

How To: Change the gearbox oil on a V6

The oil I used for the job is found [HERE](#)

By all accounts it can be found cheaper from Peugeot themselves, and the postage costs are a bit steep from Opie, but I got a discount on it and wasn't in a dire hurry to get it!!

Jack up car on the front passenger side. Leaving the car resting on axle stand, remove front wheel.

(Removal of the wheel is not completely needed, it just makes things a little more easy to access!

For further easy of access and visibility, I removed the front half of the inner wing. This allowed me to see more of the gearbox without having to be on my back on the floor.



If you are not are not a 406 coupe owner, but are helping someone do their work, you may find yourself doing this when the bonnet is opened on the v6:

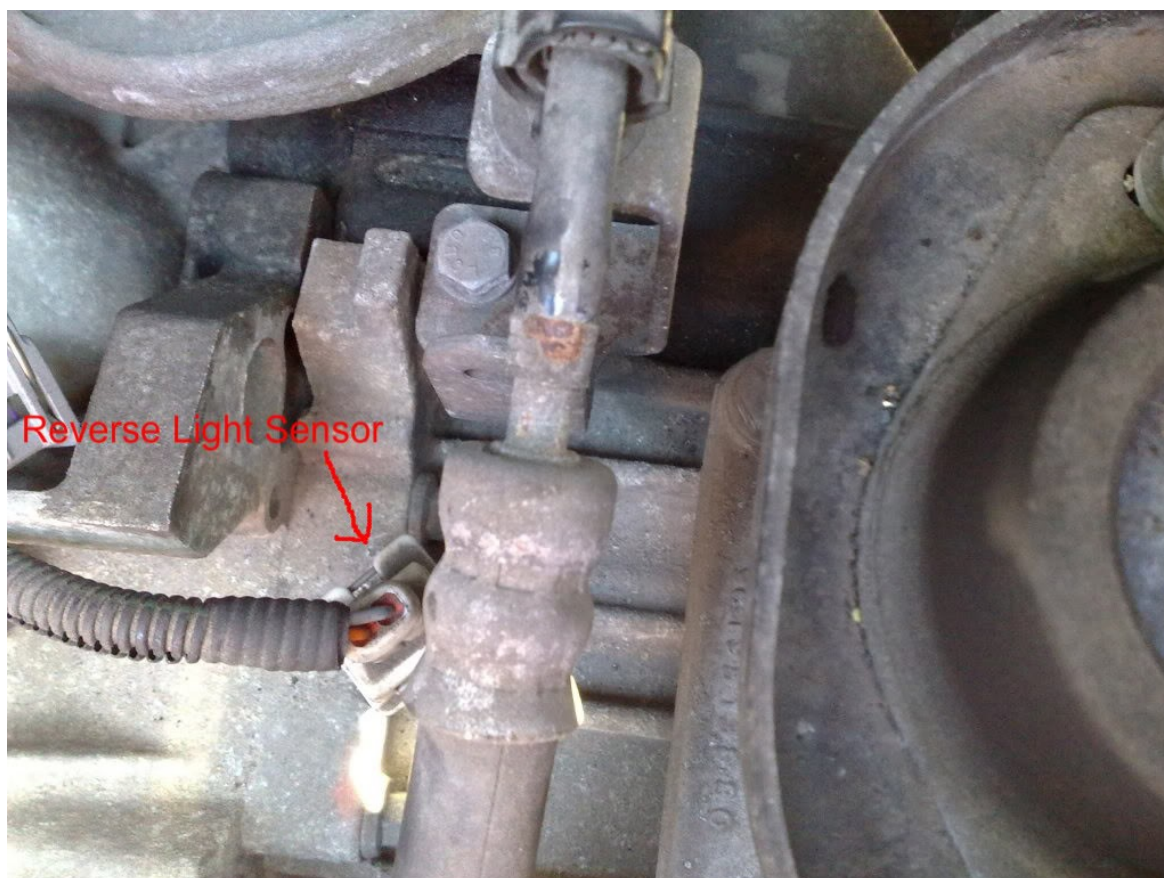


Anyway on with the job...

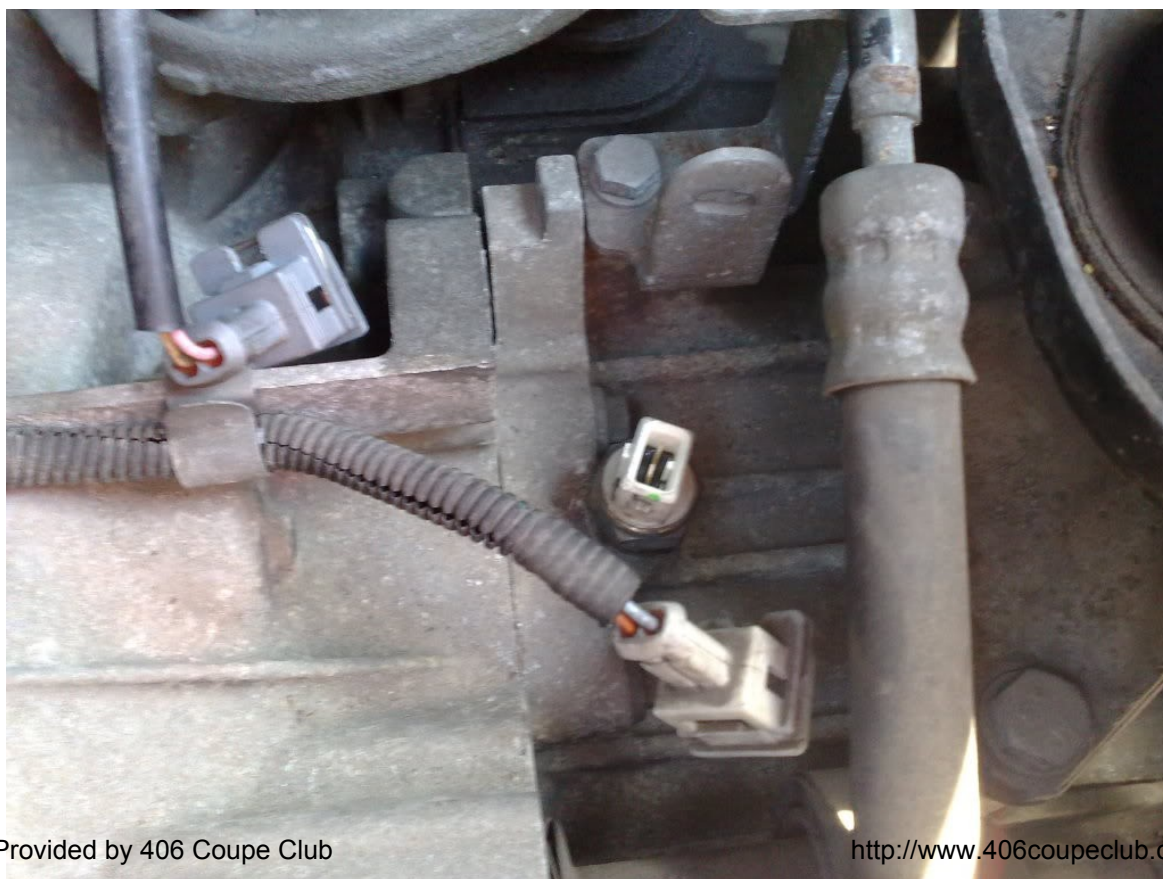
Remove the Air-Box

This is easiest to remove by first removing the top half, removing the tubes and wires attached to it, and then gently pulling the bottom half out.

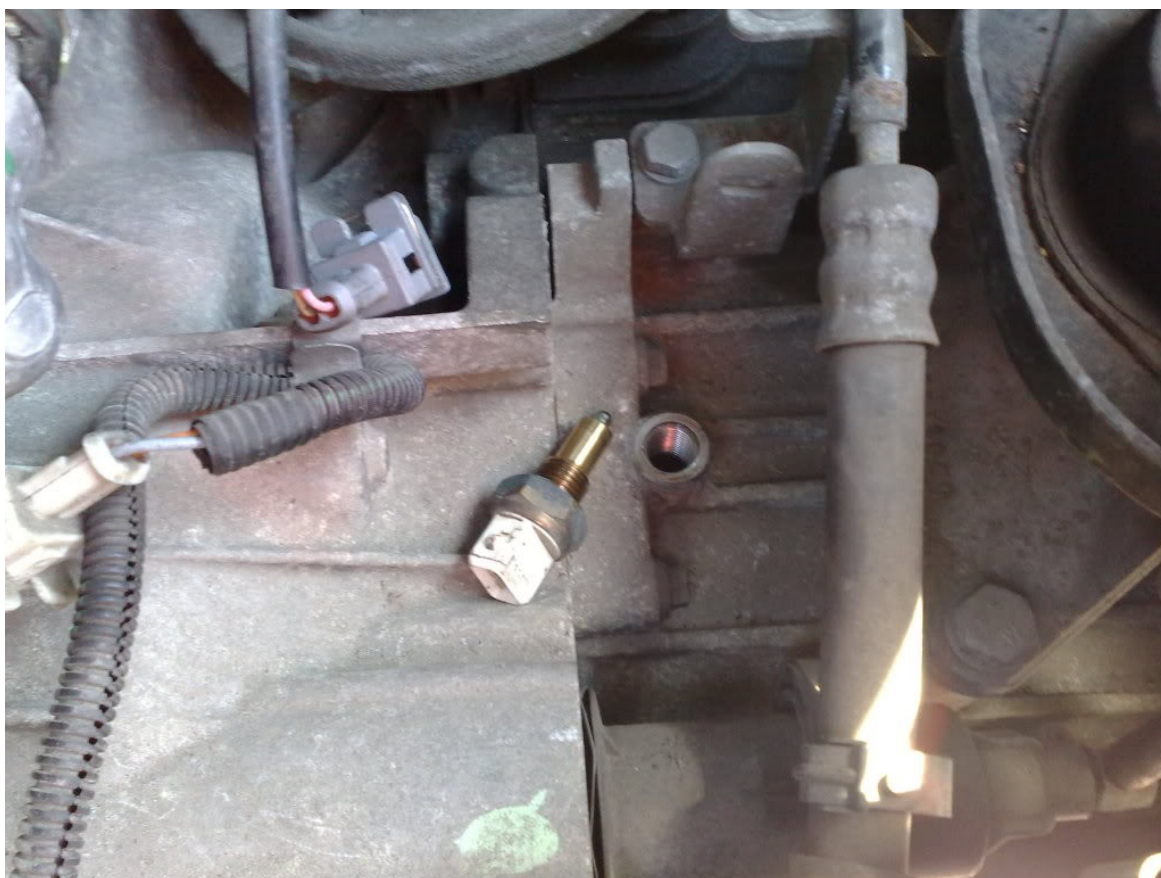
This will leave the top of the gearbox in clear sight, along with the reverse light sensor:



The wires come off this sensor with ease, though in my case it was easier for me to unclip the metal securing pin rather than push it in to remove it.



Once off, you will need a deep-reach socket, or correctly sized spanner to undo the sensor. This is the easiest way of re-filling the gearbox with oil when it comes to it.



Now that you have somewhere to fill the gearbox up, it would be a good idea to empty it!! lol

Locate the gearbox sump nut. The nut is located at the rear of the gearbox. From underneath it looks like this:



Using a sump-nut-key (same size as the one for the engine oil), crack off the sump-nut for the gearbox, but do not remove.

Once it is loose enough to remove by hand, normally only about a quarter of a turn, as with the engine sump, position a bowl/bucket/oil drainer under the car, and line it up so that the oil will flow into the bucket/bowl/drainer.

The next part is easy, but for your own good it's best to wear workshop gloves (I used non-latex ones as a friend has an allergy to latex and we buy most things like that together to save costs). The reason for this is that gearbox oil tends to have an extremely similar odour to it as cat urine, and unless you want your hands to be stinking to high heaven of it, wear some kind of rubber gloves to prevent it touching your skin!

With the bowl in position, undo the nut, making sure that when the oil starts to flow it goes straight into the chosen catching device, and not all down your sleeve, or driveway!!



Due to the gearbox only holding two litres, and the reverse light sensor being removed, it will not take long for most of the oil to drain out and leave a dribble....

In fact... about as long as it took me to get my phone out of my pocket and take this picture!! lol

While the last of the oil drains out, remove the metal filings that you will find attached to the magnet on the sump-nut.

Mine came out looking like a hedgehog, but before I could capture it on camera it had been cleaned.

Take care while doing this to not get any of the filings in the thread of the nut. This could cause problems when re-inserting it.

Give the area a bit of a clean around the sump. Clear up any spilt oil, like shown on the black pipe in the picture above, and generally make sure that the hole in the sump is also clear from any metal dusting that may have come out with the flow of oil.

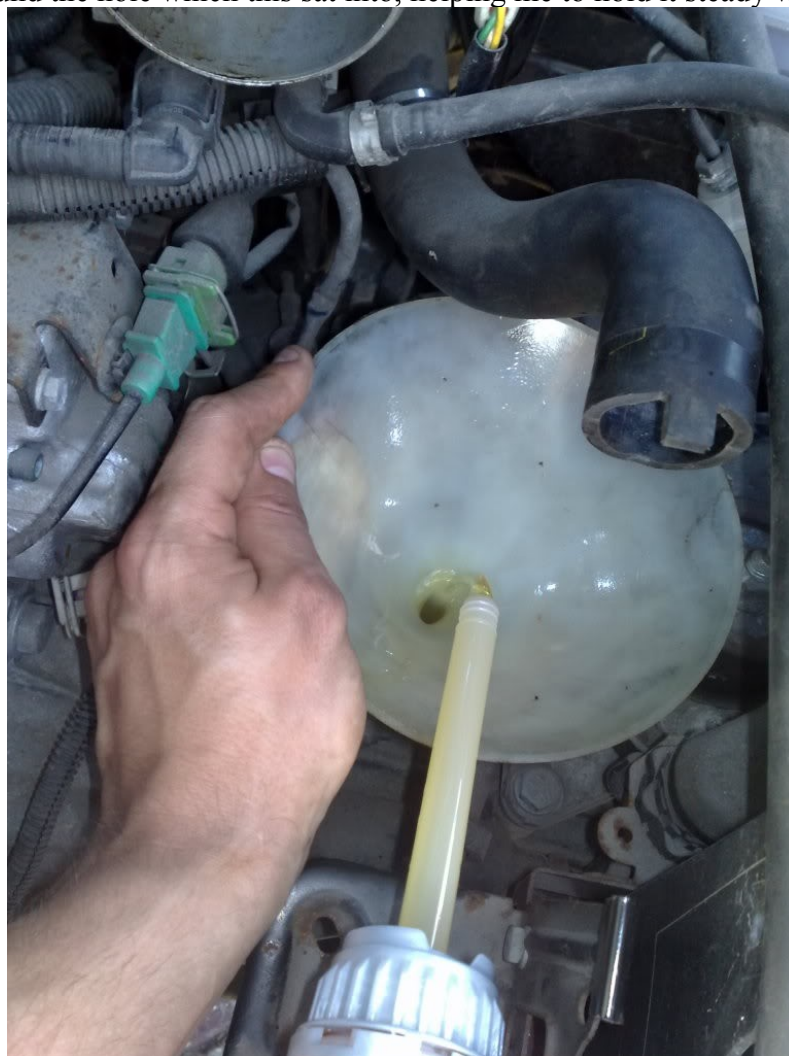
Replacing the copper washer (£1.29 from Halfords, but cheaper at motor factor's normally!), re insert the sump nut once all the oil has finished draining out. As mentioned, this will probably only take about 5 mins.

Take care not to cross thread the nut, and make sure that you do not over tighten it when it is fully in. I tighten mine just enough that I know the washer is now crushed, and secure, and then a little bit further. Just as you would with the engine oil sump.

As you will see from the 406 Coupe Club reverse light sensor hole is not very big, <http://www.406club.co.uk> for space when filling. As a result, I used a funnel. This did not sit inside the hole, instead it sat on the rim of the hole:



There is a slight lip around the hole which this sat into, helping me to hold it steady while the funnel was filled



Once provided by 406 Coupe Plus of oil back into the gearbox, replace everything that 406 Coupe Plus changed...
Reverse light sensor,

Wire onto the sensor.
Air box
Pipes and wires onto the lid, and then the lid too.
Inner wing
Wheel

Remove axle stand and lower car back to the ground



That's pretty much as simple as it is... this whole job would have taken me well under an hour if I had prepared before hand.

Instead it took me just under two and a half. I had to go out and get the sump washer, get the right sized deep-reach socket, which still ended up being the wrong size, so did it with adjustable spanner in the end, and get a few bits along the way....

Adding to that the fact that I've never changed the gearbox oil in any car I ever owned, I don't think I did too bad... lol