



One "sideways" roller unit goes under each wheel making it easy to push a car, truck or tractor into corners of a garage or machine shed.

ROLLER STORAGE SYSTEM FOR GARAGES, MACHINE SHEDS

Slick New Way To Roll "Big Stuff" Into Storage

Now you can easily roll cars, boats, tractors and other "big stuff" into the far corners of your garage or machine shed, thanks to a new roller storage system called Store E-Z.

"One person working alone can easily push a mid-size car, small tractor, large boat or other large item to roll it sideways into formerly inaccessible areas," says Dave Johnson, inventor.

"We think we can design and make rollers big enough, and economical enough, so a farmer can roll his biggest equipment — including self-propelled combines and 4-wheel drive monster tractors — to wherever he wants to store it inside the machine shed," says Johnson.

Roller units for mid-size cars, for example, are 10 in. wide and 17 in. long. They're equipped with two (one on each

side) load-carrying rollers (each 1 1/4 in. dia., 9.5 in. long and with a ball bearing at each end). Placing a roller unit under each car wheel allows to you easily push it sideways to maneuver it into storage position. You can leave the rollers in place, or remove them for use on other equipment being moved in or out of storage.

The bottom of each wheel unit is sloped slightly to the front so the vehicle won't troll back and out of the unit as it's being pushed sideways, Johnson points out. He's just getting into production and hasn't yet put price tags on the various sizes of his new roller storage system.

For more information, contact: FARM SHOW Followup, Store E-Z, Dave Johnson, 502 Reynolds St., Grand Rapids, Minn. 55744 (ph 218 326-5374).

ATTACHES TO BUMPER

New ATV Load Ramp

"When we started to use ATV's at the U.S. Fish & Wildlife Department our biggest problem was being able to load and unload them in pickups. We tried other loading ramps on the market but we weren't satisfied. This one works great and it stands up to hard use," says James Dudley, Bennington, Okla., about his new bumper ramp.

Dudley, who's worked for the Fish & Wildlife department for 21 years, says the ramp works for both 3 and 4-wheelers as well as garden tractors, motorcycles, snow-mobiles, and other equipment.

The new ramp fastens to the bumper with two brackets and clamps to the top edge of the tailgate. When the tailgate is closed, the ramp folds up right behind it. When the tailgate is lowered, the two sections of the ramp fold out with it.

The new ramp can be removed in less than a minute by simply pulling 4 pins. When the ramp is left in place, it won't interfere with trailer towing.



New ramp clamps to the top of the tailgate. When the tailgate's closed, the ramp folds up right behind it.

Sells for \$269 to \$298, depending on pickup model.

For more information, contact: FARM SHOW Followup, James Dudley, Do-Rider Manufacturing Co., Rt. 1, Box 13, Bennington, Okla. 74723 (ph 405 847-2519).



The Montags used twin screw rear ends from an old tandem axle cement truck to build the articulated tractor. It's powered by a backward-facing combine engine.

MODIFIED FRONT-END LOADER CARRIES IMPLEMENT

Homemade Articulated "Mini" 4-WD Tractor

"This home-built 4-WD offers great visibility and control, and may allow us to cut our chemical costs in half by applying herbicides in a narrow 4-in. band as we cultivate," say Roger and Dan Montag, Rodman, Iowa, about the experimental, 65 hp articulated 4-WD tractor they built last summer.

The "first-of-its-kind" tractor, which rides on four 14.9 by 26 combine tires, is designed to push 8-row toolbar implements. A Stanhoist front-end loader, widened and braced for heavy duty use, clamps onto the implement's toolbar.

"The tractor's long 15-ft. frame, made of 4 by 12 in. rectangular tubing, provides plenty of leverage for the loader to pick up field implements," says Roger, who has used the rig to plant, cultivate, and drag fields. An add-on two-stage hydraulic cylinder gives the loader extra lifting capacity and height.

"It's much smaller than most 4-WD tractors and weighs no more than a 4-WD pickup, but it can really pull. Also, it's light enough to reduce soil compaction. Narrow tires keep what compaction there is away from the row."

The Montags, who built the tractor last summer, use it mainly to cultivate. At the same time, they apply herbicides or deep-band fertilizer.

"During first-time cultivation, we use spray nozzles inside canopy shields. The nozzles deliver a 4-in. wide band which costs us only \$2 per acre," says Dan. "Because we have this tractor, on 80 percent of our corn and soybeans we'll apply only the 4-in. post-emergence herbicide band, with no other herbicides at all."

Because the loader is part of the frame, the front-mounted cultivator remains rigid. "When you turn the wheel, the cultivator immediately moves. There's no side play, so you can set shovels very close to the rows and center the 4-in. wide band over them," says Dan, who adds that the tractor would make an ideal ridge cultivator.

To build the tractor, the Montags separated the twin screw rear ends from an old tandem axle cement truck, mounting one rear end on each end of the tractor's frame and lengthening the original drive shaft between them. Each twin screw rear end has its own differential. An air piston locks a

third differential so both rear ends always drive positive.

They mounted the in-line, 65 hp gas engine, borrowed from an International Harvester 101 combine, midway between the wheels. The engine faces "backward" with the fan and radiator toward the rear.

The transmission, borrowed from a 1958 International truck, is equipped with high-low range to provide 8 forward and 2 reverse speeds. The pivot point is set at a 65:35 ratio, with 65% of the tractor's length in front of the pivot point to improve steering control. "It steers a little slower than a regular 4-WD, but with more accuracy," notes Roger.

The tractor is equipped with 3 pto shafts, 1 in front and 2 at the rear. One pto runs off the transmission at a steady speed, one pto runs off the transfer case according to ground speed, and the other pto runs according to motor speed. So far, the Montags have used only the motor-driven pto. It powers a hydraulic sprayer pump, delivering chemicals from the rear-mounted 200-gal. spray tank to the cultivator.

"The ground speed pto might be useful for implements which are countershaft-driven, such as an air planter or fertilizer applicator," notes Roger.

Last summer, the Montags used the tractor as an 8-row bean rider. The driver sprayed the two inside rows, while two other riders sprayed the three outside rows.

This summer they may use the tractor to mow grass on diverted CRP acres, pushing a 12-ft. mower.

The Montags say they plan to make a few changes on the tractor. They may replace the gas engine with a more powerful diesel engine and install a rear hitch to pull a rotary hoe or other implement. "We're toying with the idea of mounting a New Idea Uni-System corn picker," says Roger. "Also, we may add another front axle and carry a planter between the front two axles, somewhat like a road grader. By doing this, we might gain the extra traction and stability needed to push a 12-row planter."

For more information, contact: FARM SHOW Followup, Roger Montag, Rt. 1, Box 26, Rodman, Iowa 50580 (ph 515 887-4752).