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# EXPLORING EQUIPMENT

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## Making Maintenance a Team Effort

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**M**aintaining a sports field or golf course is a team effort. One person doesn't have the time or talents needed for all the work. Equipment maintenance follows the same principle. Even if you have a mechanic, that person can't be everywhere. Involve everyone in keeping grounds care equipment in top working order.

### Operator involvement

Tell operators how important their input is in your preventive maintenance program. Operators can notice when a machine is making a peculiar sound, smelling of burning oil or not handling properly. If the operator passes on this information, the mechanic can repair the minor problem before it becomes a major breakdown.

To improve the information flow between operators and mechanics, assign a unit number to each machine. Hang a clipboard where operators park the equipment. Have operators visually inspect their mowers each time they get off their machines. Each operator can report loose hardware, damaged parts, frayed belts and other specific problems on the correct unit's clipboard.

Some organizations have operators do minor maintenance work. In addition to cleaning the machines, operators put air in tires, check fluid levels, clean air filter dust cups, make minor belt adjustments and lubricate daily. This practice not only helps operators become more involved with their machines, but it also frees the mechanic for more involved tasks.

### Reel Maintenance

For riding reel mowers, the reel-to-bedknife adjustment should be the first thing on the mechanic's list of daily maintenance tasks. A daily adjustment ensures a consistent cut.

Check the height of cut after the bedknife adjustment because the adjusting process can alter the cutting height. Also, examine the bearings in the rollers regularly because a worn roller bearing

also can affect the height of cut. When you notice the roller bearings becoming worn, replace them because it's a lot cheaper than replacing a roller.

Lubricate and check pivot points where the cutting unit frames mount to the tractor or lift arms. If these points get tight due to lack of lubrication, the cutting units won't float properly across the ground. This can cause uneven or step cutting.

If the mower has counter-weight or weight-balancing spring adjustments, make sure they are set to match mowing conditions. For cutting slopes, a lighter adjustment will concentrate more weight on drive wheels for better traction. For roughs or cutting dense grasses, a heavier setting keeps the cutting units down on the surface for a better cut. Adjust all mowing units to approximately the same weight so they all cut at the same height.

### Keeping Your Edge

The key to a high-quality cut with a reel mower is keeping the reel and bedknife sharp. If either is dull, the turf appearance will suffer.

Backlapping is one way to maintain a sharp cutting reel. However, it's only meant as a finishing touch for an edge, not as a substitute for regular reel sharpening. Only grinding can restore a severely dulled reel to proper sharpness.

The front vertical surface, or face, of the bedknife also is important. As it wears, the cutting edge of the bedknife is reduced to a sharp point. It's then susceptible to nicks from small stones or sand, creating a jagged edge and giving a poor-quality cut. To keep a square front edge on the face of the bedknife, use a flat file or a small, hand-held grinder.

A bedknife should wear in a straight, flat pattern across its entire length. If it becomes waved or develops a dish pattern, the reel may be adjusted too tightly, the reel bearings may be worn or misadjusted, or the mower may be dam-

aged and twisted out of its box construction.

When you detect a wavy pattern, regrind the bedknife and reel. Before you regrind, correct the problem that caused the symptom or the wavy condition will reoccur.

### Other Regular Checks

Engine oil is an important ally in your preventive maintenance program. Check oil levels daily. During the break-in period, change the oil more frequently. Afterwards, follow the manufacturer's recommendation.

On belt-driven units, check the belts weekly for proper tension and signs of wear. Always use the replacement belt the manufacturer recommends. Belts may look alike, but they are designed to handle pressure in different places, depending on the load. Using the correct belt is important.

For mowers with hydraulic systems, check the hydraulic reservoir every day, and look for fluid leaks. Make sure this is a visual inspection. DO NOT use your hands to feel for leaks on a pressurized system. Hydraulic fluid is highly pressurized and can cause serious injury.

Equipment operators should report any leaking fluids, damaged hoses or bad seals to the mechanic for repairs. If you notice hoses rubbing together, tie them back. Replace leaking hoses with ones that are rated for the system's hydraulic pressure.

Replace leaking seals at once. Leaky seals allow air into the hydraulic system. Air can cause major damage. If the fluid in the reservoir looks foamy, air is probably getting into the system. Water also contaminates hydraulic systems and destroys components. If the fluid looks milky, water is getting into the oil.

When operators make these inspections, they should make notes on the designated clipboard. The notes then become part of each machine's equipment file. Combining operator involvement with regular preventive maintenance and good record keeping will keep your equipment in top form.. □