



## Self-Opening Silage Tailgate

"We're custom silage cutters so they get lots of use," says Terry Cofer, Searcy, Ark., who came up with an automatic self-opening tailgate design that he says "works better than anything on the market".

The tailgate works by attaching the lift arms to a stationary point on the truck frame. As the truck bed raises, the pivot point moves away from the stationary point and opens the gate. "It's much simpler than other self-opening gates I've seen in that it doesn't require cables, chains,

adjustments or expensive hydraulics. It eliminates the need to get out of the truck to unlatch the gate. Another benefit is that it moves up and out of the way when dumping into a big bag feed table, something that's difficult to do with conventional top-hinged tailgates. We've used three units for five years with no problems," says Cofer.

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## Portable Cattle Scales

"We have three different farms with cattle at each so we either needed scales at each location or a portable scale. We were unhappy with what we saw on the market so together with my son George and hired man Jack Wilkins we designed this portable weigh trailer," says Ken Alton, Lucknow, Ontario.

The weigh trailer is a self-contained portable scale that pulls easily down the road between farms, according to Alton. "We back the unit up to a loading chute and block the wheels. We can then easily weigh cattle that come in off transport trucks or weigh cattle we're shipping to market. It enables us to accurately check shrink weights on new cattle and dressing percentage when shipping to market. It also enables us to check weight gains at different farms by running small groups of cattle up the loading chute onto the portable scales then into the barn. We've weighed as many as 100 800-lb. cattle in one hour with just three men."

To build the scale, Alton says you need a wagon with a rocking bolster to self-center the weigh box on uneven ground. "You then need to build a double frame, one to mount directly on the wagon and the other attached to the weigh box. The two frames are attached by load cells. Wires from the load cells run to a control box at the front of the wagon."

Alton's weigh box is 8 ft. wide, 16 ft. long and 5 ft. high. The sides were fashioned from plastic-coated plywood. There's a sliding door in front which opens and shuts with ropes. The back door swings and latches. A ladder and load chute fold up along one side where the electronic read-out is also located.

Total cost of materials was about \$6,500 Canadian (approximately \$4,500 U.S.), which includes wagon and weighing equipment.

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## Pull-Type, 2-Row Corn Picker

"We converted New Idea self-propelled corn picking units into a pull-type 2-row corn picker for a fraction of the cost of a new machine," says Jerry Price, Maryville, Mo., who spent about \$850 on his conversion. "We wanted a picker because of the ease of storing ear corn and so we could feed ground ear corn, but we only had about 4,000 bu. to pick and couldn't justify the cost of a new machine."

Price started with a pair of 40-in. picking units from a #20 New Idea picker. He narrowed the snouts up to 30 in., a job that he says was relatively easy because each unit mounts separately on an axle. The lift rollers on the units were narrowed 10 in. and positioned upside down to accept a cable instead of a hydraulic cylinder.

"We mounted the picking units on the axle and swing-over hitch of an old Deere silage chopper. The pto shaft stayed in the same location but we removed the flat belt drive pulley and replaced it with the gear that used to go on the tractor pto for the mounted picker. There are two drive chains - one drives the husking bed and inside picking unit and a second that runs from one picking unit to

the other. The picking units mount on a 7-in. channel iron frame welded to the chopper axle at the height of the tractor axle. The cable lift originally used to raise the chopper was readjusted and hooked to the roller lift.

"The chopper frame didn't have enough clearance so we cut the centers out of the 15-in. chopper wheels and welded them into the 20-in. wheels off a 1-row New Idea picker. Weight wasn't a problem because the husking bed trails behind on its two original 'crazy' wheels. The pto shaft drive to the husking bed and elevator hooks to a jack shaft beside the main drive gear.

"In the field, the husking bed and wagon are offset one row towards the side of the tractor to help eliminate side drag. It works great but caused a misalignment problem: We had to build metal chutes to carry ears to the husking bed. The trick in making the chutes was getting a steep enough slope so ears would not pile up."

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## VW Spray Rig

"It's great for post-emergence work in corn and soybeans or for low volume Roundup application just before corn emerges," says B. Jerome Schulte, Canton, Ohio about his "VW" spray rig built with the engine, transmission, clutch, brakes and steering wheel from a wrecked Volkswagen.

"I wanted a light load machine with a narrow wheel track. The tank holds about 100 gal. and has an extra large filler hole because I bolted the bottom of a large plastic jug to the opening for quick and easy fills. Wheel spacing is wide enough to straddle four 30-in. corn rows. The boom folds out to cover 12 30-in. rows. Height of boom can be raised or lowered with two bolts. Nozzles are spaced on 30-in. centers.

"Putting the booms down keeps most of the spray pattern off corn when using Banvel plus 2-4D and it



leaves only a minimal track in drilled soybeans."

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