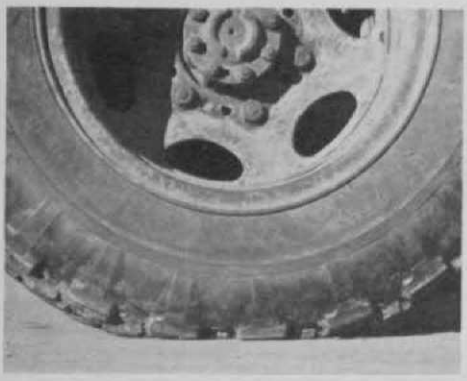
Proper Care of Tires Saves Turf, Time and Money

Tractor wheel slippage costs golf course owners hundreds of thousands of dollars each year in turf repair and replacement. A wheel that slips will either tear up the grass or dig a lengthy trench in the ground.

Such slipping can be prevented by greenkeepers if tires are properly inflated, development engineers of the Firestone Tire and Rubber Co. report upon completion of a series of tests on the company's two Akron golf courses.



Chances of wheel slippage are reduced to a minimum and tire distributes its load over a large area of ground, providing more traction surface, when properly filled to 12 lbs. inflation pressure.

Over-inflated tires tend to stiffen and are prevented from flexing to conform to the irregularities of the ground. A stiff tire will not grip the ground as easily as a softer tire so it tends to slip and rip out strips of turf.

Under-inflated tires, although increasing traction, can lose more than half of their normal life due to extreme weakening of the sidewalls. Hard tires and soft tires are equally expensive in maintenance of golf courses.

Proper inflation pressure for both air and liquid-filled tires is 12 pounds. Such a pressure not only eliminates most of the slippage, but increases tire life, the engineers report.

Tests show that best results from liquid-filled tires are obtained at the following weights: a 750-16 should have 130 pounds of solution; a 750-18, 145 pounds; a 9-24, 200 pounds; a 10-24, 258 pounds, and a 10-28, 310 pounds.

Tractor operators can help eliminate the remaining possibilities of turf damage by being careful to avoid rapid acceleration, increasing speed going up hills, abrupt changes in speed or gear, and using tractors with unbalanced rear wheels.

Development men also reveal that wheel slippage on damp ground or grass is between 10 to 20% greater than on dry areas.

For any golf course tractor work, the engineers recommend smooth, gradual starting with a slow, steady pulling gear as the most economical type of operation for tire wear, fuel consumption and turf preservation.

Spring rains, and rapidly growing grass at a time when golfers demand well-groomed fairways, create conditions for damage to turf by careless or rapid starting. Caution is the watchword.

Careless, fast starting and over-inflated tires will cause turf destruction pictured above. Even with properly inflated tires, engineers recommend smooth, gradual starting for all golf course work as the most economical method of operation.

Close-up view of damage done by rapid acceleration of tractor when starting. Same damage results from starting tractor on hill, consequently drivers should be cautioned about start-stop operations on hillsides.