



Alger started with the frame from a Ford Ranger pickup. He fitted it with thin steel wheels made by welding steel circles to wheel rims and running reinforcing spokes outward from the rims to the edges of each wheel.

## NARROW WHEELS DON'T KNOCK DOWN PLANTS OR COMPACT SOIL

# Steel-Wheeled Spray Rig Great For In-Crop Work

After years of working as a crop consultant and doing custom work, Bob Alger of Dayton, Virginia, decided he needed a new machine that would let him work in solid-seeded standing crops without doing damage and that would reduce compaction to a minimum.

"I work with a number of different farmers in a variety of crops and soils. The last thing most of these fields need is more heavy equipment with big tires to mash the air out of them. I also wanted to be able to apply plant food to alfalfa and drilled soybeans without crushing the plants," says Alger who, as a distributor for the Aer Way soil aerator, is sensitive to the problem of compaction.

"So I decided to build a self-propelled sprayer with narrow wheels that would be as light as possible yet carry enough of a load so I wouldn't have to nurse it too often. I also decided to keep it light by giving it just enough power to get the job done.

"I started with a 1983 Ford Ranger 4-WD pickup (Ford's mid-size model) fitted with power steering and power brakes. I replaced the pickup engine with a 20 hp. Onan gas engine and ran a direct drive cushioned coupler from the motor to a Sunstrand hydraulic pump and oil reservoir that mount where the radiator used to be. I removed the original transmission and mounted a hydraulic motor on both the front and rear drive axles, giving me true hydrostatic drive.

"The next problem was designing the

narrow wheels. At first I wanted to use wooden spoked buggy wheels but I was told that you can't power them. Then I thought about clamping a skinny steel wheel to a normal tractor wheel but that was too heavy.

"Finally, what I did was cut 48-in. circles out of 11-ga. sheet metal and welded it to the outside edges of truck wheel rims to the steel circles with steel spokes to the inside edge of each wheel. Two-inch thick commercially available hard rubber buggy tires were applied to the narrow wheels at a buggy shop. "Wheels are on 60-in. centers and I can spray at up to 5.5 mph. It has a 150-gal. spray tank with double agitation. An 8-hp. Honda motor powers a centrifugal spray pump which is also used to fill the spray tank. Spray booms are 390 in. wide, letting me side dress twelve 30-in. corn rows using drop nozzles. Nozzles are set up for both 20 and 30-in. rows. I also added a foam marker, acre counter, and other gadgets.

"In the last 2 years I have covered almost 2,000 acres on mostly small hilly fields doing up to 100 acres a day. It weighs about 4,300 lbs. loaded. Traction and balance are very good. On wet ground, wheels sink in 4 to 5 in. but still work fine. I haul it on a light trailer pulled from job to job behind a half-ton van."

Contact: FARM SHOW Followup, Bob Alger, Robin Roost Enterprises, Rt. 3, Box 18A, Dayton, Va. 22821 (ph 703 879-9395).



Powered by a lightweight 20-hp. Onan gas engine, all controls are within easy reach of operator. Hydraulic pump and reservoir mount under hood.



## Grain Wagon Truck Hauls Corn From Field To Bin

By C.F. Marley

It looks a little like a Brinks armored truck but to Clair and Warren Wilson, in Winchester, Ill., it's the key to efficient harvest-time grain hauling.

The two brothers built the unusual looking truck for shuttling corn from combine to bin site. The flotation tires and beefed-up suspension let it ride smoothly over the field while the truck transmission gives it highway speeds, allowing one man to keep up with an 8820 Deere combine at a distance of up to a mile from the bin site.

Capacity is 320 bu. yet the quick-dump truck will unload its cargo in less than 15 seconds. There are four hydraulically-opened slide gates - two under the center "V" and two behind the wheels - and they

can all be opened at once or individually.

The men built the grain hauler on the chassis of a 1979 Chevrolet 65 series, 2-WD truck. They built the grain box out of 1/8-in. thick sheet steel, designing it so frame members run right through the bottom of the box, keeping the center of gravity low for better handling and easy unloading. A pair of chains run across the top of the box to keep the sides from bowing out.

When harvest is over, the Wilsons pull off the grain box and switch to a lime spreading box to get another use out of the truck.

Contact: FARM SHOW Followup, Clair Wilson, Rt. 2, Winchester, Ill. 62694 (ph 217 742-3809).



### Order Form For New Subscribers

**Yes!** I want to be first to learn about latest new products. Please send me one full year's subscription (\$13.95 per year in the United States; \$16.95 per year in Canada - payable in Canadian dollars - and foreign countries). I understand I can cancel at any time and receive a full refund if not satisfied.

My check (\$ \_\_\_\_\_) is enclosed.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Make check payable to FARM SHOW. Clip and mail this coupon to: FARM SHOW, 20088 Kenwood Trail, P.O. Box 1029, Lakeville, Minn. 55044.