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HOME

Maintenance :- Main Oil and Rotor Filter /Oil Change

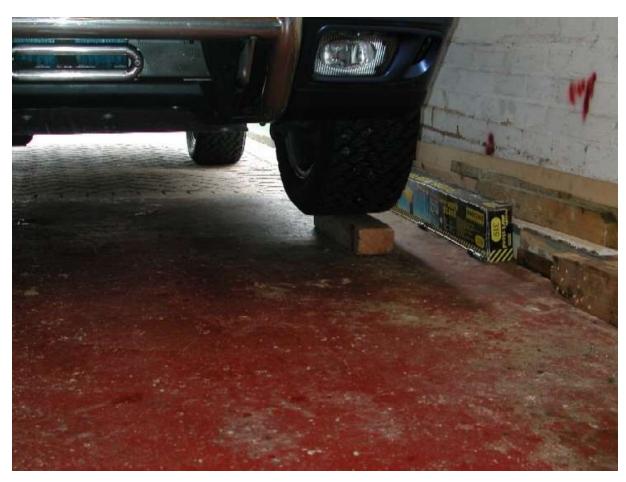
Performing general maintenance on your car "yourself" is not only satisfying, but can and WILL save you LOTS of money in labor charges when using dealers or other specialist garages.

I will include "simple" maintenance / service tasks on my pages here to show its not to difficult for anyone who has a set of spanners and wants to have a go. Changing the oil on most cars is a pretty similar task all round, and to lots of people, its a simple task to do, but if you have never done it, then read on and you may want to do it yourself next time.

Probably the "most" important task you could do above all else on your Disco and in particular the TD5 Diesel is to change your oil and filter on regular intervals. Your engine will, in a nutshell last longer, perform better and most likely have less "other" problems.

So first of all find a place to do it, I don't recommend doing it on your new blocked paved driveway just incase you spill some old oil, if you have no other choice of location, then lay down and old blanket or towel to catch any possible spillages. The Discovery is already pretty "high" of the ground, so crawling underneath is not to hard to access the sump plug, but even so, I drive onto some blocks of wood, you could also use a few bricks, it simply raises the car that few more inches and also helps a lot more of the old oil drain out.

Once its positioned, leave it running for a few minutes to "warm" the oil up as this helps it run out easier.



Now you need some sort of old container to catch the old oil. I use an old washing up bowl as its big enough to hold the oil quantity of any car and easy to position.



The Sump plug you need to remove is right at the back left corner of the engine sump



Now depending on how long you left it running, the oil could be warm or VERY hot, so either wear some gloves or be very careful when removing the plug. Its a 17mm spanner size and should not be that tight to remove. I have given up trying to "catch" sump plugs once they almost drop out, so I just let it fall into the bowl and go fishing later on with a magnet, this also help you to avoid getting burnt by the hot oil.

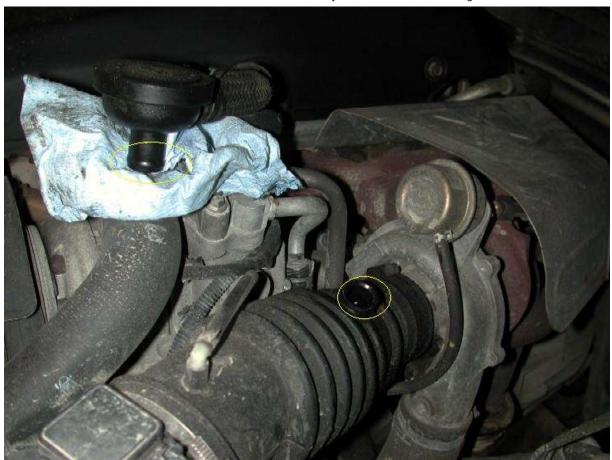
Once the plug is out and the oil is draining into your bowl, leave it for now to drain as long as possible and we will do the next bit. The TD5 Disco actually has 2 oil filters, a standard one as do all cars and also a centrifugal one as well. You need to change both to make it a proper worthwhile Job.

We will first do the centrifugal filter.

This is located just next to the turbo and is inside a housing which you have to remove the top from to get at the filter, It "should" have the word "lever" on the top as you can see in the picture below



The breather hose / breather valve pipe from the rocker cover runs above the oil filter housing, so to aid clearance simply undo the jubilee clip where it attaches to the turbo hose and move it out of your way.



Now you need to undo the 2 x 10mm bolts from the oil filter housing, NOTE!!! the turbo and exhaust / engine may still be HOT, so be careful.



The bolts can stay "captive" to the housing lid, but to make sure they are un done all the way I chose to remove them completely. My lid simply pulled up and off with light pressure. This is what it looks like removed, take note of the black "O" ring seal on the lid.



Once the lid is off, if you look in this is what you will see



The filter simply "lifts" out of the central spigot, take care to try and not spill any oil on the engine as you remove it. Once the filter is out, use some CLEAN rag or tissue and give the whole housing a clean / wipe out internally as best you can. Make sure you clean the "rim" at the top where the new seal will sit and take care not to drop any dirt or grit in there either.

It should look like below when your done.



I use genuine parts on what I consider "important" jobs, below is new filter, it also comes with a new seal for the housing lid as well. Ebay is also a great place to get stuff cheaper than the dealers and you can pick up some real bargains!!!. If your doing the Job yourself, the huge amount you will save in labor costs can be spent on using genuine parts; o)

You should also clean the housing lid internally just like before.



Re-fitting is a reversal of the removal. Smear a "little" fresh new oil onto the seal, fit that to the lid, simply drop in the new filter onto the central spigot, refit the housing lid and tighten the bolts to 10 NM or 7 Lbs FT or 88 Lbs In

Refit the breather valve and pipe we removed earlier for access ensuring it is in the same position and not rubbing against anything else.

That's that bit done!!

Now the "standard" oil filter. As with a LOT of cars the oil filter is in a stupid place and makes it almost impossible to spill some oil over the engine when removing it. The TD5 is no different in this respect, in fact its in a bloody awful place!!!. By the time we come to this point the exhaust / turbo / down pipe should be cool enough to touch, but be wary that they may still be hot!

It is located in between the turbo and the cylinder head. Here it is below.



The oil filter should NOT be that tight as they are tightened by hand on installation, use a cloth or rag to help you grip it and undo it slowly. Once its un screwed you will have to tip it and feed it out through the gap you can see above. Some spillage of oil is un avoidable, but you can place a rag or tissue below it first to help soak up as much spillage as possible.

Once its out, use some clean rag to clean the mating surface where it fits. Again I used a new genuine filter; its good practice to fill the new filter with clean oil first before fitting it, but because of where it is on the TD5 and you have to tip it about to get it back in, I never bothered as it would just waist new oil. Again smear some new oil onto the seal on the new filter to help it fit without "snagging" the seal on the filter.

Tighten the new filter by hand until it seats, then a further 3/4 of a turn. So now we have replaced both oil filters so all we need now is to replace the engine oil.

As I stated earlier I usually let the sump plug fall into the container of old oil and then fish it out later with a magnet. Once you have it, clean it of all the old oil, fit a NEW sump washer to it and refit it back to the car and tighten to 17Lbs ft or 23 NM

Now its simply a case of filling the car back up with oil. I used the same oil that the dealers use, (5w30 fully synthetic) the TD5 takes 7.2 litres of oil, so as most oil comes in 5 litre containers, you will need 2. So you can fill the engine with at least 1 complete 5 litres of oil, and I would suggest about another 1.5 litres from the second 5 litre container you have. That is more than enough to start the car with, as we need to move it onto level ground (off the wooden blocks) to get an accurate level.

So now its parked on level ground and its running, rev the engine to a fast idle (2000-2500) rpm to make sure the oil filter is filled up, turn of the engine and wait for 2-3 mins, check the level on the dipstick and top up as needed, and your done!!!