

Hewerdine stripped all grain-cleaning and handling components from the machine, leaving the transmission and original 110 hp. Chrysler 6-cyl. engine in place.

## High-Capacity Combine Log Splitter

(Continued from cover page)

Much of the wood Hewerdine splits is in big chunks. "We wanted a splitter designed so we wouldn't have to lift the wood but with lots of power and speed so we could get a lot done in as short a time as possible. We need lots of wood for the nine woodstoves we use in our family's homes and work shops."

The big splitter took 5 weeks to build and cost "virtually nothing to build," according

to Hewerdine. He first stripped all grain cleaning and handling components from the machine, leaving the transmission and original 110 hp. Chrysler 6-cyl. engine in place. The engine powers a high-capacity Caterpillar 292 hydraulic pump that was salvaged from a junked Cat front-end loader. The pump provides power to the big 7-in. dia. cylinder - with a 32-in. stroke - that does the splitting. The splitting cylinder mounts vertically on a heavy I-beam frame that mounts in place of the original header.

Hewerdine says the key to success in building the splitter was to mount the cylinder on a heavy-duty A-frame in such a way that it wouldn't bend out to either side under pressure. "It's got tremendous power and it'll split as fast as you can feed it. The A-frame design is strong and made it possible to split just a couple inches off the ground."

In operation the splitter uses all the power it can get from the combine engine. "We had to put a double chain in place of the single drive chain between the engine and hydraulic pump because chains were wearing out fast. We also installed an automatic oiler that continuously drips oil onto the double chain. We don't have any trouble now although the engine and hydraulic pump run hot when working at full capacity."

It takes three men to operate the splitter - one to run the controls, one to bring wood to the splitter and one to take wood away. Hewerdine says they can split a 3/4-ton pickup full of wood in 30 min.

Contact: FARM SHOW Followup, Tom Hewerdine, Rt. 1, Dewey, Ill. 61840 (ph 217 897-1919).



Vol. 12, No. 5, 1988

**Publisher and Editorial Director** - Harold M. Johnson  
**Editor** - Mark Newhall  
**Associate Editor** - Bill Gergen  
**Office Manager** - Joan C. Johnson

**FARM SHOW** is published bimonthly for \$11.95 per year (\$14.95 in Canada and foreign countries) by Farm Show Publishing Inc., P.O. Box 1029, 20088 Kenwood Trail, Lakeville, Minn. 55044. Second class postage paid at Lakeville, Minn., and Madelia, Minn. **POSTMASTER:** Send address changes to FARM SHOW, Box 1029, Lakeville, Minn. 55044 (ph 612-469-5572). Single copy price is \$2.00 (\$2.50 Canada). **Publication No.** 470870

**FARM SHOW** does not accept advertising and focuses exclusively on new products and product evaluations.

**FARM SHOW** does not charge for new products or services featured in the magazine. Anyone with a new product or service of interest to farmers - whether inventor, manufacturer, marketer, distributor or whatever - is invited to contact FARM SHOW regarding possible publication.

**FARM SHOW** attempts to verify product claims in editorial reports and adheres to rigid standards. However, the publisher assumes no responsibility for accuracy and validity of claims.

Printed in U.S.A. All rights reserved. including the right of reproduction, in whole or in part, without written permission.

September-October, 1988

2 • FARM SHOW



The 80-ft. booms are made of 6-in. dia. steel tubing supported at each end by a pair of castor wheels.

## "Deere 7720's Make Great Crop Sprayers"

(Continued from cover page)

wheat, got the idea two years ago when he switched to reduced tillage. "I was able to build each of these combine-mounted sprayers for about \$4,500 each. They have eliminated the need to buy expensive pull-type sprayers or to hire custom aerial spraying at \$2.50 per acre. What's more, the combine cab provides air conditioned comfort and a great view of the boom."

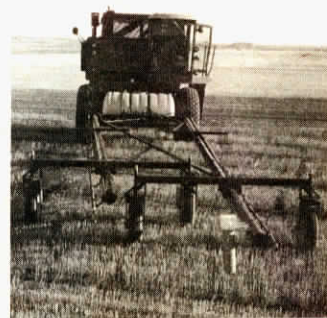
The 80-ft. booms, made of 6 in. dia. steel tubing, are supported by a pair of walking beams with castor wheels and are braced with 2 by 2 in. square tubing. Each sprayer has four 20-ft. sections independently controlled by solenoid valves. Boom pressure is 24 psi, with nozzles set on 20-in. spacings.

Spray tanks mount between and just ahead of the large front drive wheels. Each tank is carried in a tank support cradle frame. Juedeman designed his first model with a plastic tank, attaching its tank support cradle frame directly to the upper end of the feederhouse. Hookup requires removal of the feederhouse, a time-consuming job.

To solve that problem, on the second model Juedeman built quick-hitch adaptor brackets. "To remove the tank I simply pull two pins, unhook the sprayer, set the tank on the ground and back away from it," he says, noting that both combines are still used for harvesting.

The quick-hitch brackets move the sprayer forward, making the combine "front heavy". To keep the tank's weight as close as possible to the front axle, Juedeman had a stainless steel tank custom-built that's only 3 ft. in diameter but 10 ft. long. To add weight to the rear axle, he filled the combine's rear tires with chloride. "We spray at 7 mph, applying 5 gallons per acre. "Tipping hasn't been a problem," he says.

Raising and lowering of the boom is done with hydraulic cylinders which normally control the cutting platform and feeder-



Booms fold forward for transport.

house. Swivel mechanisms on the tank support cradle frames allow the booms to flex on uneven ground.

To circulate spray solution and to adjust spray pressure, Juedeman engages the combine separator drive and the hydraulic driven pump which ordinarily drives the combine reel. The combine's electromagnetic header stop switch provides instant pump control.

Juedeman, who sprays in 6-in. tall wheat, says the combine tires do little damage to the crop. "In this year's drought-stunted crop, the combines left noticeable tracks that you still could see at harvest. However, in normal growing conditions, you can't see the tracks after a few weeks."

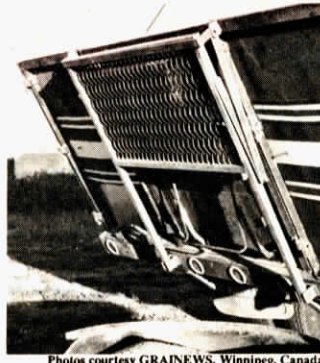
To transport the rigs, Juedeman pulls a pin and manually swings the outside boom sections forward. This winter he plans to build another combine-mounted sprayer with spring-loaded pins in the boom. "Pulling the pins will result in both outside boom sections automatically snapping forward into position," he notes.

Contact: FARM SHOW Followup, Wiley Juedeman, Box 276, Geraldine, Mont. 59446 (ph 406 737-4461).

## Truck Box Platform Makes Clean-Out Easy, Safe

"Cleaning out the corners of a truck box when unloading into a grain auger can be dangerous. Often the operator stands on the edge of the hopper and that's when accidents happen," says Robert Bamber, Ester, Alberta.

"I designed and built a fold-down platform that mounts at the rear of the truck box. When the truck box is raised, it folds down to make a level platform so you can easily reach into the truck. It also serves as a guard over the auger. It doesn't interfere with the operation of the unloading hatch and folds up easily after use. It can be completely removed when not needed by removing four bolts."



Photos courtesy GRAINEWS, Winnipeg, Canada

