

Self-Propelled Bale Shredder Built Out Of Old Combine

Dave Grajczyk, Mortlach, Sask., recently sent FARM SHOW photos of a self-propelled bale shredder built out of an old combine by his hired man, Al Barber.

"It frees up a tractor and cost a lot less than any commercial machine," says Grajczyk.

The bale shredder mounts on back of an old C.C.I.L. combine powered by a Perkins 85 hp diesel engine that's equipped with a hydrostatic transmission. Barber stripped away the grain tank and straw choppers and lengthened the frame by 18 in. The combine was originally equipped with a 16-gal. per minute hydraulic pump. Barber boosted the pump's capacity by using a splitter valve to isolate the single acting cylinders from the double acting cylinders.

The bale shredder is entirely home-built and is designed to handle both small and large

round bales. Barber studied the design of several different commercial models before building the machine. The bale chopping hammers are belt-driven off the combine's main drive pulley. A bale lifter with two clamping paddles mounts on back over the rear steering wheels. A unique linkage system with four hydraulic cylinders, working in series, was used to build the bale lifter.

A 10-ft. snow plow blade - the same width as the front drive tires - mounts on front of the combine in place of the feederhouse. The blade is used not only to push snow but also to clear away manure in the feedlot as a bale is being fed to cattle.

Grajczyk says the machine is for sale. Contact: FARM SHOW Followup, Dave Grajczyk, P.O. Box 190, Mortlach, Sask., Canada S0H 3E0 (ph 306 355-2229).



Home-built bale shredder mounts on back of combine frame. Bale arms at rear load bales into hopper.

Loader-Mounted Backhoe Shifts Back And Forth

"I can put it on in a couple of minutes and take it off just as quick when I need the loader for other jobs," says Tom Houska, Mahanomen, Minn., who built a loader-mounted backhoe to fit his Kubota 50 hp tractor.

Houska's backhoe works like one on a skid steer loader but with one big difference - the boom can be hydraulically shifted from side to side along a 6 1/2-ft. wide mounting bracket, which was originally designed for a loader-mounted round bale fork. This lateral-move feature provides two advantages. It gives the operator a better view of the digging, and it makes it easy to dig up close to buildings and fences.

He used 3/8-in. thick plate steel to make the bucket, which is 14 in. wide at the bottom and 12 in. wide at the top. The bucket is opened and closed by a big 4-in. dia. hydraulic cylinder and has a cutting edge taken from an old road grader, with a pair of notches cut into it. The bucket attaches to a boom made from 6-in. heavy wall pipe that's boxed on both sides with channel iron. The boom hooks up to quick tach brackets on the mounting plate.

A pair of 3-ft. long pivoting steel "hooks" mount along both sides of the boom. The hooks can be dropped down and used by themselves for extra digging ability. Or, the

hooks can be swung forward and hooked up to linkage that's connected to the back side of the bucket. Both the bucket and hooks can then be used together like a clam bucket.

"It works great for a wide variety of jobs. I can use it to do everything from dig trenches to tearing down buildings and picking up the debris," says Houska. "I already had most of the material that I used to build it. I like using a backhoe better on this tractor than on a skid loader because I can use the tractor's foot-controlled hydrostatic transmission to go forward or backward without having to stop. The backhoe has to be mounted on one side or the other because I'm not able to see it over the tractor's hood.

"The 4-in. bucket cylinder gives the bucket a lot of digging power. It'll cut right through 6-in. tree roots."

Houska says most of the time he uses just the bucket to dig trenches or to dig out a tree stump or rocks. However, the hooks come in handy at times. "For example, if I want to dig out a sidewalk I can use just the bucket to loosen up the concrete. Once the concrete is loose I get off the tractor and drop the two hooks down. Then I hook the bucket on the far side of the cement slab and put the two hooks on the near side and close up the bucket. One time I used the hooks and bucket together to pick up wood blocks and tin after



Backhoe boom can be hydraulically shifted from side to side along 6 1/2-ft. wide mounting bracket, which was originally designed for a loader-mounted round bale fork.

I tore down a building and load it into a trailer," he says.

Houska also uses the same bale fork mounting plate to operate a 5-ft. wide, home-built brush mower. By pulling a 7-ft. Farm King mower behind the tractor at the same time he can mow up to 12 ft. wide at a time. The mower, which was originally designed to be pto-driven, is operated by a hydraulic motor that mounts on top of the deck.

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Houska uses same offset mounting bracket on loader to operate a 5-ft. front-mount wide mower.

Sidedress Rig Built "At No Cost"

Dale Stierwalt, Tolono, Ill., built his own 3-pt. mounted, 12-row 30-in. anhydrous ammonia sidedress applicator using the toolbar from an International Harvester 8-row, 36-in. corn cultivator and the used coulters, knives and press wheels off a Yetter strip till rig. He also added a hitch on back to pull an ammonia tank. The hitch came off an old ammonia bar which he got cheap from a local fertilizer plant.

"I already had most of the components so it cost me almost nothing to build," says Stierwalt. "I use it strictly for sidedressing corn and apply 10-32-16. I use a 12-row, 30-in. planter and don't put on any starter fertilizer in the spring. I use another rig - a Yetter integrated tool carrier - to strip till during the fall."

Stierwalt says that when he first started strip-tilling back in 1996, he used the Yetter strip-till rig both during the fall and spring. "I would strip-till in the fall, and then the next spring I used it to sidedress ammonia. The company offered separate components for both jobs because when you strip-till the components are running where the rows are supposed to be, and when you side dress the com-

ponents are running in the row middles. It was always a hassle to change everything. Now I have a separate side dressing rig so whenever I need it I can just hook up and go."

Stierwalt already had the cultivator and wasn't using it any more after he switched to no-till. The coulters, knives, and rubber press wheels came off the Yetter strip till machine. "I didn't need them any more because I had replaced them with new strip till components from Yetter that are more rigid and therefore work better."

The 8-row, 36-in. cultivator toolbar was wide enough to convert to a 12-row side dress rig, because Stierwalt uses only eleven sets of coulters, knives, and press wheels and they're spaced on 30-in. centers. "I use only eleven knives because when you're sidedressing you don't absolutely have to apply ammonia in the outside rows," says Stierwalt. "A lot of strip-till farmers with 30-in. rows side dress only every other row."

He says he prefers the rubber press wheels to conventional metal covering discs because the rubber wheels follow the ground better. As a result, the knives don't bounce around



Dale Stierwalt built this 3-pt. mounted, 12-row sidedress rig using the toolbar from an IH 8-row cultivator and the coulters, knives and press wheels off a Yetter strip-till rig.

as much and run at a more uniform depth. Also, the rubber wheels leave the ground more level for planting beans back into corn stalks the following spring. The wheels run right beside the knives and do a better job of closing the trench than metal covering discs.

The applicator is equipped with a Raven

Super Cooler which converts the NH₃ from a gas to a liquid, which results in a more accurate application rate.

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