



Surber built a heavy-duty transmission jack lift out of metal pieces from his junk pile and spare parts in his shop.

Shop-Built Jack Lifts Transmission In Place

A friend called Frank Surber a few years ago and asked if he could install a clutch and rear main seal in his Mack truck. Surber said, "Sure, come on over." Then he realized he didn't have the heavy-duty jack he'd used several years ago, and his neighbor's jack, which he thought he could borrow, was broken.

"I offered to rebuild the one my neighbor had, but he'd already taken it for repair, and it wouldn't be back when I needed it," Surber says. "I decided it was easier to build my own rather than hunt for one to borrow or rent."

Surber knew what parts he needed for the build, so he went to his scrap pile. He pulled a couple of 4-in. by 4-in. by 1/4-in. square tubes, various lengths of 1-in. pipe, a large piece of 1/2-in. plate steel and a few feet of 3/4-in. 1018 cold roll rod for the pivot shafts. His storage van had four heavy-duty casters, two rigid and two swivel, and an 8-ton engine hoist jack. He also had a chromed cylinder rod for the pivots and set collars that he'd made for another project.

"I guess it was a stroke of luck that I had all the parts I needed, and all I had to do was put it together," Surber says. He used two 1-in.

holes in his welding table as a jig to hold the 1-in. pipes so he could weld them together to make the link arms. After the ends cooled, he reamed the bores with a #7 tap handle. He pre-assembled the parts, tack-welded the connection points, and checked to make sure it worked.

"Right from the start, it worked great," Surber says, "which really didn't surprise me because I always double-check measurements on everything I build."

Surber removed surface rust with KBS rust blast to provide a smooth pre-paint primer surface. He says that leaves a zinc coating that can be brushed off or left in place. He didn't have etching primer, so he just rubbed off the surface residue and left the remaining material as primer. He finished the lift in machinery gray with a full coat of KBS rust seal.

Surber says it only took him a couple of hours to build the jack, and when his friend arrived to have him work on the Mack, the new tool worked exactly as planned.

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

Handy Clamp Releases Hydraulic Pressure

Connecting hydraulic couplers when line pressure has built up can be nearly impossible. The QC Mate Quick Coupler Hand Clamp from XBoom solves the problem quickly and safely.

The QC Mate has specially shaped clamp jaws that mount to a ratcheting hand clamp with up to 600 lb. clamping force. The jaws are 13-ga. steel tubing with large structural side gussets.

The QC Mate is available in both 12 and 18-in. spacing to handle a wide variety of machine types and hydraulic block and coupler styles. It's compatible with all standard Flat-Face Hydraulic Couplers and Ag Style Hydraulic Couplers within listed sizes.

When selecting the correct QC Mate jaw size, it's important to note that the NPT size (used for couplers) differs from the coupler's outer diameter. Select the jaw size that coincides with your coupler's NPT size. A 1/2-in. NPT jaw option that fits a 1/2-in. quick coupler has an actual jaw/width diameter of 0.87 in., which is needed to fit the coupler's outside diameter.



XBoom hydraulic hand clamp.

Duo Jaws are designed to fit two different coupler sizes without changing the jaws on a QC Mate clamp.

Customer reviews on the Skid Steer Solutions website were very positive, with 95 out of 115 giving the QC Mate Quick Coupler Hand Clamp five stars. It's priced at \$89.00 on that website.

Contact: FARM SHOW Followup, Skid Steer Solutions, 2314 E. Bakerview Rd., Bellingham, Wash. 98226 (ph toll-free 866-966-2538; sales@skidsteersolutions.com; www.skidsteersolutions.com).

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



John Rochester, Charlotte, N.C.: "When picking up many small items, a dustpan works great. Dustpans also work to scoop water off the floor and into a bucket."



"If you don't finish a project and will be going back to it the next day, set up a table near it and place only the tools you'll need to finish on it. They'll be nearby and ready to go when you are."



"Use a mill cut board instead of a square to mark cuts."

David Simpler, Elkton, Md.: "After putting four new tires on my skid steer, I had recurring problems with two losing air over time. I finally figured it out. Those little

needle/toothpick-like bits on the tread are also on the bead of the tire. They were just big enough on those two tires to give a path for air to escape.

"I broke the bead on the tires from the rim, blew them out with air, and opened them up enough to pull the tips off with a needle nose plier."

"I put a nice coat of bead sealer on the tire beads and set them for 24 hours to ensure a good seal. I've had no problems losing air since."

"I would encourage FARM SHOW readers to check the bead on tires before mounting. Pull those little needle-like bits off first and eliminate a potential problem



Stephen Zonies, Waitsfield, Vt.: "I'm sure many readers have used just a small amount of caulking, tried to seal the tube, and then discovered it had set. This technique works for me."

"First, clear the hardened material using an appropriately sized drill bit. Clean before it sets. Although this is much easier, be careful. The bit's flutes are sharp, too."



If there's still good stuff left in the tube, cap off the nozzle with a wire nut, toothpaste cap, lamp finial or other cap-like item. Most are threaded for a snug fit and come in several sizes for a hermetically sealed cap. Tin foil with a rubber band over that will help even more."

Jim Stone, Warrenton, Ga.: "We've always used bailer twine around the farm, and inevitably, it'll become a tangled mess which eventually just gets thrown away. Our simple solution is to put the twine in