

Loader lifts to 17 ft. height and has breaking lift capacity of 5,800 lbs.

FITS BOTH 4 WHEEL AND 2 WHEEL DRIVE TRACTORS

"Breakthrough" in Tractor Loaders

Latest "breakthrough" in tractor loaders is the Companion I, introduced by the F and W Corp., Lake View, Iowa.

"So far as I know, it's the first and only loader on the market that works on both 2 and 4 wheel drive row crop tractors," says Eldon Frank, inventor and manufacturer.

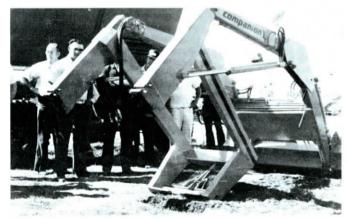
One man can mount or dismount the loader in a couple minutes without assistance. It's designed so there's no interference whatsoever with the wheels on 2 or 4 wheel drive row crop tractors, whether they have narrow or wide front ends. A universal mounting bracket bolted to the underside stays on the tractor permanently for fast on-and-off hookup of the loader. If the loader is to be used interchangeably on several 2 or 4 wheel drive tractors, equipping each tractor with the universal mounting bracket makes it easy for

one man to mount or dismount the loader in a matter of seconds on any of the tractors.

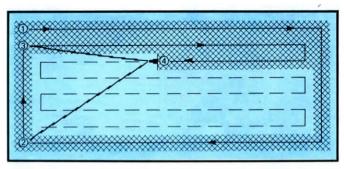
With the bracket already on the tractor, the operator only has to drop in one locking pin to mount the loader. Four snap-on hydraulic lines are color coded for easy on-or-off connection to the tractor. Another key feature is that the loader is self-standing when dismounted. "It'll stand by itself even on rolling ground and doesn't require any special jacks or standards." explains Frank.

Lifting height of the bucket is right at 17 ft. Breakaway lifting capacity is 5.800 lbs. Suggested retail cost, including the unit's two 3 by 36 in. cylinders, hydraulic hoses and bucket, is \$2,995.

For more details, contact: FARM SHOW Followup, F and W Corp., Eldon Frank, Pres., Lake View, Iowa 51450 (ph 712 664-2791).



All of the pivoting is done in back of the front wheels, allowing the loader to easily mount on both 2 and 4 wheel drive row crop tractors with narrow or wide front ends.



Above diagram illustrates how Ag-Nav operates in a typical field. (1) Starting in a corner, the operator makes a pass with the truck or tractor around the perimeter of the field. At position (2) he sets out repeater A and turns on Ag-Nav system. He then drives to location (3) to set out repeater B. He plugs width of each pass into the digital computer carried in the cab. As the tractor (4) moves up and down the field, its transmitter-receiver forms a triangle with the repeaters at position (2) and (3). As the tractor moves, it changes size of the triangle and the system responds accordingly via the needle on the dash-mounted Error Meter.

NIGHT OR DAY, IT GUIDES DRIVER ON STRAIGHT, EVENLY SPACED PATHS

New "Radar Control" for Trucks, Tractors

It's here — radar control for trucks, tractors and other equipment. Instead of guiding on a line scratched into the soil by a conventional marker, you can now plow, plant, spray or fertilize "around the clock" by watching the needle on a dash-mounted meter. You simply inch the steering wheel right or left, as needed, to stay "on target" without costly skips or overlaps on each pass over the field.

"We're introducing 2,000 units this fall as part of a pilot production program," a spokesman for Ag-Nav, marketer of the new concept, told FARM SHOW. The first-of-its kind computerized guidance system was developed by Energistics, Inc., Ft. Wayne, Ind., and is being manufactured by Magnovox. Marketing is being handled by Ag-Nav, Inc., headquartered at Virginia City, Ill.

Ag-Nav expects custom applicators to be prime prospects for the initial production run. The present system is designed for use only with ground equipment. Similar units for guiding agricultural aircraft are in the research hopper, along with a host of other potential uses for the revolutionary guidance system. Here's how it works:

There is a computer-transmitter receiver unit mounted in the tractor (or truck) with an antenna on top the cab. When he comes to the field, the driver brings with him two portable "repeater units", each of which has a built in transmitter and receiver. These battery-operated repeaters are also equipped with their own antenna and can send or receive radio signals up to about 1 mile.

Upon arriving at the field, the driver puts these "repeaters" at each corner at one end of the field (see drawing) or directly across from each other midpoint in the field. He then adjusts the computer box inside the cab for the width he'll be covering on each pass through the field.

The computer-transmitter-receiver



Al Vincent, of Energistics, Inc., shows how "Error Meter" mounts on dash in front of driver.

module in the tractor generates radio signals and transmits them (via the roof antenna) to the pair of repeater units. Radio signals received by the repeaters are transmitted back to the tractor cab. The digital computer, using measurements made on the returned signals, then determines the exact location of the tractor and displays any deviation from a straight line pattern. The operator merely steers the tractor right or left so as to keep the meter needle on zero to avoid skips and overlaps. As shown in the drawing, the guidance system is basically a triangle formed by the two repeaters and the tractor.

At the end of each pass, the operator toggles the "next row" switch on the control panel, moving it right or left to establish the path for his return trip. If he's spraying or planting and runs out of material, the operator can mark the spot in the field, drive home to reload, then come back and pick up where he left off without having to recalibrate the control system.

For more details, contact: FARM SHOW Followup, Ag-Nav, Inc., Box 55, Virginia City, Ill. 62691 (ph 219 452-7229).