

Storm body installation

Updated 8/1/24

Fuel tank is 100% warranted for two years from sale...

If you always use non-ethanol fuel. Fiberglass tanks will last forever-using fuel without ethanol

Fuel tank not warranted at all...

If you use ethanol fuel in any form

I make tanks with a resin that is ethanol resistant. The keyword is 'resistant.' Some areas of the world use horrible fuels with an evil ethanol content that will even defeat my resistant resin. This is especially true in California, Washington and California. The first effect is surface bubbling.

If 91 octane premium non-ethanol fuel is available in your state-USE IT. Yes, its more expensive. If your state only offers ethanol fuel you have to do a work around. Make a giant effort to track down sources of non-ethanol premium fuel. 1) Some stations sell this fuel for vintage machines. 2) Go to your local airport and come back with cans of non-ethanol fuel or 3) Make your own non-ethanol fuel. Find how on my home page. It ain't hard.

Do not use fuel additives with Methylene Chloride ([Lucas Gas treatment](#)) or Mineral Spirits ([Marvel Mystery Oil](#)) because they contain ethanol. **Do not use race fuel** with any percentage of ethanol

Other reasons to avoid ethanol

Ethanol can attack fiberglass resin. Dissolved resin in fuel flows into the carb and valve guides. When the engine is dormant, the transferred resin hardens in your jets and guides. The engine will run "poorly." The only solution is to dismantle the carb and your engine to remove those deposits. That ain't cheap. You don't want to do that.

Track record

Over the last 20+ years making tanks I have seen an estimated 3% failed tanks. That tells me owners are using weak ethanol fuels and are not having problems. The 3%ers have experienced disasters. Perhaps they are using fuel with exceptionally high ethanol content.

The unexpected factor

Let's say you pull up to the gas pump and select premium or a weak ethanol fuel. You will be filling your tank with the grade the last customer used. The lines from the underground tank don't clear and switch to your fuel until the lines are cleared and switch over. That's enough to pollute your bike's small tank with junk gas

Warning filters

ALWAYS USE AN INLINE FUEL FILTER to trap particulates. Keep an eye on the filter and change it when junk appears. Keep filter(s) away from hot engine parts

Storm tank mounting

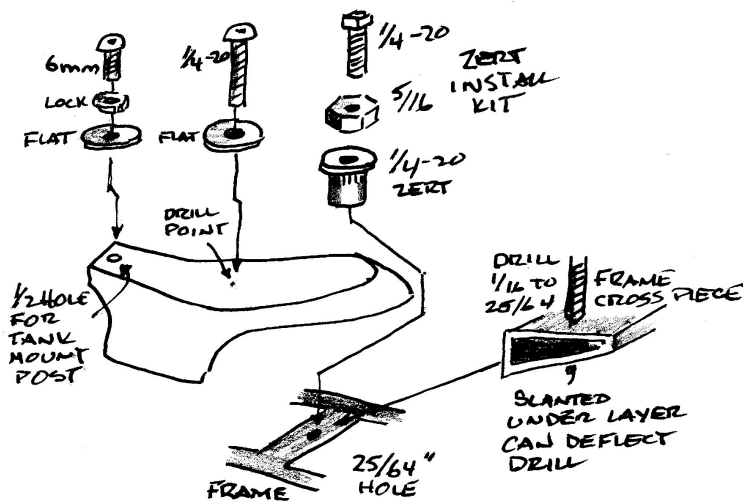
This tank mounts just like the stock tank. Snap the OEM rubber tank cushions and over my rubber protuberances on tank front. Sometimes my stubs are angled because the inside of the tank has a draft angle. If this is the case with your tank just shave the rubber until everything fits. The hole in the rear of the tank slips on the tank mount post. **The tank goes on first then the tail.**

Storm tail mounting

Place the tail on frame on the ½" rear tank mount post. If binding between tank and tail occurs simply grind away a bit of tail tab or elongate the hole, attack the tail leading edge first. If the tail is not level with the tank, shim the tail with a stack rubber washers. Rubber fenders between tank and tail isn't a dumb idea either.

NOTE

I had one report from a customer who said he had to shim the entire tail section to get a kiss fit between tank and tail. This mystified me because the body was made for the frame. Just a warning-this may be the case for you too.



Tricky tail instructions, follow closely

[] With tank and tail on the bike, center the tail with centerline of the bike. You'll notice a small drill point molded in the tail about $\frac{1}{2}$ way back (see drawing above). Lift the tail off to see where you are going to drill your mounting hole. Place a bit of masking tape on the frame cross section.

[] Reinstall and reline the tail. Now drill a $\frac{1}{16}$ " hole through the drill point and just into the tape on the frame. Pop off the tail and look at your drill mark. Is there enough frame material around the drill mark for a $\frac{25}{64}$ " hole? If not make a new hole in the fiberglass to put a new drill point on the tape.

[] Pop off the tail again. Ultimately you will need $\frac{25}{64}$ " hole. **Don't start drilling this with a big drill.** Start the hole with a new $\frac{1}{16}$ " drill and work up to $\frac{25}{64}$." **Warning.** Just below the surface you are drilling through is another frame piece BUT this piece is at an angle (see cross section drawing above). If you are not careful, your drill is going to be deflected or snap off- so drill slowly with great care. You want a straight hole for the threaded insert I provided you. You now have a $\frac{25}{64}$ " hole in your frame and the tail is off.

[] Find the nifty little threaded insert assembly kit which is a $\frac{1}{4}$ -20 thread-zert, a $\frac{5}{16}$ " nut and a $\frac{1}{4}$ -20 bolt holding it all together. Insert the thread-zert into the $\frac{25}{64}$ " frame hole and make sure its flush on the frame. Hold the $\frac{5}{16}$ " nut with $\frac{1}{2}$ " wrench. Start tightening the $\frac{1}{4}$ -20 bolt with a $\frac{7}{16}$ "

wrench. Longer wrenches are easier. What you are doing is squeezing the thread-zert so it fills the hole and swells out underneath the frame metal. This will lock the zert's threads into the frame. Tighten until you feel resistance. Overtighten beyond this point and you'll distort the threads-then you'll have to chase them with a 1/4-20 bit. This is your anchor for the rear of the tail. Save my little tool pieces-if the zert loosens up-you can just crank it tight again.

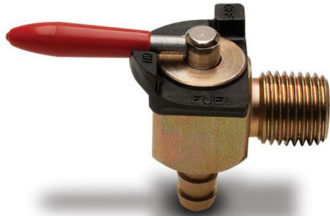
[] I have provided two mounting screws with fender washers and a split washer. The short black screw is 6mm for the rear tank mount post and the other longer 1/4-20 one goes into the zert threads. Don't over tighten either of these two bolts they are not going anywhere because the seat cushion traps them in place

[] These two mounts will hold your tail in place. The fender is shaped to sit on the frame rails for weight support. If you have cut off your rear frame loop never allow a passenger on the bike because the only thing counter balancing the rider is a 6mm screw and something is gonna give--the screw or your passenger. If you are going to ride two up, use rubber padding between the tail and frame.



Attaching the seat cushion

This is the easy. Create your own Velcro pattern. Use all the available flat spaces you can. Deploy Velcro at the 'four corners' of your seat for max holding power. Start with either seat or tail and layout your pattern. Cut and apply a corresponding pattern on the other part. You will find your scissors all gummed up with adhesive when you are done. Lacquer thinner cleans them jiffy quick. You will be surprised at the holding power of 2" wide Velcro. Sometimes you will make back-of-the-pants sound attempting to lift off the seat



Petcocks with a stern warning. How to burn your house down

I use Dapco petcocks. I hate them because they have a flaw. Sadly, I've not found better ones. Dapco internal parts are rubber. That rubber is fine and happy as long as you use the bike regularly. Fuel keeps the rubber soft. If the bike sits for a period (I don't know how long-let's say a month) the rubber dries out. Okay you return for a ride and open the petcocks. As you turn the rubber twists out of shape and out of place. Ultimately, it gets so bad the rubber ceases to function and allows fuel to flow to the carbs. If your needle and seats are worn, the carb leak and drips fuel all over your garage floor. Naturally, this has a huge fire potential and you could burn your house down and loose loved ones. You have two remedies. 1) Start the bike often or 2) pull off the fuel line and squirt three-in-one oil into the spigot if the bike will be dormant for a time. Twist the lever until it moves smoothly. It wouldn't be a dumb idea if you did this prior to starting the bike.

I won't warrant your petcocks because you've been warned. You'll have to buy new ones online for \$25 each. Don't send a lawyer after me because your property burned down. I have warned you of this manufacturer's defect.

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Gas tank cap



I used to sell Stant caps like the one the left. That's the traditional style. Lately the price has sky rocketed. My cost has risen to about \$14.00 bucks. I have to mark-up whatever cap I sell. I think you paying for a cap at close to 20 bucks is nuts.

I am defaulting to an alternative. I am now selling the caps with finger grooves, (middle). They don't look traditional but boy do they work well for cranking the caps tight. The only problem with the new caps is they allow fuel to slosh on to your tank when it's full. I am now epoxying a cylindrical collar to the bottom of the cap to check sloshing (right.)

Warning

More than a few parts I offer do not met DOT or SAE guidelines for safety. This is especially true of my fiberglass gas tanks. Metal tanks crush upon impact. Fiberglass can break and leak upon impact. This of course is a source of fire and a danger to you and others. By purchasing any of my tanks (and other non-compliant DOT and SAE parts) you are assuming the risks of; danger, injury and death. If you will not accept the risks, don't purchase my products or return them unaltered for a refund.



Thanks Phil Little
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