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

Frequent grass cutting with a sharp, well-adjusted reeltype 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.

- 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.