TerranearPMC Safety Share

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Week of November 12, 2018 – Winter Driving

It should not be surprising when organizations such as the AAA forecast that the days immediately before and after Thanksgiving and Christmas are some of the busiest travel days of the year. And while many Americans will take to the sky and wind up waiting in airport terminals for hours due to delays and cancelled flights, many of us will be traveling on our nations' highways. And as is typical for this time of the year, winter weather can create some extremely hazardous situations.

The fact is, in addition to hazardous winter conditions, cold weather tests the limits of your car's mechanical abilities as well as your abilities as a driver.

First off, have a mechanic check your car prior to taking a long trip as bad hoses, belts, water pumps and spark plug wires can leave you stranded. And should your car break down in the winter, sitting in your car, waiting for help to arrive can present some serious concerns. Most notably, hypothermia, and a lack of food and water: all can result in life-threatening situations. Therefore, make sure you have the appropriate contingency supplies with you. Items include blankets, a fully charged cell phone, food, water, a flashlight. DE-icing spray (or windshield scraper) and flares are just some of the things you should have.

And should you find yourself stranded on the road, it's a good idea to crack open the window a bit if you are going to be idling the engine as there is a chance that exhaust gases - most notably carbon monoxide – can leak into the passenger compartment and accumulate. Carbon monoxide (or CO) is a product of incomplete combustion (in this case, from the engine) and is a known chemical asphyxiant – meaning you can suffocate due to oxygen deprivation even though there may be plenty of air/oxygen available. That's because your blood (actually hemoglobin – the molecule in your blood stream that carries oxygen throughout the body) has a greater affinity for CO than oxygen and therefore, will more readily take the CO rather than oxygen! Finally, if you pull over and stop in a snowstorm, be sure to get out periodically and remove snow from behind the tailpipe to keep it unobstructed as a clogged tailpipe can contribute to CO build-up while stalling your vehicle.

And don't forget tire pressure. You can ask your mechanic to check it prior to traveling. And keep in mind that tire pressures can decrease by about one pound per ten degrees of temperature drop. So, if it's -10ºF now, and the last time you checked your tire pressure was back during that sweltering heat wave in July, your tires will be dangerously low and will jeopardize your car's handling. Nowadays, many newer vehicles have tire pressure monitors, which alert you to changes in tire pressure. In fact, as of 2008, tire pressure monitors are required on all new vehicles. But older cars don't have them, and that means the pressure needs to be checked manually.

Before any long trip, check the battery, charging system, and belts. Your battery can leave you stranded simply because it's old. Batteries are rated by a measure called "cold cranking amps" (CCA), the maximum number of amps that the battery can deliver at zero degrees (F) for 30 seconds. Good, powerful batteries are rated at or above 600 CCA. Remember that batteries lose power as the temperature drops. So not only do you need MORE power to start the engine in winter, you also get LESS power from the same battery.

Antifreeze? Yes, don't forget to protect your car for the winter temperatures you'll experience in your area. For most areas, you'll need a 50-50 mix of coolant to water. You may think, "I'll be extra good to my car, and give it 100% coolant." Well, the fact is the 50-50 mix has a lower freezing point. But that's still

only half the story. The other primary function of antifreeze is to keep your cooling system from rusting. The rust inhibitors in antifreeze break down over time and need to be renewed.

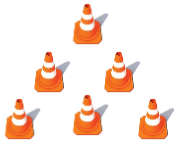
Of course, there are windshield wipers. Today, there are winter wipers that have rubber coverings that keep ice from collecting on the blade. And when using your wipers in the winter, remember to turn them off BEFORE shutting off the engine. Why? Water frequently freezes overnight during the winter. And if your blades freeze to the windshield, when you go to start your car, the wiper motor may burn out trying to get them back to the "rest position." And driving without functional wipers in winter can lead to devastating consequences.

If you have a rear-wheel-drive vehicle that needs help in the snow, you can put a bag or two of sand behind the rear axle. This extra weight will increase the traction of the rear wheels. But be careful! You can make things worse by putting too much weight too far back. By weighing down the rear end too much, you "lift up" the front end and lose some steering and braking abilities. Therefore, start with a 20-lb bag as far back in the car as you can get it. Then, go for a ride and see how your car steers and handles.

If you live in an area where it snows a fair amount, you should get four good snow tires. If you absolutely can't afford four snow tires, two new snow tires will be better than whatever you have on your car now. Mount them on the wheels that are driven by the engine. For all-wheel drive cars, you really should use four snow tires. What about cars with front-wheel drive or an all-wheel drive? Experts agree that if you drive in the snow, yes; snow tires are important. Four top-quality snow tires are the single best thing you can do as they provide improve traction. Not only do they help get you started, but they also increase your traction when you're braking and turning.

And housekeeping! (what S&H topic would be complete w/o mentioning housekeeping?!) Clear off the entire car, not just a little peephole in the windshield. You need just as much, if not more, visibility in poor conditions because you have to keep your eyes peeled for pedestrians, and unforeseen obstructions. Make sure every glass surface is clear and transparent by using a snowbrush and/or ice scraper. Your side-view mirrors and all lights should be brushed and cleared as well.

And clean the snow off the rest of the car. Why? Because the rest of the snow will either (A) slide off the roof and cover your windshield as you're slowing down; or (B) fly off onto someone else's windshield and causing him/her to smash into you. What about headlights? If your headlights are covered with six inches of sleet, you're not going to be seeing much past your hood, making it difficult to see oncoming drivers. Salt, sand and other wintry crud can dramatically impair the effectiveness of your car's headlights, even long after the last snowstorm. Whether you're planning on driving at night or not, take a moment before every winter trip to clean off your headlights. A squeegee or paper towels is all that's needed.



These are just the essentials when it comes to driving in Winter conditions. Using effective conduct of operations such as driving within your limitations in a non-aggressive fashion can be life-saving behaviors! Remember, chances are there are other people in your vehicle; and that means friends and family are relying on you to get them safely to their destination.

Whenever you're aggressive, you're at the edge of mistakes – Mario Andretti