

Home-built, self-propelled sprayer is equipped with "spacer wheels" for post emergence spraying in 30-in. corn and beans.

By C.F. Marley

## Wide Axle 4-WD Spray Rig Straddles Three 30-In. Rows

Roger and Bruce Elliott of Montrose, Ill., custom- built a self-propelled, 4-WD sprayer for a local co-op. At first the co-op used the rig primarily to do pre-plant work and to apply nitrogen to wheat.

When the co-op decided they wanted to use it for post emergence spraying in 30-in. corn and beans, they had the Elliotts make a set of offset "spacer wheels" that allows the rig to straddle three 30-in. rows. The wheels are equipped with 10-in. wide lugged tires. The wheel-spacer idea would work on any spray rig that needs some extra wheel width.

The Elliotts welded steel plates onto both ends of 12-in. wide steel drums and then

welded the drums to the hubs of each wheel. The plates inside each wheel are reinforced with steel "fins".

"It lets the operator use the sprayer for both pre and post emergent spraying without damaging the crop," says Roger. It's equipped with a 250-gal. tank and 45-ft. boom. The tires are 44 in. high. We also have 24-in. wide floatation tires for it. The rig doesn't weigh a lot in muddy places – it can even go through places where you can't walk. The tires barely leave a track on soft ground."

The rig is powered by a Cummins 4-cyl. turbocharged diesel engine with about 100 hp and has a 4-speed transmission. A transmission-driven pto is used to drive the sprayer pump. The frame is made from a pair of truck frame channel irons and mounts on a pair of 1-ton Dana 60 and 70 axles. Air bags mounted on top of suspension springs provide a soft ride. Heavy-duty steel was used to fabricate the cab, hood and fenders. The cab doors are off a Gleaner combine cab.

Sprayer is equipped with a 250-gal. tank and 45-ft. boom.

For more information, contact: FARM SHOW Followup, Roger and Bruce Elliott, 19478 N. 400 St., Montrose, Ill. 62445 (ph 217 924-4350) or Effingham Equity, Rt. 1, Box 7, Montrose, Ill. 62445 (ph 217 924-4181).



To make the offset "spacer wheels", the Elliotts welded steel plates onto both ends of 12-in. wide steel drums and then welded the drums to the hubs of each wheel.

## Loader Tractor Built From 4-WD Military Truck

Old military trucks can be converted into low-cost, heavy-duty loader tractors, says Steve Forseth, Fairfield, Mont., who converted a 1 1/2-ton 4-WD military truck for his cousin Bill Chalmers. Chalmers uses the rig to haul and stack round bales on his ranch.

"The truck was a piece of junk when I got it," says Forseth. "The engine was froze up and part of the frame was bent. I mounted a Deere tractor cab on it, and built a loader to mount on front. There's a tilt-up hood over the engine on back. "It may look a little different but it's built tough and does the job."

Forseth stripped the 1941 World War II military truck down to the frame and then cut out 4 ft. of the frame where it was bent, giving the rig a shorter turning radius. He turned the axles around so the rig runs backward and also switched the gears around. He replaced the original engine with a Chevy 292 6-cyl., in-line engine and used 16-ga. sheet metal to build a tilt-back hood and fender assembly over it. The cab is off a Deere 7520 4-WD tractor. Forseth used 3 by 8-in. rectangular steel tubing to build the loader arms, mounting them on a horizontal steel frame made from 8-in. sq. tubing. The loader is raised and lowered by a pair of new, 4-in. dia. military surplus cylinders.

"It's built much heavier than most commercial loader tractors and works fast," says Forseth. "Chalmers paid \$500 for the truck and spent a total of about \$13,000. You can't buy much of a tractor for that. A big problem with using conventional tractors to haul round bales is that the front spindles are often not built strong enough. On this rig, the bale's weight is over the truck's load-carrying axle, which is equipped with 7.50 by 20 dual wheels. The truck still has its original spring suspension, which also helps carry the load. The original transmission was too light so I replaced it with a heavy-duty GM 4speed transmission. The rig still has its original 2-speed transfer case so there's a total of eight gears. Old military trucks were geared low so the top speed now is only about 15 mph."

The rig's loader can stack bales two high with a pair of 4-ft spears. A short spike extending down from the end of the arm helps clamp the bale in place. "This design lets the operator pick the bale up from any side," says Forseth.

The loader is operated by a hydraulic pump on back that's direct-driven off the engine, providing live hydraulics. The tractor's hydraulic oil reservoir is inside the loader arms.

The cab is off Forseth's own tractor, which had a blown engine. It has bucket seats off a 1975 Pontiac Sunbird car, heating and air conditioning, power steering, and a tilt and telescoping steering wheel. The power steering unit is off a Massey 510 combine.

The rig's rear bumper is off an old Diamond T truck and the fuel tank is from a New Holland 907 swather.

Contact: FARM SHOW Followup, Steve Forseth, 1441 S. Second Rd. S.W., Fairfield, Montana 59436 (ph 406 467-2074; E-mail: kforseth@3rivers.net).



Forseth converted a 1 1/2-ton 4-WD military truck into this low-cost loader tractor. Loader is home-built while the cab is off a Deere 7520 4-WD tractor.



12 • FARM SHOW • web site: www.farmshow.com • e-mail: Editor@farmshow.com • phone 1-800-834-9665

Rig is powered by a Chevy 6-cyl. engine on back that's covered by a tilt-up hood.