Bruce Buckmaster, Rogue River, Ore.: "To remove a seized pulley from a shaft, I heat the pulley and melt wax from a candle onto the heated pulley shaft. Then I can remove the pulley easily.

"I had problems with flat tires on my hay rake. So I had the tire shop send the wheels and tires off to be foam-filled. After that, the tires lasted until the cords inside started showing."

Earl Lumbra, Montgomry Center, Vt.: "I put a jack from Tractor Supply on my home-built wood splitter to hold the front up when it's not connected to a tractor. I should have done that 30 years ago.

"I recently installed GFCI outlets in my shop to protect against electrical shocks. Peace of mind."

Gary Alford, Edwardsburg, Mich.: "I installed a Pertronix electronic ignition and coil on my 1954 Ford 800 tractor and it worked out great. That old tractor has never run so well (www.pertronix.com).

"Fuel shut-offs on Ford 800's always start leaking and replacements are getting expensive. You can remove the stop pin, replace the O-ring, and then tap in a small screw to take the place of the stop pin. This also makes it easier to repair the next time it leaks."

Will Runyan, Avoca, Neb.: "I use silicon caulk to seal air lines and fittings on air compressors. After assembling with Teflon tape, I just apply with my finger around the leaky area. It works."

Kerry Kligora, Mineral Point, Wis.: "I cut a lot of wood for our boiler every year. At the end of the season, I sharpen all the chains and gauge all the rakes prior to storing, but sometimes they rust during the off season. To stop this, I started dunking all my chains in Lucas transmission anti-slip oil. It's really thick so it will cling to the chain even when they're hanging on a nail. It also makes sure the chain has immediate oil once it's on the bar, reducing wear on both bar and chain.

"Also, I always keep an old bar for each saw around in case I need to go after stumps

or am working in a fence row. Keeps my good bar from unnecessary wear. When I'm not using the old bars, I coat them with a little oil and then store them inside old wool socks. The wool has a lot of padding to protect the bar in my tool bucket, and keeps moisture away as well."

Chris Despain, East Peoria, Ill.: "To remove stubborn bearing races from hubs/ drums in medium and heavy-duty trucks, I stuff wet rags in the well of the hub backed up against the race, then weld a bead around the race where the tapered bearing rides. When the weld cools, it shrinks naturally and the bearing taps out easily. I will already have the new race in a freezer cooling off. The residual heat from the welding process helps install the new race. I put a dab of bearing retainer around the race on installation to help install and retain. Also, I sometimes add bearing retainer compound to tighten up a loose race."

Stephen Kozerowitz, Huntley, Ill.: "I liked the idea in your last issue about sticking labels to a tire pressure gauge that list the tire pressures for various vehicles. I kind of do the same thing except that I stick labels on the fender over each tire. I do this on my tractor, log splitter, wood chipper, trailer and yard dump cart. That way I can use any tire pressure gauge to fill the tires."

Ray Webb, Emlenton, Penn.: "Here's how I remove a 3/4-in. broken stud. First, I drill a 1/4-in. pilot hole in the end of the stud. Then I take a 1/2-in. right hand drill bit and run it in reverse to back the stud out. You might have to sharpen the bit for reverse direction. This has worked well for me many times."



Ben D. Marek, New Ulm, Texas: "I broke a hoe handle. To repair it, I used a hacksaw



Bolt-on sleeves from Longhorn Fab Shop make it easy to toughen up tie rods on the GM Duramax pickup.

How To Toughen Up Duramax Tie Rods

Tie rods are known to be a weak link in the otherwise reliable GM Duramax pickup, but Longhorn Fab Shop has an answer. Their bolt-on sleeves make it easy to toughen up the tie rods.

"There are other sleeves on the market, but they thread onto the tie rod," says Manfred Schreyer, Longhorn Fab Shop. "People often realize they have a tie rod issue after putting on new wheels and tires and getting them aligned. Threading on tie rods means having to get another realignment."

Shreyer notes that flexing under hard loads can often be enough to snap the factory installed tie rods in two. Beefing them up is essential, especially if off-roading, sled pulling or drag racing.

Longhorn's clamshell-shaped sleeves are

priced at \$179.17. Offered in either steel or stainless steel, no disassembly of the front end is needed. The sleeves are machined from solid stock and fit directly over the stock tie rods on 2001 to 2016 GM Duramax trucks.

Installation takes less than 15 min. It requires no special tools or skills. Simply place the two halves over the tie rod and line up the machined holes. Insert and tighten the 10 allen head bolts and snug down the smaller set screws to keep the sleeve from moving around.

Contact: FARM SHOW Followup, Longhorn Fab Shop, LLC, 11788 Air Hill Rd., Brookville, Ohio 45309 (ph 855 797-8478; contactus@longhornfabshop.com; www.longhornfabshop.com).



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.

Mark Newhall, Editor

to cut a slot lengthwise in a 12-in. long piece of pvc pipe and slipped the broken ends of the handle into either end. I applied waterproof glue inside and secured the pipe to the handle with two radiator clamps. Now it's good as new.

"I got tired of long-handled tools sliding around in the bed of my pickup so I made some brackets out of 1/2-in. wide flat metal and mounted them over the wheel well, attached with screws to pickup box. Problem solved."

Robert Sibley, Tioga, La.: "Both diaphragms on my Danner sewer system air pump ruptured. The replacement cost for a new pump was \$450 plus labor. Instead, I found a repair kit on Amazon for \$15. Did the job myself and it runs good as new."

R.A. Smith, Piketon, Ohio: "The power steering on my 2002 Sebring sedan was getting difficult to use. It would 'stick' at lower rpm's. I talked to a friend who had the same problem with a 2007 Toyota Tacoma. His dealer wanted \$1,200 to replace the rack and pinion but instead my friend simply replaced the power steering fluid and that solved the problem. So I replaced the fluid in my Sebring and solved my own problem, too.

"I hope this helps out someone else. It's easy to forget about the easy solutions

Arthur Peabody, Upton, Wyo.: "A couple of matchsticks saved me \$940. That's what my Ford dealer wanted to charge me to fix a miss in my 2000, 7.3-liter Power Stroke engine. We had already replaced the valve cover, gasket and more on the left side of the engine, but the diagnostics insisted the problem was there. The dealer wanted to replace the computer.

"I could hear the miss on the right side, so I decided to check it out. I took the valve cover off and took the wiring harness out and then plugged it in without the valve cover in place. It ran fine.

"The problem was the electric plug on the inside of the valve cover. It has 2 little clips that snap in place, but over time they had gotten loose, probably from engine heat.

"I wedged a couple of matchsticks (after removing the heads) behind the plug. The problem was solved. It's been 3 years, and it's still working fine."



Miles Parkkonen, Marquette, Mich. (www.paintscrubber.com): His new Paint Brush Scrubber makes it easier to clean paint brushes, rollers and pads. The small, wooden tool has a grooved washboard surface. Brushes are cleaned by scrubbing them back and forth at a 45 degree angle, which separates the bristles without getting your hands dirty. The scrubber has a semicircular cutout on one side for cleaning paint rollers. The Paint Brush Scrubber sells for \$9.99 plus \$4 S&H.



Darry Markle, Claresholm, Alberta: "Mounting four 8-in. pneumatic wheels on a pallet makes it easy to move my gaspowered compressor and generator around my shop. I mounted a pair of caster wheels on one side and fixed wheels on the other.

"The compressor and generator bolt onto the pallet so I can grab onto either one to push the unit around the shop. Or, I can use a loader tractor to move the unit out to the field or load it onto a trailer or pickup."

Garry Hoffman, Killaly, Sask.: "Anyone who has ever used a 3-jaw puller knows how frustrating the experience can be. However, wrapping the jaws with a vise grip chain changes the whole experience.

"First, get the puller behind the bearing any way that it will stay. Wrap the chain around the jaws as shown without tightening it too much, and then loosen the puller