Ronald Post, Celina, Ohio: "To remove a stubborn bearing from a shaft, I come in sideways with an air hammer where the set screw is. The screw will pop out and split the collar. This is a far better way than using a torch. Wear safety goggles because the pieces can shoot out."



Robert Boddy, Bloomingfield, N.Y.: "I mounted an electric generator to the base of a push lawn mower. It makes moving the generator from place to place much easier. Real handy."

Michael Bulatko, Belington, W. Va.: "I use turpentine to loosen stuck or rusted bolts, nuts or parts. Costs a lot less than penetrating oils."

Paul Seward, Wray, Colo.: "I often use a squirt of ether to get older engines started. I've found that warm ether ignites much better than cold. Makes a lot of difference. Engine just comes alive right away. Cold ether is more caustic to the metal surfaces. In the winter, just keep your cans somewhere warm rather than outside in a cold shop."

Anonymous, Richmond, Va.: "Bar chain oil for my chainsaw is about \$25 a gallon. So I use old motor oil. After I change oil in a car or truck, I let the oil sit for a day or so in the sun and then pour off the top 3/4 of the jug to use in my chainsaw. The lubricating properties of the oil are still plenty good for a saw."

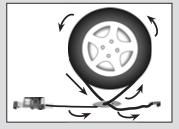
Chad Travis, Drasco, Ark.: "I made a wheeled bucket stand for a local auto garage. It's designed to support a 5-gal. bucket of fluid 3 1/2 ft. off the floor, which makes pumping fluid into gearcases a much easier job when the vehicle is up on a lift. One person can hold the hose in the gearcase fill hole and pump in fluid, without having to reach down to the floor.

"The stand's center support is made from

a 2-ft. length of pipe welded to an angle iron base. The bucket rests in a tray made from 1-in. angle iron and 10-ga. sheet metal. The back support is made from 1/4 by 1-in. flat strap bent in a half circle.

"You just roll it under the vehicle. The raised stand makes the bucket much easier to reach than if it was on the floor."

Myron Ashcraft, Gold Beach, Ore.: "Here's a quick, simple way to air up tubeless tires. Jack the wheel up to clear the ground. Wrap a loop of steel cable on a come-along



around the tire and through a heavy-duty washer. Hook both ends of the come-along in opposite directions and in line with the centerline of the tire. When it goes through the washer this way it'll form an X.

"Then use the come-along to squeeze the tire until it seals to the rim. Fill the tire with 10 to 15 lbs. of air before releasing the comealong."



Reuben Miller, Nappanee, Ind.: When he bought a load of concrete forms, the old enclosed semi trailer that delivered them came with the deal. They removed one wall and created a shelf inside the remaining shell, mounted on an angle iron frame. The heavy-

Heated, carbide cutting blade slices away rounded edges on worn tire treads to boost traction.



"Tread Cutter" Boosts Tire Traction

"We don't recommend the Tread Doctor for tractors or other big equipment tires, but it works great on motorcycles, ATV's, cars and light duty truck tires," says Kevin Schulte, Hardline Products.

Over time, aggressive tire treads round off, reducing traction. The Tread Doctor was developed to keep knobby tires on dirt bikes sharp. However, as Schulte suggested, the device works equally well on maintaining tread on any traction tire. Its heated, carbide cutting blade quickly slices away the rounded edge, returning the sharp edge needed to grab the soil.

"The Tread Doctor can extend the useful

life of your tires," says Schulte. "With a little practice, you can cut off the minimal amount of rubber needed to regain traction."

The Tread Doctor comes with its own holding stand and runs on 110V AC. It's priced at \$59.99. It's also available with a second brass head and 10 replacement blades for custom designing knobby patterns in the face of treads. It's priced at \$79.99.

Contact: FARM SHOW Followup, Hardline Products, 677 Cochran St., Simi Valley, Calif. 93065 (ph 805 581-4700; sales@hardlineproducts.com; www. hardlineproducts.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

duty shelf works great for holding skidsteer attachments and bulky or heavy parts. They removed the wheels from the trailer. I got tired of having to remove the air filter cover and trying to re-install it on a running diesel engine. To solve the problem, I drilled

David Clark, Rome, Penn.: "My septic tank is more than 30 years old, and I was worried the tank would soon rust out and fail. I didn't want to spend thousands of dollars to replace it. Also, according to the law here I would have had to install a new sand mound at a cost of about \$6,000, as well as a new pump. So to save money I had the tank pumped out. Then I lined the entire inside of the tank with mobile home supply store.

"The skirting comes in 12-ft. long, 13-in. wide panels which slide together. I used a saw to cut the panels down to fit the 5-ft. deep tank. Then I drilled holes in the panels, slid them together, and screwed them to the tank, bypassing the tank's metal baffles. My son handed the skirting down to me and I screwed it on. The job took about 2 1/2 hours.

"It turned out the tank was still in pretty good condition, but I'm glad I added the vinyl skirting. It won't rust or rot and should greatly extend the tank's life.

"It was a messy, smelly job, but then I'm 83 years old and my smeller isn't as good as it used to be so it wasn't so bad. I bought 5 sheets of mobile home skirting at \$12 per sheet and paul \$220 to have the tank pumped out."

Mike Kellett, Sublette, Kan.: "When the rechargeable batteries on a power tool go bad, I take the tool apart and solder a coiled cord to the contacts inside the handle. I have a oneway plug in my pickup bed that's connected to the battery, and I also carry a garden tractor battery with the same plug to make it more portable. A fully charged battery will last for days of hard use. I've found that 12, 14, 16, and 18-volt tools all work well on automotive 12-volts.

"I use my leaf blower constantly in the shop to dry spills, sweep in hard-to-reach places, clean out combines and tractor cabs, blow dirt off clothing, dry paint and even to discourage stray cats and other varmints that wander into the shop. I also use it to dry out wet boots, and to pull noxious fumes away from me when welding galvanized steel."

George Kronbach, Yulee, Fla.: "My 1988 Chevrolet 3500 diesel pickup would start only if I sprayed ether in the air intake.

I got the of naving to remove the air litter cover and trying to re-install it on a running diesel engine. To solve the problem, I drilled a 1/2-in. dia. hole in the air filter and then installed a tire valve without the core. Now I simply take the cap off the tire valve, insert the straw supplied with the can of ether, and spray. I don't have to take off the air filter cover at all.

"I use Amsoil products in the same pickup and installed the company's dual remote bypass oil filter system. It traps the extremely small, wear-causing contaminants that fullflow filters can't remove. Now I can go about 25,000 miles between oil changes. Saves time and money and the oil stays clean."

Marvin Hammer, Bartow, Fla.: "Over the years I've used JB Weld to repair many items, most recently a cellphone antenna that broke off from the case. I've also used JB Weld to repair a plastic wand that broke on a pump-up sprayer, and an aluminum condenser pipe on an air conditioner unit that was leaking."

Clinton Keeney, Creighton, Mo.: "I couldn't find wheel weights for my Ford 4000 tractor, and I didn't want to fill the tires with fluid. Instead, I found some bar bell weights that were the right size and welded an 18-in. length of pipe to the wheel, slid the weights on and put three bolts through the pipe and wheel rim so they wouldn't slide off."

Allen Dilg, Gurnee, Ill. (ardilg@yahoo): "We do a lot of tractor restorations and came up with an easy way to get rid of crud in a vehicle's fuel tank. Open the drain on the carburetor, and the fuel should run out in a full stream. If it doesn't, find a 3/8-in. pipe plug, a coffee can, and a piece of fine brass screen measuring about 1 1/2 in. wide by 2 1/2 in. long. Place the coffee can under the fuel tank and remove the sediment bowl assembly which will let some fuel run out of the carburetor and flush out the crud. Then install the pipe plug.

"Clean out the sediment bowl and reinstall the screen in the top part of the sediment bowl. Put Teflon pipe-thread sealant on the pipe threads and reinstall the sediment bowl assembly. Then after letting the gas set for a while you can pour it back into the tank.

"I've used this method many times with