Prepare your Grasshopper for cold weather
Winterization Tips provided by The Grasshopper Company

Cooler and shorter days are a signal that winter weather is just around the corner. These winter maintenance guidelines are intended to help you keep your Grasshopper mower in peak condition throughout the winter months – whether you’re clearing snow or storing your mower until spring.

Grasshopper recommends keeping a maintenance log to ensure proper timing of maintenance procedures. Consult all equipment service manuals for specific procedures, schedules and replacement parts lists. Use only Original Equipment Manufacturer (OEM) replacement parts, as OEM parts are designed to work in conjunction with specific systems.

**Winter Maintenance Tips**

**Battery** – Prior to the onset of cold temperatures, clean and inspect the battery, cables, terminals, tray and hold-downs as well as check the battery case for leaks and cracks. Keep the battery fully charged through the winter with a **Battery MINDer**®, available from Grasshopper (PN 102050), which prevents damage due to self-discharging without risking overcharging when left on the battery for indefinite periods of time. Keep the battery charged to keep your Grasshopper mower ready all winter long.

**Block Heater** – If the ambient temperature drops below 20°F, it may be necessary to add supplemental heat to the engine. Block heaters are available for most Kubota engines used in Grasshopper mowers.

**Glow Plugs (Diesel Engines)** – Check that all glow plugs are in good condition. One bad glow plug will prevent the engine from starting. **Caution:** Activate glow plugs for 5 to 10 seconds only. NEVER preheat for more than 20 seconds.

**Engine Oil** – It is critical that the correct oil for cold weather operation is used in all engines. The use of 30W oil in winter, for example, will often cause starting problems. Follow the engine manufacturer’s oil recommendation for cold weather operation.

**Starting Fluids** – Do not use any type of starting fluid on any Kubota, Kohler or Briggs & Stratton engine. Starting fluids will cause severe piston ring or ring land damage on all engines.

**Cold Weather Warm-Up** – Never run a cold engine at full throttle. Run at low to medium throttle for several minutes until the engine warms up. This varies from advice provided for modern automobile engines. A Grasshopper engine runs at much faster speeds than an automobile engine and should be given a few minutes of warm-up time to ensure lubricant is flowing freely throughout the engine.

**Fuel** – Different grades of fuel are used for warm- and cold-weather operation. Be certain to use a good quality, fresh winter-grade fuel, as summer-grade fuel creates a hard starting situation in cold weather. A fuel stabilizer such as **STA-BIL**® should be added to all of your bulk fuel purchases throughout the year. This becomes even more critical during winter months when the power unit may sit for many weeks at a time without being used. If fuel stabilizer was not added to the bulk fuel, then it is a good idea to add the proper amount directly into the fuel tank. Any time stabilizer is added to the fuel tank, allow the engine to run in an open, ventilated area for about 10 minutes to ensure the treated fuel is circulated throughout the fuel system.

**NOTE:** According to Kubota Engineering Bulletin KEI-144, use of biodiesel fuel in a diesel engine in cold weather conditions can lead to fuel system plugging, hard starting and other possible unknown failures. Plugging can include both fuel filters and fuel lines.

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Winter Storage Tips

Deck – Always clean the underside of the mower deck frequently during the mowing season, and give it a thorough cleaning before winter storage to prevent rust. Spray the underside of the deck with water to clear any clippings or residue. Use a bristled brush to remove any stubborn deposits. Allow deck to thoroughly air dry before storage. Apply spray paint available from Grasshopper (PN 340450, “Java Brown”) to exposed metal to help prevent rusting during winter storage.

Spark plugs – Spark plugs typically require replacement every 100 hours of operation. If a plug is corroded, replace it before storing the mower for the winter. For plugs that are still in good condition, adding an ounce of motor oil to the cylinders and cranking the engine a few times will help keep cylinders lubricated during winter storage.

Blades – Sharpen your blades in preparation for the following spring, and replace any blades that are worn or damaged with new Grasshopper GrassMax™ replacement blades. Blades should always be sharpened when they become dull and no longer provide a clean cut.

Belts – Check all drive belts and deck drive belts before winter storage. Replace any that are nicked, frayed, warped or have started to slip with genuine Grasshopper MaxLife™ OEM belts.

Air filter – A good rule of thumb is to replace the air filter either every year before winter storage or every spring before mowing season begins. Refer to your owner’s manual for specific instructions on the proper care and replacement of the filter. If a replacement is needed, always choose a genuine Grasshopper air filter to keep your mower running at peak efficiency.

Fuel filter – Refer to your owner’s manual for specific instructions regarding the proper care and replacement of the fuel filter. If a replacement is needed, always choose a genuine Grasshopper fuel filter to keep your engine in peak operating condition.

Tires – Tire pressure can greatly affect the quality of cut your mower provides. Be sure to check tires for leaks and extreme wear at the end of every mowing season. Repair or replace them, if necessary, to prevent sidewall damage from sitting flat over the winter. Tire chains are available for 20-inch diameter and smaller turf tires to increase traction for winter usage.

Exterior Cleaning – Give your mower a good cleaning before winter storage, removing any dried grass and dirt from crevices, and use a solvent such as WD-40 to remove any oil or gas stains. If the mower is washed, blow off any standing water with compressed air, and allow the mower to air dry completely before placing in storage.

Storage – Grasshopper recommends storing your mower indoors and out of the elements, such as in a garage or shop. This will help prevent undue wear and tear and ensure your mower ready for the next time you need it, whether for snow removal, debris cleanup or mowing. If you spend the winter in a warmer climate, look for storage units in your area that provide extra security and protection. A custom-fitted Cordura® mower cover is available for all Grasshopper models (PN 420085) if the mower will be stored in an open-air location.

For more information or to contact a Grasshopper service technician, visit grasshoppermower.com.

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