Built out of a 1998 Gleaner R62 combine, Dan Crick's double hay windrowing machine operates two 16-ft. MacDon disc mowers. The entire machine measures 50 ft. long.

Double Windrower Built Out Of Gleaner Combine

By Bill Gergen, Senior Editor

"Building things out of combines is a disease I have, and it hasn't been cured yet," says Dan Crick, Menno, S. Dak. He recently sent FARM SHOW photos of a double hay windrowing machine he built last winter out of a 1998 R62 Gleaner combine.

The combine operates two 16-ft. MacDon disc mowers – an R80 mounted on front which Crick already had, and an R116 on back that he bought new. He removed the wheels and tongue from the R80 before mounting it on front of the combine.

Previously, Crick built an articulated double windrower out of an old Massey 850 combine (Vol. 29, No.4). He used it for 13 years until the combine caught fire last year. "I ran the wheels off that double windrower. It was sad to see it burn up, but it was worn out anyway and I had been thinking about building a new one," says Crick.

The Massey power unit rode on only 2 wheels and operated a pair of MacDon 16-ft. hydro-swing, sicklebar mowers - one up front and one pulled behind and off to one side. Crick used the machine to cut about 2,000 acres of hay each year. "The machine worked good, but I wanted to work even faster to reduce hay drying time," he says. "Also, if either swather breaks down on this model I can unhook it and keep cutting with the other one."

The new double windrower is 50 ft. long, which is considerably longer than the old one, says Crick. "Because of the extra length the machine doesn't turn as short, and it's also more difficult to fit into my shed," he says.

Another difference is that the combine driving the new double windrower rides on 4 wheels and is not articulated. Also, it uses disc mowers that can operate at higher speeds than the sicklebar mowers. He says the Gleaner is a perfect match for the higher speeds.

"The Gleaner has a 4-speed hydrostatic transmission like many other combines, but it can go 12 mph in third gear. Most other combines have to be in road gear to go that fast and that puts too much strain on the hydrostatic transmission, especially when you have to slow down," says Crick.

He bought the used Gleaner from a dealer and was able to sell several thousand dollars worth of parts off it. He removed all the threshing components, repositioned the engine.

The combine came mounted on dual wheels, but there wasn't room for the windrow without running over the crop. Crick solved the problem by switching the wheels so they dish out instead of in, resulting in a wider stance.

"On a Gleaner combine the drive axle is attached to the frame. The combine doesn't have any suspension, but with its wide stance and big tires it rides good even at high speeds," he says.

Crick removed all the combine's threshing components, and repositioned the engine. Everything on the combine is belt-driven.

Everything on the combine is belt-driven. "The engine belt-drives the main clutch shaft, which belt-drives a pto shaft that operates a hydraulic pump on the front swather. The rear swather is operated by the gearbox from a Deere silage chopper, which drives the swather's pto," says Crick.

The new double windrower works fast and fuel efficient, says Crick. "Under the right conditions we can mow 40 acres of hay per hour. And we haven't cut anything where the combine used more than 1/2 gal. per acre."

Crick says the farmer who had owned the Gleaner before trading it to the dealer was an older guy who had taken great care of the combine and installed a lot of new parts in it. "When I told him I wasn't going to use it as a combine again, I think he was heart broken. However, I recently stopped by his farm and showed him photos and video of my double windrower and he was impressed. Now he's very happy about it."

Contact: FARM SHOW Followup, Dan Crick, 28862 433rd Ave., Menno, S. Dak. 57045 (ph 605 387-5460 or 605 661-5460; crickds@gwtc.net).

"Made It Myself" Combine-Mounted Weed Crusher

A story about a new combine-mounted weed crusher in the British farm magazine *Farmer's Weekly* (www.fwi.co.uk) recently caught our eye.

It was built by farmer Kevin Buckland, in Gloucestershire, England, who's been working on the idea since 2012. It does the job of the Harrington Seed Destructor – the Australian invention that fits on the tail end of a combine to grind down weed seeds harvested with small grain crops before returning them to the field – but at a fraction of the cost.

Buckland works for a large organic farm operation where yields have dropped by more than half in recent years due to yield-sapping damage caused by hard-to-kill weeds.

So Buckland devised a "pin mill" system that consists of two sets of discs fitted with extended 3-in. bolts. One disc of each pair spins while the other is static. Seeds are crushed between the discs before they're thrown out the back of the combine together with the chaff. There are 3 rings of bolts on the rotating discs and 2 rings on the static side.

Each "pin sandwich" is wrapped in tin to form walls around the discs. Three flexible tines on each set of discs keeps crop material from bridging between the discs. The tines, taken off a mower-conditioner, spin with the top plate, constantly stirring up material as it falls off the straw walkers.

Each set of discs is powered by a separate hydraulic motor. It takes about the same amount of energy to run the pin mills as the original chopper. The mills run at 1,200 rpm's.

To read the entire detailed *Farmer's Weekly* story, go to: https://bit.ly/2MpD26G.

Weed crusher uses 2 sets of discs fitted with 3-in. bolts. One disc of each pair spins while the other is static. Seeds are crushed between discs, then thrown out back of combine along with chaff.