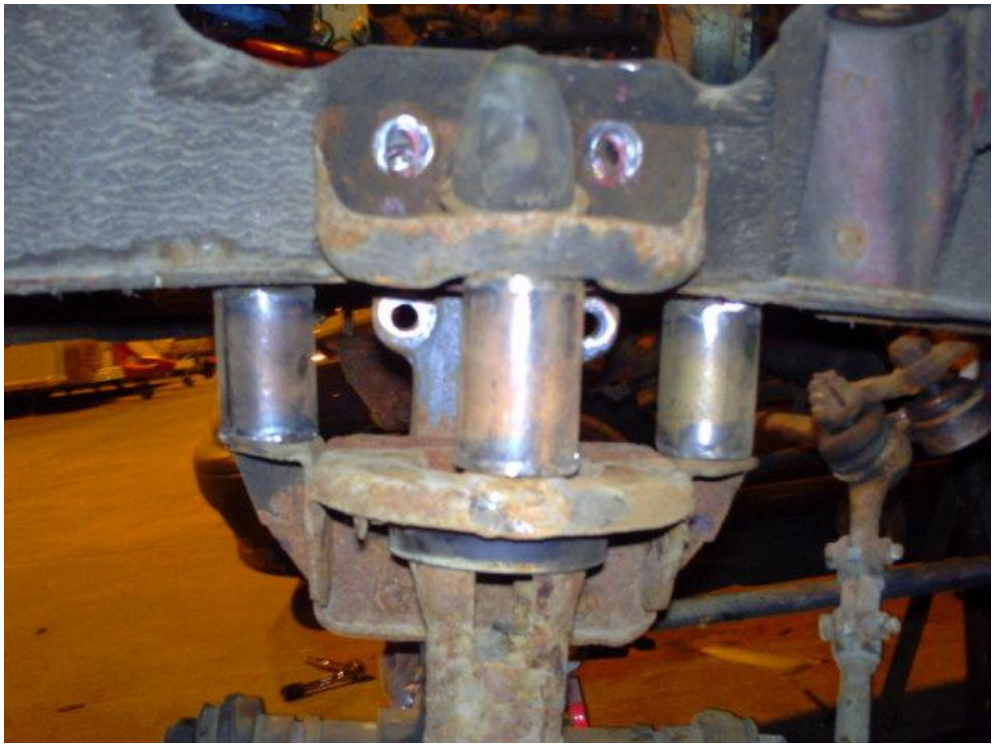
Lada Niva Front Crossmember Lift
By Simon Allen

This is to document how I did my front cross member lift for the Niva, as a few people have asked me now. This is just a guide, and already there have been variations of the theme where people have made it their own.

The way I did mine, require a spare cross member to be able to use as a donor, but you can get around it, I'll show a pic of that later.

Firstly, we assume that the cross member is off the vehicle. I made three spacers out of round pipe (I used 42mm OD x 3mm wall mild steel) and some thick washers. You will need 6:

Weld one washer to one end of each tube. leave the other one off, as the bolts that come through the chassis to mount the cross member are captive, and REAL hard to get out without making a mess.
You will need to slide these onto the bolts that come through the chassis, and hold the cross member in place on a jack, so that you can get the postitioning right, while you tack in braces to hold these solid:



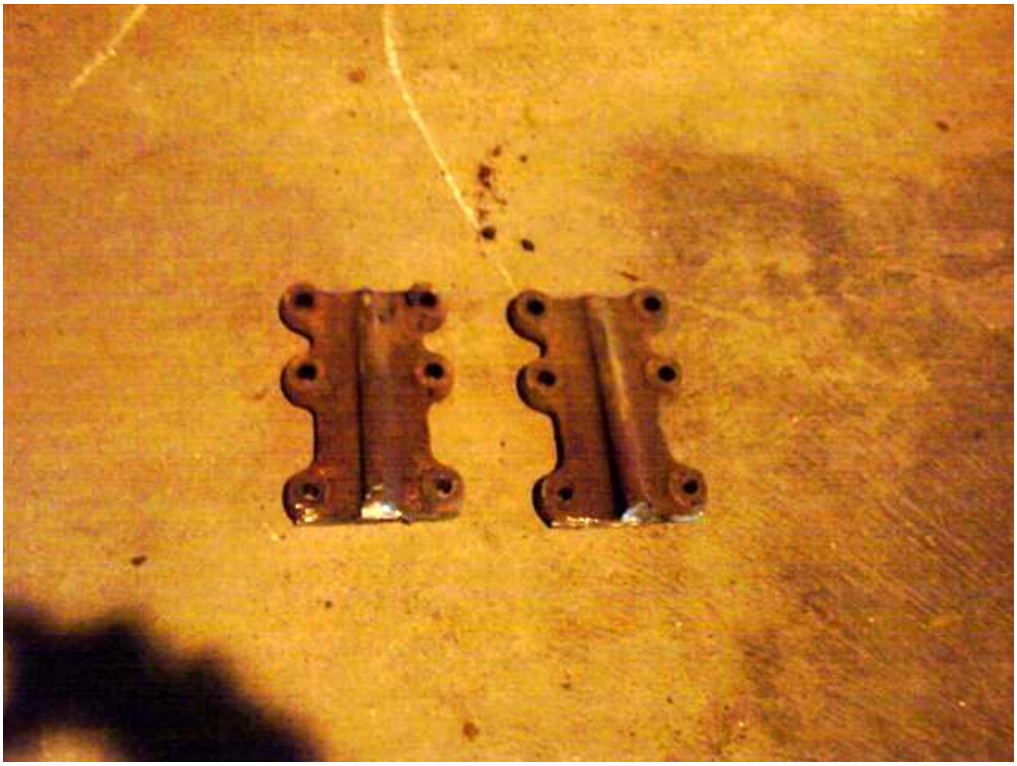
I then made braces to go in between all of these, to give the whole thing a lot of strength. I didn't take a photo if the in between, but I used the same spec tube as I did to make the spacers, and ended up with this:

you can then bolt them to the car (should have two of these at this point, one for each side).

Now you need to weld some m12x25 bolts through the washers that you didnt weld onto the spacers. These are to create a thread to mount the cross member with. Once this is done you can weld the washers to the bottom of the spacers on the car, which will then mean that you can't get to the nuts on the chassis now, so make sure they are TIGHT first, and put a tack weld on them so there is no way of them coming loose under usage.

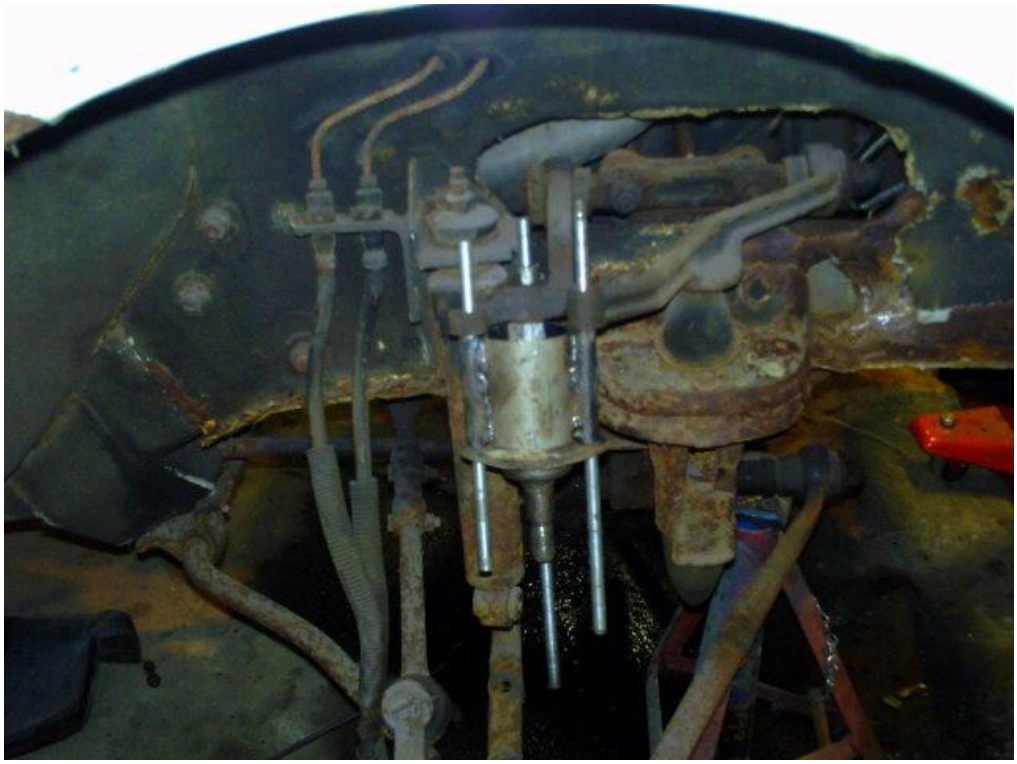
Once the spacers are completed, you can bolt the cross member to the car:

now you need your donor cross member. you need to cut underneath the 3rd bolthole down. This is so that you have enough holes for the engine mount etc etc to stay in the standard place when the whole thing is finnished. should look like this:



you can see that these are the top bits of the donor cross member. You need to clean the edge up that you have cut, and make sure you have a good chamfer ground all the way around it, so that the weld can get a good penetration later.
You then need to mark where you need to cut the cross member that is on the car. I did this by eye first, then got it down exactly using the grinder after. You need to make sure that the second set of holes line up with those going through the chassis, as these will be bolted together in the end. Will look like this:

As you can see, the bolt holes for the top wishbone are in the standard location, as are those for the engine mounts. Nice eh 😎😅
Get a good weld in there to hold it all together. I would advise bolting through the chassis as shown in the above picture, as if you're welding it right the heat will cause things to want to move. When both sides are welded, you need to REMOVE the cross member (again!) and weld the side of the cross member that was previously hidden from the welder by the spacer, don't skimp on this, it's a ballache taking it all apart again but your safety!
You will now need to make a spacer for the upper ball joint, as you have essentially moved the buh away from it. Mine are constructed of three pieces of tube with an 8mm inside diameter, and a larger piece of tube for the center, although I forgot the dimension for that 🤔but basically it needs to go over the "lump" on the back of the ball joint, and be big enough to reach the smaller three tubes when they are all bolted up. I mocked it all together by bolting it all together with the ball joint and upper wishbone. I came out with this:



(note that's the part's car, NOT my shell. I wouldn't be building a v6 into a shell with holes that big in it!! lol)

You're pretty much done now, just a few things remain. you need to build everything back up again as it would have been before. engine mounts in, upper wishbone in, you're front diff will need lowering by the same amount as what you have dropped your cross member by (i'm sorry, I can't tell you how to do this, as my setup is different due to using a steel diff casing and mounting it to the cross member). Also the arms that connect your track rod to the hub, will need swapping from side to side. this is to correct the angle of the steering arms, as the track rod end will now go in from the top of the hub, not the bottom. There are two small rods that run from the anti roll bar mounts on the chassis to the cross member also. these will need bending down slightly, and also possibly lenghtening a little. If you've got this far, that bit will be easy

When assembled you will have something that looks a little like this:

(note my steering arms weren't done then but you get the idea)

You will notice that your front dampers are now too short.... You can either modify the upper mounts to use your stanard ones, or I used the rear dampers off an old mini (they were new dampers though) as they were the right length for my lift (2.75"). your sump protector will also no longer fit, but I haven't made mine yet so I can't tell you how I did it!!

so when all is put back together your niva will be sitting pretty at it's new ride height. The beauty of the way I did it, is that the lift amount is infinately variable by what you want. it is taken up by where you cut the two cross members.

*****I ALSO HAVE TO STRESS******
the quality of your welding needs to be of a high standard. This is because the whole front suspension setup of your niva relies on welds that you have done. I used a 165amp mig turned up to the max for this. I can't be held responsible for anyone following my guidelines (and that's all they are!!) of how I did mine. I could do without people holding me responsible if an inadequate weld potentially killing someone. you have been warned!!

With that aside, enjoy your now lifted niva front end I know I like mine!!