Combine Snowblower

Parts from five different combines were used by Louis Turner, Sawyer, N. Dak. to build his one-of-a-kind self-propelled snowblower.

"I started planning it in my head 10 years ago but I didn't start building till four years ago. I still have a few things left to finish on it," says Turner who uses the big 8-ft., 3-in. wide blower to clear his own and neighbors' driveways.

Turner started with the stripped down chassis, hydraulics and drive-train of a 1952 Deere 55 combine. He built a heavy channel iron frame on top of the chassis to support the engine, cab and other components. The Deere 3-sp. variable speed transmission remained in place but he replaced the engine with a 390 Ford engine. The engine drives both the combine drive train and the blower. Power is supplied to the up-front blower through a salvaged 4-speed transmission that's chan-neled to a 90° 1:1 ratio gearbox from an Allis Chalmers combine. A driveshaft runs from the gearbox to the blower.

"This drive system works great because I can take the blower out of gear when needed and change its speed by simply shifting gears," says Turner, adding that the variable speed transmission on the combine is also ideal for blowing snow. "If you run into a big drift or heavy stuff you can slow up without losing power. It's geared to run real slow, if you need to."

Handling the nearly 1-ton weight of the big blower was a problem. Turner uses hydraulically controlled combine springs from a Massey-Harris combine controlled by a cylinder salvaged from an IH combine. He has a gauge that tells him how much weight's on the springs at any time, usually keeping it at about 250 lbs. pressure. He used hydraulic valves from another Deere combine to control the hydraulics. The axles, wheels and steering linkage from the Deere 55 are all original with no changes. The engine, controlled by a governor, runs at a constant 2,400 to 2,500 rpm's.

The heavy-duty Schulte blower is the only part of the machine that Turner had to buy. He was able to get that inexpensively because it had been built wrong at the factory and had to be reworked to function properly.

Turner plans to completely enclose the cab and paint the machine.

Contact: FARM SHOW Followup, Louis Turner, Rt. 1, Box 68, Sawyer, N. Dak. 58781 (ph 701 624-5138).

Self-propelled Stakhand combines a 1976 IH combine with a 1968 model 60A Hesston Stakhand.

"REPLACES A 100-HP TRACTOR"

Home-Built, Self-Propelled "Combine" Stakhand

"We combined a 1976 International 815 combine with a 1968 60A Hesston Stakhand to build a self-propelled Stakhand that frees up a tractor for other work on the farm," says Lee Bose, Orleans, Neb.

Working with his brother Craig, Bose stripped the combine of everything except the engine, axles, cab and drive train, and then joined it to the Stakhand. "It works better than a regular tractor hook-up because of the hydrostatic drive and the much improved ride. The hydrostatic drive makes it easy to stop and start in the field when compressing bales and when unloading. It's also easier to back into the stack yard since we can now see down the side of the wagon. Also, because of the higher position of the cab we can watch the wagon fill, which reduces the chance of plugging the flail when the wagon gets full. It also helps determine the number of compressions needed while forming the stack. Now the top of the stack always clears the top rear of the wagon. When we pulled it with a tractor, it was always a guess," explains Lee.

The Bose brothers changed the mechanical unload system on the Stakhand to hydraulics with an orbit motor to drive the unload chain. "Hesston had a problem with the electric clutch that engaged the unload drive system on this model. The changed orbit motor drive is mounted on the rear which eliminates pulling the web over rear idler sprockets. We moved the web shaft to the rear, and put the rear idlers at the front," says Bose.

The system has eliminated dirty radiator problems due to the combine cleaning screen as well as the wear and tear on tractor clutches. Bose says they feel the conversion cost less than the purchase of another 100 plus horsepower tractor.

For more information, contact: FARM SHOW Followup, Lee and Craig Bose, Box 111, Orleans, Neb. 68966 (ph 308 473-8411 or 4727).

TOTAL COST LESS THAN $3,000

Deere Combine Converted Into Big Self-Propelled Sprayer

Brian Irvine, MacDuff, Scotland, turned a 1968 Deere combine into a self-propelled sprayer for a cost of less than $3,000. He says a similar commercial unit would have been at least 10 times as expensive and probably more.

"Our sprayer is the most used implement on our farm and we were looking for a larger capacity sprayer with wider booms than our 40-ft. wide 110 gal. 3-pt. model. We were attracted to state of the art self-propelled sprayers but just couldn't justify the cost.

We decided to build our own.

"We bought the Deere 630 combine from a neighbor for about $750 because he had just bought a new machine. Like most old combines, the engine and gearing were in good shape but the rest had seen better days. We sold the excess for scrap and proceeded to built a chassis around the axles out of two heavy steel girders. The front sprayer boom frame mounts directly to the chassis for strength. The boom frame, which we built from scratch, is designed like a forklift mast so you can spray from any height from 18 in. to 7 ft. That's important to us since we spray continually throughout the growing season.

"The spray boom, which we bought second hand, is 60 ft. wide and all-hydraulic controlled for ease of folding and unfolding on headlands. We put the boom up front to make it easier to see all the nozzles at once.We mounted the 300 gal. spray tank toward the back of the chassis which helps stabilize the unit on hillsides.

"The only parts left from the Deere combine are the front axle and wheels and most of the original driver controls. Hydraulics are all driven by the Deere pump.

"Total cost of $3,000 included the cost of the combine, boom and miscellaneous parts."

For more information,contact: FARM SHOW Followup, Brian Irvine, 11B Shore Street, Macduff, Banffshire, Scotland AB4 1VB.

MacDuff salvaged the front axle and wheels and the drive controls from a Deere 630 combine to make this self-propelled sprayer with the front-mounted 60-ft. boom.