

# Window Motor Controls Bale Thrower Speed

After he got tired of having to stop to use a hand crank to control bale thrower speed on his Massey Ferguson 124 small square baler, Kenneth Allison, Fairmount City, Penn., mounted an electric window motor on the baler that lets him adjust thrower speed from the tractor cab.

"The motor lets me adjust how far bales are thrown onto the wagon without getting off the tractor. As the wagon fills up I reduce the speed," says Allison.

The bale thrower is belt-driven off the baler's flywheel. A cable pulls on an idler pulley on the belt. Allison mounted the window motor on the baler and attached it to the idler pulley cable.

"I got the window motor from a friend who was replacing a car door. I think the idea would work with any baler equipped with a belt-driven bale thrower," says Allison.

He also came up with an easy way to control propionic acid (crop preservative) application rates. He mounted a 3-speed car heater motor switch on a lever in the tractor cab. The switch is wired to a motor on the baler that controls a pump that applies the acid. "The pump and motor are part of a commercial propionic acid application kit that I had already mounted on the baler," says Allison. "To control the application rate I had to get off the tractor and manually adjust a pressure valve on a tank. Now I simply flip a switch to change the pump speed and therefore the application rate. For example, I have to use more preservative whenever I'm baling in the shade next to our woods where the hay stays wetter.

"I mounted the wires that control bale thrower speed, and hay preservative levels, in a 4-prong trailer wiring harness, which makes it easy to unhook them and to keep the wires in the right order. You have to be careful where you mount the heater motor switch because it can get very warm."

Contact: FARM SHOW Followup, Kenneth M. Allison, Rt. 1, Box 109, Fairmount City, Penn. 16224 (ph 814 275-3762).

## Home-Built Air Seeder Works Like A Commercial Unit

When the disk seeder Jim Woods used to seed small grains wore out, the Oyen, Alberta, farmer designed and built his own air seeder to plant 1,500 acres of small grains.

"I can seed and apply dry fertilizer and granular chemicals all in one pass," says Woods, who calls his rig the "Woods 6094" (60 for the Deere 6030 he uses to pull it and 94 for the year he built it).

Woods built the seeder around a Morris 531 35-ft. deep till cultivator. It has 16-in. sweeps on 12-in. spacings and is fitted with single chute seed boots behind the sweeps. "Twelveinch spacings permit better residue flow than the 7 or 8-in. spacings used on a lot of commercial air seeders and the single chute boot spreads seed out about 8 in.," he notes.

He mounted a big Bee Line fan on back of the cultivator and a Bee Line seed box on each side to provide enough capacity for 20 bags of granular chemical. Woods can use the cultivator alone or with the two-compartment seed and fertilizer cart he built.

The cart is built on the frame and running gear of a 1940's International 3-ton truck. To allow him to vary rates, metering augers drive off the truck differential via two 9-speed gearboxes Woods took off the fertilizer boxes on his retired Massey 36 disk seeder. Sheet steel for the hopper was cut at a local welding shop and welded together by Woods. It has capacity for 120 bu. of wheat seed and 4,000 lbs.



of fertilizer.

The cart blows seed and fertilizer up to the cultivator through 5-in. dia. Borgault tubes and 1-in. dia. Borgault splitters.

He pulls a coil packer behind the cart. He designed and built a hitch for the packer out of 4-in. sq. tubing that runs off the same hydraulic system as the augers on the cart and allows him to fold the gangs hydraulically.

Woods plants wheat into summer fallow at about 70 lbs. per acre traveling about 5 mph and applying 50 to 60 lbs. of nitrogen and phosphorous in a 35-15 blend. In standing stubble, he plants at about 4 mph and uses up to 100 lbs. of fertilizer.

Woods built the rig for about \$13,000 (Canadian).

Contact: FARM SHOW Followup, Jim Woods, Box 638, Oyen, Alberta, Canada TOJ 2JO (ph 403 676-2269).

# Log-Skidder Fitted With Home-Built Winch

When Stefan Steiner used a tractor and chain to haul logs out of his woods, there were places he couldn't get to because of rocks and gullies. Now, the Thurso, Quebec, farmer is able to pull logs out of the steepest ravines, thanks to a 3-pt. mounted winch-type log skidder he built.

The skidder is anchored by a 6 1/2-ft. wide blade. A big winch made out of a rear end from a GM 2-ton truck mounts in a heavy-built frame above the blade.

The skidder has 150 ft. of 9/16-in. dia. 12-ton logging cable that wraps and unwraps on a free-wheeling drum that Steiner built out of a car rim. The rim was fitted with a 3-in. lip on each side to make a 6in. deep drum. Ratchets, made from square stock and flat bar, were welded on the rim so it can be locked in position with a lever. The differential's original brake, which was loosened to allow it to free-wheel, remains on the right side, and steel cable connects to a hand brake cable which runs to the



### lever in front.

Steiner built two self-aligning pulley blocks for the pulleys that bring the cable from the drum to the center of the winch. He mounted a pto shaft on the truck rear



end to drive the machine. He built a housing with metal from an old fuel tank.

"To operate, we engage the pto on our 100 hp tractor, pull on the lever that makes the drum turn, and wind up the cable," Steiner says. "The harder we pull on the lever, the faster the cable pulls. If the log hits a stump, the brake simply slips.

"Once the log gets up to the winch, we pull on the ratchet rope to lock the drum, and then raise the 3 pt. and drive away. "There isn't much it won't handle. We've used it to haul 30-ft. long, 36-in. dia. oak logs."

Out-of-pocket expense was \$330 (Canadian), including two commercial pulleys. He'll make plans available if there's interest.

Contact: FARM SHOW Followup, Stefan Steiner, 332 Route 148, Thurso, Quebec, Canada JOX 3BO (ph 819 985-0421).