

Money-Saving Repairs & Maintenance Shortcuts

nuts back on. I made this change more than a year ago and it completely solved the problem.

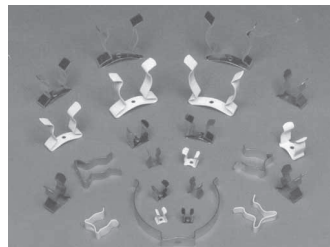
"The wheel hubs on a lot of new equipment - such as hay tedders, inverters and riding mowers - come without any grease zerks, which is unfortunate because it can lead to premature failure of the wheel bearings. I think it's worth taking the time to install your own grease zerks. All you need is a drill and a wrench. Just drill a hole in the hub, tap in threads, and use a wrench to screw in the zerk. I installed grease zerks 1 1/2 yrs ago on a Case 580 backhoe. I had to take the wheels apart anyway because the hubs were worn out and needed to be replaced, so I decided to install grease zerks at the same time. I haven't had any problems with it since then. Even if you don't have to replace the wheel hubs, you should take the wheel apart anyway in order to keep metal shavings from getting inside the hub as you drill the hole.

"The grease zerks make it easy to the bearings well-greased and should greatly extend their life. And by filling the inside of the hub with grease, you also keep most foreign material out."

Danny Hege, Olar, S.C.: "It's amazing how much money you can save by doing your own repair work with just a welder and a cutting torch. For example, when the feed roll disintegrated on our Case IH 881 forage harvester, we made the repair ourselves. About half of a 6-in. dia. pipe that served as the feed roll had worn through. We removed the feed roll and cut it apart, then welded in a length of irrigation pipe as a substitute for the original. It saved us a lot of money."

John E. Cissell, Bardstown, Ky.: "To keep from dropping small screws when working in tight spots, I put a small amount of grease on the head of each screw to hold them on the screwdriver."

John Chestnut, Wernersville, Penn.: "At about 35,000 miles the transmission on my 1999 Dodge 2500 pickup started having problems. In an attempt to avoid an expensive transmission repair, I switched to synthetic transmission fluid and added a bottle of Lucas Hydraulic Oil Booster and Stop Leak (Tractor Parts, Inc., Glasgow, Ky. (ph 270 651-2547; www.tractorpartsinc.com). It really made a difference. Now my pickup drives better than new. Apparently, the factory transmission fluid wasn't up to snuff."



John & Peg Szoke, The Arthur I. Platt Company, Inc., 160 Rock Lane, Milford, Conn. 06460 (ph 203 874-0091; fax 203 876 0637; www.toolclip.com): "Our little company makes all kinds of adjustable tool holding clips. They're great for mounting everything from brooms to screwdrivers to big shop tools on a shop wall. Our website makes it easy to figure out which size clip you need. All you have to know is the tool diameter."

RN Johnson, Inc., 269 Main Street, P.O. Box 448P, Walpole, N.Y. 03608 (ph 603 756-3321; www.rnjohnsoninc.com): This company sells old Deere parts. "We are one of the half-dozen oldest Deere dealers in the world," the company says. "We have in excess of a half million dollars in parts no longer available through Deere. We can locate new



and used parts for equipment of any brand and age. If it's not here, we'll find it."

Daniel Krenzle, Cullman, Ala.: "I repaired a weed eater motor rod by welding it while it was nearly submerged in distilled water. I welded it right up against the needle bearing on the ends without loosening the composite needle spacers inside the bearing.

"Here's an idea I saw a long time ago but have never tried myself. A welder was rebuilding an oil well drill head using a 1/4-in. dia. stainless steel pipe filled with tungsten carbide chips. It acted as a hard surfacing filler rod. Worked really well. Might work for other hard-surfacing jobs."

Rodney L. Pervier, E. Templeton, Mass.: "I used to run a lot of old International trucks with radiators that would get pinhole leaks. You couldn't fix them without burning a hole in the tubing. I'd take a regular gasket jell and paste it over the hole while it was hot. Just dab it on and go back to work. It's an easy way to fix something in the field and better than buying a new radiator."

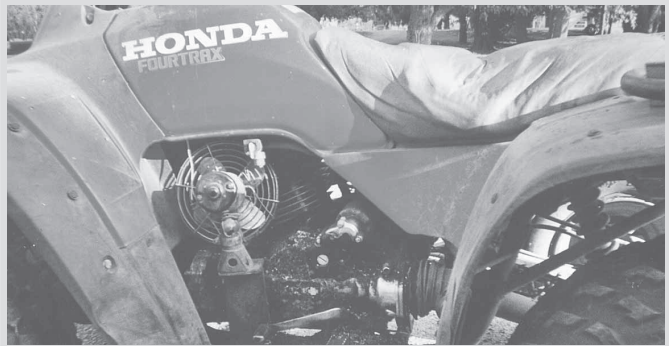


Noel Hicks, Palmyra, Ill.: "When a wind blew down a building that belonged to a nearby steel dealer, I bought the twisted girders for \$27 each and straightened them out using a jig. I used them, along with I-beams from an old railroad bridge, to build my 66 by 100-ft. farm shop."



Clair and Warren Wilson, Winchester, Ill.: "We made a farm shop dumpster out of an old fuel tank and made skids for it out of channel iron so we can tow it around. We welded links on top so we can lift it with a chain or sling."

Louis Trepainer, Ontario: "To add more life to your deep cell battery when out trolling in a fishing boat with a DC-powered motor, just hook up a 5-watt solar panel to the battery posts and you'll be able to stay out a lot longer."



"It lets me operate the ATV at idle all day long without ever overheating the engine," says Doug Fluit. "I've put hundreds of hours on my ATV since I added the fan, with no problems. I think the same idea could be used on any ATV equipped with a 12-volt battery."

Add-On Fan Keeps ATV Engine Cool

Doug Fluit of Lynden, Wash., uses a 1996 Honda ATV equipped with an air-cooled engine to do a lot of spraying and fertilizing in his commercial nursery. With rows and rows of tree branches overhead there's little air movement, which often caused the ATV's engine to overheat.

He eliminated the problem by mounting a 6-in. dia., swivel-mount electric fan alongside the engine. The fan is powered by the ATV's battery and is activated by a switch on the handlebars.

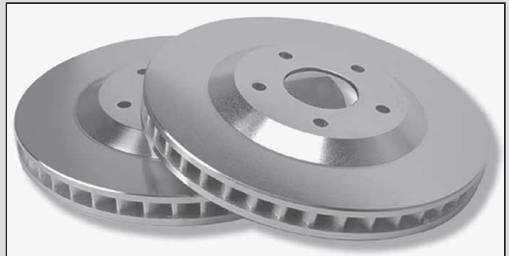
The fan came off an old school bus where it mounted on the dashboard. Fluit used 1/4-in. thick steel plate to make a bracket that bolts to the fan's base and also clamps onto the ATV's frame.

"It lets me operate the ATV at idle all day long without ever overheating the engine," says Fluit. "I've put hundreds of hours on my ATV since I added the fan, with no problems. I think the same idea could be used on any ATV equipped with a 12-volt battery.

"Most of the engines on newer ATV's are water cooled but they still don't have a fan, so you have to keep the ATV moving in order to force air through the radiator. Therefore I think the basic idea would work on newer ATV's, too."

Contact: FARM SHOW Followup, Doug Fluit, 2003 Bangbron Road, Lynden, Wash. 98264 (ph 360 354-8486 or 360 815-7061).

Buying a "frozen rotor" from DCI may be more economical than sending one to be custom-treated. "We can get deep discounts on rotors with our buying power," says Craig Weber.



Frozen Brake Rotors Wear Longer

Cryogenically frozen brake rotors will last two to three times longer and extend the life of brake pads, says Craig Weber, manufacturers representative for Diversified Cryogenics, Inc. (DCI). The company sells frozen rotors or will custom-treat rotors, drums and nearly anything else at 300 degrees below zero.

"We have custom-treated just about anything that wears out or can be reshaped, from drill bits to gun barrels, razor blades and saw blades," says Weber. "Drill bits are a big business. You can treat a \$14 bit and it will do the same job as a \$500 diamond bit. We've even treated panty hose so they don't run as easily."

Buying a frozen rotor from DCI may be more economical than sending one to be custom-treated. Custom treatment runs \$56 per car rotor and \$75 per truck rotor.

"We can get deep discounts on rotors with our buying power," he explains. "Plus then the customer doesn't have to wait for his rotor to be treated. He gets one right away."

The company advises against treating old rotors as they may already have internal cracks. The proprietary 60-hour freezing process causes the molecules, whether steel or

panty hose, to collapse, and yet the lattice structure remains unchanged. Weber compares it to compressing honeycomb and squeezing the honey out. The wax that's left retains the structure.

The dense structure is harder with fewer impurities. In the case of rotors, they don't heat up as fast against pads, thus prolonging pad life. They also offer a better meeting surface against the pads.

Frozen rotors first gained popularity among race car drivers and for off-road use. "We have Jeep dealers in Northern California who swear by them," says Weber. "Their customers burn through brakes in the mountains."

Increasingly individuals are ordering them for everyday use, adds Weber. The company also supplies fleets such as police departments, municipal buses and school buses with the frozen rotors.

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