

4-WD Tractor Built From Two Ferguson Tractors

"It isn't a big, fancy tractor but it still gets my tillage work done and I don't have much money invested in it," says Elfurt Blumenberg, who built an articulated 4-WD tractor out of two 1953 Ferguson TO30 tractors.

The Decatur, Ind., farmer built a steel framework to connect the two tractors. The front axle off an old car serves as the pivot point between the two tractors. A pair of hydraulic cylinders connect the axle directly to the rear tractor's steering wheel. Turning the steering wheel causes one cylinder to extend and the other to retract so that the front tractor turns with the rear one.

Blumenberg uses a pair of lightweight wooden poles to operate the throttle and to shift gears on the front tractor. The poles are connected directly to the throttle and shift lever. Both poles are suspended in steel loops

attached to the front tractor. To operate the clutch on the front tractor, he removed a brake slave cylinder off a pickup that was equipped with a hydraulic clutch and hooked it to the tractor clutch. The brake cylinder is connected to a foot pedal located next to the clutch on the rear tractor.

"I use it to do most of my tillage work," says Blumenberg, who farms 140 acres. "I use it to pull an 8 1/2-ft. wide chisel plow, 3-bottom Deere moldboard plow, and a land leveling system that consists of a 9-ft. wide blade and a 9-ft. wide culti-mulcher and heavy-duty harrow combination. It makes a nice seedbed. I mounted dual wheels on the rear tractor because the wheels on the chisel plow followed directly in the tractor wheel marks, making the chisel plow not level. When I don't have to pull much of a load I don't even start the front tractor. I can oper-



Blumenberg controls the front tractor with a pair of wooden poles attached to shifters. ate both clutches at the same time or operate them individually.

"It gets a lot of looks. The most fun I had with it was some years ago when we were pouring concrete. A ready mix truck got stuck trying to back out. The driver asked if I had something to help him get out, or else he

would have to call a wrecker. I can still see the look on his face when he saw my tractor."

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Seed handler mounts on bucket of Coles' Case 580B loader tractor.

Bucket-Mounted Bulk Seed Handler

"It's a simple, low-cost way for one person to handle large seed bags," says Gerald Coles, Murray, Ky., who built a bucket-mounted bulk seed handler out of scrap metal.

Coles mounted the bulk seed handler on the bucket of his Case 580B loader tractor. The unit swivels on a 3-in. dia. steel pipe that mounts inside a 4-in. dia. pipe. A 4 1/2-ft. long boom made from 3-in. sq. tubing is welded to the 4-in. dia. pipe and supports a two-armed steel bracket that's used to hold the bag. The bag's four straps are held in place by large nails that Coles inserts through steel tabs welded onto the ends of both arms.

The entire bracket is secured to the end of the boom by a pin which also serves as a hinge. The boom is also supported by a length of 3-in. angle iron that mounts along the top of the bucket and is secured to it by a pin. A

pair of 17-in. long angle iron straps are pinned to the bucket-mounted angle iron as well as to the boom.

"I didn't weld anything to the bucket at all," says Coles. "There are three different hinge points so the bag always stays straight up and down as the loader is raised or lowered. Also, there's equal pressure on all four straps on the bags. I drilled extra holes in the bag-holding bracket that holds the bag and also in the bucket-mounted uprights so I can adjust the position of the bag. By pulling one pin I can remove the bag bracket from the boom. When used by itself the boom makes a good 'boom pole'. By pulling two more pins I can remove the entire unit from the bucket."

Contact: FARM SHOW Followup, Gerald L. Coles, 710 Midway Road, Murray, Ky. 42071 (ph 502 753-4661).



Unit's 4 1/2-ft. long boom is fitted with brackets that hold bags.

"On-The-Fly" 4-WD Kit For GM Pickups

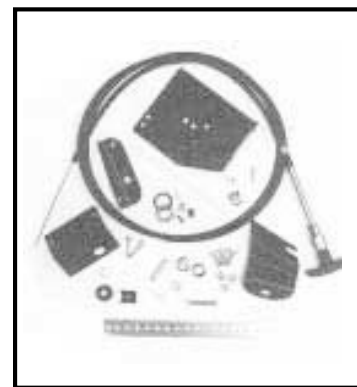
If the front axle on your 4-WD GM pickup won't engage, or takes too long to do so, you'll want to check out this new kit that gives you instant 4-WD "on-the-fly".

The "Posi-Lok" system is a manual cable-actuated system that replaces the troublesome "Thermal Linear Actuator" (TLA) found on GM pickups, 1988 and newer. The problem is the liquid inside the GM unit takes 5 to 10 minutes to heat up in order to activate the 4-WD, and it's even slower in cold weather. Also, the front axle disengages any time you turn the truck off.

The kit replaces the TLA with a new push rod activator. A clevis attaches the push rod to a bell crank, which is activated by a cable that runs into the cab. There, it's fitted with a locking T-handle that mounts on a bracket under the dash.

Installation takes about an hour and just about anyone can do it, the company says.

Sells for \$149.20 for full-size pickups; \$84.95 for S-10's.



Cable-actuated kit replaces GM's original 4-WD shifter.

Contact: FARM SHOW Followup, Posi-Lok Manufacturing Inc., 2409 Dearborn, Missoula, Mont. 59801 (ph 406 543-4019; fax 0802).

Dairy Barn Air Conditioning Starting To Catch On

Two years ago FARM SHOW featured a story about Tom and Howard Walquist, Belknap, Ill., who equipped their dairy barn with central air conditioning in order to boost milk production in summer (Vol. 20, No. 1).

We recently heard about Wisconsin farmers Bernard and Ellen Killian, who milk 80 cows near Independence, Wis., and who also installed air conditioning in their 36 by 150-ft. dairy barn.

"We got the idea after reading about the Walquists," says Ellen. "We put the air conditioning units in last spring, but didn't start using the system until June 14 because of cooler-than-normal temperatures. Since then, it's been working out well. The hottest it has been in the barn was 78 degrees and that's when the outside temperature was 108."

The system has increased the Killians' monthly electric bill by about \$400, but that's more than offset by higher production and other benefits, Ellen says.

"Our cows like it. They fight to get back in the barn when we let them out. Our DHIA test increased, from 27,300 lbs. in June to 27,800 lbs. in July, and all components re-

mained constant," she says. "For example, our butterfat content usually runs around 4.0 percent but drops off in hot weather by as much as 0.4 of a percent. With the price for butterfat currently high, this would normally cost us \$70 per day, but we saw no drop at all this summer."

The Killians' system consists of six 5-ton commercial air conditioning units hung on shop-builit brackets from the barn roof so they're level with the duct work that was installed. "With air conditioning, every right angle elbow restricts air flow," explains Ellen. It was purchased from and installed by Bernard's cousin, a licensed refrigeration man in Milwaukee.

The biggest expense in installing the system - \$17,000 - came in upgrading the barn's electric transformer and boxes. The air conditioning units were \$9,000, the duct work was \$5,000, and insulating was \$1,000.

Contact: FARM SHOW Followup, Bernard and Ellen Killian, N 37 583 Hunts Valley Lane, Independence, Wis. 54747 (ph 715 985-3351).