

Liquid Manure Tank Built From Used Fuel Tank

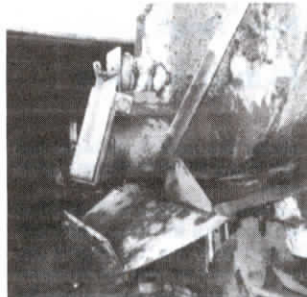
Kent Keller, Kinderhook, N.Y., who farms with his father and two brothers, wanted a way to move manure faster from his lagoon to fields 2 1/2 miles away. He didn't want to spend the money for a new fiberglass liquid manure tank so he decided to use an old 24-ft. long, 4,000-gal. fuel tank. It slides into a tandem axle dump trailer that mounts on his International single-axle semi-tractor.

They welded a 12-in. dia., 24-in. long steel outlet pipe to the back end of the tank and fitted it with an air brake valve (off a junked-out truck) to open and close a leak-proof flapper valve. The rubber-lined valve hinges at the top of the pipe. The air brake valve applies 2,700 psi of pressure against the spring-loaded door to hold it closed. When air is applied, the door opens 6 or 7 in. and manure flows out by gravity, striking a steel splash pan and hitting a baffle at the bottom of the pan which spreads out 8 to 10 ft. wide.

Inside the tank, Keller made a 30 by 22-in. baffle out of 3/8-in. steel plate and welded it to the top of the tank. The baffle extends about 14 in. down inside the tank and has a series of 2-in. holes in it. It keeps manure from sloshing out the top of the tank. The tank is chained to the sides of the trailer and also pinned at the back into hooks for the truck's tailgate.

"I've used it for four years with no problems," says Keller. "I got the tank for nothing from a neighbor and used scrap materials to convert it for hauling manure. My only investment was about \$45 for the air brake valve and air lines and about 100 hours of time. A commercial fiberglass tank of comparable capacity sells for about \$7,000 so I saved a lot of money. I already had the trailer which I still use to haul corn silage.

"The truck is powered by a 300 hp Cummins diesel engine. I can make better time with it than I can with a tractor and spreader, even when spreading manure close to the farm, because the tank unloads in only 4 to 5 minutes. I also converted a 5,000-gal. fuel tank for my 10-wheeler tan-



dem axle truck. However, the tank is too big and top heavy for the truck. I use the tandem axle truck when I'm finishing a field because it's easier to back up and doesn't get stuck as easy in deep manure.

"I use a Houle lagoon pump to load the tank. The trailer's high sides make it difficult to see the fill pipe so I use white line on the ground as a guide when backing up. I use one line to guide the trailer lengthwise and another line perpendicular to it that tells me when to stop.

"I use a toggle switch in the cab to operate a 12-volt air solenoid valve that activates the air brake valve. I never have to stop. A light comes on so I know when the valve is open."

Contact: FARM SHOW Followup, Kent Keller, Rt. 1, Box 446, Kinderhook, N.Y. 12106 (ph 518 758-7824).

Built-From-Scratch Scraper

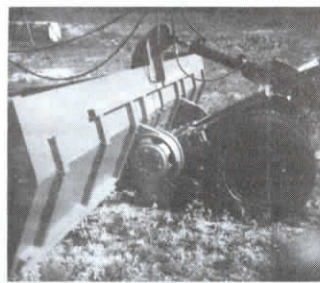
"Once I built it, I found lots of uses for it," says E. L. Short, Tahoka, Texas, about the dirt scraper he built to pull behind his 895 Versatile tractor.

"I built it to move large amounts of dirt a long distance - up to 400 ft. or so. We've used it to grade fire guards, fill wash-outs, repair terraces and we even constructed a 200-ft. long 'tank' with 16-ft. high dirt sides. It took only about 50 hrs.

"I had an old 2-ton truck and cut the frame off 3 ft. in front of the rear tires. I welded the front axle to the frame, leaving the wheels on. Then we welded the wheels to the back of the scraper blade so they act as a pivot point. The back end of the truck frame was reinforced to support a power lift cylinder (4 by 22 in.). The top of the cylinder is pinned to an old Big Ox chisel shank. The shank is welded and braced to the scraper blade.

"The scraper blade is 18 ft. long and 1/2-in. thick. We cut a sheet of plate steel and then welded it at a slight angle. We used the 2 by 2-in. hollow bars off old cultivator gangs as braces on the back of the blade for reinforcement. We bolted old road grader blades to the bottom edge of the scraper.

"We made the ends of the scraper out of



1 1/2-in. plate and use the truck frame to do most of the pulling on the scraper. We used metal H-bars from a wrecked-out plow for bracing.

"The scraper blade lifts 8 in. and slowly releases dirt, which makes it ideal for terracing, building above-ground lagoons, etc. Once we used it to clear out a fire guard ahead of a fire and it saved a lot of pasture.

"We built it for only about \$1,000."

Contact: FARM SHOW Followup, E.L. Short, P.O. Box 1480, Tahoka, Tex. 79733 (ph 806 998-4257 or 806 924-6670).

Handy Lift For Smaller Deere Tractor

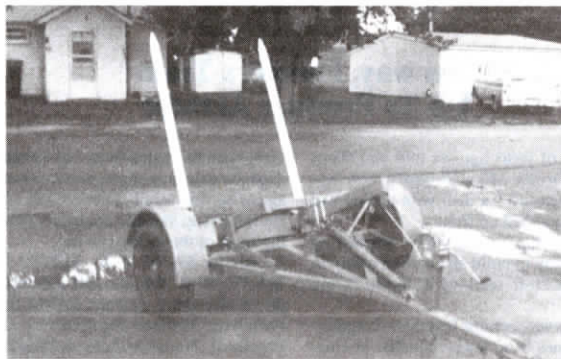
If you've got a mid-size chore or garden tractor, you'll like this mini-lift built by Don Moss, Tallula, Ill.

To make a lift to fit his Deere 870, Moss first built a Cat I quick coupler hitch. Then he took a portable hand-cranked hydraulic lift jack and mounted it vertically on the hitch to use as the lift mechanism for the lift arm, which he made out of 3 by 4-in. tube steel. He replaced the hand-cranked cylinder on the jack with a 2-in. dia., 16-in. long cylinder operated by tractor hydraulics.

Moss says the lift is ideal for intermediate lifting chores, like taking the straw chopper off his Deere combine.



Contact: FARM SHOW Followup, Don Moss, Rt. 1, Box 27, Tallula, Ill. 62688.



Bale Fork Mounts On Pickup Or Tractor

"After seeing a write-up in one of your recent issues about a pull-type bale trailer made by Ed Hammond, Pittsburg, Texas, (Vol. 18, No.5) I decided to send you this photo of my bale fork. It can be pulled behind a pickup or you can mount it on a tractor 3-pt.," says Wayne Killinger, Wolbach, Neb. "I've been making them for eight years. Farmers who've used them say they're the best single bale mover they've ever seen."

The unit is equipped with a pair of bale forks attached to a lift arm and has a 2-in. dia. ball hitch. The standard model comes with a hand-cranked winch that's used to pull the bale onto the trailer. The hydraulic

model uses a hydraulic cylinder attached to the lift arm (you pull a pin out of a pulley on the lift arm to remove the cable). The lift arm can also be operated by the vehicle's 12-volt system.

By removing two bolts you can remove the support frame for the forks and 3-pt. mount them on a tractor.

The hand winch model sells for \$775, the 12-volt model for \$1,075, and the hydraulic model for \$1,050 with one 8-ft. hose and one 6-ft. hose and mounting bracket.

Contact: FARM SHOW Followup, Wayne Killinger Welding, 551 24th Ave., Wolbach, Neb. 68882 (ph 308 246-5530).

"Load Stabilizer" Effective Safety Device

"It's simple but it works like a charm," says Hughesville, Mo., farmer Mike Cornine about the "Load Stabilizer" he made for his Deere 4450 tractor.

The invention keeps drawbars from swaying, preventing broken or bent drawbars. The device could be tailored to fit any tractor, Cornine notes.

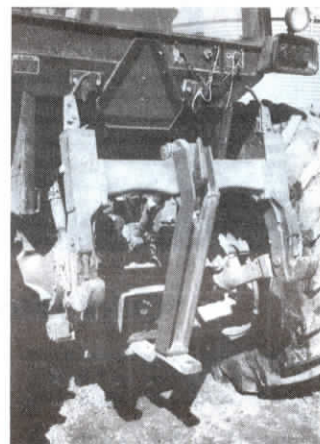
"There's nothing like it on the market," he says, "and I'd like to find a manufacturer interested in producing it."

Cornine got the idea for the "Load Stabilizer" a few years ago when a tractor drawbar snapped while his wife was hauling grain in a 500-bu. cart. Luckily, no one was hurt, but Cornine wasn't taking any more chances.

So he made a unit from a length of H-beam that attaches to the tractor's quick coupler and drawbar preventing vertical and horizontal sway by evenly distributing weight. Plus, when the tractor's load and depth controls are activated, the "Load Stabilizer" greatly improves traction, Cornine adds.

The "Load Stabilizer" for Cornine's Deere tractor is a 35 1/4-in. length of H-beam that's bent at a 45 degree angle 7 1/4 in. from the top end. There's an 8-in. by 1 3/4-in. hole in the bend.

The hole fits over the hook on the



tractor's quick coupler. The bottom of the bar is cut off at a 15 degree angle. A 3 1/2-in. by 2 1/2-in. steel plate, 5/8-in. thick, welds to it. Holes 3/4-in. in dia. are bored in the plate to correspond with holes in the drawbar so the device can be bolted on.

Cornine has used the "Load Stabilizer" on his tractor for four years without bending or breaking another drawbar.

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