



# EXTREME DRIVING CONDITIONS

## DRIVING IN EXTREME COLD TEMPERATURES

Windshield Clear: Make sure your windshield wiper blades are in good condition. In snow, sleet or rain, a tattered windshield wiper can create a hazard by impeding your ability to see what is in front of you. During winter weather it is important to make sure your level of windshield washer fluids is adequate. Keep your defroster in good working order to maintain a clear windshield.

Mirror Check: Make sure that your heated mirrors are functioning correctly, these too can become a hazard if ice and snow build up obscuring your range of vision. Check any other type of heater you may have on your rig such as battery box heaters or fuel tank heaters to make sure they are in proper working order.

Check Fluid Levels: Before heading out, check your antifreeze amount and coolant level. When expecting cold weather make sure your coolant or antifreeze is at optimum levels. The cold can have a seizing-up effect, and severely impact the function of your engine. Use a do-it-yourself antifreeze/coolant tester as a monitor.

Keep it Clean: A clean tractor trailer is a safer tractor trailer because your lights, reflectors and signals are your way of communicating effectively with others on the road.

Slip, Trip and Falls: Slips, trips, and falls, are the number one injury in most industries. Make sure that your rig is not prone to an unnecessary risk by allowing ice or snow to build up on your steps, or other surfaces. Make sure your hand holds, steps and deck plates are free from buildup. This also includes the surface of a log trailer. Ice or snow that accumulates in areas on your trailer, or on equipment that you may be hauling, can become a safety hazard to other motorists. Make sure you check all areas of your tractor, trailer including exposed wiring or airlines, and the surface of forestry equipment you may be hauling for buildup of ice or snow and remove it accordingly before hitting the road.

Keep The Fuel Tank Full: This serves two purposes, one, you won't find yourself stuck in foul conditions without fuel and two, it prevents water from seeping into your tank which can end up freezing fuel lines or filters.

Exhaust System: If snow has built up around the cab, and you are running it with poor ventilation, there is a risk of death from carbon monoxide poisoning.

Things to avoid doing: When traveling on snow covered roadways, try to avoid driving alongside other vehicles. Maintain a longer following distance for your safety, and the safety of others. Keep an eye out for sand snowplows and sanders to give them plenty of room. Avoid passing slower vehicles unless necessary, you can cause a whiteout condition for the driver that can last seconds causing him to become disoriented, lose control and cause an accident.

Adjust your driving for the conditions: Avoid braking any harder than necessary, and do not use engine brake or speed retarder which can cause you to skid on slick surfaces. When traveling on packed snow, reduce your speed by half, or more. If the surface is icy, reduce speed to a crawl and leave the roadway when it is safe to do so.

Coupling Devices: Coupling devices can pose a hazard during winter weather when cold temperatures can cause grease to freeze. To minimize the chances of this happening, use an anti-freezing lubricant.

What does your tread look like? The steering tires must have enough traction to steer the vehicle over wet pavement and snow. Use a gage to measure the depth of your tread. You must have at least 4/32-inch tread depth in every major groove not the front tires and at least 2/32 inch on other tires, obviously more would be better.

Proper placement of chains: Knowing when and how to place your chains properly is part of a professional driver's job. It is a good idea to practice putting your chains on in a safe, relaxed environment such as the company garage, or your own driveway before heading out and having to apply them in the field.

How many chains? Make sure you are carrying the right number of chains as well as spare cross links. Chains should be in good condition, and fit snugly on your drive tires. All vehicles or combinations of vehicles must carry enough tire chains while operating in any mountain pass or in and "chain/approved traction device control area" designated by the state you are traveling in. Signs instructing the vehicle to stop and apply chains are posted in those areas. The use of tire chains varies from state to state, and even county to county. Know what is required of you when traveling in those areas when it comes to the use of chains.

Team Safe Trucking's mission is to reduce accidents through enhanced driver training and effective fleet management and to recruit new, safety-focused drivers to deliver a sustainable and profitable supply chain.

Inspecting your chains: Your chains should be inspected regularly for broken hooks, cross links that are worn or broken, as well as checking for bent or broken side chains.

Starting your rig: Starting your rig in cold weather can be a challenge. Engines do not like cold temperatures and may take a little extra effort on your part to start. Ether is an equipment operator and truck driver's best friend in extreme cold temperatures. On the other hand, using too much ether can damage your engine. So, use it sparingly. Note of extreme caution, ether is highly flammable, take the necessary precautions when using a flammable substance. The use of glow plugs can warm the air coming into the engine from the air intake. Diesel engines will fail to start in cold temperatures if the glow plugs fail. See your owner's manual for instructions. Pre-heaters enable your engine to start in extreme cold temperatures. If your engine won't start make sure to check your electrical systems and fuel lines. Look for ice blockage along the lines or the fuel tank. Note, if you don't see any vapor or smoke, chances are there is a problem getting fuel to the engine. Never crank your engine for more than 15 seconds. If you determine the engine is getting enough fuel, but still won't start, check your electrical system for loose connections, corrosion, moist or cracked cables. If your vehicle has an air starter and is lacking air supply, you may need a compressor or another tractor to get it started.

## **INCLEMENT WEATHER**

Pre-Trip Weather Checks:

Visibility: Heavy rain reduces visibility, so slow down! Speed and rain are a deadly combination for several reasons. When driving in heavy rain reduce speed immediately.

Hydroplaning: Hydroplaning occurs when your tires encounter more water than the treads can displace. If you are driving at high speeds over wet pavement, the water will push the front tires off the ground, creating a thin film between the tire and the road causing you to lose traction or control of your rig. Yes, your rig is heavy, but it can still hydroplane, so slow down for hydroplaning can occur at speeds as low as 30 mph.

Driving in High Winds: If wind conditions are making it difficult for you to drive, pull over. Try to find a place to park where structures or buildings can block some of the wind. If this is not an option park so that your rig is facing the wind.

Driving in the Fog: Until you find a safe place to pull over, drive extremely slow with your flashers on and avoid passing other vehicles. Fog can go from thin to thick in a flash. So, use extra caution as you look for vehicles that have had to pull over. When you see taillights and headlights in fog it is not an indication of where the road is ahead of you. Those vehicles may not be on the road at all, so proceed with extreme caution. Rely on highway reflectors as a true guide as you navigate upcoming turns.

## **STEEP GRADES AND SHARP CURVES**

Gravity is Powerful: So before driving on mountainous terrain, make sure you conduct your usual pre-trip inspection paying close attention to the condition of your brake systems.

Safe Speed: Use your best judgement when selecting and maintaining a speed that is not too fast for the total combined weight of your vehicle and your load, the length of the grade, the steepness of the grade, road conditions and weather.

Maximum Safe Speed: On a downgrade, if you see a "Maximum Safe Speed" sign, never exceed the speed posted. Pay close attention to posted warning signs regarding the length and steepness of the grade. Select the right gear prior to starting down the grade. Once your speed has built up, do not try to downshift to a lower gear for you may not be able to put the truck back in any gear and all engine braking effect will be lost.

Braking Effect: To control your speed on a downgrade, you will be using the braking effect. The braking effect is greatest when it is near the governed RPM's, and the transmission is in the lower gears. Be sure to travel at a slow speed so your brakes can effectively hold you back without getting too hot. When brakes overheat, they may start to "fade" causing you to apply them harder and harder to get the same stopping power. If they continue to "fade" you may find yourself in a situation where you cannot slow down or stop at all.

Escape Ramps: Look for these four basic types of ramps if you find yourself dealing with a runaway tractor trailer on a downgrade: An arrester bed, Sand piles, Ramp and arrester bed combination and Gravity ramp

Go Slower than Posted Speed Limits: Obey the posted speed limit for curves. Please note, those limits were set with cars in mind, you may find it more comfortable to travel through at an even slower rate of speed.

Rollovers: If your tires maintain their traction while you execute the turn at a higher rate of speed, you could be the next victim of a rollover, seriously injuring yourself or others. Remember, research has shown that trucks with a high center of gravity are at risk of a rollover even when traveling at the posted speed limit for that curve.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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