

Not only does oil provide lubrication to internal moving components to reduce friction & protect against wear, it's also designed to transfer heat and contamination to keep the engine operating just the way the manufacturer intended.

If you've ever seen what used oil looks like from an engine you'll realise pretty quickly that it's far from that lovely golden yellow colour that's displayed in magazine ads or TV commercials. Over time the oil begins to deteriorate through exposure to extreme temperatures and the accumulation of contaminants like carbon or moisture (by-products of the combustion cycle) reduces the oil's original performance. This is why manufacturers or engine builders specify when or how often you need to replace oil.

There are many reasons why we change our own engine oil; saving money, the enjoyment of working on your car, or just because you want to make sure it's done your way and don't trust anyone else to do it. We've put together a step by step procedure for anyone that hasn't done this before and is keen to give it a go, or for those that want to make sure what they had done previously was actually the correct way.



CHECKLIST

Products:

Liqui-Moly Engine Detox or Engine Flush Plus
Liqui-Moly Engine Oil (Refer to the online oil guide)
Liqui-Moly Engine Protect or MOS2 Anti-friction Treatment
Sump plug seal/washer
Oil filter

Tools:

Car stands or ramps (Optional)
Socket or spanner set
Oil filter removal tool/wrench
Funnel
Oil draining pan
Rags
Drop-sheet (Optional)
Garage creeper (Optional)
Rubber/latex gloves (Optional)
Safety glasses (Optional)

Getting Ready:

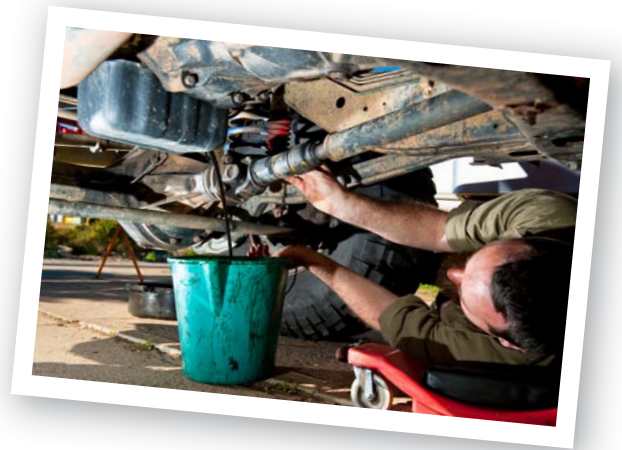
Make sure that you park the car on a level surface and put the hand brake on. If your car has a low stance you may need to use a set of car stands or ramps to give you enough clearance to get underneath.

TECH TIP: To avoid spilling any oil onto the garage floor or on the driveway lay a drop-sheet down before starting. To move around under the car at ease and to avoid getting dirty use a garage creeper to move around under the car.

Step 1:

To help the oil drain more freely run the engine until it has warmed-up, then add your engine flush (see can for directions on how to use). Turn the engine off, open the bonnet.

TECH TIP: Remove the oil filler cap and place it somewhere easy to see (on the engine cover). This will remind you not to forget to put the new oil in at the end. You may be laughing but this is a common and expensive mistake that many DIY's make!



Step 2:

Get beneath the car and undo the oil drain plug (turn it anti-clockwise). The drain plug will be located on the bottom of the oil sump. Remember that the oil can be hot and will come out quickly, so position the draining pan to allow for the flow. If you drop the oil plug into the oil use a magnet to retrieve it. While the oil is draining locate the oil filter, use the filter tool/wrench remove (anti-clockwise).

TECH TIP: Depending on where the filter is located, it will more than likely have oil in it and may drop onto you or the floor so make sure you have a rag handy. To protect your eyes we recommend using safety glasses while under the vehicle.

Step 3:

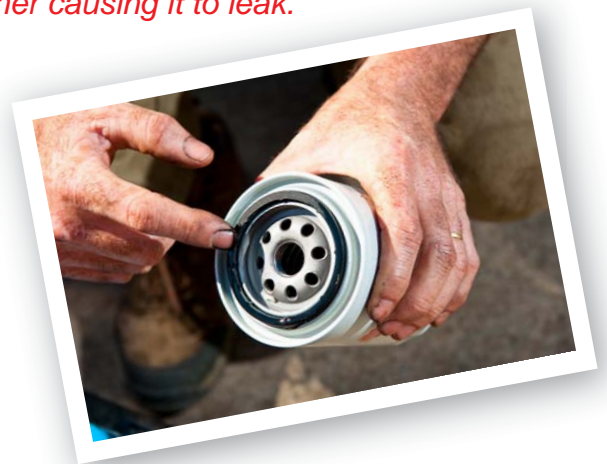
Once the oil has drained, clean the drain plug and hole with a rag. Put the new drain plug seal/washer on and re-tighten.

TECH TIP: Always screw the drain plug in by hand 1st to prevent cross threading. Do not over tighten the drain plug as you may crush or split the sea/washer causing it to leak.

Step 4:

With a clean rag, wipe away any oil or residue where the filter screws against the engine. Lightly coat the rubber seal on the new filter using the new oil. Screw the new filter onto the housing by hand until tight.

TECH TIP: With the filter wrench give the new filter no more than a quarter turn to tighten.



Step 5:

Place the funnel into the oil filler hole and carefully pour in the new oil. Once the oil has been poured add the anti-friction treatment and screw the filler cap back into place. Start the engine to allow it to idle for a minute then turn the engine off again and check the oil level using the dip-stick and top up if needed.

TECH TIP: Always refer to owner's manual for the exact amount of oil needed before filling. Remember short-fill the oil level to allow the Liqui-Moly anti-friction treatment to be added.

Step 6:

Do a final inspection beneath the car to make sure that there is no oil coming from the oil filter or drain plug. Now that everything is OK and there are no leaks you're ready to pack everything away.

Step 7:

Dispose of the used oil properly by either taking it to a recycling centre or an auto repair shop that can recycle it for you. Do not pour it down the drain etc. as this is illegal!