



AREA 51 - Foreman Bumper Project

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When I bought my Honda Foreman ATV new in 1998, I knew I would need good front end protection. At that time I purchased an aftermarket tube style bumper and installed it. After providing nearly 10 years of service protecting the front of my bike from rocks, trees and other bikes, this bumper had seen better days. With rust forming on the inside of the tubes, it was now time for an upgrade.

I wanted to build something a little more heavy duty and styled along the lines of custom bumpers found on off road trucks, with out incurring the heavy duty price tag. To start, I searched the internet for pictures and inspiration. Once I formulated a plan I began making a cardboard template which allowed me to create, adjust and play with the design. More importantly it also allowed me to get accurate measurements and angles figured out. Believe it or not its much easier to fix a mistake made on cardboard then on 3/16" steel!

Now that I had my measurements and design, it was time to start building. I started with a length of 6" x 3/16" C-channel steel, which I figured would make for a nice solid bumper. I wanted the ends of the bumper bent to match grill on the bike, so I started by cutting 2 pizza shaped wedges out of the top and bottom rails of the c-channel, as measured from my cardboard template. Next I cut a relief groove vertically from the point of the top wedge to the point of the bottom wedge making sure to only cut 1/2 to 3/4 of the way through. Having this relief would make the steel much easier to bend. All cuts were made with my fancy new 4.5" angle grinder.

Once the cuts were made, I bent the channel until the wedge shaped openings were closed and then tack welded the seam with my trusty Arc Welder. This process was repeated for the opposite end of the bumper so that both sides matched. Careful measuring from the template made sure the bumper was the width I desired. Now the bumper was curved the way I wanted, but it still looked like a rectangle from the front. This was solved by transposing the next 2 cuts from my template to the Steel as seen in the pictures. With these cuts made the bumper had taken the shape I was looking for.

Next I had to fabricate a new bottom rail of the ends of the C-Channel to match the cuts I just made. It took a little creativity to make it fit the different angles, so once again I made a cardboard template then transferred the design to steel flat bar. Once fitted, the new bottom rails were tack welded in place. Once I deemed the bumper OK, I welded all of the seams in the bumper inside and out both for strength and to fill in gaps where mud and bog would hold up. All of the welds on the front of the bumper were ground flat for a smooth, factory, seamless look, while the inside ones were left untouched after the welding slag was removed.

Next on the to do list was to figure out how to mount it to the bike!!! After some thought and planning, I fabricated 4 posts from some heavy wall steel tube, topped with a piece of angle iron that would give me a place to attach a U-bolt to attach the bumper to the round tubes of the bike's frame. I took some careful measurements of the bike frame then lined up all 4 mounts on the bumper and held them in place with a combination of Clamps, welding magnets and my steel square. The last step of the fabrication was to drill mounting holes in these mounts, and to make an oval shaped cable hole for my winch roller fairlead.

Now that the fabrication and test fitting was completed, it was time for finishing. To start I went over all the outside welds to ensure that they were smooth and level, then cleaned off all of the welding slag inside the bumper and out. Since cast steel has a rough, textured finish, I mixed up some spot putty body filler and applied a light coat to the entire outside surface of the bumper. With a little sanding the bumper now had a very smooth finish similar to the expensive, factory made, stamped steel bumpers.

A few light coats of etching primer and 4 light coats of gloss black enamel paint and my bumper was ready for business. I'm very happy with how it turned out and so far it works very well, looks great and I have the satisfaction that I completed it with my own hands. Now, after 2 years of service the bumper is holding its own with only a few minor scratches in the paint!