

Cable winch pulls tractor onto tilted lift.



Once tractor reaches the balance point, the lift slowly tilts back down until all four legs are on the ground.

Winch-Operated Lawn Tractor Service Ramp

Using scrap lumber, 84-year-old Val Otis, Rolla, Mo., built his own "service lift" for riding mowers and ATV's.

"It provides me with a safe and easy way to clean the deck and sharpen the blades on any riding mower. It also makes it easier to change oil, install belts, and do other routine maintenance," says Otis. "Once the riding mower or ATV is on the service lift I can pull up a chair and do all my work from a sitting position."

The 4-legged service lift is built mostly from 2 by 4's and 2 by 6's. It measures about

10 ft. long and rides on a pair of 8-in. high wheels. An 18-in. dia. steering wheel at the back end of the lift serves as a winch. The steering wheel is attached to a 3/4-in. dia. shaft that's held in place by couplers. A length of cable that's attached to the shaft hooks up to the front or rear of the mower.

The operator raises the back end of the service lift until the front end is on the ground. Then he turns the steering wheel to slowly pull the tractor onto the table. Once the tractor reaches the service lift's balance point, the lift slowly tilts back down until all

four legs are on the ground.

"It's a simple concept but it works," says Otis. "I used the steering wheel off a Farmall tractor because it's big. The ratio between the big steering wheel and small diameter shaft makes the steering wheel easy to turn."

Otis is willing to provide plans for a fee if there's enough interest.

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An 18-in. dia. steering wheel at back end of lift serves as a winch. It's attached to a 3/4-in. dia. shaft.

Why Buy Hoops When You Can Bend Them Yourself?

By Jim Ruen, Contributing Editor

Making hoops for grow tunnels is fast and easy with a tube bender from Lost Creek Greenhouse. Loy Robinson has been using plastic-covered hoop houses for years. Instead of buying commercial hoops, he makes his own at 1/10 the cost using low cost benders he designed and now markets direct.

"I was selling hoop house kits and had bought a \$12,000 electric bender, but it worked too slow," recalls Robinson. "I was taking a break and noticed two of the bent pipes stacked on each other and realized that if they were fastened down they'd make a great jig. I bolted them down and tried it out. It worked great."

Today Robinson markets three pipe bender series, each with jigs for 10, 12, and 20-ft. dia. hoops. He also makes a 24-ft. dia. jig in one series. The difference between each series is the surface size of the arc, ranging from 24 in. with the DY Series to the 48-in. C Series and the 126-in. F Series. The larger the arc, the fewer motions needed to complete the hoop. All three series are designed for use with 1 3/8-in. O.D. chain link fence top rail, though the suggested gauge varies.

Prices range from \$59.99 for a DY series to \$129.99 for a C Series and \$299.99 for an F Series bender. Prices are the same for all models within a series.

"The DY is the least expensive bender, but the C Series is our workhorse," says Robinson. "All three work great. Just visit our eBay site. It's loaded with customer comments."

The design is largely unchanged from his first inspiration. Two tubes in the desired arc are bolted together in a stacked position. A retainer at one end holds the pipe in place as it's bent around and between the stacked tubes of the bender. The bender is bolted to any horizontal or vertical surface that allows room for the pipe to be bent from a straight position.

Robinson also makes a bender for 4-ft. and 6-ft. dia. hoops made with 10 1/2-ft. lengths of electrical conduit. The hoops

make it easy to create low tunnel, bed-sized greenhouses.

Eliot Coleman is a market gardener, author and proponent of year-round gardening using low tunnels. He has endorsed Robinson's Quick Hoops Bender. While low tunnel hoops can be made from PVC pipe and even black plastic pipe, Coleman points out that neither will stand up to a heavy winter snowfall like metal conduit will.

Robinson gave FARM SHOW a Quick Hoops Bender so we could see for ourselves how it works.

The bender was bolted to a 4 by 8 sheet of plywood and laid between the wheel wells of a Chevy S10 pickup truck. Robinson advised that the plywood would quickly bind against the wheel wells as the bender was used, creating a stable work surface.

A 10 1/2-ft. length of 1/2-in. electrical conduit was inserted about 16 in. through the retainer. The conduit was simply walked around the bender. The process was then repeated with the other end inserted in the retainer. When the conduit was pulled away from the bender, it was a perfect hoop with 16-in. sidewalls and a 4-ft. dia. arc.

The hoops were set over a 4-ft. wide raised bed and pushed into the soil on either side. Initially the bed, with winter greens and beets planted to it, will be covered with Reemay row cover for frost protection. Come spring, the low tunnels will be used to protect an early season planting from frost. By late spring, only the row cover will be needed.

All three series of benders are available directly from Robinson. The smaller Quick Hoops Bender is offered exclusively through Johnny's Seeds in either 4 ft. or 6 ft. diameter configurations (ph 877 564-6697; www.johnnyseeds.com).

Contact: FARM SHOW Followup, Lost Creek Greenhouse Systems, 245 C.R. 2651, Mineola, Texas, 75773 (ph 903 569-8541; herbs@lostcreek.net; www.lostcreek.net; eBay site: tippergoat).

Robinson pipe benders can be used to make greenhouses or "high tunnels" up to 24 ft. wide.



FARM SHOW tested Robinson's simple method of bending hoops to make 4-ft. garden row covers.



Bender bolts onto any horizontal or vertical surface that allows room for pipe to be bent from a straight position. Hoops covered by fabric, right, protect late-season plantings.

