

Road Trip Prep & Fuel Saving Tips



Are You Ready For The Road?

An average of 13,000 Americans are killed between Memorial Day weekend and Labor Day, some a result of unperformed vehicle maintenance, according to the National Highway Traffic Safety Administration. Each year, neglected maintenance leads to more than 2,600 deaths, nearly 100,000 disabling injuries and more than \$2 billion in lost wages, medical expenses and property damage.

Most mechanical failures can be traced to neglected maintenance. For example, the U. S. Department of Transportation reports the leading cause of mechanical breakdown on our nation's highways is overheating, a condition that is easily avoidable. Other deficiencies that are simple to detect include low antifreeze/coolant, worn or loose drive belts and defective cooling system hoses.

Checking tire pressure and inflating a tire costs nothing, yet an average of 21 percent of cars inspected in check lanes during National Car Care Month have under inflated tires. This can lead to a blowout and a serious accident.

Fuel Saving Tips

<u>Condition</u>	<u>Effect</u>	<u>MPG Penalty up to</u>
Under inflated tires	Increase rolling resistance	1-2 mpg
Dirty air filter	Causes excessively rich fuel/air mixture	2.0 mpg
Worn spark plugs	Cause inefficient combustion, wasted fuel	2.0 mpg
Worn O2 sensor	Unable to detect and adjust air/fuel mixture	3.0 mpg
Dirty or substandard engine oil	Increases internal engine friction	.4 mpg
Loose gas cap	Allows fuel to evaporate	2.0
Potential loss in fuel economy if all of the above were neglected		11.4 mpg

The Car Care Council offers these fuel-saving tips:

1. Vehicle gas caps -- About 17 percent of the vehicles on the roads have gas caps that are either damaged, loose or are missing altogether, causing 147 million gallons of gas to vaporize every year.
2. Under inflated tires -- When tires aren't inflated properly it's like driving with the parking brake on and can cost a mile or two per gallon.
3. Worn spark plugs -- A vehicle can have either four, six or eight spark plugs, which fire as many as 3 million times every 1,000 miles, resulting in a lot of heat and electrical and chemical erosion. A dirty spark plus causes misfiring, which wastes fuel. Spark plugs need to be replaced as recommended by the manufacturer.
4. Dirty air filters -- An air filter that is clogged with dirt, dust and bugs chokes off the air and creates a "rich" mixture -- too much gas being burned for the amount of air, which wastes gas and causes the engine to lose power. Replacing a clogged air filter can improve gas mileage by as much as 10 percent, saving about 20 cents a gallon.

Fuel-saving driving tips include:

- Don't be an aggressive driver -- Aggressive driving can lower gas mileage by as much as 33 percent on the highway and 5 percent on city streets, which results in 10 to 66 cents per gallon.
- Avoid excessive idling -- Sitting idle gets zero miles per gallon. Letting the vehicle warm up for one to two minutes is sufficient.

- Observe the speed limit -- Gas mileage decreases rapidly at speeds above 60 mph. Each mpg driven over 60 will result in an additional 10 cents per gallon. To maintain a constant speed on the highway, cruise control is recommended.

WIPERS - In the 2001 National Car Care Month vehicle check lanes, 21 percent of participants had wipers that smeared, streaked or chattered across their windshields. Although climates vary, wipers generally need replacing every six months. An easy reminder is to change wiper blades in the spring and fall when you change your clock. Be sure the windshield washers are working properly, too, and keep the reservoir filled with solvent.

LIGHTING - Another important pre-trip check should be exterior and interior lighting. Vehicle check lanes revealed an overall failure rate of over 25 percent in the lighting category. The Car Care Council reminds motorists to check their lights monthly. Other suggestions from the Council include turning on headlights both day and night. This helps define your car's position on the road, and its distance from other drivers. When your vehicle's lighting is defective, other motorists may not get the message that you intend to stop or turn. The end result could be disastrous.

10 Minute Pre-Trip Checkup Can Pay Off

Car Care Council offers three suggestions for a traveler's 10-minute pre-trip checklist:

- Check all fluids. There are several fluids, in addition to antifreeze, that require attention, including engine oil, power steering, brake and transmission fluids and windshield washer solvent and antifreeze/coolant.
- Check hoses and belts. A belt that fails can affect the electrical system, air conditioning and power steering, as well as the cooling system. Cooling system hoses may be deteriorating from within, so old hoses and clamps in marginal condition might need to be replaced.
- Check the tires. Check tire inflation and inspect the tread for uneven wear, indicating the need for wheel alignment. Also look for bulges and bald spots.

"While a last minute checkup is better than no checkup, motorists should plan ahead to allow time to perform necessary maintenance themselves or at the local service facility. A properly maintained vehicle is safer and more dependable and will even save a few dollars at the gas pumps," said the Car Care Council's Executive Director, Rich White.

Not only can a pre-trip inspection help reduce chances of costly and possibly dangerous road trouble, it also provides an opportunity to have repairs made at home, with one's own technician who knows the vehicle. Especially important, it provides peace of mind. While no inspection can guarantee a car's performance, it's comforting to know proper precautions were taken.

Information provided by the Car Care Council (www.carcare.org)