



Robert Davis applies fertilizer, plants nine 20-in. rows, and packs the soil with this one-pass planting system that extends a total of 80 ft. behind his tractor.

Home-Built “Coulter Cart”

When Robert Davis goes to the field this spring, he’ll be using a one-pass planting system that extends a total of 80 ft. behind his tractor.

He applies fertilizer, plants nine 20-in. rows, and packs the soil - all in one pass.

“I built most of the equipment myself so it’s a low-cost system that I can use to plant all my corn and beans,” says Davis.

The system consists of a homemade coulter cart equipped with Rawson zone till coulters; a 3-pt. Deere 7340 planter hooked up to the cart; and a 20-ft. wide packer made from 20-in. dia., 1/4-in. thick well casing. The coulter cart supports a pair of tanks - a stainless steel tank holding 600 gal. of liquid nitrogen, and a poly tank that holds 200 gal. of liquid fertilizer.

To make the cart, Davis bought a used Deere 7000 pull-type, fold-up planter equipped with lift assist wheels. He removed the center 6-row section of the 12-row toolbar and then welded the outside sections back together, adding steel box beam for reinforcement. He used box tubing off an old Deere plow to make the cart’s axle and added dual truck tires. He mounted used Rawson zone till coulters onto the cart, two per row. An electric squeeze pump is used to deliver liquid nitrogen and a ground-driven pump distributes the liquid fertilizer.

He already had the Deere 7340 planter, which is equipped with nine 20-in. row units and two 34-in. skip rows. He used part of an old truck frame to lengthen the lower lift hitch points on front of the planter. These “extension arms” allow the planter to flex from side to side on rolling ground, independent of the coulter cart. The planter’s lift assist wheels raise both the cart and planter at the same time.

He built a gooseneck hitch onto the packer and added a drawbar hookup for it on back



Coulter cart in front supports a pair of liquid fertilizer tanks.

of the planter.

“It does a nice job and works well on our rolling ground,” says Davis. “The packer is heavy enough to just seal the top inch or two of soil. It really did a nice job sealing the ground up last spring when we had very dry planting conditions. The packer’s hitch rotates on a drawbar pin, so I can still turn as short as I could with a conventional planter.

“A comparable Unverferth coulter cart sells for about \$31,000, and that doesn’t include the planter or packer. I spent just \$3,500. What’s more, I like my coulter cart better because the coulters are only 3 ft. ahead of the row units, not 10 ft. As a result, row units always stay in the tilled zones even when planting around corners and on sidehills. The original no-till coulters are still on the planter so there are a total of three coulters per row unit. Because the two sets of coulters are separate, there’s plenty of room for rocks to flow through.”

According to Davis, the entire rig weighs about 26,000 lbs. when the tanks are full so it takes a lot of power. He uses his Deere 8430 articulated tractor to pull it. “Even the 8430 tractor has trouble pulling this system in wet ground,” notes Davis.

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Trash Wheel Depth Controls

Trash-clearing wheels for planters have been around for more than a decade now. Most no-tillers swear by them but Bob Sampson, Petersburg, Ill., says he had a problem with them running too deep.

He solved the problem by mounting the trash-clearing wheels on an independent frame fitted with its own gauge wheel. The frame mounts ahead of the planter toolbar.

The adjustable gauge wheel lets him set his Yetter trash wheels so they just barely skim the surface, knocking trash to the side without digging too deep into the surface.

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Trash-clearing wheels mount on independent frame fitted with its own gauge wheel.



Semi-truck trailer axles fitted with dual wheels are used to build the heavy-duty caddy.

Machine Shop’s “Tool Caddy” Built To Last

When a local farmer asked Andy Wille, Wille Welding, Garnavillo, Iowa, if he would build him a really heavy duty tool caddy, Wille was happy to help.

“He has a Caterpillar Challenger with no 3-point, and he wanted to pull a mounted DMI ripper with it,” Wille says. “He’d tried a couple of commercial-built caddies. He tore one up and could tell the other one wasn’t going to last long, so he wanted me to make him one that would.”

Wille’s first caddy worked so well he got orders for several more from other farmers in his area. The caddies are being used for drills, planters, anhydrous bars and subsoilers.

Wille builds his caddy around semi-truck trailer axles which he gets from a local salvage yard and then rebuilds. “I remove the brakes and put in new bearings if they’re needed. The hubs on these are designed to run in oil, but I drain out the oil and pack them with grease, since they won’t be running at highway speeds,” he says. He leaves the dual wheels in place and is using the semi-truck tires that come on the axle.

He makes the axle beam for the caddy from 1/2-in. thick, 6 by 10-in. steel tubing. He uses 4 by 8-in. by 1/2-in. steel tubing for the main frame and the 3-pt. hitch arms are made from 4 by 6 by 1/2-in. tubing.

He purchases hydraulic components for the caddy from Force America, Ft. Dodge, Iowa. “It’s a rephasing hydraulic system, with a 4-



“Wille Built” caddy can be used to pull drills, planters, anhydrous toolbars, and subsoilers.

in. bore, 10-in. stroke master cylinder and a slave cylinder with a 3 3/4-in. bore and 10-in. stroke,” he says. The caddy requires only one hydraulic outlet.

He says the caddy should easily lift a 30,000-lb. load. “On the Challenger, it pops a 7-shank ripper out of the ground in seconds,” he says. “I charge the hydraulics system in my shop with my 955 John Deere. That 33 hp tractor has enough hydraulic capacity to operate it, so most larger tractors will have no problems with it.” Wille sells the caddy for \$7,000, plus delivery. It’s designed to fit any Cat. III implement, but Wille says he can make caddies for any size hitch.

Contact: FARM SHOW Followup, Andy Wille, Wille Welding, 25569 Hwy. 52, Garnavillo, Iowa 52049 (ph 563 964-9151).

Slick Way To Defeat Squirrels

Rex Gogerty, Hubbard, Iowa, came up with a nifty way to keep squirrels away from bird feed. He simply slips a length of PVC pipe over the pole supporting his feeder. The pesky rodents can’t get their claws into it and the plastic pipe looks much better than tin guards and lampshade-shaped guards available in stores.

Contact: FARM SHOW Followup, Rex Gogerty, Rt. 2, Box 60, Hubbard, Iowa 50122 (ph 515 487-7617).

To keep squirrels out of his bird feeder, Rex Gogerty slips a length of plastic pipe over the pole supporting the feeder.

