Pajero EGR Modification

By members of the Pajero Owners Club

www.pocuk.com



Hi all, in reference to the latest posts regarding blocking the EGR valve I'd like to thank our wise fellow members for their feedback and advice Θ ... I (eventually) had ago myself and did this simple task... (simple when you know how Θ).

*Warning: Where I am using my Pajero, blocking the EGR valve and its effect does not fail the MOT!

If you plan to have ago yourself, first read the wise words of our fellow members further on (the photos below show the EGR valve in a 2.5TD engine! shouldn't be much different in a 2.8TD):

Here it goes:

Before you start, it makes it easier if you remove the small pipe going into the top of the EGR valve and the AutoTrans. dipstick out of the way

1- unbolt the two bolts (size 12) facing the auto trans dipstick (Photo 1)

2- Once loose use one hand to completely unbolt, ... use the other hand to stop the metal gasket falling of behind the EGR valve! (Photo 2)

3- Once the long bolts are out, remove (slide) the metal gasket out and give it a clean (Photo 3)

* If you want to remove the valve completely and give it a good clean, then you need to unbolt two more bolts below the valve... not impossible but it takes more time (which I didn't have) so I left those untouched... there is enough gap between the EGR valve and the inlet to do the job!

4- Have a drink (mine was Pepsi $\stackrel{(1)}{\textcircled{\baselineskip}}$)... using the metal gasket outlines on a piece of paper, creat your blocking metal sheet (Photos 4 & 5)

5- Wrap a clean cloth around a long thin screwdriver and give the "gap" between the valve and the inlet a good clean... lots of black tar there!

6- Place the blocking metal and the original gasket in the gap! (Photo 6)

7- Bolt and place the autotrans dipstick & valve pipe back!

Have a spin.... 😂

I did and defintely the black smoke has reduced marginally... the Pajero pulls better... but I am yet to judge the long term effects...

Photo 1:







Photo 3:



Photo 4:



Photo 5:



Photo 6:



Photo 7

	View previous topic :: View next topic
Author	Message
yokozuna *	Posted: Thu Jun 05, 2003 6:24 pm Post subject: EGR Valve again
Joined: 04 Jun 2003 Posts: 11 Location: lancashire	Got sick of doing 'sink the bismark' type smoke trails so decided to block off the pipe to the egr, 'no smoke' and spins the inside wheel when puulling out from a junction with the same amount of throttle, amazing. Just looking for reassurance that I,m not hurting my motor by doing it, Traced one end back to the solenoid looking thing on the bulkhead, has any body traced the other pipe? what does that control? Also does blocking it off make any difference at service time its being given a full service next week I,ve only drained off the Japanese oil and changed the fiter up to now. Regards Berni
	Power to the people, free Leigh from Wigan
Back to top	a profile a pm an il
JayCee ***	Posted: Thu Jun 05, 2003 8:57 pm Post subject:
Joined: 22 Feb 2003 Posts: 248 Location: Portlaoise , Ireland	Are you saying you got a performance increase just by blocking the ERG pipe $?$ If so I'll be outside in 5 min's time rain or not
	Joe
	96 Pajero 2.8GLS LWB
	Inside every tiny problem, is a huge one waiting to get out!
Back to top	a profile
Trig *****	Posted: Thu Jun 05, 2003 9:56 pm Post subject:
Joined: 24 Nov 2002 Posts: 807 Location: N. Cyprus	Yokozuna, go on, tell us how you blocked the little bugger STEP by STEP PLEEEEEZ 😅
	Cheers Trig 🧐 Trig's toy is a 1992 Mk2 2.5TD LWB Pajero Auto Exceed Gold-Green-Gold.
Back to top	🚨 profile) 🚨 pm 🎯 email) 🕼 www.
yokozuna *	Posted: Fri Jun 06, 2003 8:36 am Post subject:

Joined: 04 Jun 2003 Posts: 11 Location: lancashire	JOE I dont know if I got a performance increase or not but before the car felt as if it was 'holding back' a little particularily between second and third as if it couldnt make up its mind to change gear, and making big smoke plumes. now it pulls strongly and apart from a little black on full throttle which I believe to be right makes no smoke! now I dont mind waiting in a stream of traffic to turn right where plods behind me before I was feathering the throttle to try to reduce the smoke. Trig As to how I did it Step one find a golf tee step two pull off the rubber pipe from the agr vacuum canister step three push golf tee into end of pipe thats all I,ve done! make sure the pipe cant dangle down near to the Turbo I zip tied mine up. I hope I,ve not done anything stupid but its been two days and 200 clicks now and everything seems fine. ————————————————————————————————————
Back to top	😹 profile) 😹 pm 🖓 email
Trig	Posted: Fri Jun 06, 2003 8:55 am Post subject:
Joined: 24 Nov 2002 Posts: 807 Location: N. Cyprus	it with I thought of a metal screw!! But the golf tee idea is quite handy I also asked around about the EGR and what I understood (correct if wrong please!) is that when the Turbo is pushed hard, the valve releases some of the Turbo output to the exhuast!! If you block it then you don't loose that extra bit of Turbo output The question is why have it there in the first place? also if you block it what's the WORST thing to happen? can you blow the Turbo up?
	Cheers Trig 😇 Trig's toy is a 1992 Mk2 2.5TD LWB Pajero Auto Exceed Gold-Green-Gold.
Back to top	🐍 profile) 📚 pm) 🏼 email) 🌾 www.)
nigel fegan *	Posted: Fri Jun 06, 2003 9:18 am Post subject:
Joined: 09 Jan 2003 Posts: 10 Location: Wicklow, Ireland	having read this I'm also now thinking about doing the same, '96 2.8 LWB with only 39,000mls but very smokie, love to hear some more info first though!
Back to top	(& profile) & pm) @ email) 🕼 www.
jimmy *	Posted: Fri Jun 06, 2003 9:41 am Post subject: EGR why
Joined: 10 Oct 2002 Posts: 17	The EGR valve or Exhaust Gas Recirculation Valve allows exhaust gas into the air intake. The reason for doing this is that it reduces the temperature of combustion and the level of NOx (oxides of nitrogen) that are output. NOx is a cause of acid rain and so lower levels are a good thing (especially if your a tree). However in our Pajeros the EGR valve usually due to being sooted up and not functioning correctly

	causes a lot of smoke which is made up of soot particulates and aggravate respiratory problems like asma, so blocking it off to stop this is also a good thing
	My understanding of the MOT for our Diesels is that they look at the smoke out put and not the NOx levels so blocking it may help pass the MOT (mine is blocked and sails through it's MOT).
	As an aside I would block the EGR valve by replacing the gasket where the exhaust enters it with a solid plate. Only blocking the vacuum tube will mean if your EGR valve is faulty ie not closing properly) you will still have gases recirculating and I also noticed that the valve vents to the atmosphere spreadign soot around your engine bay if you bock the output from the valve to the intake manifold
	Hope this is all clear 😇
	Don't Panic.
	OK PANIC
Back to top	😹 profile) 🗏 🐰 pm
yokozuna *	Dested: Fri Jun 06, 2003 9:49 am Post subject:
Joined: 04 Jun 2003 Posts: 11 Location: lancashire	Trig Dosnt the turbo wastegate dump excess pressure? I think I heard mine working sounded like somebody drumming their fingers on the bonnet, its the first time thats happened as well since I,ve been running the car. Jimmy I,m thinking of cutting a gasket from a coke can (one of the other threads mentioned it) but the bolts look a bugger to get at on the exhaust side of the valve and doing it that way, I cant see any soot around the thing at the moment and I,ve been booting it quite a lot just to enjoy the rear view. Anyway you can only try it it worked for me.
Back to top	
	👗 profile) 🖁 🖉 pm 🎯 email
Ivor Green ***	Dested: Fri Jun 06, 2003 10:26 pm Post subject:
	Just a quickie Be carefull blocking these EGR valves We dont but there are the odd hot head young MOT testers who look for EGR opperation on the test, they wach to see if it pulsates when raising the engine speed , on what basis they could fail it

What's that smell.<><

Back to top	😹 profile) 🚟 mail) 🚺 www	
yokozuna *	Dested: Sat Jun 07, 2003 1:01 pm Post subject:	ote
Joined: 04 Jun 2003 Posts: 11 Location: lancashire	Cheers Ivor I, II watch out for them, although my Garage seem really more interested in seeing if they can get the T.V. and satnav system to speak English.	
	Power to the people, free Leigh from Wigan	
Back to top	👗 profile) 🗏 pm 🎯 email	
nigel fegan *	Posted: Sun Jun 08, 2003 2:36 pm Post subject:	ote)
Joined: 09 Jan 2003 Posts: 10 Location: Wicklow, Ireland	I have carried out the above mentioned mod. to the EGR valve and there's definatly considerably less smoke but didn't notice any power increase. would it be better to block up the EGR valve or would there be any difference? what happens to all the black smoke that was there? Quote: 96 2.8td LWB	
Back to top		
	😹 profile) 🗏 🧶 pm 🦂 email) 🌾 www	
NewRSoul	Dested: Sun Jun 08, 2003 11:39 pm Post subject:	ote
Joined: 04 Mar 2003 Posts: 123 Location: Blackburn, East Lancashire	 Had a go at this on Sat morning, I had been thinking of doing it for a while, on r 2.8 I unbolted the 2 12mm bolts from the EGR tube (to the exhaust manifold) a the 2 12mm bolts into the inlet manifold, then very easily peeled the metal gask from the inlet, drunk a can of pepsi, stanley knifed a replica of the gasket from tempty can (slightls smaller so it couldn't be seen by some tester) placed the blanking piece (pepsi) against the inlet, the real gasket on top (so it doesn't lood any different) and rebolted the unit on. After a test drive I must admit it seems smoother, the EGR valve was bery sooth and may even have been leaking past, but now it can't. The car is producing less smoke also, although this is subjective. I'm happy with mod, it took all of 20mins to do, including drinking the pepsi! With the ease it took doing this it may be worth others doing this as a tester, if there not happy then just remove it. The problem with blocking the vacuum pipe that if the value is faulty, and leaking then it doesn't work, this way it's definate Hope this helps. 	nd ket k y, e is
Posts: 123 Location: Blackburn, East	 2.8 I unbolted the 2 12mm bolts from the EGR tube (to the exhaust manifold) a the 2 12mm bolts into the inlet manifold, then very easily peeled the metal gask from the inlet, drunk a can of pepsi, stanley knifed a replica of the gasket from tempty can (slightls smaller so it couldn't be seen by some tester) placed the blanking piece (pepsi) against the inlet, the real gasket on top (so it doesn't lood any different) and rebolted the unit on. After a test drive I must admit it seems smoother, the EGR valve was bery soots and may even have been leaking past, but now it can't. The car is producing less smoke also, although this is subjective. I'm happy with mod, it took all of 20mins to do, including drinking the pepsi! With the ease it took doing this it may be worth others doing this as a tester, if there not happy then just remove it. The problem with blocking the vacuum pipe that if the value is faulty, and leaking then it doesn't work, this way it's definate Hope this helps. Regards Peter 	nd ket k y, e is
Posts: 123 Location: Blackburn, East	 2.8 I unbolted the 2 12mm bolts from the EGR tube (to the exhaust manifold) a the 2 12mm bolts into the inlet manifold, then very easily peeled the metal gask from the inlet, drunk a can of pepsi, stanley knifed a replica of the gasket from the empty can (slightls smaller so it couldn't be seen by some tester) placed the blanking piece (pepsi) against the inlet, the real gasket on top (so it doesn't lood any different) and rebolted the unit on. After a test drive I must admit it seems smoother, the EGR valve was bery soots and may even have been leaking past, but now it can't. The car is producing less smoke also, although this is subjective. I'm happy with mod, it took all of 20mins to do, including drinking the pepsi! With the ease it took doing this it may be worth others doing this as a tester, if there not happy then just remove it. The problem with blocking the vacuum pipe that if the value is faulty, and leaking then it doesn't work, this way it's definate Hope this helps. Regards 	nd ket k y, e is

Trig



Joined: 24 Nov 2002 Posts: 807 Location: N. Cyprus

Back to top

Posts: 123

Lancashire

Location: Blackburn, East

Posted: Mon Jun 09, 2003 4:07 pm Post subject: Last question in picture??????

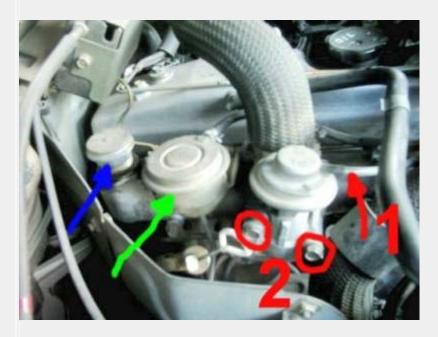


Just a last question (in picture) to confirm what has been described above... (NewRSoul... 20 mintues including having the drink ⁹¹)

RED marks:

Part 1: the EGR tube the can also be blocked with a golf ball tee! Part 2: the two bolts that need to come out to block the whole thing! Is it ok to block this end after unbolting?... can't show part 3 which must be the other two bolts near the inlet!

Just curious! What are the parts marked with Green & Blue !? The part marked in blue has a top that rotates freely!



Cheers... Trig 😌 Trig's toy is a 1992 Mk2 2.5TD LWB Pajero Auto Exceed... Gold-Green-Gold.

buck to top	a profile a pm www
NewRSoul **	Posted: Mon Jun 09, 2003 7:16 pm Post subject:
	Trig, Mine's a 2.8, see the below for a photo, the layout seems somewhat different on the 2.5.
Joined: 04 Mar 2003	http://www.photobox.co.uk/album/album_photo.html?c_photo=3321226

I don't think you'd do much with a golf tee in the EGR pipe, it must be an inch round! I think most people put it in the vacuum pipe to stop activation of the diaphram.

	But from your photo it would seem similar enough to it a try, I think there must be more that 2 bolts though, becasue it must be fastened to to inlet and exhaust manifolds? Regards Peter 93 LWB 2.8TD Auto Super Exceed
Back to top	a profile a pm
Trig ***** Interventional States Stat	Posted: Mon Jun 09, 2003 7:46 pm Post subject: Posted: Mon Jun 09, 2003 7:46 pm Post subject: Quote NewRSoul, thanks for the detailed photo ⊕ There is a different layout indeed but as you said they are still similar. The 2.8 EGR valve is rotated, the 2.5's faces upwards I think I will also give it a try the two bolts I show in my photo see to be the only bolts holding the valve ! PLan is unbolt those two remove the valve clean it (while drinking my cold beer ♀) cut a sheet of the beer can fit and put back together Will have a go asap and post results ♀ Cheers Trig ♥ Trig's toy is a 1992 Mk2 2.5TD LWB Pajero Auto Exceed Gold-Green-Gold.
Back to top	😹 profile 🕵 pm 🎯 email 😚 www