Modified electric golf cart is fitted with a metal deck that serves as a workbench. It wraps around 3 sides of vehicle and attaches to it with 4 bolts on front and back.

Montezuma toolbox mounts on one side of workbench behind driver, and there's a fold-out compartment covered by an expanded metal "rack" on front for tool storage.

Self-Propelled Workbench Drives To The Job

"This portable work bench saves a lot of steps and makes my job as a self-employed mechanic a lot easier. I think farmers with big shops could benefit from the same idea," says Chad Goetzinger, owner and operator of Chad's Tire and Repair Service in Plainview, Neb.

He recently sent FARM SHOW photos of his modified electric golf cart that carries all kinds of different tools and supplies. The cart is fitted with a big metal frame that wraps around 3 sides of the vehicle and attaches to it with 4 bolts on front and back.

The frame supports a metal platform that serves as a workbench. There's a Montezuma toolbox on one side just behind the driver, and a fold-out compartment covered by an expanded metal "rack" on front for storing air, standard jacks, and a set of acetylene tanks. A pair of scissors jacks on back are used to stabilize the workbench. A Wilton vise fits onto either end of the workbench.

Each scissors jack is attached to a threaded rod that runs up through the frame. "I use a cordless impact wrench to buzz the jacks down to the floor or ground. It keeps the whole workbench solid so that it doesn't wiggle from side to side," says Goetzinger.

On the passenger side of the cart there's a pair of big built-in drawers and a half dozen bins, as well as 6 smaller drawers lined up vertically.

"It's a real conversation piece around here," says Goetzinger. "A lot of people have come in to see it, and everyone wants to take photos. A lot of farmers with big shops in the area want me to build one for them.

"I came up with the idea because I operate a one-man shop where I work on farm tractors, trucks and other equipment. There's a big lot behind my shop where I'm often working, but it seemed like I never had the right tool with me so I had to walk 50 or 60 ft. back to get it. One day I was installing an air bag on a truck outside the shop, and I counted 11 different trips that I had to make back to the shop just to get a different tool or part."

The rack on front is supported by a pair of light chains and can be used as a base for either jack. "It works great to change tires. I flip the rack down to the ground and set the jack on top of it," says Goetzinger. "I can also use the rack on the ground to drag big truck tires into the shop.

"When I'm done at the end of the day I throw everything on the workbench or rack and drive the cart back into the shop, and then put everything away."

He says he uses the drawers to keep small tools and parts such as cotter pins, clevises, hose clamps, electrical wire, and connectors, punches, small bolts, and all kinds of other stuff including bolts and washers – anything that he might need when working on equipment.

"The whole works comes off with 4 bolts and an overhead crane, but I seldom take it off because it's so handy," says Goetzinger.

This isn't the first time he has modified a golf cart. "I'm an avid prairie dog hunter and about 20 years ago I converted a gas-powered golf cart into a portable shooting table. It's fitted with 4-wheeler tires, a shooting bench, and a place to put ammunition. I widened the seats on it so that I can drive around prairie dog towns and shoot from it," says Goetzinger.

Contact: FARM SHOW Followup, Chad Goetzinger, 208 1/2 South Main St., Plainview, Neb. 68769 (ph 402 582-4581 or cell ph 402 841-9006).

Shop Tool Can Make "Almost Anything"

"About 7 years ago I designed and built a portable universal fabricating device. To advertise the machine, I used a picture of a pedal-powered playground-size yellow Ferris wheel that I built for my grandkids, and sales took off," says Marshall Bulle about his UF-25H Universal Fabricator.

He says the Fabricator is ideal for any project that requires forming square and round tubing, pipe, flat and solid bars. Most bending is done in 45, 90 or 180 degree bends, and he says that's where the device really shines. He's used it to build a merry-go-round, swing sets, lawn furniture, a greenhouse, 4-wheeler racks, ladder racks, brush guards, dune buggys, go carts, trailer hitches, ornamental railings, gates, and fences.

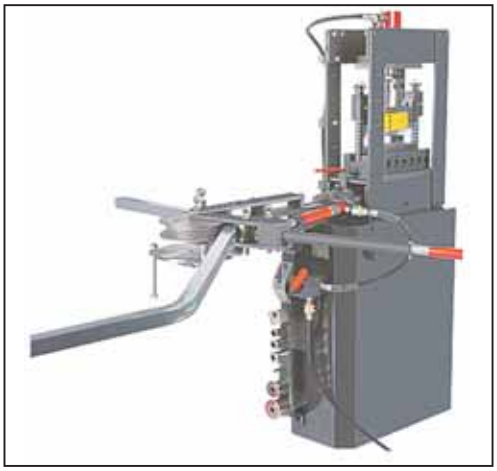
The Fabricator has a standard lock-n-stop gauge with an engraved numbering system. The gauge allows the user to repeat precise angles at a later time. Bulle has written plans books that include step-by-step directions for many different projects which he's first built himself. In 7 years of selling the Fabricator he's never had a complaint about the machine and very few questions about how to use it. He's had industrial arts teachers tell him that students can easily understand the directions and many have used the fabricator to build projects that they've sold to bring in money for their schools.

The Universal Fabricator sells for $6,998 plus shipping. Different attachments for producing scrolls, twists, bending square and round tube, flats and angles are available. The company also sells two different sizes of ring rollers.

The inventor of the Universal Fabricator used it to build this pedal-powered Ferris wheel for his grandkids.

He built the wheel in about a week, which included drawing up the plans, fabricating the parts, assembling, welding and painting. The triangular base frame is made of round tubing and the wheel frame is made of square tubing. The wheel rides on bearings at the top of the base frame and is driven by a bicycle-type pedal system on one side. The pedaling, typically done by an adult, turns the wheel slowly with a chain drive. Both seats on the wheel have safety restraints so kids can't accidentally tumble out. Says Bulle, "I've had a lot of experience fabricating and building, so I probably made the wheel faster than most people can, but anyone who's adept at building can quickly learn how to use the fabricator and build the wheel and other things."

Contact: FARM SHOW Followup, Shop Outfitters, P.O. Box 20106, 4932 Graneros Rd., Colorado City, Colo. 81019 (ph 719-676-5555; www.shopoutfitters.com).



Universal Fabricator works great for any project that requires forming square and round tubing, pipe, and flat and solid bars.

Quick Way To Fix Worn Tie Rods

When a tie rod gets worn or comes apart, John Owens has a "fast fix" solution. His Ford 5000 tractor came with a non-greasable, permanently lubricated tie rod joint. When the piece of nylon that provided the non-lubricant lubrication wore out, Owens was in the middle of a job.

"I didn't want to stop and order parts," says Owens. "A new tie rod would have cost $220, but I figured out how to fix it with a $1 washer."

The first step was to take it to a shop that had a tie rod knocker. The removal tool is a tapered fork that slides under the tie rod end. With the help of a hammer, it is driven in to knock the pivot pin out. He then put the pin bolt back in the socket and secured it in place with a 7/8-in. steel washer that fits over the end of it.

"I welded the washer around the outside rim on the top of the socket and put the tie rod back in place on the tractor," says Owens.

Later Owens had to do the same thing to the other tie rod on his 5000. Both have held up just fine.

"I always figured that when they wore out, I would get the parts to replace them," says Owens. "However, the first one has lasted for many years and so has the second. All I do is squirt some oil into the socket once in a while."

Contact: FARM SHOW Followup, John N. Owens, P.O. Box 875, Paris, Texas 75461 (ph 903 982-6952).