

TECH TALK

By Ian Bowman



typically, at Woody's Hot Rodz, fuel plumbing is done at this stage of the restoration for ease of installation. If you were doing this in- car, the removal of the spare tire well (a block off plate is supplied with the tank) and factory gas tank mounts would need to be done before any step shown. If you are planning on going frame-off, a little planning in the plumbing department goes a long way. Let's show you how its done!

The CPP tank really is a monster. Boasting a whopping 13 gallons more capacity than a factory tank, you're talking an increase of almost 200 miles, even on less-than-optimal fuel mileage.

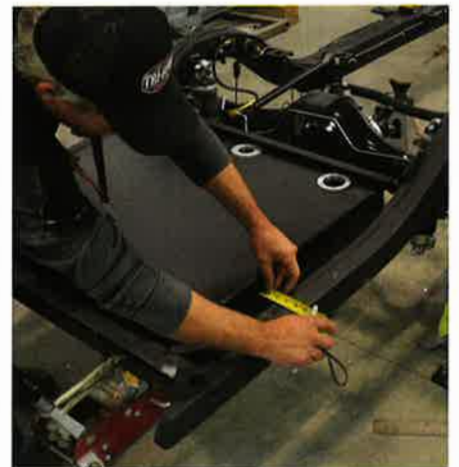


Along with the 29 gallon tank, we're using CPP's EFI fuel kit, which in this case, gives you a in-tank pump, post-filter, Corvette-style filter-regulator setup, and push-lock style fuel hose with AN ends.



First things first, you're going to want to mock the tank up in the frame. Bolting the front crossmember to the mounts, then to the tank, will ensure front mounts are lined up properly.

Care will need to be taken to make sure that the tank is even left-to-right. A measuring tape will be your friend here. Once everything is right where you want it, mark your holes, and remove the tank.



DISCLAIMER: This tank is not for the tri-five that never gets driven out of the owner's county. This tank isn't for the resto-purist. This tank is not for the car with a stock 6-cylinder. And this tank probably isn't for the car that spends most of its life in or on a trailer.

CPP's 29 gallon mega-tank is, however, for the guy after extended range with his Tri-Five without one pesky fuel stop after another. It is for the guy whose crazy big block gets 10MPG, but still wants to go road tripping too. And it IS for the guy who simply isn't satisfied with the range provided by a stock 16 gallon unit.

Being as the 2020 Golden Star Giveaway car is going to see some REAL miles put on it with the American Tri Five Association Western Invaders Road Trip, some additional juice to feed the Ed Rinke Performance LS3 was a welcome addition. So, we're going to walk you through the step-by-step install of this monster. Now, I know this will be different for us than most of you, as we have the luxury of having the body out of the way. But



With the tank out of the way, Joe Shinliver of "Trust the Builder" fame drills the mounting holes in the rear crossmember.



If you're using this tank in a carbureted application, or with an in-line EFI fuel pump, CPP provides you with feeds to do so. We're doing an in-tank setup for longevity and quiet operation, so we plugged these off.



With your mounting holes drilled, front crossmember brackets are installed. These mounts are made plenty beefy, remember, that's 175lbs of fuel you'll be carrying around!



Holes are mounted, tank goes back in now, front first. Again, remember that a few of these steps are done differently, since we still have access to the tank with the body out of the way.



The rear tank mount uses a reinforcement bar for final installation. No worries of pulling through the frame on the rear.

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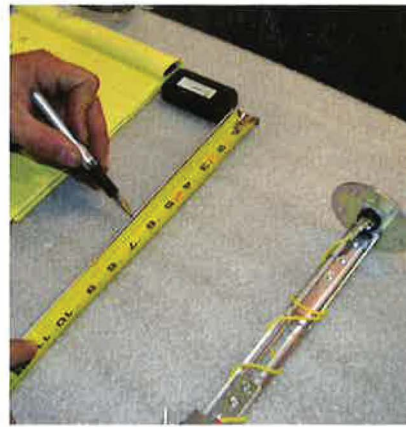
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With the tank mounted, we move on to mounting the fuel sender. This is a universal piece that CPP uses in multiple applications, so some amount of application-specific modification is required. Joe starts by measuring the depth of the tank, so we know how long to adjust the unit to.



With the depth measurement taken, and the height of the level resistor determined, we can figure how long the float arm needs to be shortened to. The level sender itself is adjustable via set screws.



Double and triple check these measurements before install. Incorrect installation will yield an improperly functioning gas gauge.



With the sending unit finalized, it gets slid into the tank. If the body was on, you'd want to install your lead and ground wires now, as once you lift the tank in place, they won't be accessible.

In addition to the supplied gasket, some fuel-resistant sealant is always a good choice for extra insurance against leaks and/or vapor odor.



Just like the sending unit, the fuel pump assembly is a universal component that requires roughly the same modifications. Again, make sure these measurements are correct, as incorrect measurements will leave the pickup sock shoved against the bottom of the tank, or too tall to properly utilize



With proper depth measured, and the fuel sock installed on the pump, a good mock up and final overall measurement before cutting the transfer hose is always a good call. This measurement is also crucial for the return hose, as making it too short can cause aeration.



There's a couple tricks to assembling the fuel pump assembly, one of which being that heating the transfer hose will allow it to slide onto the barbed fitting on the fuel pump with relative ease. This type of connection will provide an OE-quality seal that won't leave you stranded on the side of the road.



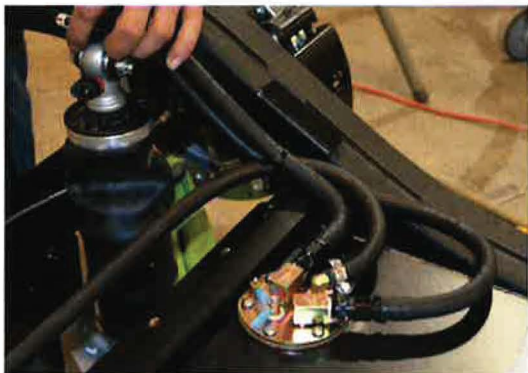
With your fuel pump assembly all together, it slips in the tank much like the sending unit. A setup like this keeps the pump cool, quiet, and away from the elements. Remember, there's a reason pretty much every single automobile manufacturer does them this way.



Being as the giveaway car is LS3 powered and won't require any deviation in fuel pressure away from stock, we opted to use a Vette-style filter/regulator assembly. By running the filter and regulator as one assembly, it eliminates an unsightly fuel pressure regulator in an otherwise spotless engine bay, and keeps return hose length to a minimum just the same. It's really a win-win, and all you have to do is find a good spot on the fuel rail to mount it.



With the filter/regulator mounted, we're onto fuel lines. CPP's fuel kit uses push-lock hose and AN-Style fittings throughout. Assembly is as simple as gets: insert the fitting into a vise, cut your hose to length, and push your hose on. The one-way barbs on the fitting will hold it in place for good. If they give you any trouble, a little heat applied to the hose generally makes them easier to work with



With your hoses made, the screw on just the same as any other AN fitting. Keep in mind, these are aluminum fittings; they need to be tight, but overtightening can easily strip the threads. Don't kill 'em! At this point, if you'd been working on the tank on the floor up til now, you'd want to go ahead and re-install. CPP also provides all you'll need to connect the factory filler neck to your new tank, with only slight modification required to the neck itself.

A dark-themed advertisement for Gold Case Radiators. At the top, there is a faint outline of a radiator. Below it, the text "TIME TO COOL" is written in large, bold, sans-serif letters. Underneath, the word "YOUR" is written in a smaller, cursive font. Below that, "TRI-FIVE" is written in large, bold, sans-serif letters. At the bottom, there is a faint outline of a radiator. The text "DE-STYLE STAMPED AND POLISHED TANKS", "2 ROWS OF 1.25" TUBES", "LIFETIME WARRANTY", and "DIRECT FIT" is displayed in a smaller font. At the very bottom, the website "GOLDCASERADIATORS.COM" is listed along with social media icons for Facebook and Instagram.



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