



Front sensor uses wand to sense position of plants in row.



Steerable rear discs (coulters) provide automatic guidance.



Hydrostatic drive on steerable single rear drive wheel powers the mower.

**"IT'LL EASILY LAST A LIFETIME"**

## "No Maintenance" Mower

### FITS PULL-TYPE AND 3-PT. EQUIPMENT

## Automatic Guidance System For Planters And Cultivators

"It's catching on fast, especially for row-crop cultivators," says Lincoln Creek Mfg., Phillips, Neb., of its new automatic guidance system for 3 pt. or pull type planters, and 3 pt. cultivators.

"We convert stabilizer discs and residue cutting discs so they hinge and steer to provide automatic guidance of planting and cultivating equipment, explain Jay and Ned Groelz, manufacturers.

To date, Lincoln Creek Mfg. has adapted hydraulically-actuated hinges to spring-loaded Orthman and Lilliston stabilizer discs, Buffalo discs (4630 and 4640), and Hiniker ridge-till coulters. Similar conversions for other make and model coulters are being developed, says Groelz.

On cultivators, a front-mounted sensor uses a wishbone-type wand to sense the position of small corn or soybean plants. It then sends steering signals back to the hinge assembly in the steerable disc or coulters to provide automatic guidance at speeds up to 7.5 mph.

"Because of its steering accuracy at high speeds, the guide system lets you cultivate close to the row with 3 pt. equipment, to use narrower herbicide bands to cut costs, and to improve cultivation results on sidehills. There's also less operator fatigue and different operators of the same machine achieve identical results," Jay Groelz points out.

The system uses wand, sled, bullet or other type sensors for automatic guidance

of 3 pt. or pull type planters, primarily those used for ridge-till where precise steering is required to keep on top the ridges.

Dealer-installed cost of the system ranges from \$2,200 to \$2,600, depending on whether it's being adapted to a closed or open center hydraulic system. "Farmers can save money by installing it themselves," says Groelz. The basic kit includes a control box that mounts in the cab, a front-mounted sensor assembly with wands, a front sensor mount, an electro-hydraulic valve assembly, and two disc or coulters hinge assemblies.

"We're also working on a kit that will convert Case crab steer tractor models 4490, 4690 and 4890 to automatic guidance for row-crop planting and cultivation," Groelz told FARM SHOW. "It feeds information from a wand into the electronic brain already built into the tractor, causing the rear wheels to steer left or right, as needed, to keep the cultivator guided. This kit will be inexpensive because it makes use of the electronics and hydraulics already built into these tractors. All that's needed to have automatic guidance on a planter, cultivator, sprayer or other equipment is to move the wand assembly from one implement to the other."

For more information, contact: FARM SHOW Followup, Lincoln Creek Mfg., Rt. 1, Box 41, Phillips, Neb. 68865 (ph 402 886-2483)

## Bale Wagon Dumps Its Load

"I built the first one for myself about 6 years ago. I load it with my kicker baler and when back at the barn, just open the back of the wagon and dump the load by the elevator. I no longer have to wrestle tightly packed bales out of the wagon door like on conventional bale wagons," says Andrew Vos, Hagersville, Ont., designer of the "Handy Dump" hay trailer that's sloped to self-unload bales.

"It'll dump a load of 140 bales in 30-seconds, allowing you to get by with only two wagons--instead of the four or five that it normally takes to keep up with the baler," Vos points out.

The dual-axle, 8 by 24 ft. wagon 'quick-hitches' to a special hitch mounted on the tractor's 3-pt., allowing you to hitch/unhitch without getting off the tractor. The wagon doesn't have an axle on the front like conventional wagons.

In the field, it hitches to a 2-wheeled dolly which, in turn, is hitched to the baler. The dolly takes the load off the baler and allows for shorter turns in the field.

To unload the wagon, you open the chain tailgate by releasing one pin. Bales will slide right out and the wagon will completely empty as you pull ahead, says Vos, adding that despite the wagon's 7 ft. height at the front, loading bales into it from kicker balers isn't a problem. By enclosing the sides, the wagon can be used to haul grain.

Handy Dump sells for \$4,200 (Canadian), including the dolly and tractor hitch.

For more information, contact: FARM SHOW Followup, Andrew Vos, R.R. 5, Hagersville, Ont. Canada NOA 1H0 (ph 416 768-3606 after 6 pm).



"Handy Dump" is sloped to self-unload 140 bales in 30 seconds.