

## **Backlapping Reel Mowers For Precise Cut Keeps Turf Attractive, Lessens Chance Of Disease**

Frequent grass cutting with a sharp, well-adjusted reel-type mower is one of the factors in creating and maintaining attractive turf.

Proper watering, seeding and fertilizing, as well as fungicides, weed killers and insecticides, are needed for top quality turf. However, the results these offer can appear worthless if grass tips turn brown, become diseased, or clumping patterns show on the turf.

Backlapping of reel mowers with a quality pre-mixed reel sharpening compound will help avoid these problems and save time and money for turf care professionals.

Pull gang mowers, and hydraulic power-driven reel mowers create a scissor-like action between the reel blades and the bed knife. Properly ground and adjusted, this reel action slices grass cleanly, leaving no torn or jagged edges.

It is the raw and torn edges on grass that take on a brown appearance no matter how well the turf is otherwise cared for. These jagged tips also allow a greater opportunity for fungus and other diseases to attack the turf.

### **SHARPENING A REEL MOWER**

Grinding and lapping are complementary steps in sharpening a reel mower.

Although there has been much debate, relief grinding seems to be recommended by more experts than flat grinding. Better adjustment, closer cutting action, plus longer life for bed knives is the reason for favoring relief grinding.

A ground, reassembled, and adjusted reel mower will cut fairly well. However, backlapping will improve the cut-

## **Backlapping Procedure**

Backlapping with ready-to-use products to complete a grinding job, or to renew the cutting edges after use, requires minimal set-up time and work. Specialists using pre-mix compounds recommend the following basic steps . . . always being careful to keep your fingers and hands away from all moving parts.

1. Set the reel turning backwards. Hydraulic driven reels can be run in reverse, while wheel friction driven reels must be mounted on a backlapping machine. A relatively slow speed (between 100 to 150 rpms) is recommended so that the compound will not be thrown off the reel blades as they turn.
2. Adjust the bed knife from both sides to make even contact with the reel blades.
3. Apply a reel sharpening pre-mix compound, using a two-inch paint brush, to the blades as they are turning. Move the brush from side to side along the reel to spread the sharpening compound the full width of the blades. After application, allow the unit to run backwards until the reel is quiet.
3. While the unit is turning, flush the reel with water from a hose to remove all abrasive grit.
5. Turn off the lapping machine. Spin the reel backwards by hand and adjust for a very light uniform contact between reel blades and bed knife. When spun by hand, the reel should rotate two or three revolutions before stopping.
6. Slowly turn the reel forward and make any additional fine adjustment so a piece of paper will be sheared along the entire width of the bed knife by every blade, being careful not to touch the cutting edges with fingers.

*This article was submitted by Richard Morris, Manager, Fel-Pro Incorporated, Producer of Clover Reel Lapping Compounds.*

ing action by removing nicks and high spots from the knives. A perfect mating between blades and the bed knife is created to cleanly slice off grass.

Many grounds care specialists backlap their reel mowers after every cutting, to insure the sharpest blades. The few minutes it takes each day for backlapping is time well spent for healthier grass. Grinding is generally done twice a year.

In contrast to grinding, lapping with reel sharpening compounds takes very little time, and removes very little metal from the blades.

Pre-mixed lapping compounds offer several advantages over the varied combinations created by some turf care people.

Various grades of pre-mixed reel sharpening compounds are available — 50 grit for heavy-duty lapping, 80 grit for regular lapping on fairway mowers, 120 grit for green and tee mowers, 180 grit for extra sharpness, and 220 grit for super fine honing.

The key benefit from lapping is extreme sharpness. A much more precise fit between reel blades and the bed knife can be obtained.



"First tee the ball."

"I tee it. What cwub do I use?"

*Morale is the state of mind.  
It is steadfastness and courage and hope.  
It is confidence and zeal and loyalty.  
It is élan, esprit de corps and determination.*  
— George C. Marshall

## **Ciba-Geigy Contributes \$50,000 To GCSAA Endowment Fund**

A \$50,000 contribution to the Golf Course Superintendents Association of America's (GCSAA) Scholarship and Research Fund has been made by the Turf and Ornamental Department of the Ciba-Geigy Corp.

The Robert Trent Jones, Sr. Endowment Fund, established by the GCSAA in August, makes scholarships available to outstanding students enrolled in college turfgrass management programs nationwide. The fund works to encourage future leaders among professional golf course superintendents.

"We're pleased and excited about the opportunity to make a significant contribution to the endowment fund," says Bill Liles, Director of Ciba-Geigy's Turf and Ornamental Department. "Furthering turf research through scholarships for college students is an excellent example of industry, education and the GCSAA working together."

John Schilling, GCSAA Executive Director, says the endowment fund enables the association to support research in such areas as drought and disease resistant grasses, environmentally sound turf management, and effective water and soil resource conservation.

Director Gerald Faubel, CGCS, Chairman of the Scholarship and Research Committee, says the timing and generosity of Ciba-Geigy's contribution to the endowment fund "indicates the kind of leadership needed to keep our profession strong."