

## PART 1

# How to Change the Oil in Your Car

### Jacking up the Vehicle



Pull the car into a driveway or space with level ground and enough working area.

Leave the car idle for 5-10 mins to get the oil warm. Be sure to exercise caution when draining warm or hot oil.



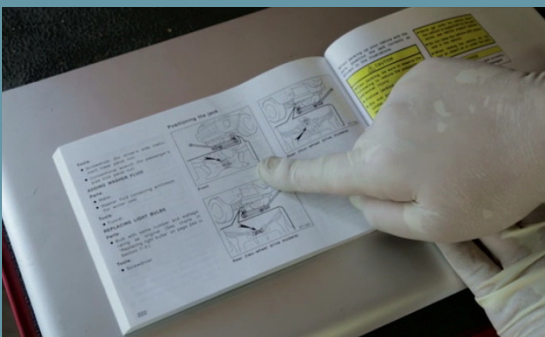
Place car in park, remove the keys and apply the parking brake.

Exit the vehicle.



Install wheel chalk/blocks to restrain tires.

Tire restraints (wheel blocks) should be placed on the tires that will remain on the ground.



Locate the jacking points on the vehicle.

If you are unsure, check the owners manual for specifics.



Jack up the vehicle.

You will only need to do this on one side. Place jack stands on jacking points.



Restrain the vehicle

Apply force by rocking the vehicle to assure it is safe.



Place the oil recovery pan (drain pan) underneath the engine.

Let car sit for 10 mins to cool down. Engine/exhaust could be hot, be careful.

# How to Change the Oil in Your Car

## Draining the Oil



### Gather your supplies.

You will be needing the appropriate oil filter and new clean oil for your vehicle.



### Remove the oil cap

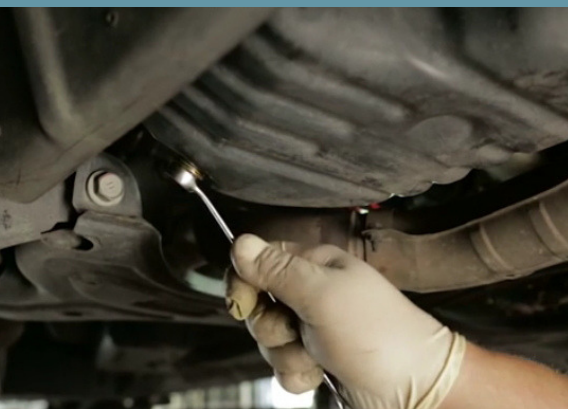
Open the hood and locate the oil cap on top of the engine.

### Find the oil pan



Under your car, look for a flat metal pan closer to the engine than the transmission.  
+ Locate engine drain plug.  
+ Verify that is the engine oil drain plug, not the transmission drain plug. If you are unsure which is which, look for the exhaust. The exhaust is always attached to engine, as is the tube that travels from the front of the vehicle to the back. The oil pan and drain plug will be located below the engine.

### Remove the oil plug



Loosen the plug counter-clockwise using the proper sized socket or a crescent wrench if you have room to maneuver. You should also remove and replace a paper or felt drain plug gasket. A metal washer can be re-used in good condition.

### Wait...



It will take several minutes for all the oil to drain out of the car. When the oil has ceasing running out of the crankcase, replace the plug. Put new washer on the drain plug. Inspect and clean 3 areas: drain, plug, and gasket. Put the new gasket on the drain plug.



# How to Change the Oil in Your Car

## Replacing the Oil Filter

### Locate the filter assembly.

Filters are not put in a standard position, so they can be on the front, back or side of the engine depending on the model.

+ Look at the replacement filter you purchased to have some idea of what to look for. Typically, they're white, blue, or black cylinders about 4-6 inches (10.2-15.2 cm) long and 3 inches (7.6 cm) wide, like a soup can.

+ Some vehicles such as BMW, Mercedes, and newer Volvos may have a filter element or cartridge as opposed to the simpler spin-on type. They require you to open the cap of a built-in reservoir and lift out the filter element itself.



### Unscrew the oil filter

First, try by hand to get a good grip and twist slowly and steadily, counter-clockwise. If you are unable to remove the filter by hand, you will need an oil filter removal tool to do this. Make sure the drain pan is underneath the filter before fully removing the filter. This will help prevent spillage.

+ To avoid spilling too much oil as you remove the filter, you can wrap a plastic bag around the filter, which will catch any oil that escapes as you remove it. Let it sit upside down in the bag to drain as you complete the job.

+ Make sure the pan is still under the car catching the spilling oil. There will be some trapped in the filter that will come out when you unscrew it.



### Prepare the new filter

Dip the tip of your finger in the new replacement oil and smear it on the gasket ring of the new filter. This will lubricate the gasket and create a good seal for the new filter, and ensure that you'll be able to get it off the next time.

You can also pour a tiny amount of oil into the filter prior to installing it. This will reduce the amount of time your car takes to regain proper oil pressure. If your filter is mounted vertically, you may be able to fill it almost to the top. If mounted at an angle then a small amount of oil will spill just prior to spinning the filter on.



### Carefully screw on the new, lubricated filter, being careful to not cross the threads.

The filter will generally say how tight to tighten it; look to the specifications on the box for more specific instructions. In general, you'll tighten the filter until the gasket touches, then a quarter-turn more.



# How to Change the Oil in Your Car

## Adding New Oil

### Add new oil to the car at the fill hole

The amount you need is in the owner's manual, usually listed under "capacities."

+ If you hold the bottle with the spout on top, it will pour more smoothly, without bubbling.

+ Make sure you're adding the correct oil.

Typically, you can safely add 10W-30 to most cars in a pinch, but you should consult your owner's manual or the experts at an auto shop before adding oil.

+ Don't always rely on the dipstick for an accurate measurement; it can be off, especially if the engine has just been run (the stick will read low because there is still oil in the galleries). If you want to check the stick accurately, just check it first thing in the morning, parked on a level surface, when it's cold and settled.



### Replace the fill cap

Check around for any loose tools you might have left around and close the hood.

Look under the car to make sure nothing is leaking. It's a good idea to wipe up any spills as best you can. While it's not dangerous to get a little oil on the crankcase as you're pouring, it may smoke as the engine heats up, leading to that burning oil smell that can be momentarily frightening. It can also make your interior smell bad.



### Start the engine

Watch to be sure the oil pressure light goes off after start-up. Put your car in park or neutral with the parking brake on to check for any drips and look carefully under the car to check for any leaks or drips. If the filter and drain plug aren't tight, they may leak slowly. Run the engine for a minute or so to get the pressure up and ensure you've installed everything correctly.

Optional: Reset the oil change light. This will differ depending upon the make and model of your car, so you should consult the owner's manual to figure out the specific set of steps. On most GM cars, for instance, you'll need to shut the car off and then turn the ignition on without turning the car over. Next, pump the gas pedal three times in ten seconds. When you start the car back up, the lights should be reset.



### Check oil levels by pulling out the dipstick

Once vehicle has been turned off again and the oil has settled for 5 to 10 minutes, recheck the dipstick to ensure that the levels are where they need to be.





# How to Change the Oil in Your Car

## Disposing of Oil

### Transfer the oil to a sealing container

Now that you've changed your oil, get the sludgy gunk into a more permanent container. Adding it to the new container you've just emptied is the safest bet. Use a plastic funnel in the bottle and pour slowly to ensure you don't spill any. Clearly mark the bottle "used oil" so you don't mistake it for the real thing.

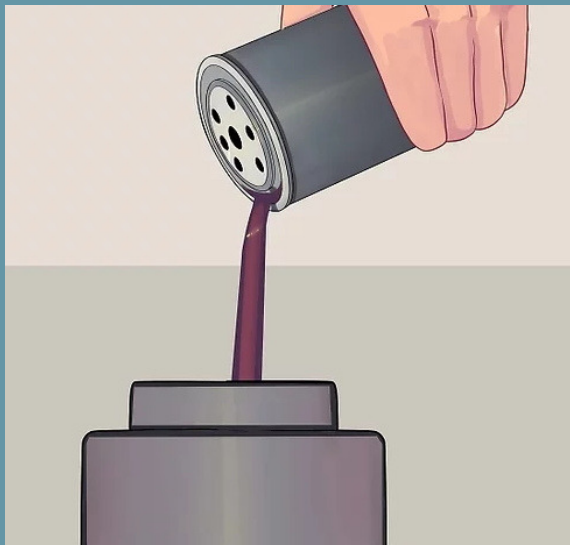
Other options include old milk jugs, windshield washer-fluid jugs, or other plastic bottles. Be very careful anytime you're using old food bottles to clearly mark it.

Don't put old oil in containers that held chemicals like bleach, pesticides, paint, or antifreeze. These will contaminate the recycling process.



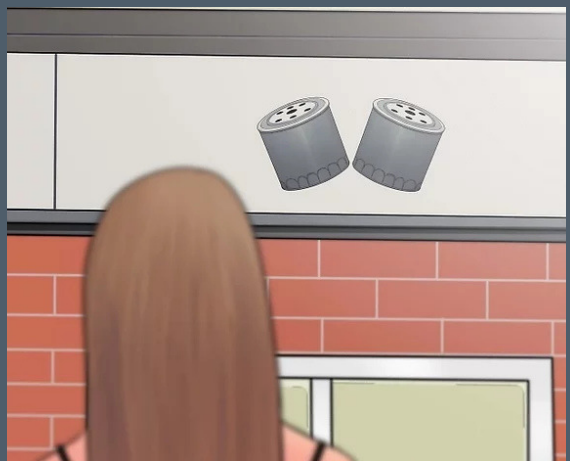
### Make sure your oil filter is drained

You can add this oil (sometimes as much as 8 oz.) to the old oil. Filters are also recyclable, so hang onto them.



### Find a designated collection site in your area

Typically, all places that sell motor oil will have this information on hand. Retailers that sell more than 1,000 filters in a year are required to accept old filters.[1] Many service stations that do oil changes will also take your used oil, though sometimes for a small fee.



### Try recycled oil next time

Used motor oil is refined until it meets the same certifications and specifications of virgin oil. The process requires less energy than pumping and refining new oil and recycling motor oil helps to reduce the need of foreign oil imported. In some cases, recycled oil also costs less than "new" oil.



#### <sources>

<http://www.wikihow.com/Change-the-Oil-in-Your-Car>

[https://en.wikipedia.org/wiki/Motor\\_oil](https://en.wikipedia.org/wiki/Motor_oil)

<https://carserviceland.com>

<https://alloyoilchangeCoupons.com>