

Kurtz says his new lift system lets him reach across a tandem axle truck box. The design also lets him raise the bucket about 3 ft. higher than on original machine.

## "Big Reach" Lift System For Skid Steer Loaders

A common problem with skid steer loaders is that you can't reach far enough to dump into big manure spreaders and truck boxes. Bill Kurtz, St. Croix Falls, Wis., says his new lift system gives any skid steer the reach of a big tractor. "Now I can reach across a tandem axle truck box," says Kurtz.

He designed and built the new lift system for his Case 1830 skid steer loader which has only a 36-in. wheelbase. He installed a new-style pivot system that "rotates" the existing loader arms forward as they're being raised. The result is that he can raise the

#### Vol. 21, No. 6, 1997

Harold M. Johnson

Founder & Publisher Emeritus

Editor/Publisher - Mark Newhall Associate Editor - Bill Gergen Associate Editor - Jim Houtsma Office Manager - Anne Lash Circulation - Ardyce Potter, Nora Nagel

FARM SHOW (ISSN #01634518) is published bimonthly (6 times a year) for \$15.95 per year (\$19.95 in Canada and foreign countries) by Farm Show Publishing, Inc., P.O. Box 1029, 20088 Kenwood Trail, Lakeville, Minn. 55044. Periodicals postage paid at Lakeville, Minn., and Shakopee, Minn. POSTMASTER: Send address changes to FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 612 469-5572; fax 612 469-5575). E-Mail: Editor @ FARM SHOW.com. Single copy price is \$4.00 (\$4.50 in Canada). Publication No. 469490. GST No. 131272023.

**FARM SHOW** does not accept advertising and focuses exclusively on new products and product evaluations.

FARM SHOW does not charge for new products or services featured in the magazine. Anyone with a new product or service of interest to farmers - whether inventor, manufacturer, marketer, distributor or whatever - is invited to contact FARM SHOW regarding possible publication.

#### AS A SERVICE TO READERS.

FARM SHOW publishes newsworthy products and ideas. Because of possible variance in the quality and condition of materials and workmanship, FARM SHOW cannot assume responsibility of proper application of techniques, or proper and safe functioning of manufactured or reader-built projects resulting from information published in this magazine. FARM SHOW attempts to verify product claims in editorial reports and adheres to rigid standards. However, the publisher assumes no liability for accuracy and validity

Printed in U.S.A. All rights reserved, including the right of reproduction, in whole or in part, without written permission.

Nov.-Dec., 1997



New lift system allows skid steer loader to be used in tight quarters when bucket is down. Counterweight swings in against back of machine.

bucket about 3 ft. higher than on the original machine and several feet farther forward.

"It gives you the best of both worlds - a lift system with great bucket reach and a short wheelbase machine that can be used in tight quarters when the bucket is down," says Kurtz.

The key to the design is a counterweight on back that swings out as the loader raises to counter balance the weight of the bucket. A stabilizer bar, which runs across the skid steer frame between the two sets of wheels, rotates the loader arms forward as the loader raises.

To make the lift system Kurtz added 15 in. onto the back end of the loader arms. The arms are pinned to a 15-in. extension at the back end of the machine that serves as a pivot. He also repositioned the hydraulic cylinders that are used to raise or lower the arms. As the cylinders are extended, the stabilizer bar forces the arms to rotate forward while the counterweight swings backward. After dumping the bucket is lowered and the counterweight swings in against back of the machine.

"I got the idea when I couldn't dump manure into my 350 bu. spreader," says Kurtz. "The bucket reaches up about 10 ft. and forward about 5 ft. at the same time. It can actually reach farther out than the buckets on most big tractors, yet the machine is very compact when the bucket is down which allows it to get into tight quarters..

"My current design is only a prototype. If it was manufactured commercially I'd wrap the counterweight around the side of the machine in order to keep anyone from getting caught between it and the machine.

Kurtz says he's looking for a manufacturer.

For more information, contact: FARM SHOW Followup, Bill Kurtz, 2187 State Rd. 87, St. Croix Falls, Wis. 54024 (ph 715 483-3866).



Roberts pushes roller ahead of his Deere 4840 tractor as he plants wheat or soybeans with his 20-ft. grain drill. A pair of hydraulic cylinders are used to tilt roller down.

## 20-Ft. Front Mount Roller Creates Smooth Seedbed

"Trying to maintain correct seed depth in my variable soils has always been a real problem. My 20-ft. wide front mount roller solves the problem," says Harvey Roberts of Shawboro, N.C.

Roberts pushes the roller ahead of his Deere 4840 tractor as he plants wheat or soybeans with his 20-ft. grain drill. The 18-in. dia. roller mounts on a steel frame that bolts to the sides of the tractor and is raised or lowered by a pair of hydraulic cylinders. The front part of the frame is hinged, allowing the roller to be adjusted for downpressure. A set of suitcase weights helps apply down pressure.

"It rolls flat on the ground and does an outstanding job of firming up sandy soils and flattening clods in clay soils," says Roberts. "Several farmers in my area mount 12-in. dia. rollers in front of their grain drills, but my roller is too heavy for my tractor to lift the additional weight on back. One problem with a roller mounted in front of a grain drill is that it doesn't have any way of flexing whereas my front-mounted roller flexes up or down independent of the drill. It works better than pulling a roller behind a disk or chisel plow because it doesn't build up with dirt from the freshly turned soil. The roller runs in dry soil all the time so it stays clean and shiny.

"To remove the roller I just remove six Welding and Steel, Inc., Box 2 bolts and use a loader to lift it off the tractor. N.C. 27921 (ph 919 338-6533).



The 18-in. dia. roller mounts on a steel frame that bolts to sides of tractor.

The job takes five minutes or less."

Roberts says he and David Dunavant of Dunavant's Welding and Steel, Inc., are considering building the roller for sale.

Contact: FARM SHOW Followup, Harvey Roberts, Box 14, Shawboro, N.C. 27973 (ph 919 336-4793) or Dunavant's Welding and Steel, Inc., Box 28, Camden, N.C. 27921 (ph 919 338-6533)

# Deere Rototiller Converted Into Wheelchair Accessible Cart

"My friend John Mays, a paraplegic, is able to go almost anywhere in a wheelchair accessible cart he built out of an old Deere rototiller," says J.W. Hay, Friendship, Tenn.

Mays bought the roto-tiller at an auction for \$15. He cut off the tiller tines and welded the wheel hubs off a Snapper riding mower onto the ends of the tiller axle. He replaced the original 3 hp gas engine with a 5 hp Briggs & Stratton electric start engine and covered it with the hood off a Deere riding mower. A metal tab welded onto the back of the tiller frame serves as a hitch for a plywood platform that rides on a pair of small wheels off another riding mower. An angle iron frame supports the platform and serves as a guard rail. The back part of the hinged platform is opened or closed with a bungee cord attached to the frame.

Mays uses the tiller's original controls to go forward or reverse.

"John uses it for recreation and to go to



Mays drives his wheelchair up onto a hinged platform, then uses a bungee cord to close the back part of the platform.

local junk swap meets," says Hay. "He likes the cart because it allows him to go longer and farther than he could before with his battery-powered cart. It even has lights."

Contact: FARM SHOW Followup, J.W. Hay, 10993 Hwy. 188, Friendship, Tenn. 38034 (ph 901 677-2475).