Money-Saving Repairs & Maintenance Shortcuts

"I repaired the plastic door hinge roller on a 1984 Pontiac Fiero by removing the top pin and roller, and then drilling out the bottom part of the pin and tapping it so the proper sized bolt fits the roller. I also replaced the bushing. Now the door roller works better than new."

Tim Wasner, 8768 N. Centerline Road, Bitely, Mich. 49309 (ph 231 745-4254; www.accuratediesel.com): "Our new fuel solenoid driver (FSD) aftermarket kit is designed for 1994 to 2001 Chevy pickups equipped with 6.5-liter diesel engines. It's designed for the do-it-yourselfer and takes only about 15 minutes to install.

"The kit solves an engine-stalling problem specific to these pickups. What happens is that the engine can shut off when you're driving down the road, almost like someone reached over and shut the key off. You can put the pickup in neutral as it rolls along and then start it back up. However, as time goes by it takes longer and longer to restart, until finally the engine won't restart at all.

"There's a module on these engines that drives the injection pump, and the problem occurs when some of the components inside the module fail due to overheating. If you go to a GM dealer they'll charge \$2,200 or more to replace the entire injection pump. Our kit mounts the module in a different location and requires no disassembly. You just unplug the original module and bolt our kit to the top of the engine. A cooler on top of our module causes it to run cooler.

"The kit sells for \$350."

Joseph Findley, Letohatchee, Alabama: "Every time I use a slot screwdriver on a 12volt battery, I stab the screwdriver into the ground in order to clean any acid off it. Then I wipe the screwdriver with a clean rag and store it."

Edward C. Pieper, Akron, Colo.: "My 1982 Gleaner L2 combine is equipped with a big diesel engine that smoked bad. I moved the timing up an additional seven degrees. It worked - the engine quit smoking and now it also uses a lot less fuel. I also added an electronic fuel pump to boost fuel flow to the injector pump. I made these changes six years ago and the engine has been running fine ever since."

Dave Mertell, Independence, Mo.: "I had a problem with bearings in the spindles on my riding mower drying out and then spinning inside the spindle housing. To solve the problem, I removed the inside seals in the bearings and installed grease fittings in the spindle housings. Then I installed bearings in the spindle, using J.B. Weld. Problem solved."

Norman Frey, Mobridge, S. Dak.: "Greasing the cylinder drive bearings on a



Deere 9600 combine is a daily routine that requires climbing on top of the right drive wheel. To make the climbing part easier, I installed an L-shaped bracket step, shown in the photo, onto the right fan screen holders. Very handy."

Hodgson Farm, Sainte-Marthe, Quebec: "Here's a quick fix for piston sleeves that are leaking anti-freeze into the oil pan. Replace the anti-freeze in the radiator with light motor oil. I've used this idea on some old tractors for 10 years, and it works."

Truman J. Miller, Wheatland, Mo.: "When I ordered trusses for my shop I asked for heavier steel - 1/4 in. thick vs. 1/8 in. thick. Then I bolted a steel beam underneath so that I can use trolleys and chain hoists to lift heavy items."

Ben Koch, Kersey, Penn.: "I built a portable vice stand by taking an old car wheel rim and a piece of well pipe and welding a piece of flat stock to bolt the vice to, and then welding the pipe to the wheel rim. Lets me move it anywhere."

Al Schollenberger, Egg Harbor, N.J.: "When replacing any bushings or bearings in equipment, I first put the new ones in the freezer for a few hours. They usually fall right in place.

"When replacing blades on my riding mower, I raise the front end on a tree branch with a come-along for easy access."

Dennis R. Ewert, Mukwonago, Wis.: "I mounted angle iron brackets with fiberglass grating on both sides of my International Harvester 966 tractor. Works great for checking the gas tank and radiator and is safer than a stepladder."



Allyn Boling, Lentner, Mo.: "I used the frame of an old hospital bed to build this rollaround work bench that's equipped with a built-in Lazy Susan. The bench can be easily raised or lowered with a crank to the desired height and is built quite strong. The drawers are made from 1/2-in. plywood with solid walnut facings. The walnut lumber was cut and cured on our farm. It's all dovetail construction.

"The can holders on top of the bench are made from an old driveshaft chopped into metal rings, with a rod underneath supporting the bottom of the cans. Holds the cans securely when moving the bench. There's even a magazine rack with a zip-up notebook in the knee hole for storing operator's manuals."

Top Engine Performance Easier With Filter Minders

Filters plug up. That's their job. The problem is knowing when a filter is plugged up enough to reduce engine performance. Filter Minders from Engineered Products Co. let you know when an air or fuel filter needs to be replaced.

"You can look at the indicator, or we also have electronic sensors that light up on the dash or trigger a default code on your computer," says Ron Kelderman, Engineered Products Co. "We sell mostly through OEMs, but installation, especially for the air filter, is easy for most applications."

He explains that most OEM equipment comes with a fitting between the air filter and the engine to attach the Filter Minder. If not, it's easy to drill a hole and pop in a grommet. Fuel and hydraulic lines are tougher and require an inline fitting. At this time it's not designed for oil filters.

Checking the Filter Minder is easy. It measures and recalls the highest restriction at maximum airflow or full load condition. As the filters plug up and restrict flow of air or fluids, the indicators activate. Ayellow position indicator gradually moves up in a clear window on the unit. When it reaches the red zone, it's time to change the filter and reset the indicator

The company points out that air filters actually are more efficient once they have a dirt film build up. That is why changing them

Power tool battery packs that have gone bad can be rebuilt "better than new", says an Ohio company.



Filter Minder lets you know when an air or fuel filter needs to be replaced.

because they look dirty may be actually reducing performance.

Filter Minders are available direct from the company or through major auto parts distributors like Wicks, NAPA and others. Prices range from \$22 for air filter monitors to \$29 for fuel filter monitors.

Contact: FARM SHOW Followup, Engineered Products Co., 2940 Airport Blvd., Waterloo, Iowa 50703 (ph 319 234-0231; toll free 800 689-7803; info@filterminder.com; www.Filterminder.com).



They Rebuild Battery Packs "Better Than New"

If you have a power tool battery pack that's gone bad, you don't have to replace it. You can rebuild it instead, and it should be more powerful than ever.

"We rebuild more than 1,000 battery packs a month," says Peter Peterson, Voltman Batteries. "We rebuild any brand. You will receive your original case back with brand new batteries on the inside."

Peterson says the batteries are rebuilt better than the original. All connections between batteries are spot welded instead of soldering, which can create heat and damage cells. "We've invested more than \$10,000 in each

of our welding systems," he adds. "Each strap receives several spot welds to ensure the best connection."

Rebuilt 2000 mAh NICAD batteries receive a 90-day warranty. The larger 3300 mAh NIMH rebuild offers 60 percent more run time than the original and carries a 180day warranty. Peterson claims the rebuild will outlast lithium batteries.

You can also sell your old DeWalt 18-volt 9096 or 18-volt Milwaukee standard shape batteries with Voltman, even if you don't want them rebuilt. The company will send a prepaid shipping label and pay \$3 each.

All old batteries are recycled. The company claims to recycle more than a million pounds of batteries each year.

Cost of rebuilding varies by power. Prices for rebuilds range from \$25 for any brand 1.2 to 8.4-volt 2000 mAh to \$140 for any 36-volt 3300 mAh. Lithium battery rebuilds with lithium cells are also available. Voltman Batteries will rebuild and return the pack within 4 to 6 weeks. Same-day-turn-around service for a \$20 premium is also available.

"Just prepay by phone or online, or enclose a check with the battery," says Peterson. "We will replace every cell with new high drain cells, and when you get it back, it will be better than new."

Contact: FARM SHOW Followup, Voltman Batteries, 320 North Mulberry St., Mansfield, Ohio 44902 (ph 419 526-1570; fax 419 526-1571; voltmanbatteries@yahoo. com; www.voltmanbatteries.com).