



The chopper's rear wheels were moved to the front of the machine.

## REDUCES TRIPS ACROSS THE FIELD

# Stalk Chopper Mounted On Front Of Tractor

By Mark Jacobs, Associate Editor

Iowa farmers Ray and Roger Hade, of Harcourt, reduced the number of trips their tractor makes across fields by mounting a stalk chopper on the front of their tractor, leaving room behind for a "ripper" subsoiler, an anhydrous tank and a liquid fertilizer tank.

Ray's son, Roger, explains how the conversion (a 1408 Deere rotary stalk chopper mounted on the front of a Deere 8640 tractor) was made:

"First, we put a sprocket on the PTO shaft and extended the shaft past the sprocket for powering a centrifugal pump that injects anhydrous and liquid fertilizer.

"Two double 60 chains connect the sprocket on the PTO shaft with another sprocket that sits about a foot under it and connects to a PTO shaft that runs to the front of the tractor. The shaft under the tractor hangs on 4 hanger bearings and, since the tractor is articulated, the shaft is knuckled twice.

"The chopper is the same as before except, instead of pulling it, we're pushing it. We took the wheels off the back of the chopper and put them up front, and we added some braces for lifting the chopper. We also mounted two, 8 in. hydraulic rams on the front of the tractor for lifting and lowering the chopper. The hydraulics for the

ram comes from the back of the tractor and is split so we can operate the chopper independently of the ripper.

"All we had to do gearwise was to turn the gear box around on the chopper. The nice thing about the chopper conversion is that it's real easy to convert the chopper back to pull type.

"The only real problem we've had with the chopper conversion is with the chain connecting the sprockets on the PTO. Stalks get in there and cause problems. We plan to solve the problem by enclosing the chain and sprockets in an oil bath."

The chopper and the ripper both cover six, 30 in. rows. Originally, the ripper had 11 knives but Roger cut it down to 6 and mounted a hitch on each side of the ripper (one for the anhydrous tank and the other for the liquid fertilizer tank).

When FARM SHOW visited the Hade farm the tanks weren't being pulled on account of frozen ground.

Roger figures their investment in the chopper and digger combination is about \$10,000, which is primarily equipment cost. They run the combination unit at about 5 mph.

For more information, contact: FARM SHOW Followup, Ray and Roger Hade, R.R., Harcourt, Iowa 50544 (ph 515 354-5373).



The pto shaft is knuckled twice under the tractor.

"MADE US \$9,000 LAST WINTER"

# One Machine Shells Corn, Harvests Stalks

Chances are you've never seen a machine quite like the one Wisconsin farmer Dan Walder and his son Mark, of Wittenburg, designed and are using to harvest corn and chopped stalks in one operation.

They equipped a 702 New Idea Uni-System (minus the regular corn head) with 2 Kemper chopper heads mounted side by side. Then, they took the 26 in. blower off one of the Kemper cutters and mounted it on the back of the combine to blow the chopped stover into a forage wagon pulled behind the combine.

"With this system, we're able to harvest corn and the stover in the same operation," says Dan Walder. "The stover is valuable low-cost feed for our beef cows. In fact, we figure this system made us about \$9,000 last winter by giving us extra feed, lower hay costs and the ability to feed cattle to heavier weights more economically."

The two Kemper choppers are powered off the Uni-System's cylinder via a right angle transmission. "We chose the German-made Kemper chopper heads because they're trouble free and have few moving parts. The only problem with them is that they knock the ears off on corn that's hanging low. However, on good standing corn these heads work great. We go along and chop the corn about 9 in. off the ground and harvest two, 36 in. rows at once. For next year, we're thinking about building a four row unit and using a sickle type cutting system," says Walder.

"The whole stalk and ear feeds into the combine but, once in the machine, the corn shells out as good as ever and the stover goes on through and into the wagon. During harvest, we didn't have to make any adjustments on the internal operations of the combine at all and we also kept the same tires on. We have the



Corn stalks are cut off about 9 in. off the ground and the whole plant goes through the combine.

chopper set to cut at 3/4 in. but some of the leaves do slide through without getting cut up.

"We enclosed the feed-out with sheet metal to capture all the stover and extended the shaker with plywood. However, with all of this, the combine became air locked so we had to move the trap door on the top of the feed-out back a little bit. The blower runs at about 1,350 rpms and is powered off the pulley that used to run the straw chopper. We bolted a hitch onto the combine for towing the wagons," Walder notes.

He adds that the idea for the invention came after he realized that his beef cattle wasted too much of the potential feed value of the stalks when they were pastured in corn fields. Walder says he has to slow down slightly from a normal combining rate, due primarily to the blower's limited capacity, but that the slowdown is worth it for the extra feed he salvages.

An extra bonus, he says, is that even though some of the corn kernels were cracked or the ends chipped, it dried faster, probably because the chopper knocked some of the wax off the kernels.

Both the Kemper heads and the Uni-System combine were purchased used, giving the Walders a dual-purpose machine for right at \$5,000 out-of-pocket cost.

For more information, contact: FARM SHOW Followup, Dan Walder, Rt. 1, Wittenburg, Wis. 54499 (ph 715 454-6458).



The chopper gearbox is turned around to attach to the pto.