Most turf pros understand that proper maintenance during the season is critical to the performance of cutting equipment, but did you know that how you store your mowers during the off-season can impact long-term durability? After spending a little time cleaning and preparing mowers and other turf equipment for extended winter storage, you can go a long ways toward ensuring easy starting and strong performance in the spring.

The first step to this, or any mower maintenance, is to acquire a copy of the owner’s manual and factory maintenance schedule for each different mower in your fleet. If you’ve lost manuals for your mowers over the years, don’t worry, most manufacturers make manuals available on their websites.

### Engine prep

The end of the season offers a great opportunity to catch-up on maintenance items that may have been neglected during busy summer months, and to prepare the engine for the unique challenges presented by extended storage.

* Perform a thorough cleaning and inspection of each mower. It’s typically best to avoid using high-pressure washers, or water at all for that matter. Instead, use compressed air whenever possible, as moisture in mower components can lead to corrosion and premature wear that can shorten mower lifespan. If you do choose to use water, be sure to lubricate the grease points on the mower to expel any moisture that may have entered during cleaning.

* While cleaning, it’s important to give each machine a thorough inspection, noting any obvious fluid leaks, loose fasteners or damaged components. This inspection will help you establish before storage.

* The cutting deck demands particular attention. Remove all grass and debris that has built up on the underside of the deck. This keeps trapped moisture from corroding the cutting deck during storage, and will allow the cutting deck to perform as designed next spring without any additional work.

* Once the mower is clean, inspect to verify that all guards, shields, safety devices and interlock switches are in-place and functioning properly. Also be sure to check for and replace any parts that are obviously worn or deteriorating.

* Changing the engine oil and oil filter (if equipped). An oil change flushes any water or other contaminants from the engine that can cause corrosion inside the engine during storage.

* Replace other regular maintenance items such as spark plugs, fuel filters and air filters. Replacing these inexpensive items now makes it much easier to hit the ground running next spring.

* Clean and maintain the engine’s cooling system. Over the course of the mowing season, debris and grass clippings can accumulate in the cooling fins of air-cooled engines, and in the radiators of liquid-cooled engines. This build-up compromises the efficiency of the cooling system, which can lead to overheating, as well as decreased engine performance and longevity.

  On liquid-cooled units, check to verify that the cooling system is filled with the proper mixture of antifreeze and water (typically a 50:50 ratio). This is critical for locations that regularly see freezing temperatures, as an improper mixture can allow the coolant to freeze inside the engine, which can cause extensive engine damage.

  Use compressed air to thoroughly clean dirt and debris build-up in the cooling fins or radiator. Inspect and clean the cooling system again in the spring, when the mower is pulled out of storage, as insects, mice and other small rodents can make their home in stored equipment, and the nests need to be removed.

* Maintain and charge the battery. Before storage, be sure the battery is completely filled with distilled water, and clean all battery posts, connections and cables. Disconnect the battery from the negative post for any storage of more than 30 days. It’s also a good idea to give batteries a full charge using a trickle charger before storage. This will ensure the battery has enough charge remaining to start the mower when it is pulled out of storage.

* Stabilize the fuel and fuel system. Use a fuel stabilizer in the tank of any equipment to be stored for more than 30 days. Run the mower for at least 5 minutes after the fuel stabilizer has been added to make sure stabilized fuel is present in the fuel lines and fuel system of the engine.
Chassis and deck prep

* Lubricate the chassis and cutting deck. Virtually all commercial mowers provide grease zerks at critical bearing areas on the chassis and cutting deck, which allow periodic lubrication without disassembly. Use a grease gun to lubricate bearings with a high-quality waterproof grease before storage. This will flush any moisture and/or contamination build-up from the bearing, and will allow extended storage without concerns about bearing corrosion and/or freeze-up.

When greasing pivot points that are tensioned, such as the idler arms or bearings on the cutting deck, release the tension from the system before lubrication. This allows the grease to be more uniformly distributed within the mechanism. Consult your owner’s manual to find the exact number and locations of grease zerks on your mower, as well as the manufacturer’s recommended grease type.

* On hydrostatic-drive mowers, check the level of the hydro oil and replace the hydro oil filter at the end of each season. On gear-drive mowers, inspect the drive belts and pulleys for signs of wear, cracking or deterioration. Also inspect the belts that drive the cutting deck, replacing as necessary.

* Put a fresh edge on the cutting blades. Sharpen and balance cutting blades before storage. Sharp, balanced cutting blades restore full cut quality and efficiency to the deck, and doing so in preparation for storage means it’s one less item to maintain before next spring.

* Check mower fasteners. Since nuts and bolts can loosen over the course of a cutting season, it’s especially important to check these fasteners often, especially at the beginning and end of cutting seasons. This will ensure that mower safety, performance and durability isn’t compromised.