



Kenny Brandt used the front wheels and axle off a Massey Ferguson combine to build his own “big wheeled”, pull-type tile plow.

## “Made-It-Myself” Pull-Type Tile Plow

“It pulls much easier than a 3-pt. mounted tile plow and has paid for itself many times over,” says Kenny Brandt, Hubbard, Iowa, who built his own “big wheeled”, pull-type tile plow using the front wheels and axle off a Massey Ferguson combine.

The tile plow has a 12-ft. long tongue. It’s raised or lowered by two 3-ft. long, 4-in. dia. hydraulic cylinders and is equipped with a 5-in. wide boot. Brandt uses his Deere 4630, 180 hp, 2-WD tractor to pull the rig.

“It looks like it was factory-built but I spent only about \$1,200 to build it,” says Brandt. “Commercial tile plows of comparable capacity cost at least \$8,000 and about twice that much if they’re equipped with a laser. The advantage of a pull-type unit – versus a 3-pt. mounted unit – is that even if the rear tractor wheels do spin and dig into the ground, depth of the tile being laid won’t be affected.

“I use it a lot to drain wet spots on ground that has old tile in bad condition. When I pull it with my 2-WD tractor I usually make six passes, going six inches farther down each time. I lay the tile in on the last pass. Because I drive slow and go down only six inches at a time, if the boot hits a rock it’ll go right around it instead of trying to dig it out. Most of my farm has a natural slope so I



Tile plow is equipped with a 5-in. wide boot, with a blade on front that’s 3 in. wider to prevent “side dragging”.

don’t need a laser. However, I did make a water level and installed it on the rig.

“I generally use 4-in. tile which costs about 28 cents a foot. I can buy 1,000 ft. of 4-in. tile for a little more than \$200. Some of the places I drain need only about 200 ft. of tile so it isn’t very expensive.

“I bought the combine axle and wheels cheap at a junkyard. I used 1-in. thick by 8-in. wide plate steel to make the boot. The blade on front of the boot is 3 inches wider than the boot to prevent ‘side dragging’, which makes the plow pull easier.”

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Anthony Stevenson converted his 8-row, 40-in. Deere 7300 vacuum planter to this 16-row, 20-in. model.

## 8-Row Deere Planter Converted To 16 Rows

After studying the yield benefits of 20-in. rows, Anthony Stevenson, Ulysses, Kan., decided to convert his existing 8-row, 40-in. Deere 7300 vacuum planter to a 16-row, 20-in. model.

He bought a used 6-row, 36-in. planter as well as two additional row units. He stripped both planters down, removing all the row units and vacuum pumps. He made a new 7 by 7-in. toolbar and bolted all the row units on it. He mounted four used gauge wheels (one pair from each planter) on front of the toolbar and two used lift assist wheels behind it. He also painted the toolbar Deere



He mounted four gauge wheels on front of toolbar and two lift assist wheels behind it.

green and mounted Deere decals on it.

“It gives me the benefits of 20-in. rows without having to spend the money on a new 20-in. planter,” says Stevenson. “The studies I’ve looked at show corn planted in 20-in. rows yields 12 bu. per acre more than corn planted in 40-in. rows. Also, the canopy closes faster which results in better weed control. I paid less than \$10,000 for the 6-row planter. I used the vacuum pumps and transmissions off both planters as well as their four gauge wheels and one set of markers. I bought the two lift assist wheels separately. My total cost was less than \$15,000.



Using flexible heavy duty screening material which he got free from a paper mill, Fraser Summers built an electric roll-up door that measures 56 ft. wide by 19 ft. high.

## “Poor Man’s” Electric Roll-Up Door

“When I built my 64-ft. wide, 96-ft. long machine shed a few years ago I wanted a big 56-ft. wide opening on one end, without any obstructions. Commercial bi-fold doors to cover that space would’ve cost at least \$15,000. I saved a lot of money by making my own electric roll-up door, using flexible heavy duty screening material which I got free from a paper mill,” says Fraser Summers, Fonthill, Ontario.

The door measures 56 ft. wide by 19 ft. high and is raised and lowered by a silo unloader winch that’s hooked up to a 1 hp electric motor.

The screening came in a 27-ft. wide roll. He cut off three sections and overlapped them to fit the width of the opening. He nailed the top of each screen section to a wood header across the opening of the shed. A large diameter plastic pipe attaches to the bottom of the screens. A cable at one end of the pipe is wrapped both ways around the pipe. Part of the cable runs up over a pair of pulleys at the top of the opening and back down to the winch and motor, which are mounted on the side of the shed about 4 ft. off the ground. The other part of the cable comes down and is anchored to the ground.

To open or close the door, Summers simply presses a reversible switch on the motor.

“It isn’t as air-tight as commercial doors, but it stops wind, snow, and rain and was very inexpensive to make. My total cost was less than \$500,” says Summers, who made the door two years ago. “It takes a couple of minutes to raise and lower the door. It would open faster if we had used bigger pulleys but the slow speed isn’t a problem.

“The screen is a good, strong material that’s somewhat like a heavy window screen. It doesn’t rip easily but is easy to cut. However, it isn’t very rigid. The first winter the screens bellowed in and out with the wind. We solved the problem by putting a round bale on each side of the door at both ends to help keep the door steady. The door drops



A big plastic pipe attaches to bottom of screens and is raised and lowered by cables operated by a winch and motor.

down between the bales. Also, we leave the door up a foot or so to let some air move in and out so there isn’t as much strain on the door. I think the same idea would work with turkey barn curtains and possibly other types of plastic sheetings.

“If we could do it over we’d probably buy the screen all in one piece instead of putting up three sections and overlapping them. We made the door 19 ft. high because we need that much height to dump bales off our automatic stack wagon. However, we usually don’t have to put the door up to the full height. We can stop the door any place we want.

“The cable is wrapped in both directions around the pipe so that it always stays tight and doesn’t slip and bunch up.”

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“I also put together a 16-row, 20-in. corn header by converting my existing 8-row, 40-in. Deere header. I put GVL poly snouts on all the rows.”

Stevenson also built a specially-designed, 30-ft. long “transport bar” that allows him to back the planter endwise through a narrow 14-ft. wide door at one end of his Quonset shed. When he’s done planting he removes the planter from the tractor’s 3-pt. hitch. Then he pivots the markers open at both ends of the planter toolbar and inserts a steel frame and legs into one end of the bar and a hitch into the other end. Then he hooks

the hitch up to the tractor drawbar and backs the planter through the door and into the shed.

“The wheels are from my father-in-law’s old Deere planter. I used 4 by 4-in. sq. tubing to build the frame that supports the wheels and used more sq. tubing to make a socket that fits inside the toolbar. I just slide the wheel frame into the planter toolbar and the weight of the toolbar holds it in there. I don’t have to use any pins in the toolbar,” notes Stevenson.

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