

Toolbar wings automatically fold forward 40° the instant the tractor starts into a turn.

WINGS FOLD FORWARD FOR MAKING SHORT TURNS, AND VERTICALLY FOR TRANSPORT

Many Uses For New "Short Turn" Toolbar

New uses are busting out all over for the revolutionary "short turn" toolbar introduced by the Hiniker Co., Mankato, Minn.

When turning with wide, closely-coupled equipment trailing behind, the wings automatically swing forward 40°, allowing you to make almost a square turn without turning into the equipment.

Each wing is equipped with a bi-fold hinge, allowing it, (1) to fold forward for making short turns and, (2) to fold up and over vertically to "narrow up" the wide toolbar for road transport.

Here, according to James Johnson, product manager, are some of the key uses for the new "bi-fold, 3-pt. mounted toolbar.

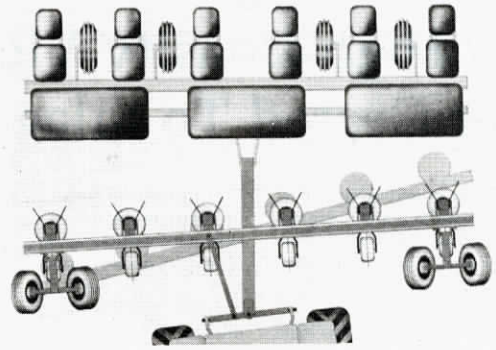
Once-over tilling and planting: If you don't already own one of the popular new combination field

cultivator-disk machines, you could equip the toolbar with disk gangs to chew up heavy layers of stalks or stubble, then pull a conventional field cultivator or chisel plow behind. You could couple the wide field cultivator close-up behind the toolbar — no need for a long tongue, thanks to the "short turn" toolbar with wings that swing forward to let you "turn on a dime."

As soon as the tractor operator starts to turn the tractor, a sensor plate on the toolbar automatically activates the cylinders on wings, moving them forward 40°. After the turn is made, the wings automatically swing back.

Hiniker offers disk gangs for mounting on its new toolbar, which is available in 27, 30 or 40 ft. lengths, and in other sizes on special order.

Another possible use for the new-



"Steered" Toolbar

Hiniker's new bi-fold toolbar described in the accompanying story is for eight row wide and larger planters. For eight row narrow (30 in.) and smaller planters, Hiniker offers the 3500 "steered" toolbar. Equipped with Hiniker Econ-O-Till tillage units, it allows you to ridge plant with a smaller conventional planter.

"Sharp 70° turns are possible on headlands with this novel hitch, even on most tractors with duals," says James Johnson, Hiniker product man-

ager. When turning, the "steered" toolbar moves rearward, out of the way of the tractor wheels, almost to the point of planter frame contact. After the turn is completed, the toolbar returns to square.

On contours, the steering arm turns the toolbar to adjust the correct angle. When the tractor "crabs" on hillside, the geometry of the hitch steers the stabilizing coulters uphill, exactly offsetting the downhill gravitational pull on the planter, Johnson points out.

style toolbar in tilled ground is to equip it with a rotary hoe, spike tooth or Danish-type tines for preparing a final seedbed ahead of larger pull-type corn-soybean planters, or grain drills.

Ridge plant with your conventional pull-type planter: Hiniker's new toolbar, equipped with the company's recently-introduced Econ-O-Till 3000 series tillage units, is tailor-made for ridge planting with larger (eight row wide and larger) pull-type planters. The 27 ft. toolbar accommodates eight 40 in. rows, the 30 ft. handles twelve 30 in. rows, and

the 40 ft. toolbar will accommodate sixteen 40 in. row pull-type planters. Two sets of "V" gauge wheels on the bifold toolbar keep the row cleaners centered on the exact ridge center.

The 7 by 7 in. toolbar is made of 5/16 in. thick steel walls. Two pins are inserted to manually switch the double-hinge for each wing into the "vertical fold" mode for transport. Each wing folds over center to 120° for added stability during transport.

For more information, contact: FARM SHOW Followup, Hiniker Co., P.O. Box 3407, Mankato, Minn. 56001 (ph 507 125-6621).

SMOOTH, HORSEPOWER-BOOSTING POWER

Add-On Front Axle Converts 2-WD To MFWD

"You get the benefits of all-wheel drive without spending \$60,000 for a new tractor," says Larry Becker, Elwood, Ill., who installed an Elwood mechanical front-wheel drive front axle — built by Elwood Manufacturing, Elwood, Ill. — on his Massey Ferguson 2745 three years ago.

"It's smooth and there's no jerking. When you engage it on-the-go, you hardly feel it," says Becker, noting that Elwood Manufacturing has been making add-on front-wheel drive on a limited basis for nearly 40 years. The company exhibited at the recent Farm Progress Show in Illinois.

Elwood Mechanical front-wheel drives are built primarily for 100 to 200 hp. tractors. They can be installed in a few hours, becoming an integral part of the tractor. Unlike some front-wheel drives factory-installed on recent tractors, the Elwood unit can withstand the torque

and horsepower of tractors up to 200 hp. without the use of torque limiters to protect the front axle, according to Becker.

Front drive tires must be sized and geared to match the drive of the rear tires. The company says it achieves a less than 1% error rate between the front and rear tires, eliminating excess wear on tires and drive train components.

The Elwood front axle is activated by an electric-over-hydraulic clutch pack attached to the transfer case and activated by a switch for the cab. The add-on front axle automatically disengages at 12 mph for safety and re-engages at 12 mph when you're decelerating.

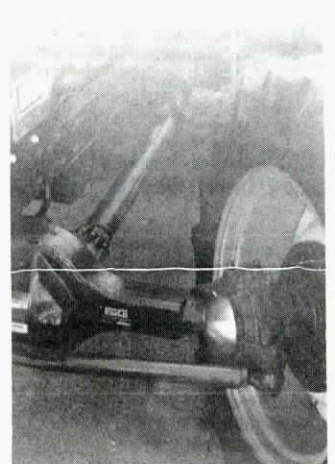
Larry Becker says he plans to replace his big 4-WD tractor with a second Elwood-equipped 2-WD. "Repairs on my big 4-WD in the past couple years have added up to some

\$14,000. The tractor is so big I can't work on it myself. Even though I haven't had to, I know I can repair the Elwood unit if I have to."

The add-on axle features totally sealed steering joints that keep mud and dirt out. Also, unlike some mechanical front-wheel drives, you can mount duals on the Elwood because the wheels don't slant in on turns.

The Elwood front axle is now fitted by International dealers to tractors ranging from a 706 up to a 5488. It can fit nearly any other make of tractor and sells for about \$10,000, installed.

For more information contact: FARM SHOW Followup, Elwood Manufacturing, Co., 105 South St. Louis St., Elwood, Ill. 60421 (ph 815 423-5591).



Elwood unit mounted on an International 1206. Note totally sealed joint.