



Surber built a custom trailer to haul his 1972 Miller Big 40 welder. It has angle-iron rails on the floor and two side cabinets for supplies.

Rebuilt Welder Rides On Shop Built Trailer

Frank Surber isn't afraid to tackle any repair or building project.

Early in 2025, he says, "I decided to get my 1972 Miller Big 40 welding machine running that I hadn't used for 12 years. After cleaning the points, changing the oil and filter, draining the coolant and refilling it, putting in a battery and clean gas, it started right up," Surber says.

"The big problem was that gas was pouring out of the carb, so I put in a new one, also an ignition switch, a choke cable and wiring from the alternator to the switch. The gas tank leaked from a hole rusted in it; some of the wiring was rat or mouse-eaten, and only two of the range selections still worked due to broken connectors.

"I removed the top cowl, pulled the gas tank, repaired the broken range selections and dropped on a temporary gas tank. It ran like a charm, so I used it for a week to power my carbon arc gouge while working on a dozer."

Surber says he needed a way to move the welder around without always having to use his backhoe, which led to another project.

"I've got a large amount of scrap and other miscellaneous junk that I use for different projects, so I decided to build a little trailer to haul the welder," he says.

Not one to draw up plans, Surber first visualizes a completed project, then gathers pieces and starts measuring and cutting. His trailer build grew from an old metal frame that used to hold sheet steel. It rides on an old steering axle and wheels from a '48 Chevy truck. For tires, he put new inner tubes in a pair of 40-year-old white walls from a camper trailer.

The welder slides onto the trailer floor guided by two pieces of angle iron. Supplies are carried in two bedside toolboxes from an old pickup. With the frame, floor and side complete, Surber primed and painted it, then added a new hitch coupler and a tongue jack.

"Now I've got a heavy-duty trailer that will take my refurbished heavy-duty welder anywhere I need it," he says.

Contact: FARM SHOW Followup, Frank Surber, Peacock, Texas.

Quick Way To Check If Hitch Is Loose

Dale McLaen, Rutland, N.D.: "Here's a quick visual check to see if the ball on your hitch or any other critical fastener has started to come loose. Take paint and make a straight mark on the ball, receiver and nut. If you glance at it later and one part of the line has moved, you'll know something is loose. You can fix it before it becomes a problem.

"I do the same thing on any wheel lug nut or other big nuts, like ones on the end of a disk gang. The mark is easy to notice. Without it, you can't tell if the nut is loose just walking by. You may not know it until the nut and whatever it's holding falls off."



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Shop Vice Does It All

Dexter Brahn has made his shop vice more useful by adding additional tools and storage to keep things close by when working.

He has storage for metric and standard wrenches and sockets, as well as screwdrivers and crescent wrenches.

There's a blade balancer, extra sandpaper, grinding wheels, a tabletop with a magnetic dish, an arm to hold a helmet, tubes that can hold a welding gun and an electric drill, and hooks that can hold other hooks or clamps as needed.

The table and balancer arm swing out of the way, and he has a work support that can adjust both in and out as well as up and down, that conveniently stores away in the back.

With the add-ons, Brahn is able to save time and keep tools at hand and organized in his shop.

Contact: FARM SHOW Followup, Dexter Brahn, 1324 220th St., Ionia, Iowa 80645.



Brahn saves time by keeping tools handy with his vice in his shop.

FARM SHOW®

Money-Saving Repairs & Maintenance Shortcuts

Have you come up with any unusual money-saving repair methods for fixing farm equipment? What maintenance shortcuts have you found? Have you had any equipment recalled by the factory? Name a particularly tough mechanical problem you've had with a piece of equipment and how you solved it.

These are a few of the questions we asked randomly selected FARM SHOW readers. If you have a repair tip, maintenance shortcut, or other mechanical experience you'd like to share, send details to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 or email us at: editor@farmshow.com.

Scott Geyer, Editor & Publisher

Todd Boehm, Denmark, Wis.:

"The gearbox mount bolts kept coming loose on my Deere 1209 haybine. Even double-nutted and torqued to 200 lb-ft, I'd lose bolts with less than 30 acres cut. I installed Nord-Lock cam-toothed washers and never lost another bolt. The bolts are 5/8 in. dia., so the washers were a decent amount of money, but now there's no more replacing bolts and welding broken brackets due to lost bolts."

Richard Turner, Belington, W.Va.:

"When I'm working under a tractor with a wrench and it takes a long time, my neck hurts. I use a six-pack of paper towels under my neck, and it stops the hurt."

Bruce Porkka, Atlantic Mine, Mich.:

"I had a double-acting steering cylinder leaking on a Case 1390 tractor. I'd read about SealLube in the "Best, Worst Buys" section of FARM SHOW. I used the additive as directed, and it worked great. I appreciate it's a Centerline, Mich., product."

Steve Crouse, Patten, Maine: "I welded a 3 by 3 piece of angle iron on the full width of the edge of my welding table with the V pointed down. It makes it easy to join round pipes, other angle irons and rectangular tubes. Just lay them in the V, line them up and tack them."

Mike Parenteau, Pine Bush, N.Y.: "I use cotton swabs, old toothbrushes and t-shirt rags for cleanup after changing the oil in my lawn mower, tractor and snowblower. They get me into most nooks and crannies. I used old coffee cans to store the supplies, one for each. My father-in-law instructed me never to toss old toothbrushes—he was right."

Robert Mitchell, Chrisman, Ill.: "One life annoyance is the straws on aerosol cans. Once you pull the straw out, it's almost impossible to keep from losing it. Now, I carefully remove the straw, spray it with whatever is in the can, and slide it back into the tape. The straw lubricates the tape, and it will be held until the next time you need it."

Pete O'Brien, Ballston Lake, N.Y.: "Putting tire chains on ag tractors can be challenging. Many a person has been injured or worse when jacking up a vehicle to put tire chains on and snug them up. A tip many in this area use is to cut off the first crosslink. This way, the chains may be installed easily inside a farm shop or outdoors, even when stuck. You'll lose approximately 10% traction, but it's safer than jacking up large vehicles. You'll still gain 90% traction with tire chains over not installing them."

T.R., W.Va.: "When putting tire chains on my tractor, I put the end of the chain on the tire over the slot in the rim. Next, I feed a heavy cord through the chain on the inside of the tire. Then, I feed the two ends through the slot in the rim and then through the chain on the outside of the tire and tie it tight. I do this at each slot in the rim. The chain won't fall out of place when it rotates to the bottom, and it can be easily hooked."



Ralph Volkman, Black Creek, Wis.: "I mounted the tool spanner wrench under the handle, so I have it when I'm away from my shop."



James Minix, Morrison, Tenn.: "I installed a starter improvement wiring harness for old Deere tractors with Kawasaki engines. It made an immediate improvement in my 1996 Deere 325 lawn tractor. I hadn't even known they existed—well worth the \$25 investment."