



Land Rover Defender

TD5 - 110

County Station Wagon

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This is our Land Rover Defender TD5 Long-Wheelbase (One-Ten) County Station Wagon (co-owned with my business partner as equal shares in it). It came along at the right price and we was told it was a good reliable runner, taxed & MOT'ed and has been owned & used by the previous owner for the past twelve years. It's been used as a work-horse & general knock-about vehicle, including family holidays (here & abroad). We was told it had only done 125,000 miles, but further investigation suggests it may have done at least another 10,000 miles, but this doesn't really worry us either. It does have character and a ready made 'Patina Look'.



Yes, it's tatty (at the moment), and it leaks water into the cab when it rains (mainly through the poor seals around the Glass Sun Roof and through the Door Seals too), especially because neither the bonnet nor the doors fit or close properly. Paintwork is well-weathered and totally Matt-Flat (no shiny paint on this one). So . . . it's in need of loads of TLC and a fair-bit of cosmetic surgery here & there. But, it appears to go well, handles & brakes okay and was an enjoyable 'drive' home (based upon our initial test drive and 25 mile return journey back home). It feels & drives just like a 'Proper' Land Rover Defender should do. We both 'love it' and cannot wait to get started on the *refurb-work*, and start *enjoying* this Landy.



First Job on our *works-agenda* was to fix both Front Doors. Neither of them fit properly as the Door Hinges are both knackered (worn & broken hinge pins). Neither Front Doors would lock easily (it was possible to lock them, but with great difficulty). So our first priority was to make this 'Landy' as *secure* as possible. We tried getting new hinge pins, but ended-up buying new hinges instead. As you can imagine on an eighteen year old vehicle (that's seen its fair share of hard graft and outdoor living) most fittings & *nuts'n'bolts* was well and truly rusted & stuck-fast. After plenty of encouragement (i.e. a Big hammer and lots of WD40 & heat) we managed to extract & re-fit the new hinges into place. Job Done!



With the new door hinges fitted to the front drivers door (and the door properly Lined-up - hence the 'G' Clamps & pieces of wood) and secured into place. The next job was to repair the two front doors 'Latches', to enable the front doors to *close* on their 'Catches' (i.e. on both parts of the Lock-Latch). Thankfully, ALL of the Doors now 'Lock' properly. But, unfortunately - each Lock (on each of the three locking doors) has a different Key, so the plan is to get a set of 'Same-Key-Locks' (i.e. One Key fits ALL Locks), well, that's the plan!



We also repaired Drivers Seat (which was coming-apart at the seams), followed by *freeing-up* the Seat Rails (which probably hadn't been adjusted in years). Both front seats now slide easily on their *Rails*, just like when it rolled-off the Land Rover production line (well! almost). A few more adjustments here & there and a general tidy-up to the *electrics* compartment made such a difference to the overall appearance. The carpets were soaking wet, and benefitted from a bit of Sun-bathing (rare at this time of year). To finish off the day's work; *T-Cut polish* was used on a section of the front Wing before packing-up for the night. This quick 'Trial Tee-Cut' polish confirmed that this *Landy* should clean-up nicely.



After a trip to our local Land Rover Parts dealer, we managed to buy a set of *Same-Key-Door-Locks (and new door handle)*. You can see I drilled a hole through the inner door frame to get access to the screws & door handle (as this saves a lot of time dismantling the inner-door frame, to get to the fixing screws). And, as it happens, I also had to Drill-out the existing Handle Screws – which were well & truly seized. Finally refitting those pesky little Spring Retaining Clips on the inner door mechanism, which took ages to get back into place. But at least that's another job done.



The front door paintwork was also treated to a little bit of 'T-Cut' polishing before the door handle was replaced, to see if the original shine could be teased-back into being on the door too. The result was pleasing – to say the least.

The next job(s), on the following page(s): was to remove the rear door 'Cardboard Door panel' to get to the rear door lock (in order to replace the old key barrel with the new key barrel). Unfortunately, when the original rear door card-panel was removed we discovered the true condition of the rear door. To our dismay we found a very rusty and cracked door frame-work in need of immediate remedial repair. Complete Rear Door replacement is not an option at this stage.

Okay! So, there's a bit of 'Rust' here and there . . . Oh! And there . . . Oh! and there too . . . but that's what owning a 'Fixer-up' is all about 😊



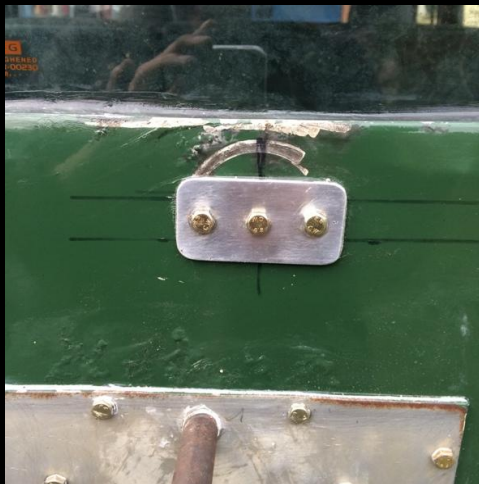
"It really does look a lot worse than it actually is" (this is my MANTRA at the moment, and if I keep repeating it, over & over again, I might even start to believe it soon). I'm sure the weight of the Spare Wheel (which is fitted to the outside of the rear door) has compounded matters and has contributed to these serious fractures and cracks (a combination of rust-corrosion, plus continuous movement fatigue and door flexing = Fractures). The Answer was to repair and strengthen-up the door & the Spare Wheel Carrier by adding *steel fabrication* to the vulnerable and damaged top & bottom fractured areas (and Wheel Carrier Bracket).

The rear door Lock & Barrel (1st photo below left) was removed together with the nearside door Lock Barrel (using same procedure as the driver's door). The Passenger side door was then *re-aligned* with 'G-Clamps & wooden strips, like we did on the other side. And, the whole lot tightened up and all the *door trim* was refitted.

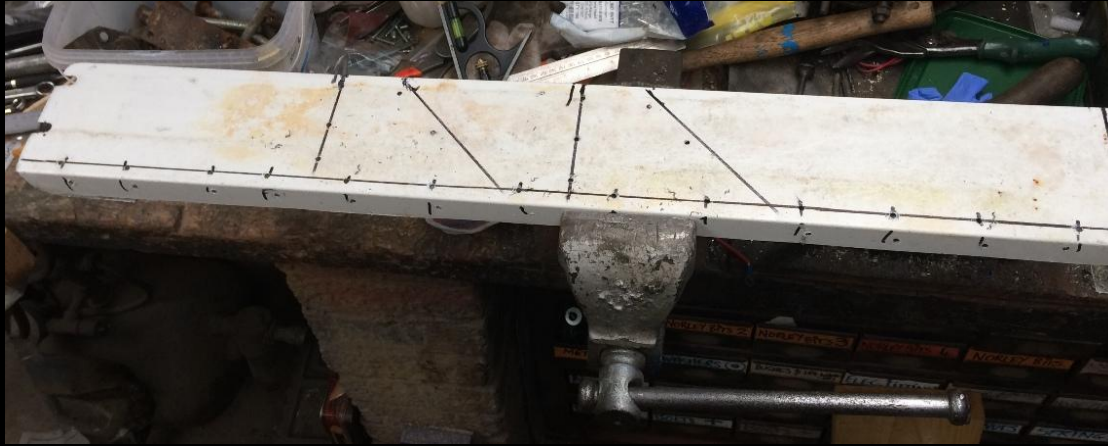


The Spare Wheel Carrier was removed & repaired, plus a new rubber seal fitted. Galvanised Steel plate was used to reinforce the existing door cross-members, thereby effectively reinforcing the old rusty and tired door (giving us a at least a couple more years of 'use' before replacing it).

Because the rear door had developed serious fractures and splits virtually 'centre-line' to the door, it was decided to remove the rear window Wiper Motor Unit & Wiper Blade (and leave it 'Off' altogether). And to reinforce the top & bottom damaged areas of the door with 2mm & 3mm steel plate (pop-riveted & bolted together) and to make and fit a complete new 'Steel Panel' (instead of & in-place-of the original Defender 'Cardboard Door Panel' cover). The finished *result* is a very strong rear door (but at the loss of a rear wiper motor & wiper blade system).



The photographs above show some of the fabricated steel gussets & plates bolted & pop-riveted into place to reinforce the rear door. The photos (next page / below left) shows a sheet of steel being used - measured-out, cut and folded (with the pop-rivet holes pre-drilled) and ready to fit on to the bottom of the rear door. Just by adding this bottom steel fabricated piece makes such a difference to the door. It is already a lot stronger than before and I'm quite pleased with the outcome. Apparently later model rear doors are *Pressed-out* in one piece, rather than *Welded* together.



The remaining rusty sections of the door (photos below) was then treated with phosphate-rust-converter paint & a coat of Hamerite green paint.



Whilst I was working on the rear door, Debz was making a difference inside the car by cleaning and disinfecting the interior (the middle photo below illustrates what a difference this has made). You can see where the Roof-lining (at the rear of the 'Glass Sun-Roof Hatchway) looks really dowdy against the 'Clean' section that has just been 'sorted'. This just goes to show the power of good-old-fashioned elbow-grease & hard graft.



The above photos show the *Before & After* images. What a transformation from "*Dirty to Clean*". Or, as I like to say; "*It's been Detol-ised*".



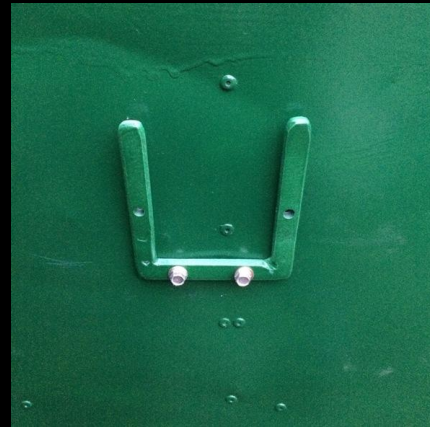
The front part of the Roof-Lining cleaned-up real nice and once the carpets had been dried, cleaned & re-fitted. We also fitted a set of new waterproof front seat covers. Galvanised steel plate was used to make an inner-door-skin (replacing the old cardboard door cover). It looks 'rusty' but it's not, it's actually brown paint. After it was cut, trimmed & folded into shape, it was then pop-riveted onto the steel door frame.



The first photo (below left) shows the galvanized steel plate in place and primed. The 2nd photo (below) shows the topcoat (not original colour)! We bought a second-hand rear Step Plate for a 'Fiver' from the Vintage 4x4 Show & Auto-Jumble (in January) which was bent & twisted out of shape, so it had to be reshaped (using heat & a Big hammer) before 'fitting' on to the Tow-Bar-Plate. We are really pleased with the result because the distance from ground level to the inner platform floor is just over two feet high, and this step makes getting *in* & *out* of the Landy much easier.



Also at the 4x4 Show we bought an ex-army fold-away-shovel (in khaki-camo, with QR holster). I made & welded-up a bracket to mount the shovel to the inside of the rear door. Yes! I know - Not an essential purchase - but I couldn't resist it.



We decided to remove both of the side-facing rear seats and the seat belts and may eventually fit aluminium checker plate to the floor and wheel arch box sections (maybe?). But in the meantime we will 'make-do' with carpet & rubber floor mats. I think the 'space' (without the seats) will be more useful to us and more convenient for our needs (i.e. when loading / unloading & carrying awkward &/or heavy 'Stuff').



We've read several articles in Land Rover Magazines suggesting the fitting of steel security plates – so, that's what we have made & fitted. The reason for this modification is to stop members of the criminal scumbag fraternity from 'unscrewing' the inspection plate (above photo – on top of the driver's side front wing) allowing them to pull the Bonnet release cable to open up the 'Hood' so they can steal the Bonnet and/or the car. The photos below show our new FBLS (Front Bonnet Locking System). No, it's not subtle (by any stretch of the imagination), but it is effective & strong, and hopefully a big enough deterrent to 'would-be-thieves'. We've also fitted a High Security Chain & industrial Shutter Padlock, to fit around the Steering Wheel (as yet another 'deterrent'). We have also fitted a complete set of Locking Wheel Nuts to further deter potential thieves.



New FBLS fitted (above right photo). With Industrial Shutter type Pad Lock fitted for extra bonnet security.

On Monday 22nd January, I drove into Town and to my dismay “there was a strange noise” coming from the engine compartment. A few miles later, the problem became apparent when the smell of burning rubber and the Red Battery Warning Light came ‘On’ following a serious mechanical malfunction! The photos below show exactly what happened . . . The Auxiliary Drive Belt ‘Idler Pulley’ bearing disintegrated!



On Tuesday 23rd, I purchased the necessary spare parts to repair this mechanical mishap, and fitted them that afternoon. I replaced Both Idler Pulley Wheels & Bearing Units (as the second pulley has probably seen just as much work as the one that failed) and obviously fitted a Brand New Serpentine Auxiliary Drive belt too.

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Photographs on the next page show yet another security feature that we decided to fit (as suggested in Land Rover Owners Magazine): Security Hinge Plates, fitted to both Front Doors and to both of the Second-Row Passenger Doors.

It is stated that these Security Plates will prevent the Doors from being stolen, even if the ‘external hinge bolts’ are removed by thieves – supposedly keeping the doors in place with these plates. Hopefully, they work as advertised, and keep our doors and the Car ‘Safe’n’Sound’ and prevent them from being stolen (well that’s the ‘Plan’).







After vacuuming, cleaning-out and polishing the Rear Cargo Floor (by Debz for the third time) the next stage was to fit the New Rubber Mats that we purchased at the Vintage 4x4 Show & Auto-Jumble (back in January). It's starting to look a lot better now with all of 'these' little touches and additions making a difference to the look and feel of our 110. (e.g. the use of this durable *checker-plate-styled* rubber mats for the Rear Cargo Floor and for the Rear Passenger Floor footwell too).



But just as one job is finished . . . yet another job appears. Something that we totally missed (when we bought this 110) was the fact that the rear 'Quarter light Window' was very close to 'falling-out'. So, I had to remove the Window completely and cleaned-up both the Seal and the Window, before refitting it back into its proper place. The Inner Seal 'Beading-Strip' took quite a bit of effort to get it back-into-place. But with the usual amount of patience and occasional swearing . . . it all went back perfectly. The job was finished-off with a home-made *Wire Security Guard*.

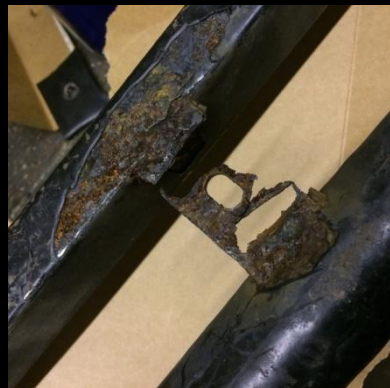
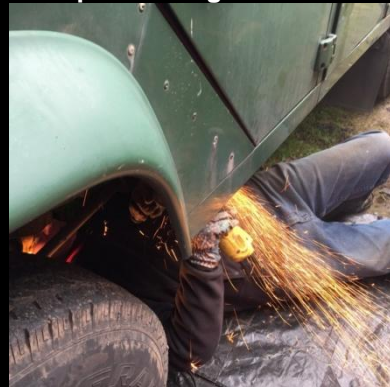


Another successfully security job completed. And . . . a 'Comparison' between the unpolished Matt Paint versus polished Shiny Paint = RESULT.

The Side Steps (on both sides) were in need of serious repair. They wobbled and creaked whenever any weight was put on them. Following closer inspection it was discovered the mounting brackets (where they bolt onto the chassis) had fractured & split due to corrosion. Plus, the nuts & bolts (that hold these Steps to the Chassis) was totally rusted & seized solid. So the next stage was remove them for structural repairs (i.e. fabricate & weld new brackets and support plates onto these old & rusty *Side Steps*) before we can re-fit them back onto the vehicle.



Due to the extreme corrosion of the Step mounting brackets and seized fixing nuts & bolts, we had to use a Disc-Grinder to cut them off.





March 2018

A complete 'Service' was carried-out on the 'OneTen' before our Land Rover TD5 110 went in for its annual MOT Test. Unfortunately, it 'Failed' its MOT Test on a 'Lighting' problems & Steering Drag Link & Ball Joint with excessive play (plus quite a few Advisory Notes). Following Remedial Repairs on the required work our 'OneTen TD5' finally passed 'its' MOT Test. Yeay! We are road-legal again. Still working on the 'Steps' tho'

[More photos to follow . . . Check-out how the repairs, fabrication work & welding went; in our next web-blog.](#)