

So your thinking of buying a Defender? Well go prepared and you maybe be able to avoid some of the pitfalls of buying one.

In many ways the Defender is rather simplistic. However that doesn't mean we recommend you buy one on your own if you know nothing about vehicles. If at all possible try to take someone with you who at least knows about how a car works!

Whilst this guide can't cover everything it give you a good start to buying a decent Defender.

Quick glance before we go into detail

Firstly they are nothing like a car to drive or use, they are a 4x4 workhorse that happens to be OK on the road! So your first drive may be a shock (not that their horrendous but some people assume they are like a car but a bit higher up!)

Unless you looking for a 'Series' then we wouldn't recommend anything with a pre-"Tdi" engine (1990 'H' reg onwards, badged Defender, "200 Tdi" from '90 to '93, "300 Tdi" from '94-'98, both have the same capacity and power however the "300" is more refined. The Defender was upgraded to rear brake discs and a revised gearbox at same time as it was changed to the 300 Tdi. The Tdi range of engines are a vast improvement in performance and economy over previous NA engines.

Go on condition more than mileage e.g. an ex-quarry/farm vehicles may have low mileage but 90% are rust buckets. I'd aim for a 94-97 300 Tdi Hard Top with under 100k.

Things to look out for are rust to chassis (mainly rear half) and to bulkhead (normally top rail below windscreen and to the door pillars). Engine wise the Tdi in "300" form needs to have had the cambelt modification work carried out (if no proof that it's been mided then budget £300-£400 to have it done) the "200" doesn't have this problem. Other than that occasionally the head gasket can go. Turbo's can wear and consume oil, lift pump failure is quite common. Generally though the engine is very robust and will do 250k+ without a rebuild if maintained.

Gearbox's do have some issues with the mainshaft so make sure it doesn't clonk too much (gearboxes are quite agricultural so it's a slow change and they can be jerky if your not used to it). Also check the 2nd gear synchro on high mileage.

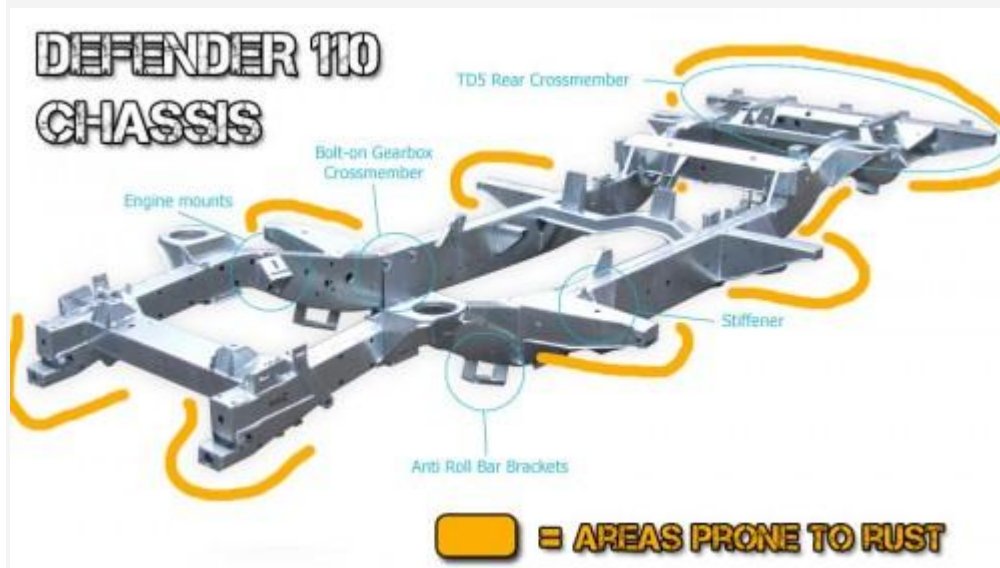
Door frames are steel so look around bottom of doors for rot, depending if they can be repaired or not they are expensive to replace.

Swivel's (the big chrome balls at either end of the front axle) can leak fluid if the seals are worn. They are not expensive in terms of a new seal but can be time consuming to do. Interior trim is not the best to start with but everything is available and if your doing long distance trips you'll probably want to upgrade the front seats anyway.

CHASSIS

Prone to rot at the rear (See below for images of Rotten Rear Cross Member). Cost to replace an entire chassis can be £1200 upwards just to purchase a replacement then a further £1500 + to fit depending on who does it. Bulk head out riggers are also prone to rot, you can see them underneath under where your feet would be, on a 110 there are body outriggers too. Front dumb irons can go also.

Below are a couple of images of 90/110 chassis that have had the main areas prone to rot highlighted, be warned that on older vehicles bad rot can be almost everywhere. Waxoyled vehicles are a bonus so long as its on top of good steel!



After being caught out myself by a very well hidden but very rotten chassis, it's amazing what you can cover with thick paint, silicone and strategically placed wooden blocks. I now go armed with a little tack hammer and work my way up and along the chassis tapping and concentrating on the areas

prone to rot. If the seller disagrees with you doing this then walk away, maybe hiding something from you.



BODY

Of course its dented, it's a Defender....

Aluminium alloy panels don't rust, but they do oxidise and turn to dust. Blisters are common as is reaction where the steel meets alloy (hinges, bolts, etc). Alloy is also very soft so you can dent it very easily. If you dented your Audi you'd cry however if you dented your Defender ... well it adds character. Dents rarely detract from value, unless of course its a complete dog that's been thrashed with a hammer.

Doors should all work, if your lucky they will fit and close without needing to slam them. Open the door and rock it up & down on the hinges – it shouldn't move but if it does (they often do) then it will probably need new hinges. Door seals are often tired and often require replacing. Locks are very poor and can be opened with a 5p coin if really worn. The Door frames are steel and so the steel rots, they ALL rot here and that's why new front doors are quite costly and decent second hand ones are hard to find.

Bumper well its about not too expensive for a new one. Don't worry if its rusty, only needs changing if its rotten or bent beyond use.

Glass – not much to go wrong. Make sure window winders work fully and if fitted expect the rear sliding windows to rattle.

Sunroof – if fitted often leaks, they can be a bit of a pig to get watertight.

Chequer plate – individual choice really but just be aware of what it may be covering up, especially if fitted to the rear cross member!

Roof – often leak at the joins. An easy fix is builders caulk or silicone.

Bulkhead – worth paying attention to this bit. It goes from under the front screen, down to the front of the footwell and are of steel construction. They rot out in the edge near the wing mirror and its a job for a welder. There is an image of one that's been removed below, typical rot is on the outer edge and what would be the door post (A post).



The other image is of a passenger footwell seen from the seat, the floor plate is removed.



INTERIOR

What there is of it. A County has the most and much of that may be wet from all the leaks, Carpets don't last well so rubber matting is much better. Seats are comfortable enough in the front but tend to sag with lots of use (as in 100,000 miles plus). Lots of aftermarket trim is available, but brand new seats are not cheap. Middle row seats are not so comfortable and rear bench seats are bloody uncomfortable thus they are often removed or replaced with inward facing or forward facing fold up seats. All plastic clips, trim, winders etc are easily available on "on-line auction sites" or from the likes of Paddocks or Cradocks.

Not Exactly Brimming with Luxuries



Headlining often sags with age and replacement with a new one isn't cheap either. If you look at a Defender without carpets, door cards and a headlining then don't worry. They were made like that! You could add them yourself but depending upon your use for the vehicle, why bother. Heaters often don't work effectively this is usually because of the adjustment on the levers. Poor lighting on the dials can mean you need new a bulb or two which are easy fixes. Remove the seat bases and look in the under seat compartments you should have a battery in there and not too much rust.

RUNNING GEAR

Front Diff – rover unit (round), last well (200,000 plus) and easy to come by second hand if required. Can leak from input shaft seal. Remove prop, pull out old seal, drift in new seal, job done. Sometimes caused by blocked axle breathers also. At the back of the engine you may see some black pipes bent over they are the end of the breather pipes.

Rear Diff – rover unit or Salsbury on 110's (more square in shape). Salsbury renowned for long life and plenty of slack in the drive line however they are not a DIY job to rebuild!

Prop shafts – should be greased via nipples. There should be no play in them so get under and try to push/pull/swing on them. U/J's wear and you will hear them, replacement is easy enough and not expensive. Wedge with a large screwdriver and see if they move. Should be easily spotted.

Half shafts & drive flanges – a common cause of excess slack in the running gear.

Bearings are much the same as other motors they should be adjustable (unsure of that on TD5's though?) front swivels do pit and leak. Below is an image of some pitted swivels so you can see what your looking for.

Example of Pitted & None Pitted Swivel Balls



Brakes – disks all round from early 1993 onwards. Should stop well for a big vehicle and shouldn't pull to one side.

ENGINE

We only know of the 200 & 300 tdi's. Late 300 Tdi's have ECU's but the rest are very basic on the electrical side. If Well looked after they can last for ages. In excess of 250,000 mile is not unusual for a Tdi. Check oil level, the state of filter (air also) then start. A puff of smoke is normal and bear in mind they are not quiet (particularly the 200) but there should be no top end tappet rattle. Gearboxes can cause a lot of noise. When warm it should not push oil out the dipstick hole, it should also not breathe when you remove the rocker cover cap as that indicates excessive wear in the motor.

Bear in mind that they are not exactly quick but don't expect every one to tear past you. My 110 with 121,000 miles on it will sit at 70mph and top out at 75mph but its a lot quieter at 65mph, Big tyres make pulling away a touch slower.

Problems with timing belts on 300's should be sorted by now, the 300 also had some head problems which is often related to coolant. Check the coolant and oil for any signs of contamination/mixing.

Service history is a good idea however many Landy owners are fairly hands on so don't be surprised to hear "I service it myself every 3000 mile" this could be entirely true. If the whole engine bay is immaculate & jet washed ask why? Timing belt should be changed so seek proof of this? If no proof then budget to get it done ASAP. Injection pumps wear out eventually, there not cheap. Smoke on running can be anything from a worn motor to a dodgy injector or bad timing. Water from the bottom of the water pump is a sign that a new pump is needed.

The Viscous fan may or may not be there. It's rather popular to replace them with electric fans but by no means is this essential. As with any engine, you really need someone who knows a diesel to have a look for you.

You can get V8's but they are of limited availability and no where as common as the diesels. Diesels average anything from 26 to 36mpg and I can get 30-32 consistently in a 110 with A/T tyres and no roof rack. However put mud terrains on, a roof rack & fill it with winches and you will probably get it to

drop a bit. For more specific engine traits I'd recommend asking on any of the forums. Just don't take everything you read as the only truth. We all have our own views/experiences.

GEARBOX & CLUTCH

Clutch is the same as all hydraulic activated ones in cars. Drive in 2nd to high revs then drop it in 5th and boot it, if it slides then its heading out. Expect heavy pedal action and you'll get a bigger leg in time. Gear change can "snag" somewhat if you push it but it gets better when its warmer. 300tdi's have R380 gearboxes (reverse near driver), 200tdi's had the LT77 (reverse up part 1st gear away from driver). The R380 is favoured as the better choice by many. Both have issues with output shaft getting poor oil supply resulting in loads of back lash in the gearbox. Budget £400 to buy a rebuilt box but many have been done by now. It's quite common to have a recon box in a defender as they often acted up within 70,000 miles.

Gearboxes are often noisy when driving but not excessively. They shouldn't leak but they often do. Transfer boxes are generally very strong but some times leaks from output seals they can get noisy as it ages.

Engage diff-lock and drive forward, the light should come on the dash. If it doesn't its often because the levers jammed through lack of use. When you disengage it you may need to reverse a few yard then go forward again for the light to go out. Note the light goes on when its actually engaged not just when you move the lever. Don't drive on tarmac for far at all in diff-lock you will wind it up and something will go bang. Take someone with you who knows about it or even ask the seller to go through it with you. Try low box also that should be fairly straight forward.

ELECTRICAL

There's not much of them, but that doesn't mean that they will work! Common problems are melted wiring (esp lights) badly added extra lamps, bad earths will almost be a certainty. A classic example is flashing your lights and the wipers start. All just needs tracing back to the earth then cleaning & refitting. Not unusual for the light switch stalk to break on the steering column, another cheap fix. If it doesn't stop running when you turn it off, then the fuel pump stop solenoid is usually broke. An easy fix. Indicator lamps are about £3, head lamps about £15. So none of it is mega bucks. Glow plugs fail, more noticeable in the winter, but again a cheap fix for new ones.

HANDLING

Should feel sound and stable when driving. Weaving about is associated with worn suspension bushes quite often. Springs & shocks take a beating off road, particularly on something so big, so check for wear. Sometimes notice a little roll as the vehicle wallows onto one side in a corner, but then it should sit there and not bounce about during the corner. Not a race car, don't throw it into a corner until your used to driving it, particularly on a test drive. A Clunk at the rear on driving off can also be the rear A frame ball joint wearing out. Knackered suspension on Defenders is usually fairly obvious in my limited experience. Tyres are personal preference, I use A/T as I don't seek to drive through mud every day and I'm off road about 5% of my miles. BFG are the favourite for many, at £110 a corner there not cheap, but you should see 60,000 mile from a set. Remoulds can be had for £55 a corner

and can see 50,000 plus from a set also. Mud's may "look better" but there noisier and hold the road less in the wet. It's all down to personal choice really, A/T tyres certainly give a vehicle a more aggressive look/stance.

That is basically what you should be armed with when viewing Defenders. People like to point out that 110's are cheaper and not so roughly treated.

That in many peoples opinion is utter bollocks, in our experience we have found loads of good tidy 90's but every 110 was heavily used as a work horse. Now Personally I ended up travelling 350 miles to St Austell in Cornwall to buy mine (Even going armed with all this info I bought one with a very well hidden but thoroughly rotten chassis, much to my displeasure).

To reiterate one last thing, if its well cared for then don't be put off by the mileage. You'll see plenty beaten up 90's thrashed to death in fields with 80,000 mile on the clock. Its the rarely off-roaded, full service history 140,000 miler that we'd have for the right price.

Don't just take our word for it, ask around and read up on them.

Good Luck!

This guide is from various sources with a bit of me added too, hope it helps you.