

Maintenance Schedule

Frequency	Maintenance Item
Monthly	Check level and condition of fluids
Yearly	Have brake fluid checked for contaminants and breakdown
Yearly	Have coolant checked for acid content and protection capabilities

These maintenance intervals are based on normal driving conditions.

For more information about your vehicle's fluids and how to care for them, contact your local

Approved Auto Repair Service facility. To locate the AARS facility nearest you, call your local CAA office or check online at caa.ca.

Important safety information: Due to the complex nature of today's vehicles, it is essential that you use the utmost care when working on your car or truck. Before attempting any service or repair, consult your owner's manual. Be sure that you understand the service procedure completely, have the proper tools, and adhere to all safety precautions, including handling instructions for any chemicals you are using. If you are unsure about any repair, consult a professional technician.



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MAKE SENSE of CAR CARE

ADVICE FROM CAA

AUTOMOTIVE FLUIDS



AUTOMOTIVE FLUIDS — YOUR VEHICLE'S LIFEBLOOD

TODAY, WITH THE ABUNDANCE OF SELF-SERVICE GAS STATIONS, SOMETIMES THE ONLY WAY TO ENSURE YOUR VEHICLE'S FLUIDS RECEIVE THE ATTENTION THEY NEED IS FOR YOU TO CHECK THEM YOURSELF. Maintaining proper fluid levels is inexpensive. However, improper maintenance and low fluid levels can make driving more difficult and lead to serious damage and shorter engine life.

This brochure covers the most commonly asked questions about fluids. If you have a question regarding any fluid not listed, contact a CAA Approved Auto Repair Service facility or your local CAA club for assistance.

Engine oil

Checking your engine oil is the most important fluid check you can do, because running your engine when it's low on oil can result in serious engine damage. Engine oil works as a lubricant for moving parts and as a means of cooling and cleaning internal engine parts.

- Check your oil when the engine is not running and the vehicle is on level ground.
- After opening your hood, find the engine oil dipstick and remove it.
- Wipe off the end of the dipstick with a rag, and notice the markings on it. You will usually see a mark for "Full" and another mark for "Add."
- Insert dipstick back into the tube, remove it quickly, and read the level.
- If the dipstick indicates the level is at or below the "Add" mark, add oil but only enough to reach the "Full" mark. Don't overfill.

New engine oil should have a light gold to brown tint and should be nearly transparent. However, synthetic oil is normally darker in colour, sometimes almost black. If the oil appears "milky" or thick, or if it's very thin and has a strong fuel odour, there may be something wrong internally, and you should have the engine checked by a qualified technician.

CAA recommends that consumers change their oil between 8,000 and 11,000 kilometres, depending on manufacturer's recommendations and the conditions under which their vehicles are driven. Those who operate their vehicles in severe conditions should change their oil more frequently. Please refer to your

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owner's manual for maintenance schedules and what constitutes severe driving conditions.

Transmission fluid

Transmission fluid, like engine oil, serves multiple functions. It provides lubrication, keeps seals soft, and protects internal parts.

- Most automatic transmissions (or transaxles in front-wheel-drive vehicles) should be checked while the engine is running.
- Make sure the vehicle is on a level surface with the emergency brake applied. Avoid any moving parts of the engine.
- With your vehicle fully warmed up and the transmission in the correct position — neutral or park — raise the hood, and locate your transmission's dipstick. Check your owner's manual for information on whether your vehicle should be in park or neutral when checking the transmission fluid and for where your transmission's dipstick is located.

- Once you've located the dipstick, remove it, wipe off the fluid, and re-insert it.
- Remove the dipstick again, and locate the fluid level. The level should be within the "Full" range and should be clean with a pink tint.

Fluid that is amber or brown in colour is a sign that the fluid may need to be changed. Fluid that is brown or black in colour or burnt-smelling is a sign of internal failure or lack of proper maintenance. If your fluid shows these signs, consult an AAR facility for the proper diagnosis.

On most manual transmission models, finding an accessible way to check the fluid level is very difficult. It is best left to a qualified technician.

Brake fluid

Although brakes are one of the most critical systems on your vehicle, brake fluid is often one of the most neglected fluids.

- A quick check of the brake fluid reservoir will determine the current fluid level.
- Before removing the brake reservoir cap to check the condition of the brake fluid, always clean away any dirt or debris to ensure it doesn't get into the master cylinder.

The fluid should be clear or have a light purple tint. Dark brown or black coloured fluid indicates it is time to replace it. Never put anything but brake fluid that is designed for your specific vehicle into your brake system. Anything else can damage brake components or even cause brake failure.

Coolant

Coolant, also known as antifreeze, prevents engine freeze-up in winter, raises the boiling point of coolant in the summer, and protects the cooling system from rust and corrosion year-round.

- Make sure your vehicle is parked on a level surface and is not running. Always check your engine coolant when the engine is cold, and **never** remove the radiator cap when the engine is hot. The best time to check the coolant level is first thing in the morning before the vehicle is started.

**NEVER REMOVE
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- A simple check of the coolant reservoir is usually all that is needed. However, if your vehicle is equipped with a radiator cap, it is a good practice to also check the level in the radiator, especially if you have a leak or expect a low-coolant condition.
- Before removing the radiator cap, verify that there is no pressure in the coolant system by squeezing the upper radiator hose. If you can't compress it easily, there is too much pressure in the system. If pressure is present, wait until it dissipates.
- The coolant level should be within one inch of the top of the radiator filler neck, and the coolant should be free of contaminants. The colour of the coolant will depend on which type of coolant you use.
- The coolant level in the recovery reservoir should be between the minimum and maximum lines.

Adding a small amount of coolant is normal. However, if you find that you are regularly adding coolant, a leak in the cooling system or engine may be the problem. If your coolant has lost its colouring or is contaminated with rust, it is time to change the coolant. When changing the coolant, it's a good idea to have your cooling system's thermostat checked as well. Coolant should be tested yearly for acid content and to check its freeze protection capabilities.

Power steering fluid

Power steering fluid has special additives to help protect the rubber hoses and seals located in the steering system. Although some may use automatic transmission fluid, most manufacturers recommend power steering fluid. Always use the power steering fluid specifically formulated for the make and model of your vehicle.

- The power steering fluid reservoir usually has a small dipstick attached to the cap.
- Although you can check the power steering fluid when the vehicle is cold, it's more accurate to check the fluid once the vehicle is fully warmed up.
- With the vehicle parked on a level surface and the engine off, remove the cap from the fluid reservoir and check the fluid level. The level should be within the normal range on the stick. Be sure to read the dipstick marking for either warm or cold levels, depending on your engine's condition.

If you have to add fluid more than once or twice a year, have the system checked for leaks. If you hear a buzzing noise when you turn the steering wheel at slow speeds, that's a warning sign of low power steering fluid.

WHAT TO CHECK

- **Oil:** Change per your manufacturer's recommended schedule.
Oil colour when new: light brown with a golden tint.
Colour when old: black.
Note: if you use synthetic oil, the oil colour is normally darker.

- **Automatic transmission/transaxle:** Change per your manufacturer's recommended schedule.
Fluid colour when new: light red or pink.
Colour when old: amber or black.
- **Brake:** Change every 80,000 kilometres or two years and have the brake fluid tested yearly for contamination and breakdown.
Fluid colour when new: clear to light brown.
Colour when old: black.
- **Coolant:** Change per your manufacturer's recommended schedule.
Coolant colour when new: red, green, or yellow.
Colour when old: diluted or rust coloured; however, the best determining factor is an actual test for protection breakdown, not the colour.
- **Power steering:** Change when fluid becomes discoloured.
Fluid colour when new: clear or red.
Colour when old: black.

REMEMBER

- Always make sure your vehicle is on a level surface when checking fluids.
- Don't overfill fluids.
- Monitor fluid loss. If it's more than the manufacturer's suggested use, have your vehicle checked by a certified technician.
- Never remove a radiator cap when the engine is hot.
- Avoid the moving parts of the engine.