# 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 farm equipment and how you solved it.*

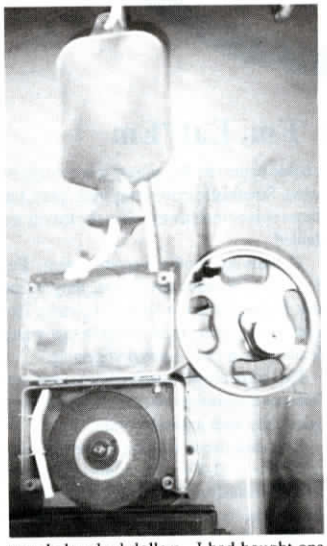
*These are a few of the questions we asked randomly selected FARM SHOW readers. If you have a repair tip, maintenance shortcut, or other mechanical experience you'd like to share, send details to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044.*

**Randy DeGrave, Colby, Wis.:** "I use a screw-out tractor jack to break rear tractor tire beads while the wheel's still on the tractor. I put the jack between the tire and fender and then extend the jack. Works great."

**Doit Ross, Minooka, Ill.:** "I keep a bunch of used spray can nozzles in a baby food jar filled with gas. That way I always have a clean one to replace a plugged one."

**Larry Easterday, Mansfield, Ohio:** "I cut tires with a chain saw. You can cut friction by keeping a container of used oil handy and keep dipping the chainsaw bar and chain into it. If the chainsaw is sharp, it'll cut right through the tires."

**Ken Winans, Binghamton, N.Y.:** It looks strange but Ken says the simple cooling system on his shop grinder saved him a lot of money. "I needed an oil cooler for my grinder but conventional systems cost a couple hundred dollars. I had bought one years ago and it didn't work that well. So this time I went down to the drugstore and bought an enema bag for $12 and hung it above the grinder, running the rubber outlet tube down to the wheel. It's a practical, efficient and economical way to put coolant on whatever we're grinding. Can be used on other machinery, too, such as a cut-off saw."



**Roy Dix, Denison, Kan.:** "John Deere 10 and 20 series tractors are equipped with tin battery boxes that collect dirt under the floorboards and rust out. I replaced the battery box on my 4020 Deere with a heavy-duty platform made out of 1 3/4-in. angle iron (1/4-in. thick) welded together in a square. It holds the battery securely yet makes access much easier. I cut off the existing terminal ends and replaced them with Blackburn #250 terminal ends which you can buy at an electrical store. In addition, I replaced the original battery with two bigger Group 31 series batteries that don't corrode terminals. I also welded a steel plate to the floorboards above the battery to protect the battery terminals.

"On my Case 70 Series tractor the battery was originally mounted in a long box under a cab brace on the left side of the tractor. It took 2 men and a boy to lift the battery out after loosening the cables through a hole in the cab floor. I made angle iron frames for both the right and left sides of the tractor and put a Group 31 battery on each. Now they're easy to get to from the ground."

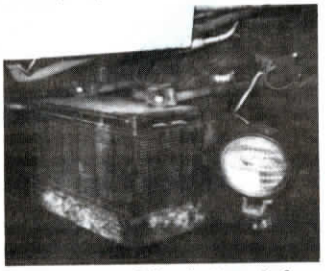


**Photo shows angle iron battery platform on right side of Case tractor.**

**Mike Bjorkman, Phillips, Neb.:** Mike converted the frame of a 70-ft. trailer house into a second floor parts storage "loft" mounted up on the wall in a corner of his shop. "It's a low-cost way to organize and keeps everything off the floor. It's also a great time saver because we don't have to waste time searching for parts." The 14-ft. wide trailer had been in a fire that burned everything but the steel frame and deck. Bjorkman cut the frame in half, then used a hoist and front-end loader to raise the 35-ft.

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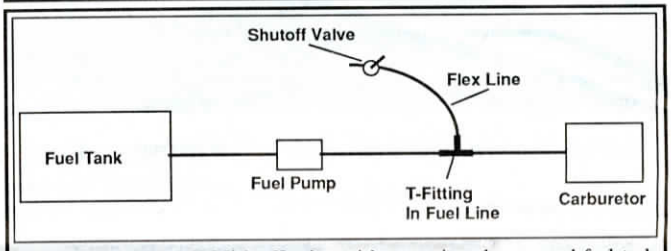
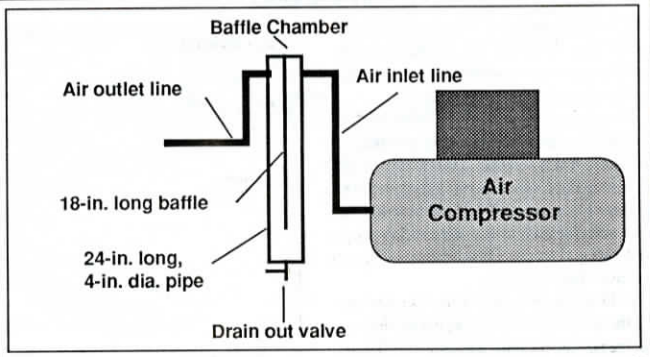



**Darel Todd, Hillsdale, Mich.:** Here's a handy idea for refilling fuel tanks on lawnmowers, chainsaws and other small engines without using a gas can. Darel installed a "T" fitting in the fuel line on his 1982 Ford F-150 between the fuel pump and carburetor. He attached a flexible length of fuel line hose to the fitting and put a small shut-off valve at the end of the hose. With the 300 cu. in. engine in the pickup running, the powered fuel tank filler will deliver between 1/2 and 1 gal. of gas per minute, depending on engine speed. Darel says the idea works great for filling any small fuel tank. "It's much easier than handling a gas can or trying to fill small tanks from a fuel storage tank. On many occasions, I've used the fill hose to help stranded motorists who have run out of gas."




**Darius Hofer, Maple Creek, Sask.:** Moisture in compressed air lines is a problem in any shop with a large air compressor if you don't have a commercial air drier, which can cost hundreds of dollars. Hofer says he solved the problem with a $75 home-built air baffle that keeps moisture out of air lines. "Take a 24-in. piece of 4 or 6-in. dia. heavy wall pipe. Cut a piece of flat iron 18 in. long, sized to fit snugly inside the pipe. Weld it in place at the top end of the pipe. Weld a cap on each end.

"Next, weld a 3/4-in. fitting (or drill and thread the pipe) on either side at the top of the pipe, facing into the baffle, and one fitting on the bottom. Air coming out of the compressor hits the baffle, travels down one side of the pipe and up the other side. Water drops to the bottom because of its weight and inertia. A simple valve at the bottom lets water drain off as needed. My baffle is positioned on three legs high enough off the ground so a drain pan fits underneath. The baffle mounts right next to the compressor tank so all moisture is taken out before it has a chance to get into any of the air lines. It works for us."

## Do-It-Yourself Engine Gaskets

You can make gaskets to seal almost any engine part with new "gasket on a roll" made out of a material that's unaffected by fuels, oil or other engine liquids and will never harden or age. It can withstand temperatures up to 600°F without deterioration.

Gore-Tex gasket material comes in narrow strips on a roll. It has self-adhesive backing that lets you place it wherever you want it and it'll stay there during reassembly of the parts.

"You can form gaskets of any size and shape so you don't need to inventory lots of 'stock' gaskets or run to the parts store every time you disassemble parts on your engine," says John Blaha, manufacturer.

Gore-Tex gasket material comes in four different thicknesses and can be "stacked" if needed to fill a larger gap. It compresses to tightly seal even pitted or corroded surfaces and can even be used over an old hard gasket that no longer seals. And when it's time to remove a Gore-Tex gasket, it simply peels off without sticking. Never needs scraping, says Blaha, noting that the material works great on water pumps, valve covers, intake manifolds, thermostat housings, oil pans, transmission case, differential covers, and any other part normally sealed with a gasket.


Sizes range from .25 mm for precision work to 2 mm for general use. A 6-ft. long roll of 2 mm thick Gore-Tex sells for $11.95 plus $2.50 S&H.

Contact: FARM SHOW Followup, Gore-Tex Automotive Gaskets, P.O. Box 1010, Elkton, MD 21922-1010 (ph 410 392-3200).