## **Pull-Type Sprayer Rides On Combine Axle**

When Max McNeil began looking for a bigger pull-type sprayer to replace his old sprayer, he decided he couldn't justify the price of a new commercial rig.

"I built my own last spring for a lot less than the \$28,000 they were asking for some of the rigs I looked at," says the Preston, Iowa, farmer. "Thanks to the 1,300-gal. tank, I can cover 65 acres before refilling now, compared with 30 acres before with a 750-gal. tank. I used it on 800 acres of corn and soybeans last year with no problems."

Key components of the sprayer came off a big flotation spray rig a nearby co-op was parting out. He used the floater's 1,300-gal. stainless steel tank and its 50-ft. hydraulic fold booms.

He beefed up each boom with 1 1/4-in. sq. tubing and widened them to 60 ft. by extending the middle section 2 1/2 ft. and each end 3 ft. Booms mount on front of the sprayer for unobstructed visibility, and they

allow him to cover 24 (30-in.) rows each trip across the field.

Booms raise and lower 18 in. with a hydraulic header lift cylinder off an old combine. T-Jet nozzles run 2 ft. off the ground in the lowest position, McNeil notes.

A gooseneck-type hitch permits the booms to raise and lower without interference.

Ends of the booms are equipped with wheels off an old lawn mower to keep them from digging in over rough terrain.

The sprayer rides on an axle taken off an old Massey 750 combine. McNeil widened the axle so the center of the tires are 120 in. apart to straddle four rows. McNeil fitted the rims, which he got off an old IH tractor, with 13.6 by 38-in. 12-ply tires.

"The smaller tires on my old sprayer always bounced too much across draws," he says.

A Hypro pump mounted on his tractor's pto powers the sprayer. It plumbs to the



sprayer with a 2-in. dia. suction line from the bottom of the tank to the pump and a 11/2-in. dia. return line.

McNeil made a 70-gal. clean water tank out of a liquid starter tank off an old planter and mounted it on front of the sprayer. He also mounted hinged steps on back that flip down for filling and up out of the way when not in use. He pulls the sprayer with a Deere 4640 and says it worked great last year.

"I'm real pleased," he says.

Out-of-pocket expense was about \$5,000, including \$1,400 for the stainless steel tank and \$200 for the booms.

Contact: FARM SHOW Followup, Max McNeil, 1019 370th Ave., Preston, Iowa 52069 (ph 319 682-7191).

## Old Deere Corn Planter Makes Nifty Double Rake Hitch

Old corn planters can be used to make nifty "double rake" hitches, allowing you to rake twice as fast, says Norris Patrick, White, S. Dak., who pulls two 8-ft. New Holland rakes together behind a stripped-down Deere 4-row corn planter frame.

Patrick already had the 1960's model 494 pull-type planter as well as the rakes. One of the rakes was equipped with a pair of dolly wheels on front. He used sq. steel tubing to lengthen its hitch by 7 ft. and hooked it up to a 4-ft. long drawbar that he clamped onto one side of the planter. He hooked the other rake up directly to the other side of the planter frame, building a separate hitch for it.

"I've used it for five years on 200 to 300 acres of hay and it works great," says

Patrick. "I had quit using the planter and was looking for a way to make use of it. My son Tony painted it as part of an FFA project. I mounted a hitch at the center of the planter and another hitch on back of the front rake so that I can pull both rakes in-line for transport. You can buy old planters like the one I used for only about \$50 at auctions.

"A bolt welded to the back of the drawbar allows the rear rake to swivel. By unbolting the drawbar and moving it sideways I can adjust the position of the rear rake so that it doesn't miss any hay coming off the front rake, depending on hay conditions."

Contact: FARM SHOW Followup, Norris Patrick, 20062 482nd Ave., White, S. Dak. 57276 (ph 605 629-6161).





## Hybrid "John Fox" Forage Harvester

FARM SHOW reader Martin VanDoorn of the Netherlands recently sent us a photo of this Deere 5400 forage harvester, rebuilt by Jannes Kamphuis of Den Ham, Netherlands, during the winter of 1995-'96.

"Mr. Kamphuis owns the largest collection of classic Fox harvesters in this country," VanDoorn explains. "He also had an old Deere 5400 chopper, but sold the original engine for a good price to a tractor pulling club.

"He liked the controls and cab of the 5400, so he scrapped all parts until only the frame and cab were left. He repowered the

5400 with the well-performing Detroit diesel out of a Fox 6650 and mounted the original Fox hood on the Deere frame. The original drive axle was replaced with an old DAF truck axle. The chopper unit was replaced with a Kemper Champion 3000 head and chopper. A new paint job was done in traditional Deere green and yellow.

"Mr. Kamphuis uses the machine every fall for corn harvest and is well-satisfied with his hybrid 'John Fox'".

Contact: FARM SHOW Followup, Martin VanDoorn, Ireneplein 3, 3212 LK Simonshaven. The Netherlands.

## Hydraulic Valves Converted To "Toggle Switch" Control

Marshall Litchfield wanted a more precise way to raise and lower pull-type implements than was possible with the hydraulic controls on his Deere 4840. So the Macomb, Ill., farmer converted the hydraulic valves to electronic controls that work more like valves on Deere's newer 8000 series tractors.

He used a 15 gpm Vickers two-way closed center electric valve. He purchased it for \$200 from the Walter Norris Co. Other similar valves are available, but he chose the Vickers because it was smaller than the rest. "It has to be pretty compact so the 3-pt. will clear it," he notes.

The valve installs behind the original hydraulic valve. It holds the lever in position to supply oil to the new valve.

Toggle switches inside the cab control the valve. Litchfield added a timer to the control box, which he can preset for a desired time. "For example, if it takes 30 seconds to completely raise our planter, we'll set the timer for 15 seconds when we're in the field so it raises it only halfway for turning around at the end of a row," he says. "This system takes a lot of the guesswork out of running hydraulics."

The electronic valve will work on any tractor with a closed center hydraulic system, he says.





Contact: FARM SHOW Followup, Marshall and Kendell Litchfield, 15340 N. 700th Rd., Macomb, Ill. 61455 (ph 309 254-3481).