

The Project

I was looking for a second car, super cheap on tax and insurance, that would relieve the family Vectra of the task of hauling two ponies around the country..

Three seats in the front for myself , herself and a wee bit of room for the thankfully petite jockey. Pony Club here we come!

The previous owner (PO) delivered it to my door, after 20 odd miles of country roads, no flickering oil lights and no boiling, this could be a good buy .



Next day post purchase blues set in. Couldn't get it to start. The battery was dead, as advised by PO. Tried jump starting but still swinging slowly and not making any great effort to fire.

Removed and checked each heater plug across a good battery and all glowed red.

Refitted and tried again. No power coming to the heater plugs. Traced back to faulty ignition switch. I fitted a temporary push button switch and tried again. It started with a cloud of smoke ! yippee ! time for a spin down the fields.

No brakes, intermittent power steering and alternator light full on, but boy is it great craic in the fields.

The alternator and power steering problem were investigated and turned out to be bad threads in the power steering pump bracket that the alternator swivels on. I bored it out and fitted a nut and bolt. I got a mate to recon the alternator while it was off.

The brakes, as advised by PO, was down to a front disk that was way too thin, resulting in calliper pistons coming out of the bores. This had obviously happened a long time ago and bores and cylinders were too far gone for seal renewal. I got a replacement calliper and a disk set , popped them on and now we have brakes and steering.

Decisions, Decisions.

The rear crossmember and the front outrigger both need replacement. I ordered these from Paddocks and they arrived promptly within a few days. I must admit that I was surprised at the lightness of the cross member. My old one had suffered a collision and was badly holed where it was bent, the outrigger is just gone gone gone ! I had done a quick check on the chassis on the first viewing and was happy that it didn't look too bad. The PO had stripped layers of body sealer from the rails and they looked rusty, but not holed. Access looked pretty straight forward also, plenty of headroom and plenty of space between chassis and body for welding access. I wasn't worried. When I got it home however, the more I looked at it the more I thought that it would be a botch job replacing the outrigger and cross member with the body still on, but always there is the nagging voice saying how do you line up the rear cross member with the body off ? After coming across some chassis drawing I decided that I should be able to do some measuring and use a chalk line to line the rear cross member up off-body.

So decision made, I would lift the body, clean up the chassis, fit the new rear cross member and outrigger, treat the chassis with rust killer, paint and waxoyl. Not what I planned on when I first saw the add, but sure it would be an experience.

Rear cross member damage



From the face



Operation Lift Off

Shed space is at a premium at the moment, and anyway that waxoyl looks like a filthy job, so I guess we will try the great outdoors. There is a bit of scaffolding lying about and I have a one ton chain hoist. A bit of begging produced another hoist (thanks Stephen).



Started at the back, removed the ten bolts holding on the rear cross member. Removed the tow bar and hitch.

Disconnected the wiring to the rear lights by removing the panels behind each cluster and disconnecting, taking note of what goes where.



If I was doing this again I would cut the loom under the tub after it comes out of the chassis and fit a decent connection box , something like a “Rubberite” one. This would also provide a good interface for the tow bar socket.

Moving forward, there are two brackets coming off the middle cross member to the tub. The one on the driver side ended up a disaster for me. The tank left very poor access, and the bolt head was spinning in spanners. Couldn't get a socket on it. Ended up spending a couple of hours with an air chisel. These are the times when I wished I had cutting gas or a plasma cutter !



If only you could fast forward for easy access....



Next up, remove two bolts on each of the rear out riggers. No bother with these.



One big bolt on each of the front outriggers. I had to drive them out with a punch. I guess these could be fun putting back in.



Remove the two bolts that go through the chassis legs, from the bulkhead brackets, just forward of the front outriggers.



Have to slow down now and strip the front of the landy, well some of it anyway.

Remove the bonnet, I ended up standing on the engine so that I could open the bonnet fully, thus allowing the bonnet to be lifted clear.

Remove the bumper two bolts each side (Mine were just sitting loose, the bumper is pretty well shagged, any donations anybody ?).

Remove the front grill, and the panel behind it.

There is a bolt underneath to the chassis on each side



And a couple each side into the front wings



Into the cab now and remove the seat bases and floor plates, remove the battery and push the battery cables down out of the compartment. Remove the main gear lever and the tunnel cover.



There are two bolts from the floor pan to the chassis, one each side of the gearbox, just in front of the seat box.



I disconnected the handbrake cable at the gearbox end from within the cab, I also removed the dashboard panel and disconnected the speedo from the clock, pushing the cable forward into the engine compartment.

Into the engine bay now and disconnected heater hoses from the heater. I removed the air cleaner and piping. Disconnected the wiring harness under the brake servo. Disconnected the heater plug feed from the first plug. Disconnected the throttle cable. Disconnected brake pipes at callipers and some on the bulkhead. Unbolted the diesel filter housing, complete with pipes, from the bulkhead. Unbolt the header tank and power steering reservoir from the inner wings and leave dangling. (probably missed some stuff here, but you get the idea). Disconnected the clutch hydraulic pipe.



For the steering shaft, I loosened and removed the pinch bolts on the upper and lower u/j's. The shaft can then be pushed further up into the top u/j until the bottom one clears the steering box shaft and can then be removed. My lower u/j is shagged so this adds to the shopping list.



Removed the fuel filler neck from the body, this required more air chiselling as the nuts were unmoveable and inaccessible.

For lifting the body, I erected scaffolding and two chain hoists. At the rear I used a lifting strap under the tub at the wheel arches. At the front I used a chain connected to the bulkhead chassis brackets.

The body lifted freely from the chassis, the tub needed a slight lever.

I lifted the body about a foot and then wheeled the rolling chassis forward out of the body.



For safety I then rested the body front and rear with on scaffolding poles.

Decisions, Decisions, Decisions.

Whilst the chassis looks rusty, it is actually I think very good. It does need some welding , but only at the very rear. I think using some short extension plates on the new rear cross member will leave a solid chassis .

Time to reflect now, yes I am very happy with my purchase. Plenty of work but mostly expected. Doing the sums on the rust killer, paint and Waxoyl, its probably chasing €150. Got a price from Galco of €1 per kilo of chassis weight for galvanising, advice from clri forum suggests defender 90 chassis is about 153kg (thanks Mudbug and Defender90). A nephew of mine does sandblasting so maybe this project just got bigger !!!

Time for more dismantling.