

Tractor-Mounted Grain Auger

Canadian farmer Ray Perreault, of Aberdeen, Sask., is well pleased with the performance of his tractor-mounted grain auger - a Brant grain auger (8 in. dia.) mounted on a WD4 International tractor.

"I removed the old carriage and made a new one to fit the tractor so that one hydraulic ram lifts the intake end. An orbit motor replaced the winch. It lets us raise and lower the auger from the tractor seat. Another

gearbox was added for the auger pto drive. At harvest, the hopper is attached permanently to the

'Total cost was \$500 for the tractor and \$600 for the gearbox. orbit motor and iron, which is not much more than a new motor would have been. The biggest advantage is being able to drive through snow and ice in the winter to easily put the auger in place for loading and unloading.'

Converting Silos Into Grain Bins

John Alexander, Fountain City, Ind., is a former dairyman who now grows continuous no-till corn. When he went out of the dairy business in 1975, he had three big silos - two Harvestores and a concrete stave - he didn't need anymore.

Like any good businessman, Alexander found a way to turn problems into assets. He converted the silos into big grain bins that now store 30,000 bu. of dried shelled corn.

"I had already stored high moisture corn in the Harvestores so I knew they could handle it but I had to aerate them. says Alexander. To convert the Harvestores, he cut a hole in the second sidewall sheet up from the ground - the bottom sheets are usually double layered and ran an 8-ft. long aeration tube straight into the silo. A 3/4-hp. fan pumps air into the tube. At the top of the Harvestores, he removed the breather bags and mounted a gooseneck-shaped pipe coming out of the top that would let the air escape but keep moisture out. The Harvestores, 20 by 50 ft. and 20 by 27 ft., store 11,500 and 6,000 bu. of corn, respectively.

'Air flows in through the tube at the bottom and up to the top of the silo and out. We keep the fan on until about December when the grain cools off and has dropped from about 16% moisture to about 14% moisture," says Alexander.

He installed a 6-in. unloading auger in the bottom of the Harvestores. At first, he used the silage unloader but says it was

slow and damaged the grain.

Converting the stave silo to dry corn storage was more complicated. First he had to add loops to the outside of the silo to strengthen it for the extra load. He then added a roof and removed the silo unloader. He made a hole in the side of the silo about 8 ft. from the bottom of the structure and installed an aeration tube that reaches into the silo, as in the Harvestores. He then cemented the floor, installing a 6-in, unloading auger. As on the other two silos, the fan is turned on as soon as the grain is loaded in from his batch dryer. Air flows up through the grain and out the top until the grain has cooled down. Unlike the Harvestores, however, there is a minor moisture problem with the stave silos.

'A little water creeps in through the sides when it rains but we've never lost more than 5 bu. of grain along the sides. We could coat the inside of the silo with a waterproofing seal and that would solve the problem. But the losses are so low that I don't see any reason to line the inside of the silo in any way."

The 20 by 50-ft. stave silo holds 13,000 bu. so his total storage between the three silos is about 30,000 bu. The three silos are connected to the batch dryer by an ingenious arrangement of augers so that the entire storage system is filled automat-

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Some of the best new products we hear about are "made it myself" innovations born in farmers workshops. If you've got a new invention or favorite gadget you're proud of, we'd like to hear about it. Send along a photo or two, and a description of what it is and how it works. Is it being manufactured commercially? If so, where can interested farmers buy it? Are you looking for manufacturers, dealers or distributors? (Send to: FARM SHOW, Box 704, Lakeville, MN 55044).

Harold M. Johnson, Editor



Military Grain Truck

"It's something my son and I are very proud of," says Ray Heil-man, Toppenish, Wash., about the GMC military 6-WD truck he bought at a farm auction for \$2,700

"It looked bad and my wife made me hide it in the north forty. So, my sons did some body work and gave it a beautiful paint job. The looks of the truck didn't help its performance, however. After about 2 weeks of hauling grain, the automatic transmission went out. The cost of a rebuilt transmission was almost the cost of the truck. We found out by talking with other farmers who owned these trucks that the transmission is a weak point. I tried to think of another way to put a standard transmission in it so it would be more dependable. The dealer said it would be too expensive to adapt a standard 4 or 5 speed so I felt I had nothing to lose by just experimenting on my own.

"First, my sons and I measured between the motor and transfer case and found we only had about 3 ft. to work with from the flywheel to the transfer case. We checked around and came up with a 1952 2-ton Chevy flywheel bell housing and transmission with an old small 3-speed brownie. The flywheel holes had to be drilled in a wider pattern and the center had to be cut out more to fit over the crankshaft. The bell housing fit perfect with the Chevrolet transmission, clutch, pressure plate and throw-out bearing. Between the transmission and brownie, we used a closecouple International universal joint with plate adapters made at a machine shop. On the back of the brownie we used two close-couple U joints.

"Everything works nice together. It has a low range in the field, and overdrive on the road when empty. The total cost was about \$600. Today, the truck sets proudly among all our other equipment - looking almost brand new."