



Nuhn Industries removed the bed from this used 6-WD Army truck and added a fifth wheel hitch and trailer, then installed a 24-ft. long, 6,750-gal. liquid manure tank.



A 40-ft. long, 8-in. dia. self-loading boom mounts on driver's side. Hydraulic-controlled boom allows operator to use push button controls in cab to fill tank from a pit.

FIFTH WHEEL TRAILER, NEW-STYLE TIRES PROVIDE GREAT FLOTATION

Converted Military Truck Makes Great Manure Hauler

Old Army trucks make great liquid manure haulers, says Nuhn Industries, Ltd., Sebringville, Ontario, which is doing a booming business removing the beds from used 6-WD military trucks and using them to pull big fifth wheel liquid manure tanks. The tanks have up to 7,500 gal. of capacity.

The company recently sent FARM SHOW photos of a 6-WD Army truck, equipped with a Cummins 300 hp diesel engine and Mack 5-speed transmission, pulling a 24-ft. long, 6,750-gal. tank. The machine is being used by Sammerich Farms, a local custom spreading business. Owner Joost van der Heiden found the army surplus truck, then turned it over to Nuhn to add a fifth wheel hitch and trailer.

The rig rides on five axles and is equipped with a 40-ft. long, 8-in. dia. self-loading boom on the driver's side. The boom is controlled by hydraulic cylinders and swings back and forth against the side of the truck like a com-

bine unloading auger. It allows the operator to use push button controls in the cab to fill the tank from a pit in only 3 or 4 minutes. The rig's boom, vacuum pump, and manure-unloading mechanisms are all hydraulically driven off the truck engine.

The rig is equipped with "shallow lug" flotation tires made by an Israeli company - Alliance Tire Co. - that exert just 8 to 10 lbs. of ground pressure. The shallow lugs create a gentle driving action that allows farmers to spread manure onto hay crops without killing off tender alfalfa plants.

"Tractors are too slow for hauling manure and conventional truck-mounted liquid manure haulers don't have enough capacity. Our Army truck hauler gives you the best of both worlds," says Dennis Nuhn. "The trucks generally have low miles and are way overbuilt so they're very rugged. They're equipped with spring suspension, and we build leaf spring suspension into our trailers so they pull

much smoother than a tractor-pulled unit.

"The tank's weight is distributed equally on 8 wheels which results in excellent flotation. The driver can go 40 mph on the highway, then pull into a field and climb a 40 percent grade while carrying a full load of manure and spread it with minimal compaction. One advantage of the fifth wheel trailer design is that the tank is mounted 2 to 3 ft. lower than a conventional truck-mounted tank which means less vacuum pressure is required to load manure into the tank. That results in quicker loading and lower power requirements. The vacuum pump we use is equipped with a unique turbo filter that automatically keeps out dust as the tank is being unloaded.

"The tires on our manure hauler have a bigger footprint than conventional flotation tires and cause less compaction than standard lug-type tires. They also wear better on the highway. Conventional tires squeeze hardest

on the outside edges of the tires which compacts the soil. These new tires leave a consistent footprint across the width of the tire which reduces compaction. Also, they don't grab as hard and 'peel' grass off.

"The driver generally engages only the truck's rear two axles but can engage the front axle if necessary. It's nice to know the extra pull is there if you get bogged down.

"The truck was originally equipped with a cloth covered cab. We wanted more visibility and room so we cut it off and built a new cab with more glass. If we could do it over we'd make the cab taller and with bigger windows for even better visibility."

The rig sells for \$120,000 to \$150,000 (Canadian) depending on options.

Contact: FARM SHOW Followup, Nuhn Industries, Ltd., RR 1, Sebringville, Ontario, Canada N0K 1X0 (ph 519 393-6284).



Flow meter and pinch valve precisely vary rates on-the-go. System installs between the discharge and injectors on liquid manure tanks.

First-Of-Its-Kind System Allows You To Vary Manure Application On-The-Go

"It's a first in the industry," says Balzer Inc. about its variable rate technology (VRT) system for liquid manure tank wagons.

Designed to be controlled from the tractor cab by computer and GPS satellite equipment, it consists of a German-built flow meter and pinch valve that precisely vary rates on-the-go. The system installs between the discharge and injectors on tank wagons and handles application rates of from 0 to 10,000 gal. per acre.

System is suitable for fields that are already plotted on computerized field maps to those that are only grid sampled. It's compatible with most major GPS equipment.

"The system helps to maximize nutrient value of the manure," says Balzer's Randy McMahon. "For example, if a 4,000-gal. tank wagon contains \$65 in fertilizer value, you're using that \$65 at exactly the right levels and only where it's needed."

The system is designed for use with Balzer tank wagons but can be adapted to most other makes, he says.

Sells for \$12,000 to \$15,000 excluding computer hardware, software, etc.

Contact: FARM SHOW Followup, Balzer Manufacturing, Cnty. Rd. 27, Box 458, Mountain Lake, Minn. 56159 (ph 800 795-8551 or 507 427-3133).



Hydraulic-driven impeller installs in wagon's vacuum suction line to help speed up fill time. Unit is designed for 4,000-gal. and larger wagons.

"Turbocharger" Fills Vacuum Wagons Fast

You can cut fill time in half or more with this new "turbocharger" for vacuum filled manure wagons.

L.M.T.'s "Fast Filler" consists of a hydraulic-driven impeller that installs in the wagon's vacuum suction line to help speed up fill time. Depending on model of tank, it either bolts or welds on and is powered off the tractor's hydraulic system.

Lee Pearson, manufacturer, says, "If it now takes you 10 or 12 minutes to load your wagon, the Fast Filler cuts that down to 5 or 6 minutes. In a 10 hour day, hauling three loads per hour, you can save 2 1/2 hours a

day. Figuring \$25 per hour for the cost of the tractor, driver and spreader, savings add up to \$65 per day. To look at it another way, you can haul 5 to 7 more loads per day."

The unit is designed for 4,000-gal. and larger wagons. It can be installed in three to six hours on most brands of vacuum spreaders and requires a 12 gpm pump at 1,800 psi's.

Sells for \$1,300 if you install it yourself. Contact: FARM SHOW Followup, L.M.T., Rte. 34 E., P.O. Box 142, Galva, Ill. 61434 (ph 800 545-0174 or 309 932-3311; fax 3155).