EQUIPMENT

Zero Maintenance Could Equal Major Cost for Zero-turn Mowers

By Roy Dust

A growing segment of the commercial mower industry is the zero-turn mowers, featuring machines that are highly maneuverable, compact in design and considered to be among the most productive equipment available.

These machines can only perform at their peak, however, if they're properly maintained. We'll examine how best to maintain these machines over the course of a season.

PRESEASON

If the unit was properly stored during the offseason, the following steps should be followed:

• Remove the blocking and all protective coverings.

 Install the battery (check and charge it as needed).

• Check the exhaust outlet and air cleaner because these are favorite sites for bees and rodents to nest.

• Fill the fuel tank with fresh gas of the proper octane. Too high an octane is bad for the valve train.

• Service the engine using the engine manufacturer's recommendations.

• Check engine oil level and look for signs of condensation contamination. Brown, milkylooking oil is not normal. If necessary, drain, refill and change the oil filter.

• Check all tire pressures and other fluid levels.

• Start the engine outside or in a well-ventilated area, running at slow revolutions per minute until warm, and check safety circuits for proper operation.

IN SEASON

Proper daily maintenance should become second nature. It's the most important step you can take to ensure the peak performance of the equipment.

Before starting the unit each day you need to:

- Check the engine oil level.
- Look at tire pressures. Overinflation



reduces traction, creates a harsh ride and increases tire failure. Underinflation can damage both the turf and tire. It also can lead to poor cutting performance.

• Inspect the machine visually, paying particular attention to loose nuts or bolts, belt tension(s), loose or frayed wiring and overall appearance.

• Clean the deck as needed. It should also be inspected for signs of damage or wear.

• Check the blades for tightness. Sharpen or replace them as needed.

• Check all shields and guards to be sure they are in place and secure.

• Start the machine and check that all safety systems are working properly.

In addition to the daily maintenance, all mower and engine manufacturers have recommended normal maintenance schedules and these should be heeded. In general, a normal maintenance often consists of the following instructions:

• Change the engine's oil and filter.

• Clean and replace the air filter element (use of compressed air to blow out filter elements is not recommended by most manufacturers).

• Lubricate all pivot points and bearings as required. This area is one of the most misunderstood, with too many people either neglecting to grease on schedule, using the wrong Disconnect the battery and store in a cool, dry place in the off-season.

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grease (all grease is not the same) and, in some cases, overgreasing.

 Check and service all fluids (hydraulics and liquid-cooled systems when applicable). Fuel filters and sediment bowls are often forgotten.

· Check mower decks for cracking and debris build up.

 Inspect spindles and pulleys. Pay particular attention to bear-

When properly cared for, the zero-turn mower can provide many hours of reliable, guality service.

ings, belt conditions and tensions.

 Inspect the battery for corrosion and proper fluid levels if not sealed.

 Examine the spark plugs. Reset or replace them regularly to maintain maximum horsepower and fuel efficiency.

POST SEASON

Taking the time to prepare your units for off-season storage can pay dividends over the long haul and will make spring start-up less troublesome. The best procedures for your individual machines will be outlined in your owner's manuals.

Generally, most machines will need at least the following steps to insure proper storage:

· Drain crankcase oil while engine is hot and refill.

 Prepare the mower deck by cleaning and either painting or

Inspect spindles and pulleys, paying particular attention to bearings. belt conditions and tensions.

coating all bare metal with a thin laver of oil.

 Clean all external surfaces and the engine.

• Prepare the engine according to the manufacturer's instructions. This will generally include:

a) Removing dirt or debris from engine cylinder heads, blower housing and air filter element.

b) Covering air cleaner and exhaust element to prevent invasion by unwanted insects or rodents:

c) Greasing and oiling completely, per manufacturer guidelines.

d) Painting or applying rust preventative to any areas where paint has worn or chipped off.

e) Being sure the battery is fully charged and filled.

f) Removing the battery from the machine and storing in a cool, dry place is highly recommended. At minimum, the cables should be disconnected from the battery terminals.

g) Draining the fuel system completely and running the machine dry or adding a gasoline stabilizer to the fuel is the final step. Run the engine long enough for the mixture to reach the filter and carburetor.

When properly cared for, the zero-turn mower can provide many hours of reliable, quality service.

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