Money-Saving Repairs & Maintenance Shortcuts



Steve Nichols, Galesburg, Ill.: "I fabricated this handy tool to help whenever I need to drill through round stock or tubing to allow the use of cotter or hairpins. I welded short lengths of angle iron to a steel plate and put it on the table of my drill press. I simply lay the rod or tubing in the V, where it won't roll around. It helps to grind a small area flat where I want the hole, so the drill doesn't dance around trying to get situated."

Mac Freyer, Dayville, Conn.: "When changing tires, I apply used oil with a paint brush as a rim bead lubricant."

Sheldon Hansel, Richfield, N.Y.: "I spray diesel fuel on my farm equipment before placing it in storage. It keeps machines looking new for a much longer time."

Robert Thomas, Oak Grove, Mo.: "When I adjusted the rear wheel spacings on my Deere 60 tractor, I used a wine bottle cork to reseal and plug the open end of the wheel hub adjustment. The cork keeps dirt and moisture out of the open hole at the end of the adjustment worm screw gear, preventing rust or plug-ups."

James C. McGowan, Russell Springs, Ky.: "My 1994 Ford Explorer had a hole develop in a steel coolant line with antifreeze in it. Replacing the line would have been costly and would have required a lot of work. Instead, I cleaned the line off and used a screwdriver to drip J.B. Weld into the hole, and then let it dry. I made the repair 10 months ago and it hasn't leaked so far."



Danny Shaffer, Stillwater, Okla.: "Here's a 'handle' that I came up with to put onto an ordinary ratchet handle. It keeps me from having to flex my wrist as much.

"My wrist starts aching after about an hour of using an ordinary ratchet. But with this homemade handle, I can work all day and my wrist won't ache at all. I've used it to tighten tens of thousands of nuts, which I wouldn't have tackled without it.

"I took a nut big enough to fit over the ratchet handle and cut out one side of it. Then I welded on a small nut and also welded on a short length of smooth steel rod to the other side, making sure the rod is positioned perpendicular to the original ratchet handle once it's clamped on."



Rex Farr, Lewistown, Mont.: "Tired of your self-venting gas jug not venting?

Here's the solution – an 'old-style' plastic vent that installs with minimal tools on existing gas jugs."

To install, select a location on top of the jug that's relatively flat and drill a 1/2-in. dia. hole in it. Apply a small amount of gasresistant sealant on the plug to aid in sealing. Then insert the plug into the hole and give it a firm tap with a hammer.

The vent sells for \$3 plus \$4 S&H. Installation and ordering information is available at: www.vent-sol.com.

Mark Schwengel, Bowler, Wis.: "Loose muffler bolts caused hot exhaust to burn a 1-in. dia. hole on top of the bar oil reservoir on my 1998 Husqvarna 141 chainsaw. A local shop told me it couldn't be repaired.

"So I went home and drained the remaining oil, stuffed some old panty hose in the hole, and used a utility knife to whittle the edges of the hole flat. I used a shop vac to suck out any dust chips and removed the panty hose. Then I cleaned the surface twice with alcohol and glued on a 1/16-in. thick aluminum patch with high temperature epoxy. Now 3 1/2 years later it's still holding. The entire process took less than a half hour and cost less than \$5."

Frank Bloom, Dundee, N.Y.: "Whenever I throw away old jumper cables I always save the clamps. They work great for holding a straight edge for marking or for holding any small pieces while welding, etc."

Emery Beachy, Hardin, Mo.: "I'd advise any farmer to learn welding, by taking welding classes and practicing. Then invest in a good welder. My welder has saved me more money on repairs than anything else in my shop. Sometimes a welding repair can beef up a 'worst buy' product to work better than new. And it's mandatory for fabrication or modificiaton of farm implements. Farmers often know better what's needed than the engineers at the manufacturing company."

Fred Homburg, Warsaw, Ind.: "In my pole barn I store equipment on 4-wheel dollies, including a 10-ft. wide 3-pt. mounted disk, a 3-bottom plow, a 6-ft., 3-pt. mounted rotary mower, and an 8-ft., 3-pt. mounted blade. That way I can easily roll them to the center aisle and more easily hook them up.

"I have 8-ft. wood shelf units in my shop. My wife had the idea of putting dividers in one of the shelves to store electrical cords. So we got 4 furring strips, used a chop saw to cut slots every 6 in., and tacked the strips to the front, back, top and bottom of the shelf. Then we cut dividers from paneling and slid them into the slots as needed. Works great.

"I use cargo nets on my pickup and trailer. I painted the corner hooks yellow so if the net ends up in a pile, I can grab the corners and unravel it more easily.

"I use clear plastic mouthwash bottles as holsters in my shop and on my tractor. I cut the bottom out and screw them inverted to the work bench, shelf or tractor. I use the holsters to hold hand-cleaner bottles, flashlights, and a roll of twistie-tie twine threaded out through the mouth of the bottle. Very handy."

Carl Schultheis, Caro, Mich.: "I'm a 72-year-old retired dairy farmer. I sold my dairy herd in 1995, but I continue to run a farm shop. The fellow who rents my farm asked me if I had a solution to fix worn snapping plates on his combine head. I cut about an inch or so off the back edge of a worn-out plow shears and welded each piece into a notch cut out of the worn side of the combine's snapping bars, with the factory-machined edge toward the corn row. The fix made them just like new again, and he said they really worked out great. It was a quick and easy fix, and all I used was a plasma cutter and wire welder."





Tool fits on a 1/2-in. drive socket and allows you to rotate the crankshaft on Deere 2-cyl. tractors, without having to remove the flywheel cover.

Socket Tool Turns JD Crankshaft

A couple of new sockets specifically designed for 2-cylinder Deere tractors make it faster and easier to do basic maintenance, because the flywheel cover doesn't need to be removed. Brian Dain, a machinist who also works on Deere tractors, designed and manufactures the Great Dain Crankshaft Tool

"It fits on a 1/2-in. drive socket for access under the inspection cover to rotate the crankshaft to check valve clearance, spark timing, magneto timing, etc.," says the Fremont, Wis., inventor of the patent-pending tool.

He machines two tools out of 4140 nickelplated steel to accommodate different models of Deere tractors built between 1939 and 1960. One socket fits the ratchet hub on A, B, D, G and H Deere tractors. The other socket fits the pressed frame gas 2-cylinder engines on models A, B, 50, 60, 70, 520, 620, 720, 530, 630 and 730.

In a YouTube video, Dain shows the time savings. He opens the inspection cover, turns the crankshaft and makes the adjustments in about 30 seconds, compared to 3 minutes to



Two different tools are available to accommodate different models of Deere tractors.

just remove the crankshaft cover.

Dain sells each socket for \$50 (including shipping), but is offering a 10 percent discount to Farm Show readers who contact him by July 1.

"It's a timesaver," Dain says, and a great tool for any 2-cylinder Deere enthusiast.

Contact: FARM SHOW Followup, Brian Dain, 809 River St., Fremont, Wis. 54940 (ph 920 358-4895; greatdaintool@yahoo.com).

"Wall Vac" Never Tips Over

D.M. White got tired of his shop vac canister tipping over when he was cleaning out his vehicles. His solution was to mount the canister to his garage wall. It keeps the shop vac out of the way, but stable.

"I mounted a section of closet shelf up on the wall and fastened the shop vac tank to the shelf," says White. "I ran the cord to a surge strip with a switch near the floor so I could turn it on and off easily."

A second length of vacuum hose attached to the original hose makes it easy for White to reach across the garage without moving the shop vac.

"It was a simple, easy fix to a frustrating problem," says White.

Contact: FARM SHOW Followup, D.M. White, 12637 Pine Lake Ave., Cedar Springs, Mich. 49319 (616 696-3738).



D.M. White mounted some closet shelving on his garage wall and then fastened his shop vac tank to it.

Range Hood Gets Rid Of Welding Fumes

By Chuck Marley

Gary Kaspers of St. Peters, Mo., has a small welding shop in the corner of his garage. "The smoke from the welder used to force me out of the shop," he says. "That's when I thought of the old range hood that I had saved when we remodeled our kitchen."

He mounted the range hood above the welding table and used a piece of flex duct for an exhaust vent. Then he plugged it into the overhead lights so it comes on with the rest of the lights. As a bonus, the light in the hood really helps brighten the work surface.



Gary Kaspers mounted an old range hood above his welding table and used some flex duct for an exhaust vent.