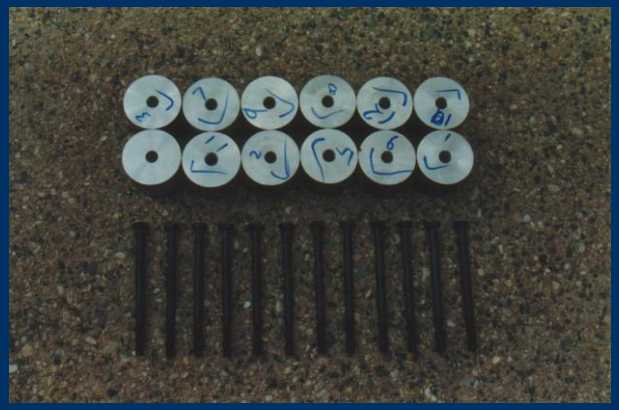
Custom 2" Body Lift

The first step in carrying out the bodylift was to get some blocks made up out of alloy rod. I had a friend manufacture 12 blocks measuring 50mm long, 65mm in diameter with a 11mm hole drilled in the centre that were machined on a lathe, so all the measurements were very precise.



The next step was to find out if all 12 bolts were the same length, diameter and thread pitch. Asking around and posting to dicussion groups proved fruitless, so I removed 6 bolts from one side of the body to measure for myself. They are all the same length, diameter and thread pitch but are different in that the first, fourth, fith and sixth bolts had tangs pressed onto the bolts to stop them from turning when they are being done up.

After I had checked the dimensions of all the bolts (90mm x 10mm), it was off to purchase 12 high tensile bolts measuring 140mm x 10mm, along with washers and nuts. I had to get the nuts as the thread pitch on the original bolts was uncommon and to get bolts with the same would be very costly. So it was decided to get a different pitch and buy new nuts to fit.

To raise the vehicle, I parked it on a level surface and then chocked the wheels. Measure the distance between the wheel arch and the bottom of the rim and record the measurements. I then went around and had a look at what wouldn't give when the jacking started. First I removed the radiator shroud. Next I loosened the bolt that attaches the steering shaft to the steering box so that the shaft could slide on its spline. You will also need to pull an inch or two of brake line through the body just above the two front top wishbones so you don't kink your lines. There is about 3 coils of brake line just inside the engine bay so there is definately enough length to do the lift. Next, relocate the earth wire that runs from the middle of the Plennum chamber on the engine to the firewall so that there will be enough slack in it to accomodate the lift. Place the

transfer case stick into 4H as it will not stay in 2H after the lift goes in, then go around and undo all the nuts on the bolts that hold the body to the chassis. Don't remove the bolts yet.

Place a jack just behind the front wheel and one in front of the rear wheels using a broad piece of wood between the jack and the body. This will prevent the jack from tearing through the floor of the vehicle. You will need to raise the jacks off the ground about 12 inches as there is a fair distance to jack and the suspension will also relax as you take the weight of the body off of the chassis. Then with two people, slowly jack the body up until there is enough room to fit the blocks. Remove all 6 bolts down one side and then slide the blocks in above the rubber spacers between the body and chassis.

All the bolts came out easily except the first bolt as it sits deep under the headlight next to the radiator in a hollow of the body. To remove this one, I had to raise the body until the bottom of the bolt was clear of the rubber mount attached to the chassis between the body and the chassis (around 60mm - 70mm clearance). Once clear, you have to angle the bolt forward and slide it out otherwise the tang will not clear the hole. After all the blocks are in, place a washer on each of the new bolts and drop them into the holes. Don't put any nuts on yet.

Lower the jacks, remove and then do the other side. Once all 12 blocks and bolts are fitted, go around and place the original washers on the bottom along with the new nuts. Then with a mate, go around and tighten everything. Tighten the bolt on the steering shaft and check brake lines and any other cables/hoses under the body.

Next thing to look at is the transfer case lever. The problem is that it will not stay in 2H if the centre console is fitted, so some rework of the lever is needed to have smooth operation of the transfer lever. I was hoping to lengthen it by 2 inches after doing the lift but decided to bend it instead when I removed it from the transfer case and saw what a pain-in-the-arse it was going to be. The stick is about 10 inches in length with a nylon ball at the bottom and a rubber anti-vibration grommet at the top that couples the bottom of the lever to the top part of the lever. Any heat applied without removing the nylon ball or rubber grommet will melt/char them. I tried to get the nylon ball off by removing a gudgeon pin located in the centre of it, however, the pin just didn't want to budge. We removed the rubber grommet at the top instead using an angle grinder as it was pressed on and then used an oxy to heat the shaft up and bend it forward so that it clears the console. There was a little trial and error here so be patient. I used a spray bottle filled with water to cool the shaft below where we were heating to protect the nylon ball and it worked well. After all that, check the clearance and refit everything.

To raise the bull bar, I had a friend weld extension plates to the bottom of the bullbar brackets and then lower the existing mounting holes by 40mm. I went for 40mm as there was some rubbing between the bullbar and the body before the lift so I was counting on an extra 10mm clearance to prevent this. This turned out to be a good decision and ended up looking like standard. Next we had to tackle the rear bumper. Here we approached the task with the same idea of welding extensions to the 4 brackets that attach the bumper to the chassis. This time we lowered the holes by the full 50mm so that the bumperettes lined up with the rest of the body. The only problem I faced was the plate that allows attachment of a towbar. It was in the way of the rear bar so we chopped (harsh word that) a small section of the rear bar off to accomodate the plate which ended up looking quite good. All up it took a full day to do the rear bar, bullbar and transfer case lever (thats not rushing it).

I am very happy with the end result. It looks great and allows fitment of tyres up to 34 inches in diameter (see section on tyres above) without any fouling of the guards. It also improves departure angle which is probably the most important thing. I am sick of straightening my rear bumper after every offroad trip and trying to explain those extra scratches/loss of paint to my wife.

If anyone is interested, it cost me $200 to get the blocks made and $30 for the bolts, washers and nuts. All up cost of $240 (including a 6 pack of beer). I had originally asked a 4WD store for a quote to do the lift and they said $1200 so I was pretty stoked at the savings.

	PSF	PSR	DSF	DSR
Before	730mm	735mm	735mm	735mm
After	780mm	785mm	785mm	785mm