



STATE SAFETY OFFICE
HEADQUARTERS, NEW YORK ARMY NATIONAL GUARD
330 OLD NISKAYUNA ROAD
LATHAM, NEW YORK 12110



SAFETY MESSAGE 17-03

Winter Driving Safety Tips

Whether you're a newly licensed driver or an experienced 88M with a "gazillion" miles logged, reduced traction from snow, ice and rain can make driving during the winter months especially dangerous. However, while winter weather does pose additional risks to drivers, they don't have to result in an accident. There are several things drivers can do to operate their tactical vehicles safely when weather conditions take a turn for the worst. Maintenance Conduct maintenance checks per the preventive maintenance checks and services in your vehicle's technical manual. It is especially important to ensure the antifreeze level and protection is adequate for the winter environment. Also, make sure the windshield washer reservoir is filled with a washer fluid that provides proper cold weather protection. Because visibility is vital for safe driving, it's also a good idea to have new wipers installed. In addition, make sure your battery is in good condition and all lights — especially headlights and tail lights — are working properly.

Operation - To improve visibility, snow and ice should be cleared from a vehicle's windows, mirrors, hood, roof, turn signals, tail lights and headlights before operation. If you're driving on ice and snow, reduce your speed and maintain a safe stopping distance. When climbing hills, accelerate slightly as you approach the hill and maintain a steady speed going up. This will allow the momentum of the vehicle to help carry you up the hill. Check the vehicle's TM for the proper gear settings for climbing and descending hills on ice or snow. Also be aware of black ice, which is an invisible, thin layer of ice on road surfaces, including bridges and overpasses. Of course, you should always wear a seat belt and drive defensively regardless of the weather conditions.

Braking - Operators must know what type of brake is on their vehicle so they can use the proper technique for stopping on ice or snow. For vehicles with conventional hydraulic brakes (no antilock brakes), use threshold braking by applying the brakes just short of lockup and then easing off the brake pedal slightly. Sudden braking will cause wheels to lock and the vehicle to slide out of control. To stop a vehicle equipped with ABS, apply firm, steady pressure to the brake pedal. Do not pump brakes on a vehicle equipped with ABS. For vehicles equipped with air brakes, apply light, steady pressure; do not pump the brakes. For vehicles equipped with engine brakes, do not apply the engine brake when operating on slick surfaces (ice, snow or rain). Refer to the TM for the type of brakes on your vehicle and specific recommended operations.

Tires - Make sure your vehicle's tires have adequate tread depth — preferably 50 percent or more of the tread remaining — if you plan to operate in winter conditions. Most

tactical vehicles have a mud/sand/snow recommended pressure for added traction in these conditions. Refer to the TM for the appropriate pressure for your vehicle's tires. For vehicles equipped with the Central Tire Inflation System, this would be the sand or snow setting. When no longer operating in snow, tire pressures will need to be increased per the TM.

Tire Chains - Tire chains are to be used on your vehicle when conditions (ice and snow) require additional traction such as in mountainous terrain. Select the appropriate tire chain as specified for your vehicle. If you are unfamiliar with using tire chains, it is recommended you conduct a trial fit on how to install and remove them before the start of a mission. Then you will already have the experience of using them when they are required. Tire chains are designed to fit snugly; however, you should allow for some movement of the chain on the tire. Tighten chains by hand, rather than tools, to reduce the possibility of over-tightening. Also make sure to carry appropriate straps for tightening the chains if they are loose.

Straps are listed by NSN:

15 inches long, stretches 20 to 30 inches — NSN 5340-01-029-9084

21 inches long, stretches 26 to 42 inches — NSN 5340-01-231-6015

31 inches long, stretches 36 to 42 inches — NSN 5340-01-029-9085

Reference the appropriate TM for installation and restrictions regarding tire chains. When no longer operating in snow, the chains must be removed to avoid damage to the tires or vehicle.

Extreme Cold - Depending upon the type of system, your vehicle may have a winterization kit that can be installed for operation in extreme cold. Refer to the vehicle's TM for information on the installation, operation and maintenance of this additional equipment.

Black Ice - Black Ice — a thin sheet of ice on a dark roadway — is extremely dangerous because it's hard for drivers to detect before they're actually on it. Black ice forms when light rain or drizzle falls on a road surface below 32 F or when super-cooled fog droplets accumulate on bridges and overpasses. A roadway covered with black ice appears wet when the ambient temperature is below freezing. Drivers must use extreme caution when driving on black ice. Vehicles that hit black ice have greatly reduced traction, very little braking capability and extremely poor directional control — all problems that heighten the possibility of skidding. Ideally, vehicles should not be driven in black ice conditions. However, if the mission must go on, drivers should reduce their speed, accelerate slowly, increase the following distance between vehicles, brake very lightly and make all turns gradually and slowly.

Winter weather conditions can challenge any driver. Follow the suggested guidelines above when operating your tactical vehicle in snow and ice and you should arrive at your destination safely.

FYI - The U.S. Army Combat Readiness Center's Driver's Training Toolbox has a series of winter driving presentations which can assist you in conducting training. It can be found on the USACRC website at <https://safety.army.mil/driverstrainingtoolbox>.

By: Steve Bishel, TARDEC Development and Engineering Center

To find previously published Safety Messages go to our NYARNG Safety Website:

<http://dmna.ny.gov/safety/>

New York Army National Guard Safety Office Points of Contact:

Safety and Occupational Health Manager:

CPT Alicia Howard

alicia.l.howard.mil@mail.mil

(518) 786-6097

Occupational Health Specialist:

CW2 Thomas Brunschmid

thomas.j.brunschmid.mil@mail.mil

(518) 786-4329

Safety Specialist:

1LT Matthew S. Williams

matthew.s.williams117.mil@mail.mil

(518) 786-6040

Safety Specialist:

SFC Chuck Austin

charles.b.austin2.mil@mail.mil

(518) 786-6121

M-Day Safety Office POC's:

CW3 Russ Hall

russell.l.hall3.mil@mail.mil