

## YJ Tub on a CJ

Ok here is the dilemma. My son has an 85 CJ7 than no matter how much you fix the rust, it keeps coming back. Nearly 20 years of Pennsylvania winters, road salt, high humidity summers and 3-4 days of rain a week has taken it toll on a body that really had no protection from rust when new. You slam the doors and the whole side of the Jeep moves front to rear and vibrates like a tuning fork. The Marine Corps found it necessary to send him to the middle east just before the start of the current war and he and his JarHead buddies were excited and ready to go. While he was gone, he wanted me to take care of his Jeep. The original intention was to install a fiberglass body tub as they are much cheaper than replacement metal ones.

I looked at different manufacturers, I see the reasonably priced ones seem to be light duty but they also sell "heavy duty" ones too.....for about \$1000 more. And whats this, you need to buy installation kits and you have to modify this and that? Then while walking around the local junkyard I noticed that YJ and CJ bodies looked pretty much identical. So I started taking measurements. Hmmmm, pretty much the same body except none of the YJs, even the early ones had any rust. I was told they were "dipped" at the factory and had better primers so that they were on prone to rust like the CJ. My mind was made up ! The CJ was going to get a YJ body and the best news is the cost for a nice YJ body was only \$500 ! All steel and no damage, I found one from a 1992 that was in a front end wreck. The body didn't seem to have any damage at all, the paint was intact, no rust and it was almost the same color too !

This is one of those modifications that several of the magazine technical writers will tell you can't be done...DON'T YOU BELIEVE IT! After I bought my body I found enough proof on the internet that others have done this conversion in the past with good results. I went into a bit more detail on my sons Jeep that was needed, but I wanted it to be as close to 100% as possible, and so did he. The biggest benefit to this conversion is it's less expensive than fiberglass, better quality than the Steel Horse/Acme/Omix replacement steel bodies as well as much less expensive than them, and the YJ tubs are galvanized at the factory.....can you say good bye rust ? Oh, I forgot the YJ body still says "Jeep" on both sides !

So I gave my \$500 cash to Rodney's Used Jeep parts on Carlisle Rd, Dover, PA and came back the next day to load the body on my trailer and bring it back home. While this could be a "one man" job, it is much easier with two people so my sons buddy Jason, a Toyota loyalist, volunteered to help, even though it was a Jeep. We stripped the old body of everything in the interior, removed the steering column, fuse block, brake stuff, linkages and other stuff coming out of the firewall, windshield and hood.

Now it was time to remove the body mounts and the old body. That was fun, everything rusted solid but we didn't have to worry about much as the body was trash so we didn't worry much about cutting and chiseling away metal. So now we have a frame with complete running gear sitting in the driveway. We inspect the frame and there is no rust or rot anywhere! Check it out below.



I know what you are going to say, why did you take the tranny out. Because we were putting in a rebuilt one from AutoZone. Now getting on with the story.....

So we cleaned up the frame, gave it a good couple coats of Rustoleum rust fighting primer and then coated the whole frame with a couple fresh coats of black. It's looking pretty new now.



Now the time has come to start fitting the YJ body to the CJ frame. We installed the transmission and transfer case 1<sup>st</sup> as it was easier to do with the body off. As extra protection, we cleaned up the bottom of the YJ body and gave it two coats of rubberized undercoating. This does a few things, less noise (but not that much less), protection from rocks chipping away at the factory protection and it just looks good too.

Below is the YJ tub up on end after we undercoated it.

Now, there are some issues as you will see as this is not a direct bolt in conversion.

1. The Body mounts directly in front of the rear wheels on your frame. You have 4 choices on this: 1. Don't worry about it, there's 9 other mounts; 2. Slide a nut into the channel in the bottom of the tub that lines up with the mount and bolt into that; 3. Relocate the mount on the frame to match up with the

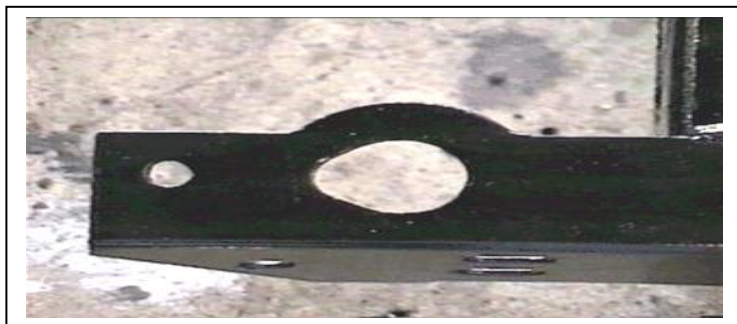
Body using heavy gauge u-channel to fill the gap; 4. go to a local junkyard and had them cut out a pair of front body mounts off a CJ-7...the ones that are the very front of the TUB will work great...just need to shave them down a touch with a grinder after taking measurements with the tub on the body so you know exactly how much to shave. If you choose #3 then cut the back mounts from the frame and grind down the residue flush with the frame so it looks good.

Then the mounts were bolted to the body to position them correctly. Finally, two pieces of heavy gauge u-channel of a suitable width were cut to fill the 3/4" gap between each mount and the frame rail. These were welded to the frame, and the mounts were in turn welded to them. U-Channel is used to lessen the risk of trapping moisture against the frame...water, etc. can drain through the channel. In the case of 3 and 4 the original rear mounts or the new front mounts with u channel will need to be moved forward to about the center of the spring hanger flush with the top of the frame and extended OUT about 1.5 inches..... or like I said you can do nothing or you can take the easy road and put a nut in the body approximately where the mount currently sits on your frame and make that work ok too.



(above, the new rear body mount in the correct place)

2. The body mounts on the rear cross-member need to be "elongated" about 1-3/4" OUT towards the outside edge of the body on each side... You'll just have to measure your tub to get the correct distance for sure, but they are almost on the outside edge of the YJ bodies and on the CJ's they're a little further in toward the center. Pretty easy deal if you have a grinder or dremel tool or even better yet a cutting torch ( I used a die grinder to cut away the excess on my frame)



(notice how the rear crossmember has been modified in the picture on the left)

Ok the modifications done for the body mounts and the new poly 1" kit installed we place the YJ body on the CJ and start at the front with the 1<sup>st</sup> mounting bolt. Leave all

the bolts loose until you have all of them installed. Move to the next bolt and so on, moving the tub as necessary. Now with all your bolts installed, go ahead and tighten them up. The worst is over. Now comes the fun of putting everything back together.



(picture on the left shows the new 1" poly mounts on top of custom fabbed stainless steel plates, we put the plates on but they are not at all necessary)

Now as you can see in the pictures, our original CJ fenders were rust free so we were re-using the entire front clip. Some people might want to use YJ fenders with the CJ hood and grill, not a problem but you will find out soon that YJ fenders are longer front to back than CJ fenders. The YJ nose is about an inch longer than the CJ nose. So, you must move the CJ grill backward so that the second row of holes in the YJ fenders line up with the threaded inserts in the grill

shell. You will of course require some bodywork to fill-in the unused holes that are left sticking out past the grill. You'll also need to drill a couple of holes in the fender to match with the threaded inserts in the grill shell, fill in the YJ hood catch holes, drill one new hole in each fender to match up with the catch locations on the CJ hood, drill new holes for the hood cushion pads, and grind a bit of the reinforcement lip off of each fender in order to get a flush fit against the grill. One advantage I found on my CJ8 with YJ Fenders is they work much better with TJ flares. My son however wanted his CJ to look like a CJ so we kept the CJ flares.

Our YJ tub still had the whole heater box on the inside. My readings led me to believe that the YJ box was a better box than the CJ one and the fan was much better in the winter than the CJ fan, besides it was 6 years newer and I didn't have to move the old one over and remove it so I decided to keep the YJ one. Pennsylvania winters are cold a better unit and better fan is a good thing. It took a little working but I made some simple brackets and got the CJ heater control cables to work with the YJ unit.

The next step here involves the defrosters. The defroster duct on the YJ tub doesn't go up through the cowl like it does on a CJ...SO, it's "make a decision time" again! You can either use the YJ dash and windshield and have the defroster go through the dash directed toward the windshield OR you can cut holes in the top of the cowl to allow the CJ ductwork to pass the defroster air directly INTO the CJ windshield frame. (this is the way I did it, as I hate the way the YJ dashboards look and love the "old school" look of a CJ dash). Use your old tub as a guide to cutting these holes.

While we are on the subject of windshields, What kind of windshield are you going to use? Either a CJ or YJ windshield will work, but if you're going use a CJ windshield (like I did) you'll have a minor issue with the windshield hold down screws)... on a YJ tub, they are farther toward the outside of the tub...by around an inch. So, you'll have to drill a couple NEW holes in your dash to accommodate this, and you'll also need to modify your bracket for the windshield hold down... elongate the hole to make the hold down fit through (this is a lot easier than drilling and tapping new holes in the windshield).

Your CJ tail gate is not going to work on the YJ tub without some help from you. Sure you can keep the JY tailgate but who wants a swinging door, I want something to sit on or to use as a table or workbench, so did my son so the CJ tailgate was going to work. To go with a CJ tailgate, like I did you'll need to make some kind of hinge mounts for it on this tub as well as the inner brackets to latch against inside the tub. You can also yourself some headache here and use your old ones or find a salvage yard that has a

tub with these brackets inside and have them cut out with a torch so you can take them and tack weld them into your YJ tub. Then, take the CJ tailgate and put the hinges on it... use some 1/8" spacers to set the tailgate on the back and use a punch to indent your holes for where you're gonna drill the holes for the hinges to mount through the tub to. Underneath the tailgate area there are several holes drilled in.... two of these holes happen to be directly under where you will need to be drilling. Take a dremel tool or grinder and grind away some of that area... around 2-3 inches so you can fit your new brackets up inside that area to screw your hinge bolts into. For the brackets, you can either go rape another CJ tub or you can take some thick metal...around 3/16" and drill and tap some holes in there that will fit the hinge mount...then slide those babies up inside the tub and mount em up!

The fuel filler hole on the YJ tub is on the wrong side (drivers side) for your CJ gas tank. SO, you can do "one of two things" once again... You can either flip your CJ gas tank around so the fuel filler is on the correct side of the body...(not a good idea because the exhaust is on that side typically) OR you can cut a hole on the passengers side of the tub that matches the one on a CJ tub so you can use the CJ fuel filler and then just use some sheet metal to patch the hole on the drivers side with some bondo to cover the old gas filler hole or you can get really cute and put a TJ license plate holder over the old gas filler hole (which I did) This way the filler hole is on the passengers side like it's supposed to be.

Roll bars. You could use the YJ roll bar spreader bars if you wanted to (if your tub came with a YJ rollbar that is and YJ windshield).....but on a CJ windshield there's not a whole lot of metal there to work with...so you will be taking your chances on drilling and tapping that area... I wouldn't recommend it...either go with your original roll bar, a full cage or get the OR-Fab sport cage. I got lucky and we found a custom roll cage in a junk yard for I think \$50 or so.



(here Jason is working on wiring with the roll cage, windshield, steering column and dash already all installed)

The only thing left to do is hook everything back up, get it painted if you want and enjoy the rust free ride for years to come without the grounding problems of fiberglass.

And here is the final product, you cannot tell this was a YJ body at one time.



**Well, I guess that pretty much takes care of it all..... take your time and make sure you measure everything two or three times before cutting or grinding and you'll have a lot of fun and save a ton of money doing this upgrade for your CJ.**