



**Gary Nye, Landisburg, Penn.:** "I've come up with a method for installing new hydraulic cylinders that eliminates the problem of air in the system. First, unhook the hoses and cap them. Remove the old cylinder. Install the new cylinder but only pin it to the base. Next, use a squeeze bottle with a narrow tip to fill the cavity in the cylinder at the pinned end with hydraulic fluid (you can get these plastic bottles at Harbor Freight). Then hook up the hose at the base. Next, use the controls to extend the cylinder to its full length and use the squeeze bottle to fill the cavity at the extended end. Attach that hose. Carefully retract the cylinder and pin that end. No air. Works like a charm."

**Merrill Smith, Deer Park, Wash.:** "My Yanmar 60-in. Rotovator would not clear the tires on my Ford tractor. To solve the problem, I made two 1-in. thick steel extensions for the 3-pt. hitch and the Rotovator. Solved the problem."

**Steward Vander Vere, Allegan, Mich.:** "I paid \$20 for a 3-piece caster set designed

for storing a snowmobile in tight quarters. The casters work great on my snowplow so I can roll it out of the way in my shop."

**Bluffard A. Bradburn, Waveland, Miss.:** "I was having trouble with steering and hydraulics on my 3000 Ford tractor. I pulled the cover on the hydraulics and found that two filters were stopped up in the supply and return lines. The dealer wanted \$800 for a new set of stainless steel filters. Instead, I just cleaned them and reinstalled. Problem solved."

**Preston Williams, Victoria, Va.:** "The oil check light wouldn't go off in my 2012 Chevy truck. I had a guy pull the sending unit and change the screen under it. Now it's okay."

"I put two 8-ft. long LED light strips on each side of my 30 by 30-ft. shop and was amazed at how well it lit up the entire shop. Makes it much easier to work when you've got great light."

"I'm sure many other folks know this trick. To take slack out of barbed wire, just twist the wire into a circle somewhere in the middle. I use a pair of fencing pliers that have two holes in the end."

"I've got a Craftsman riding mower with a 22 hp. Kohler engine. After a few years, the smell of burnt oil started coming out of the engine compartment. Oil was dripping on the muffler from the OHV unit because a gasket was leaking. I replaced the gasket and installed a metal plate to direct any future dripping oil behind the muffler."

**Donald Hemme, Redvale, Colo.:** "The cheap and easy way to break tire beads is to put a Handyman jack on the bead and then jack up against a piece of equipment. The bead will pop right off."

**Joan Walker, New Braintree, Mass.:** "I use cheap (\$7) extension cord holders to wind up paddock water lines. Very handy."



A contractor replaced the 70-year-old bridge on Gogerty's farm road with two 28-ft. long corrugated metal drainage pipes.

## Twin Pipe Creek Bridge

By Rex Gogerty, Hubbard, Iowa

When the 70-year-old piling bridge under our farm road got too shaky for heavy loads, I had local contractors bid on replacement. The solution? Two 72-in. dia. corrugated metal drainage pipes held in place by concrete and packed clay.

Mike Nolte at Nolte Service & Repair, first removed the deck of the old bridge and placed it 300 ft. upstream to carry light traffic during the 3-day construction.

He filled the creek channel depression under the old bridge with rock and broken concrete and then weighted down the 28-ft. long pipes with more broken concrete and clay packed over the top. He poured concrete around the inlet end of the pipes.

Nolte raised the grade of the approaches to the bridge with nearby pasture dirt and gravel, packing more clay over the pipes and then two layers of coarse and regular road gravel.



Old bridge deck was removed with a big backhoe and placed temporarily upstream to carry light traffic during construction.

Total cost of the new bridge was \$25,000.

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# FARM SHOW®

## Money-Saving Repairs & Maintenance Shortcuts

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

**Bob Weeks, Horton, Mich. (btvulcan@gmail.com):** "I recently discovered a solution to a steering problem I was having with my TC55DA New Holland tractor. I found that the steering shaft spline was only engaging the steering motor receiver spline a fraction of an inch, which caused the splines to wear enough to begin slipping or binding."

"To remedy the problem, I cut the steering shaft in two and lengthened it by sandwiching it between two small angle iron pieces, welding them in place. For the first time since I bought the tractor, it now steers like it should. From what I've read on the internet, this problem has stumped dealers, mechanics, and owners for a number of years. If anyone wants to contact me for help fixing this problem, I'd be happy to hear from them."

**Glen Goodson, Galax, Va.:** "I read with interest the story in your last issue about how a reader's Troy-Bilt tiller went through a flood and he couldn't get it started after that because he thought the coil was bad. He made a clever repair using a 12-volt coil and a battery from a cordless drill. I repair small engines and have seen this problem a lot. People think the coil has gone bad but the problem is usually just rust. If you sand off the rust, it will fire again and last as long as the rest of the machine."

**P.B., New York via Farming Magazine:** "I put a steel magnet in the bottom corner of my skidloader's drive chain case oil compartment. The metal will draw out any metal shavings or dust in the oil, greatly extending the life of the transmission. This idea could be used in any oil reservoir where there's room for a magnet."

**Ron Ziegler, Flying Z Ranch, Los Alamos, Calif.:** "Our 1985 Ford truck stopped running because of an electrical problem, and with all the pollution control equipment it was impossible to find what was wrong. So we removed all the wiring and pollution control equipment, and then bought a new HEI all-in-one distributor (available at Amazon.com). This distributor has the coil and points inside it. It's a one-wire distributor, so there's only one wire to connect to the 12 volts coming from the ignition switch."

"To install the distributor, I located top dead center on the compression stroke of the engine's number one cylinder. I noted where the rotor was pointing, and made sure

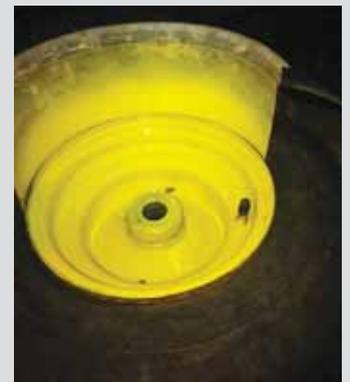
to reinstall the new distributor with the rotor in the same position.

"Now the truck runs great. Problem solved for about \$140."



**Dennis Hartmann, Double D Machine Shop, Yankton, S. Dak.:** "I go to big box and auto parts stores and purchase 10-in. wide paper towels in big boxes that contain 200 towels apiece. One end of the box has a perforated opening on top to reach in and pull out the towel. However, the design makes the towels hard to reach and they get all wrinkled up as they're pulled out."

"To solve the problem I use a utility knife to cut one corner off the box, leaving a nice, big opening that makes it much easier to remove the towels. It's also easier to see when I'm almost out of towels."



**Michael Heron, Lloydminster, Sask.:** "To paint garden tractor wheels, I cut the bottom out of an ice cream pail, and then cut it in half vertically. It leaves a semi circular piece of plastic that fits snugly around part of the wheel rim. I paint one section of the rim at a time, and then move the plastic to another section."