



When wear spots occur you simply reverse or interchange the plastic slats.

### REVERSIBLE SLATS CAN BE INTERCHANGED TO COVER WEAR SPOTS

## Plastic Plow Bottoms Outlast Steel 4 To 1

"When most plow bottoms wear out they're only worn out in one place. When our plow bottom gets a wear spot, you just interchange the slats and continue on," says Ralph Bolinger, Roann, Ind., inventor of "The Twister", a first-of-its-kind plastic slat replacement for steel bottoms.

The Twister is made with a new high-grade industrial plastic with wear characteristics that makes it as "tough as steel". Because the friction coefficient of plastic slats is 50% less than steel bottoms, and because the slats that make up the Twister can be both reversed and interchanged, Bolinger says a set will wear 4 times as long as conventional steel bottoms once the conversion is made.

To convert, the mounting shank that supports the plow bottom — called a "frog" — is modified with extensions and brackets that'll accommodate the plastic plow slats. Then, the slats are simply bolted into place.

A complete set includes three slats

that run vertically down to the steel plow share at the bottom, which is left in place. The fourth piece, at rear, is simply reversible. All plastic slats are 1/2 in. thick and of the same material that is now being used by companies to build car engines and other high wear parts.

"Our first prototype was made with steel slats but we've found that this new plastic material wears as well or better than steel and has less friction," says Bolinger.

The conversion bottoms are designed to fit any moldboard plow. A kit to fit 18-in. bottoms sells for \$159.95 per row and a kit to fit 16-in. bottoms sells for \$155.95. Both prices include about \$58 for labor and hardware to convert the frogs to accept the new bottoms. Future replacement will only require the cost of the bottoms.

For more information, contact: FARM SHOW Followup, C.F.C. Distributors, Inc., Rt. 1, Roann, Ind., 46974 (ph 317 833-4231).

## Easy Way To Check Bin Temperatures

Latest new way to check the temperature of grain stored in grain bins is through "Bin Holes", invented by Jim Shilling, of Knox, Ind.

Bin Holes can be installed on any standard corrugated grain bin wall having a 2.66 in. or greater horizontal corrugation. "Installed at the proper angle, rain can't enter the bin and grain can't run out," says Shilling. Besides the angle, a rubber gasket at the end of the 3/8-in. galvanized pipe keeps out moisture.

Using the holes, Shilling notes that you can easily take grain temperature tests using his Agri-Therm probe.

The probe is 4-ft. long and connects to a read-out meter.

Shilling suggests installing 5 or 6 Bin Holes of a height of 3 to 4-ft. in a 30-ft. bin.

Installation involves drilling an 11/16 in. hole, inserting the Bin Hole from the inside of the bin, attaching the gasket and nut, and tightening.

Bin Holes sell for \$13 each. The probe sells for \$109 and the meter for \$175.

For more information, contact: FARM SHOW Followup, Jim Shilling, Agri/therm, R.R. 4, Box 22, Knox, Ind. 46534 (ph 219 772-4311).

### SIMPLIFIED ELECTRONICS MONITOR OUTPUT OF UNLOADING AUGER

## Simple New Combine Yield-Per-Field Monitor

A new yield monitor for combines that measures rotations of the combine unloading auger to determine yields "on the go" is selling fast to farmers who've had an early look at the new product.

Dubbed the Yield Trak by the manufacturer, Micro-Trak Systems, Inc., Mankato, Minn., the new monitor has simplified the electronics needed to measure acres traveled, ground speed, and yields per field using the latest high-tech electronic components.

"It tells you the ground speed, acres harvested, bushels per acre and the total bushels harvested," says George Warren, Micro-Trak representative, explaining that the operator can monitor yield on any size acreage and store that individual yield in the unit's memory for inclusion in a total yield figure. "It lets you check the yields of several different varieties right in the same field, dumping into one wagon or truck," Warren points out.

Yield Trak consists of a small cab-mounted electronic console that fits easily in one hand. It monitors a sensor mounted on the jack shaft of the unloading auger.

The unit also monitors a speed sensor mounted on the combine driveshaft to keep track of ground speed, and a sensor mounted on the header platform that shuts off the unit when the header is raised on headlands.



Monitor gives exact bushel-per-acre read-out.

To calibrate the unit, the operator simply punches in width of the swath taken by the machine, then harvests one tank of grain, leveling it to the bin's rated capacity and emptying it through the unloading auger. The unit then automatically registers how much grain the unloading auger can move for each revolution. A special flapper switch mounted on the auger shuts the electronics off when the grain tank is empty. The monitor is powered by combine's 12-volt system and retains its memory even when the ignition is turned off.

"It's a management tool that eliminates guesswork that costs farmers money. The best thing about it is that it's priced right," says Warren. The Yield Trak sells for \$289.95 and comes with do-it-yourself instructions.

For more information, contact: FARM SHOW Followup, Micro-Trak Systems, Inc., P.O. Box 3699, Mankato, Minn. 56002 (ph toll-free 800 328-9613 or, in Minn., 507 257-3600).

## Low-Cost Attachment Stops Reel Wrapping

A new crop-guiding attachment for combine headers, designed to prevent reel wrapping in viny crops, may be the simplest solution yet to a tough problem.

K & M Manufacturing Co., Renville, Minn., introduced the new low-cost finger guides at a recent Midwestern farm show. The product consists simply of four spring tine "fingers". The tines, mounted on the crop dividers, reach in toward the reel, filling the gap between the divider and the reel where wrapping usually starts.

"The fingers slide crop material over into the reel, which prevents it from jamming up at the side. It does as good a job or better than other devices on the market that cost twice as much," says Marvin Mulder, K & M president, noting that the crop guide fingers were invented by a farmer who's tested them over thousands of acres.

The crop guides attach in just minutes by bolting the bracket to the



Four spring-tine fingers direct crop material into reel.

sidewalls of the divider.

A set of two attachments sells for \$45. They'll fit all Deere 200 Series and IH 820 platforms.

For more information, contact: FARM SHOW Followup, K & M Manufacturing Co., Renville, Minn. 56284 (ph toll-free 800 992-1702 or, in Minn., 800 328-1752).