

FREE PRINTABLE RESOURCE

WINTERIZING FIELD CARD

Do it in October in a warm garage. Not on a shoulder in the dark. Leave this sheet in the glovebox.

1. STARTING & CHARGING

☐ Battery, charging system AND belts checked

NHTSA names all three, not just the battery: when the temperature drops, so does battery power, and gasoline and diesel engines take more battery power to start in the cold. A new battery on a failing alternator buys weeks, not a season (our own note)

☐ Load-tested, not just voltage-checked

Our own rule, not an agency's. A battery that reads healthy at rest can still collapse under a cold starter. Four minutes in October, or a tow truck in January

☐ EV / hybrid: plug in overnight

NHTSA: EV and hybrid driving range can be reduced in cold; batteries with liquid electrolyte have reduced storage and delivery at low temperatures and use battery power to self-heat. Keep the vehicle as warm as possible; plugging in at night is the common way

2. TIRES

☐ Set to the DOOR FRAME number, never the sidewall

NHTSA: use the manufacturer's recommended pressure from the owner's manual and the driver's side door frame label. Do not inflate to the pressure listed on the tire itself, which is the maximum the tire can hold, not the recommendation for your vehicle

☐ Checked cold: not driven for 3+ hours

NHTSA: best checked cold, at least monthly and before long road trips. A first-thing-in-the-morning driveway check satisfies both at once (our own note)

☐ Tread 2/32 in. minimum on all four

NHTSA: at least 2/32 of an inch or greater. Also check tread and sidewalls for cuts, punctures, bulges, scrapes, cracks or bumps. 2/32 is the legal-minimum end of the scale, not a winter target (our own note)

☐ Tire AGE checked separately from wear

NHTSA: check each tire's age; some vehicle manufacturers recommend replacing tires every six years regardless of use. The low-mileage vehicle is the one this is aimed at

☐ Spare checked too

NHTSA's inspection list names the spare alongside the four on the ground

☐ Winter tires / chains / studs per LOCAL rule

Ready.gov: install good winter tires with enough tread, plus any chains or studs required in your local area. Local means look it up, not assume

My vehicle	Door-frame pressure F _____ R _____
Coolant	Manual-specified type/spec _____
Done on	Date completed _____ Next due _____

3. FLUIDS

☐ Coolant to the MANUAL's spec, and tested

NHTSA: enough coolant, meeting the manufacturer's specifications; see your owner's manual. Check the cooling system for leaks, test the coolant, and drain or replace old coolant. NHTSA names no universal mix ratio, so anyone quoting one number for every vehicle is going past the source

☐ Winter washer fluid with de-icer, blades replaced

NHTSA: fill the reservoir with high-quality winter fluid with de-icer before winter weather hits, since you can go through a lot in one snowstorm. Confirm defrosters and all wipers work; consider heavy-duty winter wipers in heavy snow areas

☐ Tank kept full (two separate reasons)

Ready.gov: keep the tank full in case of evacuation or power outages, and a full tank will also keep the fuel line from freezing. NHTSA: keep it close to full whenever possible. Pumps need grid power

☐ Diesel: anti-gel or No. 1 blend BEFORE the cold snap

See the diesel numbers opposite. Buy the additive early; the shelf empties in week one of a real freeze (our own note)

Diesel cold-flow, per Cooperative Extension: cloud point = crystals first visible • cold filter plugging point = filter plugs • pour point = fuel stops moving when tipped. Fuel *may* still work below the cloud point. It will definitely not work below the pour point. No. 1 diesel cloud point about -40°F. No. 2 diesel: -18°F to +20°F — the top of that range is above freezing. Soy biodiesel about +34°F, and ~80% of U.S. biodiesel is soy. B2/B5 blends: minimal or no effect. Higher blends: additives recommended for diesel may not be effective for biodiesel, and biodiesel's cloud-to-pour gap can be a few degrees where petro-diesel's is about 20.

4. VISIBILITY, SIGNALS & CONTROL

☐ Every lamp checked, trailer lamps too

NHTSA: headlights, brake lights, turn signals, emergency flashers and interior lights, plus trailer brake lights and turn signals if necessary

☐ Clear the SENSORS, not just the windshield

NHTSA: before driving, clean snow, ice or dirt from the windows, the forward sensors, headlights, tail lights, backup camera and other sensors around the vehicle. Packed slush over a forward radar can disable driver-assist braking (our own read)

☐ Floor mats: correct size, retention clips, no stacking

NHTSA: consider thicker or rubbery mats for slush, but improperly installed mats could interfere with the accelerator or brake pedal, increasing crash risk. Follow the manufacturer's installation instructions, use retention clips, use correct-fit mats. A second mat stacked over the original is the configuration that slides (our own note)

☐ Know which brakes you have

NHTSA: with antilock brakes, apply firm, continuous pressure to the pedal. Without them, you may need to pump the brakes if you feel the wheels starting to lock up

5. EXHAUST = SAFETY EQUIPMENT

☐ Exhaust system inspected annually

CDC: have a mechanic check the exhaust system of your car or truck every year, because a small leak can lead to a buildup of carbon monoxide inside the car. CDC: more than 400 Americans die each year from unintentional CO poisoning not linked to fires, with 100,000+ ED visits and 14,000+ hospitalizations

☐ Never run it in an attached garage, door open or not

CDC: never run your car or truck inside a garage attached to a house, even with the garage door open. Always open the door of a detached garage for fresh air. If only a tailgate is open, CO from the exhaust will be pulled into the vehicle — open vents or windows

☐ Know the symptoms: they read as flu

CDC: headache, dizziness, weakness, upset stomach, vomiting, chest pain, confusion. People who are sleeping or under the influence can die before they have symptoms — nobody sleeps through an unattended idle cycle (our own rule)

6. WHAT LIVES IN THE VEHICLE

☐ NHTSA's winter-driving list

Snow shovel, broom and ice scraper • abrasive material (sand or kitty litter) if you get stuck • jumper cables, flashlight and warning devices (flares and emergency markers) • first aid kit including a tourniquet • blankets • cell phone and charger, water, food, and any necessary medicine

☐ Ready.gov's stranded-in-any-emergency list

Jumper cables • flares or reflective triangle • ice scraper • car cell phone charger • blanket • map • cat litter or sand for tire traction. Two overlapping lists, not one canonical one. The map is the only item that still works with a dead battery and dead towers

☐ Our own additions

A tow strap rated for your vehicle's weight • gloves that survive being soaked • a second light that is not your phone • the shovel stowed where you can reach it without unloading the vehicle

If you stop moving: NHTSA — stay with your car and do not overexert yourself; let it be seen with bright markers on the antenna or windows and the interior dome light on; keep the exhaust pipe clear of snow and run the car only sporadically, just long enough to stay warm, never for long periods with the windows up or in an enclosed space. Ready.gov — if it becomes hard to control the car, pull over, stop and set the parking brake; never drive through flooded areas, since six inches of water can cause a loss of control or a stall and a foot will float many cars.

Route told	Who knows my route + ETA _____
Sources	NHTSA Winter Weather Driving Tips + TPMS final rule • Ready.gov Car Safety • CDC Carbon Monoxide Poisoning Basics • Cooperative Extension (USDA NIFA-supported) cold-flow fuel properties

Full guide: tacticalbox.com/blogs/tacticalbox-blog/how-to-winterize-your-bug-out-vehicle

Educational use only, and not a substitute for a qualified mechanic or your vehicle's owner's manual, which is the authority on coolant spec, placard pressure and service intervals. Diesel cold-flow temperatures vary by batch, blend and feedstock. Chain and stud rules are local and change. Follow your local emergency management authorities.

WINTERIZE BEFORE THE FREEZE. NEW GEAR MONTHLY.

TACTICALBOX