Remote Control Manure Pumping

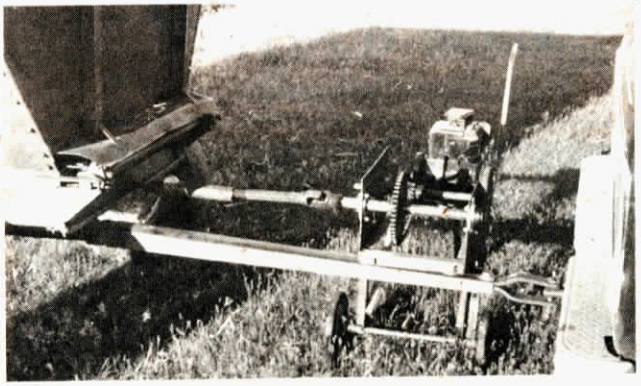
A model airplane remote control device lets Dave and Melvin Danzinger, Alma, Wis., activate the throttle on their Massey-Ferguson 1130 tractor so they can load liquid manure out of their dairy barn lagoon at the flip of a switch from the seat of a second tractor pulling a spreader.

"We leave the tractor on all day long," says Melvin. "It pumps only when the throttle is wide open. Previously, we had to jump on and off tractors to open the throttle. We haul 30 to 50 loads of liquid manure each day, so by the end of the day, you'd get tired. Also, when the steps get wet, they're slippery and dangerous. With the remote control device we simply back the manure spreader under the pump, fill it, turn off the pump and go, without ever getting out of the cab. "

The Danzingers bought the remote control device as well as the antenna, receiver, and DC linear actuator, at a local hobby and electronics store. A local electrician helped with the wiring of the controls. They mounted the antenna and receiver in a bracket welded to the tractor's hood just ahead of the steering wheel. The antenna, receiving signals from as far away as 300 ft., opens and shuts a switch on the actuator. The actuator is bolted to the throttle, which, when activated, changes the forward-reverse operation of the tractor motor.

"Commercial remote control devices can cost from $500 to $1,000. We built ours for less than $300," notes Melvin.

Contact: FARM SHOW Followup, D.S. Farms, Rt. 1, Box 147, Alma, Wisc. 54610 (ph 608 685-3628).



"Portable Pto Power Unit"

A homebuilt "portable pto power unit" lets Dale Van Westen, Parker, S. Dak., quickly unload ear corn from rear-unload wagons towed behind his pickup.

Van Westen picks all of his corn in the ear, using silage wagons. For fields close to home, he pulls the wagons with a tractor. But for more distant fields, he uses a pickup.

"The portable power unit saves me a lot of unloading time," says Van Westen. "Before, I had to unhook the pickup, back up the tractor and connect the pto shaft to the wagon, unload, then hook the wagon back up to the pickup. It was a lot of hassle. Now, I simply wheel the power unit into position between the wagon and pickup and hook up the pto shaft. After the wagon is unloaded, I remove the power unit and drive the pickup and empty wagon back to the field for another load."

The portable power unit, made of angle iron, stands on two 10-in. riding lawn mower wheels and a "leg" opposite them. Slots cut into the frame allow Van Westen to raise or lower the wheels.

A 5 hp Briggs & Stratton engine drives a large belt pulley which turns a jack shaft, equipped at one end with a small sprocket. A roller chain extends from this sprocket to a much larger one which drives the pto shaft. "The belt pulley and large drive sprocket reduce the 1,800 rpm engine to 300 rpm on the pto shaft," explains Van Westen.

The wagon's original telescoping pto shaft was too long to accommodate the power unit between wagon and pickup, so Van Westen removed it. He built the power unit so that its pto shaft is directly in line with the wagon's pto shaft.

The power unit's 36-in. pto shaft consists of two halves. Van Westen borrowed the first 18 in. section, which is 1 3/8 in. in dia. with a 540 rpm spline, from an Allis-Chalmers tractor. He borrowed the second section, which is 7/8 in. in dia., from a Deere sickle bar mower.

Contact: FARM SHOW Followup, Dale Van Westen, RR 2, Box 44, Parker, S. Dak. 57053 (ph 605 297-4541).

Replacement Tailgate For Ford Pickups

"If you drop one bale on the tailgate of a Ford pickup built from 1973 to 1979, the tailgate will be bent for life. A spot welded seam runs the full width of the tailgate right where the hinged straps that hold the tailgate up attach. With very little use, the outside 4 to 6 in. of the tailgate sags or bends completely down," says Pete Johnson, Ballantine, Mont., who builds a heavy-duty "replacement" tailgate.

"First I cut a piece of heavy 2-in. pipe the length of the tailgate. The pipe acts as the hinge for the tailgate so weight is not a factor. I weld the hinge sockets out of the old tailgate into each end of the pipe. Then I cut two 1 1/2-in. by 3/16 in. angle iron pieces for uprights and make a top piece from 1 1/2-in. sq. tubing. Four 2 by 1-in. channel iron pieces fit between the top and bottom pieces for strength.

"Next I cut a piece of 12 ga. tread plate to fit over the inside of the gate. I always weld the full length of the outer top edge of the tread plate because of the amount of abuse it takes. I mount the latches from the old tailgate on the new one and then use four clevises and 7/16-in. rod off the controls of an old IH "tumblebug" plow, along with a lever type handle, to open and close the tailgate latches.

"I've built three of these tailgates and they've been backed into posts, bulls have walked on them, and all kinds of equipment has been dropped on them with no problems."

Contact: FARM SHOW Followup, Pete Johnson, Rt. 1, Ballantine, Mont. 59006 (ph 406 967-6204).

Modified Wagon Makes Nifty Calf Feed Bin

An old auger wagon, with a modified spout and feed delivery control lever, makes an inexpensive calf feed bin for David and Melvin Danzinger, Alma, Wis.

The Danzingers use the calf feed bin in their calf barn. "We bought the wagon at an auction years ago and it finally wore out," says David. "It holds two tons of feed and makes calf feeding a quick, easy job. Works a lot better than piling feed in a stack like we did before."

To convert the auger wagon, the Danzingers removed its wheels and front swivel feed delivery spout, then built a 1 1/2 ft. spout straight out from the auger. On the other end of the wagon, they mounted a 1/2 hp motor, wiring it to a lever positioned next to the spout. Pulling on the lever activates the auger, which pours feed into 5 gal. pails held below the spout.

Contact: FARM SHOW Followup, D.S. Farms, Rt. 1, Box 147, Alma, Wis. 54610 (ph 608 685-3628).