

Defender vehicle purchase check points. (Not to be considered a definitive list).

Updated 13/12/17 Rev 2.

Before going to look:

Go to the following website and check the vehicle MOT history. It is FREE.

<https://www.check-mot.service.gov.uk/>

<https://vehicleenquiry.service.gov.uk/>

Paperwork:

- 1) Check paperwork matches what you have checked on line.
- 2) Check VIN number matches including the chassis, if chassis replaced what evidence is given. See pics.
- 3) Check the engine number. See pics below to check where.
- 4) Check service history if given.

Chassis: Use a magnet and potentially a screwdriver (ask the owner for agreement)

- 1) Rear Cross Member.
- 2) Check entire chassis for rust, incl, outriggers , internal mid body crossmember , all Chassis.

Body: Use a magnet to check.

- 1) Check door bottoms, they rust out.
- 2) Check the bulkhead , door pillars and the vent area for rust.
- 3) On CSW models check the B pillar bases for rust.
- 4) Check the footwells, lift mats and check for rust / holes, also look from inside the engine bay.
- 5) Check body cappings for rust on the outside and aluminium oxide on the inside
- 6) Check for aluminium corrosion at rear cross-member fixings.
- 7) Check for aluminium corrosion at front of tub fixings and seat belt fixings.
- 8) Check for aluminium corrosion on seat box ends.
- 9) Check for aluminium corrosion on door posts.
- 10) Check the seatbelt mounting points for corrosion. Including the base of the seatbox.
- 11) Check the Battery is correctly located and secured in the under passenger seat compartment.
- 12) Open the door and close, the hinges can fail and the door droops. Also check the door latches the nylon ring breaks , new latches are cheap to buy and easy to fit.

Instrument warning lights:

- 1) Check all warning lights work and extinguish as they should. See appendix 1.

Engine compartment:

- 1) All fluids are to the correct levels. Engine oil / PAS / Coolant .
- 2) Start engine from cold, with no glow plugs , see if it starts OK.
- 3) Once engine is hot , unscrew oil filler cap and check for crank case pressure, also check dip stick.
- 4) TD5 - Check the fuel pressure regulator isn't leaking, left at the rear of the top of the engine. If it is leaking, depending on how long could mean the starter is on its way out
- 5) TD5 - Check the rocker cover isn't leaking oil.
- 6) TD5 - Check for oil in the red plug at the ECU, under the drivers seat
- 7) 300tdi, Check the wading plug / drain in the timing belt cover, if fitted remove and check for oil.
- 8) Check condition of Ancillary belt in engine.

Car interior:

- 1) Check rear boot carpet for dampness.
- 2) Verify all doors lock and unlock using the key in door lock . Verify OTHER keys do NOT unlock the door.
- 3) If fitted , Check Central locking works.
- 4) Check all windows raise and lower smoothly.
- 5) Check all doors open on the outside door handles. Once unlocked.
- 6) Check all doors undo from the inside using the latch.
- 7) Check the seatbelts, they catch in the door latch and can be MOT failures.

Steering :

- 1) Check steering box for leaks, before and after test drive.
- 2) Check the swivel bearings, if possible lift and check by rocking at 12 and 6.
- 3) Check wheel bearing, if possible lift and check by rocking at 3 and 9.
- 4) Turn steering from full lock to lock, steering wheel should sit at ctr .
- 5) Check swivels for pitting / damage , clean before and check after test drive.

Brakes:

- 1) Check all disks , check to see if damaged or badly scored.
- 2) Check all pads on diskbrakes.
- 3) Check the transmission brake , find a steep slope and see how high it has to go to be of use.

Transmission / Gearbox:

- 1) Select and check if fitted that the CDL works as it should.
- 2) Check Low box and High engage and disengage as they should.
- 3) Check all Forward and reverse gears engage and disengage as they should.
- 4) Check all UJ's for looseness and check prop centre splines do not have any longitudinal or rotational play..
- 5) Check the wading plug / drain plug in the Bell housing ,if fitted remove and check for oil.

Car Security:

- 1) Check the radio code / Key code are included
- 2) Verify if fitted that any alarm works as it should.

Diagnostic checks TD5:

- 1) If possible put diagnostics (nanocom / hawkeye) on car and verify if any faults are recorded. Remove if possible before test drive. Review after test drive.
- 2) If Diagnostics available check MAF has a reading of approx 55 showing when engine idling.

Electrical exterior:

- 1) Verify all lights work as they should including hazards and brake lights.

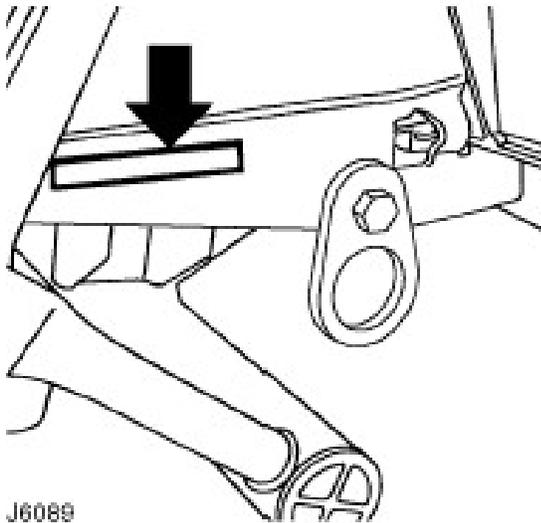
Miscellaneous:

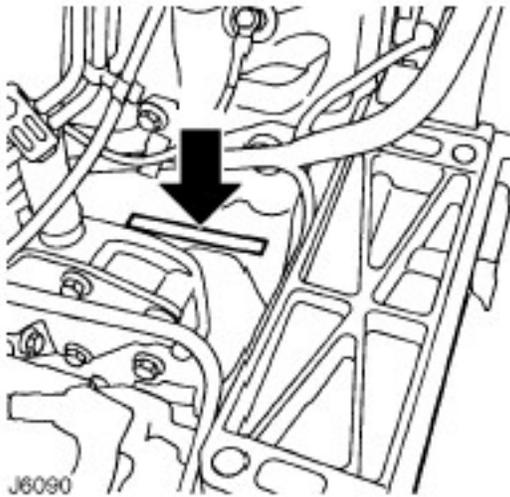
- 1) Check hydraulic jack is included.
- 2) Check jack handles are included.
- 3) Check if fitted locking wheel nut key is included plus it fits and is not distorted.
- 4) Check Tyres have even wear across the tread pattern.
- 5) General condition of tyres including inside walls.

Driving:

- 1) Listen for odd sounds. The below is not definitive.
- 2) A clunk on start off can be the A frame ball joint.
- 3) A chirruping noise that increases with the speed from underneath can be dry Universal Joints.
- 4) A rumbling when the accelerator is lifted and vehicle on overrun can be the Universal joints.
- 5) When driving in a straight line , make sure steering wheel is in the correct position. Check the steering for vagueness in the ctr and tightness when turning both left and right. Steering is approx 3.5 turns lock to lock.
- 6) Listen for any clunking or if feeling any vibration if turning tightly left or right. Could be the CV's

The number is also stamped on the RH side of the chassis to the rear of the front lashing eye, see J6089.



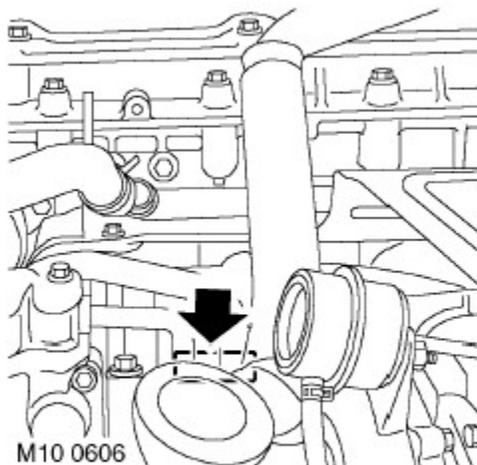


Engine serial number - 300Tdi Engine

The 300Tdi engine number is stamped on the cylinder block on the RH side of the engine above the camshaft front cover plate.

LOCATION OF IDENTIFICATION NUMBERS

Engine serial number - Td5 Engine



The Td5 engine number is stamped on the LH side of the cylinder block, below the exhaust manifold.

Warning lights



D269

The warning lights are colour coded as follows:

RED lights are warnings.

WARNING

DO NOT drive if a RED warning light remains on once the engine is running or illuminates whilst driving.

GREEN & BLUE lights indicate that a unit is operating.

AMBER lights show that a unit is operating and should be switched off (or rectified) as soon as conditions allow.



Low engine oil pressure - RED

Illuminates as a bulb check when the starter switch is

turned to position 'II' and extinguishes when the engine is running. If it remains on, or illuminates whilst driving, STOP THE VEHICLE as soon as safety permits and seek qualified assistance before continuing. Always check oil levels when this light illuminates.

NOTE: At very low ambient temperatures, the light may take several seconds to extinguish.



Battery charging - RED

Illuminates as a bulb check when the starter switch is turned to position 'II' and extinguishes when the engine is running. If it remains on, or illuminates whilst driving, a fault is indicated. Seek qualified assistance urgently.



Handbrake & brake system - RED

The light illuminates when the handbrake is applied and extinguishes when it is fully released. If the light illuminates while the handbrake is released, a fault with the braking system is indicated, check the brake fluid level (see *Maintenance*). If the light continues to illuminate, seek qualified assistance urgently.



Direction indicators - GREEN

Flashes in conjunction with the direction indicators. If the light does not illuminate, this may indicate a bulb failure in the warning light pack or in one of the direction indicator lights.



Headlight main beam - BLUE

Illuminates whenever the main beam headlights are on.

Warning lights



Hazard warning lights - RED
Illuminates in conjunction with the direction indicator warning

lights, when the hazard warning lights are operated.



Differential lock - AMBER
Illuminates whenever the differential lock is engaged.

If the light remains on after the differential lock is disengaged, transmission 'wind up' may be present. Reversing for a short distance and then going forward will usually 'unwind' the transmission. If the light remains on, contact your dealer as soon as possible.



Heated rear screen - AMBER
Illuminates when the rear screen heater is operating.



Engine immobilisation - RED
Flashes during any attempt to start the engine when the engine is immobilised.



Trailer direction indicators - GREEN

Flashes in conjunction with the vehicle direction indicator lights to show that all trailer indicator lights are functioning correctly. In the event of a bulb failure on the trailer, the warning light flashes once and then remains off.

NOTE: When a trailer is not fitted, the warning light will only flash once.



Sidelights - GREEN
Illuminates whenever the sidelights are on.



Rear fog guard lights - AMBER
Illuminates whenever the rear fog guard lights are on.

REMEMBER: In clear conditions, rear fog guard lights can dazzle other road users. Use **ONLY** when visibility is severely restricted.



Glow plugs - AMBER
(diesels only)

Illuminates whenever the starter switch is turned to position 'II' if the engine is cold. **WAIT** for the light to extinguish before starting the engine.



Anti-lock braking system - AMBER (if fitted)

Illuminates for approximately 1 second as a bulb and system check when the starter switch is turned to position 'II', and briefly extinguishes before coming on again. If the light does not extinguish and then come on again, then a fault occurred with the ABS system and you should consult a qualified dealer at the earliest opportunity. The warning light will remain on until the vehicle is driven above approximately 5 mph (7 km/h).

If the light remains on or subsequently illuminates while driving, a fault has been detected by the self monitoring system. This means that full ABS control may not be available and you should consult your dealer at the earliest opportunity.

Warning lights



Traction control - AMBER (if fitted)

Illuminates as a bulb and system check, when the starter switch is turned to position 'II' and extinguishes after approximately 4 seconds. The light illuminates for a minimum of 2 seconds, whenever traction control is operating.

If the warning light flashes (for at least 10 seconds); this indicates that the traction control has been operating for too long and has temporarily shut down to allow the system to cool down - this will only occur in extreme conditions.

If the light illuminates continuously, a fault with the system is indicated - seek qualified assistance.



Transmission oil temperature - RED (if fitted)

Illuminates when gearbox oil temperature is too high (most likely to occur in very hot weather, during continuous high speed driving, when towing heavy loads on steep inclines).

If the light illuminates, reduce speed. If the light remains on, stop the vehicle and do not drive until it has extinguished.



Check engine - AMBER (Td5 models only)

Illuminates as a bulb and system check when the starter switch is turned to position 'II' and extinguishes after approximately 3 seconds. Illumination at any other time indicates an engine fault - if the light illuminates, avoid high speeds and seek qualified assistance urgently.



Fuel filter - AMBER (Td5 models only)

Illuminates as a bulb check when the starter switch is turned to position 'II' and extinguishes after approximately 2 seconds. If the light illuminates while driving, this indicates the presence of excessive amounts of water in the fuel. You may continue driving, but should seek qualified assistance at the earliest opportunity.



Low fuel - AMBER

Illuminates when the fuel remaining in the tank drops to a minimum of 2 gallons (9 litres). If the light illuminates, refuel at the first opportunity.



Cold start - AMBER (Petrol engines only)

Illuminates when the cold start control is selected and extinguishes when the cold start control is pushed fully in.