

**CAN BE USED BY 4-WD TRACTORS  
NOT EQUIPPED WITH PTO'S**

## Big New Grain Cart Unloads Hydraulically

If you're looking for a big grain cart for a "pto-less" 4-WD tractor, you'll be interested in this new "hydraulic unload" cart from United Farm Tools, Glasgow, Kent.

The 750-bu. cart is fitted with a 2-stage unloading auger - two separate sections of auger, each driven by its own hydraulic motor. The augers aren't mechanically connected. Instead, an enclosed rubber tube connects the end of one auger to the base of the other. The base of the outer auger swivels on a steel arm.

"It lets you use a big 4-WD tractor to haul grain without having to spend money for a pto," says Sam Lawson, president. "Many

farmers want to use 4-WD tractors to pull big grain carts. However, most large 4-WD's don't have pto's. Adding a pto can cost \$6,000 to \$12,000. You can buy our cart alone, without the wheels, for about the same money.

"Using independently driven auger sections makes the cart fast and efficient, and because the augers don't join together there's no hinged joint area to damage grain.

"It also works great for filling grain drills and planters with seed or to fill hog feeders, etc.

"The cart is designed so it can be equipped with Caterpillar rubber tracks,



**Cart has two separate sections of auger, each driven by its own hydraulic motor.**

making it easier to pull and reducing soil compaction. A Cat dealer removes the axle and wheels and bolts on the track undercarriage."

Sells for \$12,679 without wheels. A 625

bu. model sells for \$11,495.

Contact: FARM SHOW Followup, United Farm Tools, Inc., P.O. Box 4026, 113 West Public Square, Glasgow, Kent, 42142 (ph 502 651-7121).



**The Thrones pull 450-bu. "tag-along" cart behind their 1990 Case-IH 1680 combine.**

**"LETS US MAKE A FULL ROUND  
WITHOUT HAVING TO STOP"**

## Iowans Build 450-Bu. "Tag-Along" Grain Cart

Richard and Michael Throne, Scarville, Iowa, wanted extra carrying capacity for their 1990 Case-IH 1680 combine so they could make a full round in the field without stopping to unload.

They solved the problem by assembling their own 450-bu. "tag-along" grain cart that's filled by the combine's unloading auger on-the-go. Once the cart is filled, it's unloaded by its own auger that's hydraulically controlled from the combine cab. A hydraulic motor mounted on the combine's rear axle is plumbed into the combine's hydraulic system. (It direct-drives a pto shaft that powers the tag-along auger as well

as a short length of auger mounted across the cart's bottom).

To unload the tag-along cart, the operator flips a switch in the cab to start the hydraulic motor, then uses the combine's hydrostatic drive lever to control auger speed. A 2:1 heavy duty gearbox gears the hydraulic motor down so that the pto shaft runs at 1,000 rpm's.

Hydraulics from the combine's hydrostatic reel are used to fold the unloading auger and to operate the bottom dump gate as well as to operate orbit motors on a pair of small leveling augers mounted across the top of the cart.



**Hydraulic motor direct-drives pto shaft that powers tag-along auger.**



**A pair of small leveling augers driven by orbit motors mount across top of cart.**

This cart allows us to harvest a lot of corn without hiring additional help to drive trucks or wagons and reduces soil compaction by eliminating trips through the field," says Richard. "It lets two men harvest 1,200 to 1,300 acres - one runs the combine while the other drives truck. It also eliminates considerable wear and tear on wagons since they don't have to be driven into the field to meet the combine. We go 4 to 4 1/2 mph depending on conditions.

We built it six years ago for our Deere 7700 combine, then switched it to our Case-IH combine when we traded combines three years ago. To hook up the cart all we do is drop in a pin on the tow bar and attach the pto shaft and two hydraulic hoses. Using a hydraulic motor to power the pto shaft works better than a mechanically-driven gearbox because it's simpler and costs less. We salvaged the hydraulic motor from an International 815 combine.

The combine and cart hold about 750 bu. when full, yet it's easy to pull the cart in the

field. The leveling augers across the top of the cart move corn to the back of the cart so it can be filled to maximum, if necessary, when opening fields or making rounds greater than 1/2 mile. We transfer grain from the combine to the cart on-the-go so that the cart is full by the time we finish a round. The cart and combine can be unloaded simultaneously, or independently.

"We mounted extra mirrors and lights on the combine that make it easy to see what's happening during unloading and to make it easier to back up or turn."

The cart is an older United Farm Tools model. The Thrones mounted sideboards on it to increase the capacity and used sheet metal to extend the front of the cart so the combine unloading auger can reach it. They also mounted an extension on the unloading spout (not shown) and widened the wheels out so they straddle four 30-in. rows.

Contact: FARM SHOW Followup, Richard Throne, Rt. 1, Scarville, Iowa 50473 (ph 515 568-3374).

### 168 Combines Harvest One Field

More than 30,000 French farmers recently gathered around the edge of a 55-acre field in France to witness a record-setting event - 168 combines harvested the wheat crop in that one field in less than 15 min., setting a record for fastest harvest that will go into the Guinness Book of World Records.

The combine extravaganza was the brainchild of Henri Pescarolo, a race car driver and farmer who staged the event to help raise the spirits of the French agricultural community, which has been in a depressed state due to recent GATT trade negotiations and agreements. Nearly all makes and models of combines participated in the "harvest of the century", including Deere, Case-IH, Massey Ferguson, New Holland, and a number of European brands. Each machine made a single pass across the field.

