Robert E. Spencer, Gasport, N.Y.: "When trying to install a nut in a difficult spot without having it fall off your fingertip, you can hold it in place with a bit of chewing gum on the end of your finger."

Keith Larsen, Spangle, Wash.: "I have a box of cheap wrenches, sockets and other tools from flea markets and pawn shops that I can bend, grind, file, cut, or weld to fit fasteners that would otherwise be impossible to hold or turn. This has saved me a lot of trouble over the years and kept me from needing to ruin one of my good wrenches."

William Watner, St. Mary's, Kan.: "I had a problem on a 1980's Caterpillar V40D forklift that had a leaking "inching" valve (which lets you disengage the transmission without taking it out of gear) that caused intermittent failure when going into forward or reverse. Once my mechanic finally figured out the problem, he bypassed the valve entirely instead of replacing the valve, saving me about \$500 or more. I rarely used the inching valve pedal anyway. The forklift has a Hercules engine and has been a good machine with just one engine rebuild in more than 11,000 hrs. of use."

Joe Duggan, Rochester, Mass.: "You can save time and prevent messes by freezing wet paint brushes instead of cleaning them off each time you use them. Just thaw them out next time you want to get back to work.

"To save time, I write the oil type, filter model, and wrench size needed on the wall near my tractors in our machine shed."

John J. Patterson, East Peoria, Ill.: "When I'm trying to solve problems on my older Ford and Farmall tractors, I get a lot of help from people at Yesterday's Tractors, which is a website forum with lots of good folks (www.yesterdaystractors.com). One of the things I got help with was putting electronic ignition on all my old tractors and REO trucks."

Wayne Hamel, Hopwood, Penn.: "I have found that sometimes I can repair an item or tool by wrapping with string or nylon cord and then saturating the cord with super glue. Makes a long lasting, solid repair." **Roger Podell, Wautoma, Wis.:** "When pushing new brake lines through the frame on cars or trucks, I put a spent shell casing on the end of the line to keep out dirt. There's a shell casing that will fit any size line."

Richard Depenbusch, Zenda, Kan.: "When loosening the fan belt on my Farmall, I spray soapy water on the belt with an old spray bottle. This slips the belt against the pulleys so it's easier to work with. You can rinse it off when you're finished.

"I use WD-40 to clean gas, diesel and grease off my hands, then wash with soap and water. WD-40 is water soluble so it comes off easy, yet mixes with petroleum.

"I welded short pieces of pipe to a piece of angle iron that I mounted crosswise on the post holding up my vise. This makes it easy to keep a variety of hammers close by."

Andrew Sewell, North Yorkshire, England: "I was talking to a farmer friend recently about how to limit fires on combines. Many farmers use a leaf blower to clean off any debris that might catch fire.

"He told me he takes a different approach, especially because he runs an older machine. He bought a hand-held infrared thermometer and when he stops at the end of the day, he walks around the machine pointing it at bearings and other parts to see if anything is running hot. When he finds a hot spot, it usually means a part needs to be replaced."

Ken Burtard, Theresa, Wis.: "This is not a new idea but maybe some folks

haven't heard of it. Large 1-gal. milk jugs work great to store small parts. Cut a large opening in the container, leaving the handle intact. I label the contents with

a permanent

marker. I separate all the bolts in the containers by thread size - coarse or fine, metric or SAE, etc., and store the containers on 8-in. deep shelves."

Tool Releases Hydraulic Pressure

A tool invented by Michael Sharpe of Greenfield, Tenn., makes releasing pressurized hydraulic couplers as easy as turning a bolt.

The tool makes use of the following parts: a female ISO hydraulic coupler, a 3/8-in. flange nut, a 3/8 by 2 1/2-in. bolt, a 1/8-in. pipe elbow, and a 2-in. long, 3/8-in. dia. round bar.

To build the tool, Sharpe uses a needle nose pliers to unscrew and remove the internal components from the coupler, leaving an open barrel that will couple onto the hose under pressure. The next step is to weld the flange nut upside down into the coupler's threaded opening. Sharpe welds the 2-in. long round bar horizontally to the top of the bolt to make a "T". He inserts the bolt into the nut so it extends down far enough to reach into a coupler. He also drills and taps a hole in the side of the coupler to insert a small pipe elbow.

To use the tool, he connects the coupler to the hose and then gently screws the bolt in until it contacts the ball in the center of the coupler tip to relieve the pressure. The fluid comes out of the pipe elbow and can be collected in a Dixie cup.

"Make sure you don't screw the bolt down far enough to damage the coupler. You can prevent that by trimming the bolt length," says Sharpe.



Releasing pressurized hydraulic couplers is as easy as turning a bolt.

Contact: FARM SHOW Followup, Michael Sharpe, 688 Puckett Rd., Greenfield, Tenn. 38230 (ph 731 431-7354; gfd_703@yahoo. 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



Gerard E. Ouellette, Richmond, Maine: "A machinist friend and I built this overhead crane that pivots 180 degrees from side to side. I'm disabled and can't lift anything so it's one of the handiest tools in my shop. A trolley and chain hoist run on a track made from a 6-ft. long, 4-in. I-beam. The track is free to swivel on a bushing mounted high on a 10-ft. steel post.

"The crane is located near one wall of my shop where I keep most of my tools. To move the crane around I just pull on the chain hoist. It's more convenient to use than a portable floor hoist because there aren't any legs in the way. It's a life saver for lifting objects weighing up to 800 lbs. or more. The photo shows the crane lifting a 150-lb. 'power pack' that mounts on my tractor's 3-pt. hitch."

John Copenhaver, Neillsville, Wis.: "For 25 years I did maintenance work on rental homes at a local college, so I've seen a lot of clogged drains in sinks and bathtubs. Usually I was able to use a shop vac with a 1 1/4-in. dia. hose to handle the problem. I removed the stopper and plugged the vent hole with my finger, then placed the vac over the drain to suck out the material. Rarely did I have to use a chemical drain cleaner or a 'snake'. Besides, if you accidentally drop a wedding ring down the drain a chemical drain cleaner won't help get it out."

Larry Wood, Waldo, Ohio: "I was using my riding mower recently and turned off the engine so I could pick up some sticks in the yard. When I got back on I couldn't get the



mower started.

"I opened the hood and found that an eyelet on the end of a cable from the battery to the starter was broken. I didn't have a new eyelet that large so I made one using a 2-in. long, 3/8-in. dia. soft copper pipe. I hammered one end of the pipe flat and drilled a 5/6-in. dia. hole through it, then soldered it to the battery cable. I was back mowing in just 20 min., and it saved me a trip to town."

Dave Irey, Edina, Minn.: "I use my table saw a lot for projects using mostly 5/8 and 3/4-in. thick oak and other hardwoods.



I have to make a lot of 90-degree cuts but was having trouble keeping my saw guide at precisely 90 degrees on repeat cuts.

"To solve the problem I bought a 3-ft. length of 3/4-in. wide, 3/8-in. thick hot rolled steel and a length of 2-in. channel iron. It serves as a cross piece. I carefully squared up the 2 pieces and then arc welded them together. I've made 3 different saw guides this way - one for 90-degree cuts and the others for 45-degree cuts.

"My homemade saw guides are a real time saver because they eliminate the need to ever check the angle degree. I bolted a long 3/4-in, thick board onto the channel iron that extends over the edge of the table saw and serves as a handhold. As I'm working I hold onto the board with both hands to make sure I get a nice, square cut. The board can easily be replaced if I happen to nick it with the saw."

Butch Beck, Hope, Ark.: "Ever lost the filler spout cap on a 5-gal. fuel can? A 1/2-in. pvc cap makes a great substitute."

n the fine, ainers **Gerard E. Ouellette**, **Maine:** "A machinist friet this overhead organ that nive