



Pat Prom says kids like to pretend they're operating his half-size antique tractors. He set up this scene to show off his Deere 830 and McCormick-Deering W-9.

"THEY LOOK AND SOUND JUST LIKE THE REAL THING"

## Kids Love These Half-Size Tractors

"My half-scale Deere Spoker D and McCormick-Deering W-9 antique tractors look and sound just like the real thing and are a big hit at shows and parades," says Pat Prom, Eden Prairie, Minn.

Prom previously built three different half-scale Deere models - including an 830 Deere - that were featured in FARM SHOW (Vol. 22, No. 3).

The steel-wheeled Spoker D is powered by a 6 hp Kohler Command gas engine connected to a Wheelhorse transmission that faces backward and is belt and chain-driven. The tractor has 23-in. high rear lugged wheels and 14-in. high front wheels. The lugs, rear wheels, and wheel spokes were all hand made. There are 48 lugs and 24 spokes on each rear wheel. Prom cut the lugs out by hand and bent and welded them together. He punched a square hole into each lug and also punched 48 square holes into each wheel rim, then bolted the lugs onto the rim. The wheel spokes are made from strap iron and are hand riveted to the hub and welded to the rim. Prom couldn't find anyone to roll the rear wheel rim so he hand rolled it himself. The axles are made from lengths of 3/4-in. steel rod.

He used 1/2-in. dia. steel pipe to make the steering wheel. He bent it into a circle, then ground off the back side to leave it "hollow" and welded on the spokes. The radiator is hand made. There's no muffler - exhaust simply comes out one side of the tractor. The seat is off an exercise bike.

"I made everything as detailed as possible," says Prom. "Deere made Spoker D's for 3 1/2 years beginning in 1923. A total of fifty 1923 Spoker D's were built, and 12 are still registered with the Deere Two Cylinder Club. That's pretty impressive. The 1923 model was different from the others in that it had a 26-in. dia. spoked flywheel instead of 24-in. and had a strap iron front axle instead of cast iron. Each side of the radiator has four square holes and there are a total of 30 slots in the steering wheel and its spokes."

The McCormick-Deering W-9 is equipped with a Datsun 1200 cc engine; International Cub Cadet transmission and rear end, with a Opel Cadet pressure plate used in the transmission drive; Chevy Vega radiator, turned crosswise and cut down; and Ford Pinto clutch and disc and transmission shaft. He



Prom's half-scale, steel-wheeled Deere Spoker D is powered by a 6 hp Kohler gas engine connected to a Wheelhorse transmission.

hand made the frame, hood, grille, manifold, belly pan, bell housing, and fenders. The steering wheel was hand made from round steel tubing. The seat is off an exercise bike and is spring-loaded like the one on the real tractor. Prom bought the muffler, which was originally designed for an Allis Chalmers B tractor, at Fleet Farm. The gas tank is off a Farmall B tractor. He shortened the tank by 6 in., narrowed it by 4 in., and cut 3 in. off the height, then welded all the pieces back together and used fiberglass to seal it.

The 8-spoked rear wheels are 15 1/2 in. high and 12 in. wide and are off an old pickup. The original rims were only 8 in. wide. Prom cut them and welded in new material to widen them by 4 in. The 32-in. high tires are off a Ditch Witch. The 10-in. high front wheels were hand made and are fitted with commercial tires.

"The W-9 was made from 1939 to 1954 and was one of IH's biggest tractors," says Prom. "It was powered by a big 4-cylinder gas engine. The manifold on the Datsun engine that I used was too big so I had to hand make the intake and exhaust manifolds. I placed the battery inside a stainless steel box to prevent corrosion and mounted it outside the frame, just like on the real tractor. I hand made the fenders by cutting the edges off trailer fenders and welding them to flat metal."

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VanderLinden powered a Parker 710 grain cart with a 407 cu. in. diesel engine and hydrostatic drive out of a mid 1970's IH 915 combine. He also equipped the self-propelled cart with a combine cab.

"KEEPS UP WITH FOUR COMBINES"

## Self-Propelled Grain Cart Boasts 23 MPH Top Speed

"I used it this fall to help an area farmer haul soybeans and I was able to keep up with four combines so they never had to stop to unload," says Bob VanderLinden who built a nifty self-propelled grain cart out of a commercial grain cart and various combine parts.

The Redwood Falls, Minn., farmer started with a Parker Industries 710 grain cart box he bought new last December. It was purchased without rear axle and wheels, pto shaft and bin ladder.

He decided to power the cart with a 407 cu. in. diesel engine and the hydrostatic drive out of a mid 1970's IH 915 combine. He also fitted the rig with a combine cab.

The engine and cab mount above a front steering axle off a junked IH 1480 combine. He used the final drives and axle off the 915 combine. He had to cut the frame in half and lengthen it to fit under the grain cart. He purchased two 33-in. driveshafts to extend the final drives out to the ends of the axle.

"The rear 30.5 by 32-in. tires are taller than what were on the 915 combine," VanderLinden says. "This gives me a faster ground speed - 23 mph top speed unloaded -

and better flotation in the field."

He converted the 17-in. dia. pto-driven auger on the grain cart to hydraulic drive with a kit from Parker. He also installed a flow control valve in the cab so he can vary auger speed from 0 to 300 rpm's.

"Figuring out how to best run the unloading auger was the hardest part of the project," he says. "I was going to belt drive the auger off the combine's separator clutch, but it turned the wrong way. Driving the auger hydraulically works well. I can unload an entire 700 bushel load in a few minutes with the auger running full bore."

After keeping up with four combines harvesting 50 bushel per acre soybeans this fall, VanderLinden figures he'd be able to keep with two combines harvesting 180 bushel corn.

The project took three months to complete. He painted machine Parker green.

Out-of-pocket expense was about \$2,000, not counting the price of the cart.

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The rear 30.5 by 32-in. tires are taller than what they were on the 915 combine, which gives VanderLinden a faster ground speed and better flotation in the field.