

Yarema added 2 1/2-ft. extensions to either end of Leon 8-ft. wide bucket.

## **Giant Loader Buckets**

Manitoba farmer Ernie Yarema likes to do things in a big way so he got impatient with the size of loaders built for his farm tractors. He went out and made one big loader bucket and bought another one.

First he added 2 1/2 ft. extensions to either end of a Leon 8-ft. wide bucket using various pieces of plate steel and angle iron bracing. "It works beautifully for moving snow," says Yarema, who mounts the 13-ft. wide bucket on a 155 hp tractor.

He also bought what he calls a "poor man's" industrial loader. He paid \$900 for a big front-end loader fitted with a large 4yard bucket. The loader mounts on a 118 Versatile 4-WD diesel tractor that he was able to buy for \$2,000. He had to install a heavy-duty axle in back to support the big loader and he also installed a big hydraulic pump to run it.

"I loaded 3,000 yards of gravel with it last year and plan to load out 10,000 yards this year," says Yarema, who has a pit on his

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Auger is fitted with both conventional flighting and with a grain vac, making it ideal for cleaning out bins or moving grain out of flat storage.

## Double-Duty "Auger-Vac"

You've never seen anything like this doubleduty grain auger that's fitted with both conventional flighting and with a grain vac, making it ideal for cleaning out bins or moving grain out of flat storage.

In many cases it eliminates the need for sweep augers and shoveling of grain by hand, says inventor Glen Haugerud, who runs a grain vac repair business in Craik, Sask.

The 7-in. dia. auger moves 2,000 bu. per hour as a grain auger only or 1,200 bu. per hour as a vacuum only. When the two run at the same time, they'll move up to 3,200 bu. per hour. "The auger has plenty of capacity to handle both the auger and grain vac at the same time because generally, most augers run about half full anyway,' notes Haugerud. He installed a grain vac pump on the auger's transport axle, running belts to it from the auger's pto drive. A 4in. flex hose runs from the vacuum pump up to a manifold that mounts about halfway up the auger. A second, longer 4-in. hose runs from this manifold to a pickup nozzle that can be moved around freely to clean up

In order to drive the vacuum pump off the auger's 540 pto drive, Haugerud split the auger and remounted the upper half below the lower half. Using sprockets and add-on shafts, he can drive both halves of the auger - as well as a pulley that drives the vacuum pump - off a single pto. The split auger arrangement also allows him to drive either the auger or grain vac separately. If a separate drive were rigged up for the grain vac, there would be no need to split the auger, he

Key to success of the auger-vac is the use of a bristle auger on the section of auger positioned beneath the screen between the auger and the vacuum manifold. As it turns, it continually brushes the screen, keeping it from plugging up.

Haugerud has applied for patents in the U.S. and Canada and plans to continue testing his prototype before bringing the double-duty auger to market.

FARM SHOW Followup, Contact: Glen's Grain Vac Services, Box 444, Craik, Sask. SOG 0V0 Canada (ph 306 734-2228).

## "Eliminator" Replaces Battery **On Stationary Engines**

If you're tired of the hassles of maintaining batteries on irrigation and other stationary engines, you'll want to take a look at the new "Battery Eliminator" - a small, electronic device that lets you start and run an engine without a battery in place.

Only slightly larger than a deck of cards, the Eliminator installs on an engine the same way a battery does and acts like a fully-charged battery while the engine is running. Once installed, all you do is pull up to the engine with a truck or tractor, and run jumper-type cables between a special connector installed on the vehicle and the Battery Eliminator, start the engine, disconnect the cable, and drive away.

The Eliminator works on all 12 or 24-volt engines, handling fluctuations in voltage caused by all types of various engine features. Once the engine's running, it "fools" the engine into thinking a fully-charged battery is attached.



Eliminator "fools" battery into thinking a fully-charged battery is attached.

If you have an engine in a remote location that's difficult to reach with a truck, you can carry a free-standing battery on an ATV and fit it with a pigtail connector that'll hook up to the Eliminator.

Sells for \$125 plus \$225 for the truck start-up kit

Contact: FARM SHOW Followup, Free Spirit Enterprises, Inc., 1537 N.E. 39th., Topeka, Kan. 66617 (ph 800 345-6513).



Add-on row units replace existing field cultivator shanks. A single disc opener is set at a 23° slant and turned at an 8° angle to direction of travel to make opening.

## New No-Till Disk Seeding System

It looks strange but the inventors of this new "angled" no-till disk seeding system - Hugh Barton and sons Barry and Darryl - say it gives planter-like accuracy to air seeders.

The add-on row units are designed to replace existing field cultivator shanks. They simply bolt in place on the frame and you attach the existing seeder hose. looks strange about the new-style disc openers is that the single 18-in. dia. disc opener is set at a 23° slant and turned at an 8° angle to the direction of the travel. It opens up about a 1 1/2 in. opening. Seed is dropped through a tube mounted under the disc.

"The trouble with using double disc openers on big air seeders is that you have to add a tremendous amount of weight to penetrate hard ground. Our single disc openers slice through soil and residue. After the air seeder passes, you can hardly tell where it's gone," says Barry Barton, noting that the angled disc openers have also solved one of the worst problems farmers face when trying to no-till into small grain stubble - hairpinning, or the pulling of straw into the seed trench.

Depth control is adjusted individually on each unit with a simple clevis pin, so you can set row units in tractor tracks at different depths to adjust for compaction, unlike most air seeders where you have to set the depth



Depth control is adjusted individually on each unit with a clevis pin.

of the entire cultivator frame to one level.

A rubber wheel runs next to the angled disc opener to scrape off dirt and residue. A packing wheel that's angled the opposite way from the opener follows behind. Side draft is prevented by mounting an equal amount of left and right hand units on each rig. Works with any existing seed delivery system. The Bartons plan to add a second, smaller disc (10 in. dia.) to the row units for injecting fertilizer.

They're selling units for \$575 a row (Canadian) and are also negotiating with a major manufacturer to produce them.

Contact: FARM SHOW Followup, Barton No-Till Disk Opening System, Box 123, Conquest, Sask. SOL OLO Canada (ph 306 856-4608; fax 306 856-2017).