also listed.

The Viper arrived in a well protected heavy cardboard and foam container. Upon opening I was favorably impressed with both the fit and finish of the gun. However, upon initial assembly I was unable to attach the bipod. The threaded pin that holds the bipod to the stock was missing. A call to Jeff Caudill (owner of Bluegrass Armory) resulted in what I've later come to expect from him, a quick and courteous response. In just a few days I received the pin in the mail. It seems that in the rush to get the rifle here for testing, the pin had accidentally been overlooked. Considering the genuine hospitality of the folks at Bluegrass it was only a minor inconvenience.

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So, what features contribute to this gun's value? For one, the bolt design allows for very quick lock time. Jeff tells me the Viper's lock time has been measured at 1.76 milliseconds by Charles Fagg of Tioga Engineering, in Pennsylvania, PA. For those of you who don't immediately have a comparison in mind, how does that compare to other rifles? The Remington M700 which is familiar to almost everyone is frequently utilized in silhouette matches at least partially due to its excellent lock time. It's among the quickest of production center fire rifles with most variants running in the 2.5 to 3.2 milliseconds. With heavy springs and a titanium firing pin, the lock time can be further reduced to about 1.6 milliseconds. Other fine actions such as Stolle, Hall, and Anschutz run in the 1.7 to 2.1 range. As you can see, even allowing for a certain amount of testing variation, the Viper is in very good company. If you want to try and shoot the Viper off-hand at your next local match, go ahead, lock time won't be the reason you didn't connect.

Another feature that the Bluegrass Engineers believe innovative is the design of their muzzle break. At first glance it appears to be a fairly

typical five chambered design, but is available in aluminum as well as the more traditional steel. The brake has a very tight bullet clearance of only 0.008 of an inch per side. As you can see from the accompanying pictures,

that equates to little more than the thickness of a layer of masking tape. The tight tolerances and high temperature gases have apparently led to erosion issues with some high vol-



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ume shooters of the aluminum version. Bluegrass is offering to replace the aluminum brake with a steel one at no charge for those who have experienced excessive wear. Intuitively, at least, the tight bullet clearance should result in greater percentage of gas deflection and an increase in overall performance.

Although I didn't perform an in depth evaluation of the brake, it did seem to work reasonably well. At 24 pounds, recoil is still noticeable, but bearable. If you want to further decrease recoil or adjust the balance of the rifle, the rear of the stock has twelve predrilled holes where additional weight may be added to bring the total up to around 30 pounds. A kit is available from bluegrass, but the same thing could be easily accomplished by inserting lead wire or shot.

The trigger of the Viper is vaguely reminiscent of those found on AR-15's. It's adjustable but requires the installation of a #4-40 hex set screw, which isn't factory supplied.

It's simple in design and appears that it would lend itself well to tweaking. Since the gun was a loaner I resisted the urge to attempt any substantial modifications. The trigger unit is attached to the stock via two knurled steel pins, which are removable for cleaning or adjustment without tools. Trigger pull was in the 3 pound range with very little creep and a minimal amount of over travel. If you're willing to shoot with your trigger finger very low on



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the shoe, the amount of force required to release the sear is closer to two pounds due to the effect of leverage. One of my few unanswered desires for the Viper is the lack of after market accessories currently available. Specifically, a Jewell type trigger would be a nice option. While I haven't found anything problematic with the stock trigger it might not serve everyone's purposes.

The stock is made from a 6061T6 aluminum extrusion that's been heat treated. It has an integral scope rail that fits either Picatinny or Weaver style rings and offers 30 moa of elevation machined in. Due to the straight stock design you'll need tall or extra tall rings just to be able to mount most large diameter scopes. Even with tall rings you'll want to make sure you can comfortably see through the scope without necessitating smashing your



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face into the stock to get a good, comfortable sight picture. Like all metal stocks they are stable and rugged but can be somewhat uncomfortable to shoot in extremes of ambient temperature. When selecting rings don't forget to allow for the height of a cheek piece, you may want to keep your face from direct metal contact.

Now that we've got details of the rifle covered, how does it shoot? My personal best was with the Hornady A-Max 750 grain bullets and H5010 which eventually yielded groups in the 3.5" to 4" range at 600 yards. Even though that's quite respectable I have little doubt that could be improved upon with further experimentation. While I've not personally witnessed it, there have been credible reports of groups measuring in the 4" range at 1000 yards with what I'm sure have been carefully tuned Viper's. Even tricked out guns can't be expected to shoot that well unless they're based on a solidly engineered design.

In reviewing any firearm it's only fair to point out perceived weaknesses as well as strengths. Admittedly, after much study I've only come up with two suggestions and both of these are minor in nature. The first modification would be the ability to lock the bolt handle to the bolt body. Currently, the handle is threaded in place and has the potential to loosen during handling. I'm sure that if you pack this gun far enough someday the handle will come loose, probably at an inopportune time. While you could use thread locker each time you reassemble the bolt that seems like an awkward solution at best. It's a minor annoyance but it would be nice if it could somehow be mechanically locked in place; perhaps something like the old Bruno ZKW 465? Secondly, slight bevels on the stock raceway would help to make bolt insertion slightly easier after cleaning. While neither of these modifications may be practical or feasible it's something to think about in the never-ending search for perfection.

While the disadvantages of the Viper are few, the advantages are many. These include anvil-like toughness, fine accuracy and absolutely first rate customer service. There are few, if any other rifles in this price range that are as capable. Even some of the better AR type conversions approach the same overall cost by the time you factor in the price of the receiver. Plus there are certain comforts in knowing that the Viper has a dedicated receiver that's in no danger of wearing out like you might think would be possible with a conversion unit.

Overall, the Viper XL-50 provides quite possibly the best value for a fifty on the market today. While it's not inexpensive, at around \$2,900 it does offer true value. It's a durable rifle that's both accurate and reliable. That combined with Bluegrass Armory's first class customer service will makes you feel like you've made the right choice. I suspect we will be seeing many more of these around. 🐍