

They Built Their Own 2-Row Corn Planter

It's not fancy, but Al Rutkoski's 2-row corn planter gets the job done. He and his son Brett fashioned the ground drive planter from salvaged parts and some work in the shop.

"We had a 2-acre hay field we wanted to plant to corn for deer," says Rutkoski. "We don't have a planter and couldn't really justify buying one, so we decided to make one with stuff we had laying around. We ended up with a 2-row planter with 28-in. row spacing that drops a seed every 6 in."

Their first design used wheel-driven disk plates, but it required a 90 degree gearbox, chains and sprockets. Rutkoski says it was just too complicated, and they couldn't get it to work right.

"We decided to go with a drum-style planter using 3-in. pvc pipe and a wood drum," he says. "We turned a piece of ash on the lathe to make the drum."

Each planting unit consists of a wood drum and 3 pieces of pvc pipe with a wooden seed chamber and a seed hopper made from gallon plastic jugs. The drum sits inside the 3 sections of pvc pipe. The left and right sections are stationary and act like bearings. The center section is attached to the drum and turns with it.

"We drilled holes sized for a kernel of corn into the center pvc section," says Rutkoski. "We had to experiment some, but we have 11 holes about an inch apart."

The wooden seed chamber fits over the center section. A scrub brush trimmed to match the width of the center section is mounted to the side of the chamber. As the

center section turns, seed falls into the holes. The brush holds back additional seed as a hole rotates out of the chamber and releases its seed. The seed falls into a funnel made from a pop bottle and then into a steel pipe with row openers mounted to either side of its lower end.

"The row openers are old skill saw blades," says Rutkoski. "I put them in my lathe and ground the teeth flat."

Both wood drums are center drilled to accept a 1/2-in. threaded rod axle with a sprocket at one end. The seed chamber and the "bearing" pvc sections are mounted to a 2 by 6, which is mounted to the 3-pt. hitch planter framework of angle iron and steel tubing. The 3-pt. section was salvaged from an old Bush Hog mower.

A front axle with rubber tires retains just enough ground contact to turn a sprocket attached to one wheel. It drives the sprocket on the seeding unit's threaded rod axle. An adjustable wooden block serves as an idler wheel for the drive chain.

The closing wheels are the wheel rims on a shortened axle from an old trailer house. Rutkoski wrapped the open center of the rims in flat link chain to fill in the space.

"I can adjust the top link on the 3-pt. hitch to increase down pressure," he says. "I also have an adjustable arm on the seeding units to adjust seed depth."

Rutkoski said they don't need electric seed monitors on the home-built planter. When seed drops into the plastic funnels, it makes a little noise," says Rutkoski.



Rubber tire on planter's front axle drives a sprocket on a threaded rod axle on seeding unit (above). An adjustable wooden block serves as an idler wheel for the drive chain.



Contact: FARM SHOW Followup, Al Rutkoski, 3441 Lamton Rd., Decker, Mich. 48426 (ph 989 325-1293; alsamachineshop1@hotmail.com).

Power folding kit lets operator use a handheld remote from inside the cab to lower combine's grain tank fountain auger down into tank.



Power Kits Move Combine Tank Auger And Steps

Getting a combine ready for road travel is a lot safer and easier with 2 add-on inventions from PWR EZ Systems, says company founder and inventor Jeff Bohn. One device swings the ladder from field position to the road travel position. The other lowers the grain tank fountain auger from operating position down into the tank. Both devices are patented.

"Pushing a button on a hand-held remote swings the ladder in or out, which eliminates a big safety issue," Bohn says. "The operator doesn't have to stand outside the cab on a small ledge, 8 ft. off the ground, push down on a metal bracket and then swing the ladder awkwardly to the side. Doing that a person can lose their balance and slip and it's a long way to the ground."

The Power Swing ladder uses a small cylinder activated by an electric motor to move the ladder in or out. The device fits all Deere STS and S series combines built since 2000, is easy to install, and sells for \$995 plus shipping.

Bohn also invented a power folding kit

for the in-tank fountain auger. Designed originally for Deere STS combines, it allows the operator to lower or raise the auger from inside the cab from a hand-held remote. He's working on a kit for CIH 10, 20 and 30 Series combines.

"With this kit the operator doesn't have to crawl up the back of the combine, over the engine and into the tank, which can be really dangerous if there's any moisture on those ladders. Everything is controlled from inside the cab," says Bohn.

Bohn's design efficiently mates the fountain auger extension to the base auger. Says Bohn, "We replaced the top auger bearing with a hex ID bearing, a spacer and a hex stub shaft so it easily meshes with the lower auger shaft. The kit takes about 3 to 4 hrs. to install, and that time will make your machine a lot safer to operate." The auger kit costs \$1,499 plus freight.

Contact: FARM SHOW Followup, PWR EZ Systems, 9006 Rogers Road, Castalia, Ohio 44824 (ph 419 357-7458; www.pwrezsystems.com).



LaVern Peterson and relatives transformed a 300-gal. sprayer into this portable watering tank. When pipe is let down by cable attached to hydraulic cylinder, water gravity-flows out.

Nifty Way To Water Trees

Like many FARM SHOW readers, LaVern Peterson likes to make old equipment useful for new purposes. So when he needed to water newly planted blue spruce trees, he and his brother, and his brother's two sons transformed a 300-gal. sprayer into a portable watering tank.

They removed all the spraying equipment and connected a flexible hose to the tank's drain and ran it out through a hinged piece of 1 1/2-in. galvanized-pipe. Peterson purchased a 10-in. long hydraulic cylinder that runs off the tractor's hydraulics. It is mounted vertically with a cable attached to the end of the piston that runs up over a pulley to the hinged pipe.

"I stop at every tree and let the pipe down to water; it's gravity flow. It doesn't take long to get out 10 gal. It shuts off when you raise it up," Peterson explains.

"We can water about 30 trees at a time. A 3-in. trash pump in a nearby lake is used to refill the tank. It only takes a couple minutes," he adds.

Peterson pulls the waterer with a small Deere utility tractor. "It's a simple outfit, but it works so well," he says. Despite dry summers his trees are doing well, and he plans to make another one for a relative.

Contact: FARM SHOW Followup, LaVern Peterson, 312 27th St. N.W., Watertown, S. Dak. 57201 (ph 605 886-3247).

Don't Miss The Next Issue Of FARM SHOW

Every day our editors are uncovering exciting new products and farmer-built inventions that promise to save you time and money. Don't miss out! You can tell when your FARM SHOW subscription expires by checking your address label on the front cover. It gives you the date of your final issue (example: 12/1/2017). You can use the order envelope enclosed with this issue, or the order coupon on page 40, to send in your renewal. Or call us toll-free at 1-800-834-9665.