



Tandem rake hitch was made from two Deere side delivery rakes and the tongue from a hydroswing haybine.

Tandem Rake Hitch

"After seeing a tandem rake hitch in an issue of FARM SHOW several years ago, I decided to build one for my Deere side delivery rakes. I got it done for less than \$200 and now I can rake two single windrows or one double one, depending on conditions," says Scott Seaver, Montague, Mich.

"I use older Deere side delivery rakes because they do a much better job fluffing windrows and are very gentle on hay. The rakes are also cheaper to operate since it's easy to find old rakes for parts.

"After buying a tongue from a hydro-swing haybine at an auction and an electric-over-hydraulic pump at a flea market, I got to work. The haybine arm was just the right length to extend back over one of the Deere rakes. I mounted an axle and wheels from a manure spreader on the back end of the hitch. The rear rake tows from the back axle.

"I mounted the electric-over-hydraulic pump at the back of the hitch to operate the steering cylinder but since it only operated in one direction, I had to add a large spring opposite the cylinder to pull it back for the return stroke. The pump runs off its own battery but can also be wired to the tractor battery. A switch mounts on the tractor fender to operate the pump. If you have a tractor with good hydraulics, you don't need the auxilliary pump but I rake with an Allis WD which has poor hydraulics.

"I can change raking configuration by simply steering the hitch to one side or the other right from the seat of the tractor.

"This rake is a real time saver and the price was right."

Contact: FARM SHOW Followup, Scott Seaver, 4346 W. Roosevelt Rd., Montague, Mich. 49437 (ph 231 894-9703).



A 3-ft. wide tray mounts on front of Gannon's New Holland 256 basket rake, about 6 in. off the ground. When rake teeth pick up windrow to roll it, the tray catches it and slides the hay off the back onto drier ground.

Simple Inverter Turns Wet Windrows

Several years ago, Charles Gannon, Petersburg, Tennessee, was caught with a field of millet he intended to bale that was windrowed but too wet and wouldn't dry.

He tried fluffing it up with a neighbor's tedder, but that left it tangled in clumps and knots that still refused to dry out.

Gannon decided there had to be a way to turn hay over completely without making a mess. After working on the problem awhile in his shop, he came up with a sort of tray that's 3 ft. wide and fits on the front of his New Holland 256 basket rake, about 6 in. off the ground.

"When the rake teeth pick up the windrow to roll it, the tray catches it and it slides off the back onto drier ground," he explains. "It doesn't change the width of the windrow. It just flips it over so the dry top of the windrow is on the ground and the wet bottom is up where it can dry. It saves a lot more of the

leaves than if you roll the windrow over with a rake alone."

Gannon made the tray out of a 4 by 12 sheet of galvanized sheet metal. He mounted it in a frame he made of 1 1/2 in. square steel tubing. It takes four bolts and about 15 minutes to attach the frame solidly to angle iron brackets mounted on the rake frame.

"I've made four or five of these over the years, changing the style a little as I did it. This style works the best," he says. "It works best if the hay is dry on top, so it slides on the sheet metal. If the hay is wet on top, it doesn't slide off as easily. It doesn't take any longer to use it than to turn the windrows with a rake."

Gannon says the hay inverter cost less than \$500 to make.

Contact: FARM SHOW Followup, Charles Gannon, 57 Eddins Road, Petersburg, Tenn. 37144 (ph 931 659-9916).



Nutting doubled up two New Holland 9-ft. side delivery rakes. An 18-ft. long "bridge hitch" connects the two rakes.

Double Rake Hitch Is Easy To Adjust

To reduce raking time and to be able to adjust raking width to make consistent size windrows for his baler, Michael Nutting, Garfield, Kansas, put together his own "double windrow" rake hitch.

"I like to make good heavy bales. My rake hitch lets me make a bigger windrow which results in bales with more consistent size and weight," says Nutting. "It also greatly increases my raking capacity. With the rear rake overlapping the front one 6 to 8 in., I can rake a 16 to 17-ft. swath."

He started with two New Holland 9-ft. side delivery rakes which he bought used for \$3,000 apiece. He used 3-in. sq. steel tubing to build an 18-ft. long "bridge hitch" that connects the two rakes. The back end of the bridge hitch pivots on a homemade, 3-in. sq. steel axle supported by a pair of car wheels. The rear rake pins to a drop hitch behind the axle. The position of the rear rake is adjusted by changing the position of a steel pin about 18 in. ahead of the pivot point. The pin connects two overlapping metal bars that extend from both sides of the axle. There's a series of holes in each bar. To change the angle of the rake, Nutting pulls the pin, turns the axle, and then reinserts the pin in a different hole.

One bar is longer than the other one. Nutting can rake to either side by reversing position of the bars. He can also set the rakes to make two passes to the left, two passes to the right, or one to the left and one to the right.



Position of rear rake is adjusted by changing the position of a steel pin about 18 in. ahead of pivot point.

"This is the third double rake I've built over the years, and I think it's the best yet," says Nutting. "It's really easy to adjust. From the time I leave the tractor seat I can have this machine ready to rake in less than 45 seconds. Most commercial double rake hitches take at least ten minutes to hook up and also require a strong bar.

"The front rake always makes a full pass, but I can set the rear rake to make anywhere from 1/4 of a pass to a full pass. The front rake pins onto a drawbar that's built onto the back side of the bridge hitch. The bridge hitch attaches directly to the tractor drawbar. I use a trailer jackstand to unhook it."

Nutting says he's looking for a manufacturer.

Contact: FARM SHOW Followup, Michael L. Nutting, Rt. 1, Box 56, Garfield, Kan. 67529 (ph 620 569-2348).

Baler Converted Into Low-Cost Windrow "Flipper"

"I didn't want to spend the money for a new one so I built my own. It fluffs the windrow and turns it over a half turn," says Arlyn Bilodeau, Chetek, Wis., who converted an International Harvester 46 small square baler into a low-cost windrow "flipper".

The baler's pickup gently lifts the windrow and then the auger moves it to the side where it falls out and back onto the ground.

Bilodeau removed the baler's flywheel and cut off the bale chamber. He removed the twine box and made an opening in the back of the baler for the hay to flow through. A steel rod across the opening helps flip the windrow.

"I've used it for about six years with no problems," says Bilodeau. "It works great on hay and also on windrowed grain. The only limitation is that it tends to plug up in real heavy windrows. I use a small Farmall B tractor to pull it. I run the tractor fast enough so that the material is picked up and flows



Bilodeau started with an IH 46 small square baler. He removed the baler's flywheel and cut off the bale chamber, and made an opening in back of baler for hay to flow through.

right on through.

"It didn't cost much to build. I already had the baler which I wasn't using any more," he notes.

Contact: FARM SHOW Followup, Arlyn Bilodeau, 2172 10th Ave., Chetek, Wis. 54728 (ph 715 458-2122).