



Auger attaches to Deere 90 series corn head frame using clamp-type fasteners. The system is self-contained and operates off a hydraulic motor.

Add-On Auger Solves Feederhouse Trash Problem

If you've ever had to stop your combine to clear a pile of loose "stuff" piled on your corn head's feederhouse, you might want to take a look at this new add-on auger for Deere 90 series corn heads.

Shoup Mfg.'s Force Feed Auger is designed to force fluffy trash into the cross auger to keep snouts clean. It attaches to the combine's corn head frame, positioned directly on top of and in front of the feederhouse, using clamp-type fasteners. The system is self contained and operates off a hydraulic motor.

"It's designed specifically for dry conditions when trash is light and fluffy," says Chad Schoolman. "Part of the problem is that manufacturers have made combines bigger and faster so heads are double the size, yet the size of the feederhouse hasn't changed. Also, the heads are plastic which has a tendency to build up static electricity that attracts trash. New corn varieties may play a part,

too. "The auger can be easily raised out of the way when not in use or to do maintenance on the corn head. It operates off the same valve that controls your reel speed."

Models are available to cover either four or six rows. The 4-row model comes with an 8-in. auger; the 6-row comes with a 9-in. auger.

"The problem develops mostly at the center of the head, so if you have a 6-row head you only have to cover the inside four rows. If you have an 8-row head, you can cover either the inside four or six rows. On a 12-row head you need to cover only the six inside rows," says Schoolman.

A 4-row model sells for \$1,895 (delivered); a 6-row for \$2,095.

Contact: FARM SHOW Followup, Shoup Mfg., Kankakee, Ill. (ph 800 627-6137 or 815 933-4439; sales@shoupparts.com; www.shoupparts.com).

3-Pt. Mounted Stand-By Generator

Harold Madison of Smiths Grove, Ky., lives in an area where it's not unusual to have ice storms and power outages.

It's times like those when his generator is worth its weight in gold and he particularly likes having a pto-driven, 3-pt. hitch-mounted unit.

"You don't have to worry about your fuel deteriorating or the carburetor drying out if you haven't used it for two years," he explains. "By relying on the tractor, you know it's going to start and run when you go to use it."

Madison found his 10 kW AC generator on eBay. "It just needs to be one that can be turned at 1,800 rpm rather 3,600, in order to run off a tractor pto," he says. "I fabricated the rest of the system mostly from salvage material I already had."

He used a salvaged 18-in. pulley from a Deere finishing mower for the drive pulley, and bought a 5-in. generator pulley. That ratio allowed the tractor pto to run at 500 rpm instead of the usual 540.

The drive pulley bearing assembly is a salvaged rear hub from a front-wheel-drive Pontiac Firebird, driven by a 5/8-in. V-belt.

"I suspect the 5/8-in. belt is marginal on a 10 kW unit, but so far it seems to work okay. Depending on the size of pulleys you can find, the output of the generator, and the horsepower of your tractor, you may be able to slow the power unit down even more," he suggests "You will need about 2-horsepower per kilowatt. I didn't need the full 40 rated hp of my tractor. Reducing the speed will save fuel."

Madison painted his unit and has started to draw up plans for it, which he will make



Madison found a generator on eBay and made a frame to pto-power it on a 3-pt. hitch.

available to interested parties at a nominal cost.

"I've probably got less than \$450 in this system. The new generator was \$380 (including \$80 for shipping), the pulley was \$16, and then there were some welding rods," he says. "If you were to buy a comparable commercial model, I think you'd be looking at spending between \$1,700 and \$2,000."

Contact: FARM SHOW Followup, Harold Madison, 1276 Apple Grove Rd., Smiths Grove, Ky. 42171 (email: hmadison@src.com).



Spitzley used scrap parts to build the string trimmer. "From the seat of the tractor, the head can be adjusted 1 ft. in any direction," he says.

Tractor-Mounted String Trimmer

Larry Spitzley's home-built weed whacker on front of his riding mower moves four directions independently. That makes it perfect for working in the 12-acre cemetery near Mulliken, Mich., that he maintains. Before building it, he used a hand-held string trimmer around the several hundred headstones.

Spitzley uses a Deere 4110 tractor but says the trimmer would work on any compact tractor equipped with a loader valve and "power beyond" hydraulics. The tractor should also have a hydraulic capacity of at least 6 gal. per minute, he points out.

"The ground in rural cemeteries is not very level, so I wanted this weed whacker to let me raise and lower it as well as move it in and out," he explains. "From the seat of the tractor, the head can be adjusted 1 ft. in any direction. It used to take two people roughly eight hours each, just to trim the whole cemetery. Now I can mow and trim at the same time, saving a minimum of 25 percent of the total man-hours it took before."

When Spitzley extends the weed whacker out to his left, it's like having a mower out there, he says. Its eight strings (.155-in. dia. heavy-duty nylon cable) trim roughly a 24-in. dia. circle.

He got the idea for the design of his rig when he saw an old ski exercise machine on a trash heap. He retrieved the item and used parts of it in his design.

The frame design consists of eight rollers (for moving the head in two directions – in and out). They run on two pieces of square tubing.

He purchased two 1-in. hydraulic cylinders (with 12-in. travel) – one to propel the head on the rollers, and the other for lifting it up



It's powered by tractor hydraulics and will trim a 24-in. dia. circle.

and down.

"I put the rollers at the end of the cylinders," he explains. "There's an L-shaped piece of steel on the rollers that allows it to move in and out."

A hydraulic motor controls the weed whacker's power head, running it at around 2,500 rpm's.

The device bolts to the front of the tractor and there are six hydraulic lines running to it.

"It takes only 2 to 3 min. to put it on or take it off," Spitzley says. "I have about 65 hours invested in it and about \$1,050 in parts. It works very well."

This is actually the third weed whacker that Spitzley has built – he just kept improving on his design each time until he was happy with it.

"I've finally gotten it to where it's really strong, and I can't believe how good it works because of the speed and how much I can do with it," he says. "It's very light-weight and quite unique."

Contact: FARM SHOW Followup, Larry Spitzley, 12716 Boyer Rd., Mulliken, Mich. 48861 (ph 517 649-8942; spitsp@aol.com).

"Poor Man's" Concrete Mixer

Frank Krakow, New Albany, Ind., recently sent FARM SHOW photos of what he calls a "poor man's" hand-cranked concrete mixer that he built out of an old 10-gal. plastic barrel.

"I use it to do a variety of small jobs around our farm. It doesn't cost anything to operate and cost almost nothing to build," says the 82-year-old Krakow.

The mixer mounts at an angle on a wood frame made from 2 by 4's and plywood. It can be easily towed around by a small tractor.

He bolted two lengths of angle iron to the inside of the plastic barrel and then used brass bolts to attach aluminum sheet metal off a refrigerator on to the top of the barrel in a cone shape. A hand crank attaches to a long bolt that runs through the center of the barrel. The bolt runs through an 8-in. dia. steel plate that bolts to the base of the barrel. The plate has bearings mounted inside it, so the barrel turns freely when the crank is turned.

"Once it's mixed together I use a long



Krakow says his home made mixer cost almost nothing to build. He cranks it by hand and tips it to unload.

handle on the side to pivot it up to dump into a form or a wheelbarrow," says Krakow.

Contact: FARM SHOW Followup, Frank Krakow, 4205 Saint Joseph Rd., New Albany, Ind. 47150 (ph 812 944-0917).