Kerry Kilgora, Mineral Point, Wis.: "When repainting a house, barn or other building, I often come across isolated small areas where the wood is rotted, especially on window frames. There are commercial hardeners but they're usually so watery that most of the hardener drops out before it has a chance to work, and the wood has to be below 15 percent moisture. I now use Gorilla Glue to repair all these areas.

"First, I remove the bulk of the pithy wood. Then I fill a disposable large animal syringe that has an 18-ga. needle (available at any farm supply store) with Gorilla Glue. I inject the affected area with the glue. Water activates the glue, the wetter the better. When the glue dries, it will expand to some degree and dry the wood. If it expands beyond the surface of the wood, I simply cut off the excess with a sharp wood chisel and then sand smooth. If the glue doesn't fill the entire area, I use 2-part auto body putty to fill, spot spraying the putty patch as soon as possible after drying to keep it from absorbing humidity."

C.J. Bunce, Perry, Kan.: "I worked on a large farm for a year and a half and one of my biggest projects was setting up a service truck. The owner liked cordless



power tools so there were a lot of batteries to keep track of. It was especially difficult to keep the dead batteries separate from the charged ones, so I came up with the idea for this battery rack. I cut two 2 by 4's to fit the size of the cabinet on the truck. Holes were drilled to accept the neck of 18-volt batteries and evenly spaced to hold 7 of them. The bottom board is painted red and the top green. If a battery is dead, it's on the red. If it's charged, it's on green. The racks made use of previously unused space and the batteries fit snug enough that they're secure even on rough ground. I mounted a 12-volt charger on the shelf above the battery rack so we could charge batteries in the field as we used them without having to run the generator."

Graham Robertson, Westminster, Md.: "When the engine shroud on my old Simplicity garden tractor cut some wires that caused the generator to burn up,



I decided it would be cheaper and easier to replace it with a 1-wire auto alternator. The Briggs & Stratton engine had a 1-in. shaft out the front – to drive some accessory I did not get when I bought the tractor – so I figured I could drive the alternator with that. I had to move the original muffler away from the front of the engine, installing a standard 1-in. muffler out the side.

"I needed a large pulley to get enough rpm's to drive the alternator so I made a drive pulley out of an old lawn tractor transmission pulley. It was originally made to fit a 1/2-in. shaft. I ground it out to fit and welded a small 1-in. shaft pulley to the front of it to hold it to the shaft. The alternator cost \$25 and came from an old Chevrolet. Once I got the alternator mounted, the hood would no longer fit so I had to modify the hinges to raise it 4 in.

"The last thing was to install a 30 amp gauge to allow for the higher output. A side benefit of this conversion is that it works well to jump start tractors and trucks with dead batteries.

"This is not a show tractor. It's just an earnyour-keep farm tractor that we like because of its tall deck and huge heavy flywheel, which allows it to deal with pastures a foot or more tall."

Frost L. Nix, Ponca City, Okla.: "For 30 years I've used a golf ball to squeeze every last bit of material out of caulking tubes. Once you've used part of a tube, pull back the handle on the caulking gun and put a ball in the tube. You'll be surprised how much more caulking you can get out."

Burton Graves, Sandusky, Mich.: "As a former IH serviceman, I always kept a small magnet in my tool kit to attach to a wrench to hold tiny screws, bolts, washers or nuts when replacing parts. It's a very handy way to keep from losing them."

Wayne E. Sensenig, Hole Solutions, 255 Locust Point Rd., Elkton, Md. 21921 (ph 443 945-7011): "In the last issue of FARM SHOW, a reader wondered if anyone had a solution to drill bit slippage in cordless drills. As a retailer of Norseman/CTD cutting tools, I suggest he try our Magnum Bully line of industrial grade drill bits. These drills are

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



manufactured from special Hi-Molybdenum tool steel and have 3 flat sides on the shanks to eliminate chuck slippage. The 135° split point gives fast penetration and accurate starting without a center punch. These bits are designed for use in work-hardening grades of stainless steel and other hard metal drilling applications. We offer other cutting tools such as hole cutters, hole hog drills, car reamers, countersinks, and more."

Don Smith, Smith Repair, Fredericksburg, Iowa 50630 (ph 563 379-6536; don@donsoil.com): "For years farmers with Freightliner semi tractors told me they needed fuel tank straps that wouldn't rust out. We're excited to announce that we



now have replacement straps at an affordable price

"The original straps are made from 12-ga. mild steel. With more aggressive ice melt chemicals now in wide use, coupled with fairings that cover the fuel tanks to improve aerodynamics, these steel straps quickly rust away.

"Our tank straps are made from 16-ga. 304 stainless steel so they won't corrode.

"Freightliner doesn't sell the T-bolt fasteners separately so when we sell a set of straps we require your original T-bolts in exchange, or there is an additional charge for the bolts

"We currently make fuel tank straps only for Freightliner FLD120 and newer classic model trucks. However, with dimension information and T-bolt or specialized hardware available, we can also fabricate them for Peterbilt, Kenworth and other brands. The price will be in the \$500 per stran range."

Bill Flies, ProQuipment USA, Frontenac, Minn. ph 952 484-7444; b.flies@mchsi.com; www.pqusa.net): "My patent pending battery disconnect is



designed to extend the life of batteries and other components when equipment is idle for an extended period of time.

"The Cutoff Cube takes up only 1 sq. in. of space so it's not in the way and can accommodate any size cable. It's especially useful for equipment you only use for short periods of time. When you're done using the machine for the season, just turn the knob and lift the cable off.

"The Cutoff Cube sells for \$20 including shipping."

Cal Miner, Willmar, Minn.: "To keep ratchet straps and bungie cords from getting tangled up when they're not being used, I store them in old socks. For example, I might fold a half dozen bungie cords in half and stuff them in one sock."

John W. Collins, Sherburne, N.Y.: "I wanted to make holes in wine bottles to insert Christmas lights. So I bought a carbide drill but it tended to 'wander' and chip the hard glass.

"So I drilled a hole into a piece of 2-in. sq., 1/4-in. thick plexiglass and put the bottle in a tube of water, and drilled through the plexiglass.

"The water acted as a lubricant and kept the drill bit from getting hot. It took about 2 min. to drill each hole."

He Made His Own Fuel Injector Tester

"My homemade fuel injector tester works great for trouble shooting injector problems on diesel engines," says Paul Bernier, Geyserville, Calif.

He made a tester out of a hydraulic jack from a cab-over truck.

"The jack normally lifts the cab to gain access to the engine. I found that it produces 2,500 psi, which is enough to pop the injector and check the spray pattern," says Bernier. "I had to add a pressure gauge, adapt the hydraulic line to the injector fittings, fill the reservoir with diesel, and bleed the line. I watch the gauge while pumping the handle, which lets me see what pressure the injector pops at. The spray pattern is easy to see. It has saved me a lot of time diagnosing problems."

Contact: FARM SHOW Followup, (Paul Bernier, Ireinreb@gmail.com).



Fuel injector tester was made out of the hydraulic jack from a cab-over truck.