

# Mid State Firearms Complete Upper

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I was looking for a decent upper for a budget build to help control the Texas pig population and hopefully double duty as a varmint gun. Mid State Firearms was right in my price range at \$329, and they have a \$10 flat shipping rate. I took the chance with the blemished model because it was going to save me about \$30 and it's going to be a truck gun anyway. Like always I searched the Internet for reviews but time and again all I could find were reviews on their website. When that's the case, I'm always skeptical that it's just the company and its employees marketing their own product, so I decided to share my experience with everyone else.

First, I sent them an email on a Saturday just to ask what kind of accuracy I could expect. I was surprised when I got a reply later that day! Allen Gearhart told me to expect right at MOA, which is certainly acceptable at this price point; the swift reply definitely boosted my confidence in the smaller company. I placed my order on their website Monday morning. Allen called around lunch, and there was a mix-up at my bank because of my recent change of address. Cleared everything up with the bank, called Allen back, and he finalized the order with me on the phone! Great customer service! To make things even better, that Thursday I had my upper. A three day turnaround is pretty impressive. I ordered the 16" stainless barrel, 1:8 twist, with the 223 Wylde chamber. It comes with a carbine length gas tube and an A2 flash suppressor. I upgraded the standard 10" free float quad handrail, to their 15" Gen 3 Slim Rail for an extra \$70. It seemed like it would be more comfortable than the quad rail, I like the way it looks, and it has the full length top rail and 3.5" rails on the front sides and bottom for sights or lights. With the upgrade, I got everything I wanted, shipped to my door, for right at \$410.

It was shipped USPS, and they definitely started treating it as a truck gun. The box was pretty beat up, but I cut the tape and the upper was wrapped tight and thick with bubble wrap. As I pulled it from the bubble wrap, I noticed it was heavily oiled. Personally, I like it that way. I would rather break it down and wipe it off as I inspect it than let the delivery guy get caught in the rain or snow and end up with a brand new rust pipe. Visually everything seemed great. The only blemish I could find was the T2 and T12 markings were slightly discolored.



The rough handling during shipping was totally absorbed by the box and bubble wrap. As I disassembled and cleaned it, everything seemed to be in order. The gas key was properly staked, fit and function was tight and repeatable. I paired it with a Palmetto State Armory lower and a BSA Tactical Weapon 3-16x44 scope. There is a little play between the two halves, but not extreme. I picked up the scope for \$99 and it blends nicely with the gun.



The spring rains muddied up the roads and shut down the local range for nearly two weeks. When I finally got the chance to shoot it, I was chomping at the bit to say the least. The extra time did give me a chance to gather up plenty of ammo, both factory and handloads. The range work was all done at 100 yards, seated and with sand bags. The only magazine I had was a 30 round Pmag. I must admit, the magazine length was a little long for my sandbag set up so I wasn't perfectly steady, but I was confident I could make it work. The weather was near ideal for accuracy testing. It was overcast and about 75 degrees with a slight and steady breeze.

Ammunition listed in order of bullet weight, factory ammunition is in bold, and all handloads were fueled by Varget:

- 50 gr Sierra Blitzking
- 52 gr James Calhoon DBL HP
- 55 gr Nosler Varmageddon (tipped)
- 55 gr Nosler Ballistic Tip
- 55 gr Monarch FMJ (brass case)
- 60 gr Hornady V-max
- 62 gr MFS SPBT Steel Case (zinc coated)
- 62 gr Federal Fusion (Original, not the MSR Version)
- 69 gr Australian Outback Ammunition w/ Sierra Matchking
- 73 gr Berger VLD Target
- 75 gr Hornady Match (.223 Rem non-Superformance)

It only took a few rounds to get a decent zero. I wasn't terribly worried about hitting the bulls eye perfect. I knew each type of round would have its own point of impact anyway. Before I spill the accuracy beans, I have a few more confessions to make. All accuracy testing was done on the same range trip, this was the first time I fired the rifle (no break-in), I fired all shots with no cleaning, and last but not least I shot it like an AR. I didn't melt down the barrel by any means, but I fired more shots in less time than I ever would with my bolt guns.

Accuracy Results:

Bullet	Powder Weight (gr Varget)	Group Size (Inches)
50 gr Sierra Blitzking	26	0.67
	27	1.32
52 gr Calhoon DBHP	26	1.25
	27	1.33
55 gr Nosler Varmageddon	26	0.71
	27	1.48
55 gr Nosler Ballistic Tip	24	1.16
	24.5	1.59
	25	0.52
	25.5	0.81
	26	0.96
	26.5	1.21
	27	1.56
55 gr Monarch FMJ	FACTORY	2.59*
60 gr Hornady V-max	26	1.12
	27	1.05
62 gr MFS	FACTORY	3.16*
62 gr Federal Fusion	FACTORY	1.22 0.17 w/o flier
69 gr Sierra GK (AustralianOutback)	FACTORY	0.84
73 gr Berger VLD	22	1.18
	22.5	1.32
	23	0.68
	23.5	0.47
75 gr Hornady Match	FACTORY	1.31 0.87 w/o flier
Average of all Groups Combined		1.08
Average Including only the best handload for each bullet		0.89
Average Handloads only		0.78
Average Factory loads only		1.12
*Both Monarch and MFS were clear outliers, and as such not counted in average group size calculations		

As you can see, the upper is most definitely MOA capable. I am confident that, with a little load development, I will be able to maintain ½" to ¾" 100 yd groups.



The Varmageddon group wasn't my tightest overall, but since it was all horizontal stringing, I feel like it was all trigger control. I did a little work to the factory trigger, and removed most of the creep. That said, it is still about a 5-6 pound trigger. Given my already shaky confidence from trying to balance the rifle on the 30 round mag, and a trigger pull over half the weight of the rifle, I feel with an aftermarket trigger this load could turn out to be the best of the bunch.

The next weekend I took the gun out to my parents, where we blasted some softballs we floated down the river for rapid fire function testing. With over 50 rounds fired, both steel and brass casing, we had exactly zero failures to eject and equally as many failures to fire. Perfection.

After over 200 rounds, the only thing that isn't up to par with the higher end models is finish durability. There is wear in the obvious and expected areas, where moving parts contact one another, but there is also wear on the handguard. Some of this wear is on the sides and could possibly be from rubbing against a tree or other rest while shooting. It's also wearing on the very end by the muzzle. I can't even imagine a scenario in our use or handling of the gun where this area could have been subjected to very much abuse. We haven't been practicing our bayoneting technique.

In the end, I am super pleased! I must admit I was a little hesitant because the price seemed way too low to get the product I was hoping for. I was confident it would handle the swine, but unsure if it could reach out and touch wily coyote or catch a sly fox slipping through the cedars. I am now sold though, and if you couldn't already tell, I would definitely recommend Mid State Firearms if you're looking for budget priced upper. This thing definitely out shoots its price. The upgraded handguard handles nicely and looks even better in person than it did online. Even after the extended range trip, including several rounds of cheap ammo, the barrel cleaned up quickly and showed very little if any copper fouling. The great customer service may have sold me on this first purchase, but the product merits the next.