We all do the same thing, its part of life or should I say it is our life: We wake up, go to work, get work done, do more work, get more work done and then go home and go to sleep. Repeat process the following day until the end of the season. That's it, right? Same program every year until we retire. Well, the object here is to make the work part a little easier during the year so we can get to the retire part and still have enough life in us to enjoy it. So what do we do? We buy machines that will make our job easier. Simple enough until you think about the details for a while.

Here are some simple facts:

- Machines make us money
- Machines cost us money What should we do?
- Spend money wisely on the machines
- Machines will make more money

The "end of the season" is defined as the time of the year when a particular machine / equipment will not be needed for some extended period of time. For example, snowplows end their season in the spring. Aerators end their season twice in one year, at the end of spring and then again at the end of autumn. Sounds tricky but it is pretty much a straightforward concept. Finish the last job and put it in the shed. Need it again, pull it out of the shed and get it in service. If you are lucky that procedure might work.

Hold on! Not so fast here. Remember last year when you pulled the snowplow out of the shed and you noticed all the rust on the blade and the cutting edge? How about the pins and the springs that look like they might fail the first time the blade trips. Or, how about the aerator that was put away after the last job in the spring. Now all the tines are covered with rust and the hollow cores are plugged up with what looks like dried soil but acts like cement. How about the time needed to free the cores so they will penetrate the soil so they can do their job.

What we need here is a bit of 'WINTERIZING"

'WINTERIZING' can be defined as getting the machine ready for the next job BEFORE you put it away after the LAST job.

Time is money, machines make money the more time you have to do the work without spending more money than you have to leads to one thing: retiring with lots of money. Great concept!

Seriously now. If we take care of our machines they will take care of us. They make the work easier to complete and probably in less time. Seeing the job being completed in a timely manner will also lower our stress to a manageable level. Time is money! Put the time in now and you will make more money later.

I don't know if you can accurately say that a neglected engine will cost the most money to repair but it might be a good place to start talking about 'winterizing'.

## How to Winterize Your Turf Equipment Engines

As winter approaches, it is time to winterize your gasoline-powered equipment such as lawn mowers.

FACT: Winterizing will help extend the life of your small gasoline engines.

To winterize your small gasoline engines there are two different approaches you can take:

## 1. Drain the Tank

Check the owner's manual for information on draining the fuel system for off-season storage. If recommended for your specific model, draining the tank will reduce evaporative emissions that occur during storage. Continued on page 5 "Winterize"



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## **'Winterize' Continued**

If the owner's manual says the gasoline can be removed and it can be done easily, the gasoline should be carefully drained from the tank (and carburetor, if possible) and collected in a clean, approved storage container. Any remaining gasoline in the system can be removed by operating the engine until it stops.

## 2. Use a Fuel Stabilizer

If the gasoline cannot be easily removed, a gasoline stabilizer should be added to the fuel in the tank. To minimize air space in the engine's tank, tank full fuel fill the with gasoline/stabilizer mixture. The engine should be operated for a few minutes to draw the stabilized gasoline into the carburetor. For added protection you may want to consider taking the time to close the engine's valves. For engines with handpull starters this can be done by pulling the cord until resistance is felt. Also an effective vapor barrier can be added by placing a piece of aluminum foil over the tank cap and then securing the foil with tape.

Whichever approach is taken, you should also store your motorized equipment in a cool, dry place that is well ventilated and out of direct sunlight. Either winterizing approach is the same, regardless of whether you are using reformulated gasoline or conventional gasoline. Reformulated gasoline meets all the same requirements for storability as conventional gasoline. Therefore, reformulated gasoline is just as storable as conventional gasoline.

Why is 'winterizing' the fuel system so important? Winterizing is important because gasoline left in an engine's fuel tank and carburetor can degrade over time. During storage, gasoline can interact with air and moisture to form gums and deposits. Therefore you should not store gasoline in the engine's fuel tank for any inactive periods longer than one to two months unless it is properly stabilized.

The next step is to thoroughly lubricate the internal moving parts. Fogging oil is the best solution here. Fogging oil is a very thin lubricating oil that penetrates all small cracks and crevices getting to the parts that need it the most. The crank bearing, valve seats etc. all need that oil to be there when you start it up for the first time in the spring. Remember what I said above... 'WINTERIZING' can be defined as getting the machine ready for the next job BEFORE you put it away after the LAST job.

Spray all external moving parts with light oil such as WD-40 or CRC. This will form a barrier to keep

moisture off the metal parts. Then look over the piece of equipment and find all the scratched and dented damaged areas. Spray all these areas with the same oil. I prefer to wait until spring to do any touch-up painting. Sometimes moisture is still under the paint in the fall and it tends to spread over the winter. This just leads to doing the job twice.

I failed to mention cleaning but you already knew that. Soap and water every where. Decks, covers, handles, wheels, frames all need to be free of soil, oil and contaminates. Get it clean so you can see what you have to work with and what might need attention. You will never see that cracked deck when it is covered with dried mud. Grass clippings, chlorophyll, soil and grime all hold moisture. Moisture promotes rust. Rust deteriorates and fatigues metal. Rusted metal fails. Rusted machines fail and then you fail when you have to do the machines' jobs!

Once all the above tasks are complete for the machine it is a good idea to place a thin piece of plastic over the machine. I like to use a trash can liner. Use a sharp knife to slit it open and lay it over the entire machine especially the engine. This plastic will be the layer that attracts any condensation. Better there than on that clean 'winterized' machine that you won't be using for awhile. The daily dew, or frost settling on the machine will eventually break down or weaken many parts. The woven pull cords will rot and break just like rusty nuts will. You know how we all hate rusty nuts. Avoid it all together and enjoy the moment when it is placed back into service.

Remember, be smart and take care of that equipment and it will take care of you. Refer to your owner's manual or shop manual for any special details that might pertain to your special piece of equipment. You paid good money for it and it is making good money for you so why not keep it in service for many seasons to come. ;)

