

Understanding your car components



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Winter took a bit longer to get here than most years. It was in the warmer temps and dry roads of

December that my son scheduled his driving test for the morning of his sixteenth birthday in January. He did not foresee what the road conditions would be like upon awakening that day—frozen and slushy roads topped with fresh snow. The snow plows were doing their best to keep up, but with an 8am testing time, I was nervous for my son. As I cautiously drove into work over the slick roadways, I prayed that he would do well—for what a disappointment it would be to fail your test on your birthday! At 8:34am my husband sent me a picture of a certain young man with a confident smirk of success on his face. Great news! But was it?

I had mixed emotions, as passing in such conditions may give him a false sense of confidence and with the ability to drive without his father and I, we may not be present to encourage and correct driving behaviors. Later that morning a customer shared with me how minor accidents for all of his teens helped to make them more cautious. This is not something a mother of a new driver wants to hear, but it's something I needed to hear. The passing of a basic driving test is not a guarantee that someone will be a cautious, active, safe driver.

Is it only teens that need practice and education? Of course not. Driving is a skill we will use for most of our lives. We must continually hone this skill to become responsible motorists and role models to others.

Even if you have done all you

can do to become an active and safe driver, certain weather conditions or other variables could alter your skills. Furthermore, when there are drivers who are not obeying laws, do not know the capabilities of their vehicles or preparing them properly, are not performing repairs and maintenance in a timely fashion, or are driving recklessly, unsafe or aggressively, even the best drivers can be affected. Before we get into the nitty-gritty of specific laws and driving skills, we need to start at the beginning.

Being a responsible driver begins with the vehicle you are driving. What are the capabilities of your vehicle and what functions does it have that might help or hinder your driving? What can you do to help it perform at its best? Do you know the components that can wear out and potentially cause a safety hazard? Do you perform repairs and maintenance in a timely fashion?

DRIVE TRAIN

Is your vehicle Front Wheel Drive (FWD), Rear Wheel Drive (RWD), Four Wheel Drive (4WD) or All Wheel Drive (AWD)? The type of drive train your vehicle has will affect how your vehicle handles in slippery conditions. Understanding the different systems will allow you to make an educated decision on what is right for you when purchasing a new or used vehicle but also help you understand if you need to alter the way you drive in order to maneuver your vehicle effectively, especially during inclement weather.

TIRES

One of the most significant yet neglected parts of every vehicle are the tires. Generally their condition is not addressed or replaced until significant wear is present. Legally speaking, there is a certain tread

depth that must be maintained on vehicles. Did you know that? Buses or trucks must have at least a 4/32 tread depth and all other vehicles must have at least a 2/32 tread depth—a very minimal requirement. Even at this depth, safety can be an issue. Tire companies perform simulation testing to demonstrate how tire depth can impede braking and be a major safety concern—especially in emergency braking situations.

Did you know there are laws that address the requirements of tire conditions including leaks, separations, tread depth and inflation? Do you monitor the air pressure in your tires and address it on a regular basis to ensure they are properly inflated? Proper inflation will ensure your tires are effective in most driving conditions. And do you have your tires rotated regularly so they wear evenly, provide better traction and last longer?

Do you have all-season tires on your vehicle? As a resident of a cold-weather state, have you ever researched the benefits of winter tires? Incredible technology has been developed to increase traction considerably using winter tires—from the material used to the tread patterns. If your vehicle has a drive train that does not perform ideally on wintry roads, purchasing winter tires will likely increase traction and performance significantly.

BRAKES

Is your braking system healthy and performing well? When is the last time it was inspected? A safe braking system is crucial to responsible driving and consists of many components—pads, shoes, drums, rotors, lines, fluid, etc. It is important to have your braking system inspected periodically, and immediately if you notice an issue or if



there are any brake warning lights illuminating on your dash.

Does your vehicle have anti-lock brakes (ABS)? Back when I took driver's ed, we were always encouraged to “pump the brakes” when it's slippery. This is not the case if your vehicle is equipped with ABS. They should never lock in the first place, so pumping them will just make you take longer to stop. You should apply the brake firmly and hold it while the ABS does all of the work. You may feel a pulsation during this, but that is normal. Just hold firm, pay attention to your steering and do not let off the brake.

STEERING/SUSPENSION

The job of your vehicle's suspension is to maximize friction between the tires and the road surface. There are many components to this system—control arms, tie rods, ball joints, shocks/struts, sway bars/links and bushings. Your suspension system works with the steer-

ing system to control your vehicle and keep it aligned. It is important that both of these systems are in good working order to best keep you safe when performing driving maneuvers. These components wear depending on a number of factors or could become damaged or rusted. Having them serviced as part of your maintenance program and/or when recommended by your mechanic is essential to maintain your safety as well as others.

Every component of your vehicle has a purpose. Knowing their purpose and how you can better control and maintain your vehicle is important. Delaying repairs of worn components may be detrimental to you or others—especially in slippery road conditions. Being a responsible motorist starts with knowing your vehicle and repairing safety items in a timely fashion.

Article courtesy of Babcock Auto Care.