Money-Saving Repairs & Maintenance Shortcuts

Steven Yoder, Reedsville, Penn.: "To weld cast iron I use Weldcote Nickel 99 cast iron electrode repair rods (weldcotemetals. com). I cool off the cast iron in dry sawdust."

Evapo-Rust, Springdale, Ark. ph 888 329-9877; www.evapo-rust. com: Evapo-Rust water-based rust inhibitor is now available in an aerosol can. The aerosol makes it easy to evenly coat the surface of any object by just spraying it at any anele. It's sold only



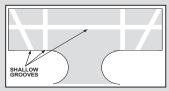
at O' Reilly Auto Parts (www.oreillyauto. com).

Robert J. Wagner, Whitewater, Wis.: "Mud was plugging the gauge wheels on my no-till planter, so I drilled four 2-in. dia. holes in the wheels so the mud can escape."



Ross Brown, Millet, Alberta: "I made a tool that fits into the receiver hitch on my pickup and lets me raise the deck on my 54in. riding mower up off the ground so I can service the blades safely while standing up. It uses a hand-cranked boat anchor winch equipped with a 4-ft. nylon strap, with the winch bolted onto a vertical 4-ft. length of 2-in. sq. tubing. The tubing is welded at a 30-degree angle to a shorter length of tubing that fits into the receiver hitch. The joint where the 2 tubes are welded together is reinforced with scrap metal. I welded a small hook on front of the mower frame."

G.F. Donk, Clyde, N.Y.: "The drive pulley on my Ford flail mower worked loose and stripped the splines, so I had it replaced with a Browning clampon spline hub (www.applied.com/cbrowningshq1hub/p/100790189). Bergman Electric in Auburn, N.Y., performed the work. The pulley was held in place by a snap ring, and once it worked loose I couldn't find a way to secure the pulley. A factory replacement pulley would have cost about \$300. The Browning clamp-on spline hub was still a fairly expensive solution but it solved the problem."



Charles Matthews, Petersburg, Tenn.: "Trying to hold any kind of round stock, such as small pipes and bolts, in place in my vice is much easier since I cut shallow matching grooves into both vice jaws. I used a grinder to make one horizontal groove, 2 vertical grooves, and another groove at the end of each jaw face at about a 45-degree angle. Problem solved."



Bill Kerstetter, 281 E. End Mountain Rd., Mill Hall, Penn. 17751 (ph 570 726-3334): "I am a retired welder who needed a hobby. My wife and I started doing a variety of crafts which need spirals, springs, rings, and other twisted metal. I decided to make a machine to produce them.

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would be powerful, but slow. I used a gearbox out of an old lift chair and

drive it with a 1/2-in. drill. "I can twist or wrap steel rods and make all kinds of springs or rings for many types of projects. I've made a variety of jigs out of conduit or pipe. I can turn anything from 1/8 to 1/4-in. dia. rod on jigs up to 1 1/2-in. dia.

"The stock to be twisted

is stuck through a hole in one end of the jig, which is then turned slowly by the gearbox. Tightness of the spiral is controlled by the operator. To make rings, I simply make one complete turn, cut off the stock, and flatten it out. Tightness of the spiral is controlled by the operator.

"Word has spread among friends and neighbors about what this setup will produce so I now make things for other people. It works great and saves a bunch of money as well as trips to town."



Lee Tolliver, Tok, Alaska: "I spotted a discarded fire hose reel at our local transfer station and figured I could put it to good use as a big air hose reel.

"I like to do work all over my yard – not just in the shop. My portable air compressor is not big enough to run tools or blow up big tires. So I decided to use the fire hose reel to load up a long air hose.

"I figured that if the fittings on the reel could contain water, they would probably also hold air. And they can, with only a little bit of leakage. I had to rework the fittings to fit the air hose and loaded up about 125 ft. of 1/2-in. hose. The reel could hold a lot more so I'm planning to increase the total length to about 300 ft.

"When I'm done, I roll up the hose by hand – mostly because I need the exercise. It would be easy to add an electric motor and chain to drive the gear that's still in place on one side. The entire reel mounts on a hand cart so it's easy to move around."



Automatic paint can shaker uses a 1/3 hp electric motor to belt-drive a right angle gearbox that reduces the speed.

Make Your Own Paint Can Shaker

"I got tired of wearing out my arm stirring paint cans. So I came up with an automatic paint can shaker that saves a lot of time and hassle," says William Hettler, Federalsburg, Md.

A 1/3 hp electric motor belt-drives a right angle gearbox to reduce the speed. Hettler cut a groove next to the hub of a small pulley on the gearbox and welded in a vertical bolt, on which he installed an idler pulley with ball bearings. He bolted a metal plate on top of the idler pulley and then bolted a pitman arm to the plate.

The pitman arm pushes and pulls a homebuilt metal basket that's sized to hold a 1-gal. paint can. The basket is welded to a pair of heavy duty hinges that pin onto the end of the pitman arm.

"It works great. I made it last spring and have already used it a lot," says Hettler. "The pitman arm pivots back and forth on the idler pulley, which causes the basket to rock back and forth about 2 in. I used light duty angle iron to make the basket and use a bungie cord to hold the paint can in place. The whole assembly mounts on a board that's easy to move around."

Contact: FARM SHOW Followup, William Hettler, 5816 Davis Mill Pond Rd., Federalsburg, Md. 21632 (ph 410 754-0005).

Chopsaw Blade Fitted To Bench Grinder

Herman Vander Vos doubles the life of his chopsaw blades with a shop-built saw. The 14-in. dia., carborundum metal cutting blades on his heavy-duty chopsaw have to be replaced when they wear down to 8 in. Now he puts them back to work.

"I used a mandrel on an old belt-drive emery wheel as a mount for a worn down blade," says Vander Vos. "After removing the emery wheel from the mandrel, I mounted the motor and pulley on a 2 by 12-in. board."

The worn down blade has a 1-in. center hole that has to be reduced to 1/2 in. to fit the mandrel. Vander Vos uses a 1/2 in. bit to enlarge the center of a pair of 1-in. dia. washers. He slips the washers into the center hole of the blade and mounts it to the mandrel.

"The washers fit snugly and keep the blade perfectly balanced on the mandrel," says Vander Vos.

He uses a couple of short 2 by 4's as a rest for the metal being cut. They have a channel cut part way through them just large enough to admit the free-turning blade.



Herman Vander Vos puts worn metal cutting blades on his chopsaw, using a mandrel on an old belt-driven emery wheel as a mount for the blade.

Vander Vos notes that the mandrel speed should be over 3,500 rpm's. "It makes an excellent cutting tool," says Vander Vos. "It gets more mileage out of a blade and sure beats using a hacksaw on small jobs."

Contact: FARM SHOW Followup, Herman Vander Vos, 7034 Nash Rd., Bozeman, Mont. 59715 (ph 406 587-0271).

"No Funnel" Oil Bottle Tip

Longtime FARM SHOW reader Edwin Jordan says he has an easy way to prevent oil and liquid spills if you don't have a funnel handy.

Don't remove the aluminum seal on the bottle of chainsaw bar oil, antifreeze, motor oil, or other products, he says.

"I use my pocket knife to make a hole big enough to get a good stream going, and make another small vent hole for air," he says. If the container doesn't have a seal, you can just make holes in the cap, and cover them with tape for storage if you don't use the entire bottle, Jordan suggests.

"It works especially well when you're shooting at a small target, like a chainsaw or lawn mower."

At 87, Jordan says he has been a jackof-all-trades and doesn't like to waste anything. Not spilling oils and liquids also saves time as there is no mess to clean up.