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"TURNS AROUND IN ITS TRACKS"

Self-Propelled Baler Great For Small Fields

"The maneuverability is unbelievable," says Quentin Fry, Montpelier, Ohio, who combined a 1971 New Holland pull-type baler with a 1967 International 706 tractor to build a self-propelled square baler.

A flotation tire in front, powered by a hydraulic motor, pulls the rig. A variable speed hydrostatic pump allows speeds up to 13 mph forward and reverse.

"It works especially well in small odd-shaped fields with lots of short windrows because it's only half as long as a baler and tractor combination," says Fry. "I can turn short and bale the next windrow immediately. I had been using a pull-type baler which was hard to pull around corners. Eventually I tore off the baler's pto shaft. My self-propelled baler has no universal joints which eliminates any worry about driveline trouble. With hydrostatic drive I can vary the speed according to windrow width to keep the baler full all the time. The hydraulic motor is extremely quiet. It's also a lot nicer to drive because the operator sits right alongside the baler. I can see the windrow without constantly turning around."

Fry removed the baler's pto shaft and tongue and stripped the tractor of everything but the engine, frame, and steering column. He used 1/4 in. steel plate to build a box frame that he welded to the side of the bale chamber and to the tractor to connect the two rigs together and to support their

weight. The box frame is strengthened by a length of 12-in. channel iron welded to both sides of the tractor frame. Both of the baler's original wheels were left intact. "The weight of the engine is on the tractor's front wheel, and there's no transmission so there's not that much weight on the box frame," notes Fry. The baler's flywheel is powered by a jackshaft that comes directly off the engine. The flywheel is engaged by V-belts controlled by the tractor clutch. Fry can use either the foot or hand clutch. Since the engine runs counterclockwise and the flywheel clockwise, he had to reverse direction of the jackshaft using pulleys and an idler.

A hydrostatic pump driven by the engine's crankshaft powers a hydraulic wheel motor mounted on the 30 by 24 flotation tire. The wheel is mounted on a frame made from 12-in. channel iron that's welded to the front fork of the tractor. Fry geared down the hydraulic motor, which he removed from a combine. A small sprocket on the motor chain drives a large sprocket on the hub of the front wheel.

Fry used 1/8-in. steel plate to build a cab for the tractor, fitting it with windows from an International 715 combine cab.

The rig cost \$7,500 to build.

Contact: FARM SHOW Followup, Fry Bros., Rt. 2, Box 409, Montpelier, Ohio 43543 (ph 419 485-4002).

HYDRAULIC-POWERED UNIT REQUIRES NO MAINTENANCE

Add-On Header Reverser

Most new combines have built-in header reversers. A Canadian company makes a hydraulic-powered add-on unit that lets you upgrade older machines.

The Rodono Reverser, which is designed to attach directly to the end of the feeder-house shaft by way of a chain coupler, develops more than 1,000 ft. of torque using a Charlyn motor, a hydraulic multi-disc clutch, planetary gear and chain reduction sprocket. The reverser case receives oil from the hydraulic system so no regular maintenance is required.

When a plug-up occurs, there's no need to slow separator speed. "You just turn off the feeder and activate the reverser. There's no need to leave the driver's seat," says designer and manufacturer, Jim Grose, Clive, Alberta.

He says most combines have plenty of hydraulics to power the reverser. Pull-type combines can either be powered by a third outlet on the tractor, or the company will provide a special adapter. A minimum of 5 gpm is required at 1,500 lbs. The combine pickup should have a one-way clutch or hydraulic drive, or be capable of reverse rotation without damage. The reverser's Charlyn motor drives an internal chain reduction which drives a planetary gear which drives the output shaft through the clutch.

Fits all 14 Series Case/IH combines using a driven beater. Also fits some Deere, New Holland and Versatile combines. Sells for \$1,850 complete with mounts, hoses and valves.

A second model is available for com-

NEW PROCESS MAKES THESE "STATE OF THE ART" PARTS POSSIBLE

"Cast" Tillage Parts Last "3 to 4 Times Longer"

Two new replacement parts for moldboard and chisel plows have 3 to 4 times the life of conventional hard-surfaced steel replacement parts, according to manufacturer J. Matt Carroll of Carroll Agricultural Products, Sandusky, Ohio.

Carroll is plant superintendent of an iron foundry in Sandusky and also has a college degree in agriculture.

"I have always been aware of the problem of wear in tillage parts but not until recently did the heat treat technology exist to make cast iron a viable alternative to conventional steel tillage parts. Once I learned the new technology, we began to prototype and field test different parts. We now hold patents on two cast parts with unique new designs, and we're field testing three new parts we hope to bring on the market soon," says Carroll.

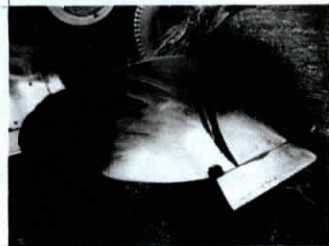
His moldboard plow shin and chisel point are already in use on farms in 8 states. Carroll sells his products direct. "We tried working through established wholesale networks but had no success. They tell us they can make more money selling parts that wear out quicker," explains Carroll.

He says his moldboard replacement shin not only lasts 3 to 4 times as long as conventional shins but also reduces wear to the rest of the moldboard because of its patented moldboard overlay.

Carroll's "Terraizer" replacement chisel plow point also features a wider overlay designed to extend shank life. He says reported life of his points averages 4 or more times as long as conventional hard-faceted steel points and 2 to 3 times as long as chrome points. They're designed to fit Glencoe, Weise, Empire and other models.

Here are comments by farmers who've tried Carroll's new cast parts.

Robert L. Sparks, Norwalk, Ohio: "We've been using a chisel plow for the past 7 years, averaging 100 to 150 acres per set of 9 hard-surfaced points. We used Terraizer chisel tips last fall on 470 acres and they performed excellently with no breakage and still have a lot of life left. We're recom-



Carroll says his moldboard plow replacement shin lasts 3 to 4 times as long as conventional shins and also reduces wear to the rest of the moldboard because of its patented moldboard overlay.

mending them to all our friends."

Jack Schlessman, Milan, Ohio: "We had three moldboards that would have had to be replaced on our 588 White plow. One was cracked and the other two were worn out. We put Terraizer shins on them and, after plowing between 800 to 1,000 acres the wear pattern has not changed. It appears that with these shins on we can expect another year or two from our moldboards."

Allen Puckrin, Sandusky, Ohio: "I was initially concerned about how well they would scour but within 20 acres they were completely polished and scouring well. From my experience, I'd expect these shins to outwear regular steel shins at least two and maybe three times. The feature that really impressed me was the overlay of the moldboard and the added moldboard life because of it."

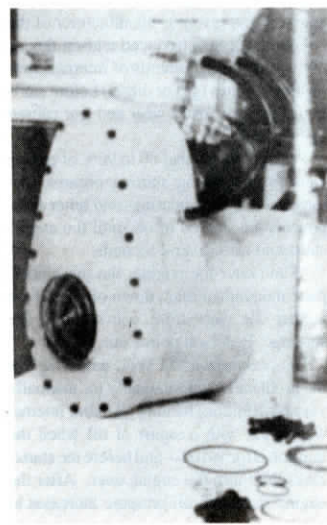
Gilbert Weyer, Castalia, Ohio: "We plowed over 200 acres of very rocky sandy soil. The shins held up beautifully to the rocks and showed only minor patterns of wear. I would estimate the shins to triple the life of the conventional steel shins plus double or triple the useful moldboard life."

Carroll cast chisel points sell for \$19.95. Moldboard shins sell for \$27.50.

For more information, contact: FARM SHOW Followup, Carroll Agricultural Products, 1120 Wayne St., Sandusky, Ohio 44870 (ph 419 627-1166 or 625-5125).

bins where it's not possible to get clear access to the end of a feeder shaft. It has the same hydraulic clutch but no internal gears or chains. All reduction is done externally. Amount of torque depends on size of drive sprocket. Grose has mounts to adapt it to all Case/IH combines, most Massey combines including new rotaries, the 9700 White rotary, most Deere combines, and most Gleaner models. Other models can be custom-fit. Sells for \$1,500.

For more information, contact: FARM SHOW Followup, Jim Grose, Rodono Industries, Rt. 1, Clive, Alberta T0C 0Y0 Canada (ph 403 784-3864).



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