

Small Engines

Mulching Mowers

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As much as one-half of household wastes transported to landfills during the lawn mowing season are landscape related. Many landfills are running out of space and will close in the next few months or years. Also, many cities and counties have ordinances prohibiting the disposal of grass clippings and leaves in existing landfills. Homeowners are now encouraged to leave grass clippings on lawns as a source of plant food and to compost tree leaves to reduce the volume of disposal material.

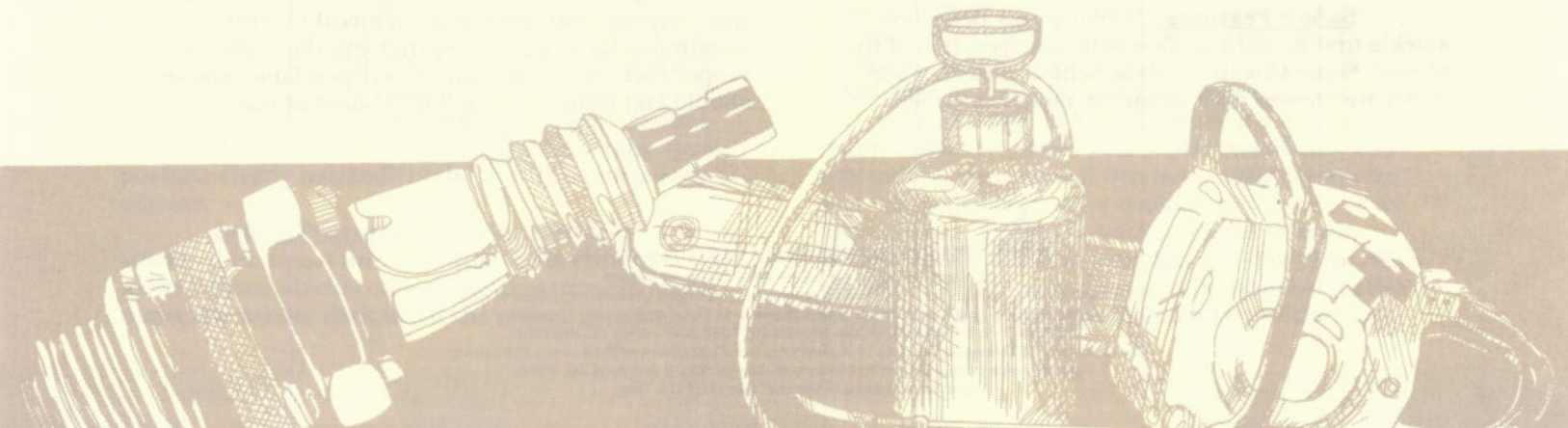
Grass clippings can be left on lawns if the volume is small and the clippings have been chopped into small pieces. The small pieces usually fall between the grass blades into the lawn where they decompose rapidly. If homeowners follow the accepted rule of removing only one-third of the total height of the grass blades at each mowing, clippings can be left on the lawn with no damage. Research indicates that mulching mowers work best when about 1 inch of grass is removed at each mowing. If you have to cut 2 inches or more, mow more frequently or use a bagging-type mower to prevent accumulation of excess clippings on the lawn surface. To comply with the one-third rule, actively-growing lawns need to be cut every three to five days in most locations in Tennessee. Rainfall, temperature, and soil fertility may cause variations in the normal mowing interval for many homeowners.

Mulching mowers are engineered to mow lawns and leave short clippings on the lawn. These mowers have special blades and mower deck design

to chop clippings into small pieces. A secret to successful operation of mulching mowers is to observe the one-third rule for mowing dry grass. If clippings are too long, the mower cannot chop them into small pieces. The excessive volume of clippings blocks light and interrupts lawn grass growth.

Mulching mowers differ from conventional mowers in several ways. Conventional mowers usually have one blade. Mulching mowers may have one, two or three blades. Conventional mowers usually have a flat deck. Mulching mowers have convex-shaped decks. This shape permits clippings to be "suspended" above the mower blade(s) and re-cut into smaller pieces by the mulching blade(s) as they fall back to the lawn surface (see illustration 1). Since mulching requires more power than conventional mowing, mulching mowers with a 20 to 22-inch cutting width usually have four or five horsepower engines compared to three and one-half to four horsepower engines on conventional mowers the same size.

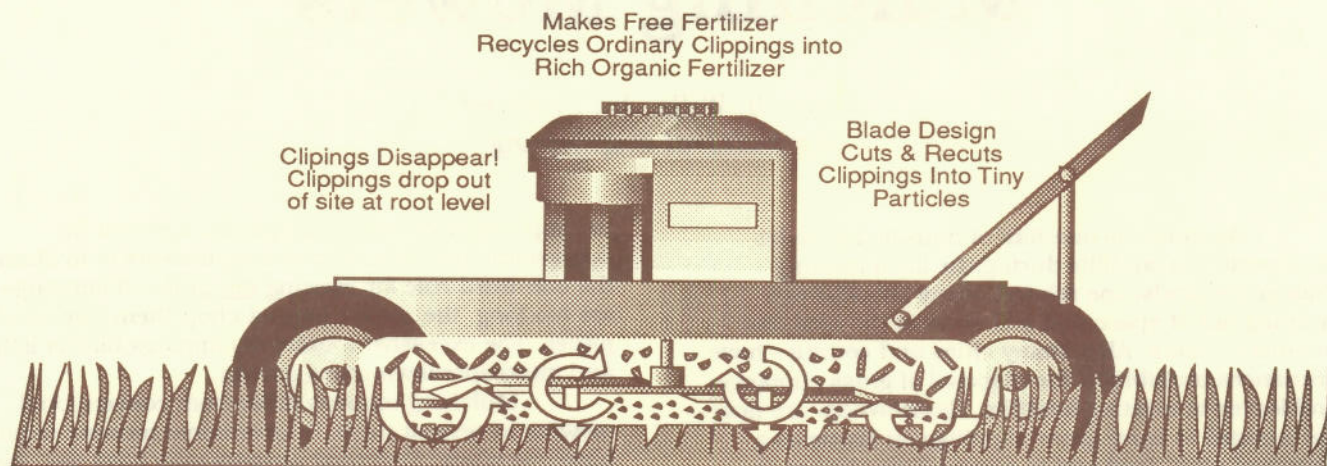
Some mower manufacturers make mulching mowers that are "dedicated" mowers. A dedicated mower is made for mulching only, and cannot be converted to a bagging or a discharge mower. Other manufacturers make mowers that can easily and quickly be converted from mulching to bagging and/or discharge and back to mulching. Convertible mowers are more versatile than dedicated mulching mowers. If rain, time restraints or other factors prevent mowing on a timely basis for mulching, a bagger or discharge device may be installed to collect or to broadcast excessive clippings unsuitable for



mulching. Before you purchase a convertible mower, look for models that quickly and easily convert to baggers or to discharge mowers. Some models are converted from mulcher to bagger or bagger to mulcher in a few seconds. Most will take less than a minute to convert.

Some riding mowers and lawn tractors have mulching decks and blades. The 30-inch-cut riding mower is

now available in both mulching and convertible versions. If you have a riding mower or lawn tractor with a conventional mowing deck, you can replace the conventional blade with a mulching blade or blades. This conversion may prove satisfactory until you purchase a new mower. Most mulching mowers in the riding mower and lawn tractor size range are convertible to baggers or discharge (side or rear) mowers.



Features To Look For When Purchasing A Mulching Mower

Several features are worth inspecting and evaluating prior to purchase. These include:

Handling - Mowers that feel heavy and clumsy can make mowing a real chore. Select mowers that are lightweight and easy to maneuver. Evaluate the "balance" of the mower. Front-heavy or rear-heavy mowers may be difficult or awkward to steer.

Servicing - How easy is the fuel tank opening to get to? Do you need a funnel to put gasoline into the tank? Can you change engine oil easily? Look for easy-to-open drain valves and hard-to-get-to drain plugs. Changing oil is, at best, a messy job. Look for features that simplify the process.

Starting - Examine the position of the starter rope for ease of operation. On some models, the starter rope runs through eyelets or other devices that may increase the effort needed to start the engine. If the mower has a battery to start the engine, consider its accessibility for replacement or service. Examine the throttle control for ease of operation. Is the choke position clearly marked? Is the throttle control easy to adjust?

Safety Features - Look for rear deflection shields that do not interfere with the operation of the mower. Some shields on walk-behind mowers slide under the mower deck when the mower is pulled

backward. Examine the handles on the mower. The handle height should be easily adjustable and the controls should be comfortable to operate. Some mowers have cushioned handles that dampen vibration and lessen fatigue when gripping the handles for long time periods. Are tools required to adjust the handle? Look for tool-free adjustments. They save time and the need for additional tools.

Cutting Height Adjustment - Look for a mower which adjusts quickly and easily. Some mowers have a single cutting height adjustment. Most have individual adjusters on each wheel. Make sure these are easy to operate. Some inexpensive models require removal of the wheel axle-bolt and insertion in a different hole in the mower deck to change the cutting height. Avoid these types if you adjust cutting height frequently. Tools are required and the process takes several minutes under the best conditions.

If possible, before purchasing a mower, take it home and use it under your home conditions. You can quickly determine if this is the right mower for you. Many dealers have a demonstration mower for this purpose. You don't want to invest several hundred dollars in a mower that you don't like. With proper care and maintenance, a dependable mower should last from 1,000 to 2,000 hours of use.



SP2680-5M-3/95(Rep) E12-2015-00-044-95

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The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914.

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