

**Ken Hlady, Eureka, Mont.:** "If you have an old dental Water Pic, it can be used as an adjustable minipressure washer. I find it works super for cleaning items such as shaver heads, watch bracelets, and other small parts and tools. It can be used with hot water and detergent, if needed."



**Terry Upton, Rochester Hills, Mich.:** "Old refrigerator doors make good shelving in the shop for bottles and cans or other parts. Just screw them to the wall and fill them up."

**Anonymous, Michigan:** "I suggest you always check gearboxes of used equipment before buying. There's at least one dealer in my area that removes the gear lube and substitutes a small amount of grease so it won't leak. The equipment leaves his shop looking clean with no drips. When the gearbox 'blows up' after purchase, he says, 'It's your baby.' It's always best to get your hands dirty when buying used."

**David L. Brown, Maple Grove, Minn.:** "I've read in your magazine about people using pvc piping to pump compressed air around a shop. This can be very dangerous. I worked in a small shop where

they installed this type of system, mostly to have an air nozzle to blow parts off after machining. One morning, after an employee turned on the compression, he heard an explosion in the back of the shop. The piping by the compressor had shattered under the pressure and there were pieces everywhere. We were lucky no one was near the area. After checking with a pipe supplier, we found out the piping was not rated for air pressure. I'd never use pvc in my own shop."

**Gabe Davidson, Annandale, Minn.:** "Liquid Wrench makes a number of outstanding lubricants, including Chain Lube, Penetrating Oil, Dry Lube, and Silicone



Spray. They work great – if you know where they are when you need them – and if you haven't lost the 'noodle' tube that fits into the nozzle. I solved the problem by putting cans of lube in an old cardboard 6-pack carrier and writing on the tops of the cans so I know what each can is at a glance. To hold the tubes in place, when I buy a can, the first thing I do is take off the cap, lay the can on its side, and put a drop of glue on the nozzle to hold the noodle tube in place. Then I cut a slot in the side of the cap to fit back over the tube. Works great."

**Wilson Rickenbaker, Lexington, S.C.:** "I always use a scale when sharpening opposing

**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](mailto:editor@farmshow.com).

Mark Newhall, Editor

rotary cutter blades to ensure smooth operation. It's important to get the weights of the opposing blades even to prevent vibration.

"To maintain good conductivity, I use brass or stainless steel fasteners on electrical connections, especially on old 6-volt equipment."

**Steve Nichols, Galesburg, Ill.:** "When mounting and dismounting smaller tires I generously spray the tire and wheel beads with Armorrall protectant. It's super slippery and is supposed to be good for the rubber. And it won't make rims rust like dish soap solutions.

"I have a trick to repair mower deck hanging brackets with worn mounting holes that are oversized and egg-shaped. I clamp a piece of copper bar to one side of the metal piece, over the hole you are repairing. You can then weld the hole shut, grind the weld flat and redrill it to the original size. The copper bar is a conductor, but the weld won't stick to it."

**Joseph De Ruiter, Jr., Vesper, Wis.:** "One of your readers recently reported how he uses an electric winch to power the lift arms on his Farmall. I have a better solution that I came up with on my Farmall B. I mounted an old power steering pump up by the fan, ran 2 copper lines back to the seat, and mounted a hydraulic cylinder and one control valve. I used it to replace the old vacuum-powered pickup system that Farmall used to use for the cultivators and plows. I did this years ago and the homemade hydraulic system still works great."

**R.B. Hunter, Lancaster, Texas:** "To clean and shine old rusty chains or tools I simply drag them behind my tractor on a gravel road. Anything that's rusty or corroded will clean up fast."



**Jeff Bond, Anaconda, Mont.:** "I use an old military truck for logging and sometimes have to leave it outside overnight. The ignition switch on military trucks has no key so it could be easily stolen. You can buy an

in-line ignition lock for the battery cable, but it's expensive and can be unreliable.

"To solve the problem, I welded together a small metal box made from 1/8-in. thick steel and used a 1-in. dia. steel pin off an old 3-pt. hitch. I insert the pin from the back of the dash through a hole already in the dash and through a hole that I cut into the box. The pin extends out from the box about a half inch. Then I attach a padlock to the pin to lock the box in place against the dash, which prevents access to the master battery switch and the ignition switch. When the box is removed, the dash looks just like it did before.

"I also use the box to store my registration and insurance papers. Installing the box took about one hour and I spent about \$10 to weld it up and paint it."

**Rex Gogerty, Hubbard, Iowa:** "We equipped our shop furnace with extra registers to get more heat into our main work



space, which is about 40 ft. away. We cut and bend corrugated metal and anchored it above the furnace fan's outlet. Crude baffles can be adjusted to direct the air flow. The furnace mounts on concrete blocks to

avoid possible water damage and to simplify cleanout and maintenance."

**Allen Heling, Clintonville, Wis.:** "After the fuel injection pump on our Deere 4230 tractor was worked on, we noticed it started smoking more and wasting fuel. So last year my son and I installed a turbocharger, the same one found on Deere's 4430 and 4630 models. It made a big difference. Now there's virtually no smoke and therefore, no need to adjust the injection pump. We're getting about 20 more horsepower and using 10 to 15 percent less fuel."

**Art Olive, Stacy, Minn.:** "I keep Dawn foam-type dishwashing soap handy whenever I come in from my garden or shed. It works great for cleaning up dirty, greasy hands. The soap comes in a 10-oz. pump bottle. Two pumps give me a handful

## "EGR Delete" Kit Solves Powerstroke Problems

If you have a Ford 6.0L Powerstroke and you've had EGR cooler problems, Performance Machine & Mfg. says it has the solution. And if you haven't had EGR problems yet, you will, suggests Matt Henderson, Performance Machine & Mfg. Either way, the solution is the company's EGR Delete Kit.

"With a few modifications, these can be great trucks," says Henderson. "They have coolers and valves that just go bad sporadically. There is nothing maintenance can do. The only fix is to remove it from the truck, which is legal in all states but Calif."

Henderson first ran into the problem working with the diesel trucks that carried his race cars to the track. Excessive heat passing through the EGR cooler can crack it, and the cylinders fill up with coolant, which has to go somewhere.

"It can end up breaching between head gaskets," explains Henderson. "In some trucks it can break rods and destroy the engine."

When he didn't find any true fixes to the EGR cooler, he engineered around the problem. The EGR Delete Kit makes it possible to remove the cooler while rerouting the coolant.

"Pulling a cooler out is not a problem with our kit," says Henderson. "We have dealers who can do it, but anyone with experience working on a tractor or truck can do it with our instructions."

Since he came out with his EGR Delete Kit, he admits several others have also been introduced. However, he says, other kits don't include oil filter housing gaskets and O-rings and a fuel injector O-ring kit for all



**Henderson EGR Delete kit makes it possible to remove truck's EGR cooler and reroute the coolant.**

8 injectors. Henderson says his kit does more than simply eliminate a problem.

"Trucks will still pass the smog test without the cooler, and you can usually expect a 1 1/2 mpg increase in efficiency," says Henderson. "If you add the tuner we sell on our website, you can get four to five more miles per gallon."

Henderson says the kit is designed for the Powerstrokes where the problem was most common - the 2003 to 2007 F250, 350, 450 and 550 models with 6.0L engines. He adds that a similar problem has shown up with Dodge 2500 and 3500 trucks in model years 2007 through 2011. He has introduced a kit for them as well as a kit for 2008 to 2012 Fords.

The complete EGR Delete Kit starts at \$259.95. The recommended tuner is priced at \$379.99. The company makes and markets a variety of other performance enhancing kits and products.

Contact: FARM SHOW Followup, Performance Machine & Mfg., 5890 Industrial Park Dr., Lenoir City, Tenn. 37771 (ph 877 408-3256; orders@performancemachine.com; [www.performancemachine.com](http://www.performancemachine.com)).