Pre-Winter Check

Winter is fast approaching, now is the time to make sure your tractor is ready for the extreme conditions.

Let's First Talk About Fuel…

Diesel:
Untreated diesel fuel will "Gel" when the temperature drops. Gelled fuel will not flow through the fuel system resulting in a tractor that will not run. To prevent this we use a product that you add to the fuel tank. (See Image 1)

Image 1
Diesel Fuel Additive

This diesel fuel treatment is available from most parts suppliers. If the fuel has already gelled, the tractor must be transferred to a warmer environment until the fuel becomes liquid again. The anti-gel treatment will **not** be effective in already gelled fuel.

Gasoline:
Gasoline will not gel but it can go bad. I recommend adding a fuel stabilizer to your tank. This will prolong gas from turning into a "Varnish". This product is also added to your fuel tank. (See Image 2)

Image 2
Gasoline Fuel Additive

Next, Your Cooling System…

A healthy cooling system is crucial to winter operation. In addition to a clean and clear radiator, the most important thing is the "Value" of the anti-freeze within the coolant. Anti-freeze "Value" is checked by a special coolant tester. (see Image 3) If the desired strength is not present, coolant must be drained and a new mixture of coolant and water is added back into the systems. The mixture is about 50% Anti-freeze coolant and 50% water, depending on climate. Lastly, make sure all fan belts and hose clamps are tight. See our May 2010 Tech Tip archive for additional information.

Image 3
Coolant Value Check

Next, About Your Battery...
A low charged battery can freeze in winter. Once this occurs, the battery is damaged. Be sure all battery connections are tight and free of rust and corrosion. Check to see if charging system is working properly. Low battery voltage will cause damage to the entire electrical system.

And Lastly Cold Start Help…
Diesel engines require help to start in cold temperatures. ***Glow plugs*** and ***manifold heaters*** are some of the most common types of cold starting aids. Proper operation of these systems is essential to long engine life and proper tractor performance. ***Block heaters*** can be installed on both gasoline and diesel engines. They heat the coolant in the engine block to help in cold starting conditions.

In summary, winter is the toughest time of year for tractor operation. Proper maintenance will give you a worry free tractor this winter.