

Project Big Ford

Ford LTD Crown Victoria LX Country Squire

September 2009

Spotted this ad on ebay

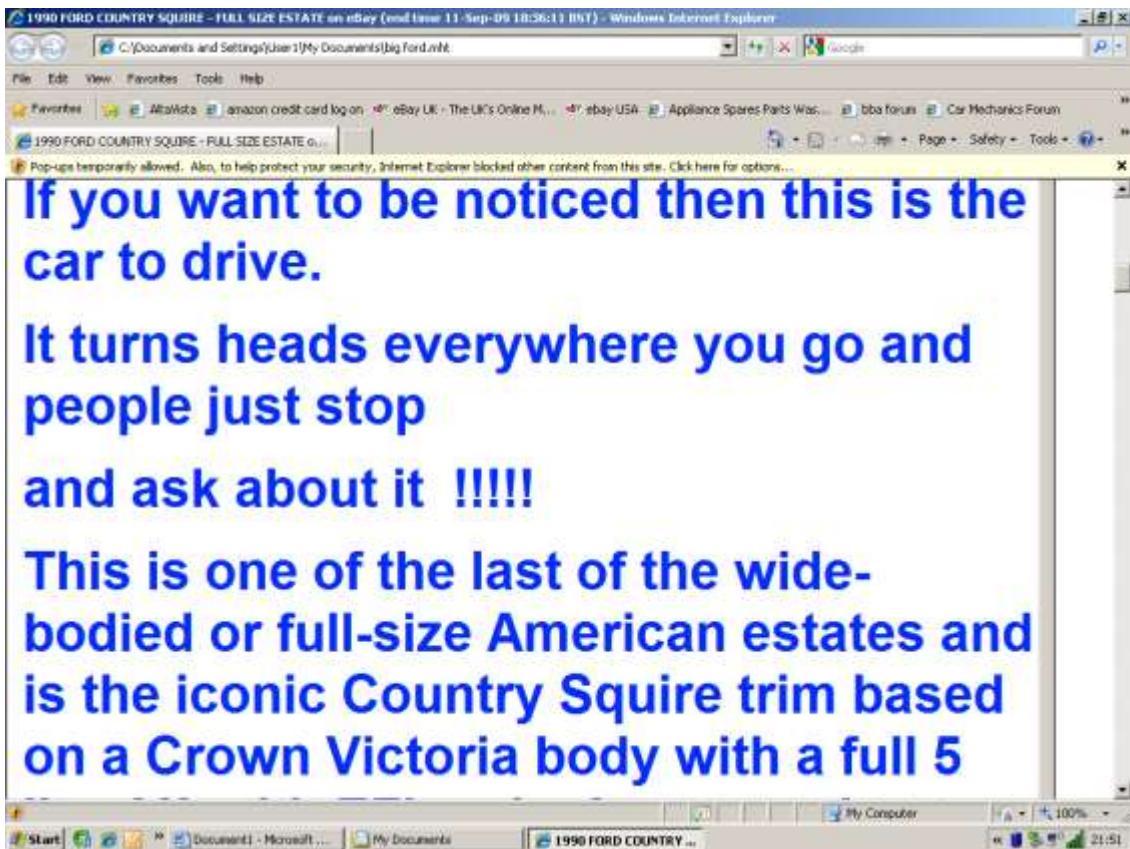
1990 FORD COUNTRY SQUIRE - FULL SIZE ESTATE on eBay (End time 11-Sep-09 10:36:11 BST) - Windows Internet Explorer
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1990-FORD COUNTRY SQUIRE - FULL SIZE ESTATE o...
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Description P&P and payments

Item specifics - Cars & Other Vehicles

Manufacturer:	Ford	Colour:	White
Model:	-	Engine Size:	5,000 cc
Type:	Estate	Power:	-
Mileage:	-	Seats:	8
Doors:	5	MOT Expiry:	2010
Model Year:	1990	Drive Side:	-
Reg. Date:	01 Apr 1997	Road Tax:	2009
Reg. Mark:	***** Get the Vehicle Status Report	Exterior:	-
Previous Owners:	10	V5 Document:	-
Transmission:	Automatic	Manufacturer's Warranty:	-
Fuel:	Petrol	In-Car Audio:	-
Service History:	-	Interior/Comfort Options:	-
Safety Features:	-		

Sold in August and now relisted due to non-paying buyer



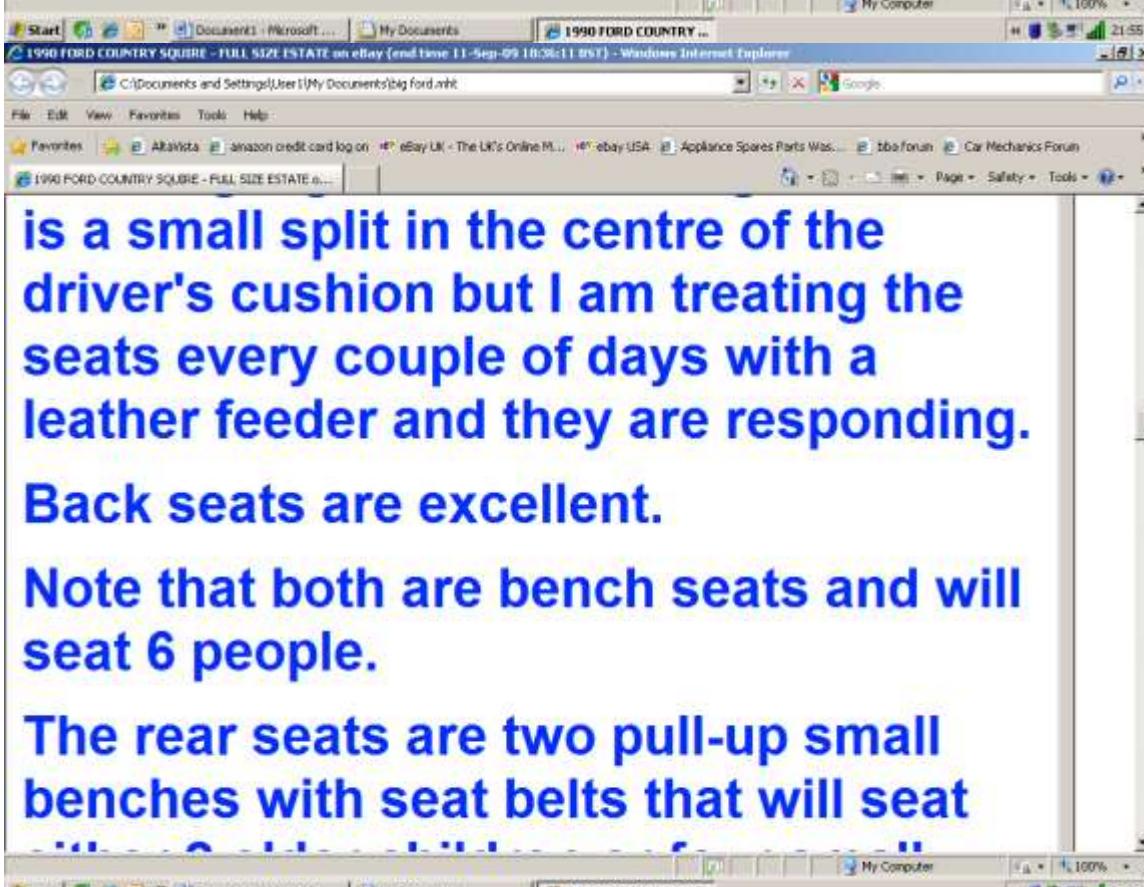
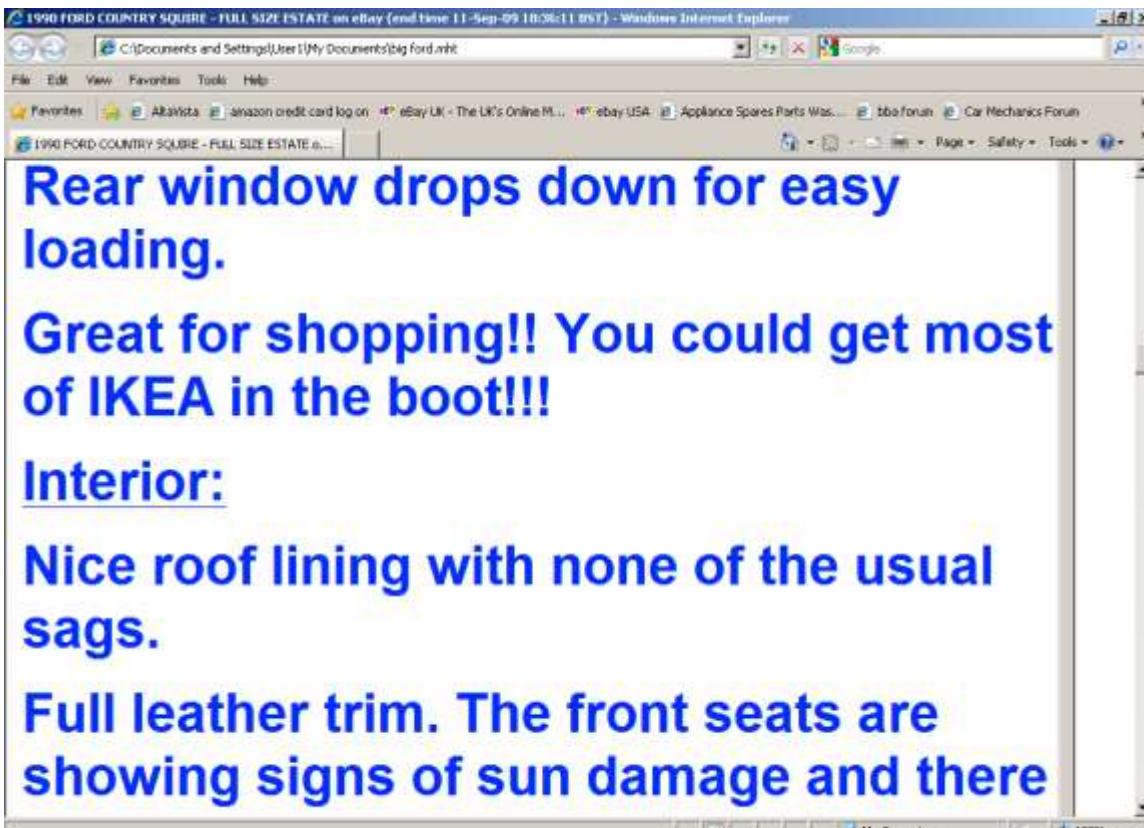
litre V8 with EFi and a four speed auto trans.

If you don't know anything about the Country Squire it is basically a form of trim rather than a specific model and is based on many different bodies such as the Ford Torino and the Ford Galaxy. This one is based on the Ford Mercury Crown Victoria as used by the US Police in many states. Parts are easy to

get and being a Ford they are cheap too!!

Miles at 65,000 I suspect is second time around.

The condition is very good for the year. This is my daily driver and is so easy to drive and, yes, easy to park in a multi-storey has long as you've got the b*s to drive it there.**

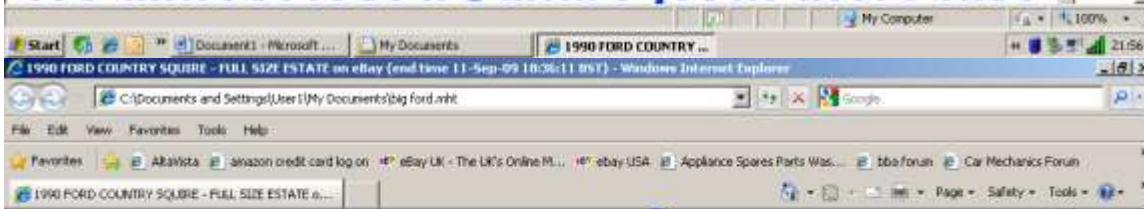




either 2 older children or four small children.

The well in which the rear seats are located is lockable to hide valuables etc. The seats face side to side and still there is room for luggage behind the rear bench seat. With the rear bench folded down(a one button operation) the rear cargo space is awesome.

We almost lost a Jumbo jet in there last



week!!

All door cards are excellent and the glass and interior chrome and fittings also.

Body:

The body is good with no signs of obvious rust.

Underneath is good. I have owned the





car for several years and she has mainly been kept indoors.

Motor:

Nice engine, serviced last autumn, starts on the button and pulls well. This 5 litre is fast up to about 70 and then levels out nicely. Pulls well loaded too!

Gearbox:



All good.

All gears are there and the kickdown works well.

Overall:

An excellent example of this now collectable classic car.

Electric windows to all windows



Electric seats.
Stereo/cassette
Tilt steering wheel.
Column change
Heated rear window
Two-way tailgate
Spoked alloys
Excellent white-wall tyres

Two new front calipers fitted this May
A real head-turner
Seats 8 or 10 whichever you prefer
I have carried my 9 grandchildren in the car
Rides like a limo, smooth and serene.
Air con is disconnected.
The car comes with loads of history.

Bad points:

Central locking is lazy.

Cruise control does not work. It has not worked since I bought the car.

Small split in drivers cushion.

Two battle scars on exterior trim, one on lower driver's door and one on rear nearside edge. Both could be fixed easily by removing trim(clips) and

straightening and refitting. A simple job but I am too lazy to do it.

But the car is 19 years old and is sold as seen.

If you are expecting a new car then you are looking in the wrong section! This is a graceful lady who responds well to care and attention.

I am only selling because I have too

many Yanks and need to release some funds to restore my last car a 1970 Lincoln Continental Mark III coupe.

PLEASE NOTE THE NUMBER PLATE IS NOT FOR SALE AND WILL BE REMOVED AT POINT OF SALE Now carries a "G" reg.

This is for sale locally and I would recommend a visit to view.

I will remove from sale if sold locally.

I will remove from sale if sold locally, naturally.

Please don't ask the buy-it-now price as you will see it displayed in the pics.



No P/X sorry...no swaps...cash only!"!!

He said it was in good shape for the year and has been well looked after. Asked him a few questions, then agreed to buy it sight unseen, when I said that I would never do it again after the pimped astro van! Although good fun!



The car was located in Abergavenny (South Wales). So, I booked 2 train tickets (my eldest son, Callum and myself) to travel down and pick it up on Sunday 20th September 2009.

20/9/2009

First train to Birmingham New Street, second train to Newport and arrive in Abergavenny at 2:24 pm. Took a few photos on the train



Arriving at Abergavenny railway station



Signed the paperwork, paid the bill (£2500) and away we went.

Owner said the AC didn't work (belt disconnected after the clutch packed up), cruise control has never worked and rear window won't go down from the switch on the dash, although it does from the key at the back. I noticed the airbag light was flashing. He also said that fuel spilled out of the fuel filler neck that was probably due to a lack of Vaseline on the seal.

Front seat leather dry and cracking, but the car drove well all the way home.

Noticed that the steering wheel wasn't straight. Previous owner said it had never overheated and the temp stayed at the same point all the way back. This was later discovered to be false, because it is stuck in the same position!!!

Stopped off at Little Chef in Derby to have some tea and noticed that the front right door wouldn't lock.





On the way out of the car park I noticed that the red brake light had lit on the dash. No idea why.

21/9/2009

Put a seal on the fuel filler cap. Need to get one from the scrapyard though.

22/9/2009

Checked coolant level and saw that the coolant was brown and very very low. There were also rusty water stains down the passenger side of the block on the back HT lead and other components.

About 5 litres of water went back in!

AC clutch had broken clear and since then the compressor had seized solid. The air pump also sounds rough.

24/9/2009

Had a bit of time to have a look at the car.

Quite a few faults apparent.

But the main ones are

1. Front right door won't central lock.
2. No parking brake operation and red light lit on dash.
3. Temp gauge stuck
4. Coolant filthy.
5. Thermostat housing seal dodgy.
6. Airbag light flashing.
7. Awful exhaust pipe exiting out the side.
8. Cracked and dry leather seats at the front.
9. Wet carpet at front right.
10. Sticker remains on various windows.
11. Chipped paint inside at the rear where the folding seats are.
12. Flaking rust on separate chassis member at the back.
13. Number plates wrong size.

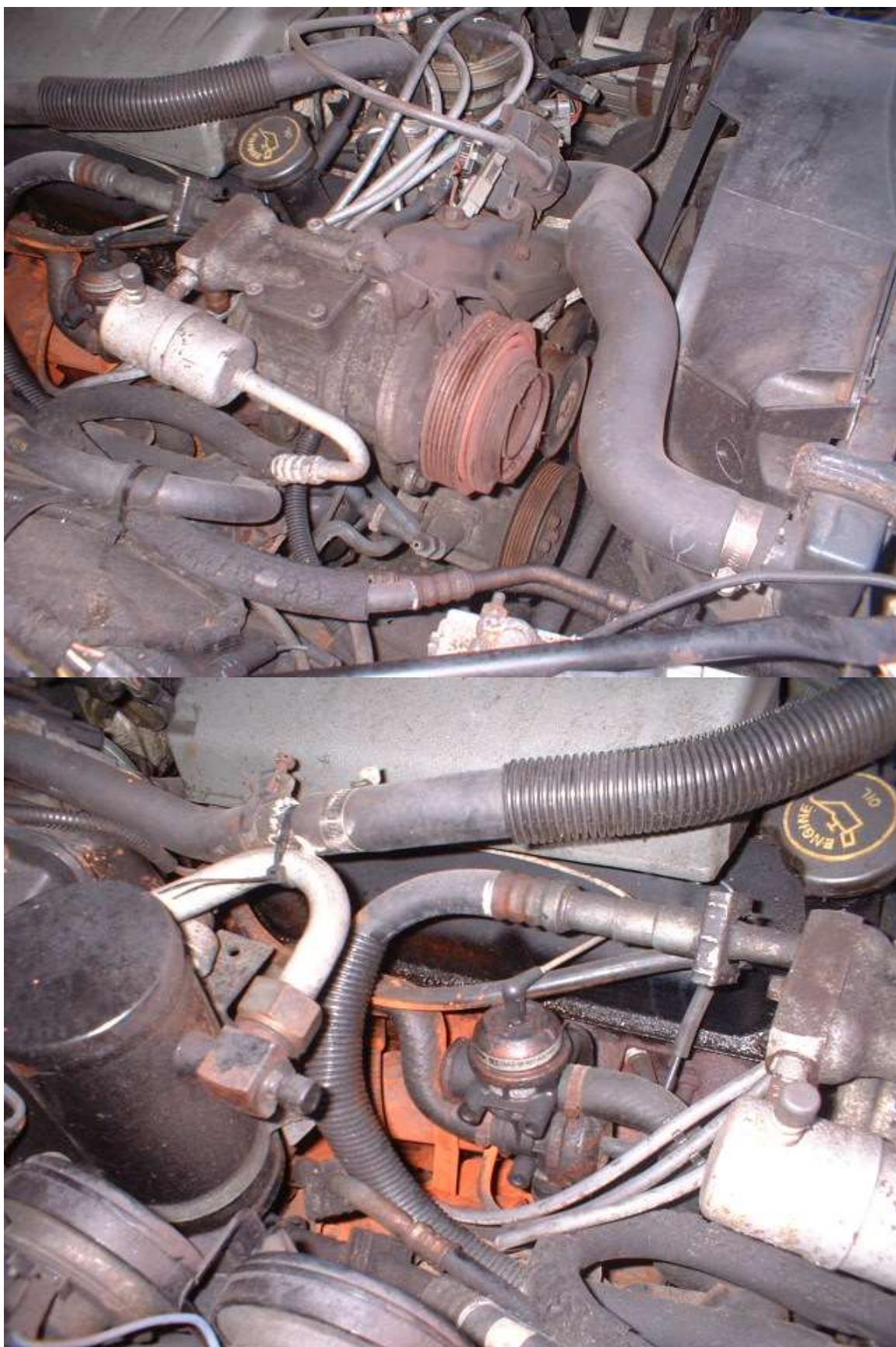
Central locking first. All the doors will lock except for the front right, that shows no sign of action and the right rear door is very slow. The manual slider lock inside works with pressure, so my guess is that the solenoid is seized.

One stripdown later and somebody has been in there before. The solenoid is loose inside and is not moving. I need to grind the rivet head off outside the door and have a careful look. Also check the signal to it. Then I may replace it with the old camaro ones I took off. Probably won't need them because the handles may be disappearing.

Here are some photos of the car as it awaits restoration.



















25/9/2009

Picked up a new angle grinder from the new B & Q. Used it to grind the head off the rivet that holds the solenoid in. This is the view when dismantled:



Here is a view of the part dismantled door.



Can't repair that one then! I'll look for a replacement.

While I was doing that, I had a scout around ebay and found a leather specialist situated in Sheffield:

Andrew Rastall
Workshop Upholstery and leatherworks
88 Gregg Road
Sheffield
0114 2400513

Had a good chat to him on the phone and he is going to pop over and have a look. He said that he could match any colour anyway, so even if any panels want replacing, there shouldn't be a problem.

At least now the doors all lock, but not the tailgate (that is showing no sign of life!) and the back right passenger one is slow.

So, back right stripped out and solenoid is very slow (no doubt partially seizing due to water), but rest of door hasn't been disturbed before. Seal intact.

26/9/2009

Sent an email to the previous owner, Chris in Abergavenny:

Hi Chris.

You will be pleased to know that the big ford resto has started (central locking, parking brake and airbag). There's something you can help me with when you get time, if you don't mind.

Could you tell me what has been replaced over the last year or two. Eg I know you said it had a service last autumn, what was replaced?

How long ago was the AC disconnected?

Was there a coolant leak on the passenger side of the engine at some point that caused all the brown staining?

Thanks for any input on this, the more info I get the better this resto will be!!

Please ignore this if you want.

Thanks.

Andy.

Reply:

Hi Andy

Good to hear from you

All that has been replaced over the last two years were plugs, Leads (I think), oil and filter natch, two new front calipers and the rear exhaust pipe.

The brown staining in the offside engine bay has always been there and I assumed it was from an earlier leak.

I have also had both sump plugs re-tapped and helicoils fitted.

Threads were stripped.

AC has been disconnected only a few weeks since the belt disintegrated. The only coolant problem I have ever had was a strange one.

I went to visit a friend who lives not far away but up a very steep hill and this climbs for about 800 feet from the valley floor.

I arrived with the temperature gauge on normal.

Suddenly about two minutes after switching off the engine there was a loud hissing and gouts of steam came from under the bonnet.

I checked the gauge and it was normal but a small hose had split at the top of the engine .

My friend said that the post office van had done it twice and we thought it might be the rapid climb and subsequent altitude change dropping the pressure and so reducing the boiling point.

The gauge never rose above normal and when it had cooled down I was able to cut the hose where it had split, right on the clip, and refit and never had a problem again.

The original hose is still on there.! Weird or what!!

CW

27/9/2009

Long day on the car today.

Solenoid removed from back right door and lubricated. In fact, had to remove nearly all the lock mechanism to get it out. Riveted back in and now a lot faster.

Went to tailgate and removed the lock mechanism and solenoid. This was in order to find out why it was hard to put up the rear window with the key. All this was due to a misadjustment at one of the rods. Working well now. Solenoid was beyond repair, so a camaro one was substituted and is working fine.





Rear spare wheel removed and a bearing and a dust seal found at the side of it. Not sure where from though. May send an email to Chris to ask. Spot of corrosion spotted between inner and outer wheel arches while spare wheel was out. Need to media blast or cut out and replace.

Now need to remove drivers side panel and see if there are any wires going to the lock, since the central locking doesn't work from the key. The wiring diagrams don't indicate that it is supposed to, but you never know.

Parking brake mechanism out next, then all the brakes.

28/9/2009

Stripped off the fan, rad cowl, radiator and thermostat housing (took ages to get bottom bolt out – since cleaned up very well!) The rad is in poor shape in the bottom corners and the coolant colour is brown and awful!

Phoned USAutomotive for some parts prices:

Spark plugs: £38.80

Rotor arm: £3.95

HT leads: £47.50

Dizzy cap: £12.50

C/L motor: £75

Thermostat: temp to be found (195 F)

Rad cap: £6.85

Oil filter: £4.95

Air filter: £9.95

Fuel filter: £8.25

Belt: £16.06

Total of £168.83



28/09/2009

Plus a radiator at £114.63



Flushed the block out with the hosepipe in the top hose and water out the bottom hose. Then disconnected the heater matrix pipe from the front of the inlet and put the hosepipe in that and flushed through the bottom hose.
Took ages for the brown water to become clear (about 30 mins).



Then flushed and reverse flushed the rad



Here is a bucket of sludge!



Reinstalled the rad, topped it up with clean water and ran it up. Then removed rad again, flushed it out again and also the block and heater. Then ran it up again. Left to cool overnight.

Had an email from Chris in Abergavenny that the red parking light is on because the parking brake pedal is not high enough. Just lift it up with your foot he says! And it works!

Heres the e mail:

I remembered what the red brake light is.
If you put your foot under the service brake and lift slightly the red light will go out!
As I told you the new cable was never fitted properly.

While the engine was running, I pressed the switch for the rear window and it worked!!

Now I am on a roll. I hit the dashboard just above the temp gauge and it fell back to cold! I then watched it and it gradually went up as the engine got warmer. 2 successes there!



Removed the underdash panel near the fuse box to locate the parking brake pedal. Took a photo of the pull switch under the dash to send an email to Chris to ask what it's for. Probably fog lights that aren't there anymore!



Also took a photo of the light unit under the bumper on both sides at the front to ask on the forums what they are for

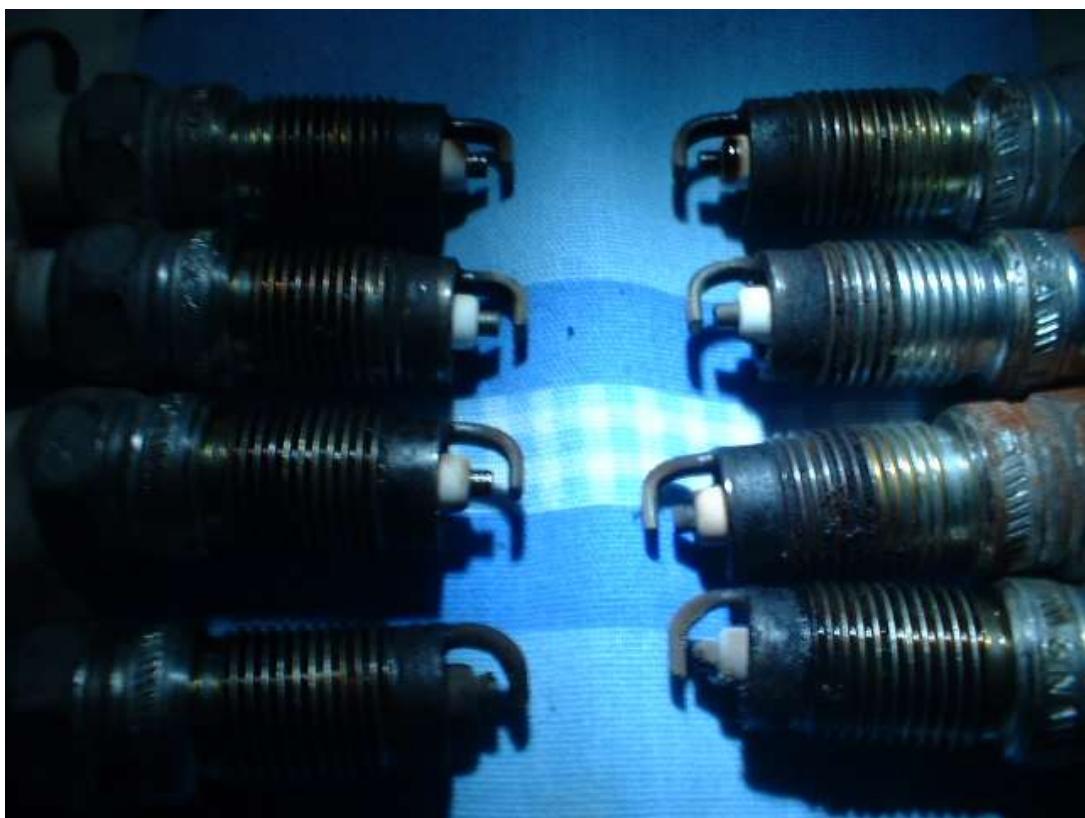
Oh, airbag is flashing out code 8 repeatedly.

Just got a reply from the forums that says the lights are little headlights that light up when the lights are on and the indicators are on. Supposedly lights up the road you want to turn down! So, went out and confirmed it! They actually do! Can't believe it-cheered me up no end!

30/9/2009

Investigating parts prices from rockauto, but in the meantime removed all spark plugs and managed to break the last one on the drivers side! 2nd one in 30 years!

Most were in good shape, but 2 had very close gaps compared to the others. Number 8 looked and smelled of a misfire. That also correlates with the corroded top of the plug and the corresponding corrosion in the HT lead.



To get the passenger side plugs out, I had to remove some of the AIR pipes including the diverter valve.



Here is the before and after shot of the engine bay spark plug clearance



Had a look at the parking brake to see why it won't ratchet. Difficult to see so the front seat may have to come out. But I could see that the pawl was disengaging from the ratchet every so often. Pulling the pedal up to the top re-engages the pawl on the ratchet.

1/10/2009

Removed front drivers seat and sheared the front right bolt off at the floor level! Front left came out as a stud, but the back 2 were okay.

Stuck my head under the dash to check out the parking brake mechanism and removed the under dash panels. Then spotted that the steering shaft UJ where it attaches to the intermediate shaft was loose.

It didn't look right, so out the steering column came.



I removed the UJ and turned it round and refitted it. Then put it all back. Perfect now.

The parking brake works well if it is pressed down quite quick. It needs adjusting at the cable though to make it come on in fewer clicks.



It also doesn't return to the top fully, but it may do when adjusted. Lubed it all up while I was there. All trim put back.

Tomorrow I need to drill and retap the floor then put the seat back, and start on the brakes.

Parts prices are not much better at rockauto when VAT/import duty is added on. So I may go with US Automotive after all. I'll give them a call later.

Need HT leads and air filter removing and intake manifold gaskets and rocker gaskets adding.

2/10/2009

Phoned back US Automotive, because the rockauto bill is not much cheaper. Unfortunately the rad had been sold, so I ordered the following (some items have been deleted and some added from earlier).

Plugs, dizzy cap, rotor arm, air filter, fuel filter, serp belt (AC and PS), thermostat, rad cap, oil filter, inlet manifold gaskets and valve cover gaskets. (£158.37)

I then ordered a radiator through rockauto. (\$233.70)

Drilled out and retapped the sheared seat bolt.

3/10/2007

Back brakes today.

While taking the back right wheel off I noticed the shock absorber had a hose going to it



So this is the self levelling rear suspension eh? Wondered what that compressor on the LH front inner wing was.

Anyway, shoes are recent but the cylinder looked like this



So removed to bench (lines okay) and stripped out. LH piston seized.



Honed bore out and put back together.

Have a look at the fluid that cam out, compared to what went in!



Looks like LHM fluid!! Luckily it's not!

Seriously dark now, but I just had time to remove drivers side drum and remove the slave and strip, clean and rebuild.

Ordered 2 new slaves from US Automotive just in case.

4/10/2009

Put drivers side drum brakes together and bled out.

Put screwdriver through the sill closing panel! Some welding to do then.

Remove front right wheel and confirmed that it had a new disc, calliper, pads and flexy line.



Noticed that the dust shield was in a bad shape, So removed caliper and hub/disc and removed remnants of shield. The shield is plastic and has seriously melted! No wonder if the calliper had seized.



Greased upper and lower ball joints and track rod end. Pushed some fresh brake fluid through.



Moved to other side, but the dust shield is okay. Greased ball joints and pulled some fresh fluid through.

Both wheel mounting faces cleaned up and copper greased.



The backs of the alloy wheels need stripping and painting due to paint bubbling and flaking.

Torqued all wheel nuts to 86 lb ft and resecured centre caps.

Scraped all sticker remains of both side rear windows and the front screen. Get a tax disc holder tomorrow.

Removed battery and put it on charge on the bench. The battery tray is an extension of the plastic inner wing with a reinforcing metal plate underneath. This is rotten. So took 2 of the bolts out and had to grind away the third. I'll make up another one soon.

On the drivers side front the drop link bushes are perished and the hole in the lower control arm has worn oval. Needs welding up. Do that soon.



With some careful measuring and calculations earlier on, I calculated the PCD to be 4.55". It is in fact 4.5". Not bad eh?!

PCD 4.5" x 5

Removed battery and noticed that it is sat on the plastic inner wheel arch with a metal support bracket underneath it. This is what it looks like.



Had to grind off one of the bolts because it was rusted in solid.
Need to make one of those.

Battery is a Bosch silver and holds charge well. Left on battery charger for a few hours (about 24). I will connect it up to the solar charger to keep it topped up.

5/9/2009

2 parcels arrived today. The official manual and a load of parts (plugs, cap etc) from US Automotive.



Removed plenum to be greeted with this site.





The PCV valve and grommet have come out of the inlet and the engine is now spraying oil out of the hole. No wonder it is oily. The oil goes all the way down the transmission as well. This is gonna take some cleaning up.

Andrew Rastall (leather man), came round to have a look at the front seats and confirmed my thoughts that the bases need replacing. Re dye and condition the rest, and as long as I help, it will be about £300 ish.

Andrew Rastall
88, Gregg House Road
Sheffield
South Yorkshire
S5 9JU
0114 2400513



6/10/2009

Another parcel arrived today from US Automotive. No doubt the 2 rear slave cylinders.

Removed PCV valve and grommet and pipe from the engine and cleaned them all up. Then pulled the screen out with some pliers and degreased and blew through with compressed air. I will order a new grommet tomorrow.



Picked up some JIZER degreaser and carb cleaner from partco unipart and sprayed all the oily area down with jizer. I will leave it overnight and spray it with water tomorrow and try to clear it all with the addition of compressed air!

7/10/2009

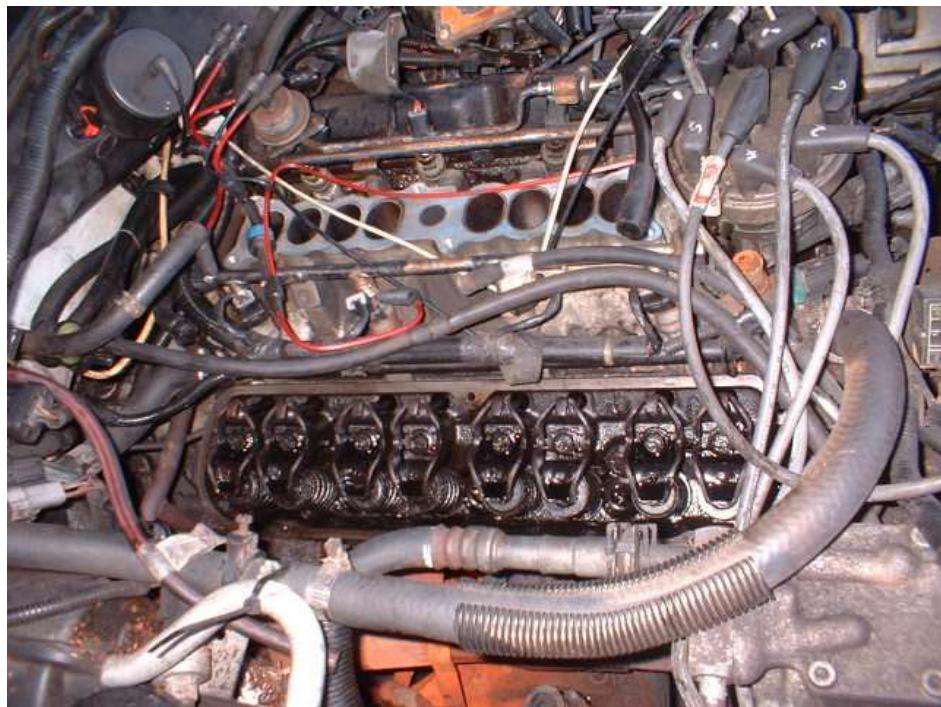
Spent ages degreasing back of the block and pipes. It looks as if some of the rubber pipes etc have been softened by the cleaner. I'll see if they go back to normal.

Tried to order a pcv grommet but nobody has one. So it's rockauto again at \$1.71 and \$23 shipping!

Before and after degreasing



Removed passenger valve cover



On to the bench and old gasket removed and cleaned up for the new gasket.



New gasket stuck into place with black RTV sealant.

Opened parts box! Xmas come early.



Rad arrived today.



9/10/2009

Drivers side valve cover removed and cleaned up. New gasket stuck to it awaiting refitting tomorrow.

10/10/2009

Fitted both valve covers. Media blasted, etch primed and painted black the small bracket that goes on to the back of the drivers side valve cover and holds 2 wiring multi plug connectors.



Removed all thermactor (AIR) components including the pipe that goes across the back of the heads and attaches to them



This pipe was cut and the ends welded up and painted black-when in fact I could have just turned them round!



Need to install them with a bit of silicone.

Then it was engine bay clean up time. Thermactor brackets, pipes and vacuum pipes.



Looks a lot better now, but those rusty stains will have to go!

11/10/2009

Battery tray day.

Built a new battery tray out of aluminium plate.



Need to paint and install tomorrow, Then re-secure front of drivers seat when I have got power and start assembling engine tune up parts. When the grommet arrives its together time, one more flush and new radiator and antifreeze. Then fire up.

12/10/2009

Grommet arrived today from rockauto. 3 business days. Damn good. Small box in a BIG box!



Didn't quite fit snugly, so I stuck it in! Found some hydraulic hose that may replace the hard PCV hose. See if it fits tomorrow.

Spark plugs installed after degreasing and blowing round the holes.

Cleaned up the drivers side HT leads and pulled back the boots and retensioned the ends.

Re-secured the loom up against the firewall



And the wires against the air filter box bracket.



Ordered 2 cartridges of 3125 from rust.co.uk. should arrive tomorrow.

Painted battery reinforcement with 2K black, but with a brush this time. Rustproof tomorrow and replace battery.

13/10/2009

Cleaned up passenger side HT leads and recrimped a few connections. The king lead terminal from the coil was particularly bad and loose. Some want shortening and resecuring somewhere else. The original retainer on the pass side is broken.

Replaced dizzy cap and rotor arm



Plenum cleaned up and bolted back down with new gasket. Noticed that the EGR valve tip was completely clogged up! I will clear that as soon as possible.

The 2 rear solenoids on the plenum are for the AIR system, so won't be needed, but must still be left plugged in to prevent a fault light on the dash.

Dinitrol 3125'ed the battery tray and installed it.

Found some radiator flush in the loft that Steve left behind. I will try to get the engine fired up tomorrow and do a final flush. Then new radiator and thermostat in.

14/10/2009

Final bit of assembling today before fire up. Cleaned throttle body out, made a gasket for it and bolted it all back down.



Fuel filter next. The old one appeared to be held on with tie wraps:



But in fact they were holding the pipes on! Why? When it was removed, I could see why. The new one had a shoulder on each pipe where the clips attach and stop the pipes from being pushed off.



New one fitted securely with no tie wraps! The bracket holding the fuel filter looks well rusty. Might get that off and media blast.

Battery put back and clamped down, then noticed that the battery doesn't look wide enough for the clamp



Another job then!

Filled cooling system up with fresh water and 3 bottles of the rad flush. Fired engine up and it coughed and spluttered and ran smooth but with an exhaust blow from the drivers side CAT where the AIR pipe used to be. Weld that up tomorrow.

Then drop all coolant out, flush with hosepipe once more and fit the new rad, thermostat and rad cap. Then fill with antifreeze.

Need to bolt down the front drivers seat.

14/10/2009

One of the interesting things about buying a used car is you dont quite know what you'll find in it!

Under the drivers seat was this tape (tape? whats that then??!!). the very best of Foster and Allen.



I have emailed the last owner to ask if he wants it back, and he did. So it went off in the post today.

The next task is to get the radiator in.

Coolant dropped out again that I put in last night and the hosepipe brought back into play for one last flush through.

Then its out with the new rad and transfer all clips and connectors/adaptors

New and old together



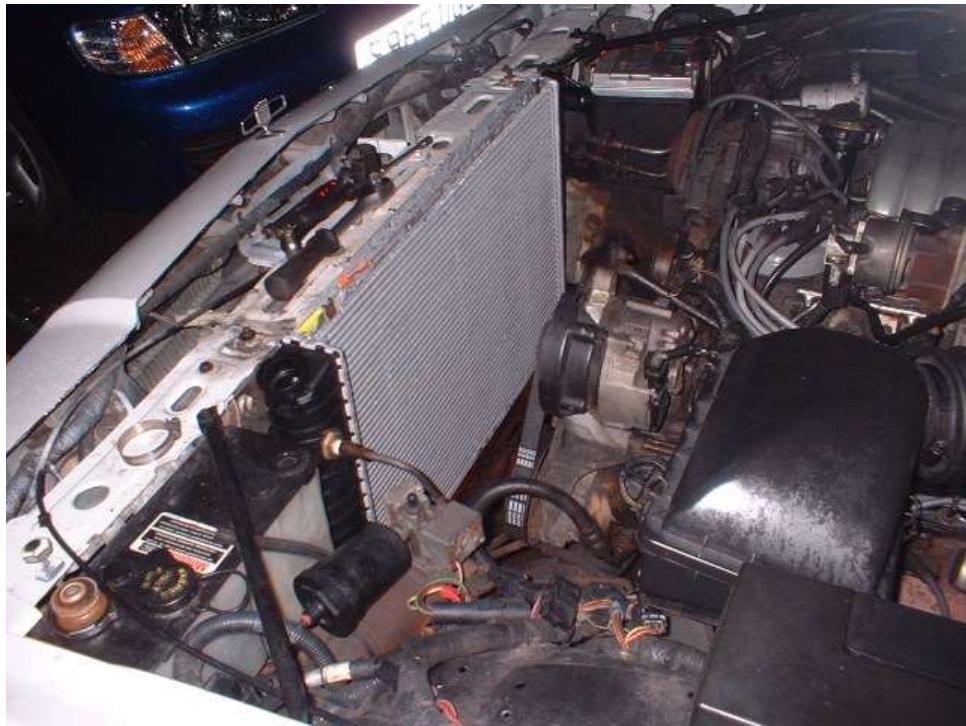
Moving trans cooler connection adaptors over



This is the lower radiator panel that is showing signs of light rust. So, a clean up first followed by a coat of dinitrol 3125



Then its in with the radiator



New thermostat fitted and new rad cap.

Then the system filled with 50/50 ethyl glycol antifreeze/inhibitor.



Here's the coolant colour after an engine run up until the thermostat opens and it all starts to circulate. The heater got warm so it must be circulating well round there. No wet carpets yet either.



16/10/2009

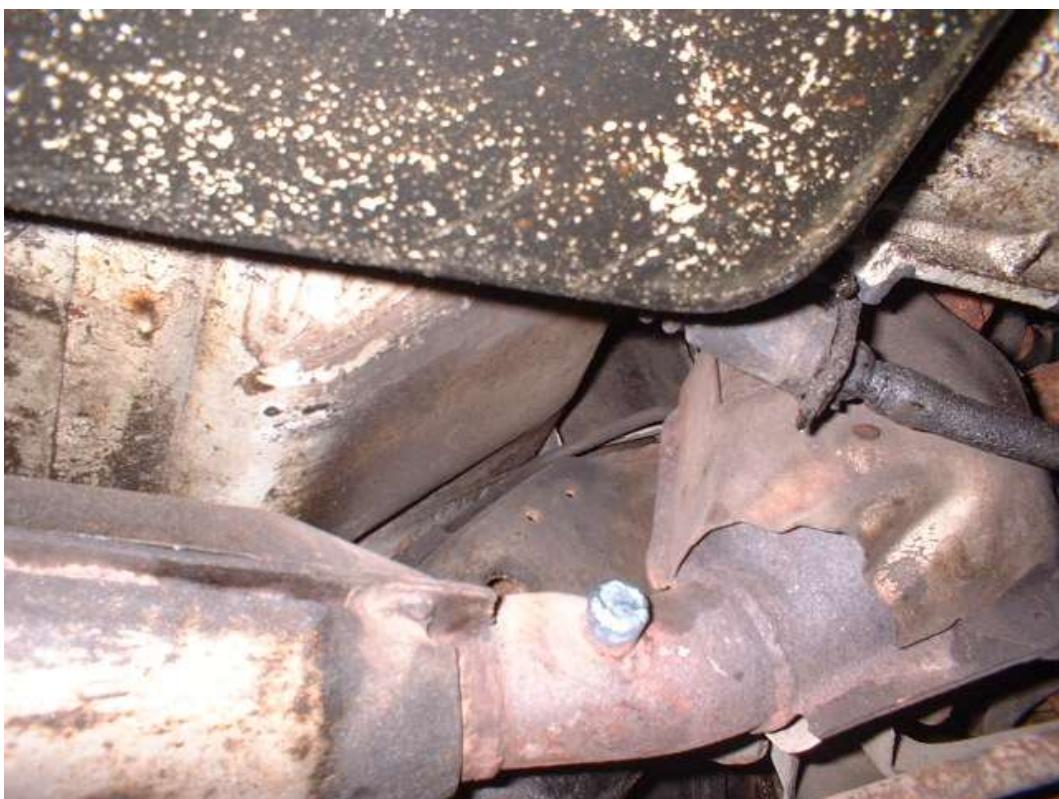
Got car up on one side tonight so I can weld up the drivers side cat thermactor pipe stub.



Heres the view of the offending stub.



Here is the pipe welded



More worrying, while I was under there, I noticed the frame on the drivers side just behind the wheel and right at the side of the CAT was a funny shape and black undersealed.





Inside the section is packed full of rust debris. So someone has welded it all up and not cut out any rot. Just plated over the top. This needs sorting out asap and properly. Over to the other side then and the hammer went through that one as well-but no where near as bad.

I then went round the complete frame with my hammer but didn't find anywhere else rotten, although it all needs a good clean up.

17/10/2009

Took everybody for a drive to chesterfield bowling centre to book Adams 7th birthday party. Noticed a coolant smell when we were coming back home. Perhaps the heater matrix is starting to leak. With coolant that colour and the age of the car it must be inevitable. So one ordered from USAutomotive for about £56. Will take about a week and a bit to be delivered.

I removed the under dash panel on the passenger side and immediately spotted a white envelope wedged behind there. And I was even more surprised when the address on the envelope was one of the past owners in Clay Cross!! Only a few miles away. Addressed to a Mrs Houghton. I know from the history file that one of the past owners was an Ian Houghton who wrote a nice letter to one of the previous owners. What was the chance of finding them again and personally delivering the envelope?! Wow!

Also found wedged up there was a leather pouch packed full of cents and dimes!



While I was under there I noticed the heater flap/door linkage was corroded and stuck.



Joint dismantled and lubed. Immediately the joint was freed the flap door moved over its full travel. Put back together but now need another one way washer. An M10 nyloc nut wedged on in meantime.

Noticed that the front right sidelight and front left outer marker light are off. There are scotchlocks under and behind the front bumper that may need sorting out.

Callum, Adam and myself took the car to clay cross to see if I could find the past owners.

And they were actually in! Had a fantastic time talking to them. The envelope was a birthday card from her Mum who unfortunately had died since then. Ian told me he had the rearmost seat belts changed in about 1998 because they had never been used and were stuck. Also he had changed the interior light lenses because they had cracked. Said they had cost a fortune. The dent in the bonnet (LHS halfway back) was caused by a stone thrown up by a car in a caravan park in Dorset! He confirmed that the trans was rebuilt in about 1998. He even showed me where he used to park the car (in a communal car park on the opposite side of the road). They are going to look out some photos for me.

Jobs to do:

1. Find and fix exhaust leak.
2. Tailgate lock not working again-find out why and fix it.
3. Squeaky wheel somewhere.
4. Heater core
5. Front light bulbs that are out.
6. Number plates.
7. Chassis welding.
8. Airbag light.
9. Drivers seat power functions not working properly.

Read an article on the internet that the airbag wires can rub through on the inner fender and cause the light to flash.

May be the cause of mine. I'll look into it when my EVTM manual (electrical, vacuum troubleshooting manual) arrives from the states (ebay us).

18/10/2009

Started to scrape the frame clear of heavy rust scale. Started at back right.



Noticed the rusty brackets remaining from past fog lights. Started to remove them. Some are well corroded in.

Where the grommet is under the trunk floor, I have managed to put the hammer through it!



19/10/2009

Started on the list above. Checked the operation of the locking solenoid in the tailgate. Looks as if it is working but not pulling the rod far enough. Put it all back when I have more time.

Moved the welded air pipe bracket around a bit on the back of the drivers side passenger head and the exhaust leak stopped. Easy fix.

Removed the light unit from the front right and was greeted by a carnage of wiring mods!



That domino block and the blue scotlocks will have to go. The flashers are wired across the front of the car and wired to the amber leds on the side of the wing. The bottom corner light fitting is not used so I will get that working and remove the leds. All other bulbs replaced by LEDs as much as I can.



23/10/2009

Went to viaduct scrapyard and managed to locate 2 bulbs and bulbholders to put in the lower corners. Came from a Renault Megane!



As can be seen, I made a hole that the holders will go into and then turn and lock out of thick ally plate.



Then bonded it to the units



Then to find a way to mount the megane bulbholders in the unit. So, fitted a grommet round it and enlarged the hole to fit it.



Then wired it all up as a complete harness that will just unplug leaving all the bulbs and bulbholders in place.



Then removed the LED side units. Looks better.



Then noticed an antifreeze puddle under the car. Almost below where the brown staining is.

Had a closer look up there and spotted the leak



That's a sheared off head bolt! Well. I said I wanted a challenge!

26/10/2009

Started to dismantle the engine today. Snapped the TV cable pivot off the bit at the end of it. May be able to make something work.

See all the photos for assembly notes.

The backs of the valves are spotless. Wonder why since the rest of the engines internals are grimy.



All exhaust manifold bolts came loose quite easy – but I cut off a couple of the long threads from 3 before trying to move them.

Final shot of today before attempting the head removal



27/10/2009

Used acetylene torch to persuade exhaust manifold to downpipe stud nuts to unscrew.

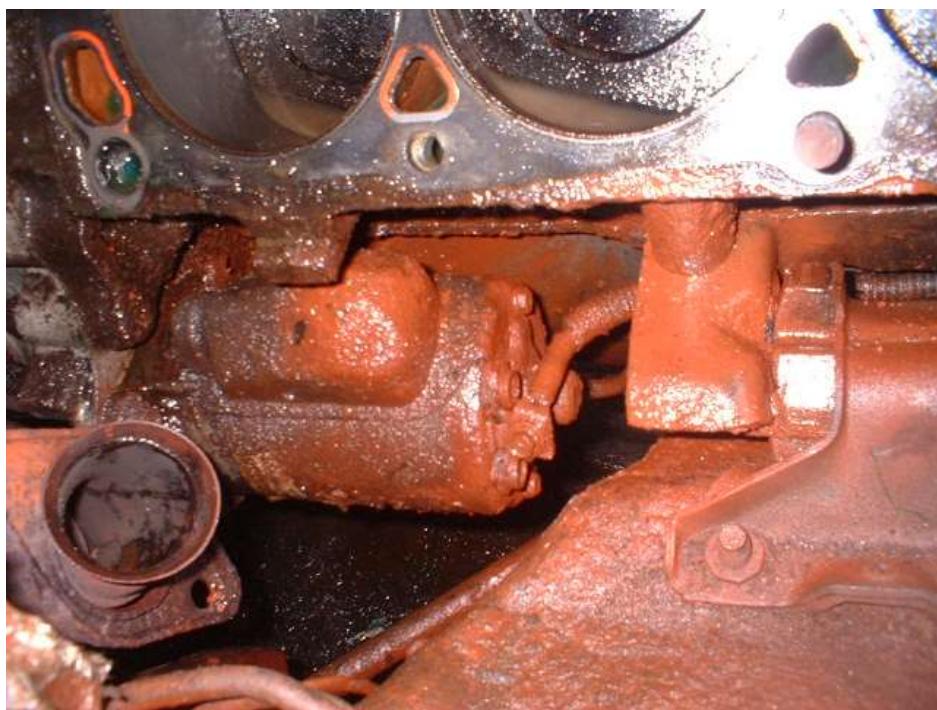
Removed manifold to see the starter absolutely covered and corroding away.



Head bolts came off okay and even the head came off the broken stud easily.



Heres the starter again!



Tried to get a stud remover but couldn't get one locally.

28/10/2009

Borrowed some stud removers. Didn't need them because it came loose easily. Still don't know why it sheared.





Removed drivers side head. Had to cut the middle flange off the air filter cradle because the nut holding it on was so badly corroded all the flats had disappeared!

Ordered a full engine gasket set but having trouble getting the cylinder head bolts. Forgot to Order core plugs.

Decided to pull the engine because it is full of carbon/oil deposits and a lot of it may be in the sump and oil pump screen. And because it is filthy!

29/10/2009

Saw our neighbour Stuart across the road and asked him if he knew of an engine crane anywhere. He said he

Did and phoned JJ autos on Station Lane. Apparently his firm lent the engine crane to John at JJ and told him to keep it there. I popped down and brought it back.



So its engine out-on my own!





Into the garage we go and onto the engine stand.

Spoke to US Automotive. Tried to order some head bolts. They are not sure which ones they are so they will phone back tomorrow.

Heater matrix and engine gasket set arrived.

30/10/2009

Went to Crich Tramway museum today. Good. Phoned US Automotive from there and finally ordered the bolts and the core plugs.

Removed top cover off starter and it had just started to rot through with the coolant being sprayed on it. Media blasted it and fibreglass matted the hole up.



Then painted it with etch primer and then white primer.



Starter media blasted and etch primed and white primed.



Tomorrow will be painting red and silver time.

Costs so far^②

1. Car purchase price £2500 (\$4100)
2. £45 rail tickets to collect it (\$74)
3. Shop manual £24 (\$40)
4. PCV grommet £17 (\$29)
5. Radiator £142 (\$234)
6. plugs, filters, plenum gasket etc £158.37 (\$261)
7. Wheel cylinders £54.05 (\$89)
8. Degreaser and carb cleaner £16.30 (\$27)
9. oil and carb cleaner £25.30 (\$42)
10. EVTM manual (£14.89) \$24.49
11. Engine stand bolts and copper grease £12.39 (\$20)
12. Heater matrix £76.64 (\$127)
13. Engine gasket set £140.99 (\$233)
14. Head bolts £
15. Core plugs £

Total so far of £3226.93 (\$5331)

Had a bill for £109 from US Automotive. Wonder what that's for?

31/10/2009

Tried to call US Automotive. No answer. I'll wait for the goods to arrive on Monday and have a look at the invoice.

Cleaned up all the block today and removed timing cover complete with water pump. All looks good.

Loads of debris came out of the cooling system passages when it was turned upside down.

Painted starter red and cover silver. Paint front bit silver tomorrow.





Sump removed tomorrow and lifter bracket and lifters. Paint sump silver and block red.

1/11/2009

Painted front bit of starter silver and hung up to dry.

Cleaned up timing chain case and etch primed, white primed and sprayed silver.



Water pump cleaned, etched, and painted red.



Timing marks painted silver.



Sump removed



Core plugs on drivers side removed.

2/11/2009

Prepped sump for paint



Grey etch primer and silver



Then etch primed and painted the load spread bars that fit alongside the sump.

Jobs to do:

1. Remove the other 3 core plugs and clean up the edges.
2. Fit new core plugs.
3. Remove oil pump screen and clear out and refit.
4. Prep and paint engine mounts silver.
5. Clean oil pan mounting faces of old gasket material.
6. Remove lifter clamp plate and make sure its clean underneath.
7. Paint block red.
8. Refit oil pressure switch.
9. Press new crank seal into timing cover.
10. Refit timing cover and timing marks. Highlight centre dot mark.
11. Refit water pump.
12. Fit sump.
13. Paint and refit harmonic balancer and crank pulley.
14. Recon heads.
15. Paint heads.
16. Install heads on block.
17. Prep and paint intake (silver).
18. Fit intake.

Head bolts and core plugs arrived today.

3/11/2009

Core plugs installed and oil pump pick up removed, cleaned and reinstalled with new gasket.



Block masked up and sprayed with etch primer, white primer and red.



Painted red



5/11/2009

Installed new crank seal



Bolted up the timing cover and water pump



Screwed oil pressure switch back in with PTFE tape



Water pump bolted up



Started to degrease the harmonic damper. Aim is to get the heads reconditioned this weekend.

6/11/2009

Bolted the sump on to the engine, but not before cleaning up every single bolt head and threads.



Put oil filter back on temporarily to prevent muck getting in.

7/11/2009

Managed to prep and paint the harmonic damper, engine mount plates and crank pulley.

Degreased both cylinder heads and removed both core plugs from each head. Then used a pressure washer to blast out the coolant passages to get rid of more brown crud.





9/11/2009

Started to service the cylinder heads. Drivers side first. Managed to remove the first inlet valve, which was spotless, and lapped it in.

New valve stem oil seal and back in.

Next exhaust valve removed and left till tomorrow.

10/11/2009

Did the next 5 valves and left the 7th out till tomorrow.

11/11/2009

Finally finished lapping all the valves in on the passenger side head. Also put in 2 new core plugs.

Next time, scrape all inlet and exhaust surfaces clean, blow passages with compressed air, degrease again, mask off and paint. Then its onto the other one.

12/11/2009

Scraped all the inlet and exhaust port faces clean and degreased. Blown all passageways clear. Tomorrow I need to mask off, degrease. Mask off again and paint.

May even install engine mounts, balancer and crank pulley to get space in the shed to store the newly painted head while I am doing the other one.

Still thinking forward to the method of getting the frame off. Obviously need to get the car higher and supported fully. I will remove both front seats to reduce the weight. Obviously remove the transmission and prop. The trans can go under the engine on the stand. Prop can go under camaro.

13/11/2009

Reinstalled harmonic damper and crank pulley.



Prepped the head for paint, then etch primed, then white, then red.



14/11/2009

Cleaned up the drivers side head, derusted, ground all the valves in, masked, primed and painted red in one day! And that's inbetween taking Callum to his trampolining lesson!

Start on rest of engine components tomorrow. Eg water pump pulley and intake. Need to bolt on the heads as well to get them out of the way.

15/11/2009

Heads bolted on and torqued down. Had an awful thought that the stripped bolt hole would not hold up. But it did.



18/11/2009

Managed to strip down the inlet, but not before 3 injectors were stuck solid in the intake. Managed to release them but not sure if they'll work again!!

Heres a few shots of the intake at the start





Degreased, and ready for media blasting (only about 4 hours so far!).



Here it is media blasted, ready for masking and paint

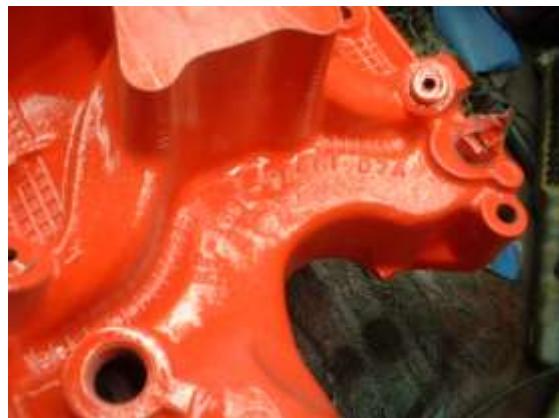


19/11/2009

Painted the intake today.



Interesting numbers on it. Just to the left of the ford logo is a circle with 1989 written in it.



20/11/2009

Media blasted and painted thermostat housing silver.

Cleaned up all intake bolts.

Removed CTS from metal pipework and cleaned them all up. Reinstalled with PTFE tape.

Cleaned up air temp sensor and refitted with PTFE tape.

Cleaned up all injectors and put in a box ready for sending away to be cleaned.

Cleaned up the AC support bar and sprayed with etch primer.

Next I need to clean up the coolant pipe that goes across the inlet and spray it silver.

Clean up all pushrods and install.

Bolt on intake after cleaning threads in heads.

22/11/2009

Cleaned all threads in the head and torqued intake down.

Rescued coolant pipe from tailgate area and straightened the brackets.

Rescued water pump pulley and started to degrease/prep for paint.

22/11/2009

Supported trans with a piece of square section tube and removed axle stand and jack from under the car.



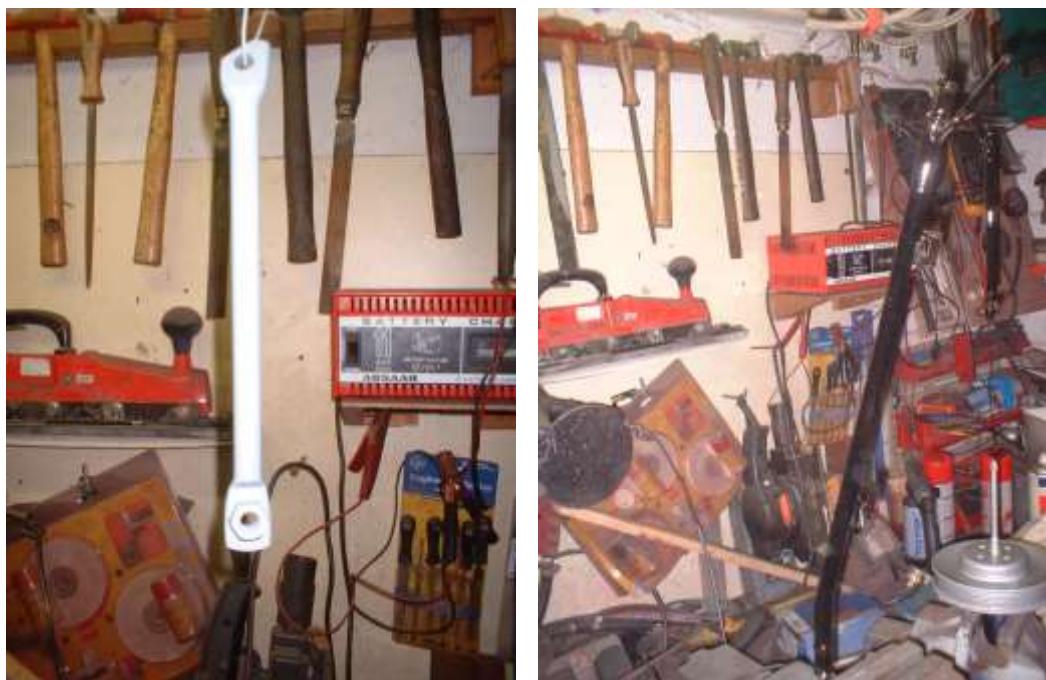
Moved bellhousing bolts (6) to the rear of engine on engine stand.

Now need to remove all fuel from tank and remove it. Also get a railway sleeper and cut it into 4 and put the car on them. Then design the body stand and support the car Then drop the frame.

Sent an email out to an ebay seller of some chrome valve covers. Unfortunately there are no pictures so I have asked for some.

Need to order some pushrods since 2 or 3 are worn at the lifter end. Also need to order those studs for the exhaust manifolds from rockauto. May even order some new oxygen sensors.

Water pump pulley, coolant pipe and AC support rod painted.



23/11/2009

Fitted coolant pipe and water pump pulley. Secured water pipes to them.



24/11/2009

Cleaned up distributor and clamp and fitted it in just about the correct position.

Distributors rotation is anticlockwise and engine rotation is clockwise as viewed from the front

V8 Firing Order: 1 5 4 2 6 3 7 8.

Ign timing is 10 degrees BTDC at 800 rpm.

Bought this on ebay for the car

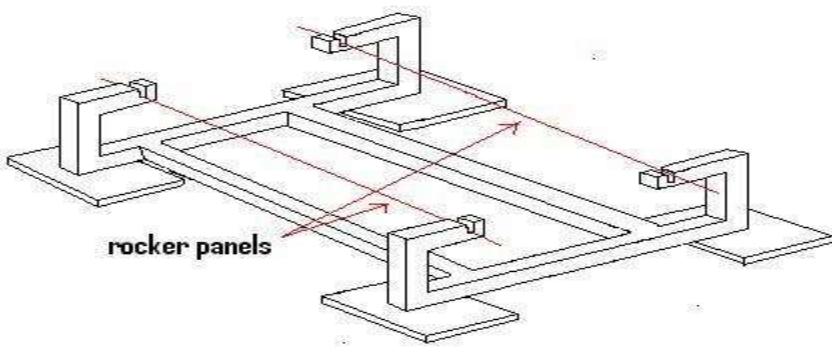


An integrated memory (512mB) usb stereo/CD player. Bit modern but.....!

25/11/2009

Went to garden centre near eckington (Quarry?) and ordered a railway sleeper to be cut into quarters and pickup tomorrow (thursday) after school.

Designed a frame to hold the body while the chassis is removed.



Start to strip things out from underneath soon.

26/11/2009

Picked up railway sleepers.

27/11/2009

Put car on sleepers. RH side of car is on sleepers + another plank to get the car level.

28/11/2009

Pumped petrol from the tank into mine and carols car using the fuel pump test connector (orange wire) and my power probe.



Removed power steering pump and AC compressor to the bench. There was absolutely no pressure in the system at all. Wonder how long that has not worked for?

Battery removed and put on the garage floor and connected to the solar charger.

Spotted first frame nut, bolt and washer.



29/11/2009

Pouring down today, so started to prep the power steering pump/alternator bracket, power steering pump, alternator adjust bracket and reinforcement rod.

30/11/2009

Etch primed all the above.

Went down to station lane to find this fabricator shop that may stock square section tube, but couldn't find it! Found Twiggs in matlock though that stock.

Measured the car to get rough lengths needed.

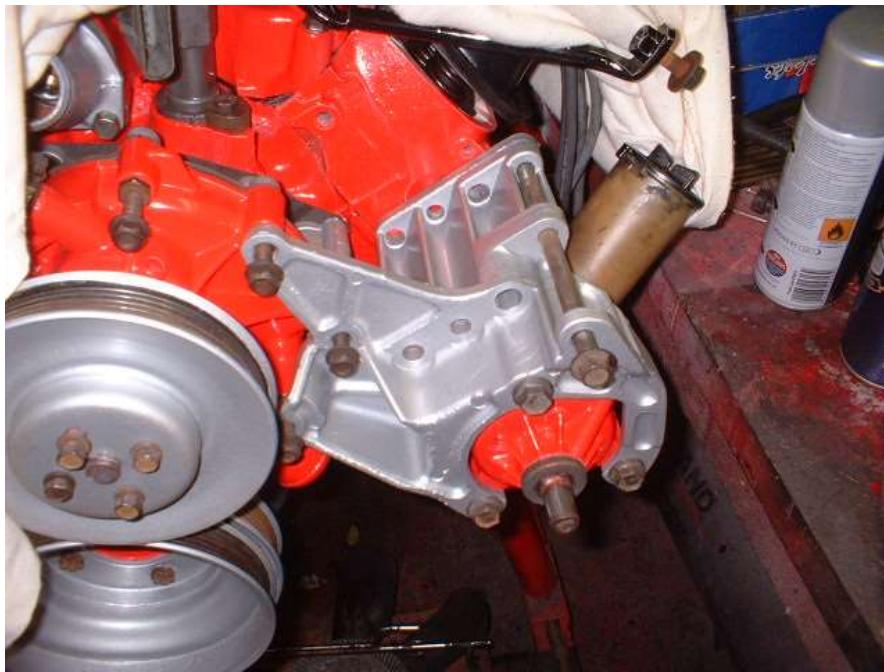
1/12/2009

Sprayed power steering pump red, bracket for power steering/alternator silver, alternator adjust bracket black and alt reinforcing rod also black. Started to prep the p/s pump pulley.

Redesigned underbody frame. Get steel soon and start to build.

3/12/2009

Fitted ps pump and bracket temporarily back to the engine.



Really cold today but dry, so its transmission out.

Heres the pipes.



Had to cut through the top one because I couldn't shift it. I'll replace them with copper anyway.

The frame is very rusty under there, so it's a good job its coming out.



Put trans on my trolley and put it under the engine.

4/12/2009

Friday and I'm knackered! Decided to have a go at removing the fuel tank, but didn't get very far!

Loads of water build up in the filler neck. May have to put a drain plug and pipe in there eventually.



5/12/2009

Popped over to Twiggs in Matlock to order some steel for the .
Ordered two 1m 90 cm and four 50cm lengths of 8cm by 8cm by 3mm steel box section, and 5
2m lengths of 2" angle iron.



Raised back of car a bit higher with 2 screw jacks and removed fuel tank. Fuel supply line and vapour line on passenger side and fuel return on drivers side.



Rusty fuel straps



Mixed up some deox c and put one end of one strap in one container and the other in a bucket.
Power steering pump in the bucket as well.



6/12/2009

Removed steering intermediate shaft (had to unbolt steering box because the sliding joint wouldn't slide!)

Freed up on the bench though.



Cleaned it up, re-oiled and sealed it all back up.



Put it in the shed for storage.

Removed air compressor. Some reference photos.

Put it in the shed also.



Had a check of the carpet on the passenger side and it was wet in the corner. So removed seat and pulled carpet back and dried it out.

Removed a bit of the underfelt because it was saturated.

Tried to remove cowl vent on passenger side to find drain hole, but the one near the middle of the car is seized and just spinning. So, I removed the fan and noticed that it was a coach bolt that had obviously spun. Sort that out another time.

Found the drain hole just under the heater box. Looks like water runs under the cowl black plastic vent and drips into the heater and exits through a hole that has a rubber flap on it. I will remove the cowl vent and seal it down when I can get the bolt out!



Stuck a screwdriver up the drain pipe from the fuel filler opening and nothing. So stuffed my airline up there and blew all the water all over me! The rest drained out.



7/12/2009

Nibbled away the nut and thread with my air saw and die grinder and got the plastic vent off. Then sealed it down with RTV black sealant. I couldn't get the stud out at all so I will wait till the dash is out and then remove it.

8/12/2009

Removed p/s pulley from deox c, prepped it and sprayed it with etch and silver.

Put fan heater in car and started to dry it out. I had to remove a lot of the foam from under the firewall insulation because it was so damp and horrible.

Washer reservoir put in playshed.

Jobs to do:

1. Loosen all frame to body bolts.
2. Loosen rear axle locating bolts.
3. Remove bumpers
4. Unbolt bottom of shox.
5. Raise rear of vehicle so wheels are just coming clear.
6. Raise front to be the same.
7. Build rear frame to be just below sills.
8. Lower on to frame.
9. Support boot floor from underneath.
10. Build front support, lower on after removing front wheels.
11. Weld the 2 together.
12. Remove rear axle.
13. Clear handbrake cable from front.

14. Support front.
15. Drop frame clear.

9/12/2009

Removed some of the sound insulation under the firewall black stuff on the passenger side because it is soaked and will get smelly!

Left fan heater on for some time.

Took both fuel tank straps out of solution, prepped and etch primed the ends. Then put them back in the other way round.



10/12/2009

Started to build under body support frame



Front support













11/12/2009

Completed front support, but then decided that the front MAY be high enough, but the back probably will not be! So, I will modify the rear one and then get it fully welded at CSG, then install that, and then remove and get the front one fully welded.

Chucked the 2 alternator bracket through bolts into the deox c, and the 2 fuel tank strap pins.

12 and 13th dec 2009

Cut 2 8" lengths of box section and cut and welded them to fit inside the vertical sections so I can make an axle stand arrangement for adjustability.





14/12/2009

Took rear section to CSG and got it welded up.

Brought it back home and finished the inner uprights and drilled it for a head bolt as a pin!!



Tomorrow I want to install the rear frame and remove the front one and take it to CSG for welding.

15/12/2009

Picked up some acetylene from treste in sheepbridge and welded the U sections on to the top of the uprights. Then bonded some rubber to the top for some protection.

Put frame under rear and put front one in the car for its trip to CSG.

16/12/2009

Dropped off front frame for welding at CSG and picked it up later. £69 in total.

Put frame back under front.

Sprayed fuel tank straps silver and prepped the ps steering bracket through bolts for painting after I rescued them from out of the deox c.

18/12/2009

Sprayed 3 bolt shanks black.

19/12/2009

Fitted the 2 through bolts and tightened them up to secure bracket. Long alternator pivot bolt still wet.

Tightened 3 ps pump bolts and now need to modify the puller threads to push the pulley back on.

Now need to remove all front suspension and steering and rear axle. Then front and back bumpers. Then drop the frame down.

20/9/2009

Removing front suspension time.

The coil spring will be a problem – no weight to compress it, so remove calliper, disc and drop link. Break outer tie rod taper and break upper ball joint. The spring will only extend to the limit of the shock absorber, then its into the engine bay with the air saw and cut down through the stud and nut till the spring pulls the shock absorber through. The spring won't fly out because the shock absorber is inside it.

Then its shox out followed by the spring and lower control arm.





Steering bolts already loosened, so just got to undo the idler arm through frame bolts, but it started to snow really bad so I packed it up. But not before putting the wheels back on sleepers so it looks reasonable.



21/12/2009

With the help of Callum I removed the 2 idler arm through bolts and put the whole linkage and steering box in the garage for a cleanup.

Rear axle removed on my own! Top arms and shox left attached to frame.

Rear right shock looks sad!



Then put rear axle on stands on the patio. Piggin heavy. Had to drag it round then put it on my car creeper.



22/12/2009

Removed front and rear bumpers and put them at the side of the camaro.



The rear bumper seems to sit too far away from the car with a filler panel inbetween.

I may remove that panel and put the bumper closer to the bodywork.



Popped off to Twiggs in Matlock and bought some more angle iron for a possible rear support and 2 removable diagonal braces. Also some 1.6 mm plate (for sills) and 3mm plate for the chassis.

Here's a photo of the car with the bumpers still on and the wheels balanced in place.



Retired to garage and removed both knuckles from the LCA's and pushed out the old ball joints.



One ball joint was very loose, but the other wasn't too bad. But they are both going into the bin anyway.

US Automotive phoned and 2 upper ball joints and 2 lower ball joints (only 1 lower in stock – other to follow). And 2 drop links. Also left them with finding me some frame to body mounts.

May phone back tomorrow and order some top A arm bushes.



23/12/2009

Ordered some top shaft kits for the upper A arms. About £89 each! Not sure whether that's for both sides or not. Doesn't matter anyway, since they are essential.

Ball joints and drop links arrived today



Managed to remove the 2 front frame bolts, then decided to see what the others do. All came out except for the back left that spun the captive nut. 2 behind the front wheels (one on each side) sheared.



I will have to cut a frame bolt access hole in the back left corner. Heres the spot in green pen



Pulled handbrake cable through frame at front left and removed the pipe clamp on the chassis leg at front right.



Built a frame to support the rear of the car.



26/12/2009

Cut the access hole out and soon saw that the threaded plate was spinning inside the cage. So I cut across the cage and held it with an adjustable. The bolt then sheared. Not good, but at least its off.



Then discovered 2 more frame to body bolts above the axle. These were tight, but came undone.

Final job before dropping the frame was to unscrew the brake pipes from the master cylinder. 2 came out but the front left one had to be cut through.

Dropped frame down using 2 jacks and a prayer! Came down well, but was very close getting it out!



27/12/2009

Stripped frame and took loads of photos (file called "frame" in my pictures folder).



I then phoned Jay and asked if he would help me drag the frame onto the garden so I could weld it there.

He suggested using a motorcycle shop with a blaster and powder coating workshop in Shirebrook. Called M K Motorcycles (tel **01623 747491**) and situated past top cat. Jay said to say that Jason and Pete from hilltop has recommended him). He supposedly has a big enough shop to media blast and powder coat

We dragged the frame onto the back garden and leaned it up against the tree.

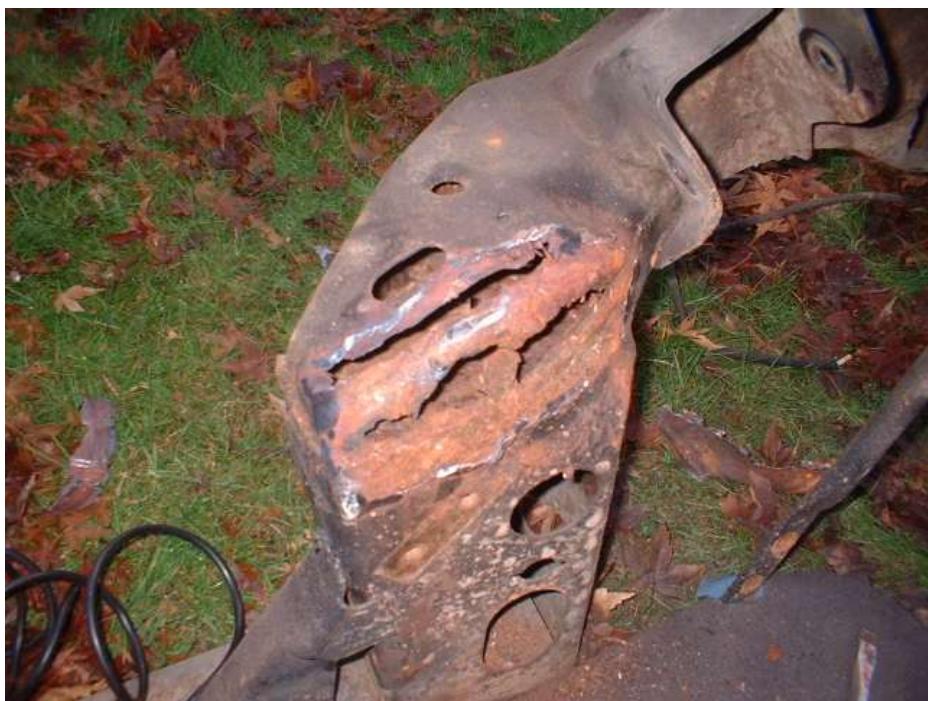


Moved into garage and prepped the 2 Icas for media blasting and removed the shaft from the upper control arms.

Ground the heads off the rivets of one upper ball joint but couldn't punch them out. Try again another day.



28/12/2009 and 30/12/2009
Started to cut out rusty steel from the frame corner



Outer plate removed to reveal true state.













The other side is just as bad so Jay came round and we moved the frame to the other side of the tree and turned it upside down.

1/1/2010

New years day today so I won't start too early!

Clear day, so I cut out the other side, which didn't look too bad. Wishful thinking eh?





2/1/2010

Snowing today and sold Carols Almera.

Made up the inner diaphragm plate and the top plate to weld in tomorrow.

Drilled out the 4 rivets on both upper A arms and knocked both ball joints out.

3/1/2010

Long sunny but cold day today.

Managed to weld up the corner and weld up the weak rusted area on top of the frame where a body mount sits near the back.







Cleaned up rear axle upper trailing arms and chucked them in the acid bath.

Also split one of the clamshell engine mounts apart and cleaned up the rubber section and chucked both clamshell halves in the bath.

4/1/2010

Contacted surface processing ltd and got a quote for chemical stripping and electrophotically coated. £1300. Bit much. Sent them an email about turnaround time.

Jay suggested hot dip galvanising. Going to get a quote.

Hole drilled into the bottom of each welded corner to get rid of any water that accumulates.

6/1/2010

Jay sent me the details of the galvanising firm

Josephine ash galvanising

Speak to Terry Linacre say that steve mellor said to ring

Wood industrial estate at holmewood

Tel 01246 854650

7/1/2010



Phoned galvanisers above and they recommended it wasn't done due to the dangers of twisting in the hot 450 degree tanks. Not worth the risk then.

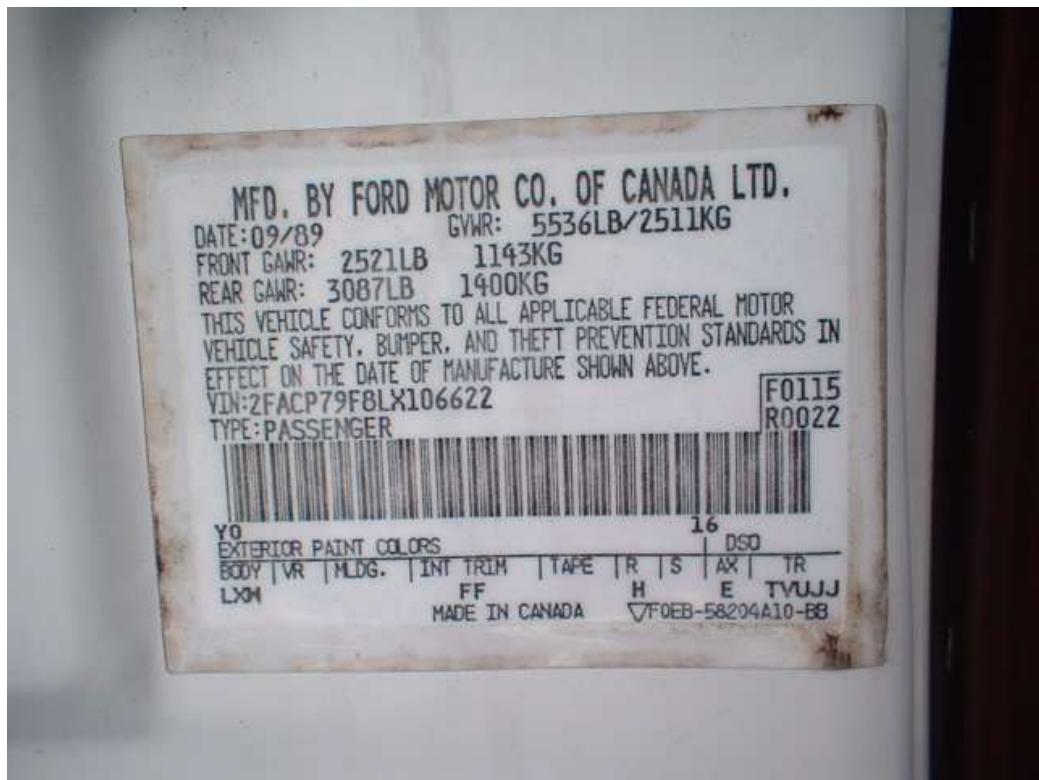
Contacted M K Motorcycles in Shirebrook and asked them for a quote.

Put the chassis on 2 axle stands and a skateboard today to do the welding on the top of the other chassis rail. But I don't think it needs it after all.



Phoned MMS up and ordered 25 feet of 8mm and 6mm kunifer pipe for fuel lines.

Discovered VIN number is wrong on all the paperwork.
Here is a photo of the ID tag on the back of the drivers door.



8/1/2010

Went to MMS and picked up the copper fuel pipe and some masking tape.

Still no luck on the body mounts although Darren is still looking.

Last lower ball joint arrived from U S automotive today. And they had forgotten about the body mount search. Reminded them.

Rescued the upper trailing arms for the rear axle out of the deox c. Amazed how they came out



10/1/2010

Put first lower trailing arm in deox c solution.

Bought some more etch primer, weld thru primer, silver and red smoothrite paint from Halfords.
£41!!

11/1/2010 and 12/1/2010

Spent ages trying to figure out a way to make the replacement fuel lines. There's no way I can exactly match these. I've got to find a way to reproduce the stop on the pipe to prevent the connectors pushing off under pressure.

Fuel filter back first. I have cut the steel line off just after the flexible fuel filter line and slightly flared it. Then slipped an 8mm fuel pipe on it. Then bent up a section in copper and slipped a one way circlip on the pipe to copy the stop.



Etch primed and painted black the AIR pump bracket.

Sprayed the passenger engine mount clamshells silver.

14/1/2010

Repeated at the front for the flexible section, and then bent up a new section joining them.



Had a quote from M K Motorcycles of £280 to blast and powder coat the frame. Nice one.

15/1/2010

Had an email from rockauto offering wholesale discount parts. More specifically the rear self levelling suspension shock absorbers.

Part Type: Shock Absorber

- **Manufacturer:** MOTORCRAFT
- **Part No:** AS253
- **Notes:** w/Load Leveling Air Shocks; Rear Left

[Go to the Catalog](#) 

Regular Price: \$140.79

Closeout Price: \$38.79

• SAVE 72%

- **Manufacturer:** MOTORCRAFT

- **Part No:** AS252

- **Notes:** w/Load Leveling Air Shocks; Rear Right

[Go to the Catalog](#) 

Regular Price: \$124.79

Closeout Price: \$50.89

• SAVE 59%

What an amazing price! Ordered these and some exhaust manifold to downpipe studs.



www.RockAuto.com

Came to a grand total of £142.33. Receipt on next page.

US Automotive quoted £200 per side!!

Bent up and flared the vapour line on the passenger side. Thats a long line! Had to bend it all on the patio on ice and snow!



16/1/2010

Finished off the lines on the passenger side.





Also made and installed the return line on the drivers side.

17/1/2010

Bent up the 3/16" brake line on the drivers side.





18/1/2010

Made up some P clips to secure the loose lines near the fuel filter on the passenger side. Then removed all bumper buffers.

Now need to remove all lines and plastic clips and the 2 front body mount bushes. Then its off to media blasting-so I've emailed M K motorcycles to ask if I can get it delivered later this week (Thursday or Friday).

Found 2 lower body mounts on ebay in the states. \$7 each + \$28 shipping. Bought them.



19/1/2010

E mail from M K Motorcycles to say Friday is okay. So, phoned Jay to ask if he can do it. Said he would phone me back later.

Removed a bit of oil/grease from the frame in prep for blasting. Tried to remove the front bushes, but the through bolts had seized in the sleeve, so had to cut the heads off and move to the bench, warm it up and then remove the remains of the bolt.

Had a quick shifty under the car and the inner sills may be not as bad as they look. I'll have a poke around another day. The front 2 sheared frame bolts are well rusted in, but should move with a bit of heat.

Rear shockers arrived today from RockAuto. Manifold studs to follow.



21/1/2010

Exhaust manifold studs arrived today from Rockauto.

Nipped under car and tapped the inner sills on the passenger side with a hammer. Was very soft at the back near the wheelarch. So that needs cutting out and inspecting. No doubt the other side is the same.

Warmed up the passenger side frame stud that sheared and put the stud remover on and sheared it off!!

Arranged with M K Motorcycles for Malc to pick the frame up on Monday afternoon. Need to find some muscle to help us shift it.

22/1/2010

Drilled and retapped the sheared stud on the passenger side.

23/1/2010

Drilled and tapped the sheared stud on the drivers side.

Started on the rust at the back of the sill on the drivers side

The outer sill is almost unmarked but the inner has gone right at the back.

Heres a bunch of photos that show what has been removed. I had to remove the outer sill section for about 12" or so, but it will weld back.

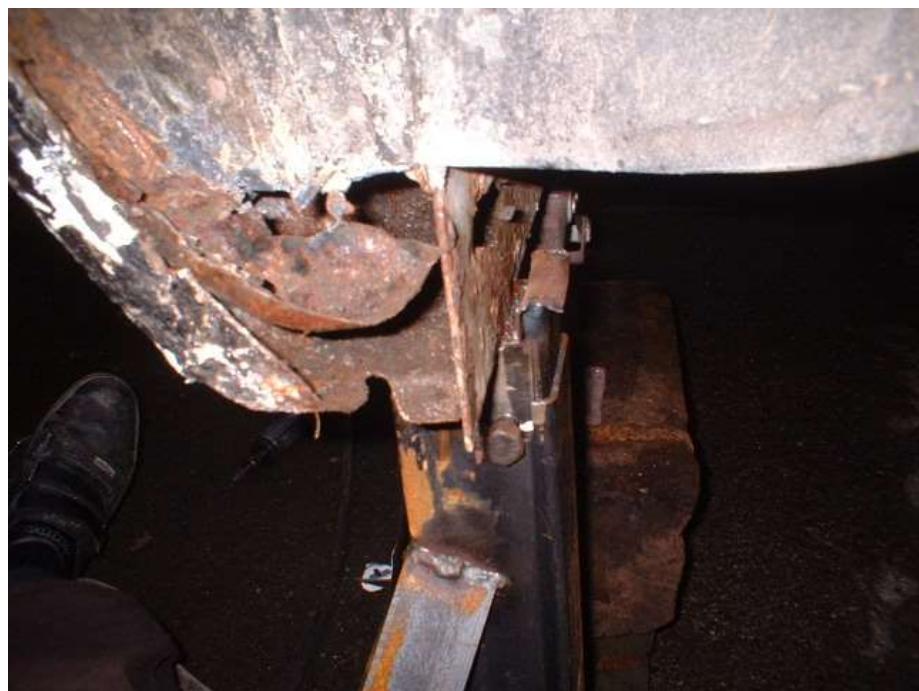




Then put my hammer through!







Heres a view down the sill. Looks sound further down but a bit dodgy at the front!



Here it is cleaned out and dried.



The sills are galvanised and in good shape. A good coating of dinitrol 3125 will hold this forever.

24/1/2010

Started cutting back to sound steel. I had to remove the last 12" of sound sill though to get access to the rust further up.



Heres the rust inside at the top



More cutting





Here's my wooden support!



Haven't got any 2mm steel to replace the inner sill with, so I'll have to get that in the next few days. In the meantime, rust cleaning/repair where the frame will sit.

Sprayed one of the upper trailing arms with etch primer.

Stripped frame of all pipes awaiting its trip to the media blasters tomorrow.

25/1/2010

Frame collected in a big van, but still stuck out of the back! I asked Malc if he could hold it for 2 weeks instead of one! Give me time to get the body ready for it. Sent the upper A arms off as well to be powder coated.



26/1/2010

Phoned Twiggs up and ordered some 2mm steel plate. I asked Dennis to pick it up for me.

Phoned U S automotive to ask where my upper A arm shaft kit was. They said it should be with me in a few days.

27/1/2010

Removed drivers seat and lower B post trim.

Attempted to move the torx bolt holding the seat belt to the sills so I can remove the corroded plate underneath. And snapped the T50 bit! Off to halfords tomorrow to get one.

28/1/2010

Bought a new set of torx bits and with Carol and Callums help and an acetylene torch, I managed to get it out.

29/1/2010

Cut the 2mm plate to size and welded it in place on both sides. Then etch primed and painted it red inside.



30/1/2010

Media blasted the outer sill section and reduced the width of the lip. Then welded up the 2 sill trim holes that I don't need any more.



I removed a lot of the rust on the inner sill earlier in the week and spotted the seat belt reinforcing panel was a bit rusty. So that will have to come out.

Other rear LTA put in acid bath and then drilled out the rivets in the remaining engine mount and chucked them all in the acid bath.



Heres the removed rusty panel and the associated panelwork under it.



Here is the inner sill marked for cutting out and the new panel welded in



Heres the inside view of the holes drilled to remove the plate



Media blasted the floorpan where it was rusty above the seat belt reinforcement panel and then the bag blew up! Media blast again tomorrow.

Ordered 16 poly mounts from Energy Suspension. \$287.



I have also had a thought of bending the bottoms of the quarter panels behind the rear wheels to get rid of the straightness the panel has. I'll have a look how far I can bend it in when the frame is put back.

Sprayed rear UCA etch primer, then white primer and red smoothrite. Look good.

31/1/2010

Media blasted loads today. And then prepped for the epoxy paint from the firewall to the end of the sill. Need to degrease the front a bit more.

Cut off the rusty bits off the seat belt reinforcement panel and chucked it in the acid bath.

Need to chuck all the frame to body bolts in the bath next.

Check if I have chucked the UCA handbrake clamp bolt in the acid bath. (didn't but have now!)

Need to support the passenger side and start cutting.

1/2/2010

Supported the pass side and started investigating the rot. Not good.

It has gone further up than the other side and further down the sill. Absolutely loads of rust came out of the sills when I drilled 3 1" holes and blew compressed air down.



It is rusty in these areas



Got an e mail and telephone call from Malc at m K motorcycles to say that the frame is ready.
And can he drop it off tomorrow at 4 pm.

2/2/2010

Dropped the frame off at 4pm and looks superb!

Malc has taken some photos while work was in progress







Fantastic job.

3/2/2010

Snowing again today so I rescued the second lower trailing arm out of the acid bath and prepped it for paint. Put it in the hallway with the other one. Awaiting paint. Need to rescue its nut and bolt from the acid bath.

Still not received the shaft kit from U S automotive. I'll send them an email.

4/2/2010

Had an email from USAutomotive saying that one shaft is here and the other is on back order. So I phoned them and had a rant and a rave. They told me on the 23rd that there were 2 sets available and they hadn't bothered telling me. Eventually they found another one but I probably won't get it till a week on Monday (in my feb holidays).

Had an explanatory cut in the wheel arch on the passenger side.

The first panel cut revealed a piece of black foam that was saturated with water. This had obviously run down into the sills and started to corrode them from the top down. Heres a photo of it being squeezed with a chisel.





The photo in the top right above is the back view of this



More corrosion here



So it looks as if the panels will have to come out one by one until I can find sound steel.

This is the plan

Panel 1 and 2 remove



3rd panel to remove



5/2/2010

Saturday. Started cutting out the rot on the passenger side.
Heres how the cuts went:





Marked for cutting





Still more to cut out then

Finally back to good steel.



Cardboard template cut for replacement inner sill





Media blasted the bit of rust that is left and sprayed it with weld thru primer.

7/2/2010

Cut a bit of metal to fit in the corner here and bonded it in with liquid metal so I can weld it tomorrow.

Cut out a new section of inner sill to be welded in when I can.

Removed old inner sill from outer sill and chucked it in acid bath.

10/2/2010

Trial fitted new inner sill and marked for trimming and drilling holes for plug welding.

Welded in the small new section of floor.

Welded up the holes where I drilled the spot welds out in the floor flange and end of box section.

Both of the upper A arm shaft kits arrived today from U S Automotive..

13/2/2010

Repaired sill and bottom of d post by butt welding in sections.



Sealed it up, etch primed it and painted it red



14/2/2010

Painted inner sill with etch and red and welded outer sill back in and painted it white





Then rustproofed the inside and used heat gun to make it flow in all the seams

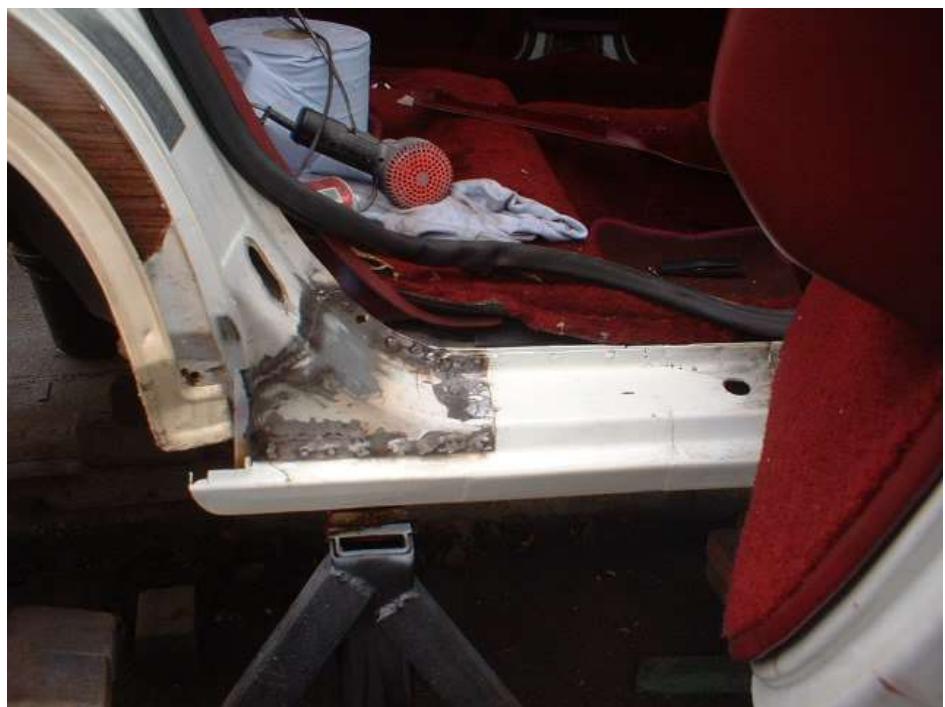


15/2/2010

Sprayed both lower trailing arms red with the usual etch and white primer.

Sprayed both halves of drivers side engine mount silver.

Welded in the base of the C post and primed and painted it white. Rustproofed underneath.





16/2/2010

Drilled out all the spot welds on the bottom of the passenger sill to about 6 inches from the front. Then put my hammer through it! Some more welding to do then!!



Cut the bottom off the inner sill to reveal a rusty outer sill but not too bad.



It is very close to the front wing so I will cut the inner sill back further and then blast the heck out of the front section. It then may need properly repairing when the car is running again.

18/2/2010

Cut further forwards towards the stand and removed a further section of inner sill.



Lots of scaly rust inside but I can't cut further back because the stand is there. So I'll media blast into the front as far as I can and then rustproof and tackle it again when the frame is back on.

Heres a view from the inside looking in



Here's a view down the other way



19/2/2010

Cut the inner sill further back and prepped the edges for welding. Removed seat belt reinforcing bracket and chucked it in the acid bath. Seam sealed the vertical welded seam towards the back of the sill.

Removed the wheel arch trim from the back passenger side and covered the holes up with black insulating tape to stop water going down them. Temporarily put it back.

Tomorrow I want to weld in the inner sill and start to prep for paint on the passenger side. I also need to weld up the split in the floor where the seat belt plate was.

20/2/2010

Not feeling too well today and we were at the church hall for a car boot sale!! Made about £25.

Cut a cardboard template and transferred it to 2mm steel in 3 sections. Fits really well.





Weld the 3 together tomorrow then weld them in. Mustn't forget to treat the insides of the outer sill first. May use epoxy mastic 321 inside the sill.

21/2/2010

Snowed like hell during the early mornings, so didn't get much done.
Removed all 3 plates and prepped the back of them for paint and etch primed them.

Sprayed 3125 into the bottom of the C post and warmed it up to get it into all the seams.

22/2/2010

Welded up the holes in the sills for the stainless trim. Then ran very low on gas, but its still leaking out of the valve, so its exchange time.

Found another weak spot in the passenger sill about halfway along at the bottom. Around the drain hole. I will weld in the inner sills and tackle that on a later date when the frame is in.

23/2/2010

Got laryngitis today but struggled through at work. Swapped the argon/co2 cylinder for a new one.

Sprayed back of the inner sill plates with etch primer and diamond white to provide some protection over the next few years.



24/2/2010

Had to have a day off today since I can't speak at all!

Hooked up the new cylinder and then noticed it was pureshield (all argon) and not argoshield. So I was given the wrong one. What.

Kev at Treste said it should be better to use. So I turned the valve to blow it clear and nothing came out. So another phone call and I went down to swap it. Then it was too late and too dark to weld.

So I 3125'd the sill and will weld it tomorrow.

The body to frame mounts arrived today so I've got no excuse now.



26/2/2010

Finally got to weld in the plates tonight after my second day off with a lost voice.





Then sprayed 3125 inside the sill and heated it up with a hot air gun until it ran into the seams and dripped out



Now I can see the rusty patch on the underside of the passenger door. Sort that out later.

Next is a final touch up weld and seam seal and prep for epoxy mastic.

27/2/2010

Chipped all the old body sealant off the top of the inner sills and started to prep for paint. This included media blasting any surface rust and seam sealing.



Here are some fatigue cracks on the frame mount (highlighted in black)



Need to weld these up.

28/2/2010

Media blasted loads and seam sealed most joins.



Welded up the metal fatigue cracks



But something is not right. The captive nut is spinning. And the metal seems weak. So I am going to cut an inspection hole to see what is inside there

First attempt at not quite in the right place



So another hole drilled



Now I can see what's happened. The captive nut cage has broken free on one side and has bent upwards. The threaded nut has dropped out of the bottom! And there is plenty of rust. So it looks as if the panel will have to come out to assess the damage.

2/3/2010

Removed the panel to have a look





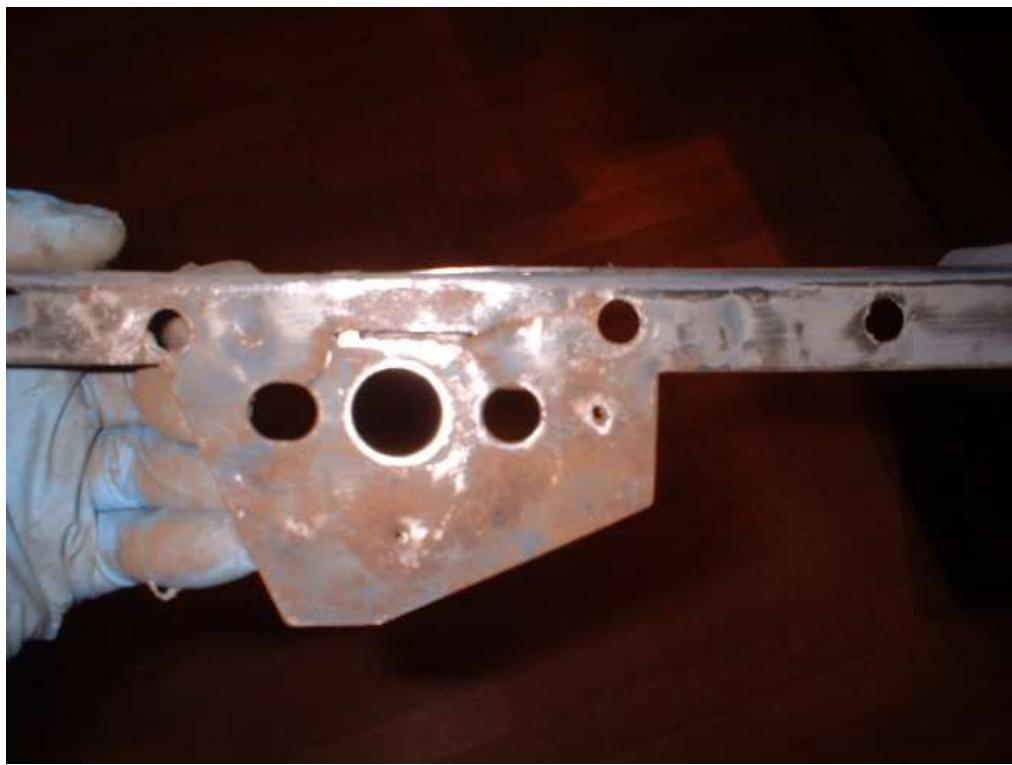
3/3/2010
Etch primed and painted media blasted section white.

4/3/2010
Cut out the rusty corner panel and made a joggled section to go in.





Heres a photo of the underside of the captive nut panel with all the cracks in it!



6/2/2010
Finish welded the back right mount.



Repaired seat belt reinforcement panel rust by removing the plate first



Here's the panel back left about to come out



Heres the other side of the panel to show how far the rust has travelled



Heres a sneak preview of the frame



Forward planning here to the assembly

I need

1. pushrods
2. front shox
3. TV cable
4. injectors testing and cleaning
5. trans x member and various components powder coated.
6. Front lower control arms blasted and painted with ball joints pressed in.
7. Rear axle cleaned and painted
8. o rings for fuel lines
9. Trans painting
10. prop shaft painting
11. Bolts for body mounts (don't forget the 2 at the front).
12. Powder coat plenum?

12/3/2010

Had many hours reconstructing the above corner

Heres a few photos to show its build





13/3/2010

Managed to weld in the panels and another section in the top corner that was rusty.



Then glued in a new section in the corner



Then bonded in a reinforcement panel above the frame hole.

Heres a view of the same section before and after



Just got to weld in the new wheel arch sections and weld the inside panel back and we will go for the 3 remaining seat belt plates and we are painting.

18/3/2010

Cut out all the remaining 3 seat belt plates and made some replacements and welded them in.





Took the frame exhaust hanger plate, all 4 seat belt plates, and rear brake pipe bracket and the exhaust hanger bracket to blasters at the bottom of Whittington hill but they wouldn't do them because they were too small. What!! Looks like I am blasting them myself then.

19/3/2010

Blasted all the above.

20/3/2010

Sprayed the rear brake pipe bracket and the exhaust hanger silver.

Welded the 4 seat belt plates in and welded the closing in panel on the drivers side.





Seam sealed all the joints.

Then welded new steel in the drivers and passenger seat belt plates



Prepped the underside for paint. Took hours and hours.

21/3/2010

Painted the underside of the car where the frame will be with the epoxy mastic paint. This is thick stuff.



22/3/2010

Then realised that the floorpan kick up will also need to be painted so prepped all that as well. Took about 2 hours.

23/3/2010

Repainted everything again including the floorpan kick up.

Dropped the front LCA's and the trans x member off at the blasters.

25/3/2010

Another coat of paint on the floor where the kick up is.

Stuck both front seat belt reinforcing plates down with evostik adhesive and clamped it all up. Supposedly an unbeatable grip.

26/3/2010

Removed clamps from seat belt mounts. Stuck solid!

Etch primed the trans x member



27/3/2010

Sunny Saturday and time to unveil the frame and fit up the fuel lines etc.





All clamps dinitrol 3125'ed before and after fitting. All lines sprayed also. Frame is going back tomorrow so I need some plywood to be able to slide the frame under. Went to my dads and pinched some from the loft! I may also use our bedroom door!!

Ordered some bushes for the LCA's, 2 front shock absorbers and 16 pushrods from US Automotive. Order the rest from RockAuto. No sign of any listings for a TV cable. Need to order some injector seals and LCA bump stops.

28/3/2010

Arranged for Jay and one of his neighbours and Gary from down the road to help carry the frame across the garden to the car.

While I was waiting for Jay (he forgot to turn the clocks forward!) I burned the rubber out of the bushes in the LCA's



Then removed the outer shells ready for the new bushes.

Painted the fuel tank straps with etch primer and red to match the frame.



Took bedroom door off



And slid all the 4 panels under the car



Heres the poly mounts waiting to go in



Then I remembered that I have to reuse the spacers with the front core support to frame mount. As I was prepping them, I got a surprise! They are in 2 halves!



Here is one of them prepped and painted



Here's us 4 carrying the frame over the bushes and the steps!! Carol taking the photos.







Gradually I raised the frame up and bolted it in. Two of the washers were too big to go through the holes so I had to cut a slot to get them in.



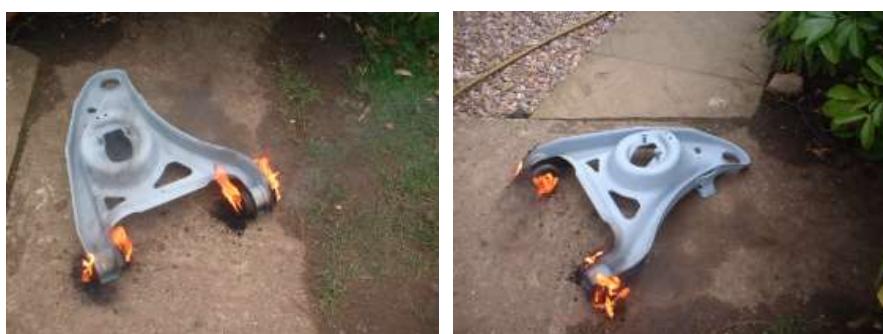
Here's a few photos of the underside. I refitted the exhaust hanger just before the photos.





Sprayed trans x member with white primer and red smoothrite.

Removed old bushes from LCA's.



29/3/2010

Took injectors down to barrow hill service centre but they don't do it anymore. Martin couldn't recommend anyone, so it looks as if its B & H Autokraft.

Purchased injector seals, front LCA bump rubbers, EGR to throttle body gasket and throttle body to plenum gasket from Rockauto.

Front shox, LCA bushes and pushrods arrived today from US Automotive.

2/4/2010

Finally got all the LCA bushes in and lower ball joints.



Then pushed the top control arm bushes in and painted the shafts silver.



3/4/2010

Bolted the new upper ball joints in place.



Welded the elongated drop links holes up in LCA and filed them back round.



Sprayed the LCA's with etch primer again, white primer and red smoothrite.



Turned the bump rubbers round in the UCA's!

Sprayed the UCA securing nuts silver.



Start the back axle tomorrow.

4/4/2010

Bolted the front suspension back in but with airbags I had left over from my Astro project. I can't put the springs back until I have the weight of the engine and trans in, but I can't put the engine and trans in till I get the suspension in! So airbags it is.

I need a 3/8" to 1/4" reducer though. I'll try PPS on Tuesday after the bank holiday.



I also need to get the injectors to Doncaster to be checked.

Also strip the axle down and get it media blasted.

5/4/2010

Prepped and painted the 2 front discs/hubs.



6/4/2010

Started prepping the back axle for paint today. Spent hours and hours and hours scraping, grinding. More time needed tomorrow.



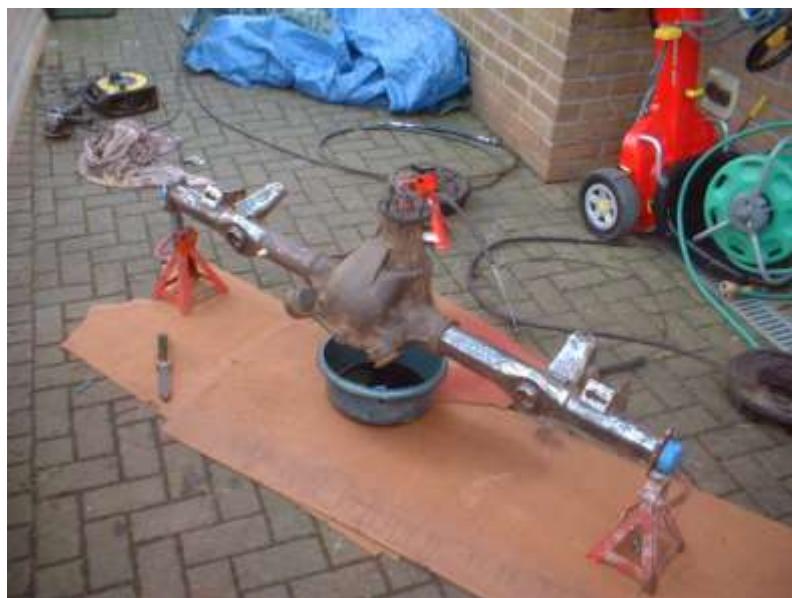
Front suspension bumpstops arrived from Rockauto via Craig of FedEx.

Took injectors up to B H Autokraft. Trevor said they will strip them and change the plastic bits on the end and probably the basket filters in the top. Fluid will be passed backwards through the injector (which makes sense).

7/4/2010

Picked up the 2 3/8 to 1/4" airline reducers today.

Loads more time on the back axle today. Got to the point of derusting most of it and removing the diff plate. Looks as if it is an LSD. Looks in good shape also. Need to get some additive for that. May pull halfshafts out and remove backplates.



Took drums to media blasters and managed to paint one of them red, and etch primed the other. Need more white primer and some more red smoothrite.





8/4/2010

Painted both drums red. Need to paint the inside lips at some point since it is difficult to spray in there.

Backplates removed, stripped out and backplates sprayed silver. At the same time I prepped and painted the diff cover silver also.



Axle painted with 2 good coats of smoothrite red and a further coat sprayed on for good measure!

The axle fell off the stands and split my bowl which was full of gear oil!!! You can see the split in it in the right hand picture!!



9/10/11th April 2010
Ordered some LSD additive from U S Automotive.

3 days in Mablethorpe in our caravan! Sunny but damn cold!
Then Voyager wouldn't start!! Flat battery. RAC to rescue.

12/4/2010
LSD additive arrived on the first day of our hols! In playshed. It stinks really bad!

Derusted the area of floor pan behind the fuel tank and about 1/3 of the way along the rear floor.
Then media blasted some areas and painted it with a really thick coat of epoxy mastic.



Derusted the rear springs the best I can and sprayed them with 1 coat of dark green smoothrite followed by a good coat of silver. The green was left behind from a few years ago and the silver was easier to see as it covered the green. These are only temporary anyway 'cos airsprings will be there.



Tomorrow should see the rear axle go in and the front airsprings inflated so I can remove the stands.

13/4/2010

Finished assembling the axle with a new stainless allen bolt at the top middle to hold the flexy to the diff.

Here's the last view before the diff is sealed up.





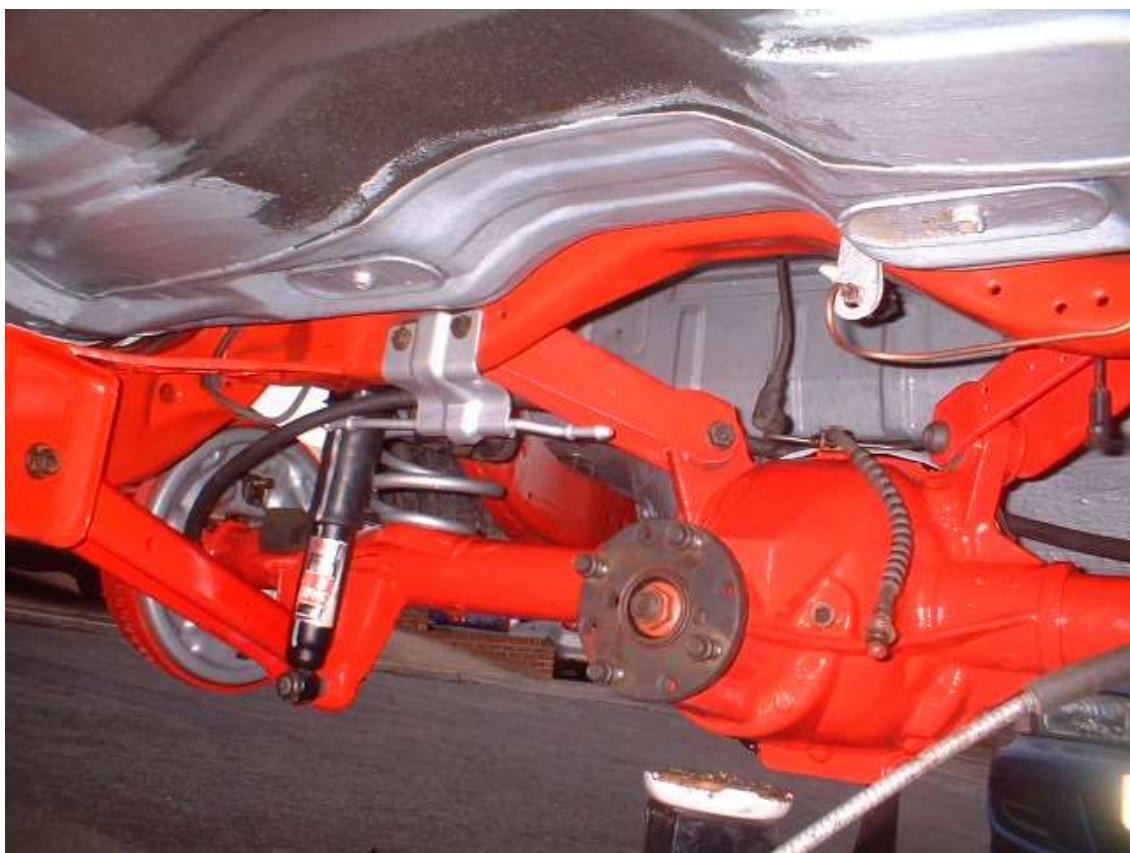
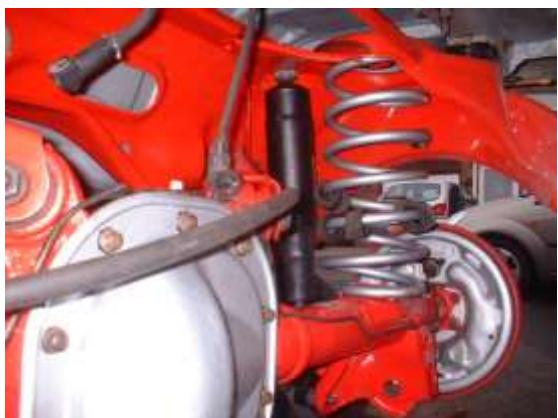
New slaves installed.

Rear cover RTV silicone sealed in place (as recommended in the shop manual). Note there is no oil in it yet.

Axle dragged round to car on 2 jacks. All the family helped (and Dee Dee the penguin)



Axle installed in the car followed by the springs.



Front discs installed. NB no split pins yet.



Front bump stops installed with stainless nylocs.



And a massive moment.....all wheels installed and frames pulled out from under the car and cut up!! Fantastic!



14/4/2010

Time to clear out the hallway today and refit the seats.

Carpet removed from the car and put on the patio and vacuumed and beaten till it was clear.

Floor of car vacuumed also, seat belt bolts wire brushed and threads 3125'ed and all seat belt buckles installed.



Rear seat bottom bolted in.

I found 2 big bolts under the drivers feet carpet that were loose. Where the hell have they come from? Time will tell.

Most interior trim replaced or temporarily put back.

Passenger seat put back in, but then I remembered that the 6 way power seat didn't work properly the last time it was in. So lets have a look.

The reason for the groaning and non operation apart from tilting side to side weirdly came obvious.



The weld had broken. But why? After dismantling, all the swivel joints on one side were seized solid. So solid in fact that hitting them with a hammer wouldn't shift them. A flame and a big lever eventually worked wonders.



Then clamped for welding tomorrow. Damn good job done if this works.

15/4/2010

Welded up seat rod and tested fully working!! A damn good cheap repair.



Went to Doncaster and picked up my injectors.

Had the injectors cleaned by stripping out the filter baskets from the top of each one, removing the plastic base and spraying fluid backwards through them and then dipping them in an ultrasonic bath.

New filter baskets and bases and spray pattern tested okay for each one! £80 cash!

Heres a boring shot of the new injectors waiting to go in (as well as some copper 8mm pipe).

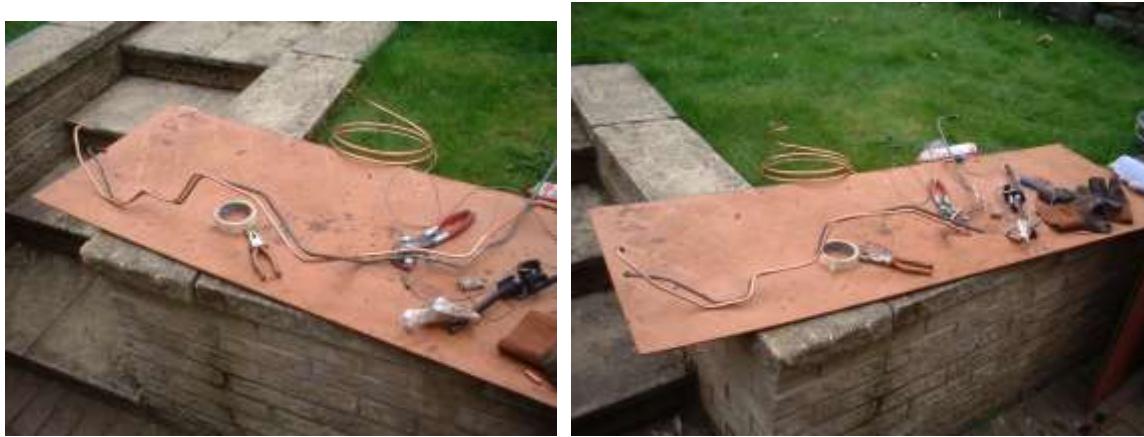


Made up 2 plates to replace the rotted ones at the top of the trans x member to frame rubber mounts. Sprayed them silver.



Bought some 8mm copper pipe from MMS to bend up some new trans cooling pipes.

Decided that one pipe was in very good shape, so I just made up 1 to replace the one that I cut.



Transmission pulled out from under the engine and degreased (3 hours and sore fingers!), the masked up and painted hammerite silver. Left to dry overnight.



16/4/2010

Transmission put in the car followed by the cooling lines (I new). Shift lever and TV cable ends degreased before bolting in.

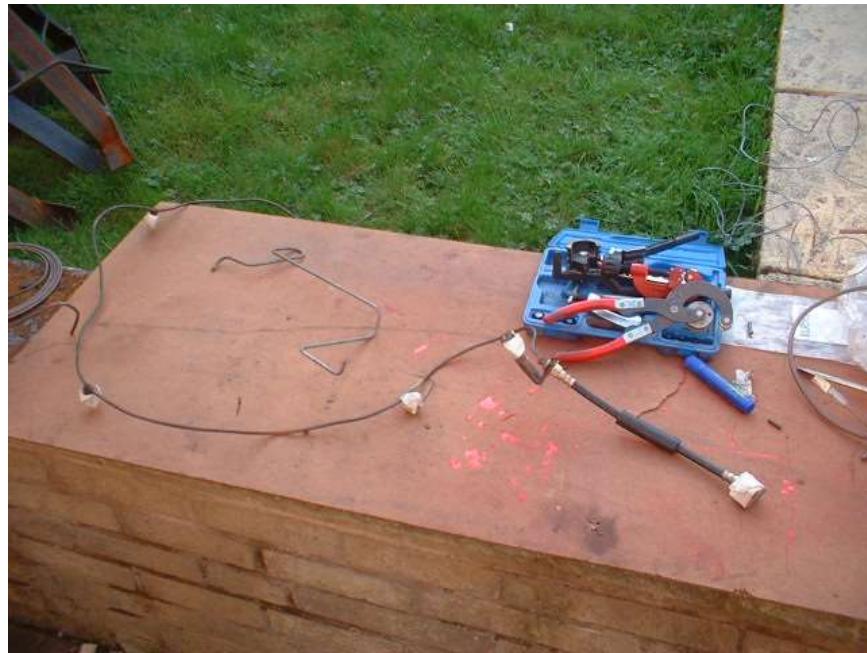


Heres the trans pipes in



Went to JJ Autos and borrowed the engine crane for this weekend.

Then made a new master cylinder to drivers front wheel out of copper pipe and installed it.
The front master cylinder to passenger wheel pipe has been renewed before so I just cleaned it up, reshaped it and installed.



Rear brake pipe connected to flexy at rear axle.

Engine mount rubbers metal inserts painted red.

Tomorrow I need to

1. Clean up the firewall,
2. Install the PS pulley after making a special tool,
3. Install injectors and fuel rail,
4. Install pushrods and seal valve covers down, and perhaps
5. Cylinder leakage test each cylinder.
6. Bolt engine mounts in.
7. Tighten the upper A arm bushing bolts a bit to make life easier when tightening up when the weight is on the car.

Then engine is going back in.

17/4/2010

Did all the above apart from numbers 1 and 7.

Pulling the PS pulley on was a challenge! I had to make a threaded rod from 2 different threads and hope for the best! Worked well though.

Tomorrow I need to

1. Clean the firewall up a bit.
2. Lower the car onto the ramps or railway sleepers (better) and
3. Tighten those upper A arm nuts down a bit.

18/4/2010

Cleaned firewall up, lowered car onto ramps, A arm nuts tightened down till almost touching.

Heres where the engine is going!

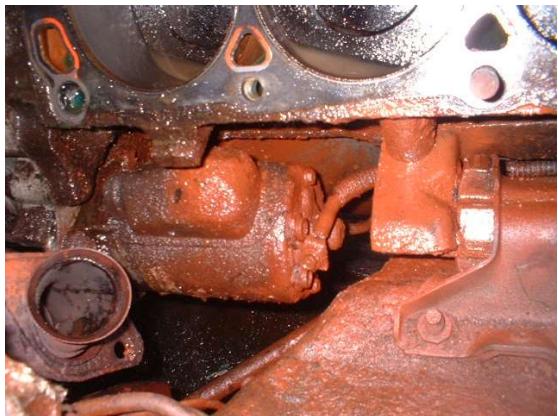


Crane borrowed from JJ Autos on Station lane and hooked up to engine.





Here's a photo of before and after



22/4/2010

By tonight I have managed to fit the prop, tighten trans x member nuts, tighten engine mount bolts, installed and secured fuel lines, fitted fuel injector loom, tightened down valve cover bolts, fitted loom securing plate to back of drivers side valve cover and connected the 2 multi connectors.

Also bolted in starter and connected starter cable (after a serious clean). Bolted up major earth on back of passenger head.



Ordered 2 oil filters and a transmission filter kit from US Automotive which arrived today.

Spent 3 evenings prepping the fuel tank for epoxy paint.



Media blasted the areas around and on the sender unit and fuel pump. Then removed them. I have a replacement fuel sender unit ring and seal, but not a fuel pump one.



24/4/2010

Spent last few days prepping the tank.

Media blasted the top of the fuel pump and top of the sender unit.



Areas under locking plates rustproofed, new O ring and plate installed on sender unit, old o ring and blasted lock plate put back on top of fuel pump.



Hours and hours of prepping, degreasing etc and we are ready for the epoxy paint.



Thick coat put on the fuel pump side on the 23rd then the other side done today.

Stuart media blasted the exhaust manifolds for me again, and I retapped the threads and restudded them, screwed in the O2 sensors and sprayed them with silver high temperature paint from Halfords.



Manifolds loosely installed because I need to replace the fasteners.



Plenum prepped and sprayed with etch, then white then red smoothrite. It looks BRIGHT!



Old broken plastic tab from the TV cable drilled out and lever straightened. Clevis pin found and inserted temporarily.

Both small coolant lines from the inlet to the throttle body changed. Big bore pipe under plenum replaced with new.

Radiator, fan cowl and fan installed. Alternator coil and coil bracket bolted back in.

Trans filter and oil filters arrived. Need to fill trans with 7 litres of fluid and then top up as necessary. New oil filter installed.

Jobs tomorrow

1. Tighten fan bolts
2. Drop trans pan and change filter. Paint pan while it is off.
3. Remove and try to seal both sump plugs.
4. Make TV cable bracket.
5. Tighten prop bolts
6. Spray dipstick and install.
7. Fill sump with oil .
8. Fill trans with oil.
9. Fill back axle with 80/90 and LSD additive.
10. Fit hoses and fill with coolant.
11. Clean and replace rear axle height sensor.

2/5/2010

By today I have managed to do all the above except for filling the back axle up. But I have sprayed the steering box silver and cleaned up all the steering shafts/joints as well. Here we are with the pitman arm puller being used.





Heres an interesting find. It looks as if the pitman arm has been changed before and someone has had trouble pulling it off and ground it off! You can see the grinding marks here.



The passenger side outer tie rod is on its wear limit though – or was it the other side!! I'll get that changed soon.

Cleaning up the rear self levelling sensor was interesting!





Oh, and the fuel tank didn't look right in silver because it had silver straps! So I painted it red! Then 3125'd the top of the fuel pump and the sender unit for the fuel tank.



Fuel pump tested and okay. All connections cleaned and lubed before assembly.

I removed both studs from the floor area that the top of each strap attaches to and cleaned them up on the bench, then sprayed 3125 into the thread holes and put the studs back in.



Then tank bolted in and new nylocs used to secure it. Next time remember to push the filler neck tube into the tank before it is bolted into place. It only has to be a few cm down.



I need some of those plastic horse shoe clips that hold the fuel line connections onto the fuel filter. I have tie wrapped it for now.



When I put the coolant in, it started pouring out of the bottom of the thermostat housing. Upon removal, the thermostat must have slipped out of its groove and got trapped when I bolted it down. Everything looked okay, so I reused the old gasket and some rtv sealant. No leaks now!

The rear oil pan plug was leaking, but a nip up did it!

The trans pan leaked like a sieve until I also tightened up all the bolts!

I successfully made the TV cable pin that attaches to the throttle linkage, but may need shortening slightly since it is almost touching the bottom of the throttle body. But, I have bought a good secondhand one from a gentleman on grandmarq.net for \$40 including shipping! That should arrive soon. I'll swap it out then.

I'll replace the positive and negative battery cables and clamps when it is running. They are a bit past their best to say the least!

Just got to hook up the HT leads, install the battery and try for a fire up. Do that tomorrow-bank holiday Monday!

3/5/2010

Spun engine up and once the lifters had pumped up it started. I could hear both exhaust downpipes blowing though! All cylinders firing but noticed a big petrol leak from a section of flexy pipe just behind front x member. It must have split from the continual flexing when fitting everything up.



Idle is surging up and down, so I need to clean out that throttle body IAC valve and EGR valve.

Trans pan still leaking a bit so tweaked all the pan bolts up again.

4/5/2010

Stripped out throttle body and cleaned the IAC valve (was clean anyway) and the EGR valve that was coked up bad. Took the opportunity to grind a bit off the top of the clevis pin on the throttle valve cable.



Still not cured the surging idle, so ignition timing next.

5/5/2010

Tried to do Ignition timing but the engine wouldn't run with the SPOUT connector disconnected. Wonder why? Eventually traced to one of the coil connectors. As I plugged the multi block connector in one of the terminals was pushed out. The locking tab is missing. So pushed it in properly and timing was about 10 degrees ATDC and it should have been 10 degrees BTDC!

Adjusted back to proper spec and idle surge is gone and now rock steady.

Calipers and springs prepped and painted.



Tweaked up hose clamps to stop various antifreeze leaks.

14/5/2010

Steve and myself fitted the front springs tonight (Friday).



TV cable arrived from the states. Had to pay £14 customs!



15/5/2010

Calipers fitted and all steering joints greased, tightened up and split pins fitted. Split pins fitted to hubs.

Brake reservoir filled up with fluid and left to gravity bleed through the rear.

Vacuum bled the entire system and some joints tightened up.

Anti roll bar painted red and installed. New drop links fitted.





16/5/2010

Brakes bled out again. Pedal feels okay.

All suspension bolts tightened to spec front and rear.

Exhaust hanger fabricated for exhaust near rear bend.

Cycled to Halfords and bought some fire putty. Used it to seal the downpipe to manifold joints.

Dropped the car to the floor and tightened up all wheel nuts and turned the car round and reversed it up against the garage. Success!!



Here is where it was for 7 months!



Need to order a fuel filter so I can get those plastic clips.

18/5/2010

Now I need to do a bit of cosmetic welding before the MOT. Lets start with this. And the panel that I removed 7 months ago



I will cut along the black line and joggle a new section in.

So, panel cut and media blasted and a new section made up and joddled.



Then had to go down to the caravan park to see if our caravan had been broken into. Luckily it hadn't.

Same thing repeated on the other side. There's the sponge stuff that causes all the water to be absorbed.



Then painted white and a grommet glued in to stop water entering (after a serious rustproofing dose though).

Handbrake next. Lets make up a tensioner and see what happens.



Installed in the line and it all works!! So it looks as if a wrong cable has been fitted at some point.

30/5/2010

Steve tightened all the suspension bolts down for me. Most to 90 ib ft.

3/6/2010

Booked in for an MOT in 3 days time, so tidying up time.

Made up some clamps to bond to the bumper so I can fit the new £26 (!) number plates to it!



Reinstalled all the interior underdash trim, and checked fog light switch out for power (which was okay), although I am not fitting one!

Removed the heater to inlet manifold water pipe and installed a new one from MMS. Now no leaks.

Trans pan bolts nipped up again to try and stop the drips.

All suspension and steering greaseable joints greased.

All brake pipe unions also checked for tightness.

Tax disc holder from 1998 found in my camaro folder and installed.

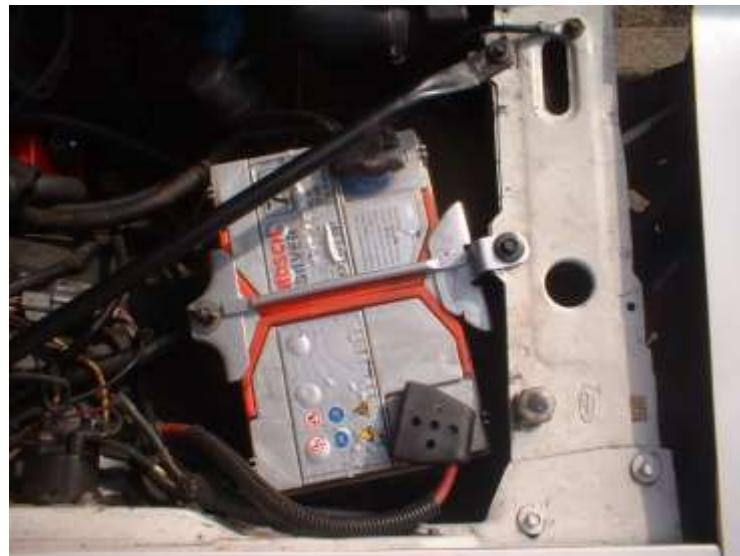
All tyres sprayed with tire foam and look good.

Battery clamp cleaned up, modified, welded and sprayed silver. Threaded rod cut shorter and rebent. All the spacer bolts removed!

This is the old battery clamp that is too wide, and the spacer bolts!!



New painted clamp



4/6/2010
Passenger side sill welded up with a perfect butt patch.



Then painted white temporarily and rustproofed behind.

Screenwash reservoir filled and all glass scraped with a wallpaper scraper to get all the stuck on stuff off. Then used Toyota glass cleaner.

2 gallons of fuel put in.

AC pipes tie wrapped to bracket to keep clear of the belts.

Coolant level topped up with 50/50 mix of blue Unipart stuff.

5/6/2010

Took to MOT test and passed! Success!



No problems or squeaks or rattles. Sounds good.

Now I can take my time and start to do the bodywork!

27/6/2010

Started to chase down the flashing airbag light.

First 3 photos show the 2 side front sensors being checked. Both okay but slightly rusty. All mounting points de painted, vaselined and bolted back down to clean metal.



k

The next photos are of the sad looking front sensor that is seriously rusty! Also didn't check out with the multimeter. Read open circuit. Whats the chance of getting one of them!





Luckily Justin McCarter on the crown vic forums has one he took off his car and has offered it to me for just the shipping! As long as it works. I have PM'ed him the test procedure and await the results!

29/6/2010

Replaced end of king lead at the coil end by a proper connector! Still need to price up a coil and HT leads.

1/7/2010

Received 2 brand new rear light units form ebay us! \$25 each + \$20 postage + £19 customs.
Not bad.



16/7/2010

Interesting developments on the airbag front.

Heres a shot I took earlier on of a seriously corroded front centre sensor.



The silver circle in the RH photo above is a rivet that should have been connected to the remains of the wire that is sticking out! So that is why the airbag ECU was detecting no earth through the circuit.

So I soldered a wire to the little bit that was left and secured it back to the case with a self tapping screw.



The white stuff is a sealant to try to prevent it all happening again!

Then fully rustproofed (dinitrol 3125) and installed.

Guess what? After supposedly years of the airbag light being on, it actually went off!!

Too good to be true almost. Time will tell though.

23/7/2010

Here we go, 2 steps forward and 3 steps back.

First.....that code 8 for the airbag circuit front sensor, has now reappeared and turned into a code 9! Perhaps the heat from the soldering iron on the little bit of wire that was left has affected a solder joint on the PCB buried in the protective covering. The resistance across the firing circuit resistor is way too much. It was okay before the soldering. Whatever has happened either needs further investigation by trying to dig away at the plastic, gel covering, whatever its called. Bit like an archaeological dig-a bit at a time and with a lot of care OR loose the airbag and all associated components and wiring completely. 1990 airbag technology is a bit dated and worrying.

Secondly and more serious was the appearance of the oil pressure warning light after a run and a thoroughly warm engine. According to the manual that's 6psi or less - oops!. No problem, perhaps a faulty switch on the block. So, get an oil pressure gauge, make up an adaptor hose and wire it in temporarily.....



Fire it up and what do I see? 40 psi with a cold engine and 10W 40 semi synthetic oil. As it warmed up I kept an eye on the pressure. When fully warm, the pressure was 5 or 6 psi. As I blipped the throttle the oil pressure went up to a max of 25 psi. Now call me a perfectionist, but that ain't enough. The engine doesn't rattle or smoke or misfire even when idling hot, but it doesn't inspire confidence!

During the winter when the engine was on the stand, the bores were well within spec, the cam lift was also within spec, but the engine was filthy inside and out. I removed and cleaned the oil pick up tube and cleaned as much as I could. When the decision came to rebuild or not, I knew the bodywork/chassis work would take a lot of labour and money so took a chance on renewing all the gaskets, core plugs, oil seals, lapping valves in etc. It wasn't burning oil before and was quiet, so a calculated gamble was taken. Leave the crank bearings well alone, save some money, put it back together, finish the bodywork/chassis welding, get it back on the streets, get it taxed (licensed) and insured and legal. Then sit back and assess whats next.

Well it looks as if the gamble may not have paid off. I don't think I have any choice than remove the engine again, strip it down and rebuild it properly. Not something I wanted to do, but that was the gamble, and if it needs to be done, so be it.

I'll change the oil and filter again to see what happens, but I am not expecting any change. I am assuming the clearances on the mains and big ends and cam are the main culprits for the loss of oil pressure.

Here we go again.....

Reply from Pseudoboat on crownvic.net

That engine will go a long time in that condition. You'll get a lot of responses about it with a lot of good advice. It's a common problem for these engines. I ran mine for over 100000km with that problem with no worsening. I just ran some additives for it and the light stayed off.

However you are a perfectionist. A perfectionist would pull the engine, send it out for boring,

and all the other things they do to freshen a block. You will do the HO upgrade at least. You will run headers. Your oil pressure will be perfect. Just wait until the body is done. Your engine is fine for now

Sounds like good advice.

29/8/2010

This is the bit I want to change. The straight section at the bottom of the rear quarter panel, and the trim and the removal of the badge and the removal of the red marker light. Oh and the fake wood!!



Heres the interior trim and the rear seats removed on the passenger side.

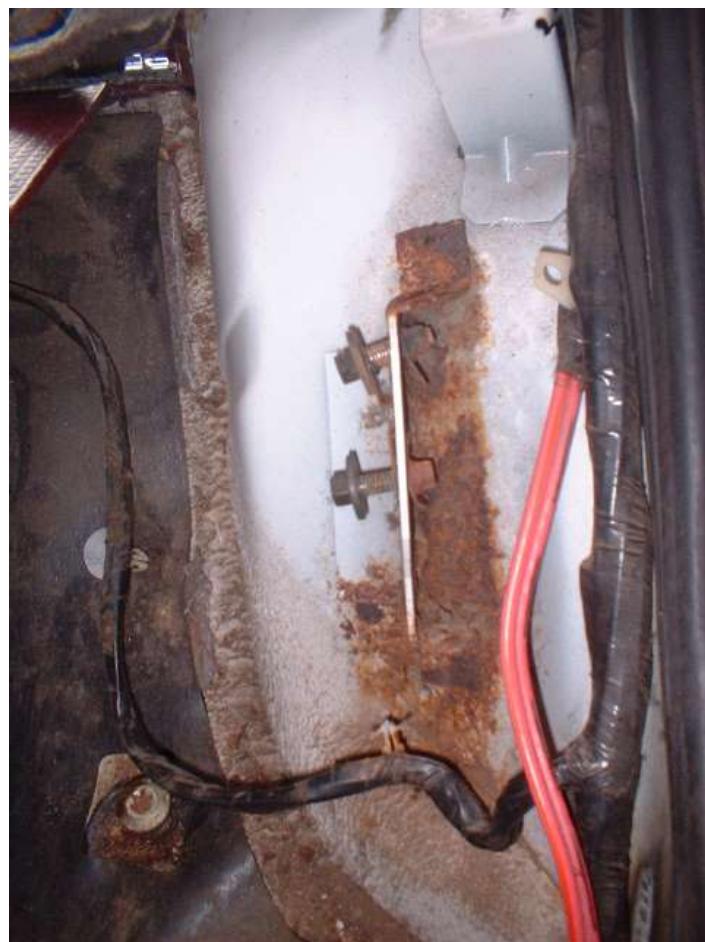


Heres a view of the inner wheel arch joining the outer quarter panel. Notice the rust starting to show through.



If the car was repainted, it wouldn't be long before that ate its way through. So I am going to remove the outer half of the inner wheel arch and try to detach the inner wheel arch lip from the outer wheel arch lip cleanly. Then reshape, media blast and repaint.

This is the bracket on the drivers side that the rear seat back bolts to and pivots on. That is rusty and will be removed and remade. One of the speed nuts (as we call them) has already rotted through.



Ready for cutting!



Right, if this thing is going to get a quality paint job, I don't want any rust bubbling through after a few months. So I need to dig deep and find any potential rust areas.

Rear wheel arch lips are notorious for corroding. So I need to remove part of the inner wheel arch and separate the inner lip from the outer one and have a look. Fun!!

Heres a view of some rust bubbling through at the bottom of the wheelarch towards the back.





Now lets go inside and remove the inner wheel arch section.
Line marked for cutting



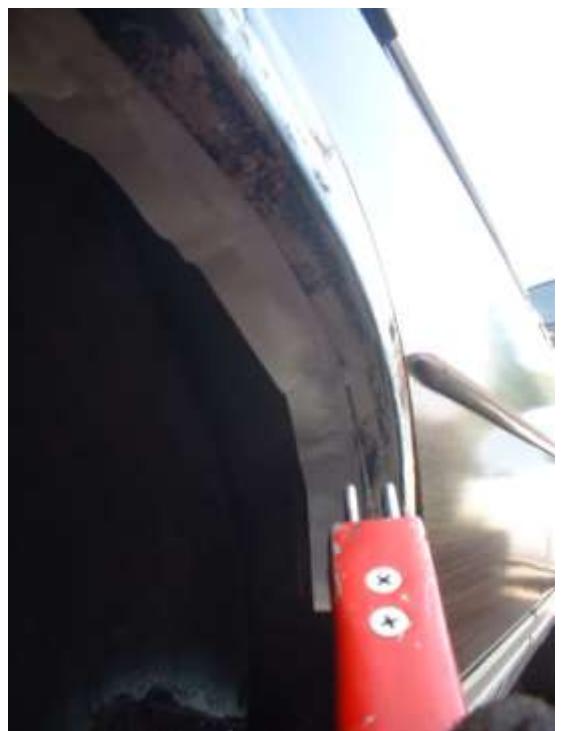
Here are photos as the inner wheel arch is removed





1/9/2010

Front of rear wheelarch lip repair and width reduction next (sounds like cosmetic surgery!).



The wheel arch lip is way too wide, so here is my famous air saw in action again (above right photo).

2/9/2010

Today is quarter panel reshaping day.

Heres the panel under the rear bumper marked for cutting.



Heres my friend Jay sat waiting to bend the quarter panel up. So this is the original shape



Here is the quarter in its new shape

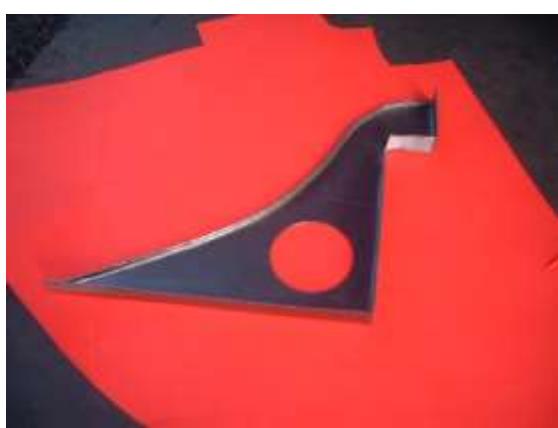
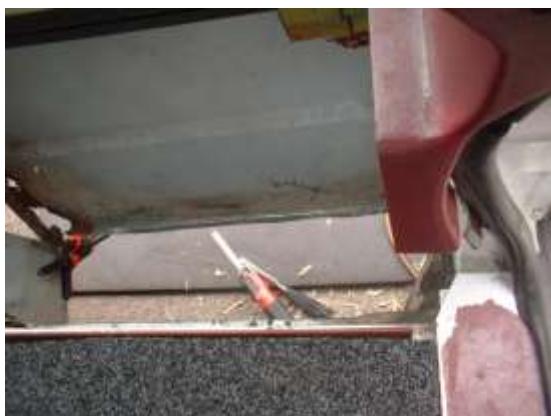




Heres the old spare wheel well with a cut or 2 in it!



Heres a few shots of the spare wheel well being designed and fitted





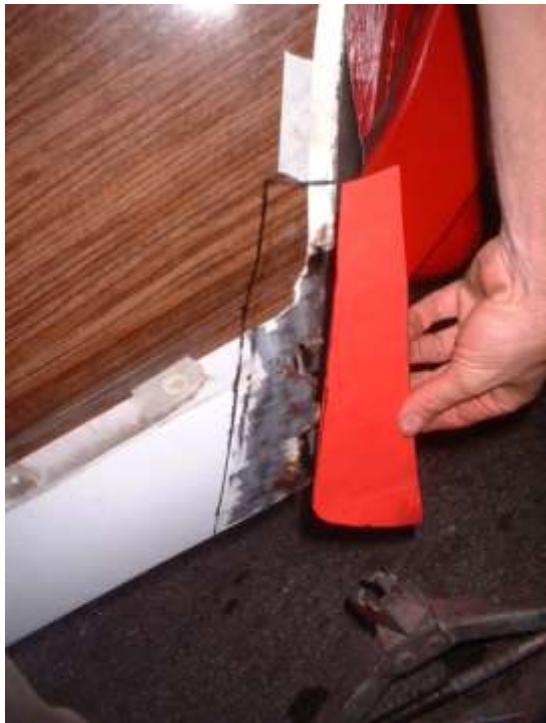
Now then, one of my friends (Chris) has done a sketch of a possible finished product.....

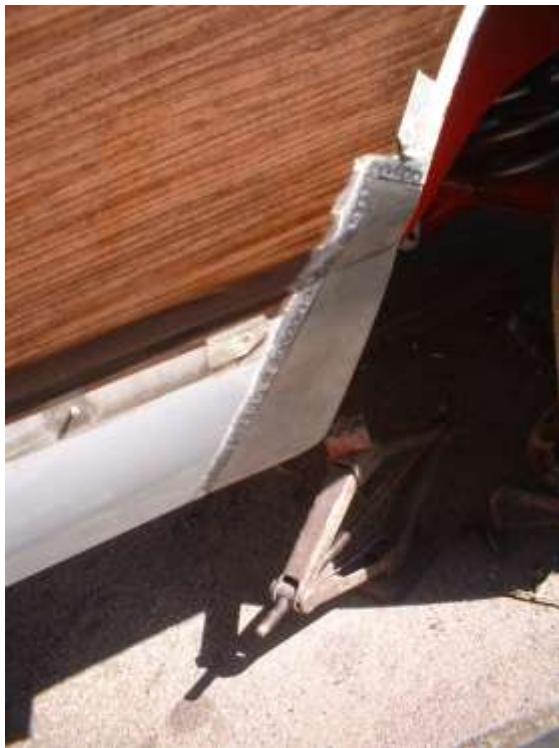


12/9/2010

The task was to repair the rust corner of the wheelarch, finish the panel replacement where the spare wheel used to be and try to weld some holes up.

Heres the card template for the rusty corner and a black line where I am going to cut.





12/9/2010
Cardboard template for bottom panel made



Card templates made for bottom corner





And rustproofed



Holes welded up with copper plates to absorb the heat and prevent distortion



18/9/2010

Time to remove the "wood" from the rear quarter so I can do some more welding and get it prepped for paint.



Light panel cut out for welding up



19/9/2010

Panel made, joggled and welded in





Phoned Andy Scott to get the gentlemans number in Handsworth who may be able to paint the car.

His name is Phil and he is at Bramhalls Automotive on orgreave crescent. Tel; 07929 635508

I'll give him a call tomorrow.

Started to grind clear the wheel arch lip on the inside. Looks good apart from 2 areas.

25/9/2010

Weekend again, so its bodywork time.

I need to finish the welding on the passenger side, so its rust removal time.....this time the outer wheelarch



You can see the bits that will be cut out.

If I hadn't removed the inner arches, this would never have been repaired properly and would soon breach the new paint. We've all seen this before - a rust repair that keeps on coming back. Well this one won't.





Heres my gazebo giving some degree of protection from the autumn weather!



10/6/2010

Couldn't get the lower repair panel flat with a skim of bondo, so after a bit of investigational work, I found out that the wheel arch lip I welded in was slightly out of shape (not curved enough), so I had to cut the lip out again, reprofile the panel and then weld a new lip in.....

Here's the lip cut out.

Couldn't get the lower repair panel flat with a skim of bondo, so after a bit of investigational work, I found out that the wheel arch lip I welded in was slightly out of shape (not curved enough), so I had to cut the lip out **again**, reprofile the panel and then weld a new lip in.....

Heres the lip cut out.



After loads of bondo skimming, panel beating sanding and priming, we come to this



But I am not happy since the shape is wrong and the creases not sharp enough. I will weld in the inner wheel arch first and then deal with that later.

Because I am working outside in the autumn, I need some protection. So here is my gazebo and a tarpaulin!!



Heres a couple of views of the inner wheelarch structure cut out and new flanges bent ready for the new inner section. Notice the accidentally cut upper panel that my air saw went through by mistake!! Welded back together though. Don't tell anyone.



10/6/2010

After mucho thoughto of a name for this vehicle, I have been introduced to its name (no, almost a slogan) by accident.

My eldest son (almost a teenager at the ripe old age of 12 years and 11 months) is undergoing diving lessons (swimming pool, diving board ones, not the underwater scuba type!) and he was finding it difficult to dive off the 3 meter board. I know how he felt, because I have been through all this when I was a mere pup. I said "trust me, just do it. Call it a leap of faith, it will open up new dives to you".

He wasn't quite sure what I meant about a leap of faith, so I tried to explain it. Something along the lines of, just step forward and trust in what will happen.....

This sums up the wagon. So many people have said it is ugly, too big and a modern day dinosaur!! Don't forget us Brits are not used to such size and ..almost..., dare I say it.....arrogance in a car!

But I don't see it like that. It will look different, it will look lower, it will look a LOT better...TRUST ME...

So, there we go, LEAP OF FAITH. Now got to decide where to airbrush/signwrite the name on the finished car.

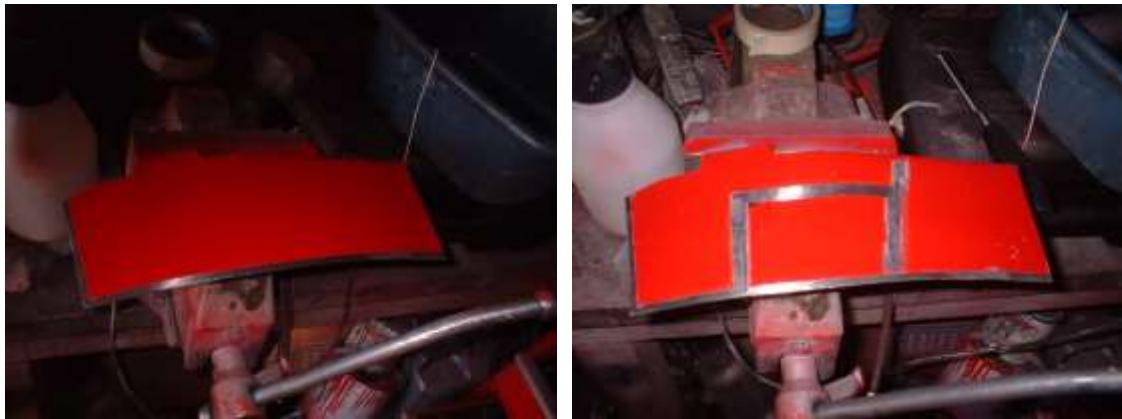
I quite like that. Not quite sure that my Wife does though - or even that I am still sane!

12/10/2010

Now its time to start to reconstruct the inner wheel arch and tie the inner to the outer.

Heres a panel cut to fit





You can just see the adhesive squeezing out here.



17/10/2010

Needed to finish the inner wheel arch yesterday and today so I can start to paint this thing.

Heres a strange ugly bulge in the rear of the inner arch that needs to go. Notice the black marker line where it is going to be cut



The numbers are there so Callum can hold it down with a screwdriver while I weld from the other side!

27/10/2010

Finally got to finish weld the inner arches and seal from inside the tailgate area.



Heres where I managed to weld from the inside



6/11/2010

Had a lot of bad weather recently, so been very limited working outside.

Anyway I decided to remove all the bondo and paint I put on the wheelarch and try to panel beat it all into the perfect shape without using any bondo at all!!! This meant cutting out and rewelding some of the patches I welded in before! Including the wheel arch lip from the top of the arch forward.

Heres the wheelarch in as close as I can get after about 4 hours tapping!!





As you can see, I had to remove and reshape the creased section just behind the door.

24/11/2010

After long hours at work and crappy british weather=this is where I'm at...

Heres the finished wheelarch painted white temporarily (protection from weather) with its coat of epoxy primer to further protect it.





I'll flat back the epoxy primer next spring.

Heres a photo of the new “spare wheel well”!



Had to spray adhesive with panel wipe and then use the flat bed sander to remove it all.

24/11/2010

And off we go to the other side.

Now when I bought the car, the owner said an exhaust shop had reversed the car into something and damaged the trim around the marker light. He also said the panel had not been damaged.

Heres a photo of the trim just after it was taken off



Was the panel bent? Have a look



You bet it was! Difficult to tell from the photos, but it was crumpled around the marker light and the body crease line.

Here it is again after a few hits with a hammer. The masking tape is to stop the british rain from getting in!



29/11/2010

Painted the inside sheetmetal that I welded in with epoxy paint (same stuff as the underbody last winter). Then it snowed, and snowed and snowed.....and snowed some more!



21/3/2011

Some good weather at last, so out with the hair dryer and scraper and hammer and dolly.

More "wood" removed and adhesive and 2 hours tapping and scraping and tapping and scraping, oh,...and levering and we have an almost straight rear quarter around the old marker light hole.



24/3/2011

Here we go with my favourite tool! My neighbour hating, damn noisy but brilliant air saw!



24/3/2011

Finally managed to make up and spot weld in a joddled patch.



26/3/2011

Wood stripped from drivers rear quarter.



28/3/2011

Trim hole welding up time.....

Here you can see the copper backing plate underneath the hole to absorb a lot of heat and prevent the panel warping.



All holes welded up at the back of the quarter.

Now to do something about the gas filler pipe. I want to fabricate and fit a stainless pipe that bends quite sharply around the inner wheelarch, goes through it and exits just behind the rear light unit. Then I can weld up the aperture on the quarter panel.

Here's the first bend in place,...view from the wheelarch



I will cut out the inner wheelarch next and weld in sections of the pipe to extend it to the back of the light unit.

29/3/2011

Main section of inner wheel arch removed...





2/4/2011

Today (Saturday) I cut out the remnants of the inner wheelarch lip and look how good the inside lip is!



The lower quarter corner behind the rear wheel looked good apart from a small bubble



When ground back this is what we had



Metal marked for cutting out and new patch clamped and spot welded in



Inner section at the rear marked for cutting and removed



Wheelarch lip reduced in width

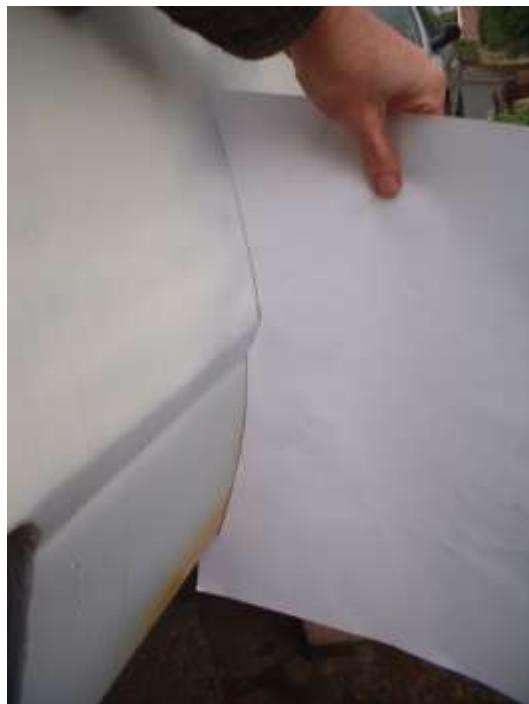


Now the inner wheelarch is out and down to a single skin, lets have a look how rusty it is on the inside lip



Absolutely immaculate!! Wish the other side had been like that!!!

Reshaping quarter panel next.
Here is a cardboard template to fit the passenger side I did last year



And heres the profile of the drivers side after a bit of tweaking



Not too far off!

Look at the rust in the bottom corner here...



Thats now been shotblasted clear.

Heres some temporary supports welded in place until I can get a panel fabricated



Heres how the back corner matches up after a careful bit of cutting. Managed to get a good butt fit.



Panel made to butt fit where possible.....
Perfect match just above my hand....



05/04/2011

Fits perfectly at the back also....



05/04/2011

and tacked in



Interesting views from the inside...



Look, no rust!



I'm going to see if I can fabricate the gas filler pipe next.

10/4/2011

Got to get moving with this car - I need it complete for this summers cruising!
So assuming I am going to use some fuel, I had better finish that filler pipe relocation off.

Here it is clamped in roughly the right place...



The light unit just touches the filler pipe cap with no room for the bulbs and holders. Which is just as well since they are going LED!

Here's a sequence of photos.

Bracket made and welded to the pipe and discreetly bolted in with speed nuts (captive) and stainless cap head bolts



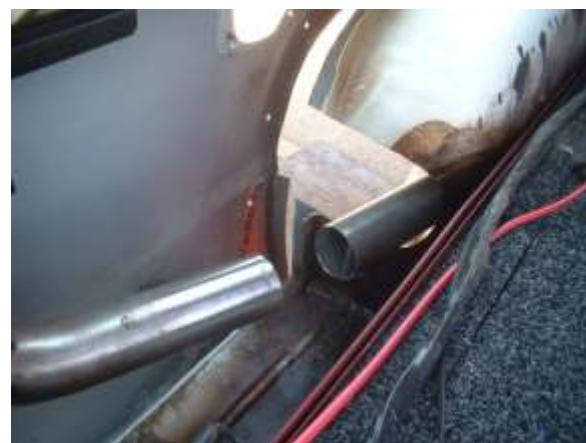
In roughly the right place..



So its time to cut a hole. A BIG hole...



And a little more pipe welded on to reach



It was at this point I ran out of pipe, so I made some out of flat steel and clamped it in. I couldn't MIG it at this stage otherwise there would have been a big bang!! So I clamped it up best I can, removed it and welded it a safe distance away.



All in awaiting fully gas welding

Here is the gas door pressing in the quarter cut out.



I decided to not use the door as a patch since I fancied the challenge of fabricating a new patch! After a lot of cutting and measuring, and making a wooden former...and a few swear words...well, actually quite a few damn and blasts...here it is



Welding in next.



That was quite tough to build. I'm going to lose the rear lockable compartment but who cares!

Next I'm going to weld up the hole in the quarter where the old filler door used to be.

Now I don't fancy butt welding this panel in. Too much chance of an irreplaceable panel distortion. So I am going to make a backing plate and spot weld the gas filler panel to it and then spot weld the whole thing to the quarter...







I had to use my spot welder with the long arms to reach into the top right hand corner



Love these photos! Looks like its got spots!



heres a view from the back





Heres a view of the drivers quarter panel with all holes welded up and all glue residues removed. Took me about 2 hours with a panel wipe solvent and a flat bed sander to get rid of all the stickiness!!



I then started making card templates for the inner arch. Here the first one in place....





Here it is transferred to steel and a 90 degree flange welded on





and here it is clamped for a final trial fit.



Ran out of time then and got too late to do an grinding/welding so decided to strip the tailgate. Here it is with most things stripped off....



Looks a lot better!

I need to remove that lock and handle, so I will have to use a remote to mimick the action of the lock. One button to wind the window down, and a solenoid to pop the tailgate open. I will keep the interior handle so I can still drop the tailgate down.

Now I know this is a silly question and I know what the answer is going to be...whats the chance of getting a new tailgate window seal!!!!

Right, I've got a week and a bit to do as much of the bodywork as I can. So first job is to fabricate and weld in the inner wheelarch.

First 2 sections tack welded/glued in.





Hopefully complete all the rest tomorrow and final weld in.

Heres a view of the inner arch tack welded in. This is the single skin outer quarter I wanted. No rust for me inbetween the 2 layers!



View from inside the tailgate area



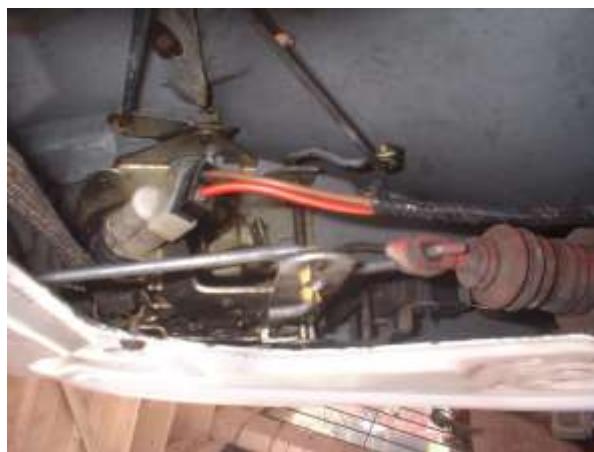
Now onto the tailgate. I want it smooth and clean. Just the license plate and illumination. Which means welding up the hole where the hi level brake light used to be and, of course, welding up the handle and lock holes.

Here you can see the black line where I will cut and weld



Once the outer handle is removed I have no way of opening it until the remote solenoids are installed (which wont be till I order them!!), so I need to rig up another external way of getting in - which will also act as an emergency entrance if the electrics fail. So its upper latch removal time, locking bars/rods/linkages removed (locks? we dont need no stinking locks!! Not without handles anyway). This alternative entrance method will involve a throttle cable routed through the tailgate to behind the same light unit where the gas filler neck is.

Heres a couple of views with the stock latch





And heres what was removed...



And heres it all installed back and a lot less cluttered



Looking forward to removing the handle and rod next.

Heres a view of the quarter with a skim of bondo on ready to be flatted



I must finish the mechanical emergency entry to the tailgate before i can weld up the tailgate handles and locks.

Heres a view of the latch with an extension welded in and a stainless wire attached to it.



Heres the wire going through the tailgate with 2 hooks made from galvanised nails and electrical connectors to attach the wire to the hooks!



It still needs securing properly.

Here it is secured to the loom with bright yellow tie wraps in the opposite corner of the tailgate and going through the conduit into the back of the car



And a view of it coming into the back and bolted through a welded on plate behind the corner of the bumper



And a final view of the cable sticking out of the rear. I know need a lever or handle designing.



And you know what?.....It works! So tomorrow is welding up time.

Inner wheel arch fully welded and sealed. Heres an interesting shot looking up from the drivers rear wheel arch



Thoroughly cleaned inner arch ready for the epoxy paint. Looks in fantastic condition seeing as its now 21 years old!



The gas filler pipe is going in tomorrow for powder coating. Dare I do it the same colour as the frame!!

I was having trouble getting the profile right for the body crease where the gas filler door used to be. So I came up with the idea of cutting a bit out of the old gas door, welding a handle onto it and dragging it across some newly applied bondo on a straight base (part of our dining room door panel!!).



Results were very good! Spot the gas door!!





Onto the rear tailgate. My air saw and carbide burr made short work of the panel.



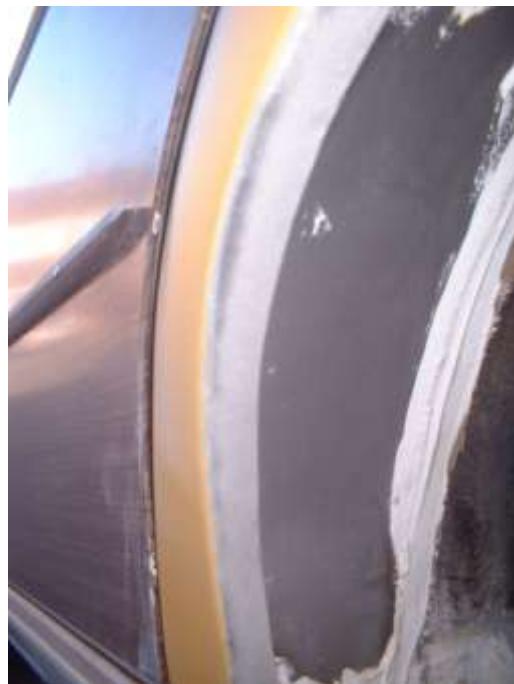
Welding up tomorrow.

It hasn't actually rained here for weeks! So I've been using it to get a serious amount of bodywork done!

Heres a patch for the tailgate handle tacked in late one night...



Too late too grind so I media blasted the wheel arch lip. Now this is a good sight. A completely rust free lip inside and out! Not bad for a 21 year old in the UK



I was prepping the rear wheel arch for its epoxy silver paint and noticed the rear seat mounting bracket that is spot welded to the inner arch was rusty (I had forgotten about it!). So I couldn't paint until that was repaired.



Here it is with the bracket removed



There was a couple of rust pin holes below the bracket that had gone through, so it has to come out

Heres some new metal ready to be welded in when the rusty bit is cut out



Here the outer black line is a locating mark to make sure I get the bracket back in the right place after the repair, and the inner one is the cut line



Heres a good view of the rust cut out from under the arch. You can just see the back of the front seat



Patch welded in





Bracket cleaned up and welded back in by plug welding from the back



Looks a damn sight better than before.

5/5/2011

I'll have to weld in that tailgate panel handle patch tomorrow!

Heres the handle and lock welded up



Now heres an interesting sight..when trying to drill out the rivets holding the rear window in I saw this



It should look like this



The rivet centre has failed to break off. I am really surprised that it didn't catch on something on the way up! Or perhaps it did!

Heres the wood grain being warmed up and scraped off



Now I dont know if you can see this, but when I was sat on the floor scraping off the wood

sticker I saw some writing that isn't visible at all from any other angle. I tried to get a photo of it. Have a close look at the white section just above the wood...



It says "FRED BEANS DOYLESTOWN". Obviously a sticker from a car sales place. After a google search, it is located in PA. Nice to discover another secret from its past.

Finally got the car to fit in the garage ...just!!! can't open my toolbox drawers though until its pushed forwards a bit!



Heres the remnants of the wood from the tailgate!!!



There is wear in the tailgate hinges, or at least in the bottom one. Not quite so sure about the top one, so out it must come to assess its condition.

The three crossheaded screws are BIG and tight, so I had to use my air gun with a screwdriver attachment to shift them



Here it is removed with the rusty plate from behind it.



Now heres the wear in it. You can just see the worn rusty area where the roller goes in. It has worn slightly out of round, so I will weld it up and file it back into shape.



Heres a view under the tailgate



Rust starting to form in the seams. So after shotblasting.....



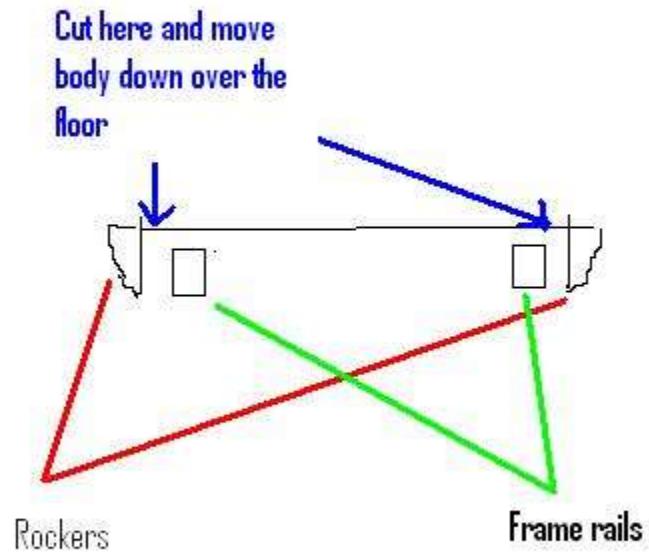
Heres a quick view of the smooth tailgate



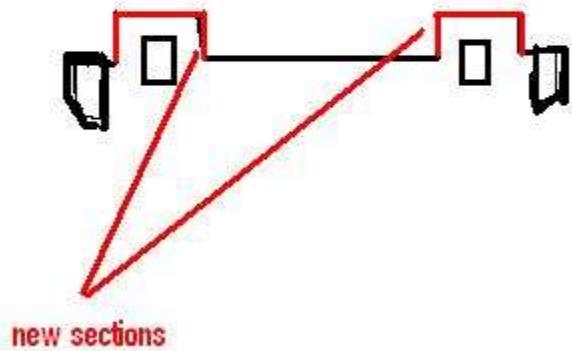
Now probably just the same as anyone else, I am always thinking of this project, even when I am busy. Probably too much thinking time, because.....

I think its time to perhaps lower this car but without lowering the suspension. This needs to be channelled. leave the chassis where it is and all the suspension but lower the body over it.

Now theres 2 ways to do this,



Floor left where it is but frame rails raised up through it.



The first way will ensure the seats still fit but I'll loose interior height and my head may hit the roof (6' 2").

The second way will keep the interior height but may affect the seats.

Hmmm, more thinking needed.

Heres the worn guide welded up and filed back



Now its tailgate off time to assess the lower hinge damage



On the floor awaiting dismantling



Have a look at this short vid of the wear. The pin and bushes are okay but the other pivot isn't

[youtube](#)

Here it is off to reveal another slight problem





Its actually twisted. Must have been a lot of force to do that.

Rivet welds ground off and took apart then straightened. Didn't realise there was a bronze bush under there. I am going to machine another pin/rivet that is a tight fit in there.



28/6/2011

Dropped off and picked up a new machined pin from the engineering shop where the exhaust plates were fabricated for the Camaro. Actually forgotten its name! Fits in the bush very well.



My MIG welder wont cope with welding it back in, so I had Glynn at CSG weld it for free!!

The cable that goes from the D post to the tailgate that had corroded and broken I actually heated it up with my torch and pried the ends open. Then found some cable in the garage and recrimped it back on with the vice.

Tailgate put back on the car.

Heres a couple of photos of the car outside while I put a new garage door on and widen the entrance.





Up to 29 July 2011

More wood sticker removal inbetween doing the kitchen. Got all drivers side done except for the front wing.

30/7/2011

Stripped inner door panel off and saw a completely intact waterproof membrane. No ones been in there before. After 21 years!

Tactics are to strip out the door lock solenoid and all non essential linkages, including handle and pull wiring through. Then remove door, and straighten door pillar where hinges bolt. Then weld door handle up.

By 10 pm I had managed to remove the central locking motor and door handle and rod.

Heres a few views of the door lock



4/8/2011

Removed the door and straightened the hinges a bit with a big hammer and put the door back. This time the door gaps are good but the door frame isn't! Top right is almost touching the frame



6/8/2011

Put a request out for drivers door seal on the forums. Mines a bit torn



Rightio then.....

Now I've got the chance, its the drivers rear door clean up time

Door handle removed



Cut out



Plate cut out and held in place by a magnet



Welded up



There was a bit of distortion, but nothing that an hour of persuading/panel beating couldn't sort out.

Then its door off and media blast the bottom.



I am going to bend the bottom lip out slightly and pour some dinitrol 3125 rustproofer down and tap it tight again. This will prevent any further rusting inside.

Heres a good sight of the old vinyl wood grain stickers in its rightful place!!



25/10/2011

Door lip at the bottom bent out at 90 degrees and derusted as much as possible. Then ran dinitrol 3125 inside the door and under the lip. Hot air paint stripper used to get it to flow everywhere.



Lip tapped back flat and heated up again. Then degreased and seam sealed.

Other 3 trim holes welded up and all glue removed with solvent and panel wipe.



Anyway, its time to make the rear door on the drivers side to fit properly. The main door is now lined up well with the rear quarter and the rocker, but the window frame touches on the top right....



and is too far from the B post on the left.....



So it needs to be moved to the left about 1 cm...ish.

Heres the first cuts with my trusty fav tool - my air saw..



As you can see I am cutting out the frame along with the steel it is attached to and then move it over a bit.

Here it is loose on one side



Other side not here but photographed, but cut the same way.

Heres the door frameless!



Pity I can't get that to work! Looks good. Or could I? No, stop it - lets just get this car painted!!!

Completely cut loose and ready for prepping for welding



Here it is moved to the left a bit and tacked in. You can see how far it has moved over by the gap



Tacked in the other side



Fully welded



Now need to reassemble the door and move the window runners over a bit and also the dew wipe on the weatherstrip trim that goes on top of the door.

Then its on to the drivers door.

7/11/2011

Filled and sealed the welds on the outside. Still to protect on the inside though. Refitted the glass and hardware but had to remove the rubber weatherstrip in preparation for moving it over a bit. Those staples are tough!

I bolted down the front window runner without moving it over and it all works!

Heres the new gaps



Looks smooth already down the side! Love it.

Next its strip down again and prep it for paint. Oh, and staple the weatherstrip back in its new place.

11/11/2011

More filling and flatting of the drivers rear door. Getting close now.

Started to dismantle the drivers door. Removed the inner trim panel and enjoyed taking the door mirror off!! Into the tip we go.

13/11/2011

Drivers door stripped down next and after removal of the door trim and glass, time to get rid of the handle and lock..



I'm seriously glad to get rid of those handles. I'll have 5 spare soon if anybody wants any!

The door mirror will be the next to go the way of the trash! When I took it off it fell apart! Have a look at the repair job underneath the mirror



When I looked at the door under the mirror it was obvious that the mirror had been hit and made a good job of bending the door



Here is the first attempt at straightening it out. Thick plates and a bolt between them



An hour or so later... the straight version



Its going to be welded up anyway and another mirror moved to a proper position a bit further forward. In fact I may even use the internals of the old mirror and design and build a new outer shell.

Progress is okay at the moment, certainly going to be a few hours spent in there this winter!!

Thinking forward, once every panel is cut, welded, smoothed prepped and primed, they are all going to come off and go into storage (may have to leave front fenders on though).

Car will be put into the centre of the garage with the wheels on a railway sleeper each. The the

front and rear springs removed and the wagon lowered down onto its bump stops.

Then bump stops removed and wagon lowered further until the front ball joints go to their limit of side to side movement.

The distance from the bottom of the rocker flange to the floor will then be measured. This is the distance the body will be channeled over the chassis so I can get it on the floor at full drop on the future airsprings.

The car will then be raised back up to its original factory suspension position and solid rods fabricated and put in place of the springs.

Then the fun begins - car stripped to a shell and floor/firewall cutout and everything lowered. And welded up.

One thing I know for certain is that the hood will have to be a cowl induction one to clear the engine, that will have made a break upwards!!

This is going to be one fun winter!!!!!!

27/11/2011

Made up a panel to cover the handle and lock hole in one and spot welded it in.



Just got to MIG weld the back of the lock hole because the spot welder won't quite reach in under the window channel. Then its prepping the rest of the door.

31/12/2011

Spotted this on ebay

The screenshot shows an eBay UK auction page for a "ford country squire 5.0 v8 BRAKING ONLY". The item is listed at a starting bid of £200.00 with 0 bids. The seller information shows a positive feedback rating of 100% and the item is located in Dorset, United Kingdom. A small image of a blue Fiat Twinair car is displayed on the right side of the page.

Phoned him up. Paul on 0759 6066155.

Agreed £200 for all glass (except front screen) and all door rubbers, seals, weatherstrips and fuel tank.

His address is
Paul Ashby.
1 Highlowe Close
Bournemouth
Dorset
BH11 8NN

5/1/2012

After a week of discussing with Paul, I have agreed to buy all the above, plus the engine and box and other bits and bobs.

Heres a pic of the engine in the 1985 country squire.



7/1/2012

Paul delivered a massive load of parts today! A big pallet and a particular heavy engine and box!

8/1/2012

Back to welding up the drivers door. Cut an access hole to get the spot welder in and finish welding the plate in.



Spot welded around rest of lock.



13/1/2012

Sealed around the plate with sikaflex and finish welding up the door mirror holes.



Also welded up the 2 top trim holes and the access hole.



19/1/2012

Drivers door removed and hung from the roof to enable welding and panel beating/prep at a better height.



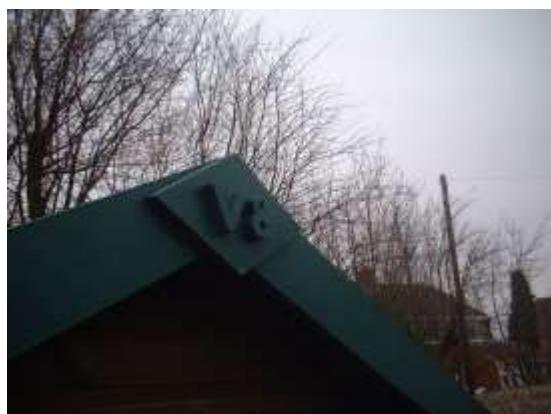
21/1/2012

All adhesive removed from the door. Took ages!

Door removed to lie on the bonnet on 2 big foam pads. Flat bed sanded after welding up the last 2 trim holes lower down.

31/1/2012

The last 2 weeks have been spent restoring Carol dads old shed after rescuing it from the allotment. It is now in place and waiting for parts to be sprayed and/or stored in it! Going to be this cars lifeline for the next year or so.



Looks very clean



7/2/2012

Door put on bonnet on foam pads and final 2 trim holes welded up near the bottom of the door.

Gouge knocked back out as far as possible and the bottom lip peeled back to check for rust.
Then dinitrol 3125'd and crimped back. Now needs the bottom lip straightening and the door
skimming with filler.





13/2/2012

Got a week off this week so I have every intention of doing quite a few hours on it.

So, started at 7:30 this morning.....

Plan was to finish the drivers door prep. Since I recrimped the base of the door, it wasn't quite straight anymore. A few wobbles so had to be panel beaten flat again and a skim of filler over the top. You can see it here



After using my favourite long flat bed hand sander (no machines for me!) and a coat of hi build primer, here we are



Since its cold in the UK still (is it ever warm?), this is my heat source directly above the door.
It's a G clamp on one of the ceiling joists and an old hair dryer hung from it!



Here's a view of the prep where the mirror and the door handle used to be (good riddance)



Then door turned over and the panel I welded in to get access for the spot welder filled level and all seams sealed.



While all that is drying/setting its time to strip the wood grain off the drivers fender and start welding all the trim holes up.

Fender light removed first, but a bit of rust present



so had to grind one bolt head off.



This is the last time it's going anywhere near the car! I'm going to weld the hole up.



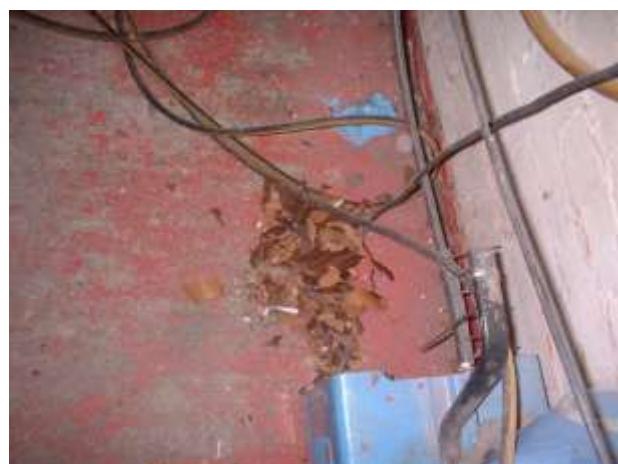
And here's a satisfying view of all the wood grain coming off the fender



And a casual view of my Lincoln Mark 8 patiently waiting for its new fuel level sender!



And here's all the wood grain vinyl on the floor rather than on the fender! Result.



A few decisions have been made on the car!

Firstly the colour has been chosen. I pulled up at a supermarket the other day and saw a Viper metallic Green VW Scirocco parked in the sun. It looked absolutely stunning.



Going to cause a lot more work, but when its sat on the floor on 20's or 22's with black glass, no handles or locks or badges or fuel filler doors or anything else that could stick out, I think it will look awesome!

The second decision is to go with a custom built 68 charger type front end where the 5th gen camaro headlights are buried behind a black grille, with the headlight doors that open. The bumper will be widened and smoothed and colour coded.

Another leap of faith eh?

14/2/2012

Primed reverse side of door this morning





and then stored it in my shed!! I now need the space to perform surgery on the fender.



I love the view of a totally smooth door



Here's the drivers fender stripped of the wood

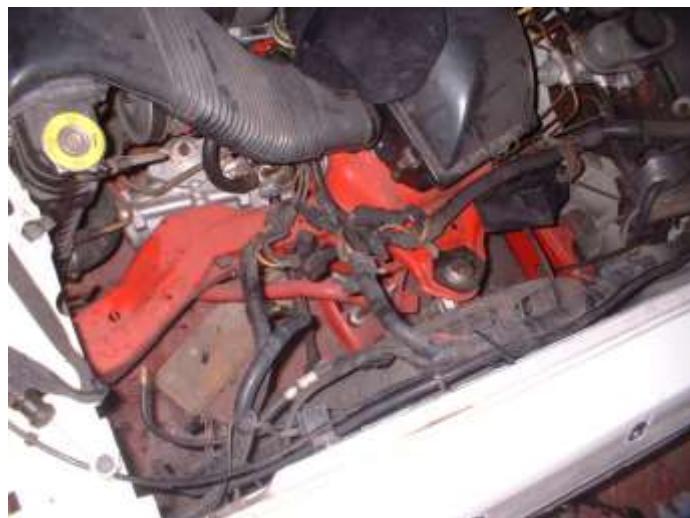


Now I need access to the back of the fender when welding the holes up, so inner fender needs to come off. Needless to say, I'm sure some fasteners will be seized.

Here it is before



and here it is after. Had to grind one head off holding the inner fender to the rad support panel down here, and sheared a stud under the vacuum reservoir. Both easy to sort.



Now its welding holes up time and then fender removal for media blasting

Out with the welder to fill up the holes in the fender. That rhymes!



Got too late at about 9 pm to grind steel, so removed the hood trim. Looks loads better now.





May be fender removal tomorrow to start prepping it for paint and a spot of media blasting.

26/2/2012

Stripped front of car down - here's a photo sequence.





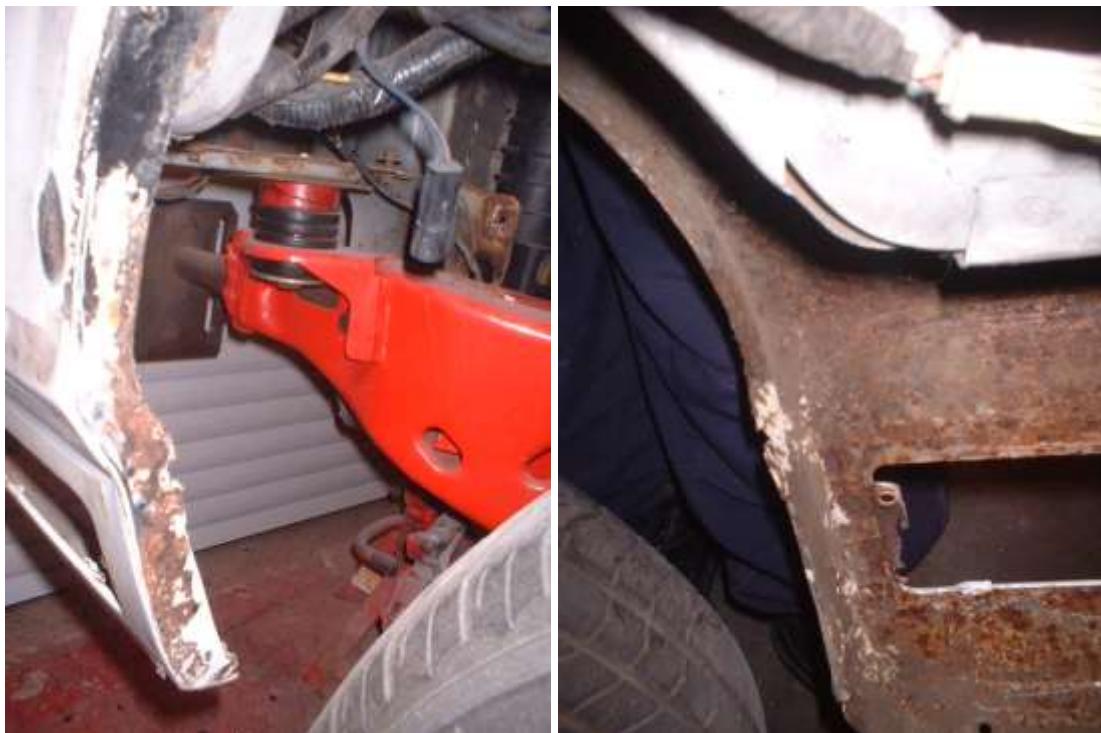
29/2/2012

Finally finished welding up all the trim holes in the front drivers side fender, and there were 22 of the stinkin' things!! Ford could have saved all that money on machines that stamped those holes out!

Time to weld in a patch to replace the light that was at the bottom of the fender, but I saw some rust behind there a while ago, so lets have a look



And here's a view of the lip that has been skimmed over by my grinder. The white stuff is bondo...



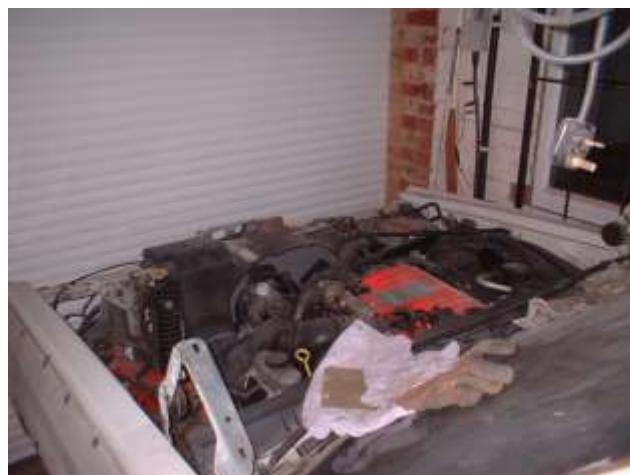
So its time for rust repair again! No panels available, so its back to the fabrication again. This car's got more rust than a rusty oil rig....

I'm going to reduce the fender lip by about half and separate the 2 skins, just like I did in the rear. I've got to make sure there is no rust lurking between seams to bubble through the new paint.

Better get my media blaster out then.....

3/2/2012

Okay so its hood removal time so I can get that fender off



Really surprised me how many bolts hold the fender on! 12 in fact!

This is the only one that didn't come out. It loosened and then kept spinning. No doubt the captive nut holder broke in half



So it was out with my air grinder to grind the head off



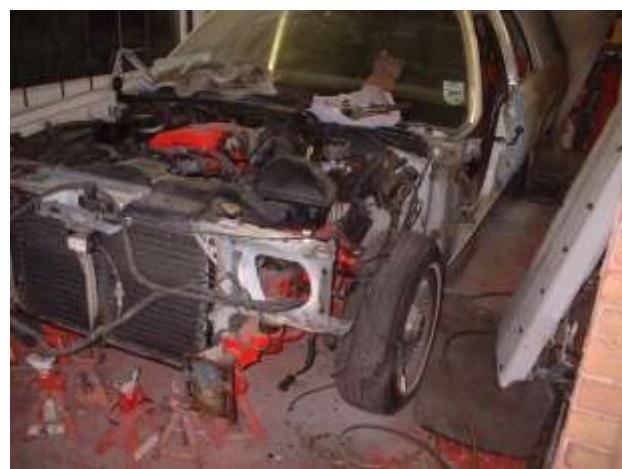
Fender came off but is that the remains of a bulb at the bottom of it?!! How the hell did that get there?



Doesn't look too bad at the bottom, but here's the other side



Looks a bit sad now!



I try to fire the engine up every so often, and today was it. But it wouldn't play ball-no dash

lights or any life at all. Finally spotted this connector that had literally fallen apart! And I had pulled apart a connector where the air compressor used to be. Oops! Started up straight away then.



More to come tomorrow, but the plans for the car are to complete all the exterior bodywork and assemble everything to make sure it all fits, the fun starts!!!.....

The major lowering will be the cutting of the floorpan and lowering the body over the frame.
Airsprings will take place of the coil springs front and rear. Shockwaves at the front.
The car will lay frame when slammed, and I don't care how much work that takes. It's do or die

The frame may need notching at the rear, and the upper and lower control arms at the front may need modifying, and even the frame may need Z'ing.....but I won't know until it all goes back together for a mock up, after the exterior bodywork is done. Even the body to frame mounts may need modifying.

6/3/2012

Time to remove the inner skin from the fender and see how far the rust goes. I'll also need more space for the wheel to go up into the arch when it lays frame! So here is the cut...



Here's the main section removed



Just leaving this section on the lip. Here's my fav air saw cutting through the top layer - I hope!!



Here's how far the rust goes up the inside of the front of the fender - it reaches up further under the inner skin than I thought.



Here's a few views of the fender lip that is left. I now need to remove the inner lip clean from the

outer one by grinding through from the inside and causing little or no damage to the outer



Just before I packed up for the night, I did a surprisingly satisfying job! Removed the chrome trim from the back of the fender near the screen!



7/3/2012

Managed to get an hour on the fender tonight and started to grind back the welds on the inside of the lip and peel back the inner lip. Here's the first bit bent back



And finally we are all clear



Rust has only gone through in 3 places but I will replace all the lip anyway.

I ran the grinder over the rusty steel and it looks far better than before



Rather than media blast the whole thing, I am going to use naval jelly(on liquid form) to eradicate all the rust. I am going to dip the fender into a BIG container and leave it for a day or so till all the rust is gone. then the welding starts.

Heres the back lower portion of the fender bent back to check for any rust under there.



Looks okay under there.

9/3/2012

Put the front end in a plastic tray full of deox c rust remover, and this is the result





Its just gone through in 1 pinhole here. One spot of mig weld and it will be sorted!!

11/3/2012

Put back end of wing in solution. Then I will media blast the lip and start fabrication/welding.

17/3/2012

Pulled wing out of solution and prepped it for etch primer.



8/4/2012

Bit more progress at last! I've actually restored another car in the time I've been away! Not a classic though. A small teeny everyday thing! A 1997 Ford Fiesta 1.4 Ghia



Anyway, back to the country squire. Time to weld up the light in the fender

Here is a patch cut to cover the hole



And the hole cut out very accurately for a butt weld



Tacked in



The welding caused slight distortion so I made a decision to replace the weak lip so I can panel beat it back to shape without losing the shape. So, a piece of wood clamped across to keep it all straight and out comes the first part of the lip





and new lip welded in prior to cutting to width



fully welded in



Now to panel beat it all flat.....tomorrow.

9/4/2012

Finished panel beating the lower front of the fender. Perhaps need one more dab of weld at the back in one spot.



Then took all the paint off the lip and other lower part ready for welding and prep. Noticed that there is some rust pitting there.



14/4/2012

Media blasted the corners and inside lip of the drivers fender.



Then went over the final pits with the die grinder and abrasive bit to really get rid of all rust (right hand picture above).

29/4/2012

Final job to do on it before prepping for paint is to replace a section of the rusty lip and reducing it all in width.

Here's the bad bit cut out



Part of a cornflake packet being used as a template!



To be honest the fender was junk! Its took me weeks to get all the corrosion off, and will take me loads longer to get it flat! But, none available here in the UK so thats that. And I've got to do it all again on the other side!

5/5/2012

Lip welded in



Now its time to reduce the width of the lip. Masking tape on and a pencil line to cut down





and cutting



Here's an interesting discovery. Final paint sanding and this line of rust appears through the paint





Same line with rust ground out



That would have caused some paint bubbling a year or so down the line.

Here is the fender all flattened back and ready for a skim of bondo and primer.



6/5/2012

Put a skim of filler over various sections of the fender, and then moved over to a very suspicious looking A post. I am going to peel back the layers to see what is going on.





10/5/2012

Anyway, finally finished removing enough steel to know roughly why its rusting.
Take a look here



I think the moisture is coming down the A post here as well as creeping around the hinge.



I'm going to have to cut out here and replace this first



But its dash out first because I ain't setting fire to it when welding it up! And I'm going to need full access to the firewall when moving the floor up.

13/5/2012

Started to remove dashboard. Took hours but I am stuck on the 2 huge looms going through the firewall. The drivers side eventually came through but the other side goes under the heater box. Here's where we are so far



So it looks as if the pass inner fender will have to be removed to get access to the underside of the heater box.

14/5/2012

Car pushed out of the garage slightly to get access to the inner fender bolts



Took a big decision to junk the AC stuff. For 2 reasons mainly - keep the car as simple as poss, and I don't know how long it has been not working for! Could be really expensive to get it back up and running. So out it goes.

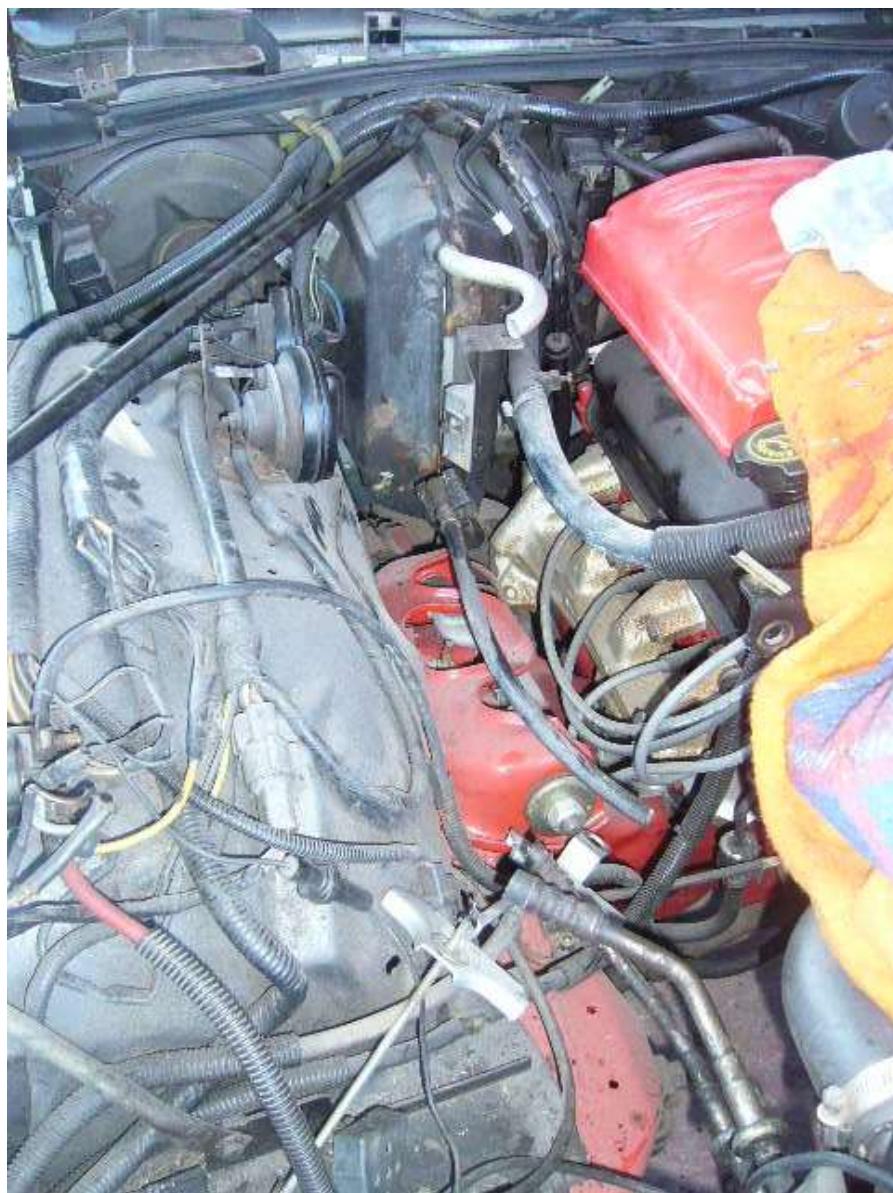
Here's some AC debris that has been removed



Heres a view of the AC rad still on the car and one with it off



Heres a lot cleaner view of the engine bay without most of the AC components there



Inner fender removed at last



Wiring pushed through into pass compartment next, and most likely heater box removal.

16/5/2017

Took me about an hour to remove the fan resistor 8mm bolts here



The connector looks like this though - needs cleaning up before it goes back.



Finally got the dash clear and put it in the shed





19/5/2012
Removed airbag safing centre from bottom of A post



And saw this rust in the corner



Removed ECU and put it safely out of the way because I'm welding very near it.

Cut out the final heavy rust on top of the A post and accidentally cut through another plate underneath!



So cut further back and welded it up



Made up a plate to butt fit and welded it in



Need to sort this out



20/5/2012

Ground out the rest of the remaining rust on top of the A post



And made up a plate and drilled holes for spot welding through



Then marked the spots on the A post where the spot welds are going to go and then etch primed it. Also the back of the plate.



11/6/2012

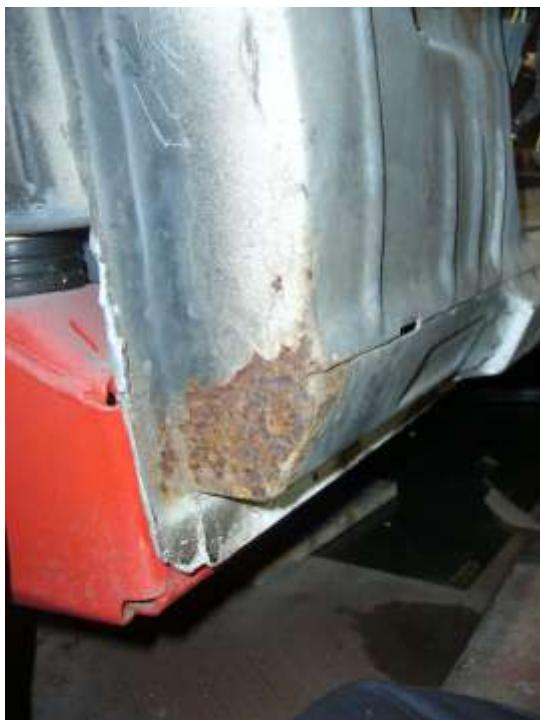
Here's a series of photos to illustrate the repair of the bottom of the A post and the nearing completion of the top of the A post.



Rust proofed and seam sealed



Heres the bottom of the A post with a plate fabbed and drilled with a rustproofing access hole and fully 3125'ed and etch primed.









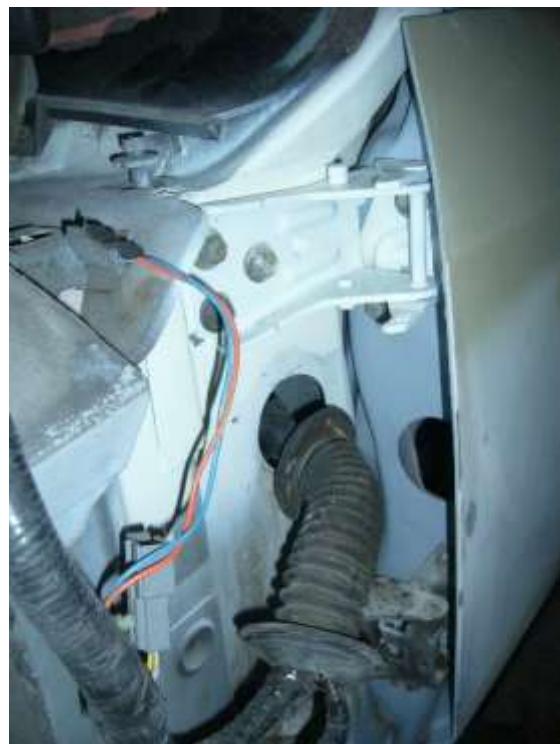
19/6/2012

Now top of A post is repaired, the top hinge is a rusty mess! here it is after it has been dipped in acid



I like the tide mark! I left it in for a week because I forgot about it. Oops!

here it is painted and installed



Which brings me round to the refitting of the doors and the PITA lining up of everything.

Did it all line up? Err.....no.

I had to cut the frame clear of the rear door again because it was too far in towards the centre of the car when closed and forcing the top of the door out.



Serves me right for welding it up when the car wasn't fully assembled.

After what seemed hours, we have an almost good alignment between the doors and the rear quarter, apart from here....



The bottom of the rear door wants tapping in slightly to line up, A block of wood and a hammer will do here!

Here are the door gaps. I want them nice and tight.





I still like this view of the quarter with no fuel filler door there though! Smoooooth.



I have also spent hours on the drivers fender flattening and spraying - pictures tomorrow.
I really hope it fits against the newly lined up drivers door!

2/7/2012

Epoxy mastic 121 used on the inside of the drivers fender.



And wing put back on the car



I now need to move the car over (after welding up the door frame on the back door, which I've forgotten about!). But as a break from the constant bodywork I'm going to remove as many unnecessary wires from the dash eg air bag wires, compressor wires etc.



6/7/2012

Finished welding the window frame on the drivers rear door at the back, but only tacked the front. Needs finishing when the door comes off when all the bodywork is done.

But its time to push the car over on the jacks and get stuck into the other side. Here it is in its new place for a few weeks.



7 and 8th July 2012

Removed the fake wood trim from the front door.



Stripped out the rear door and put a sequence of photos in the photo section to show how it all goes back together!



9/7/2012

Back to bare metal round the handle area



Always amazes me that a straight hacksaw blade can cut round corners!!



Patch cut out and stuck in place with duct tape and a magnet and tacked in place



Finished welded over the next hour or two (taking it slow to keep distortion to a minimum



Don't let appearances deceive, there is distortion there that will take a few hours to sort out by tweaking and tapping and levering..etc!

Also managed to grind away all the front wing trim fasteners and welded up the first few holes at the top.

Started to think about the wheels and tyres I will need. Original sizes on now are 215/70 15.

10/7/2012

Made a new worktop!



Door off and onto worktop and bottom stripped of paint to check for rust and to be able to skim the bottom with filler after I unfold the bottom lip and straighten it all out and remove the minor rust.



Bottom lip folded back and immersed in a custom phosphoric bath made out of old guttering!!



13/7/2012

Front passenger door card stripped off and window put in position to grind out the rivets tomorrow.



17/7/2012

Last few days I have welded up the pass front door lock, handle and mirror holes.



Also pulled the back door out of the acid bath and tapped it back down after drowning it in dinitrol 3125.



Also managed to strip out all the airbag wiring from the back of the dash after removing the heater ducts first





21/7/2012

Heres the extension to the window channel inside the rear passenger door



This has now gone into my acid bath at the top of the garden!



Here's the rear pass door skimmed with filler and awaiting primer



And the back of it already primed



Moving onto the fender and off it comes



This is a familiar view of rust carnage..



I'm going to cut the hell out of it tomorrow with my air saw!

22/7/2012

inner fender cut out exactly as the other side and the lower front sat in my acid bath



That will be in there for a day or two so its onto the front door. Onto my worktop it goes and the base stripped of paint just in case there is any rust underneath



Which is a good job because if you look closely in the next picture you will just be able to see some rust marks that would have bubbled the new paint up.



I knew of the underside rust but hadn't seen it for a bit, so door turned round and here is my next job!



Should be simple enough to sort out....lip bent back, rust cut out, a spell immersed in acid and weld in new steel.

25/7/2012

Rescued wing out of acid bath and put back edge in.

Also put base of front door in the guttering acid bath.

26/7/2012

Welded in new sections at the base of the front door where the rust was. Now needs grinding back flat.

27/7/2012

Remember the rust at the base of the passenger front door?

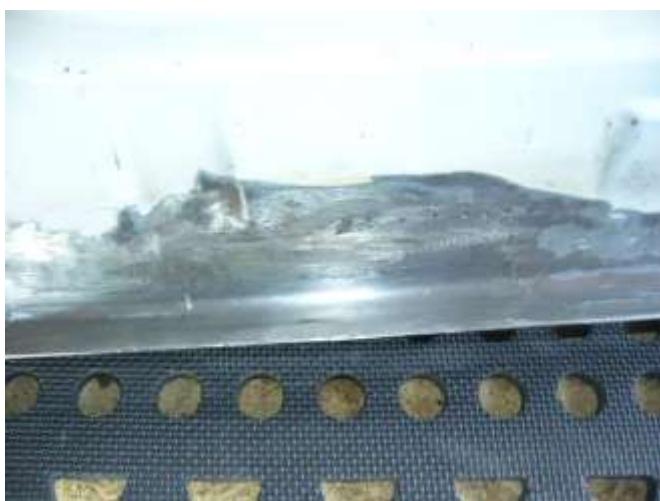


Which turned into this





and finally into this



That has now been seam sealed, so back onto the fender. A puddle of acid to get rid of some more rust



Leave that do do its work and onto the hinges on the passenger A post.
The top one had been welded for some reason. You can just about see where the weld has pulled a lump out of the corner of the A post



and the corresponding hinge



pity you cant see the lump of weld on the hinge face in the photo very well.

I'm moving on a bit so I can get this car channeled within the next 4 weeks or so!

12/8/2012

Managed to get the passenger front door filled and etch primed but need to flat it down where the mirror and handle/lock used to be.

Onto the top of the A post. Cutting through the layers bit by bit.





13/8/2012

Metal cleaned up as far as I want to go



Worried about how deep the rust goes on that corner, so out it comes as one unit



Heres the top of the panel removed



and the other side



Really surprising that it has only gone through in that one area.

New steel going in tomorrow.

This was an interesting sight. Loads of media from the blasting I did over a year ago.



16/8/2012

Plate welded in



and welds ground down



Final plate made and holes drilled for spot welding. Notice the painted panel under it with masked off areas where it will be welded through



Welded in



have a look at this for welding penetration! Gone through 2 thicknesses!



Heres where I think some water gets in to the A post. Here I am levering up the panel at the bottom of the windscreen revealing a gap where the sealant has gone.



Onto the bottom of the A post. On the other side it was rotted out, so I thought I would cut this side out to check



Looks good this time but the inner rocker has some corrosion on that may need doing.

18/8/2012

Managed to get rid of all the corrosion by using the air saw as a descaler and the air grinder with the carbide burr on.

Welded in a new plate and seam sealed, etch primed and rustproofed.

Minor filling done on top of A post and etch primed.

Next is a clean up where the bottom hinge goes and the doors are going back on. Then fender repair time, then total strip down and brace up for cut.

1/9/2012

Welded aerial holes up and underside of wing painted with epoxy chassis paint and left alone because it stinks.

4/9/2012

Filled and etch primed the top part of the wing. Next need to fill and prep the arch and the lower 2 sections of it.

7/9/2012

Lower sections filled and top of fender sprayed with primer filler.



23/9/2012

Up to this date I have managed to finish off the wing and the doors



Also stripped out most of the firewall (wiper, heater box etc.), and gutted the interior. Photos in firewall and interior folder.



24/9/2012

Got car moved into the centre of the garage and up on 4 railway sleepers

25/9/2012

Fuel tank removed and front rad and core support removed.



6 jacks ordered this morning off ebay. Hoping to remove engine at the weekend.

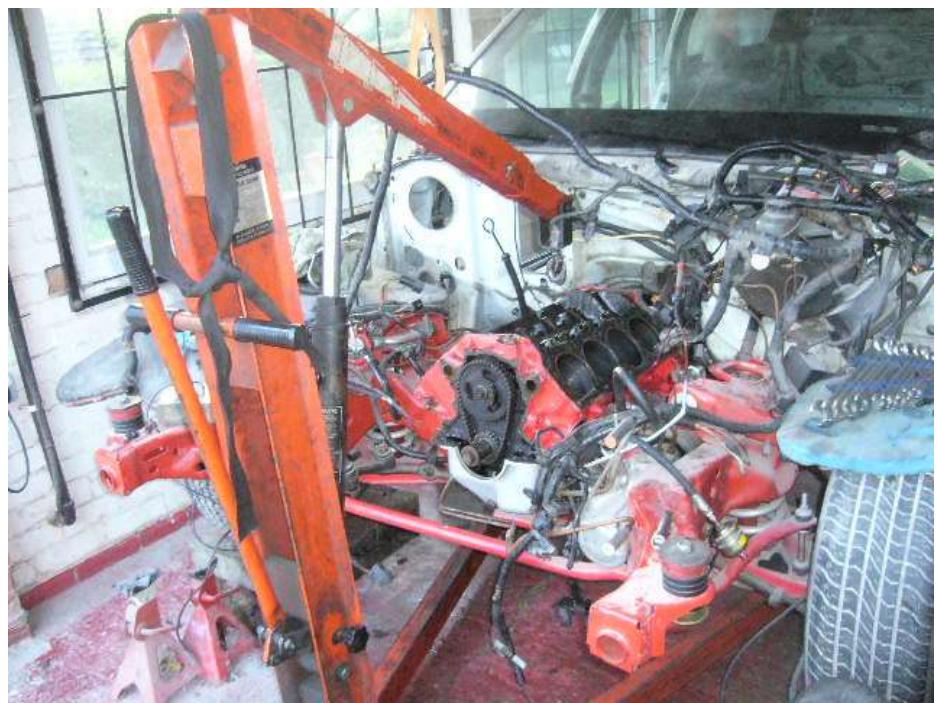
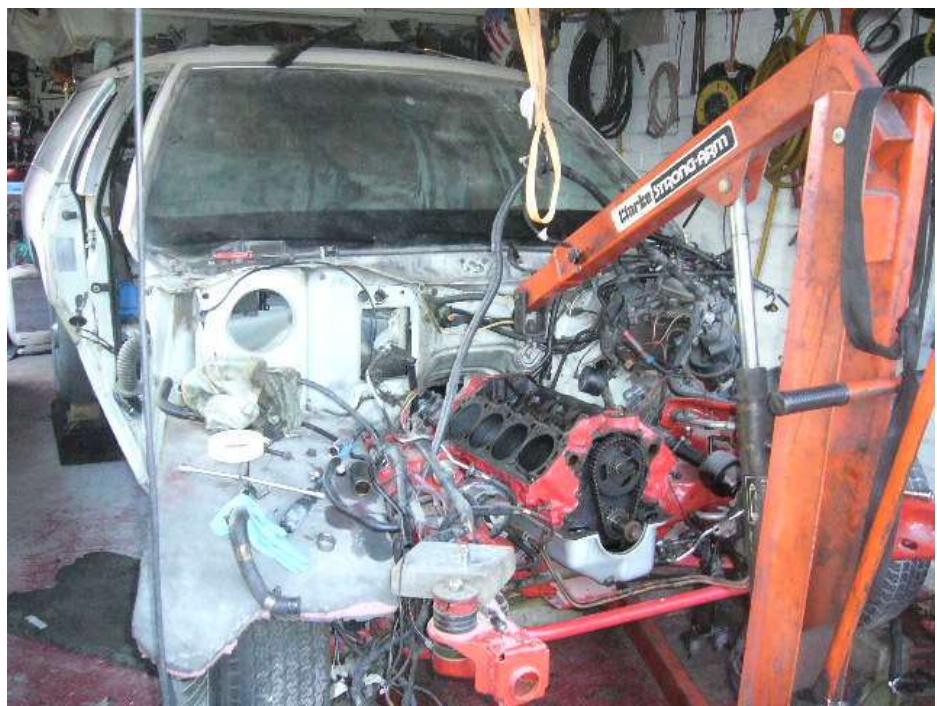
26/9/2012

Removed plenum, alternator, power steering pump and fan/pulley.

Gave Trevor a ring at B & H Autokraft in Doncaster to see if he will build me an engine - just like old times! He said he would.

27th, 28th and 29th/9/2012

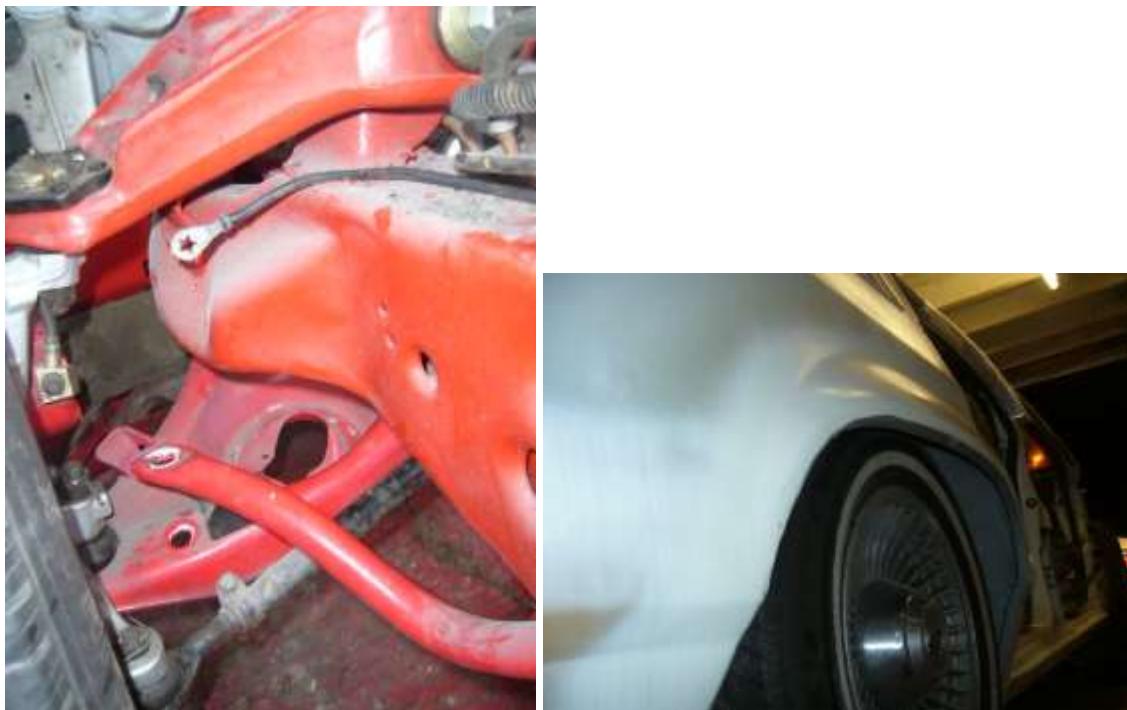
Borrowed engine crane from station lane and finally managed to remove engine and transport it to B and H at Doncaster. Then took crane back and borrowed Jamie's spring compressor.





30/9/2012

All springs removed and car dropped onto its bump stops. Need to drop the body 10cm to be able to hit the floor!!





6/10/2012

20mm angle iron bought and welded in position across the A, B and C posts and connected to the D posts



Sure looks naked now...



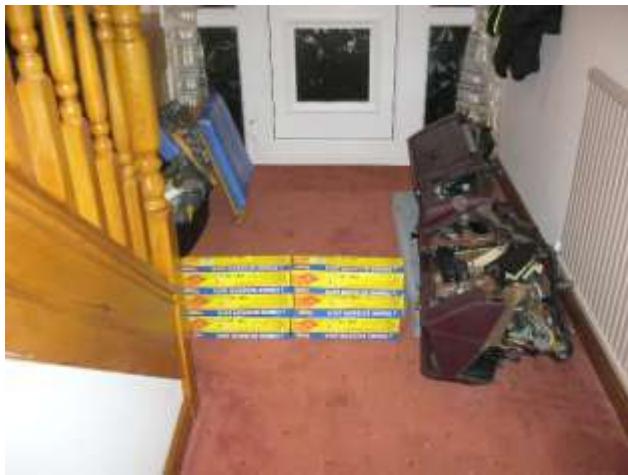
7/10/2012

Since I haven't got a fancy 2 post lift, I'm going to have to use 6 scissor jacks to lower the body down over the floor.





I've even managed to persuade my lovely Wife to let me leave the dashboard in the hallway!!



13/10/2012

Welded in heavy plates at the bottom of each A and B posts.





14/10/2012

Removed both rear tailgate area sections today to clear the decks for the up and coming cut.

Before



After





20/10/2012

To get the chassis rails higher up into the body, I need to shorten it and consequently move the rear body mount forward out of the way.

Heres the start of the access



I need access to the top of the rail, so out comes the section above it



Chassis marked for cutting



And cut out



Heres the old mount position compared to the new position



28/10/2012

Rear floor cut right across the back so it can go up when the body is dropped around it.



I now need to remove the top of each rear wheel arch to enable the wheel/tyre combo to go further up

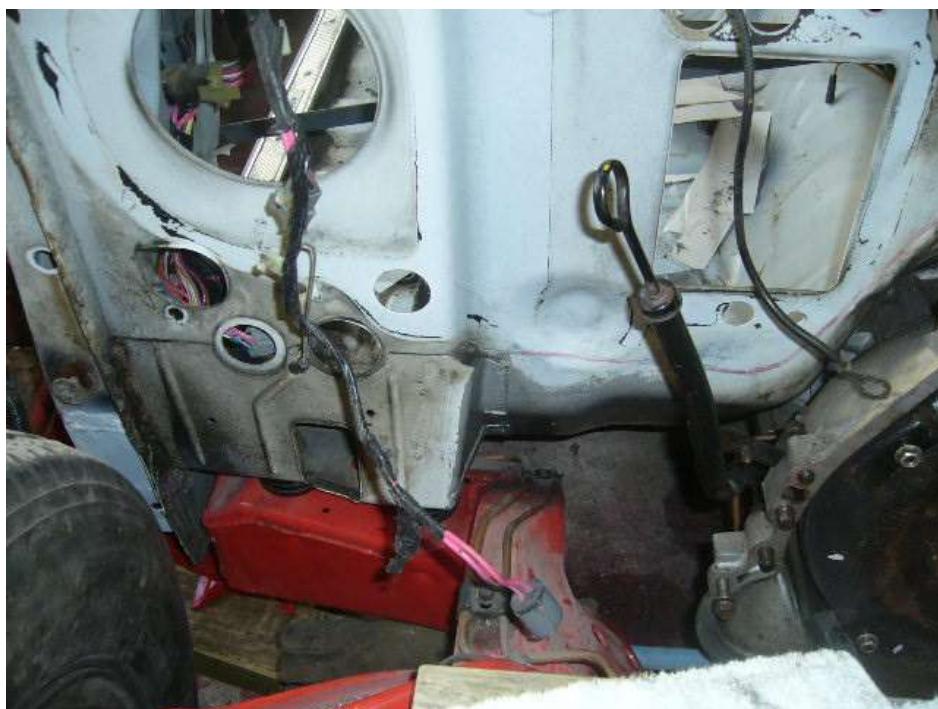




Heres the level marks to determine when the floor is at the new desired level. Lowest mark is at 6cm, then 8cm, then 10 cm.



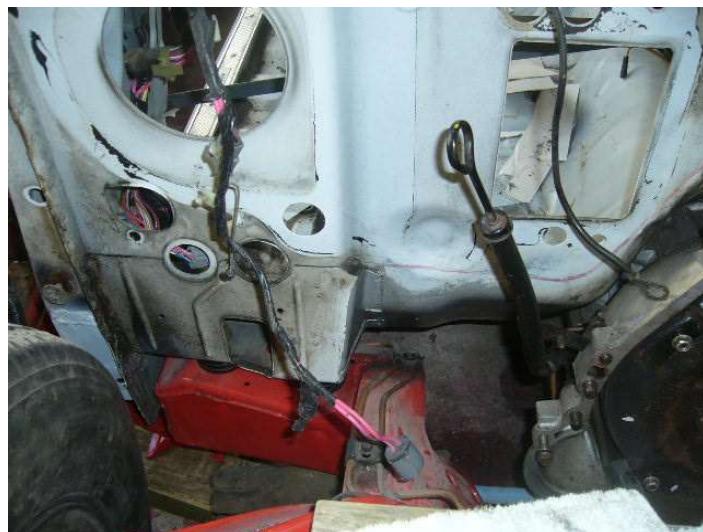
Here is the intended firewall cut - red line you can just about see.



I will cut out the steering column hole (red line) (can you cut out a hole?!!) and weld it back in later.

29/10/2012

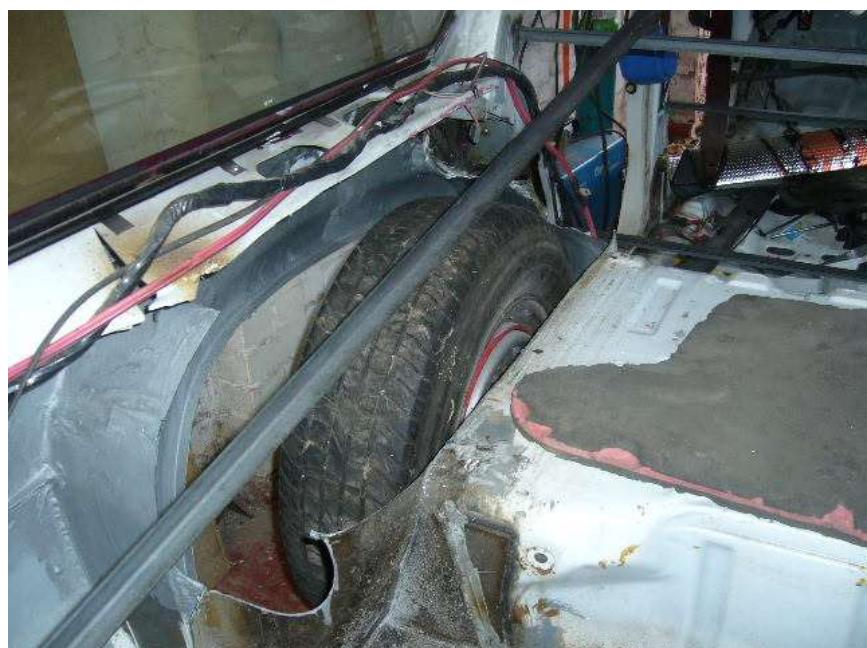
Here is the intended firewall cut - red line you can just about see.



I will cut out the steering column hole (red line) (can you cut out a hole?!!) and weld it back in later.

31/10/2012

Final bit of cutting done before we get to the firewall and the big cut!!







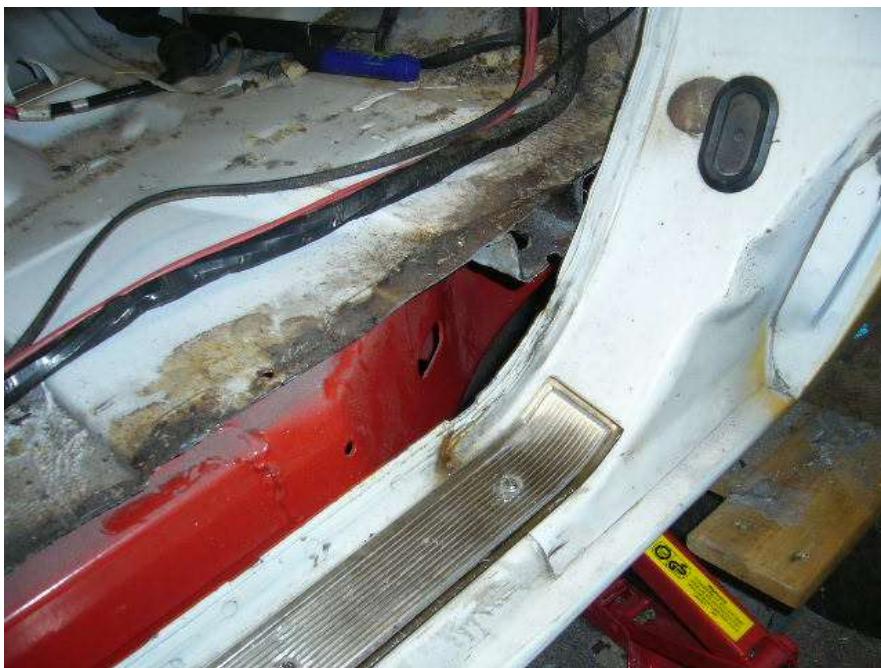
8/11/2012

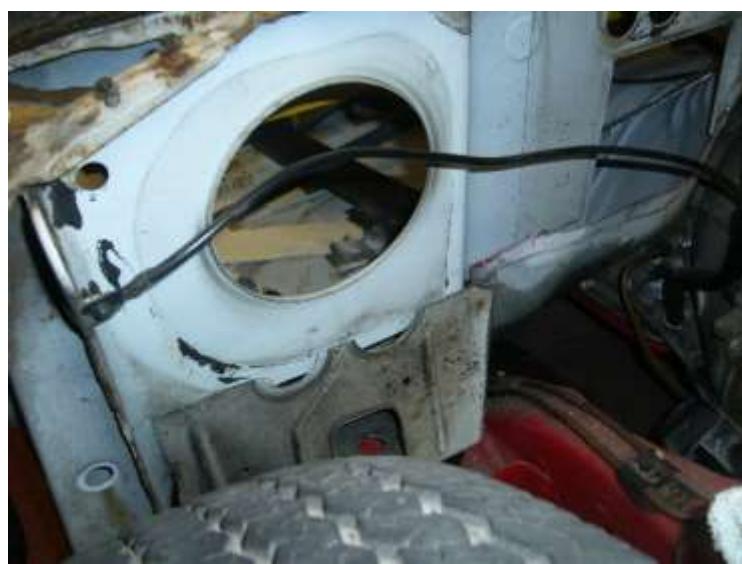
Here's a chunk of the firewall missing to enable the floor to move up 10cm.





And here's the floor finally moved up 10 cm all round..







Here's a view of the rear tyre/wheel looking good tucked up underneath!



View from underneath later.

10/11/2012

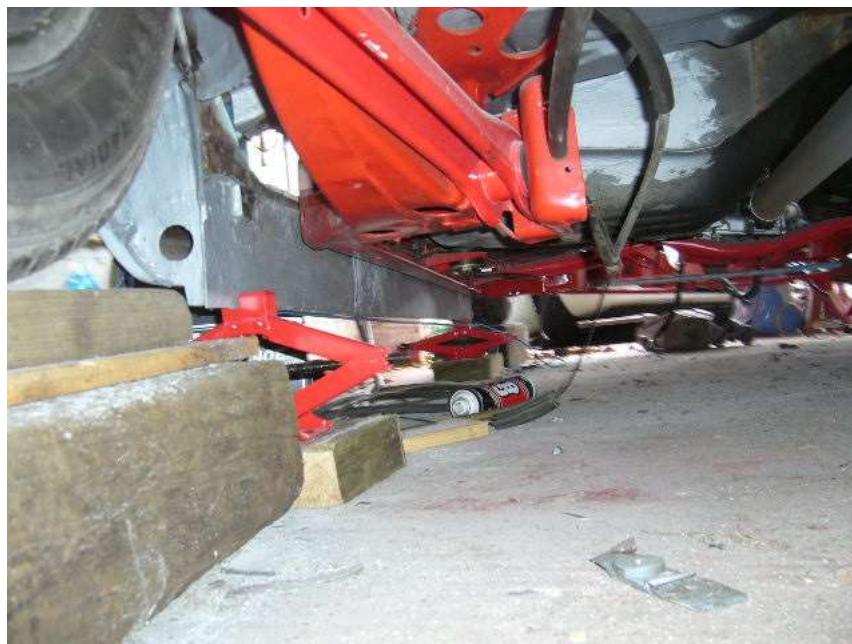
Heres a view of the rear of the frame legs before and after the body drop



This is how far the frame sat below the rocker panels before the body drop



This is where the frame is now





I suppose this is why a box cannot sit on the floor because the frame and exhaust sit below the bottom of the rockers, no matter how far its lowered on the springs.



A lot of work though just to be fashionable and radical!!

19/11/2012

Right, need to weld the floor back in its new place.

Starting at the back (because this is the hardest part!). Heres a view of the back left frame rail



And here's a new mount tack welded in in a new place



And a view from underneath



The plan is to take most of the winter welding the floor back in and then roll out the chassis from underneath and finish weld the body underneath. Then prep and paint.

Chassis back under and start to fit everything back (but of course most things wont fit anymore!!). Engine might be rebuilt by then also.

Phew, this could take some time!!

21/11/2012

Another layer fabricated to go here

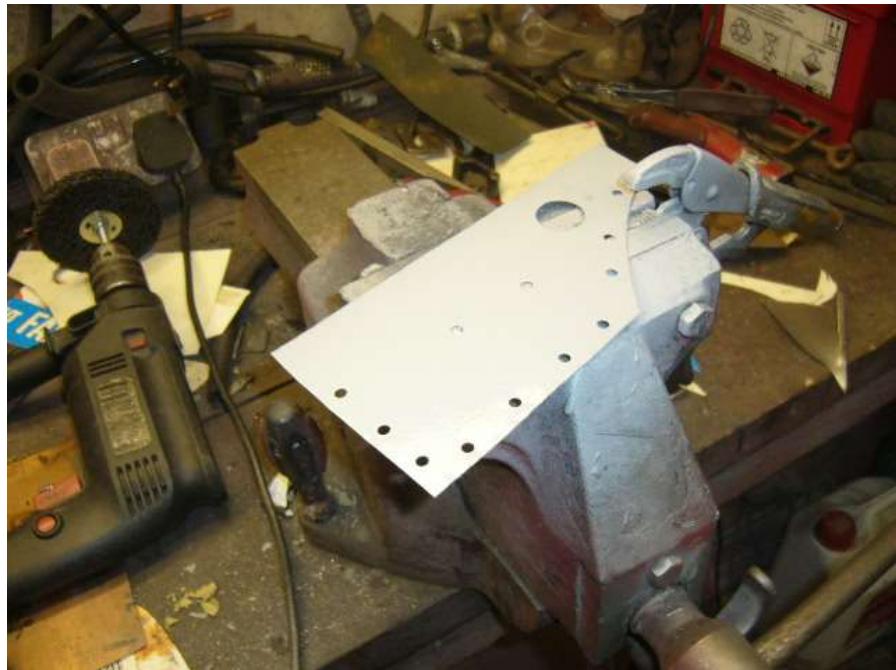


and holes punched in it to spot weld through

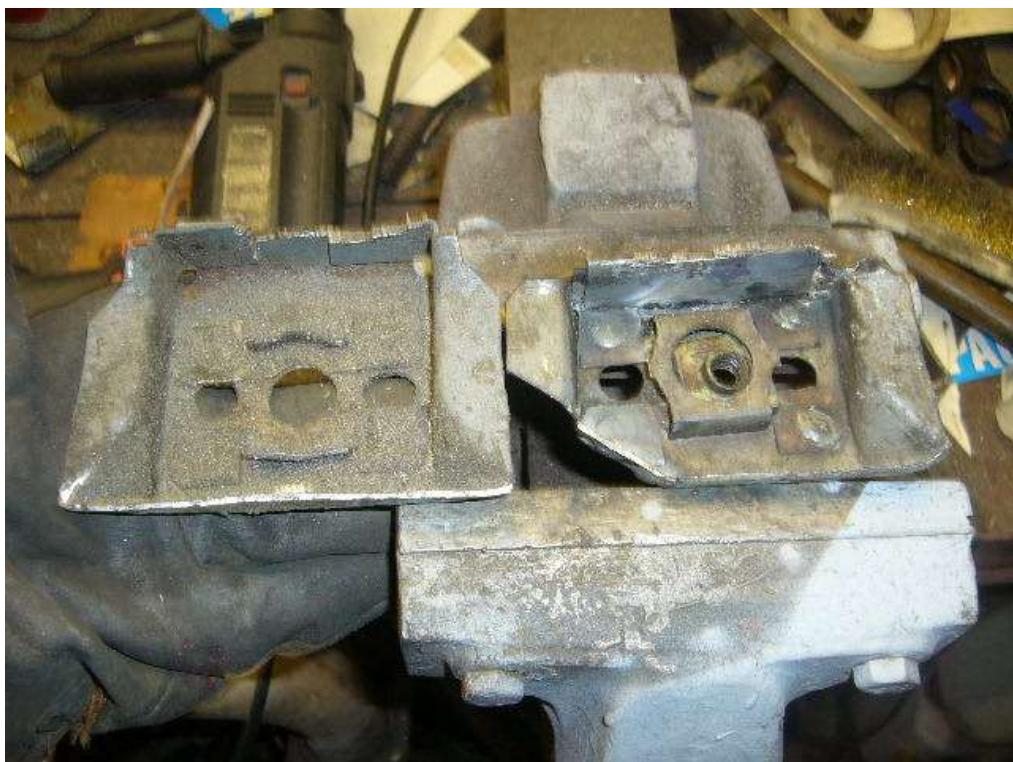


Masking tape put on where welds are going to be and etch primed on both plates and welded in





Captive bolt frame modified to fit. Look at the before and after....



and welded in



Sorry about the poor picture.

27/11/2012

Here's where the rear floor ended up when it went further up into the body (red arrow)



Here's the section I cut out (photographed it out of order!! Sorry.



This is so I could weld it back further down





Corner gaps welded up with filler strips



Here's a card template made of the new side panel being made to tie the rear of the car (D post) to the inner wheel arch.



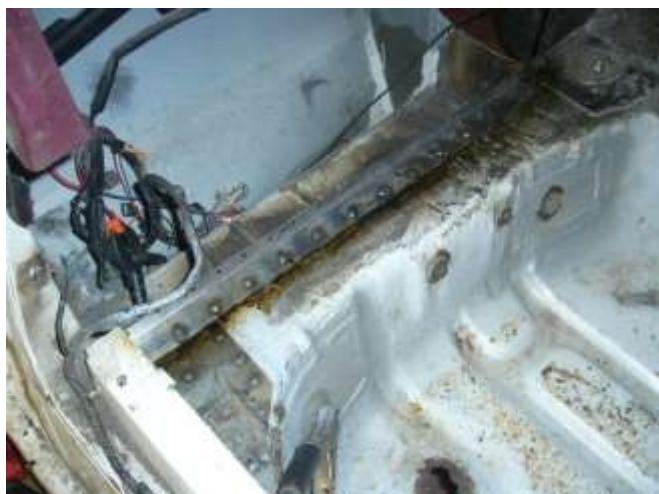
Make it out of steel tomorrow.

2/12/2012

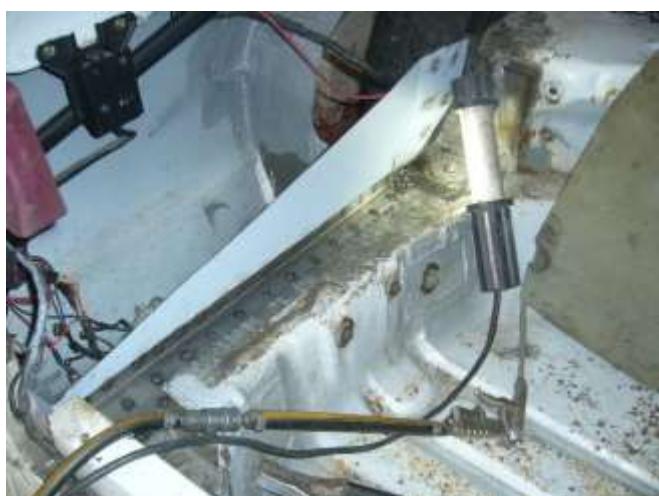
Trial fitted the side panel and a right angled strip



Strip spot welded in on top of rust proofing fluid that has now flowed all over because of the welding heat



Vertical panel etch primed on the planned tough to reach areas and spot welded in





Next I will produce a second vertical wall running alongside this one and close it all off to mimick the factory setup.

4/12/2012

Starting to close off the side section with the boxing in of the frame captive nut





Top section made and clamped in place. This will be spot welded and plug welded in- but not before sealing it all inside with rustproofer.



6/12/2012

Here's the closing off side section and the top being spotwelded together



And the finished product



Here it is in place as a quick check for fit



Tomorrow it will be removed and seam sealed inside and etch primed, then fully rustproofed before finally welding in.

8/12/2012

Rectangular body mount access hole cut out and edges flared to retain some rigidity.





3 more access holes created by my sheet metal punch





Welded joints seam sealed and inside of panels etch primed and painted white for rust protection once it is all welded in and inaccessible



All welded in...



Tomorrow I'm going to etch prime, prime and paint that area green - just to see what it may look like when the car's painted!! Bit of motivation.....!

16/12/2012

onto the other side.

In this shot you can see the edge of the floor and where it has been cut from the rest of the body



Heres a view from above that shows how much of a gap I have got to fill! Its taken from the top downwards if you are trying to figure it out



Heres the first side panel made up to fill that gap and a right angled section spotwelded on for

the floor to be welded to



Welded in and thoroughly rustproofed before anything else

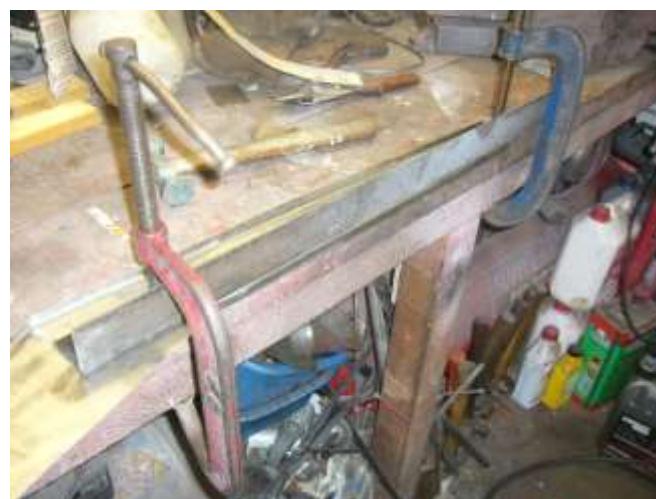




Cardboard template made up for next section



Transferred to steel and here is how I put the right angled bends in





Card template made of side section



New steel cut and shaped and offered for trial fit. Not bad!



Now needs the body mount access hole and rustproofer access holes. Here is the way I get the flares on the corners...with a 3/8" extension bar and a hammer! And some mole wrenches to start the bends off.



Before it gets welded in the whole interior section gets further rustproofing and the new steel gets seam sealed, etch primed and painted white (spare colour left from previous touch ups when the car used to be white!!



Now I've got to wait for the paint and rustproofer to set/go off before welding otherwise it all goes up in flames. Still produces loads of smoke though!

18/12/2012

Finally finished welding it in! And loads of rustproofing injected inside.



And onto the front. The firewall to be specific.

Ran a few short welds so far on the passenger side.



Have to be careful here because I am welding galvanised steel and it gives off small quantities of cyanide gas! I'm trying to grind the coating off where I can before welding.

20/12/2012

Finished constructing and tack welding the firewall.

Firewall tacked together and gaps filled in at the side and just under the servo lower holes.
Excuse the rusty appearance, I've not cleaned it up yet!!



I like this shot. Shows how far the front tyre/wheel goes up on full drop



Another general shot



Heres a view of how far the servo has gone down. It is very close to the brake pipes, but still fits.



The steering column intermediate shaft goes through the firewall 10 cm further down than it used to do and I will have to make it JUST clear the servo and modify the shaft to work.



24/12/2012

New extended "step" made up out of 3mm steel sheet and welded in place.

24/12/2012



I will weld the floor back to this.

The weatherstrip will go along there so will have to be shortened. The bottom inside face of the door will have to be reshaped and the door card shortened.

25/12/2012

Started to fabricate panels to close the gap between the floorpan and the sills.....

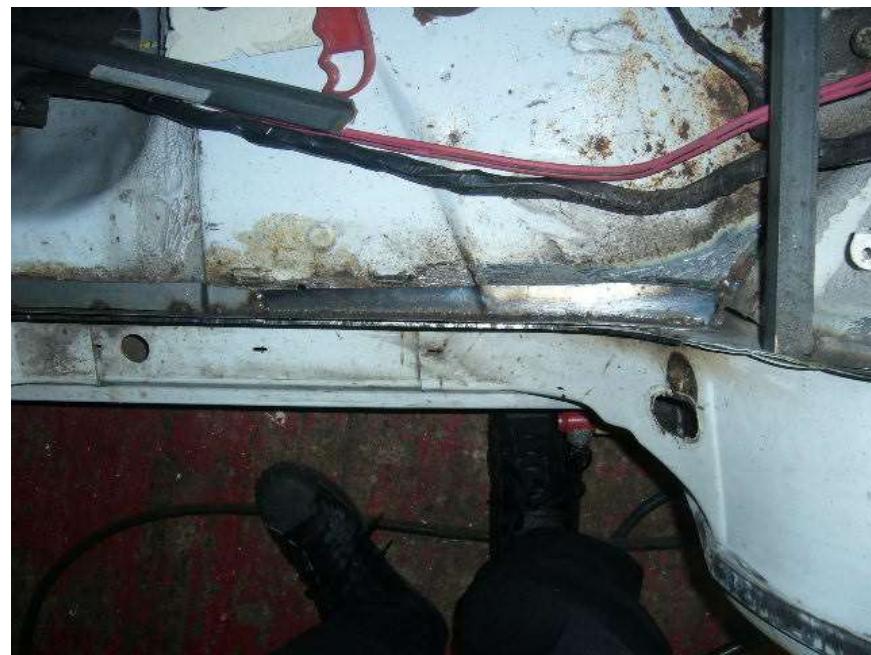
26/12/2012

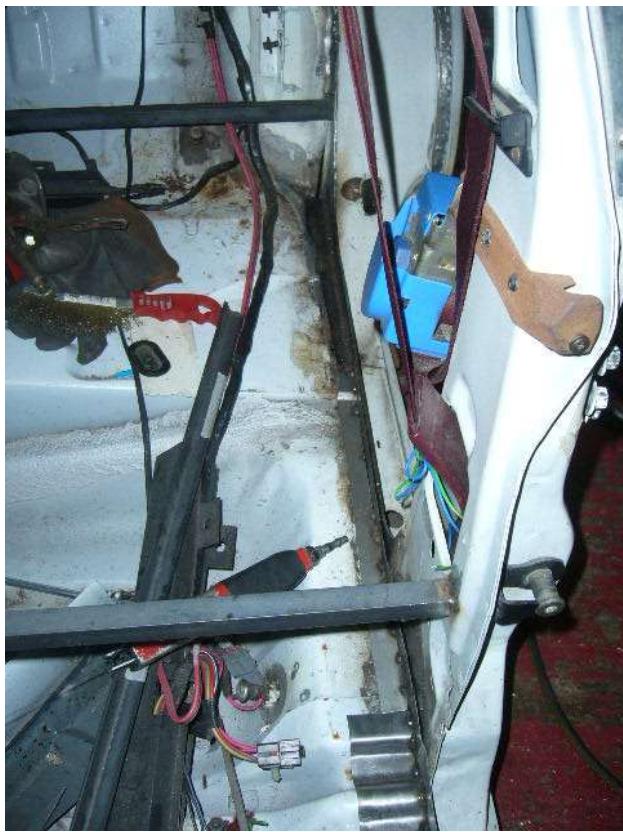
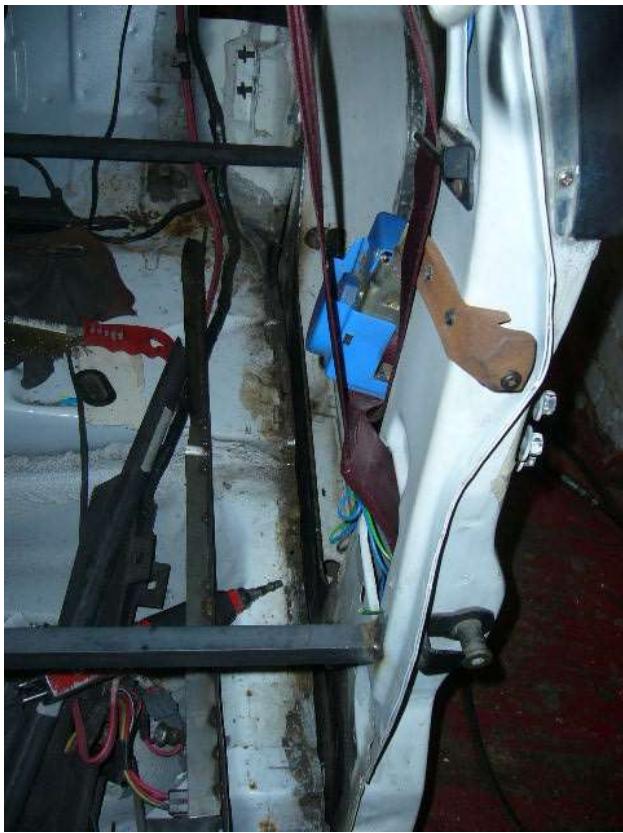
More panel fabrication...

Started to close the gap between the rockers and the floorpan on the drivers side.
Hope you all can understand this but here is the gap



Here's a patch welded up to go in that gap







Bending that wavy section took some considerable time!!

I intend to spot weld it to the floor pan and spot weld to the verticals then seam weld across the floor to stiffen it up.

Interestingly, in a few weeks I have to get the body up high off the chassis, wheel the chassis out and work underneath for hours then wheel the chassis back in overnight.

No 2 post ramps here. At the moment I have 3 block and tackle systems ready to go to raise it up but may incorporate other ideas yet.

27/12/2012

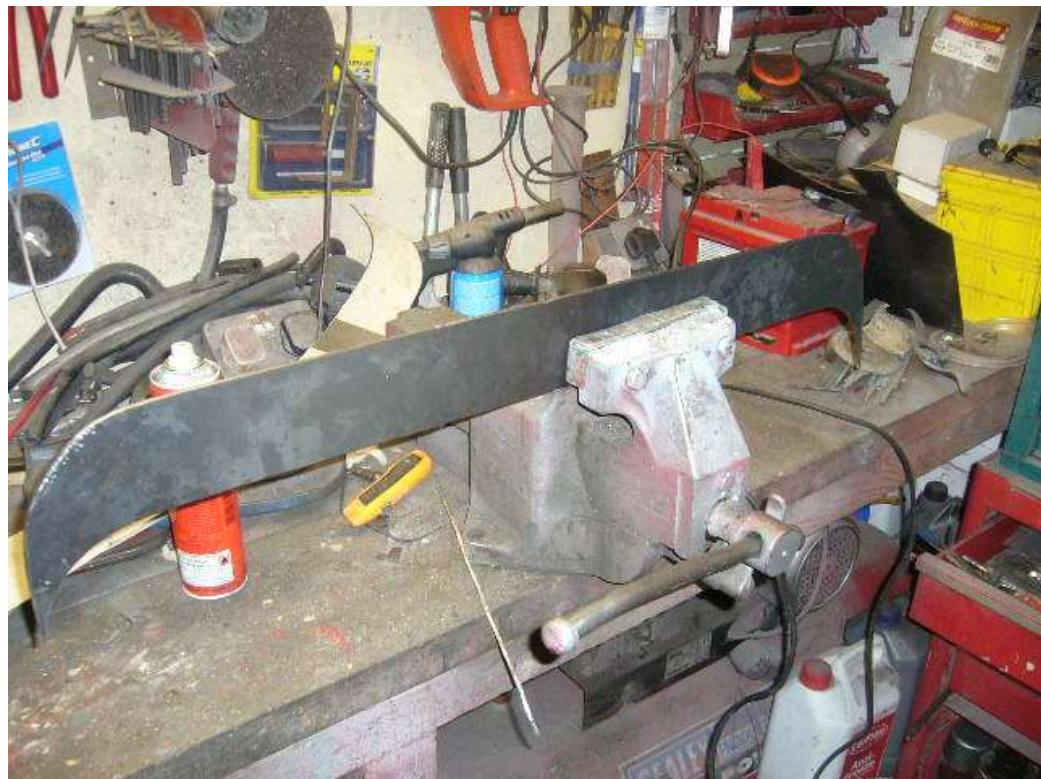
Bolted the servo back in and shortened/rebent/reflared the pipes to it. But not before cleaning up the rear of the MC and associated hole in the servo with files and wet and dry.

This photo shows how far the master cylinder has moved down!



31/12/2012

Heres the 3 mm thick steel plate cut out



to fit here



No plasma cutters or any other fancy profile machine! Just an angle grinder, air saw and die grinder! Took about 2 hours!

Here's a shot of the floor finally welded back to the body.





3/1/2013

While I am welding on the passenger side I spotted the fuel filter bracket bolted to the frame.
It was the only bit I didn't have blasted and powdercoated. So off it comes and here it is





Just a little bit rusty then! So it goes into my acid tank for a few days and I will then weld it up

New rocker extension welded in where the rear door is

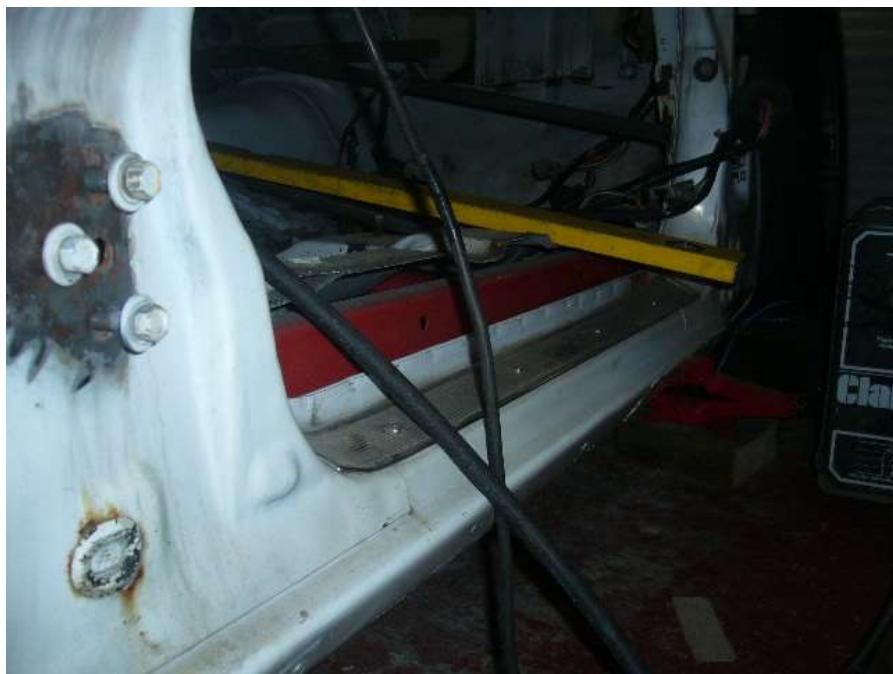


Now I will have to fill in this gap





Here's the next gap to fill in

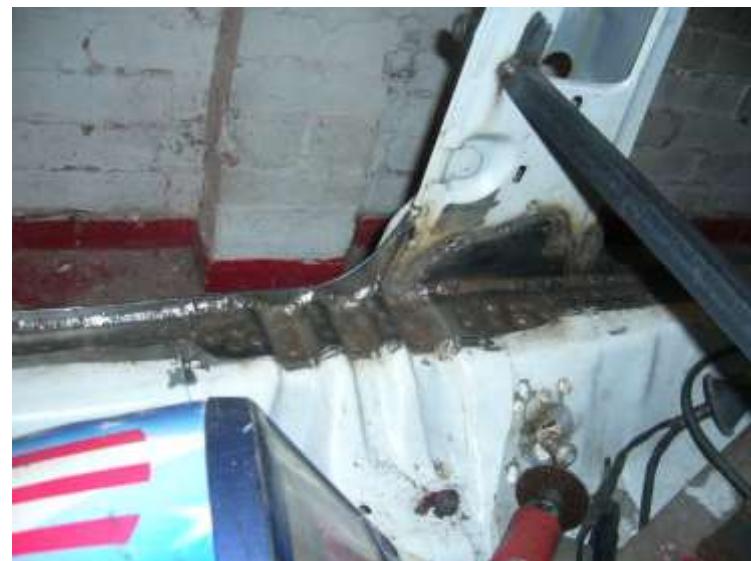


5/1/2013

Got a call from Trevor at B and H to say my engine is ready!

6/1/2013

Decided to fillet weld the floor back to the rockers on the passenger side this time.





Right at the front is a bit awkward.



So I made this panel



to go here.



then welded up and panel adhesive where I cant get to weld



Onto rear wheel arches next! Oh and my engine is ready to pick up! Fully rebuilt.

8/1/2013

My garage is quite small and I have absolutely no space left to put my new engine on a stand let alone paint it! This is the space at the back



and the front rails of the car is up against the roller door at the front!

So where the heck do I put the engine so I can paint it?

Then I had an idea! Put the engines stand in the engine bay. Will it fit? Have a look



I know it will be a PITA to get round it but it is possible. After painting it I will hoist it off the stand and bolt it back into place and assemble the engine in situ (the block already has the bottom end in, its just minus the heads and everything else!)

This may work!

11/1/2013

Put cylinder heads in the back of the car to go to Donaster tomorrow and pick the engine up and drop them off!

12/1/2013

Engine pickup day! And cylinder head drop off at the same time.

Here's the plastic wrapped thing in the back of our Chrysler Grand Voyager



and the crane ready to pick it out



Here's sneaky peek at the top of one of the pistons



and onto the engine stand!



I've had a standard rebuild but with the exception of higher compression pistons to make it slightly more "peppy!" but without causing any pinging with our fuel.

Painting it next and then assemble time, once the heads have had their 3 angle valve job etc. Nothing fancy but more modern!! My performance engines disappeared with my youth! Now its slow and low.

Trevor has not got the bill sorted yet.

Can't paint the engine because it is too cold.

21/1/2013

Had a bit of a break from the continuous welding and fabrication!.....

But, back we are!

Here's the back passenger side rear wheel inner arch tacked back in 10 cm higher and slightly recurved tighter



This means that the back seat upper cushion will probably not clip into the catch, so that will need repositioning slightly.

Because its double curved, I filled up the hole with a few panels, not just one



We had a bit of snow today, enough to close most schools so I had a day off!



26/1/2013

Forgot about my fuel filter bracket in my acid bath!

This is what it looked like before



And this is how it came out



I'll weld that up the next few days, while the "welding the floor back to the bodyshell" continues into, what seems like its millionth hour.....

27/1/2013

Over to rear drivers side wheelarch. Here we are tacking it all back together





29/1/2013

Closed off part of the inner wheelarch.





Getting close to body off time. Just some finish welding to do. And engine block to paint and install and we are up and away.

Heads rebuilt - phosphor bronze valve guides, 3 angle valve seats..

5/2/2013

Went to Doncaster to pick up my heads and pay for it all. £1350 for cash.



Tapered plug fitted to seal off unwanted passages



Etch primer



and bright red!



Onto the engine-bored 40 thou over





Oil pan and timing chain cover next.

5/2/2013

Sprayed oil pan and spreaders silver after etch priming.

6/2/2013

Timing chain cover prepped and etch primed and painted silver.

8/2/2013

Spent too many hours prepping and painting engine parts..

Oil pan...



Timing chain cover



Water pump etch primed



and painted red



This weekend its back to the welding!! I'll see if the back seat will fit and if my head catches the

roof! As if I'll be sitting there anyway.....

I know for certain the back seat rear squab wont latch because they are in the wrong place!

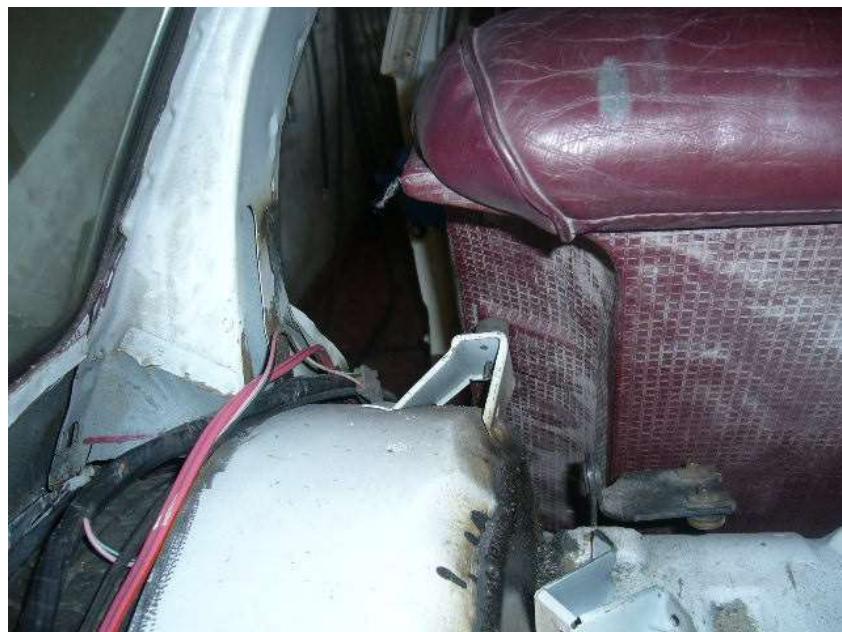
Oh, and the throttle pedal welded back in its new place would be a good idea...

10/2/2013

Finish welded the rear wheel arches and trial fitted the seats



The stop on the drivers side was slightly out so just needed pushing over slightly (you may be able to tell)



Slightly out of line on the passenger side



So off it comes





And in its new position

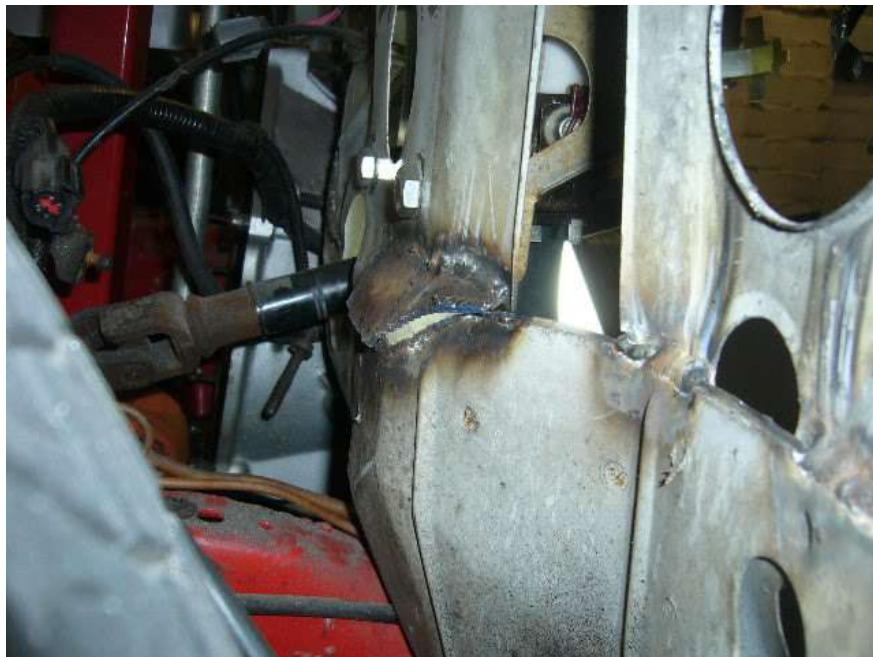


13/2/2013

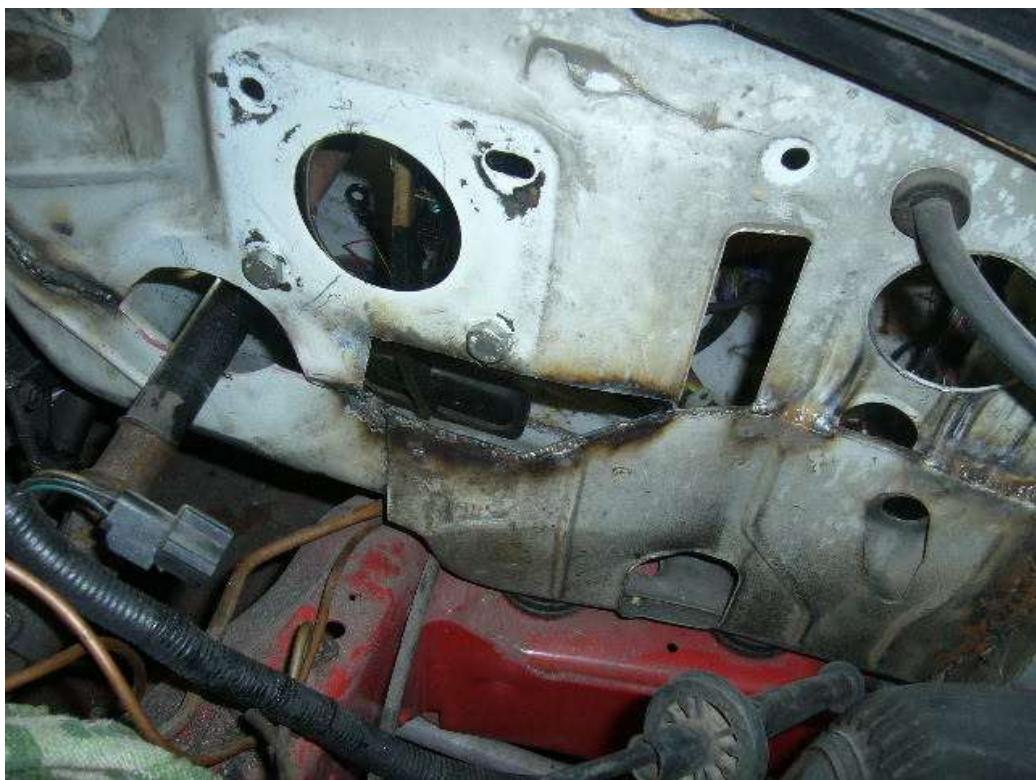
Ok. Confession time!

Tried to fit brake pedal box but it wouldn't fit. I welded the firewall up without bolting it up to check! Yeah, I know.....should have known better.

So, had to cut across my welds and pull the firewall out at the bottom a bit



Then making sure the pedal box is in, cut out the plates I so lovingly welded in before (serves me right).



Pedal box in as first plate is welded in





Oh dear!!! Soon be back though!

I've also just got my block and tackle pulleys to hoist the body off the frame very very soon!!



17/2/2013

Fitted timing chain cover, water pump, oil pan and crank pulley and harmonic balancer.

Why has the water pump got to be such a PITA thing to fit?

Small block chevys are a damn site easier!!





Fitted my block and tackle in the roof and took the strain!



Intentions are to pull the engine off the stand, fit the flex plate and install the engine. Then hoist the body off the frame, wheel out the chassis and finish weld underneath. Then paint entire underside and bolt back permanently to the frame.

Then its painting green time!

Need to remake the front drivers wheel to master cylinder brake pipe because now it is too short!

Need to tighten crank pulley bolts (centre and 4 around the drive pulley)
Need to tighten engine mount through bolts.

May tomorrow fit converter to flexplate nuts and tighten. Then replace starter motor.

Back end up in the air and complete rear inner wheel arches – perhaps.

18/2/2013

Isn't it just typical..... when you want some help to do a quick car job, everybody disappears.
Especially when it involves a bit of work-like helping to put an engine in.

So on my own it is.....

After a short time it was in. No swearing, cussing or anything like that. Just a smug smugness!!



Tomorrow its starting to hook things up like trans shifter cable, heater, vacuum lines etc. But I can't hook the throttle up until the heads and plenum are on and I haven't got the head bolts till about Wednesday.

In the meantime, 2 more block and tackle pulleys to go up in prep for lifting the body off the chassis.

21/2/2013

Time to fabricate all the simple things on the firewall now. Starting with the hole for the Trans shifter cable and ECU slot.

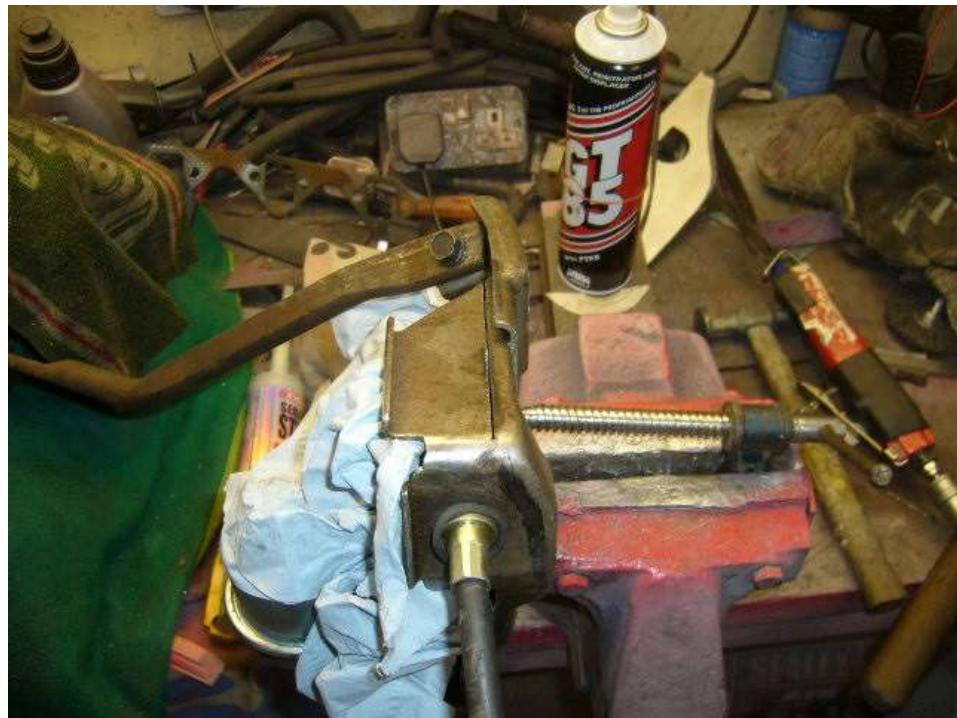


After hours of messing about, this is what we have ended up with



Now at least I can refit the ECU bracket and shifter cable.

Now onto the parking brake. The hole where the cable goes through has moved up 10 cm so will no longer be any good - although I could cut up the bracket and relocate the cable.



and relocated about here



I'll post a photo of the finished product later on.

In the meantime, the pedal is too long!

Needs this much cutting off



And rejoined but had to be flared to match the contours



The almost finished product



Heater box next.

21/2/2013

Just spotted that I have lost my hood release cable hole! Here it is/was from an old photo



Put it on my list! I've got a big list.

25/2/2013

Remember this rusty thing?



That was acid dipped to look like this?



Well I welded it up and painted it. Now it looks like this



Funny how the simple little things like this are really pleasing!

Onto my hood release cable. Not to make it too simple, I drilled the right size hole through, then enlarged the sheet steel on the outside of the firewall to smoothly join with the emergency brake cable slotted hole!



From the inside



Heater box next!

2/3/2013

Went to Doncaster and picked up my head bolts. Bolt them down tomorrow.

3/3/2013

Bolted up the heads with the ARP bolts I picked up on Saturday from B and H.

Bolted the heads down on the block so I can start to see where various things need to go!
Photos soon.

Meanwhile for a break from the metal fabrication, its seeing if I can get the heater to fit time!

First the "air inlet assembly ducting" as its called in the shop manual.
This thing



Here's a temporary fit and you can see where the bottom of it is touching the firewall before it sits flush



So I need to cut the bottom off so it has a chance of sitting flush.

Here's the cut line planned to completely flatten the bottom



Here's my air saw in action



Here's the bottom cut off flat



And a side view looking across the bottom showing the flat profile



I'll make a new base and bond it in, then produce a water drain hole.
Then its onto the other heater boxes...

9/3/2013

Been assembling the engine so I can trial fit the throttle linkage etc.





Back onto the heater box. Fabbed a closing off plate for the base and a water drain hole. Now its completely flat on the bottom and actually fits the firewall now!





and a view to the inside



Onto the A/C fan heater box that goes on the firewall under the hood.

I don't need the AC matrix now so I split the box open to remove it



The other side of the matrix (fan side) was filthy and partially blocked with debris



And here's some more debris in the case



What I intend do here is cut the box diagonally with a saw to remove the bulk and close it off with a steel plate and incorporate an oil pressure gauge in it perhaps! To show everyone what I mean, this is the exact thing I did when I built my 77 Trans Am back in the early 90's



Here's my saw in action





A trial fit and the base is touching the frame (just) so tomorrow I'll remove the bottom "bulge".



11/3/2013

Had to shorten the height of the box and then plastic weld a bit of it back together. Hopefully the pics will tell the story.



Steel closing off plate bonded in to the base and left to set.



Still got a flange to weld on and a corner to cut, but not far off finishing this bit now.

The main heater box that contains the heater core nearly fits!!! But it may as well be miles off.

Finally got the inlet manifold on and the fan and alternator, but it looks too tall to me! I will relocate the alternator down low on the other side and most likely use an electric fan.





May get a spare PCM just in case. Left Scott a PM.



13/3/2013

Bonded a new extended flange at the bottom.

Now its onto the main heater box, but its not going to fit and its going to be hard to modify the heater itself due to the closeness of the outside edge of the case.

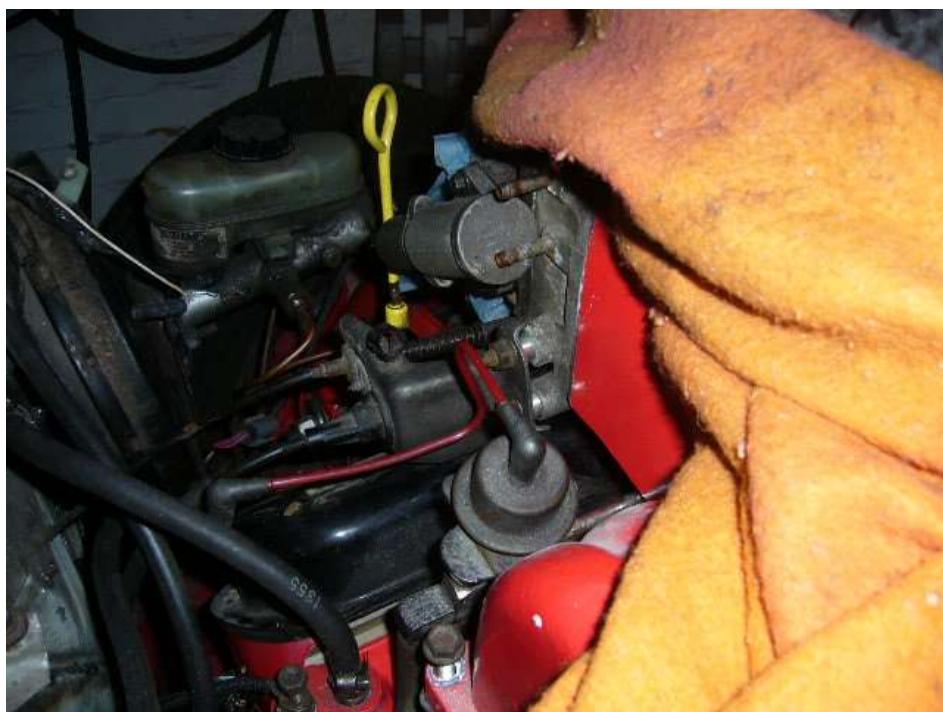
16/3/2013

Cut out what I needed to of the firewall and transmission tunnel. More than I thought! I'll weld it up when I hoist the body off the chassis in a few weeks.



17/3/2013

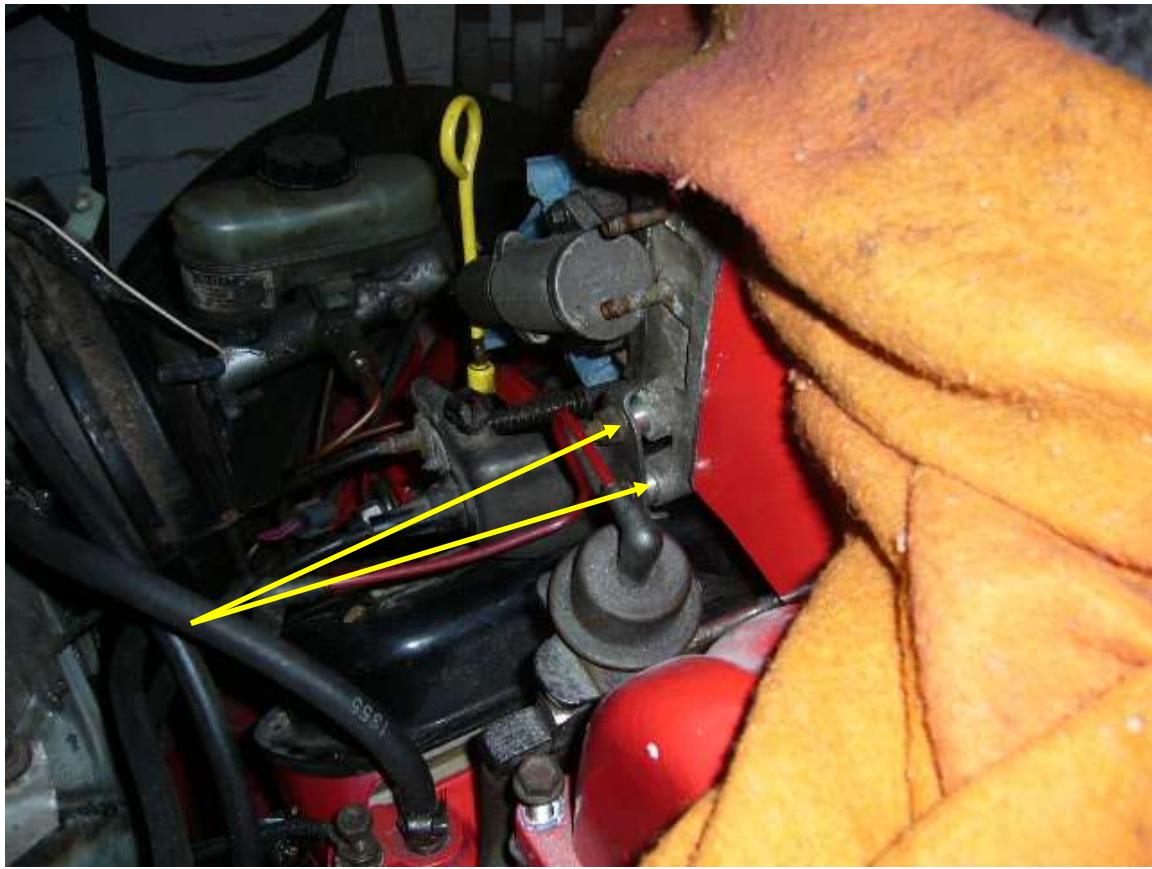
Fitted the plenum temporarily but the throttle cable was a little bit too tight, so I have spaced it off slightly.



Hole drilled through firewall to help secure the corner box and the AC box together. Then bonded on a fabricated bracket.



Fitted the plenum to the motor today, but the throttle cable was slightly too tight, so I spaced the bracket off the plenum about 10 mm.



I'll see how that works out with the engine flexing about.

28/3/2013
Right its shortening pedals time.

Here's the full length gas pedal



and here's the pedal shortened awaiting finishing and final welding



And bolted back into its new welded in mounting place



Now the brake pedal wants shortening

Here's a section cut-out awaiting welding back together



and fully welded with the missing bit looking on!



4/8/2013

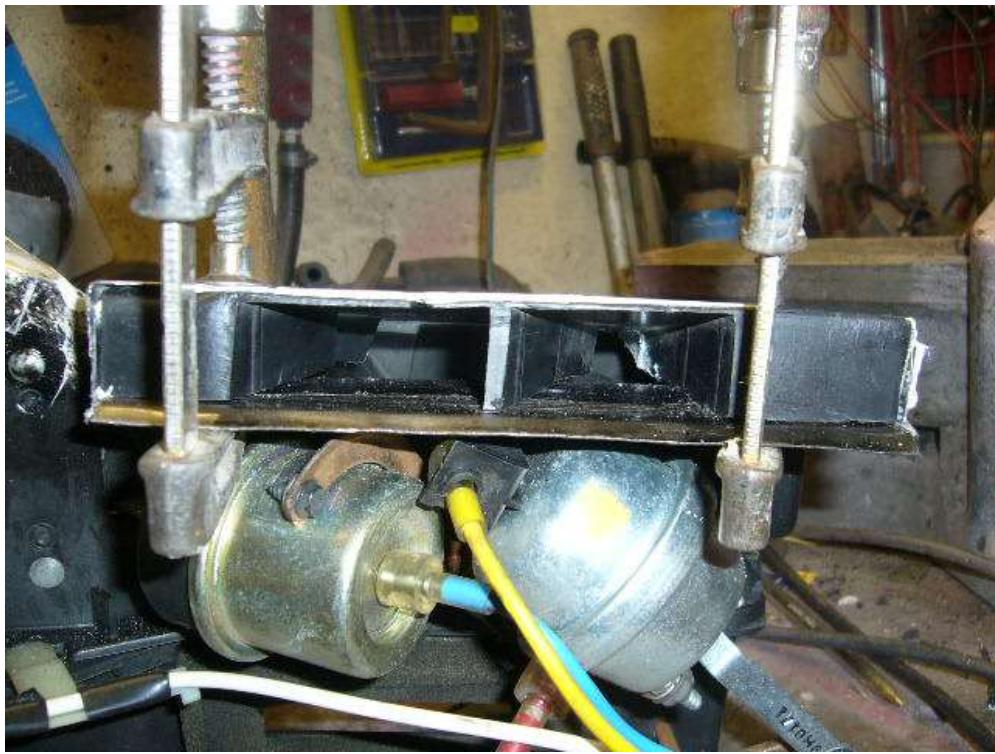
Anyway, back to the heater. Last job to do is the shrinking down of the lower centre air vent that directs air over the trans tunnel and down to the footwells.

This is how big it was in height



and this is the new lower profile design





Now that's finally done, it's refitting dash (joy) and steering column and see if I can get the column to connect up to the steering box!



And servo removed to get access for cutting and welding.
Here's the firewall cut out a bit more and ready to tack in position. The UJ misses the bottom

of the servo by about 10mm! But it works and it steers!



Finish weld that up, strip it all out again and its hoisting up off the chassis for its final welding and painting underneath.

May even get this to the paint shop this year!!

12/4/2013

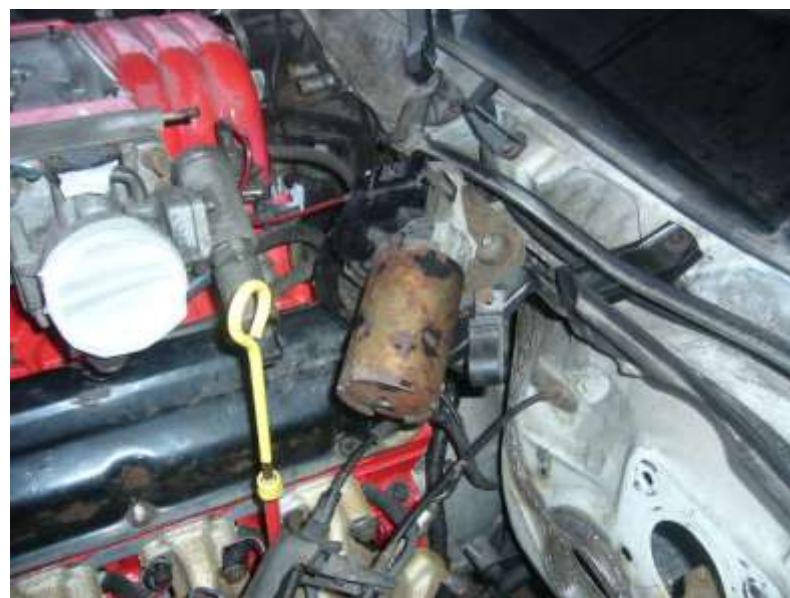
Last few jobs before body is hoisted off the chassis (again!)

Final welded up the steering column mount through the firewall



Had a trial fit of the wiper motor but it doesn't fit!! Touches the rocker cover and throttle

cable and TV cable are in the sweep



So I will fit a kit car type one in this space

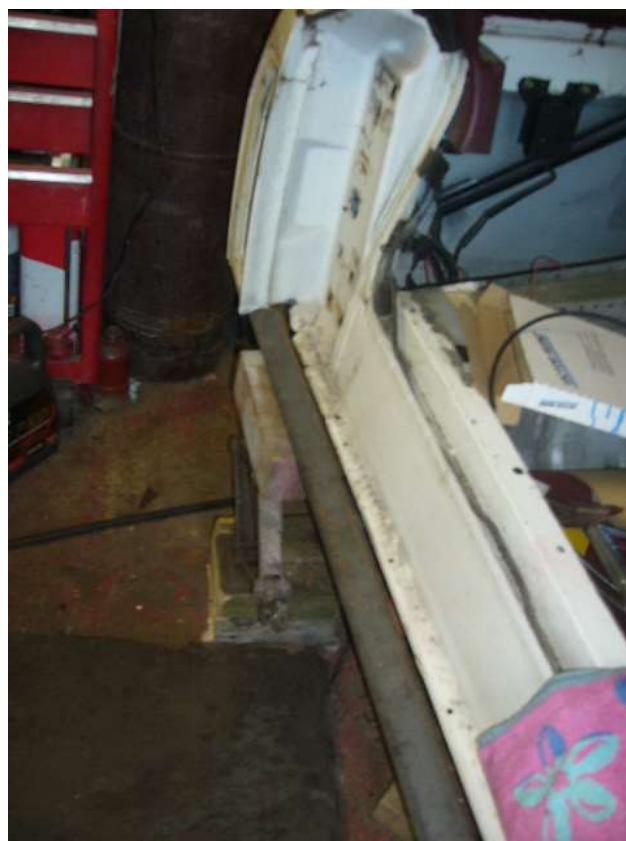




All welding completed on the firewall inside



Now its welding up a framework to support the rear of the car when I use 2 hoists



14/4/2013

2 brackets welded up to help lift the rear of the car



24/4/2013

Not been on for a bit. Can't believe how painful a nerve trapped in the back is! But it doesn't hurt there, oh no, just down my right leg.

Anyway, doesn't appear to be getting any better so while I wait for an mri scan on monday (cant wait) I'm going to get on with it.

Bet you can't tell what I've done here!







6/5/2013

been diagnosed with a herniated disc in my back, so I have had to take it slow and steady, but I'm still going!

Working underneath the body for a few weeks now, so I have designed and built a custom car creeper to get me higher up. Photos tomorrow.

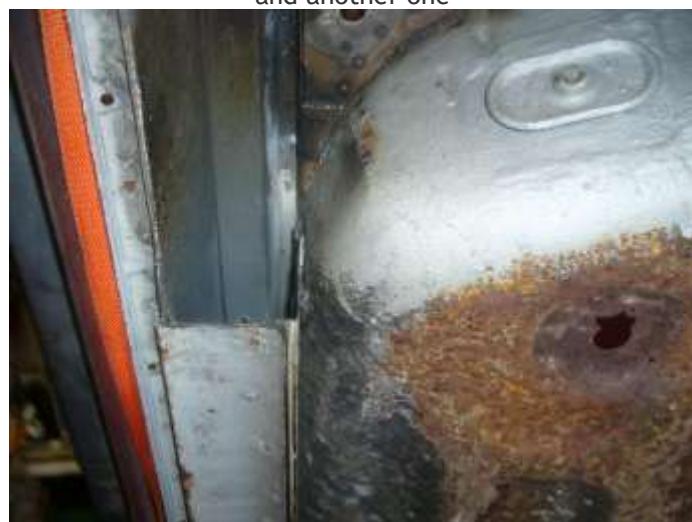
Got to start blocking holes up and reinforce areas under the floor where it has moved up 10cm.

First one here





and another one





14/5/2013

Progress is nil due to my prolapsed disc not really improving and waiting for physio to start to give me a chance.

I've been signed off work for 2 weeks but can't do much obviously.

My only chance of completing the underside work on this car is to design and make a rotisserie that is attached to the ceiling joists and not the floor. In fact, there is so much to do under there, I don't think I would be happy doing it even in my 20's or 30's anyway!!

So, design is under way and I will post up pictures as it progresses. Be warned though, this will be sloooow 'cos my back and leg hurts! I've not actually sat down for 8 weeks now - cos I can't! Driving is darn near impossible.

20/5/2013

Decided to get this engine fired up before the rotisserie is built.
So first off is to prep and paint the valve covers.





7/6/2013

Old exhaust dismantled ready to be fitted temporarily.



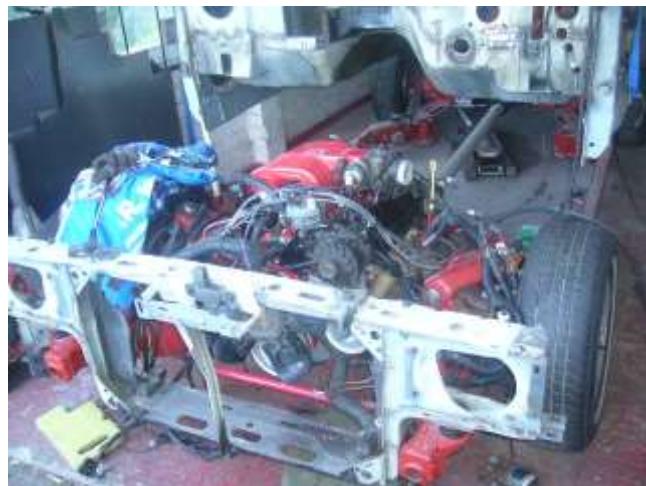
8/6/2013

Coil ordered from USAutomotive and arrived. Old bracket removed and modified to refit a bit lower down



Engine wired up as far as possible to enable a fire up.

Front panel refitted so I can mount the radiator. Although it will want heavily modifying!



Jobs to do:

1. Remove old heater matrix and fit to heater pipes so I can fill with coolant
2. Fit radiator and hoses and transmission pipes
3. Fit exhausts
4. Try to locate fuel tank and plumb in
5. Fit dash somehow and complete wiring - especially the earths.

17/6/2013

Removed old heater matrix and fitted new one. Used old one to plumb into engine from fire up.



19/6/2013

Removed all wiring from the dash to enable fire up and rewiring.

23/6/2013

Wired engine up for first time starting

Cranked engine over from ignition switch successfully. Tomorrow its coolant, petrol and fire up time! Fingers crossed.

25/6/2013

Here's the back of the dash stripped of wiring because its not going back in, and I want to wire the engine to start for the very first time after an extensive rebuild!



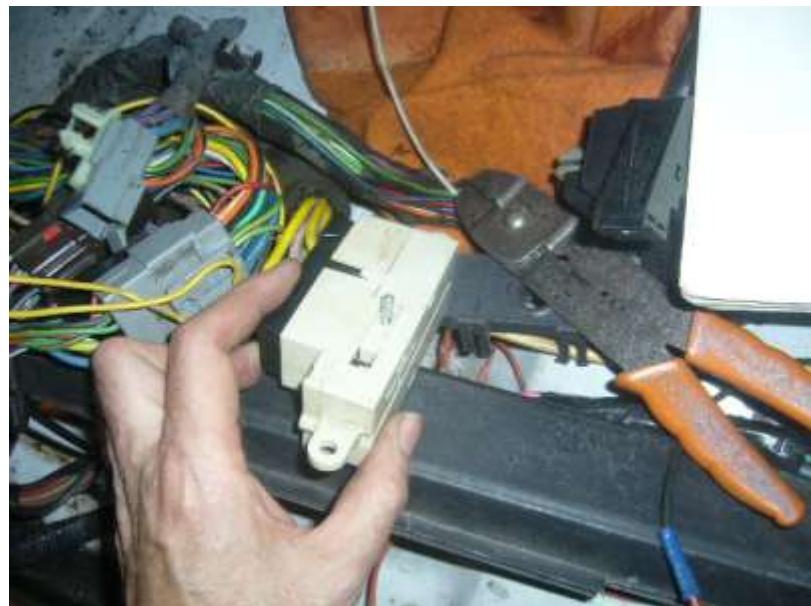
Here's the engine all wired up with the harness going into the car through the heavily modified firewall



Here's my instrument panel



and my ignition switch!



So, tonight after more than 2 years and a full engine rebuild, blood, sweat and tears, I went for the start.....And it fired first time!!! Sounds fantastic. Forgot how that V8 burbled away to itself. I know its only a 302, but its MY 302 and it works!

Timing adjusted and its as smooth as a babies bum!

Now, inbetween waiting for my back to recover, and needing a fix (and a possible profit) I bought these 2 ford fiesta zetec s cars



The first is heavily modified and may sell on for a small profit. The second is a reshelled write off that I will use as my everyday car.

Yeah, I know, the first one is a bit fast and furious for a 52 year old but I don't care!!

5/11/2016

Been a looong time, but need to get this moving again. Been 3 years.
Engine has been regularly fired up and still on the original battery that has been kept fully charged over the years.



Some 1.5 mm thick steel bought and collected from Twiggs at Matlock



Cut the passenger side rocker panels out in preparation for new ones. I will use the other side to help fabricate the panel in 2 sections.

Marked for cutting





Heres the inside of the sill



And the outside



Cardboard templates made and transferred to steel and cut out.





22/5/2017

Put a bottle of cataclean in the tank and ran engine up for a bit. Should help.



July 2017

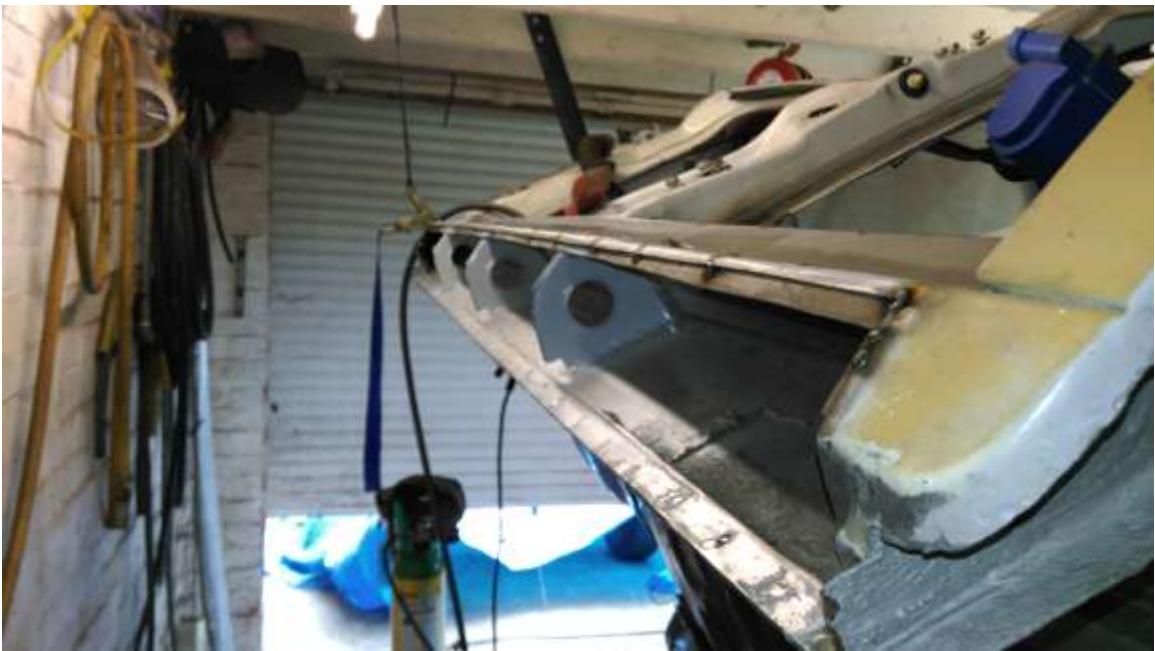
Back onto these sills.

Drivers side one cut out and realised that the ones I welded up in November last year were useless due to heat distortion. So, back to square one and I will weld in the sills in 2 sections. Upper and lower.

Both inner sills derusted and painted with KURUST then etch primed and painted silver.



Reinforcing gussets made and welded in



Top section tacked in



And bottom section



Repeated on passenger side





August 2017

Finally finished welding in both sills and ground all welds down for filler and paint prep.



22nd and 23rd of august 2017

Due to fly out to Salou on the 24th so need to prep and paint the underside.















2/9/2017

Another coat of paint to the back half of the car after red scotchbriting it all back.
Had to order some more green epoxy 121 paint before I went on holiday.

Tomorrow I need to paint the front half. Then while that is waiting to dry, strip out the shed and try to find all the parts.

Plan is to refit everything to the firewall so I can remember where it all goes and then be able to weld up the firewall and drill holes for the vacuum pipes that go into the inside.

Then paint everything and fit the car back to the chassis and bolt it down temporarily and refit everything. Including fuel filler pipe.

Oh, and make battery tray.

In summary:

- Paint front half of underside with second coat of green.
- Search out parts from the shed.
- Find master cylinder and perhaps find a replacement.
- Make battery tray for the rear right corner.
- Refit all floor grommets
- Pull wires through above fuel tank and secure grommets.
- Remove all masking tape from bolt holes.
- Remove scaffolding pole from through the car
- Weld up firewall
- Refit everything to firewall and weld up firewall/trans tunnel under heater.
- Lower back onto chassis and plan holes through firewall for vacuum pipes.
- Drill and paint everything.
- Bolt back onto chassis and refit all doors etc.
- Modify front radiator panel and fit wings.
- Trial fit the bonnet and modify.

September, October 2017

Painted front half of the car



Removed the scaffolding pole that runs through the car



Welded up the hole in the firewall where the pole went through.



Trial fitted everything to the firewall. Had to weld a threaded stud on the hold the vacuum pipe thingymabob.



Drilled a hole for the vacuum pipe grommet to go through the firewall



Filled all the welded seams on the firewall, seam sealed every joint and painted firewall inside and outside





Also painted floor to sill joints inside the car and the rear sections I welded in all those years ago



Went on a search for parts in the shed and the loft. Found most things except for the fuel filler pipe and the 2 brackets that attach to the firewall and the dash. Will keep on looking.

Rescued the master cylinder out of the shed, stripped it down and it was perfect inside! So, bench bled it and it is now awaiting plumbing in to the brake lines.



Servo next...





Here's the number off it



Into the media blaster it goes and then etch primed and sprayed gloss black.



Handbrake mechanism, servo, master cylinder, vacuum pipes, bonnet release cable, wiring loom, ECu bracket and ECU and accelerator cable fitted to firewall.





Painted the steel bits of the heater boxes with green epoxy mastic 121.





Sprayed underside of the corner heater box with etch and lack enamel.



Loads of wiring removed from the car, including the wiring from the suspension level control module from the back to the front.

And some wiring from airbag redundant supply module that used to go just beneath the screen across the car.

More to do though. Would like to remove all the wiring from the RHS of the firewall apart from the horn perhaps, and starter solenoid.

Painted the end of the chassis sections with epoxy, then sprayed with primer and post office red paint from the Camaro.

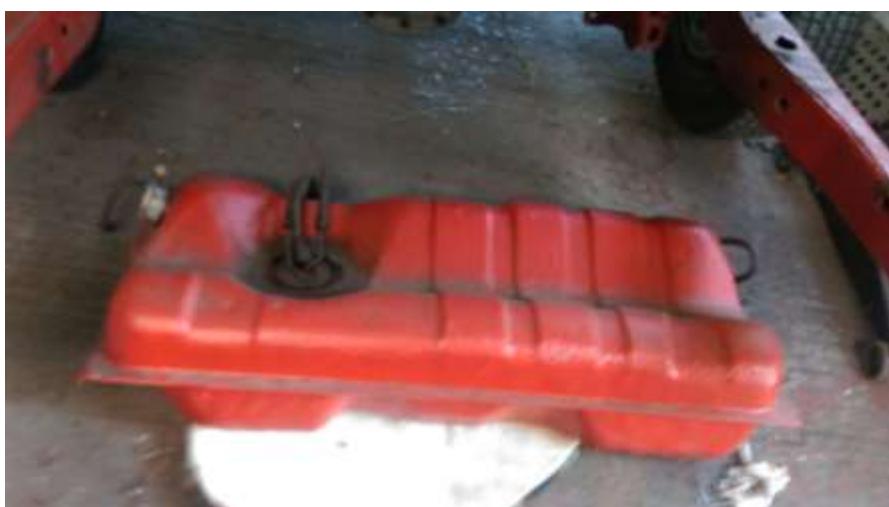




Various scratches down the frame primed and painted also.



Fuel tank removed ready to put the body back on it's chassis.



14/10/2017

Rescued the 2 dollies from the unit to put under the front wheels and to get the chassis directly below the body.

Body mounts in place



Lowered onto the chassis with the help of Carol and Callum. Bolts put in loosely. Tighten later.

Noticed straightaway that the vacuum line that should go from the back of the plenum down to the distribution block on the firewall was too short!

Plan is to get the whole car together and see if I can find all the parts and to get it all working. Then apart again for paint.

Dashboard reassembly first, then paint scuttle, then dash in.

15/10/2017

Remembered that I can't put the fuel tank in because the fuel pump wiring connector has broken because the plastic is brittle. So, off on to ebay to order a 2 way and a 4 way weatherproof connector pair.

The image shows two separate eBay product listings for 'AMP Econoseal Waterproof Wiring Electrical Multi Connectors'. Both listings are identical except for the number of ways (2 Way vs. 4 Way) and the quantity (1 pack). Each listing includes a thumbnail image showing various connectors, a title, a description, a price of £2.95 or £3.50, and delivery information.

Top Listing (2 Way):

- FREE P & P
- 2 3 4 6 Way
- (222324794915)
- Crimp Tool Required?: No
- Quantity (Pack Size): 1
- Number of Cavities/Connections: 2 Way
- ITEM PRICE: £2.95
- Estimated delivery Wed, 18 Oct

Bottom Listing (4 Way):

- FREE P & P
- 2 3 4 6 Way
- (222324794915)
- Crimp Tool Required?: No
- Quantity (Pack Size): 1
- Number of Cavities/Connections: 4 Way
- ITEM PRICE: £3.50
- Estimated delivery Wed, 18 Oct

Rescued the dash out of the shed and was quite surprised that there were no wires in it! Then I remembered that I thinned them down while they were still in the dash (sat on the shed floor) the transferred them all to the car to enable me to fire the engine up.

Went into the car and pulled the dash loom out of it and laid it on top of the dash on top of the bins outside!

Went into the loft and found some dash bits in a shoe box including the shifter cable bracket that bolts onto the bottom of the column and the light switch knob.

Working from old photos I reassembled the dash then put it in the hallway.





Grabbed the steering column out of the shed and put it on the bench. The 2 creamy coloured vacuum lines have disintegrated in the light through the shed window!

So, went up on ebay and bought some silicone hoses for the main vacuum line (black 9mm), the 2 deteriorated pipes (blue 3mm) and one to replace the braided one I put on top of the engine ages ago (black 4mm).

	Silicone Vacuum Vac Hose Pipe Tube 3mm 4mm 5mm 6mm 7mm 8mm 9mm 10mm Available (290742298928) Colour: Black Length: 1/2 Metre Internal Diameter: 4mm	£ 4.68     ITEM PRICE: £1.95		View order details Contact seller More actions ▾
	Silicone Vacuum Vac Hose Pipe Tube 3mm 4mm 5mm 6mm 7mm 8mm 9mm 10mm 13mm ID (401073216147) Colour / Hose I.D: Black 9mm Length: 1/2 Metre MPN: Does Not Apply	£ 4.68     ITEM PRICE: £2.61		Leave Feedback Return this item More actions ▾
	Silicone Vacuum Vac Hose Pipe Tube 3mm 4mm 5mm 6mm 7mm 8mm 9mm 10mm 13mm ID (401073216147) Colour / Hose I.D: Blue 3mm Length: 1 Metre MPN: Does Not Apply	£ 4.68     ITEM PRICE: £2.07		Leave Feedback Return this item More actions ▾

I then rememberd something about the ignition lock cylinder that was removed for some reason??? So I ordered another one from rockauto.

RockAuto Order Confirmation
Order 72235590



Monday, October 16, 2017 09:29 AM Central Time

Ship To:

Andrew Fanshawe
14 Bateman close
New whittington
Chesterfield, Derbyshire S43 2DT
United Kingdom
+447833967239
andyfanshawe@aol.com

Bill To:

Andrew Fanshawe
14 Bateman close
New whittington
Chesterfield, Derbyshire S43 2DT
United Kingdom
+447833967239
andyfanshawe@aol.com

andyfanshawe@aol.com is not signed up to receive our newsletter, repeat customer discount and other marketing emails. Would you like to [resubscribe?](#)

	Part Number	Part Type	Price EA	Core EA	Quantity	Total
1990 FORD COUNTRY SQUIRE 5.0L 302cid V8						
STANDARD MOTOR PRODUCTS	US175LT (US-175LT)	Ignition Lock Cylinder (8301.20.0000)	£ 11.02	£ 0.00	1	£ 11.02
Shipping	Economy Mail (Consolidated)					£ 5.26
	Carrier may collect duty and tax upon delivery					
Order Total						£ 16.28

You will be charged in US Dollars. If the currency of the bank account you are paying from isn't US Dollars, the amount that appears on your bank statement may vary due to bank fees and conversion rates.

Thank you for paying with PayPal Express. Your order will ship when your PayPal payment has been processed.

Prepped scuttle for paint and put a coat of green epoxy mastic 121 on. Will paint it black in the next couple of days. Then the heater can go in, then the dash.





Supposedly sand from the sahara in the atmosphere today and the sky is orange!



November 2017

Sprayed scuttle with 3 coats of satin black.

Sealed heater air vent down with black RTV.

Fabricated a metal close off panel for the heater box (where the AC used to be)



Stuck sound deadening material on the inside of firewall and transmission tunnel.

Sprayed it with etch primer and satin black. Stuck double sided tape around the inside edges and bolted all 3 heater components onto the firewall.



Replaced fuel tank and cut off the electrical connector and crimped some heavy duty yellow connectors on. Covered them in lube and conduit.

Lowered car onto the floor and installed dashboard so I can test fit the steering etc, and work towards a fire up.

Need to hook up the heater matrix next. I will disconnect from the Old heater matrix and transfer over. Might as well drain coolant out (5 year long life) and renew it, since it has been a few years.







16/11/2017

Put steering column in and new ignition lock cylinder. Got it all working eventually after a battle! When I removed the old cylinder, I put the gear that should go at the bottom of the lock cylinder shaft. Then forgot it should be in there! All back in now.

Reattached heater cable then something snapped behind the top slider (heat setting) control knob. A piece of brittle plastic had snapped off, so I welded it back together. Works okay, but may need an attempt to put it back to what it used to be. On a boring day!

Reattached both earths at the bottom of the A posts inside the car. Found 5 connectors under the dash that I won't need. Heated windshield switch, power antenna switch, 2 police option connectors and climate control module connector. All labelled under the dash for removal when the dash comes back out for the last time.





Dash removal.....

1. Pull 2 pieces of trim off that go across the dash.
2. Under steering column panel 94 screws, 1 missing).
3. PRNDL wire and bolt.
4. Metal bracket that goes under the column.
5. Ignition switch white box
6. Light/stalk switch 2 screws.
7. 2 white vacuum connectors.
8. U/J
9. Shifter cable.
10. Steering column.
11. Light switch knobs.
12. Fascia panel.
13. Heater control surround panel
14. Vacuum connections to it.
15. Release cable from top of controls
16. Unlug all wires.
17. Dash pulled forwards releasing all the wires and pulling through firewall.

Next jobs:

- ~~Earth connector near servo.~~
- ~~Hook battery up and all connections.~~
- ~~Attempt to start.~~
- ~~Put rear on axle stands and see if trans works.~~
- Battery tray.
- Wiring to battery
- ~~Air springs on back axle so I can get the car out of the garage!!~~
- Service and bleed brakes.
- Hook up handbrake cable
- Fit rear doors
- Paint dashboard black.
- ~~Attach heater pipes to new matrix.~~
- Lower front panel and attach wings and nose cone and bumper
- Fit rear tailgate and rear bumper.
- Tidy up all wiring to the dash and tape them up.
- ~~Put dash back permanently.~~

18/11/2017

Connected up as much as I could. Connector I marked 13 on the heater side of the engine compartment is close because I had to Pull it round the A post!!

2 earths relocated to here



Key turned and it started!! Sounds good. Slight misfires, but no doubt injectors are sticky. Quite a time since I started it last.



Water temp gauge working ok. Fuel level reading lower than zero and low level light on. May be because the level is actually low, or sender not working.

I put a 180 ohm resistance in the sender connector at the rear and it read full. So will have to wait till I can get more fuel in to see if it works.

So I will find the Firestone airsprings in the loft and install them on the back next, so I can do the rear brakes.



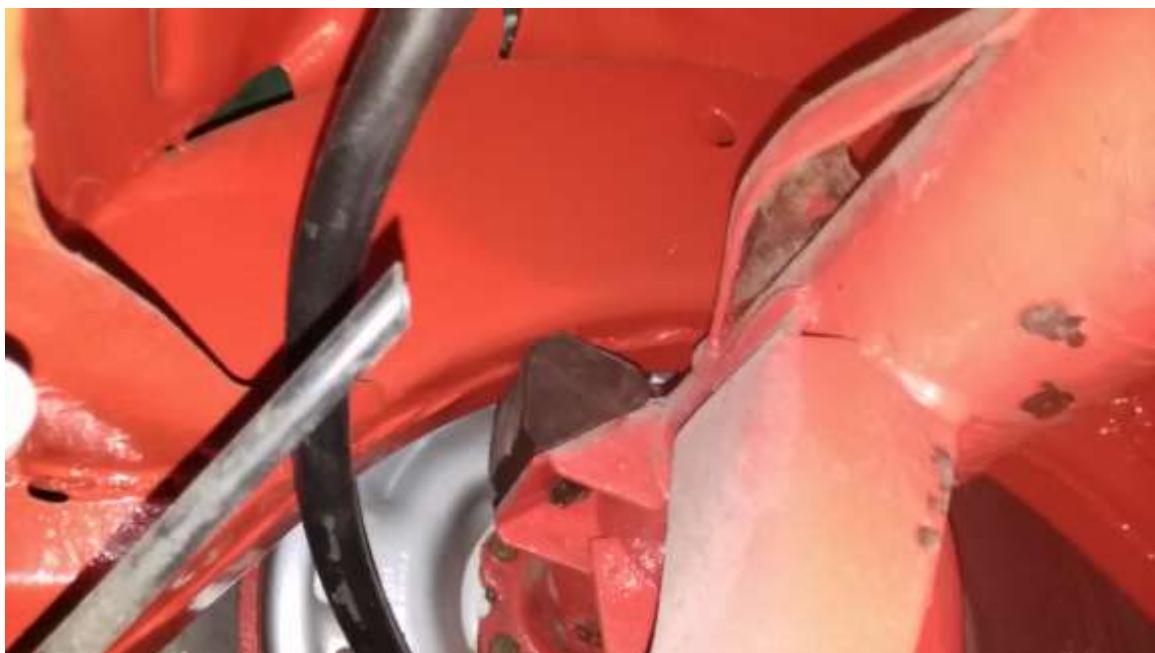
21/11/2017
Turned the above into this



And finally this prototype



Jacked the back axle up to its bump stops and I need 160 mm top to bottom of spring assembly. Mine measures 200 mm, so need to lose 40 mm out of the bottom mount.



Cut 40mm out of the bottom mounts and installed the airspring assemblies. I had to cut 4 holes through the floor since access is too difficult. Will repaint the edges and grommet them up soon.







But slight problem here!!
The 3/8" line that comes
out of here are fouling on
the red chassis here.

I need to reclock the
mount so the airline
comes out of the top
mount and goes forward
slightly nearer the
shocker, then bend back
round and into the car
through the floor.

28/11/2017

Reclocked and rewelded the top mounts so the airline is clear as it comes out.

29/11/2017

Bolted airsprings in again and temporarily plumbed them both in to a schraeder valve at the back of the car.

Rescued the shockers out of the shed and installed them. Axle lowered and the wheels will come clear of the arches when they are removed!

Rear wheel cylinders removed, stripped, cleaned and put back together. Considering they have been sat for a few years, they have no issues whatsoever. No doubt due to the fact that the brake fluid was new at the time.

Brake lines blown clear from the back (never know how much dust has accumulated in the open lines over the years at the master cylinder!).

All 3 lines connected to master cylinder.

Need to strip the front calipers out next and remove all seals and then bleed out the entire system. Oh, and derust the discs. May repaint calipers green.

30/11/2017

Bled rear brakes out.

Reattached the 2 heater hoses to the matrix and put new coolant in it. 5 year long life stuff again.

Removed front right disc and caliper and stripped caliper down to its component parts - again!

1/12/2017

Painted caliper metallic green.



10/12/2017

Front brakes reassembled and bled out.



Next jobs as a priority are

- Get wiring on passenger side dash to heater box somehow!
- Test trans out.
- Accelerator pedal and cable sort out.

14/12/2016

Decided to have a look at the fuel sender unit because its irritating me. Took the sender out and straightaway spotted that the float was full of fuel! So it had sank. I heated it up with a hair dryer and the fuel sprayed out like a fountain! There were 2 ver fine cracks in the brass float so I thoroughly cleaned it up and soldered them up. Refitted and all perfect!!



20/12/2016

Rear axle put on stands and transmission checked in all the gears. All works okay. Fuel gauge still working. 3 gallons of fuel put in.

28/12/2017

Welded up a 10mm spacer to mount the throttle cable just off the firewall. Just need to drill out the holes a bit bigger and bolt in. The 2 bolts go through from the interior side and thread

into 2 threaded spacers I have welded in inside the spacer. The throttle cable then is bolted down with 2 nuts. I then need to either extend the cable or modify the accelerator pedal.

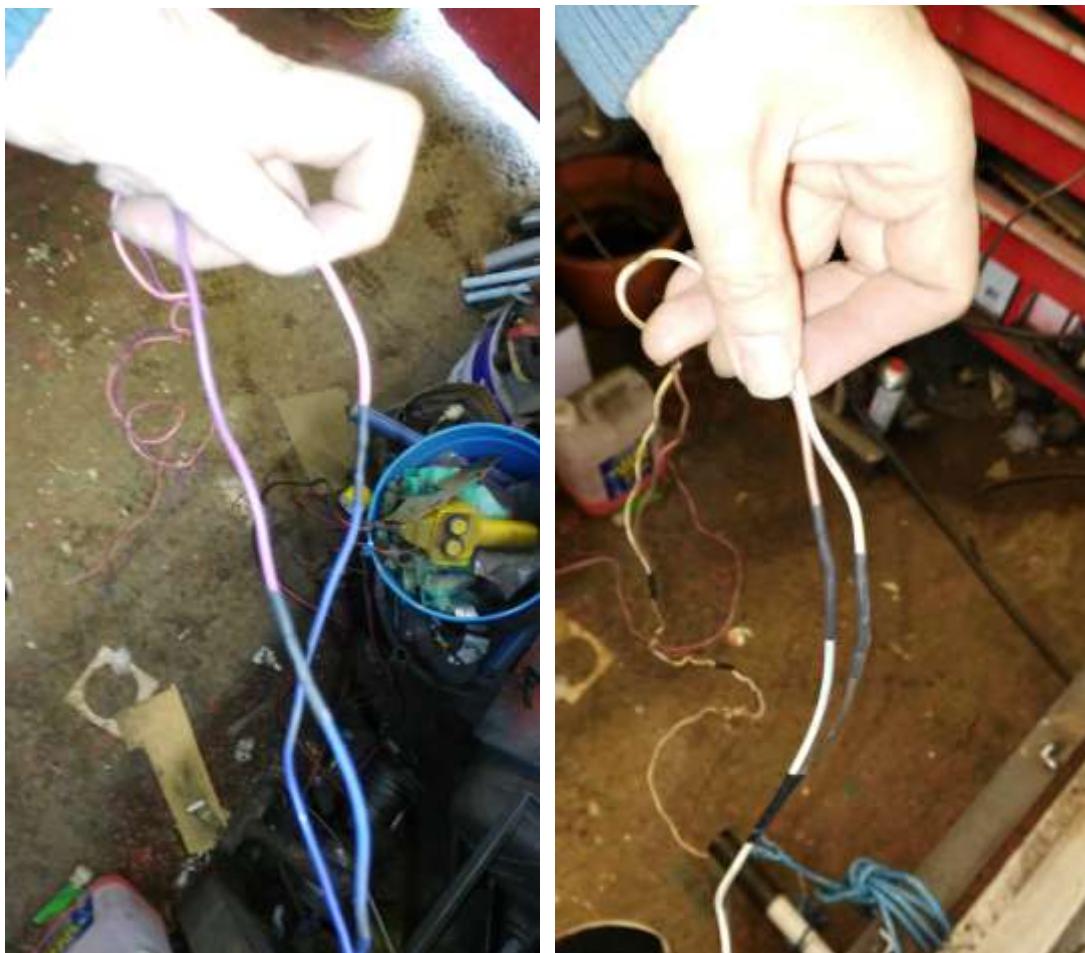
1/1/2017

Started to attack the wiring going to the RH side of the car. Cut out a few wires that were for the heated windscreen (which mine hasn't got). I will relocate the horn relay inside to cut down to a minimum the amount of wires going through the firewall.

Should end up with the 4 heater resistor wires, 2 blue horn wires and 2 wires for the lights.

Drilled a hole through the trans tunnel on the passenger side for these wires.

Extended the horn wires before taping up.



Interestingly, the original big grommet that used to be in the firewall has been cut to just have the centre bit, with a groove cut in it.

23/7/2018

Changed the oil and filter (10W - 40 semi synthetic).



9/10/2018

Fitted 3 doors back to the car. Had to cut a slit in one of them to make it shut properly. All 4 door bottoms need modifying to seal against the new floor lip.

Drivers door a bit more awkward.

17/11/2018

Removed front rad, fan and rad support so I can Z the chassis at the front. So I can get the rad support level with firewall/scuttle.



1/6/2019
Finished cutting the front of the frame rails



Then Z'ed them and welded in the top plate (photo soon).

Everything reinstalled. Rad hoses (changed top one for new one) and trans pipes (had to bend them slightly to fit since the rad is now lower. But everything fitted. Not putting fan back since its going electric.

2/6/2019

Put everything back on the car. Tailgate, drivers door, front wings, nose cone, headlights grille etc.





3/6/2019



4/6/2019

Removed everything from the shed and sorted everything out for a move to the unit when the camaro goes on the rolling road.

Found wasps nest in air filter



5/6/2019

Trevor turned up with trailer and we loaded it up.





And successfully dropped it off at the other end.





Running and driving well and now needs sorting out.

Plan is to start at the back with the bumper fitting and then the fuel tank filler tube. Then the rear doors and a floor paint. Then onto the front doors and heading forwards.

9/8/2019

Rear bumper first. Needs fitting closer to the car and shortening.

7 cm section cut out.



And bolted back together with 2 plates and a block of wood.





Bumper well tucked in at the sides now





11/8/2019



Wired up the tailgate and checked everything is working. Turns out that the rear window wont go up and down. Wiring diagrams later and discovered that I hadn't plugged in the switch on the dash!



Rescued all the light bulbs from the back (some broken and some ok), and bolted one set of old light units back. All working okay.

Noticed that one of the white plastic rear window brackets is cracked. Repaired it with a metal plate and tiger seal.



28/8/2019

Here are the rear airbags I think I will need. Since the ones I have fitted don't lift high enough. From thorbros. Who I think used to be suicide doors back in the day!

The screenshot shows a web browser window for the thorbros.com website. The URL is https://thorbros.com/airbags/firestone-firestone-f9000-sleeve-bags. The page title is "Firestone F9000 Sleeve Bags". On the left, there's a sidebar with various product categories like "STUFF ON SALE", "63-87 Fullsize Chevy Parts", "4 Link Kits", "4 Link Parts", "AccuAir", "Air Line (DOT)", "Air Management", "Airbags", "Airlift", "ComTech", "Firestone", "Stem Specialties", "Bag Brackets", "Christmas Ornaments", "Clothing", "Control Arms", and "Crossmembers". The main content area shows the "Firestone F9000 Sleeve Bags" product with a price of \$69.99. It includes a description: "F9000 Sleeve Air Bags. 1/4" single port, 4.5" compressed, 12" extended. 'Do not exceed these dimensions!'" A quantity selector is set to 1, and an "Add to cart" button is visible. Below the main product, there are "Related products": Firestone 255c 2500 (\$79.99), Firestone 224c 2600 (\$79.99), and Firestone F9100 Sleeve Bags (\$199.99). At the bottom, there's a link to "Login or register to post comments".

Here is the door/window controller that may work. From Dakota digital.

The screenshot shows a web browser window for the dakotadigital.com website. The URL is www.dakotadigital.com/index.cfm/page/pType=product/product_id=460/category_id=401/mode=prod/prd460.htm. The page title is "Automatic Door Lock Controller". The left sidebar has navigation links for HOME, AUTOMOTIVE, MOTORCYCLE, OFF-ROAD, APPAREL, TECH INFO, CAREERS, CLEARANCE, FIND A DEALER, SHOP TOUR, REQUEST CATALOG, and CONTACT US. The main content area shows the "Automatic Door Lock Controller" from Dakota Digital. It features a product image of a black rectangular module with pins, a download link for the "INSTALLATION MANUAL", and a "MADE USA" badge with an American flag. The product description states: "The PAC-3500 was designed with flexibility in mind. This unit will Lock/Unlock: Suicide Safety Door pins for a shaved door handle application; Power Door Lock/Unlock motors for a standard power lock application; The PAC-3500 can be activated by two methods: Vehicle speed: this can be accomplished by hooking into an existing VSS circuit (electronic speedometer, Cruise Control, Transmission mounted speed sensor, Electric lockup torque converter kit, Navigation system, etc.) This will Lock as the vehicle approaches a user selectable speed, then Unlock as the vehicle ignition is turned off. Gear position: when using a Dakota Digital gear shift sending unit, a 12volt signal can be applied to the input of the PAC-3500. Once the transmission is shifted into a drive gear, the doors will lock and will then unlock as the transmission is shifted back into Park. The PAC-3500 includes a dual relay pack to interface with either suicide safety door pins or standard door lock actuators."

October 2019

Back on the car. Finally.

Battery tray made and positioned in the back right corner of the car.





Will get it powder coated when it all gets dismantled for the last time.

Bumper time.

Plate with 2 welded nuts on it fabricated and placed inside each chassis rails at the back. Then holes drilled and bolted through with M0 bolts.

Brackets fabricated and welded.



Fits very well, and adjustable.

November and December 2019

New starter solenoid that came with the car relocated inside the heater box. All wiring either cut short or lengthened to meet up with it in there.



Multiplug connector installed in the wiring to the lights.

A “bridge” fabricated and built over the upper suspension arm to get the wiring over it.



Red and black 35 sq mm cable run to front of car from battery and to the frame respectively. Same at the front from the frame to the engine block and from the starter solenoid to the starter. Original red starter lead brackets re-bent, repainted and reinstalled.



Battery terminal plates fabricated



Top of tailgate trim rescued from the loft (the one from the scrap one) since it has no hi level brake light and looks waaaay cleaner.

All black paint stripped off, dents removed (may need slight filler) and all brackets removed from original one and transferred over.



Attempted a fire up and sounded good. But the key turned like it was in treacle. Then started it a second time and the starter stuck in engagement while the engine was running. Sounded horrible, so turned the key off but starter kept turning! Disconnected battery quick. Phew.

After a bit of investigation, and after freeing the key off with WD40, I discovered the new starter solenoid had stuck on. So, threw it away, reinstalled the old one and its all systems go.

Old red battery cable clamps removed, rebent, old grommets removed, repainted and reinstalled in their new positions.



Just minor wiring bits now (P clips in boot, ~~conduit over bridge and replace heater box plate~~).

18/12/2019

Put conduit over bridge and replaced heater box plate.

Onto suspension.

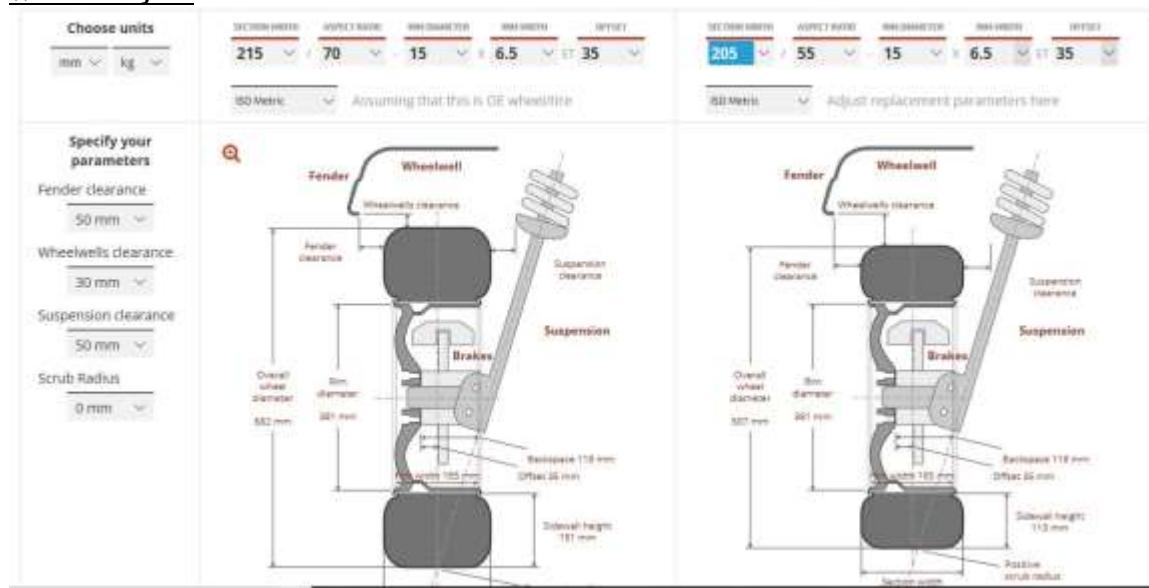
Rear air bags removed. Front spring removed at front right. Car on 4 axle stands under the frame. Axle jacked up onto bump stops and front right suspension assembled without spring and jacked up against slightly shortened bump stop.

String put along the sill bottoms to determine how far the tyres stick below it. Which was about 1 to 2 cm. So very close. I need a tyre that goes to 10cm below the wheel rim at front and back. Research needed later.



Here's some research on the wheels.

If we use the original wheels.....
With 205 tyres



Rims	Rim 1 (15x6.5 ET 35)	Rim 2 (15x6.5 ET 35)
Rim Diameter	381 mm	381 mm
Rim Width	165 mm	165 mm
Backspace	118 mm	118 mm
Offset	35 mm	35 mm
Typical Weight	6.8 kg	6.8 kg
Tires	Tire 1 (215/70 R15)	Tire 2 (205/55 R15)
Section Width	215 mm	205 mm
Sidewall	151 mm	113 mm
Overall Diameter	682 mm	607 mm
Rim Sizes	15x6 15x6.5 15x7 15x7.5 15x8	15x6 15x6.5 15x7 15x7.5 15x8
Circumference	2143 mm	1905 mm
Revs per mile	751	845
Speedometer	Assuming that this is OE tire and speedometer readings are correct	When speedometer reads 60 km/h actual speed will be 53.4 km/h
Typical Weight	12.2 kg	9.4 kg
Rim + Tire Weight	15 kg	16.1 kg
Clearance	Wheel 1	Wheel 2
Suspension	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Fenders	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Wheelwells	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	100% clear (leaves even more room than OE)
Brakes	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Scrub Radius	Zero scrub radius (zero value is assumed by default)	Positive scrub radius (about 12 mm). Scrub radius will be changed by 12 mm, this may affect the car's handling. Please check manufacturer recommendations. Please be aware that calculated value is approximate.

With 215 tyres (limited choice of tyres here)

The figure consists of two side-by-side technical drawings of a vehicle's front wheel assembly, illustrating the relationship between the wheel, fender, and suspension components.

Left Diagram:

- Fender:** The upper horizontal component.
- Wheelwell:** The recessed area where the wheel is mounted.
- Brakes:** The caliper and rotor assembly.
- Suspension:** The coil spring and shock absorber assembly.
- Overall wheel diameter:** 462 mm
- Bolt diameter:** 30 mm
- Front track width:** 215 mm
- Front scrub radius:** 215 mm
- Front wheel width:** 115 mm
- Front wheel offset:** 25 mm
- Front wheel backspace:** 115 mm
- Front wheel height:** 151 mm
- Front fender clearance:** 50 mm
- Front wheelwell clearance:** 30 mm
- Front suspension clearance:** 50 mm

Right Diagram:

- Fender:** The upper horizontal component.
- Wheelwell:** The recessed area where the wheel is mounted.
- Brakes:** The caliper and rotor assembly.
- Suspension:** The coil spring and shock absorber assembly.
- Overall wheel diameter:** 615 mm
- Bolt diameter:** 30 mm
- Front track width:** 215 mm
- Front scrub radius:** 215 mm
- Front wheel width:** 115 mm
- Front wheel offset:** 25 mm
- Front wheel backspace:** 115 mm
- Front wheel height:** 151 mm
- Front fender clearance:** 50 mm
- Front wheelwell clearance:** 30 mm
- Front suspension clearance:** 50 mm

Rims		Rim 1 (15x6.5 ET 35)	Rim 2 (15x6.5 ET 35)
Rim Diameter	381 mm	381 mm	≡
Rim Width	165 mm	165 mm	≡
Backspace	118 mm	118 mm	≡
Offset	35 mm	35 mm	≡
Typical Weight	6.8 kg	6.8 kg	≡
Tires		Tire 1 (215/70 R15)	Tire 2 (215/55 R15)
Section Width	215 mm	215 mm	≡
Sidewall	151 mm	118 mm	↓ 21%
Overall Diameter	682 mm	618 mm	↓ 9%
Rim Sizes	15x6 15x6.5 15x7 15x7.5 15x8	15x6 15x6.5 15x7 15x7.5 15x8	
Circumference	2143 mm	1940 mm	↓ 9%
Revs per mile	751	830	↑ 11%
Speedometer	Assuming that this is OE tire and speedometer readings are correct	When speedometer reads 60 km/h actual speed will be 54.3 km/h	
Typical Weight	12.2 kg	10 kg	↓ 18%
Rim + Tire Weight	19 kg	16.7 kg	↓ 12%

Clearance	Wheel 1	Wheel 2
Suspension	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Fenders	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Wheelwells	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	100% clear (leaves even more room than OE)
Brakes	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Scrub Radius	Zero scrub radius (zero value is assumed by default)	Positive scrub radius (about 10 mm). Scrub radius will be changed by 10 mm, this may affect the car's handling. Please check manufacturer recommendations. Please be aware that calculated value is approximate.

With 17" wheels

Choose units:

mm ✓ kg ✓

SECTION WIDTH	REPECT RATIO	MM DIAMETER	MM WIDTH	OFFSET
215	70	15	6.5	35

ISO Metric ✓ Assuming that this is OE wheel/tire

SECTION WIDTH	REPECT RATIO	MM DIAMETER	MM WIDTH	OFFSET
215	45	17	6.5	35

ISO Metric ✓ Adjust replacement parameters here

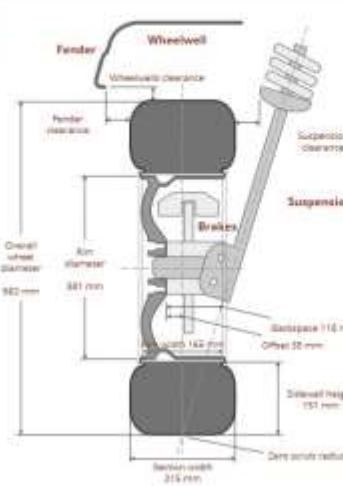
Specify your parameters

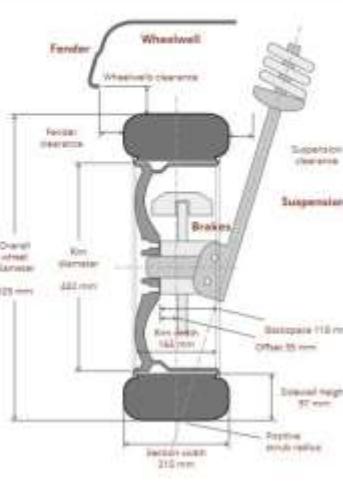
Fender clearance: 50 mm ✓

Wheelwells clearance: 30 mm ✓

Suspension clearance: 50 mm ✓

Scrub Radius: 0 mm ✓





Rims	Rim 1 (15x6.5 ET 35)	Rim 2 (17x6.5 ET 35)
Rim Diameter	381 mm	432 mm ↑ 13%
Rim Width	165 mm	165 mm =
Backspace	118 mm	118 mm =
Offset	35 mm	35 mm =
Typical Weight	6.8 kg	8.7 kg ↑ 28%
Tires	Tire 1 (215/70 R15)	Tire 2 (215/45 R17)
Section Width	215 mm	215 mm =
Sidewall	151 mm	97 mm ↓ 38%
Overall Diameter	662 mm	625 mm ↓ 5%
Rim Sizes	15x6.5 15x6.5 15x7 15x7.5 15x8	17x7 17x7.5 17x8
Circumference	2143 mm	1964 mm ↓ 9%
Revs per mile	751	819 ↑ 9%
Speedometer	Assuming that this is OE tire and speedometer readings are correct	When speedometer reads 60 km/h actual speed will be 55 km/h
Typical Weight	12.2 kg	9.4 kg ↓ 23%
Rim + Tire Weight	19.0 kg	18.1 kg ↓ 5%
Clearance	Wheel 1	Wheel 2
Suspension	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Fenders	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	The same
Wheelwells	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	100% clear (leaves even more room than OE)
Brakes	Assuming that this is OE wheel/tire and there is no any problems with clearance on both sides	100% clear (leaves even more room than OE)
Scrub Radius	Zero scrub radius (zero value is assumed by default)	Positive scrub radius (about 9 mm). Scrub radius will be changed by 9 mm, this may affect the car's handling. Please check manufacturer recommendations. Please be aware that calculated value is approximate.



American Racing

VN-507 - Rodder

One Piece Cast Aluminium, Split Five Spoke
Vintage Silver with Diamond Cut Lip.
Wheel Nut used: ET or Bulge

Wheel Size: 17 x 7 SPECIAL ORDER ONLY	Wheel Size: 17 x 8 SPECIAL ORDER ONLY	Wheel Size: 18 x 8	Wheel Size: 18 x 9.5
<p>Bolt Pattern: 5-114.3 mm Backspacing: 4.00" Offset: 0 mm Centre Bore: 72.60 mm Finish: Vintage Silver Diamond Cut Lip Centre Cap Included: YES</p>	<p>Bolt Pattern: 5-114.3 mm Backspacing: 4.50" Offset: 0 mm Centre Bore: 72.60 mm Finish: Vintage Silver Diamond Cut Lip Centre Cap Included: YES</p>	<p>Bolt Pattern: 5-114.3 mm Backspacing: 4.50" Offset: 0 mm Centre Bore: 72.60 mm Finish: Vintage Silver Diamond Cut Lip Centre Cap Included: YES</p>	<p>Bolt Pattern: 5-114.3 mm Backspacing: 5.25" Offset: 0 mm Centre Bore: 72.60 mm Finish: Vintage Silver Diamond Cut Lip Centre Cap Included: YES</p>

Suspension airbag travel dimensions from top to bottom of spring mounting faces

Front: Minimum 26cm (10.24")
Rear: Minimum 16cm (6.4")

Ride height 30cm (11.8")
Ride height 29cm (11.6")

Gives a ride height of about 5 to 6 inches

Going on the Ridetech website <https://www.ridetech.com/>

It looks like these will do for the rear



Air Spring - 2000lb. Tapered Rear

[Write a review](#)

\$200.00

This Item Ships Free
orders over \$100.00 in the continental US

Part Number: 90009100

Availability: In stock

Quantity:

[ADD TO CART](#)

 California Prop 65 Warning

[Add to wish list](#) [Add to comparison list](#)

 Like  Share 

And these for the front



Universal HQ 1000 Series ShockWaves - Pair

[Write a review](#)

\$925.00

 Prop 65 Warning

This Item Ships Free
orders over \$100.00 in the continental US

Shock Length

2.9" Stroke Shock

Choose Your Shock Length

Mounting Style

Everywhere

Choose Your Mounting Style

Part Number: 21120101X

Quantity:

[ADD TO CART](#)

 California Prop 65 Warning

[Add to wish list](#) [Add to comparison list](#)

 Like  Share 

29/12/2019

Spent last 4 days working very early hours (since Carol was on nights) and constructed the wiring bridge on the drivers side. Also rerouted the trans shifter cable and secured it to the bridge.





Made a plastic wiring clamp out of a fiesta lower steering column shroud and bolted it to one of the master cylinder bolts and tie wrapped the wires up.



Tidied up all the wires and secured them with tie wraps temporarily.
Removed all egr wires back as far as I can in the loom, Also the AIR solenoid and EVR wiring.

Reinstated the coolant/washer tank and lengthened the wires to fit.

Found the vacuum reservoir tank and relocated vac pipe over to the passenger side. Will reattach it there perhaps. Will check if the HVAC or other vacuum dependent devices need it. Plugged it with a yellow plug.

Lengthened both earth wires behind each headlight and bolted them to the front of the wire bridges.

Tomorrow I need to check the horns for operation (cant remember what I did under the passenger side of the dash when I relocated the horn relay). And relocate the horns to just behind the passenger side headlight. Then its onto the rear air springs removal (again!).

30/12/2019

Relocated the horns to the front inside of the passenger front wing. Wired all the 3 wires through a connector and secured it to the panel under the headlight aperture.





Relay located here under the passenger side of the dash. Attached to the bracket on the heater box.



31/12/2019

Put the washer bottle back and lengthened the wires to reach it.

Starter is sounding slow at the start so there must be a high resistance somewhere. So, stripped out the solenoid and cleaned up all the connections thoroughly. Sounded a lot better and started up well. Engine sounds healthy.

Used the firepole connectors to rewire the corroded connectors coming from the alternator.

Onto the fuel filler neck.....

3/1/2020

Tried to refit the original one I made way back. But didn't fit. In any way. So need to start again.

Spent hours and hours trawling the internet for parts and eventually ordered these:

ALL CATEGORIES NEW PRODUCTS BLOG CATALOGUE MERCHANDISE DELIVERY & RETURNS CONTACT US

Home > Fuel System > Fuel Caps > Classic Style > 63mm Aston Style Alloy Fuel Cap and Neck Assembly

63mm Aston Style Alloy Fuel Cap and Neck Assembly

£49.20
excluding shipping

ADD TO CART

1

ADD TO WISHLIST

Integral mounting flange with 51mm fuel hose spigot.

Part Number: FD63

Share:

Delivery: **FREE UK DELIVERY**

Guarantee: **ALL GUARANTEES OVER £60**

ALL CATEGORIES NEW PRODUCTS BLOG CATALOGUE MERCHANDISE DELIVERY & RETURNS CONTACT US

Home > Fuel System > Fuel Filter Hose > Gates 90 Degree 51mm I.D. Fuel Filt Hose

Gates 90 Degree 51mm I.D. Fuel Fill Hose

£27.60
excluding shipping

ADD TO CART

1

ADD TO WISHLIST

IVACOK
51mm I.D. 61mm O.D.

Part Number: FF5090

Share:

Delivery: **FREE UK DELIVERY**

Guarantee: **ALL GUARANTEES OVER £60**

You bought this item | View item details

45 / 90 / 180 Degree 304 Stainless Steel 1D Polished Bend - Mandrel Exhaust Pipe

Condition: New
 External Diameter: 57mm
 Elbow Type: 180 Degree Elbow
 Elbow Leg Length: 151mm
 Buy 1: £10.70 each
 Buy 2: £10.55 each
 Buy 3: £10.49 each
 Quantity: 1
 4 or more for £10.38 each
 More than 10 available
 504 items
 £10.70 each
 £10.70 / Unit
 Buy it now
 Add to basket

Shop with confidence
 eBay Money Back Guarantee:
 Get the item you ordered or your money back. Learn more

Seller information
 mtoSiconhoses_outlet (17269) ★
 98.3% Positive Feedback
 Save this seller
 Contact seller
 Visit Shop
 See other items
 Registered as a business seller

Ad closed by Google
 Stop seeing this ad
 Why this ad? ▾

The plan is to use the 180 degree 57mm (2 and a quarter inches) stainless pipe to come out of the tank, turn the corner, join to the 90 degree hose and join up with the fuel filler cap somewhere behind the light unit on a custom bracket.

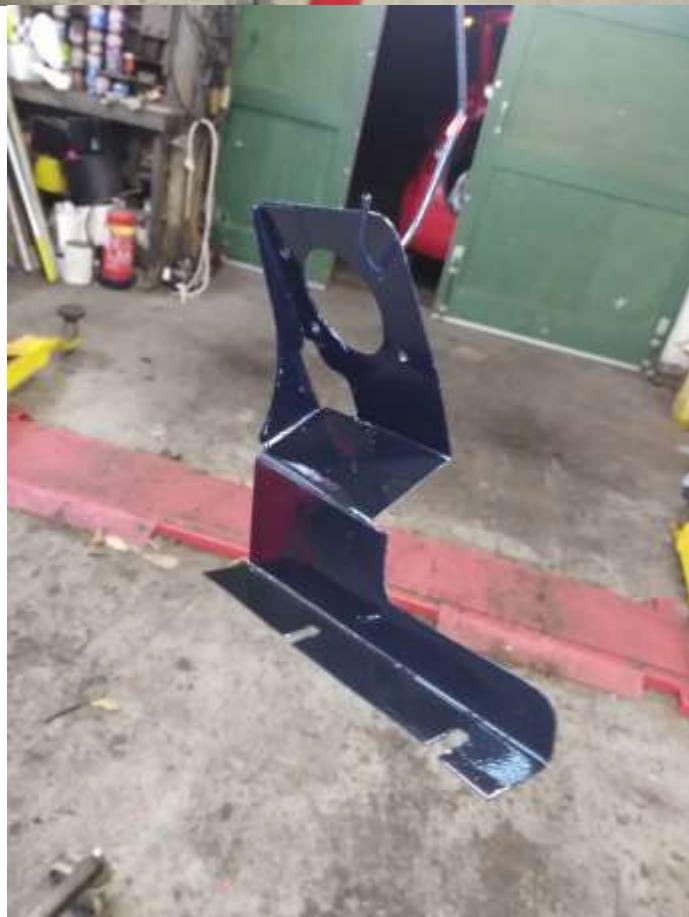
17/1/2020

Finally arrived at this





Then made up the gas cap support using the original cars black plastic one and fabricating a support that bolts behind the inertia switch.



Boot floor and vertical panel under filler cap derusted and painted with green epoxy 121.



Feb 2020
Frame front that was Z'ed reinforced with 3mm plate.





