Money-Saving Repairs & Maintenance Shortcuts

"Push down on the control lever to stop. Air-cooled engines tend to heat up after being turned off, which can sometimes make them hard to restart. For a reliable restart, pump the fuel bulb four to six times to push overheated fuel out of the cab and replace it with cooler fuel from the tank. Then raise the control lever to the choke position before lowering it right back down to the run position. This will set the throttle lock until the trigger is touched again. One or two pulls should start the saw right up again.

"I have sold and serviced more than 100 of these chainsaws and would not continue to do so if I felt that the saw had inherent flaws

Dale Fisher, Jackson, Mich.: "I have discovered that when alkaline batteries die in a device there is often still a little life left. By testing with a voltmeter, generally, if one battery is dead the other one may not be because the draw might be stronger in one position than another. If you switch the batteries around, you should get a little more use. Batteries are expensive so every little bit helps.



Jim Heaslip, Hagersville, Ont .: "I made a tool to make S-hooks and J-hooks. It consists of a piece of 1/2-in. hammermill screen flattened out with a piece of 2-in. angle iron welded on the bottom to hold it in a vice. It works well for bending 3/16 and 1/4-in. steel rod but 5/16 and 3/8-in. rod requires some heat to make the bends. I use a piece of pipe to help bend the rods around various size discs and tubes that are bolted to the hammermill screen. Comes in handy more times than you would think.



David Simpler, Elkton, Md.: "Sometimes filling a chainsaw with a gas can is just too cumbersome. It's hard to get gas in without spillage and if the saw is hot, it can spark a fire. I've found that a large detergent bottle works very well. You can easily squirt gas into the small hole without spillage and it has a snap lid for easy closure. You can also carry it in a coat pocket. I do the same thing with bar oil."

Tom Donahue, Mound, Minn.: "I was working on a tractor gearbox and dropped a nut inside where it fell to the bottom of the box. I tried to get it with my flex magnet, but it kept sticking to everything but the nut. I slipped a piece of flexible plastic tubing over the entire flex magnet except for the very tip of the magnet. That stopped it from grabbing onto everything. I got the nut the very first try."

William Sanford, Roxboro, N.C.: "I watch YouTube videos on equipment repair and product testing. It saves me a lot of time and money on repair jobs and helps me make good purchases.

'In my shop, I put everything I can on wheels or casters so I can move benches and tools to wherever I'm working. Big time saver.

Del Bigelow, Sandy, Utah: "I use Berryman B-12 fuel additive in gas engines that have sat around for a long time without running. Works great to get them going again.

Tony Kramer, Converse, Texas: "The plastic radiator reservoir on our 2002 Dodge 2500 truck cracked on the bottom. Instead of buying an expensive replacement, I put four coats of clear Flex Seal over the cracked area. Months later the repair is still holding up."

Dave Mertell, Independence, Mo.: "The steering shaft mountings on my Gravely ZT mower were poorly mounted from the factory. The steering levers were only attached on one end. The weld on one of them broke out of the frame and left me steering with one arm, which is not easy on a ZT. I added a new steel mounting plate on both sides of each shaft. At 96 years old I'm still fixing manufacturer mistakes!"

John Brennan, Ellicottville, N.Y.: "I'd like to suggest guys pick up an inexpensive set of impact wrench sockets to use with a breaker bar. It might well save you some grief from time to time. However, make sure you wear goggles since the sockets can turn into shrapnel if working on a tough nut or bolt."

Bruce Warren, Wellsboro, Penn.: "Ask your local auto parts dealer if you can trade a dead battery for a core exchange battery with some life left in it. All my seldom-used 6 and 12-volt equipment with coils use them. I've saved hundreds over the years, and it costs the dealer nothing. They like it because it keeps me coming back for parts. Can't get that kind of service from Amazon.'

Mike Frantz, Seymour, Mo.: "One money-saving tip I came up with is taking apart 2-piece idler pulleys on my riding lawn mower and replacing or repacking the bearing. These pulleys are meant to be replaced when the bearings go bad but I just drill out the rivets and spot welds so I can take out the bearing. If the sealed bearing is not rough but just dry, you can use a razor blade knife to gently work out the seal on one side and pack grease in before bolting the pulley back together. When the bearing wears out again, it's a simple matter of unbolting the pulley. Saves a lot of money over buying new pullevs.

James E. Laumeyer, Rice, Minn.: "To break the bead on a small lawnmower tire, place the wheel on a drill press table and run the chuck down on the bead several times around the circumference of the wheel.'

Maurice Kaiser, Cedar Grove, Ind.: "It's hard to change closing wheel springs on Deere and Kinze corn planters. I invented



the Easy-Spring fastener, which was featured in FARM SHOW recently. It's easy to install and repairs the worn casting hole where the closing wheel spring fastens to the corn



NanoShield spray on treatment bonds to glass to protect it.

Windshield Treatment **Makes Glass Stronger**

For vehicle operators hoping to save their windshields from cracks and chips, C-Bond's nanoShield might be the answer.

NanoShield is a liquid chemical that dries to an invisible finish post application, helping to increase the strength, durability and structural integrity of glass windshields.

C-Bond explains all glass contains microscopic flaws and defects. When left untreated, these weaken the glass and cause small cracks and breaks. NanoShield bonds to glass to help protect it.

Application of nanoShield should take place in a climate-controlled, dry area ranging from 50 to 90 F. You simply spray it on and squeegee it off.

Vehicles can be driven immediately after application, although heavy rains should be

"No Weld" Tractor Forks

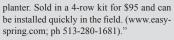
When Boyd Brue built a forklift to move pallet-stored firewood, he did it with wood and steel and no welding. The forks are held in place with U-bolts, threaded rod, and angle iron.

"I don't have a welder, so I make do with salvaged wood and steel," says Brue, a retired mechanical engineer.

The foundation for the forklift is a wooden base plate made with 6-in. thick wood blocks at either end and 2-in. thick planks in between. The blocks are bolted to a quick attach plate for Brue's skid steer.

Two by two-in. angle irons, two on top and one on the bottom sandwich the wood base. The forks are 2-in. steel pipe. The pipes are bolted to the bottom of the wood base. Threaded pipe extends through the upper angle irons in notches cut into the wood base blocks to an angle iron laid across the top of the pipes. U-bolts secure the pipes to this angle iron. Brue also ran threaded pipe through the base end of the pipes ensuring pressure on any one pipe or group would be shared by other pipes.

A slotted and angled length of wood mounted in the lower base angle iron helps maintain the spacing of the pipes. The combined pipes lift 4-ft. wide by 4-ft. high by 32-in. deep pallets, designed to store a third of a full cord of wood. Each loaded pallet





John Rochester, Deerfield, Fla.: "I use Torx bits as extractors to remove worn screws. Not my idea but works very well."

avoided for up to 24 hours.

C-Bond claims testing shows glass strength is increased up to 80 percent when compared to untreated glass. This reduces chipping and cracking and reduces repairs and replacement costs by up to 83 percent.

NanoShield was developed in cooperation with Rice University's Chemical and Mechanical Engineering Departments and has been privately validated by independent third-party laboratories.

It's manufactured in Houston, Texas, and is available at automotive dealers throughout the country. Kits start at \$50 plus shipping.

Contact: FARM SHOW Followup, C-Bond nanoShield, 6035 South Loop East, Houston, Texas 77033 (ph 832-649-5658; www.cbondnanoshield com)



Brue made his tractor forks using threaded pipe, angle iron, wood and u-bolts.

has a metal roof to cover the wood when stored outside.

"I needed a way to move the wood into my garage for winter where it would be convenient for heating the house," says Brue. "I built this forklift attachment and used it for many years. A grandson lives in the house now, and still uses my firewood storage system."

Contact: FARM SHOW Followup, Boyd Brue, Rochester, Minn. (ph 507-269-4087; boyd.brue@gmail.com).



Dexter Brahn, Ionia, Iowa: "I replaced the fluorescent lights in my shop with LED high bay lights. My shop is now brighter than outside. Well worth the time and monev.