



Spring
Car Care

Filter Maintenance

Modern vehicles rely on multiple filters to capture debris before it reaches critical operating components. The most well-known filtration device is the oil filter, which is typically changed at intervals of 3,000 to 5,000 miles as the fluid enters the end of its life cycle.

Don't overlook the importance of other essential parts that help your vehicle breathe, protect the fuel system and enhance the air surrounding your cabin.

Before picking up new filters and attempting a DIY replacement, ensure you're up for the task. Check the owner's manual for installation instructions or watch online tutorials to see the process in action.

If the new components appear too challenging to replace on your own, recruit help from a local repair shop. They can professionally complete the swaps while you're in for other maintenance or schedule a separate appointment.

AIR FILTER

Your car's air filter requires less frequent replacement than



© ADOBE STOCK

oil screens but is still critical to change regularly. According to the American Automobile Association, those in suburban or city environments can wait until about 20,000 miles before replacements.

However, dusty rural conditions will require more attention. You can check it periodically by removing it from its housing, holding it up to bright light and making sure the rays pass easily through the filter. If the filtering media is clogged or dense, you should consider

a replacement.

FUEL FILTER

Most modern vehicles use a non-serviceable fuel filter that is located in the gas tank. However, some cars and trucks, generally those that use diesel, require general maintenance on external filtration components.

In addition to changing it during regular service intervals, the experts at Kelley Blue Book suggest a fuel filter may be the culprit if:

- The vehicle has trouble starting.
- You experience rough or slow speed while cruising.
- The engine shuts down during operation.
- You face excessive vibration while idling.

Once the fuel filter becomes clogged, it will ultimately inhibit the vehicle's performance.

CABIN AIR FILTER

You may not realize that another filter is fitted to your

vehicle and is used to maintain the air that enters your cabin. It's generally located in the glovebox and can usually be replaced with little automotive knowledge.

You'll know it's time to change the filtration device when you notice reduced airflow from the climate-control system, unpleasant odors or increased dust. An excellent general replacement interval is between 15,000 and 30,000 miles or when you experience early signs of failure.

Making Sense of Additives

You wouldn't invest in vitamins or supplements to put into your body without understanding the benefits or risks. Treat your vehicle with the same grace by researching additives before pouring them into its intricate mechanisms.

While most chemicals provide enhancements, you can save money by knowing which ones are required to solve issues your car is facing.

FUEL TREATMENTS

If you've navigated the chemical aisle of your local auto parts store, you have noticed rows of products that claim to enhance a vehicle's fuel system. Performance-enhancing concoctions often claim to boost performance, improve fuel mileage or condition numerous components.

If you're aiming to increase your mileage per gallon, the Federal Trade Commission warns vehicle owners to take a buyer-beware approach. The group states that while different products may show some impact, most results will be so minimal that drivers won't notice the benefits.

However, fuel treatments that claim to condition and clean the system can be beneficial to extend your vehicle's performance. Some quality products are intended to be poured into the gas tank and ultimately scrub carbon and other buildups from crit-

ical components like the fuel injectors.

For diesel engines, you should choose conditioners based on your region's temperatures. While an all-season injector cleaner is a great idea, make sure to use an anti-gel product during the winter. The chemical reaction reduces diesel fuel's freezing point to avoid serious issues when the weather is frigid.

OIL STABILIZERS

Engine oil treatments are another popular option for those who want to promote better operation for their vehicles.

Typically, a quart of stabilizer substitutes a quart of oil during a fluid change. It's efficient when helping oil maintain its viscosity for longer intervals and thoroughly coating and lubricating the engine components.

Some manufacturers claim that their products can increase the life of oil by 50%. However, to maintain your manufacturer warranty, ask a local dealership about their policies regarding using additives and the extended oil change intervals.



Inspect your Spare Tire Setup

There is never an ideal time to discover you have a flat tire.

The inconvenience is usually noticed as you head out the door with intentions to drive, or during the commute. Without ensuring your car is equipped with an adequate spare tire, you may face expensive towing or road-service charges.

Many older vehicles include a donut tire, a scissor jack and a lug nut wrench to complete an installation. Depending on the automobile type, the setup can usually be found in the trunk or installed on the chassis' undercarriage.

If you would rather avoid using a temporary spare, consider investing in a fifth full-size matching tire to keep on standby. Remember to incorporate the wheel into your vehicle's rotation scheduling, so it wears at the same rate as the other tires.

Automakers are pressed for space and fuel economy on some cars, so many are instead offering onboard tire repair kits. Most options include an air compressor and tire sealant that plugs small holes, making it possible to reach a repair shop.

Before hitting the road this spring, make sure to analyze your vehicle's emergency tire system. Become familiar with how to use the provided components and tools that make the replacement task easier when the time comes.



© ADOBE STOCK

CHANGING A TIRE

One of the essential skills to learn for yourself and teach to loved ones is how to change a tire. Understanding the process can save you time during emergencies and help you get to a repair shop for a permanent repair and avoid expen-

sive towing bills.

Check out these tips from the Department of Motor Vehicles about changing a flat safely and efficiently.

- Find a safe spot to park the vehicle, like a side street or the shoulder of a road.
- Use safety equipment like

reflective triangles and turn on your hazard lights.

- Loosen but don't remove the lug nuts before jacking up the car.
- Reference your owner's manual to find the proper location on the vehicle to begin lifting it with the jack.

• With the vehicle raised, remove the lug nuts and detach the flat tire.

- Align the spare onto the wheel bolts, hand tighten the nuts and lower the car.
- Next, use a tool to tighten the nuts in a star pattern to ensure even alignment.

Check your Brake Fluid

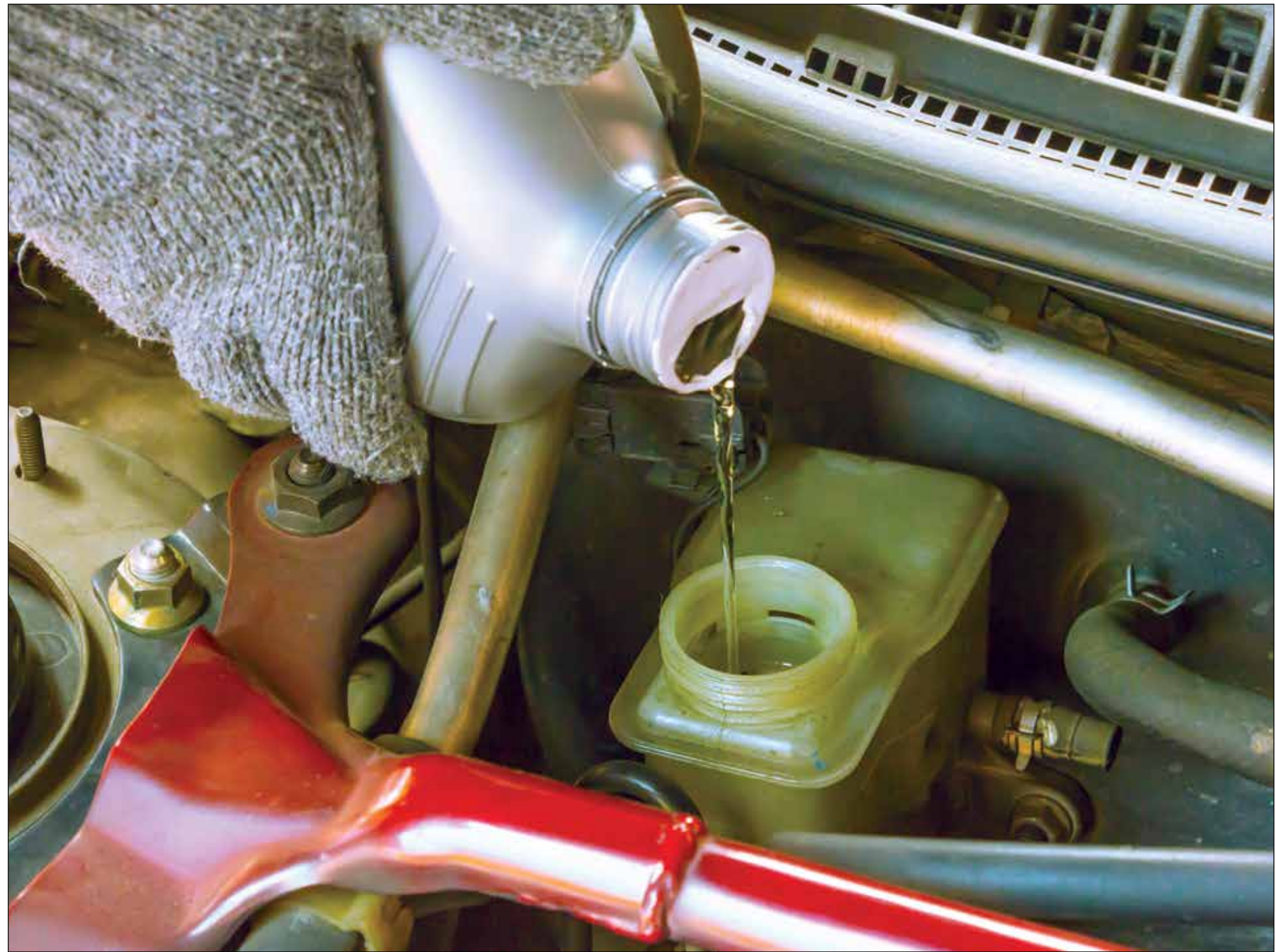
A vehicle's braking system offers multiple warning signs when attention is required. From squeaking pads to grinding rotors, drivers typically receive generous alerts that help them prepare to invest in a replacement.

However, one aspect that is often overlooked is the brake fluids' capacity and condition. Without this vital hydraulic fluid, the entire system can become ineffective and create a dangerous inability to stop.

You can quickly check the fluid level by looking under the hood and locating the vehicle's master cylinder. Typically, it is located on the driver's side, near the firewall. The reservoir's cap will usually have "brake fluid" clearly showcased to make it simple to identify. Before topping it off, you should understand its role in your vehicle and how to ensure the system isn't already compromised.

BRAKE FLUID'S ROLE

Your vehicle comprises numerous components that work together to complete a stop once the pedal is pressed. The non-compressible fluid can withstand the high heat that is produced in braking systems.



© ADOBE STOCK

Its primary purpose is to travel through lines to force a caliper to push the brake pads into the disc rotor, ultimately causing the automobile to stop.

Over time, its chemical makeup can break down, allowing the hydraulic fluid to overheat and create air bubbles in the system. If ignored,

this is a problematic issue as the liquid will compress the air, significantly compromising your ability to stop.

HOW TO CHECK BRAKE FLUID

Generally, adding brake fluid to a vehicle isn't part of routine maintenance. However, you should check

the reservoir periodically to ensure it is at full capacity according to the manufacturer's specifications.

If the system is low, it typically means a leak at a connection or throughout the brake lines. Another common reason for lack of fluid is that the brake pads require replacement.

You can check the levels by finding the master cylinder reservoir underneath the hood. Ensure it is filled to the correct minimum/maximum line inscribed on the plastic bottle. If your container is metal, you should be able to remove the cap and determine its capacity by looking inside.

Choosing a Local Mechanic

If you don't already have a trusted local mechanic who ensures your vehicle is operating correctly and safely, find a reputable provider this spring.

As you build a professional relationship, you may discover regular customer discounts, honest discussions about repairs and an expert who becomes familiar with your vehicle. With regular inspections and maintenance, your mechanic can diagnose significant issues before they require more expensive remediation.

An easy way to get to know the local shops in your area is by researching their locations. Check review websites to discover feedback from current and previous customers. Ask your friends and family about their experiences with mechanics. It's imperative to avoid deciding based on prices alone. Ensure they are well-versed in your specific vehicle brand, offer warranties for parts and labor and make you feel comfortable while visiting. Here are some other factors to consider when choosing a dedicated mechanic.

ASE CERTIFIED

Mechanics who participate in a national program conducted by the National Institute for Automotive



© ADOBE STOCK

Service Excellence receive ASE certification.

To receive this honor, one must pass national tests and complete a two-year work experience requirement in a skilled occupation. Jobs include independent garages, auto part stores, municipal fleets or dealerships. The difficult test includes questions regarding all significant areas of vehicle repair.

After the initial certification,

mechanics can pursue Master Technician status by completing additional exams and fulfilling experience requirements. You can quickly identify shops in your area that employ an ASE-certified mechanic as they are permitted to display an ASE sign at their place of business.

WORKS WITH YOUR SCHEDULE

If you work a Monday-

Friday schedule, finding a shop that works with your weekly routine can be difficult. Find out if they offer a shuttle service that can take you to your job after dropping off your vehicle.

Once the repair is complete, find out if they will use the courtesy carrier to bring you back to the shop or if they can deliver the car to your place of work. You should also find out if they have an available tech-

nician on the weekend.

WARRANTY

Most reputable shops offer guarantees on parts and labor. Find out if their warranties are covered nationally, as breakdowns can occur when you're far from home.

Quality providers can work with the distant repair shops to get you back on the road and reimburse you for charges at a later time.

Fuel-Saving Tips

As winter's road conditions begin to fade, many travelers can't wait to hit the American highways during the spring. You can save money in your travel budget by implementing fuel-saving tips.

Check out these ideas from the National Institute for Automotive Service Excellence to increase your car's miles per gallon.

MONITOR YOUR TIRES

Most modern vehicles use tire-pressure monitoring sensors to notify drivers if their tire loses the recommended amount of air. Generally, a dashboard warning light that depicts a tire with an exclamation mark in the middle will illuminate. If you notice this issue, it's imperative to refill the compromised tire to the manufacturer's specifications and monitor it to find out why it depleted. Often, cold weather can cause the air inside to condense and take up less space, causing a drop in the psi (pounds per square inch.)

The United States Environmental Protection Agency suggests that keeping your tires properly inflated can improve gas mileage by 0.6% and up to 3% in some cases. While the tire's maximum



© ADOBE STOCK

pressure is typically printed on its sidewall, drivers should reference the sticker on their door jamb to find the vehicle manufacturer's recommendations.

REMOVE EXCESS WEIGHT

Some drivers add heavy equipment and supplies to their vehicles to help gain traction and increase safety during wintry conditions. These can include snow shovels and extra

blankets or clothing. However, the extra weight can significantly decrease a vehicle's fuel economy. Once the ice and snow threat is over, remove the additional weighted items and emergency equipment.

GET A TUNE-UP

Well-maintained engines are designed to operate at their peak performance. As spark plugs, coils and other critical components begin to wear,

replacing the vital parts can bring your motor back to life. Consider visiting your local repair shop to get an inspection on your starting and operating system.

FOLLOW SAFE DRIVING TECHNIQUES

When traveling, it's essential to anticipate incoming traffic and plan alternative routes if your main path is obstructed by an accident or highway

repair. Avoiding excessive idling and stop-and-go driving can improve your vehicle's overall fuel economy.

It would help if you also considered driving with a gentle approach. When you aggressively accelerate after a stop, vehicles require a larger gulp of fuel to meet the driver's commands. Instead, advance higher speeds slowly and gradually meet speed limits to maximize efficiency.

Get your Car Trade-In Ready

When planning to buy a new or used vehicle, the question of what to do with your current car arises.

You can quickly make a transition by trading in your old ride right at the dealership, or owners can sometimes earn more money by listing it for public sale. Regardless of how you plan to go out with the old and in with the new, you must consider numerous factors to complete the move.

FIND YOUR VEHICLE'S VALUE

The first subject to tackle is understanding how much your current vehicle is worth. You can get a general idea by utilizing free tools that provide a value based on the year, make, model, features and condition.

When entering your information, be honest about its integrity for both the interior and exterior. You should become familiar with what constitutes poor, fair, good or excellent condition.

Another avenue to consider is hiring a professional to perform an expert appraisal. While it may cost a small fee, understanding your vehicle's worth gives you efficient bargaining power when it's time to make a deal.

Before beginning the process of searching for a new car, follow these tips to ensure



© ADOBE STOCK

your ride is trade-in ready.

SPRING CLEANING

Of course, you should get rid of any personal items or waste accumulated in the back seats and trunk. Once the car is clear of belongings, contact a professional detailer for a deep clean, or save money by performing the job yourself.

Visit a local car wash to

access commercial-grade vacuum systems to quickly pick-up small debris like pet hair, wrappers or even loose change. Remember to adjust your seats back and forth so you can get the hard-to-see mess.

Next, use your favorite cleaners to clean and shine the dashboards, seat materials and interior trim. Don't forget to

give the exterior a deep clean and wax before visiting the dealership.

FIX MINOR REPAIRS

Dealership appraisers will immediately deduct dollars off the trade-in value if they notice repairs are necessary. Consider analyzing your vehicle for these easy-to-overlook imperfections.

- Small cracks on the windshield or paint.
- Wiper blades that need replacing.
- Non-working light bulbs.
- Low fluids.

Store your maintenance and service records in the glove-box. Make sure to mention that the vehicle is well taken care of and in excellent working condition.