



ENERGIZING KENYA



## AUTO CHECK FOR CONFIDENCE

Since the invention of cars, drivers have sought ways to make their cars more efficient and reliable. Today's cars are the best they've ever been, but they're still not the maintenance-free wonder machines of utopia. Cars need frequent TLC (especially Subaru, hehehe...), and it is the following different auto fluids that need the attention.

Fluids (mainly, lubricants) play a paramount role in every facet of your car, including fuel economy, longevity and lately, emissions control. Using the right quality and keeping them at the right level will ensure your car uses less fuel, pollutes the environment less and you **DRIVE WITH CONFIDENCE FOR LONGER.**

### I. ENGINE OIL

After fuel (unless you have a fancy EV), oil is your car's most important fluid. Engine components spin thousands of times a minute, and it is the oil that keeps everything moving and reliable.

Most cars have a dipstick in the engine bay which lets you quickly inspect the oil. It is best to check your oil after your engine has been turned off for at least 10 minutes so the oil can settle at the bottom and cool off.

First, pull the dipstick out and wipe it clean with a rag. Then, reinsert it and pull it back out. The dipstick is marked with maximum and minimum indicators that show how much oil is in your engine. The oil on the dipstick should be near maximum.

If it is at or below the minimum, top up immediately. A low reading could indicate your engine is leaking or burning oil, which can cause damage if left untreated.

Oil level is one thing, but its condition is equally important. To check it, you are going to have to get your hands dirty. Smear the oil on the dipstick between your fingers. It should feel slick and smooth – if you notice any particles or grittiness, components are likely wearing down, which can be a major issue.

Also look at the color of the oil. If it is a yellow or amber color, you are good to go. If it is a darker coffee color or black, it is time for an oil change, and if you see a milky color; that means coolant is leaking into the engine.



## 2. COOLANT

With all the combustion and friction in an engine, a lot of heat is generated. Coolant works to keep everything cool, by absorbing the heat and dissipating it through the radiator.

Maintaining the correct coolant level prevents overheating. You only have to check this fluid every 10,000 km or so, but if there is a leak or other issue it is important to know how to top it up. Never check your coolant while the engine is hot as pressurised coolant can spray and cause burns. Always wait for the engine to cool completely before checking the coolant.



The process to check coolant varies from car to car. If your car has a coolant expansion tank, look to see if the coolant falls between the minimum and maximum indicators on the tank. If it does not, open the radiator cap to see if the coolant is filled up to the top.

Before you add coolant, make sure it is a type approved for your vehicle and once you do, give the radiator a few minutes to "burp" out any trapped air bubbles before you put the cap back on.

## 3. POWER STEERING FLUID

If you have ever driven a legacy car, likely the first things you noticed is the heavy steering. Modern cars have upgraded to power steering to make maneuvering easy at any speed, and many power steering systems are hydraulic, using pressurized fluid to make turning the wheel effortless (though some newer models now rely on electric steering). There is no set timeframe on when power steering fluid needs to be replaced, but you should still know how to check it.

Like with other fluids, look for either a dipstick or reservoir in the engine bay. The process is similar in that you will remove the dipstick or check the markings on the reservoir. If the fluid is low just top it up, but it is essential to use the type specified for your vehicle to avoid damage. If you find that you are frequently adding fluid, it is likely there is a leak, and your car will become increasingly difficult to steer if this is not addressed.



## 4. BRAKE FLUID

The importance of your car's brakes needs no emphasis. Modern car brakes are hydraulic, meaning that fluid connects the pedal to the brakes themselves.

When you step on the pedal, a plunger pressurises the brake fluid inside the lines, which causes the brake pads to clamp on the rotors and slow your car. This is supposed to happen instantly – if there is any delay or abnormal feeling to your brake pedal, the fluid is the first thing to check.

Over time brake fluid can become contaminated by water, which can make brake lines rust. Leaks can also form, leading to a spongy pedal feel or irregular brake performance.

Most cars have a brake fluid reservoir in the engine bay, and checking it is as simple as taking a look at its level and color. Like with other fluids, make sure the level falls between the minimum and maximum indicators.

Add more if it is below the minimum, but make sure it is a type compatible with your car. Brake fluid comes in several varieties with their own distinct colors, but all should be translucent, not cloudy or dark. If you cannot see through your brake fluid, get it replaced.

## 5 TRANSMISSION FLUID

Transmission fluid serves a similar purpose as oil in the engine: it lubricates and cools the components inside your transmission. Transmissions contain gears, clutches (even in automatics), and valves which must move smoothly to provide seamless shifts.

While many transmissions come with "lifetime" fluid that should never need replacement, bad transmission fluid can cause rough shifting, strange noises, and uncontrolled surging that make driving difficult.

If you experience any transmission issues, check the fluid first. Some cars have a dipstick, however others require a professional mechanic to inspect the fluid condition. If your car has a dipstick, the process is the same as above, though you will need to have the engine turned on and the transmission in Park or Neutral to get an accurate read.

. Inspect the fluid level, as well as its condition. It should be amber or red in color, and feel smooth. Like with other fluids, if it is dark, cloudy, or gritty, it means there is a problem that needs to be inspected.

To add transmission fluid, pour it into the fill tube if your vehicle has one. After verifying the fluid level on the dipstick, move the gear selector through the gears with your foot on the brake to help the new fluid flow through the transmission.

Transmissions are complex pieces of equipment, so if you continue to have problems it is best to contact a professional mechanic.



## 6. WINDSHIELD WASHER FLUID

Windshield washer fluid does not have any effect on your car's performance, but it is still vital to safe driving. After all, if you cannot see where you are going, you will not get very far. Fortunately, it is the easiest fluid to maintain.

You can buy jugs of it at gas stations or auto supply stores (or make your own) on the cheap. Simply pour the fluid into the reservoir until it is full, close the cap, and be on your way. Sometimes, regular tap water with liquid soap only does the job.

Fuel is what your car uses the most, but do not neglect the other fluids. Follow a strict maintenance schedule to ensure you do not miss oil changes, and always watch out for unusual noises, odors, or vibrations.

These fluids might not stop you like an empty tank of fuel, but they are equally important in keeping your car in great working order (ladies, I hope you got that, hehehe...).

