

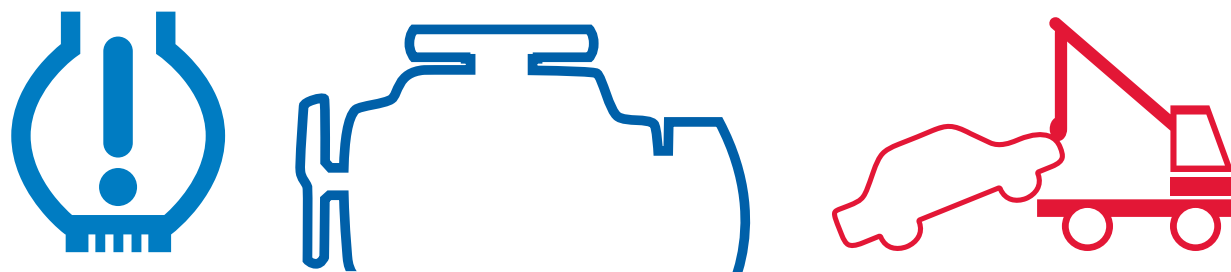
10 Things You Need To Know About Car Maintenance

1. Warning lights and indicators—No one likes to see the engine light illuminate on the dashboard, but when one of the warning lights comes on and stays on while driving, check your Owner's Manual and follow its advice. Waiting to do repairs can be costly and even dangerous.
2. Oil—Engine oil not only lubricates and cools internal engine parts, it collects and traps dirt and contaminants from the combustion process. That's why you should have it changed regularly.
3. Air filter—Don't let your vehicle's air filter get too dirty. A clogged filter restricts airflow, robbing horsepower and potentially fuel economy. If you're unsure about when to change the filter, have your ACDelco-affiliated technician check it out.
4. Heater/Defroster—The heater/defroster in your vehicle draws its heat from the circulation of hot engine coolant. If you smell a sweet, syrupy odor inside the vehicle or spot a greasy mist on the inside of the window, there may be a leak in the heater core. Have it checked out.
5. Tire pressure—Underinflated tires waste gas and can prematurely wear out the tires, because they generate more friction on the road. Making sure your tires are properly inflated is one of the easiest things you can do to optimize fuel economy and tire longevity.
6. Brakes—Your vehicle's brakes should feel smooth and perform quietly. If you feel shuddering or hear a grinding sound when you step on the brakes, they should be inspected as soon as possible!
7. Coolant/Antifreeze—Different cars require different types of antifreeze. If you need to top off the coolant in your vehicle, check the Owner's Manual for details on the correct type. You could harm the cooling system or engine with the wrong coolant. Your ACDelco-affiliated technician can assist you with this.
8. Timing belt—If your vehicle has 50,000-70,000 miles or more, it's a good idea to check the Owner's Manual for the recommended service interval for the engine's timing belt. It can break without warning, leaving your car immobile until it's changed—be it in your driveway, workplace parking lot or on the highway.
9. Tire vibration—A vibration felt at certain speeds or one that increases in severity with the speed of the vehicle can indicate out-of-balance tires or tires that need replacement. Either way, don't ignore the vibration—get it checked!
10. Alternator—If your vehicle's battery or charge indicator light comes on, it may not be a battery problem, but a faulty charging system. The red light is essentially a warning that the system isn't charging the battery and you don't have very far to drive before the battery goes dead. Pull off the road as soon as it's convenient to prevent stalling on the road. With luck, your cell phone will be charged, because you'll likely need to call for assistance—and probably a tow truck if you're far from home.

See Clearly with ACDelco Wiper Blades



If you're like almost everyone else, you don't think about changing windshield wiper blades until it's raining or snowing—and the smeared view and noisy operation reminds you. If your wipers smear, streak or "chatter," it's probably past time to change them. ACDelco offers wiper blades for most vehicle models, including many hard-to-find applications, and they're constructed with a coating on the rubber that helps reduce streaking, friction and noise. Your technician can install new blades in only a few minutes, so there's no reason to put up with that smeared view any longer.



BY THE NUMBERS:

3,900,000 is the number of public road miles (6,300,000 km) in the United States; there are approximately 566,000 public road miles (912,200 km) in Canada.

130,000 is the approximate number of times a single spark plug fires during an hour of driving in a modern car with the engine turning 2,200 rpm.

1910 was the year Cadillac introduced the first practical, battery-operated ignition system, developed with the company that would become ACDelco.

12 mph was the limit imposed by the state of Connecticut on May 21, 1901, for vehicles on country roads—initiating America's first speed limit (the limit was 8 mph within towns).

1 is the number of Corvette Z06 police cars—capable of more than 190 mph—employed by the Wake County, N.C., Sheriff Department. The vehicle was obtained through confiscation and is now on patrol duty.



ACDelco Quality Proven in Independent Testing



Electric Car News: Chevy Volt is Charging Up

Hybrids move over. The 2011 Chevy Volt is set to charge up the auto world when it goes into production later this year. It is an extended-range electric vehicle and unlike a hybrid, its gas engine does not directly drive the wheels. The Volt drives the first 40 miles on its fully charged, advanced lithium-ion battery and after that, the gas engine kicks in as a generator to power the Volt's all-electric propulsion system. That design gives the Volt the capability of driving hundreds of additional miles—a range pure electric vehicles can't match—but for many drivers' daily commutes, the Volt won't use a drop of gas at all.

The Volt has an "Efficiency Meter" in the digital instrument cluster that gives the driver real-time feedback on driving efficiency. The interior heating/cooling system has three efficiency modes, while activating the Volt's "Green Leaf" button provides access to vehicle Power Flow, Charging and Energy information. The driver will be able to set the charging schedule inside the vehicle or remotely, based on time of day or cost. And the Volt even has audio and visual cues to alert the driver when the car powers on, off and when charging is activated.

California will be the first market for the Volt, with national availability following thereafter. Many of the first Volts on the highway will be seen in a signature, silver-green exterior color called Viridian Joule—a color name proposed during a national online contest. More than 13,000 color names were suggested and another round of online voting selected the winner. Viridian Joule narrowly topped the runner up: environMINT.

You can learn more about the Volt at chevrolet.com/volt or become a fan on Volt's Facebook page: facebook.com/chevroletvolt.

ACDelco's DuraStop® line of brake pads—which includes organic, semi-metallic and premium ceramic pads for most car, truck and SUV applications—is a great example of the rigorous design and validation processes that help provide the highest quality for our portfolio of nearly 100,000 parts.

There are no explicit standards for aftermarket brakes in the United States, but ACDelco DuraStop brake products are D3EA® certified. Testing is voluntary and conducted independently to provide objectivity of results. It is conducted on pads, shoes, drums and rotors, where test platforms are available.

ACDelco submits its DuraStop brake products to this comprehensive testing, including D3EA, because it is one way to ensure the brake components we provide will help you to properly maintain your vehicle.



What's That Sound?

We've all experienced that annoying squealing sound when stepping on the brakes (and sometimes without even touching them), but do you know what that sound really means? In most cases, it's an intentional warning that the disc brake pads are nearing the end of their useful life. Manufacturers, including ACDelco, build metallic indicators into the pads that contact the disc brake rotor when the pads' material wears down, causing the squealing sound. When you hear it, it's time to have the brakes checked. Doing it soon after the sound begins can save a more costly repair later, as severely worn pads can damage the brake rotors.



Tech Spotlight: Tire Pressure Monitoring System

A common new feature on cars, trucks and SUVs is the Tire Pressure Monitoring (TPM) system. Some vehicles have offered them for years, but the U.S. government mandated them as standard features on all vehicles, starting with those built on and after Sept. 1, 2007.

In a nutshell, the TPM system warns if pressure in any of the tires drops below the recommended level. Sensors in the valve stems initiate a radio signal and a warning message is illuminated in the main instrument display, indicating a wheel(s) has lost pressure. The warning may be a message that pops up on an electronic information display or a simple illuminated icon on the dashboard of vehicles without an electronic information center.

When the TPM system warning illuminates, it should be taken seriously. Underinflated tires can cause traction and handling problems. Also, underinflated tires generate greater friction that can damage the tire, as well as reduce fuel economy and tire longevity.

If the light continually illuminates but the tire pressure checks out OK, there may be a problem with the monitoring system. Regardless of the cause, when that warning pops up, have your vehicle inspected.