

Updated 1/11/22

Championship Ice fenders

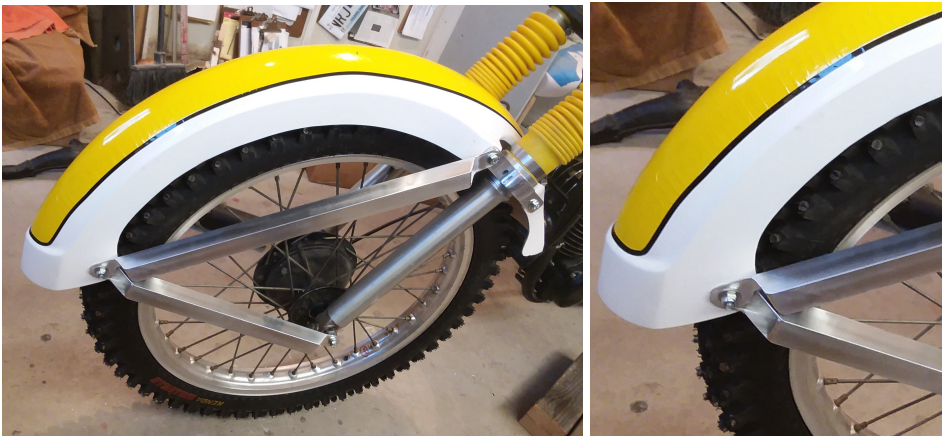
Hardware store items to buy

- [] Mounting braces aluminum box tubing or conduit tubing
- [] Bolts, fender washers and Nyloc nuts, 1/4-20 or 5/16 and LocTite

This is my third generation front fender and first gen rear. The front is made for regular forks upside down forks with some clever strut designs. I hope the world's only dedicated ice fenders work for you. Be mindful the strength of these fenders is not totally the fenders themselves. It's the mounting system. Although there is inherent extra strength in the fender shapes and side walls.



Here is a front fender mount design for Upside Down forks contributed by Mike Bauer, one of my summer & winter riding friends. Notice the triangulated forward struts to defend against impact and they have a hollow construction to reduce side-to-side fender wiggle—basically so the studs don't chew up the fender.



This is the brace system I installed on my 1975 Yam MX400B. I used 1" square box aluminum tubing. Angle cut ends for screw access. Clumsy looking but it works

Front fender features;

- [] Eight mounting points. Use all eight and the fender will be rock-solid
- [] Fork capture pockets. If the mounting straps break or get loose, the fender can't roll down under the wheel causing your head to smack the ice
- [] New fender radius matches 21" and 19" ice tires.
- [] Mega strength shapes. Molded shapes add great strength to an otherwise normal rounded fender.
- [] Thick strength. These are about 1/8" to 3/16" which is the right balance between strength and weight

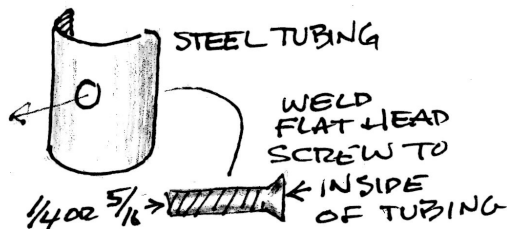
Front fender features;

This is a great chunk of fiberglass with strengthening contours all the way through it. Mount points are endless.



Mounting front

The most important mounting concept to keep in mind is ...**triangulate**. Use a triangle from forks to fender front. That's where the impact strength is. In the photo above, I did so but the lower mount tube should have been at axle height. I can't tell you what slider mount points to use because all forks are different. Hopefully, you have convenient axle pinch bolt as a location otherwise you'll have to fashion some kind of clamp around slider. Or tap 1/4-20 holes in the end of your front axle.



Here's one way to create a mount point if your slider doesn't have any threaded mount points. Use LocTite, fender washers and nyloc nuts in mount system. Hose clamp to sliders

[**Don't** weld tabs on to the sliders unless you are a class A welder. I had it done once and it distorted the slider enough to cause striction-something you don't want to discover Friday night before a Sunday race 300 miles from home].

Rear fender



This racer didn't mess around with wimpy mounts. It looks like 3/16" x 2" strapping—that's war quality

Step one, pre mount before you paint

1. Duct tape your fenders into position. Spaced blocks of wood between rubber and fender will help
2. Whack off what you don't need of rear fender
3. If you need a different angle for the fender mounting tabs use a heat gun on them then clamp them in a new position and let them cool. Be ginger and don't crack them. Just a gentle movement relying on the heat.
4. Start measuring and cutting your mount tubing. Find low fork mount points for fender front and high fork mount points for fender top and rear. If using conduit, smash the ends flat and drill. Hole in fender front should be mounted as close to axle line as possible to stiffen fender from forward hits.
5. You are building a cage to support your fender. Try and position the tubing in **triangles** if you can. This principle is the same for mounting both fenders.
6. Don't use flat aluminum straps. They don't provide enough lateral strength. Flat straps allow fender to wiggle side-to-side and the screws will chew the fenders and mounts up. I favor boxed aluminum square tubes

Use fender washers



Use big washers on the outside and inside of the fender. This will help spread stress over a wider area when you smack into someone. I didn't

mention this but I always used 1/4-20 bolts in this set up. Use **rubber fender washers** against the fiberglass to reduce creakage (my invented word.)



Mounting straps from conduit

Just squeeze both ends flat for mounting. It's cheap and looks pretty good. Now I'm using square aluminum.

Repair

When you crash a fender (I didn't say if) just repair like normal fiberglass. There is lots of clearance between fender and tire so you can use many layers of glass build up the inside to make the repair stronger than the original part. Finish the outside with Bondo etc.

Paint prep

Use lacquer thinner or acetone (careful this stuff can turn you into a zombie) to remove mold residue and bits of molding clay around flare edges. Sand fender edges with 320 wet/dry sandpaper. Sand fender surfaces with 400 w/d. Prime with epoxy and paint with your favorite multiple part automotive paint or rattle can if it's warm in your shop.

Trailer

The length of your front fender is a given-it must go below the axle line. This means you can't mount the front in wheel chocks. You have to back the bike into the chocks. If you are using front and rear fenders, rig up something else so the wheels don't skidder around inside your trailer or pick up.

Studding

If you are an ice racer you want to stick so use black screws. If you want to slide, use gold screws on the inside rear and black on other three edges



Right photo in 2019 at age 77. You kids don't get all the fun
Thanks--Phil Little

Blood on the ice-a warning

Story One

In January of 2016 I was talking to a Canadian fellow who told me a chilling story which happened 10 years ago. An ice rider fell and his own bike's rear tire went wild and chewed him deep and severely. It caught a leg artery and he died right there on the ice quickly with his friends frantic to do just anything.

Story Two

That same year I was chatting with Dan Hodder from Rochester, MI. Just last weekend a fellow ice rider got snarled up in his rear wheel and the engine was not limited with a tether switch. The rider was all chewed up from feet to hips and it was a serious big-time injury. He lived but is still in the hospital after a week.

Story Three

I ride with a very nice bunch of guys and none of them use any fenders whatsoever. I wait on the entry path and wait for them all to get tuckered out and leave-then I go on the track. If somebody comes up behind me, I just pull off. I didn't reach the age of 78 by being stupid

What's the message here. Duh! Use front and rear fenders plus a tether switch and I don't care where you buy 'em. I mean it's just too easy to buy protective devices which keep your soft flesh away from ultra sharp studs whirling at who knows what RPM.