



Forum Rules	Volvo Owners Club	About VOC	Volvo Gallery	Links	Volvo History	Volvo Press				
Volvo Owners Club Forum > "Technical Topics" > 200 Series General > 200 Series Articles 240 General: Replacement of Intank Fuel Pump on Volvo 240.						Welcome, unpodicose . 1,127 Unread Posts since your last visit. You last visited: Sep 10th, 2014 at 22:06 Private Messages : Unread 0, Total 1.				
User CP	Members Cars	Blogs ▼	Help	Community ▼	Calendar	Extra Stuff ▼	New Posts	Search ▼	Quick Links ▼	Log Out

200 Series Articles How to's and Guides for the 200 series.

Information

- **VOC Members:** There is no login facility using your VOC membership number or the details from page 3 of the club magazine. You need to register in the normal way
- **AOL Customers:** Make sure you check the 'Remember me' check box otherwise the AOL system may log you out during the session. This is a known issue with AOL.
- **AOL, Yahoo and Plus.net users.** Forum owners such as us are finding that AOL, Yahoo and Plus.net are blocking a lot of email generated from forums. This may mean your registration activation and other emails will not get to you, or they may appear in your spam mailbox

Thread Informations

Replacement of Intank Fuel Pump on Volvo 240.

Views : 8984

Replies : 6

Users Viewing This Thread : [unpodicose](#)

Thread Tools ▼ Search this Thread ▼ Rate Thread ▼ Display Modes ▼

Paul240480

Ovlovnut



Last Online: Today
10:55
Join Date: May 2006
Location: Nivillac

[View Photos By:
Paul240480](#)

Replacement of Intank Fuel Pump on Volvo 240.

As we know the intank fuel pump (on models equipped with one) often fails. Symptoms are usually an over noisy main fuel pump once fuel is down to say 1/3, as it struggles to lift the fuel from the tank. The intank pumps 'job' is to feed fuel up to the main pump. Failures can be the in tank pump itself giving out or the small rubber pipe from the pump to the 'out pipe' perishes, so the pump just pushes fuel back into the tank. You should be able to hear the in tank pump either by get your ear down close to the tank cover in the boot, or by removing the filler cap and listening for the pump.

Fuses also are worth checking, of course.

If you suspect the pump to have stopped working, one 'trick' worth trying is to remove the tank cover & tap on the 'lid' of the sender unit, which houses the pump. Sometimes this is enough to get it going again, but is really putting off the inevitable.

Having said that, the cars will often soldier on with a dead pump in the tank. Mine has done so for three years now!

Not good practice as the main pump is over worked, can over heat and of course will wear rapidly. The 'trick' once diagnosed is to keep the tank filled once fuel gets to say, a little under ½ a tank.

So I have now replaced my in tank pump. A joint effort this one with the able help of Cumbrianmale. This is a good one, as it threw up some problems – as in it showed how corroded the stubs on the sender lid can be..... yes, pushing the return pipe back on, at the end of a job thought to have been well done saw said return pipe bend and split!

Luckily, we nipped down to the scrap yard and picked up a replacement sender unit & did the whole job all over again (LOL) and now all is good. A bonus is that the yard sender unit works, so I still have a fuel guage, woohoo!

Aftermarket pumps are said to vary in size somewhat from the Volvo ones so getting them to fit into the holder can be an issue, buy these at your own peril! I got mine from Rufe on here & it was about £80. I now have a working spare from the yard. The new one was fitted!

Other things you may wish to have ready to fit are:

New 'O' ring (Rubber seal) P/N 949276

New Lock Ring P/N 1235324

I decided to go for it without & see what mine were like. The rubber 'O' ring looked new & the lock ring cleaned up sufficiently (to my untrained eye). On the scrap yard one, the 'O' was very stiff, but lock ring looked better then my original.

Has yours got an intank pump? Well if you look at the lid of the sender unit under the plate in the boot. If it has three pipes coming out of it, outlet, return and a breather (will be blanked off with a black rubber cap) then yes. If you have two pipes coming out then no. I think this relates to k-jet equipped yes EFI equipped no. Diesel models no (D24) . For earlier models with carbs, I don't know but someone will reply to confirm either way..... and to correct this last paragraph if I am mistaken!

1) In saloons, remove the boot carpet & you should see a silver square shaped metal plate held in by two screws, with two wires coming from it (one black one grey). In Estates you need to remove the boot floor by undoing the 8 screws and lifting it out to reveal the plate.







2) Unscrew the plate & slide it carefully back along the wires out of the way. Now you can see the top of the tank & the top of the sender unit with its three pipes.





You will no doubt see lots of crud & rust flakes on top of the tank and sender unit. Get a Hoover and get as much of it out as you can. You don't want it dropping into the tank later. If needs be, tape a smaller diameter tube onto the Hoover pipe to really get in there. Now this lid has probably not been removed in its 20+ years, so put some penetrating oil around the ring & leave it to do its job. I left mine 3 or 4 days adding more oil daily. Maybe overkill, but it worked.

3) you can undo the wire at the block & then remove the spade ends from the block to allow the wires to pass out ready for removing the unit from the car.



(Removing the block allows the wires to easily pass through the rubber grommit and the silver plate).

There is also an earth wire to the boot floor. Remove this & replace the screw for safe keeping.

4) Next is to remove the fuel pipes from the metal tubes on the sender unit lid. The outlet has a screwed clamp, the return a spring clip. The clip can be 'got' with a pair of thin nosed pliers, the clamp may come free with a screw driver, it may like mine need carefully cutting through with a junior hacksaw.



5) Now the fuel pipes are out of the way, it is that time to remove the sender unit. Now one way is to get a bit of metal, brass I think is the 'spark free safest' and angle it into the ring & then hammer it to spin if free. The hole restricts you getting a good angle (leverage). Another method is to use a two-legged puller. Remove the threaded bit & then adjust it so that the two legs lock into to two of the 'gaps' in the ring. Hold it there. Then get a spanner (21mm or an adjustable) to fit over the pullers. Then use an adjustable spanner (We used two adjustables) to turn the first ti turn the pullers. Hope that makes sense?





Sorry just realised my pics do not show the second spanner that is used to turn the whole set-up. Hope you follow....

We found it needed a few 'whacks' as per the first method to free it, then a progressive 'force' using the puller method to finally get it free.

6) Once the lock ring ring is free, you are ready to lift the sender unit out. Fiddly, as Volvo made the hole too small! You need to take your time, it will come out. First lift it until the pump is past the lip of the hole. Then you need to angle it to allow the float to pass. Take your time as it is easy to knock the float off, which will leave you 'fishing'. Once the float it through, you need to angle it further to get the 'sock' (a filter) through. Here it is on its way out.

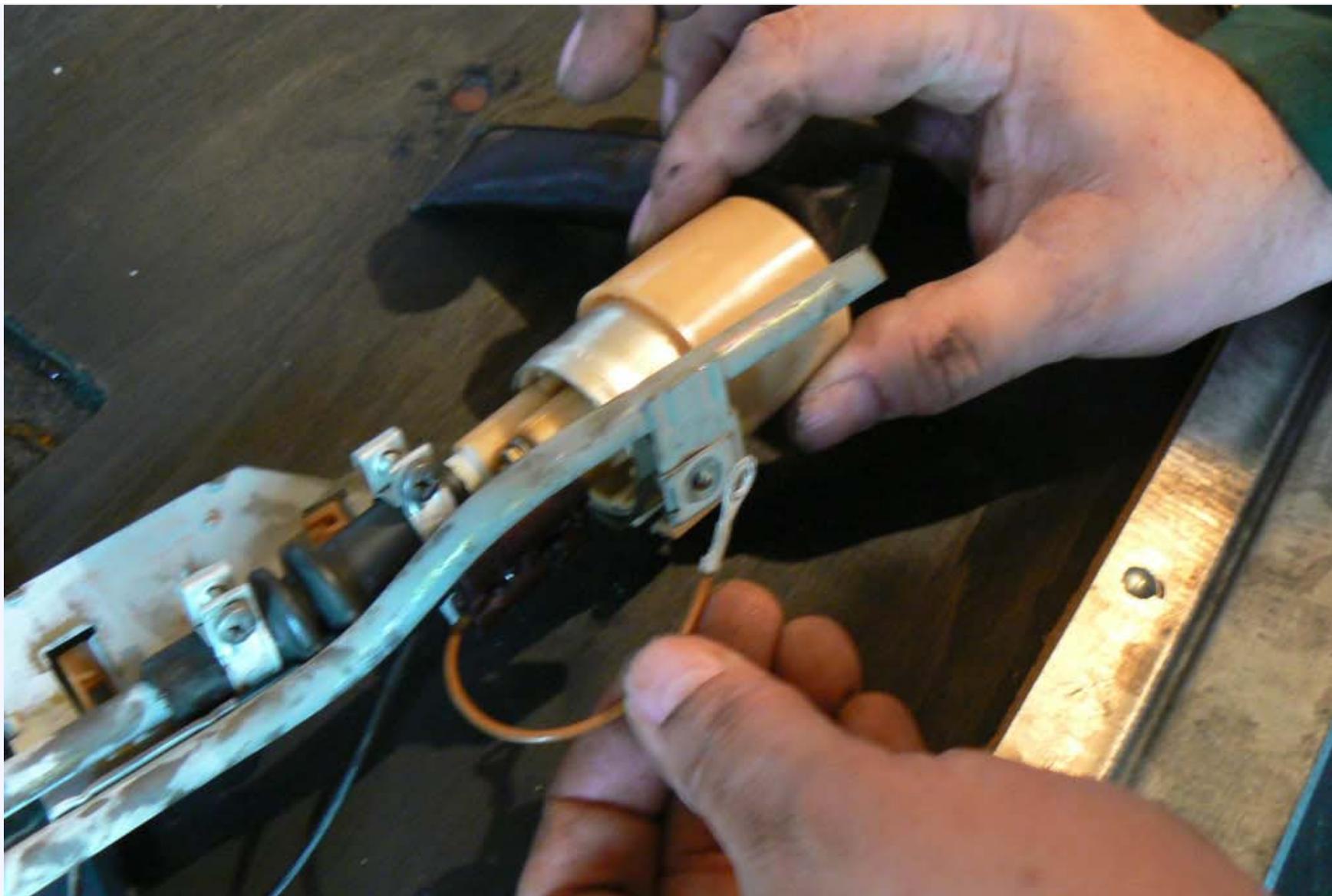


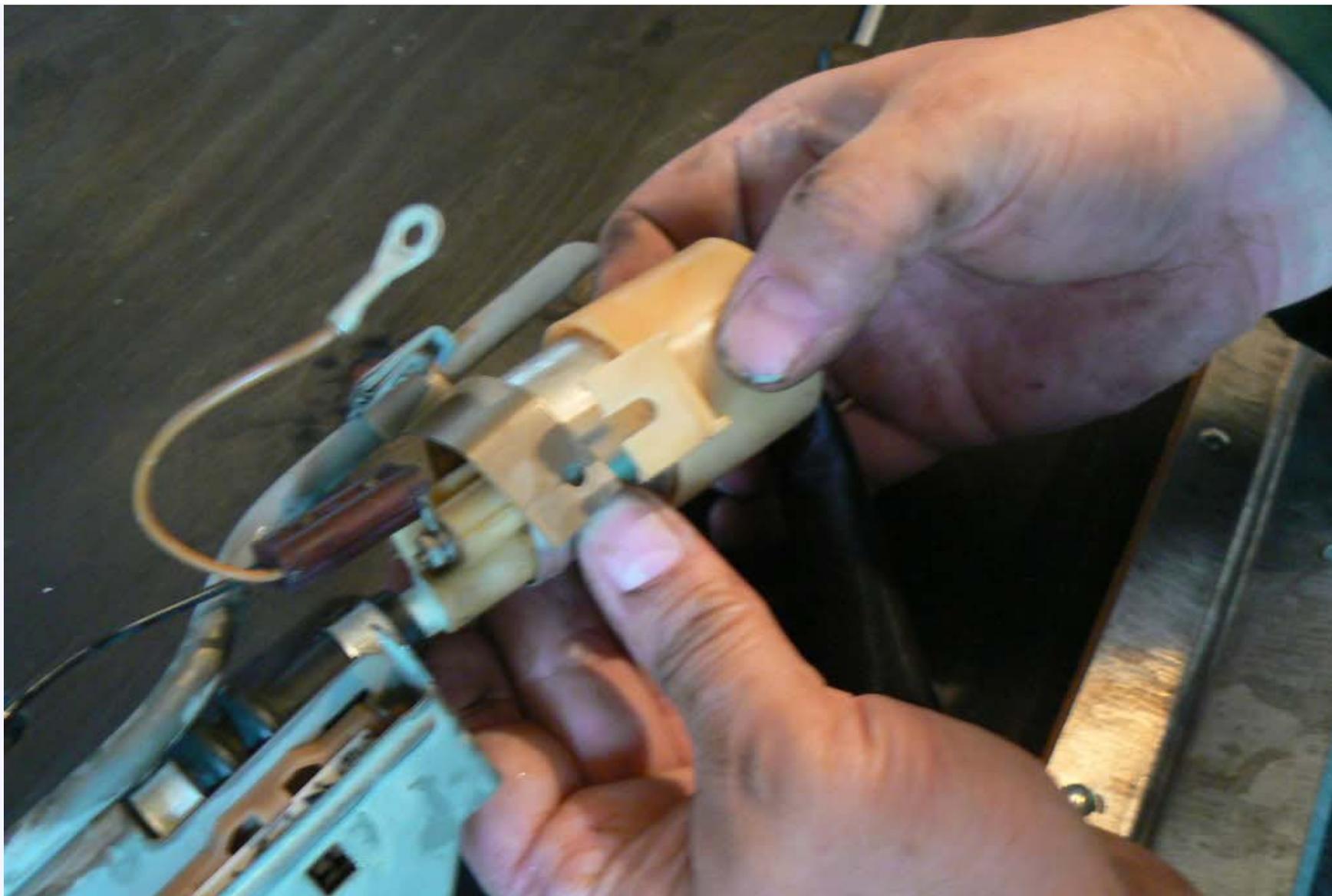
Once out you will have this.



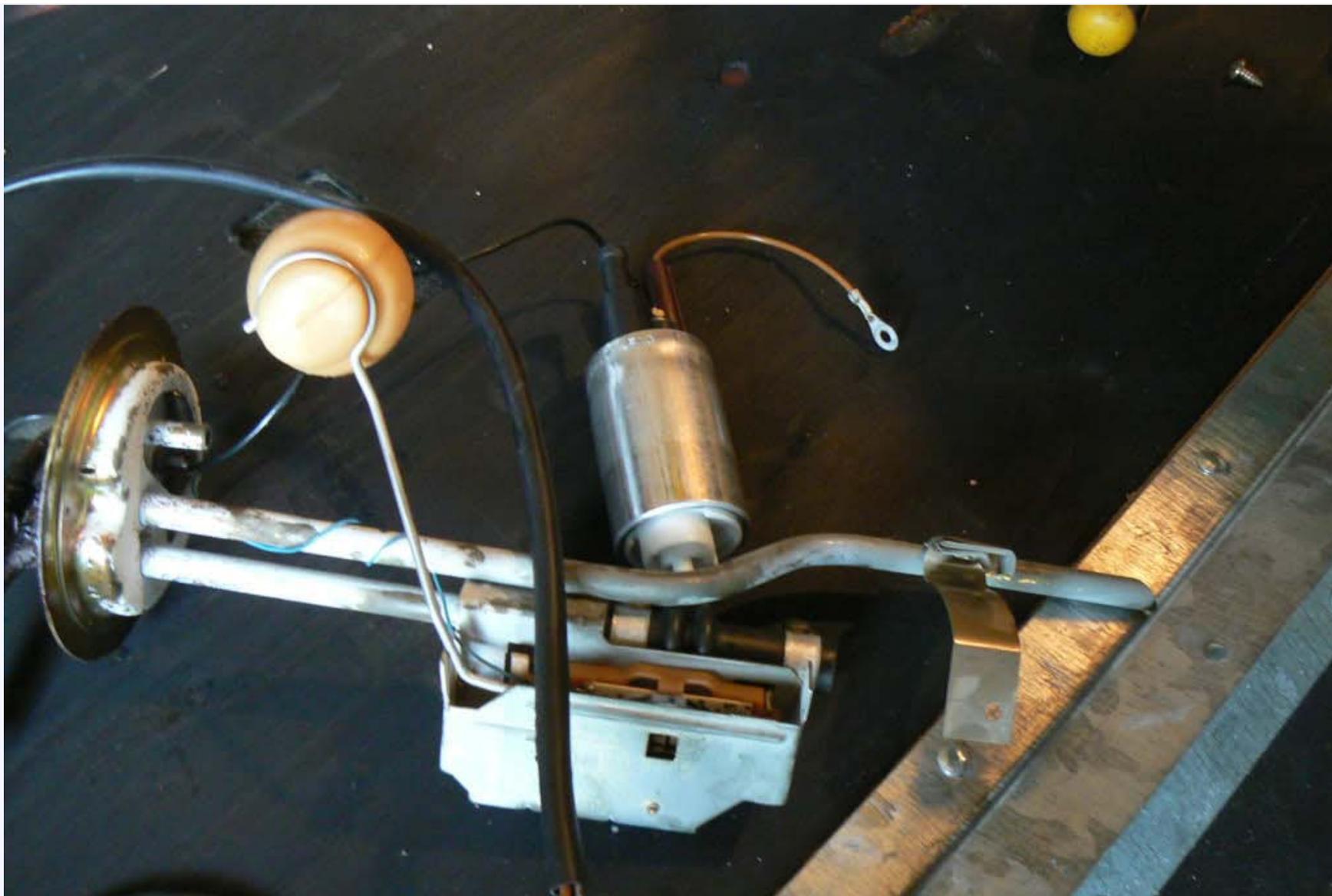
7) Now it is time to remove the dead pump from the sender unit and fit the new. This part is fairly obvious, just a case of working through it methodically. I will let the pics do the work. The sock/filter will clip off and clip back on again with a little persuasion.





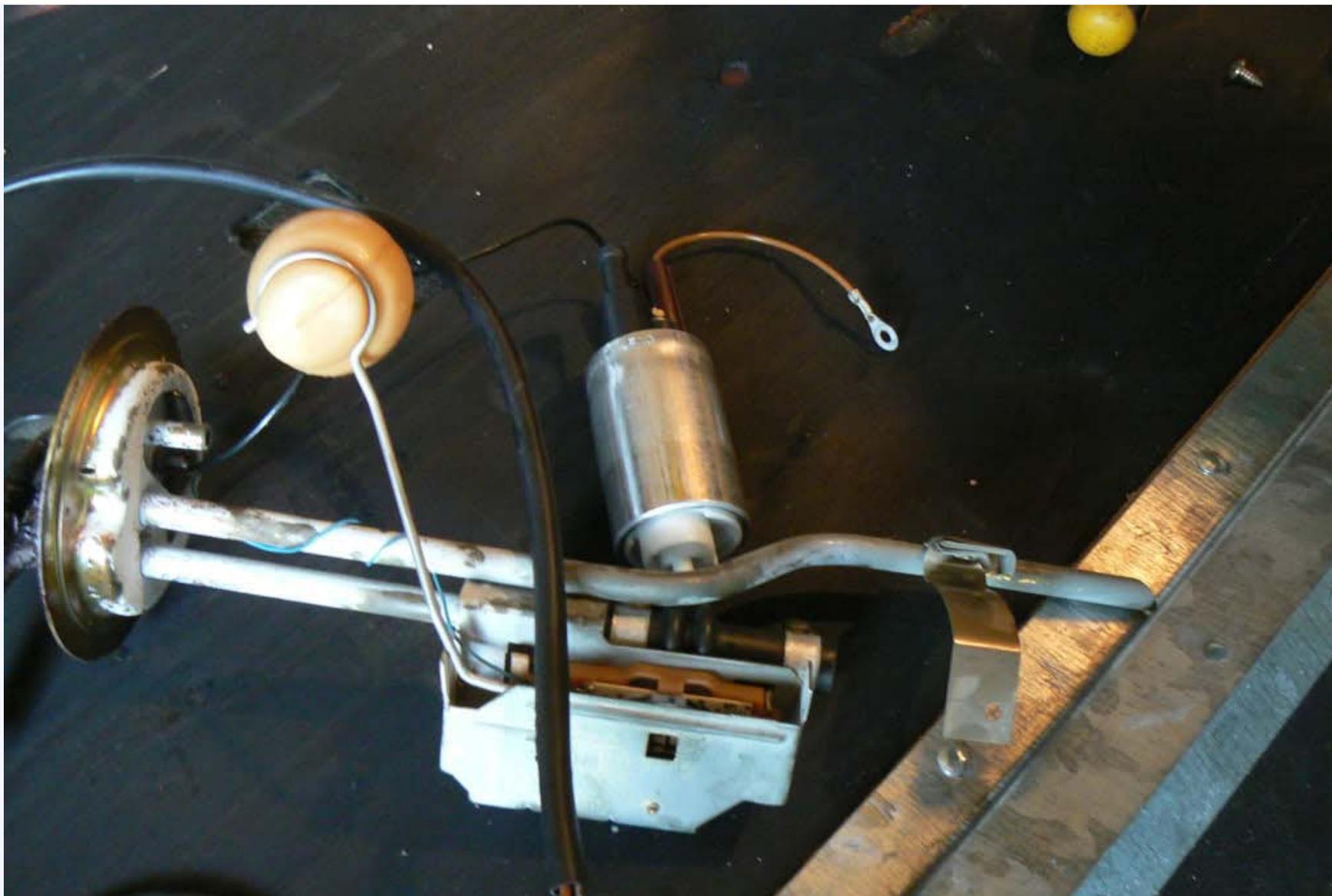






In words of the 'famous' manual, fitting the new pump is a reversal of this procedure lol.

8) Now we are nearly ready to re-fit. Before you do, you should clean up the lip of the hole where the unit sits. It will be full of crud. You don't want it falling into the tank either. So, get some cotton buds, dip them into grease & wipe it clean. The crud will stick to the grease & lift out.



Leaving you with a shiny finish like this.



9) Now it is time to drop in the sender unit with the new pump. Sock first, then the ball & then the pump. Again, take your time, it is fiddly, but it will go.

10) Clean up the ring if re-using, brake cleaner is ace. Put the 'O'ring in place, smear a bit of copper slip onto the mating surface of the lock ring & put it in place ready to be locked. Use the two-legged pullers arrangement to spin it tight.

11) Then refit the two pipes onto their respective tubes, we used a bit of wash-up liquid to slide them on. (be careful though, this is where my original return pipe split). Then nip up the clamps. I have used some jubilee style ones, these are not the recommended ones for fuel lines apparently, the 'proper' type are like the one that will be on your 'outward' pipe.

12) Now it is a case of feeding the electrics back through the grommit & plate & re-fitting the spades into the block & pressing the block connectors together. Re-connect the earth wire.

13) Now it is time to re-connect the battery & fire her up. Hopefully you will hear the rewarding 'buzz' of the new in tank pump & will see no leaks (this is where we saw the return pipe weeping lol).

14) Once you are happy all is well, re-fit the silver plate/cover & the carpet/boot floor & tick another jobby off of your 'to do' list.

As ever, feel free to add any tips or advice you have if you have already tackled this one.
Thanks.

1989 240GL Est B200E
1996 850 GLT Est 2.5 20v
2004 V70 2.4SE Auto
<http://www.gitessouthbrittany.com>
<http://moncopainmonchien.jimdo.com/>



The Following 4 Users
Say Thank You to
Paul240480 For This
Useful Post:

[240Torslanda](#), [gordon barker](#), [Kwekkel](#), [volvo always](#)

Jul 22nd, 2011, 09:20

#2

migrator

Aye - him again



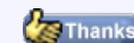
Last Online: Yesterday 20:21
Join Date: May 2001
Location: HERIOT



Mods, Can this be 'sticky'ed and/or moved/copied to a 'How to ...' section? This is one of those posts that is too good to 'lose' in the general depths of time.



(Ouch - that's another knuckle ...)
VOC 11817



The Following User
Says Thank You to
migrator For This
Useful Post:

[Paul240480](#)

Jul 22nd, 2011, 09:37

#3

cumbrianmale

Forum Support Team



Last Online: Sep 8th, 2014
00:25
Join Date: Mar 2006
Location: Cumbria God's own



Quote:

Originally Posted by **migrator**

Mods, Can this be 'sticky'ed and/or moved/copied to a 'How to ...' section? This is one of those posts that is too good to 'lose' in the general depths of time.

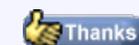
It will be copied to the articles once people have had a chance to comment and add tips or advice.

Current
'14 V40 D2 R Design

country
Blog Entries: [1](#)

[Previous Volvos](#)
 '89 745 GLE
 '98 V90 3.0 24v
 '98 945 Celebration Auto,
 '96 965 SE Auto,
 '86 744 GL,
 '81 244 DL

Veronica - 2014 Volvo V40
 31 Fuel-ups
 driven by cumbrianmale



The Following User Says Thank You to cumbrianmale For This Useful Post:

[Paul240480](#)

Jul 22nd, 2011, 11:06

#4

ALLOA
Senior Member



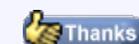
Last Online: Today 13:12
 Join Date: Dec 2003
 Location: ALLOA



Hi! Paul an excellent, clear, step by step guide. I have had to change the sender out a couple of times. We seem to put more salt on the roads in darkest Scotland! The pipes on top of the unit corrode badly and go porous. You have a smell of petrol outside the car but never see any on the drive so its difficult to trace. When I fit a new unit I usually coat the top of the unit with heavy grease to give it a bit more protection. I'd guess that this doesn't really apply to you in France!
 The last time that I did this I actually found it easier to just drop out the tank as a unit. This gives you the chance to have a good inspection of the tank. These rust in Scotland as well!! The tank is only held in with a few bolts. The only 'fiddly' part is the clamp on the filler pipe.

Regards

Scott



The Following User Says Thank You to ALLOA For This Useful Post:

[Paul240480](#)

Jul 22nd, 2011, 13:06

#5

Paul240480
Ovlovnut



Thanks Scot, yes good point to put some protection on top of the unit. I forgot that. I've not done it yet, but intend to get a can of waxoyl or similar and give the top a good coating of that. And yes not so much of an issue here, though Tank did spend a good 14 years living in the Portsmouth area, so plenty of salty air!

1989 240GL Est B200E
 1996 850 GLT Est 2.5 20v

Last Online: Today 10:55
Join Date: May 2006
Location: Nivillac

[View Photos By: Paul240480](#)



2004 V70 2.4SE Auto
<http://www.gitessouthbrittany.com>
<http://moncopainmonchien.jimdo.com/>



Jul 22nd, 2011, 13:48

#6

c_lee
VOC26332



Last Online: Sep 10th, 2014
01:13
Join Date: Nov 2006
Location: North West UK

That's a good article Paul and easy to follow.

I replaced the in tank pump on one of my 240's last year and there are just a couple of things I would add.

1/. Before I disconnected the rubber pipes from the rigid pipes on the top of the plate I tied lengths of string round each and tied the other ends in the boot. With space in the hole tight to work in it would be easy to loose grip on a pipe and it to fall into the void behind the tank. If working with the car on the ground it would be difficult to crawl under to recover the pipe and you wouldn't be able to start the car to raise it on ramps.

2/. Before feeding the assembly back into the tank wire the open end of the float hook closed so that the float can't get dislodged and fall into the tank - it can be a tricky job to get the unit back through the hole. I originally didn't do that and lost the float in the tank and it can be very difficult to recover it - I tried for well over an hour and gave up as I needed the car. I had no fuel gauge for months and only did the float recovery about a month ago. When wiring the hook closed make sure there are no wire tails protruding that could catch on other things in the area.

HTH - Colin

My daily 2006> : 1988 240GL B200E Manual saloon
Her daily 2012> : 1999 V70 TDi Auto
1982 > 95 '76 244GL Auto: 1995 > 02 '86 360GLT: 2002 > 06 '92 440Xi: 2004 > 12 '88 240GL B200E Auto
Only Volvos since 1982. Caravan 1990 Lunar Clubman 500/4



The Following User Says Thank You to c_lee For This Useful Post:

[Paul240480](#)

Jul 24th, 2011, 15:00

#7

Paul240480

Ovlovnut



Last Online: Today 10:55
Join Date: May 2006

With thanks to Loki_the_glt the answer as to if carb' engines have an in tank pump (pasted in from another thread)

Carburettored cars have a mechanical fuel pump fitted that is driven off the jackshaft for the distributor. If you look under the carburettor and just behind the distributor shaft you should see something resembling a small Stromberg with two pipes - one comes from the tank and the other goes to the carburettor. You can check its basic working by disconnecting the pipe to the carburettor and sticking the end of it into a milk bottle or other suitable container and cranking the engine over a couple of times: no fuel going into the bottle means no fuel going to the carburettor.

Location: Nivillac

[View Photos By: Paul240480](#)

So no in tank pump on carb' models , 👍

[Link to original thread](#)

1989 240GL Est B200E

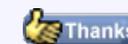
1996 850 GLT Est 2.5 20v

2004 V70 2.4SE Auto

<http://www.gitessouthbrittany.com>

<http://moncopainmonchien.jimdo.com/>

Last edited by cumbrianmale; Jul 24th, 2011 at 17:27. Reason: add link to original thread



The Following User Says Thank You to Paul240480 For This Useful Post:

[billythefish](#)

Tags

[240](#), [fuel pump](#), [in tank](#), [replacement](#)

[« Previous Thread](#) | [Next Thread »](#)

Currently Active Users Viewing This Thread: 1 (1 members and 0 guests)

[unpodicose](#)

Posting Rules

You **may not** post new threads
You **may not** post replies
You **may not** post attachments
You **may not** edit your posts

[BB code](#) is **On**
[Smilies](#) are **On**
[\[IMG\]](#) code is **On**
HTML code is **Off**

[Forum Rules](#)

Forum Jump

[200 Series Articles](#)

All times are GMT +2. The time now is 13:53.

[Contact Us](#) - [Forum Homepage](#) - [Archive](#) - [Top](#)