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Double Hitch Cuts Baling Time In Half

Dane Hanson gets his baling done in half the time it used to take. His 2-wheel hitch lets him pull two balers at one time and at nearly half the cost of a commercial 2-baler hitch.

"I sell a lot of small bales of hay to the horse market," explains Hanson. "I couldn't go to a large baler, so operating two balers at once was the only way to get the job done faster. After using this setup, I would hate to go back to a single baler."

Originally, Hanson envisioned using square tubing for the hitch's main crossbeam. However, a 10-in. wide, 12-ft. long I-beam salvaged from an old creamery was the right length and height. The 12-ft. width provides ample room for the two in-line balers to track

in parallel.

Hanson recognized that the hitch had to be sized to provide the right height for the baler hitches and pto connecting gearboxes. He chose to go with mechanical drives instead of hydraulic for cost and repairability.

"I looked at a commercial hitch, but it cost \$14,000 and used hydraulic motors to power each baler," says Hanson. "The gearboxes I used cost about \$6,000 new, but if they break down I just replace a gear, bearing or possibly a shaft. When a hydraulic motor goes, it's gone."

Hanson welded a 12-ft. length of 12-in. wide channel iron over the top of the I-beam. It provided a mounting plate for bolting the

gearboxes in place and also gave the beam more end-to-end strength.

"It ended up like a large T-beam with wheels mounted to spindles welded to either end," says Hanson.

The tongue is a heavy wall length of 6-in. dia. steel pipe angle braced to the hitch crossbeam. Baler hitches are mounted on the backside of the beam at the height needed by the baler tongues. Hanson says he overbuilt the bale hitch projections and is glad he did.

"The baler tongues put a lot more weight on the hitch than I expected," he says.

Hanson admits he also over-engineered the gearboxes. Though the balers require only 50 to 70 hp each, the gearboxes driving each is rated for 150 hp. The center gearbox that drives the outer boxes is rated at 250 hp. He used 1 1/2-in. shafts to connect the gearboxes. New U-joints added roughly \$2,000 to the overall cost.

"I didn't want the gearboxes to be the weak link," explains Hanson. "I wanted to be sure

I had plenty of capacity."

Hanson says designing the gearbox set up was one of the more complex steps in building the hitch. "I sketched out where they would go, as I needed a three-shaft center one and two-shaft right and left drives to either side," notes Hanson. "My supplier, Curtis Machine Company, was a big help."

Going heavy-duty has paid off. Hanson notes that while the double baler hitch runs smoothly most of the time, occasionally a problem shows up that tests the hitch's durability.

"Once in a great while, the balers get in sync with each other, and for a couple of minutes they really bang the tractor and the gearboxes," says Hanson. "That's when I'm glad the gearboxes are oversized."

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He Plants Grazing Corn In 15-in. Rows With Grain Drill

Floyd Summy modified an old grain drill to plant grazing corn for cattle. He couldn't be happier with the drill or the MasterGraze tillering corn he uses (featured in FARM SHOW's Vol. 35, No. 1). Both work great for planting the small paddocks he rotates his herd through each summer.

"The drill saves the expense of buying a corn planter, and I can plant 15-in. rows," says Summy. "I space my planting out so the corn isn't all ready for grazing at the same time."

To get his 15-in. rows, Summy laid a 1/8-in. thick piece of plastic across the drop holes in the drill. Holes on 15-in. centers in the plastic left every other hole in the 11-ft. drill closed.

"I set the control on the drill to double the rated population since every other hole is closed," explains Summy. "If I want to plant 25 lbs. of corn seed per acre, I set the drill at 50."

Summy, who uses horses for planting, mounted the tongue direct to the drill instead of using a forecart. This gives him more control of the drill in the small paddocks he plants, and the running board on the rear of the drill provides a place for him to stand as he directs the horses.

"It is easier to turn with the horses, and I can back them into sharp corners," he says.

Summy also applies herbicide while planting corn with the drill. Since he plants small sections at a time, he doesn't need a lot of volume. He uses a battery-powered, 25-gal., ATV sprayer. The tank mounts over the hitch frame, and nozzles are mounted under the running board at the rear of the drill. The battery sits on the running board.

"Six nozzles were the most I could run with the sprayer pump, even at its lowest flow," says Summy. "It's only a 1/8-gpm pump. At the speed the horse walk, I apply about 21



Modified grain drill allows Floyd Summy to plant corn in 15-in. rows. gal. per acre."

He notes that ATV sprayers are known to fluctuate in pressure. To moderate the spray pressure, he used an in-line bladder. He made it from a canister on a backpack sprayer and mounted it between the pump and the spray nozzles. A valve on the bladder lets him build up pressure. When he starts seeding corn, he opens the valve, and the nozzles are at full pressure.

"I broadcast a mix of atrazine and metolachlor through the nozzles, which overlap by about 2 in.," explains Summy. "It saves another trip through the field."

Summy uses the corn in a grazing crop rotation. In the spring, he works the grazing paddock up and plants the corn. Once it's grazed down, he uses the drill (without the plastic) to seed either turnips or rye for fall grazing. Grazed turnips are lightly disked in the spring and seeded to grass. The rye is plowed under and planted to alfalfa. Both grass and alfalfa will eventually be plowed under for another crop of grazing corn.

"You can really cut back on fertilizer with a good crop rotation," says Summy. "Plus when you plow under grass or alfalfa, it conserves moisture for the new crop. That makes a big difference, especially last summer when we had a bad drought."

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