LAND ROVER DISCOVERY MK2 MK II DEFENDER 2.5 TD5 EGR Valve Removal Pipe Tube Kit Blanking Blank Bypass Overhaul Repair Kit Install Instructions Guide

by **x8rltd** on October 20, 2016

Intro: LAND ROVER DISCOVERY MK2 MK II DEFENDER 2.5 TD5 EGR Valve Removal Pipe Tube Kit Blanking Blank Bypass Overhaul Repair Kit Install Instructions Guide

The Problem

Carbon rich recirculated exhaust gasses leave deposits within the EGR valve which restrict or damage the EGR valve causing vehicle faults.

The EGR valve on these vehicles is designed to redirect a portion of the vehicles exhaust gases back to the engine through the intake manifold. Carbon rich recirculated exhaust gasses enter the EGR valve before the intake manifold, over time Carbon deposits gather in the EGR valve and can interfere with the operation of the EGR valve flap and can block air flow. Resulting in reduced fuel economy and vehicle performance. Often this build up damages the EGR valves which are expensive to replace. This malfunction of the valve or blocking of the exhaust port causes Detonation (also known as pinging or spark knock) causing misfiring or rough idle. Many examples can be found across the internet showing these EGRs completely blocked up with carbon; significantly reducing airflow to the intake.

Symptoms of the fault

Rough engine running

Misfiring

Decreased throttle response

Loss of power or torque

Smokey engine

Low MPG / decreased MPG

Vehicle stalling at low speeds

Acceleration slow / sluggish

Vehicles affected and compatibility

Land Rover Discovery MK 2 MK II TD5, 1998-2004, all models.

Land Rover Defender, TD5, 1998-2006, all models.

Engine Codes 10P, 15P and 16P.

Associated part numbers:

7.22434.04, ERR6620, WAV100270, WAV000020.

Part numbers are for guidance only, please inspect your EGR to ensure you are purchasing the correct kit.

Our solution

Our kit allows easy replacement of the EGR valve with our improved design part which stops any recirculated exhaust gases entering the intake manifold. Resolving vehicle faults and stopping carbon build ups in future.

Install our completely Stainless Steel EGR blank and eliminate build up in the intake manifold. This allows the engine to breath better which can improve vehicle performance and fuel efficiency. Our EGR blanking kit stops these recirculated exhaust gases entering the intake manifold, eliminating the risk of future build ups.

Our kit is the most comprehensive available including all components required to delete the EGR valve and will fit in the same way as the OEM part. You will receive:

1x Stainless steel EGR tube, precision machined and all constructed from stainless steel, featuring a substantial bead to ensure an air tight seal with the boost hose.

4x Stainless steel EGR to intake manifold bolts.

1x Intake manifold to EGR gasket.

1X solenoid vacuum pipe blanking plug with cable tie to secure.

1X Exhaust manifold blank with high temperature gasket and fasteners allowing you to remove the EGR to Exhaust manifold flexible tube that often blocks or splits.

Our kit is top of the range and the most comprehensive kit available. Check out our instructions and video to see how our kit allows you to successfully eliminate the EGR valve on your vehicle.

Possible advantages of EGR deleting:

Turbo can spool up quicker and at lower revs resulting in less turbo lag.

Prevents carbon build-up inside intake manifold and ports.

Smoother pick up from idle, engine running and better fuel economy.

Increases in power and / or torque which slowly fades as carbon builds up.

Improved fuel consumption / MPG.

You will receive

.1x Stainless steel EGR tube

4x Stainless steel EGR to intake manifold bolts.

1x Intake manifold to EGR gasket.

1X solenoid vacuum pipe blanking plug with cable tie to secure.

1X Exhaust manifold blank with high temperature gasket and fasteners.

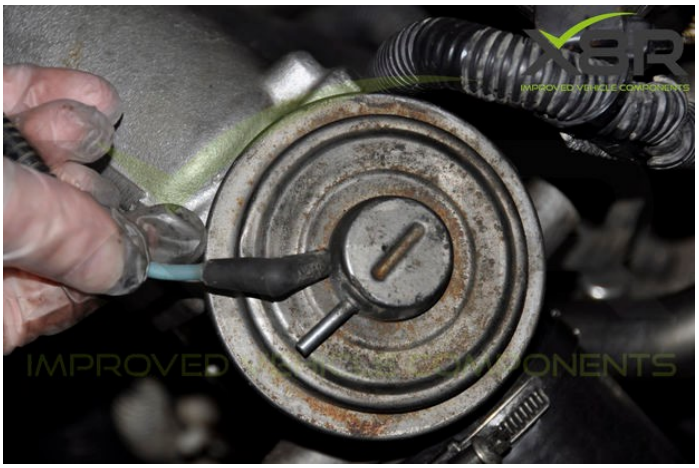
Step 1: Remove the engine cosmetic cover

Remove the engine top cosmetic cover; 3 bolts in total one on drivers side and two on passengers.

Remove the radiator / fan cover (4x Philips head screws)

Step 2: Remove the pipes from the EGR valve

Pull the Blue vacuum pipe loose from the EGR valve.
Loosen the Jubilee clip and remove the boost hose from the EGR valve.



Step 3: EGR cooler (skip this step if your vehicle doesn't have an EGR cooler)

Only relevant for vehicles fitted with an EGR cooler:

This repair stage is shown on the bench for clarity, it should be carried out on the vehicle and only the metal pipes should be removed, the EGR cooler should remain mounted and no other pipes removed.

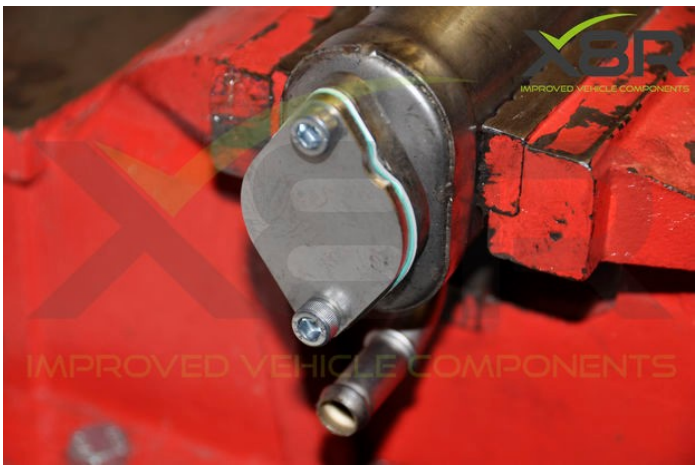
Remove metal pipes from both ends off the EGR cooler (EGR to cooler and cooler to exhaust manifold)

Clean up the mating faces of the EGR cooler and ensure they are free from loose rust, carbon deposits and grease.

Using our blanks, gaskets and fasteners blank off the EGR cooler. If the mating faces are particularly rusty you may need to use a sealing paste to achieve a good seal.

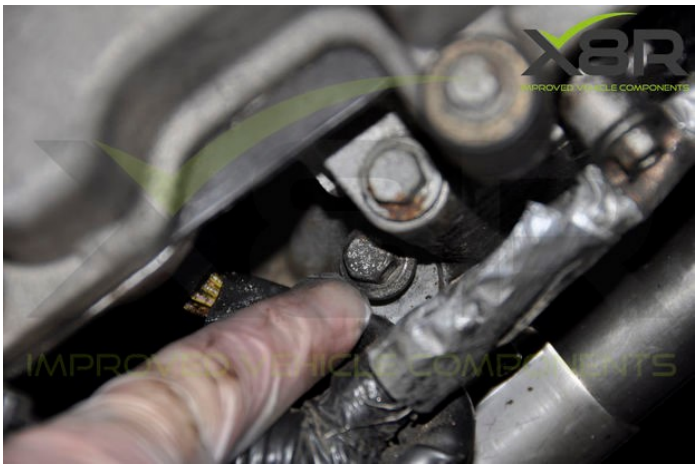






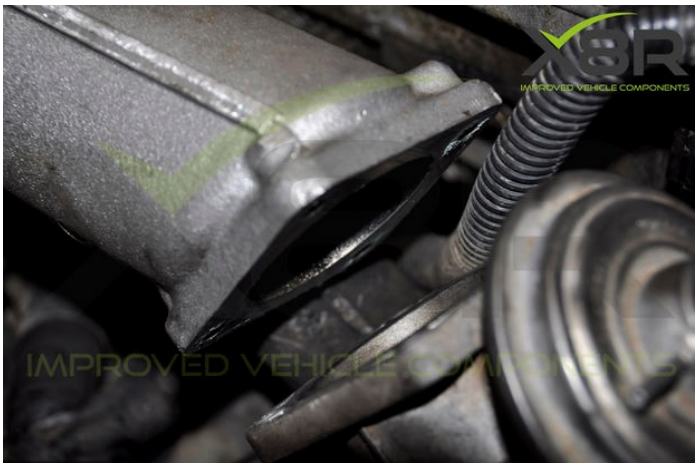

Step 4: Loosen EGR to exhaust manifold pipe (non EGR cooler models only)

Locate the end of the EGR metal tube that connects to the exhaust manifold. Loosen bolts and release connection. Remove bolt that secures the tube to the engine block.



Step 5: **Remove EGR valve**

Remove 4x bolts and remove the EGR valve and EGR to exhaust manifold tube.



Step 6: Clean up the mating faces

Clean up the mating faces of the intake manifold and exhaust manifold, make sure surfaces are clear of loose rust, carbon and grease.

Try to remove as much carbon build up from inside the intake manifold as you can through the hole exposed by the removal of the EGR valve.

Step 7: Blank off the vacuum solenoid

Trace the Blue vacuum line back from the EGR valve to the solenoid. Remove the pipe from the solenoid and blank off using our blank and secure with the cable tie.

It is important that you disconnect the correct pipe, disconnecting any other pipes can affect braking.

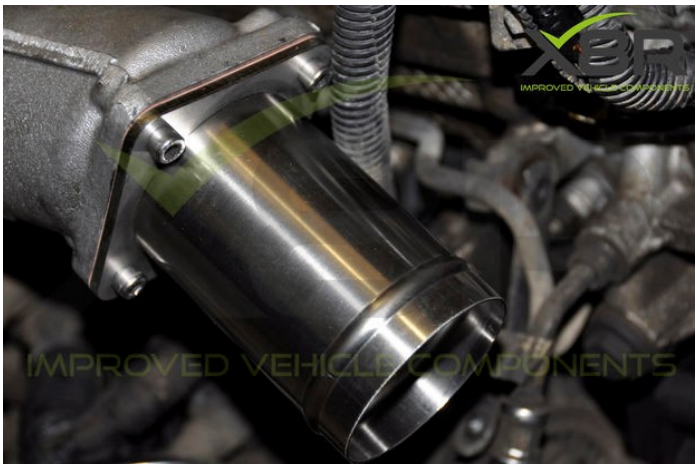
Step 8: Blank the exhaust manifold

Using our stainless steel blank, gasket and fasteners blank off the hole on the exhaust manifold. If the manifold is excessively corroded you may need to use a sealing paste here to get a seal.

Step 9: Fit our EGR delete tube

Fit our EGR delete tube to the intake manifold using our stainless steel bolts, remember to fit our gasket between the EGR tube and the intake manifold.

Attach the boost hose to the EGR tube and secure with the Jubilee clip.



Step 10: Check for leaks

Before refitting the engine covers start the vehicle and check for any leaks.

This completes the repair. If you need any further guidance on this install or would like to purchase the parts shown please call us on +44 01843 446643 or email us at sales@x8r.co.uk.

Please also check out our instruction guide on YouTube.

www.x8r.co.uk