



Powered hopper quick-taches to front-end loader and has a fold-down chute on one side. "Works great for loading seed into my grain drill," says inventor Greg Ritter.



Ritter drives along his feedbunk to unload feed. A 12-volt electric motor belt-drives an auger that runs along bottom of hopper.

## Tractor-Mounted "Feed & Seed Handler"

A Kentucky farmer says he saved a lot of time and labor by building what he calls a "feed and seed handler" to fit a front-end loader. He uses it to put feed into bunks and also to load seed into planters and drills.

Greg Ritter, of Glasgow, used 12-ga. sheet metal to build the 5-ft. wide, 3-ft. deep, 4-ft. high hopper which is equipped with quick-tach brackets on back. The top of the hopper is open. A 12-volt electric motor belt-drives

an auger that runs along the bottom of the hopper. The motor runs off the tractor's electrical system and is operated by a switch that mounts on the tractor console. A fold-down chute extends out one side.

What makes the unit really handy to use for feeding is that he can tip it forward and scoop up a load of feed like you would with a loader bucket. The front edge of the hopper is fitted with a section of grader blade to

reduce wear.

"It's a useful rig for a lazy man like me, and it cost only about \$400 to build," says Ritter. "I use it a lot to feed soy hull pellets to my cattle. I buy the pellets in bulk and store them in my shed, which has a concrete floor. After I scoop up the pellets I just drive along my feedbunk to unload. I can unload 300 lbs. of feed in only about one minute. I can also load the hopper out of a feed bin.

"I also use the hopper to add supplement to my grinder-mixer as I grind feed.

"I think my powered hopper would also work great for distributing sawdust bedding in a free stall dairy barn," he notes.

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## "Poor Man's Accumulator" Drops Six Bales at Once

Ron Zumberger, Quincy, Ohio, didn't have enough help to load a bale wagon behind his baler, so he decided the next best thing was a bale accumulator. Trouble was, he couldn't justify the expense of a commercial unit so he built his own. The result is what is called a "poor man's bale accumulator."

Zumberger bought eight 16-ft. lengths of 1 by 3-in. steel tubing and put together a 16-ft. long frame just the right size to fit over the 14 by 18-in. bales from his New Holland baler. "It's long enough to hold five bales," he explains.

He put an axle at the center of the frame, taken from an old Ford corn picker. On the axle, he mounted the rear wheels and tires from an Allis Chalmers WC tractor. "I wanted the frame to be about 2 in. off the ground and these wheels and tires, mounted on top of the frame, were just right for that," he says.

He says his initial plan was to put stub axles on the sides of the bale frame and use smaller tires and wheels. "I decided, though, that making it heavier and putting the axle above the frame would help assure it wouldn't break

down. And since the WC wheels were available, I used those," he says.

At the rear of the bale frame, he mounted a door, made of tubing and steel plate. He made a spring-loaded bar latch for it that he can trip with a rope from the tractor seat and a hinge that allows it to open easily and completely out of the way of the bales.

"When I pull the rope, the force of the bales against the door pushes it open and the bales slide out," he says. He welded extra weight on the door, so it would be self-closing.

When he made the accumulator, he figured it would need flotation wheels at the front to keep the front of the frame from digging into the soil like a plow. "I put them on, but after I had used it awhile, I noticed they weren't needed and I cut them off," he says.

Another change he made after having used the accumulator for awhile was adding a flare to the front opening, made of sheets of 1/8-in. steel. "Occasionally, a bale would get crossways in the opening and I'd have to stop and straighten it out," he says. "Since I added the flaring, I haven't had any problems."

The rope from the tractor seat to the back



Zumberger put together a 16-ft. long frame to fit over the 14 by 18-in. bales from his New Holland baler. It's long enough to hold five bales.

of the accumulator runs through a couple of holders on the baler and one on the accumulator.

"When there are five bales in the accumulator and one ready to drop from the chamber, I open the door and leave six bales in a line," he says. One tug on the rope opens the door and the weight of the door closes it tight again.

He goes through the field later to restack the bales and pick them up with his Bobcat skid loader to stack on wagons or trailers. "It saves a lot of work in picking up bales," he says.

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## Remote-Controlled Grain Cart

FARM SHOW first told you about Louis Vaessen's self-propelled grain cart a couple years ago (Vol. 24, No. 1). He recently added remote controls to the rig.

He uses a model airplane controller to control the throttle, engage the transmission, and to steer it wherever he wants it to go.

The cart was built on the chassis of an IH 815 combine fitted with a home-built 400-bu. grain tank. After using it for a couple years, Vaessen got to thinking that he could eliminate a driver if he could control the unit himself. Many of his fields are long and straight – with rows as long as 3/4 mile.

Vaessen used automotive power window motors to operate the throttle and

transmission controls. The steering wheel is turned by a Tri-R Robotic driver – a small rubber wheel that runs against the steering wheel. The Tri-R system is normally used to self-steer tractors and combines, via sensors that follow the row. Vaessen simply converted it to take "orders" from the model airplane controller.

Spring-loaded switches on the front axle (similar to refrigerator light buttons) keep the cart running straight until Vaessen activates the steering unit.

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Louis Vaessen uses a model airplane controller to "drive" his self-propelled combine.