## Money-Saving Repairs & Maintenance Shortcuts

great results. I've even used it on an aluminum cylinder head, being careful not to apply too much heat. I've never had much luck with penetrating fluids, but the wax method works every time."

Dean Larson, Tescott, Kan.: "I recently put up some fencing using 5 by 100-ft. rolls of 6 by 6-in. wire. It looks much like concrete reinforcing wire but is heavier gauge and galvanized. To bend the wire around itself I used a homemade metal tool that's about 6 in. long by 1 in. wide by 1/4 in. thick, with three holes in it. My homemade tool works a lot better than pliers for bending such wire."



Randy Boykin: "In a recent issue William Merendini of Brodheadsville, Penn., reported that his 2008 Deere 3720 tractor was unstable and felt dangerous to use. In my opinion, the problem isn't with the tractor but with the operator and the dealer who sold him the tractor. In the first place there's too much air in the tires. The air pressure should be adjusted to the amount of weight he's carrying. Also, my guess is he doesn't have any ballast in the tractor's rear tires. He needs to fill them with calcium chloride or a similar product for weight, especially if the tractor has a frontend loader on it. Also, slow down."

Jim Kissock, New Bloomfield, Mo.: "My youngest son, David, has a good idea on how to get ice out of a livestock water tank. Just break the ice like usual and then use a fish net to scoop it out. Works great.

"If you have a small hole in a metal water tank, use a roof washer that has metal on one side and a plastic washer on the other side to bolt through the hole. Tighten the nut on the bolt so the washer covers the hole, and it won't leak."

Shoup Mfg. Co., 3 Stuart Drive, Kankakee, Ill. 60901 (ph 800 627-6137; www.shoupparts.com): This company sells a handy operator's manual storage canister. The sturdy plastic canister measures 12 in. long with an inside diameter of 3 1/4 in. It comes with a screw-on cap that has a neoprene seal, and with a mount-



ing bracket with pre-drilled holes so you can mount it permanently anywhere on your equipment. The nice thing is that you'll never wonder where your operator's manual is when you need it. That way you can use a cell phone to order parts right from the field.

Sells for \$12.95 plus S&H.

**Barry Laybourne, Tugaske, Sask.:** "If you own a Deere 50 or 60 series tractor built in the 1990's that has a warning light for the oil instead of an oil pressure gauge, the light will not warn you soon enough to save you from serious engine damage. The light may not come on until the damage is done. To solve the problem all you need is a \$50 oil pressure gauge tied into your engine block somewhere. It could save you thousands of dollars in parts and labor. This advice also applies to Case 2090 and 2290 tractors."

David Chalmers, Mancelona, Mich.: "I bought a Farmall Super C tractor equipped with a 1-row cultivator but without a 3-pt. hitch or a quick hitch. I made a front-mounted 3-pt. hitch using Ford 8N tractor parts and some ingenuity. I can operate a rear-mounted grader at the same time."



Marshall Enterprises replaces damaged centers on grainhead augers. They also ship out kits so you can do the work yourself.

## How To Repair Grainhead Augers

Grainhead auger centers get messed up pretty bad over a couple of seasons. Instead of replacing the entire auger, Marshall Enterprises will just replace the damaged center. Or they can ship you a kit so you can do the work yourself or have it done locally. Grainhead auger centers are generally not available from manufacturers, says Ron Marshall.

"We started repairing grainhead augers nearly 20 years ago," he says. "We try to keep centers on hand for 200's, 900's and 600's Deere and Gleaners going back to the old G series. If we don't have them, we can get them for most makes. We can roll one for any odd style that we don't have."

Thanks to jigs they have developed, replacing a center is easy for Marshall. Once the old center has been cut out, the jigs keep the new center true with the two auger halves. Mig welders are used to first spot weld and then seam weld the centers in place.

"Mig welders don't create the heat of a wire welder," says Marshall. "With the jigs, if a guy gets here first thing in the morning with a stripped head, we can have him back on the road by early afternoon."

Marshall charges around \$600 to have a new center installed. Most kits with instructions sell for \$250 to \$275 plus S&H.

Marshall also offers full finger conversion of Deere and Case-IH table augers to improve feeding from cutterbar to the feeder chain and reduce bunching for better separation and more even spreading at the back of the machine.

Contact: FARM SHOW Followup, Marshall Enterprises, R.R., Varna, Ill. 61375 (ph 815 866-0029 or 309 463-2251; augerfixer@yahoo.com).



"It solved a problem with sweating and icing around the carburetor," says Frank Slapar, who came up with a better intake air pre-heater for his 1941 Farmall M tractor.

## Intake Air Pre-Heater Solves Problem On 1941 Farmall M

Frank Slapar, Pittsburg, Kansas, used scrap sheet metal and some plastic pipe to come up with a better intake air pre-heater for his 1941 Farmall M tractor.

"It solved the problem of sweating and icing around the carburetor," says Slapar.

His father bought the tractor new and it's been in their family ever since, says Slapar. "It was a multi-fuel tractor that ran on kerosene, powerfuel, or gas. It came with a 1-gal. fuel tank for gas that was used as a starter fuel, and a 22-gal. tank for other types of fuel. It also had a multi-fuel intake manifold with heat shield, which assisted in keeping the manifold and carburetor hot after it was started.

"The multi-fuel exhaust manifold developed cracks in it so we replaced it with a manifold designed for another tractor that runs on gas. However, we found that on cool, humid mornings the new intake manifold would sweat and, in some cases, form frost on the outside just above the carburetor. That didn't happen with the tractor's original multi-fuel manifold."

Slapar says he searched various Farmall internet forums for anyone who might be able to help. "Most respondents indicated that Farmalls were noted for this problem," says Slapar. "I couldn't find an intake manifold pre-heater that would warm the air before it enters the carburetor so I built one myself."

He started with a 16-in. length of 6-in. dia. stove pipe and a can that originally contained hand cleaner, and pop riveted them together. He made a 2-in. dia. hole in the stove pipe and fabricated an outlet to which he attached a 1 1/2-in. dia. plastic pipe, in order to route warm air to the air cleaner. He also placed sheet metal between the radiator and carburetor in order to route warm air coming off the tractor's radiator to the outside of the carburetor and to the intake manifold.

Contact: FARM SHOW Followup, Frank M. Slapar, 705 Osage St., Pittsburg, Kansas 66762 (ph 620 231-1366; samfm@ mobill.net).

## **Custom AC For Your Old Classic**

There's nothing like the feeling of cruising around in a classic car or pickup, but in the summer it can get too hot for comfort. Old Air Products has a solution. Replace that old square heater with a Hurricane custom A/C system that heats and cools.

"We have a different approach," explains Clint Millican, Old Air Products representative. "We have a pull-through system. It pulls the air through instead of pushing it through. That allows for compact unit designs. Our units have a square, modular design that looks like heaters used in the 40's and 50's."

Old Air Products makes Hurricane units to fit almost any classic vehicle.

"It doesn't matter if you have a Ford car with a Chevy motor. All our system components are interchangeable," Millican says. "We custom package each system per vehicle. We allow our customers to pick and choose from a variety of options such as round or rectangular louvers, various condenser sizes and mounting brackets to create a custom unit for their vehicle."

The systems can be easily adapted to tractors and other farm equipment. "We have a dealer installing them on Kubota tractors,"

"I recently came up with a way to use potatoes to clean rusty iron," says Ron Bennett, Rochester, N.Y., in a recent issue of the National Hay Tool Collectors Association newsletter.

"Slice up 10 lbs. of potatoes. Place a large plastic bag into a box or tub large



Hurricane A/C system pulls the air through instead of pushing it, which allows for a more compact design.

Millican says, "because our units are less expensive thanAC units from the company." Cost for custom units starts at about \$1,000,

with upgrade options such as chrome compressors and electronic controls.

Old Air also sells factory A/C replacement parts for vehicles from 1960 to 1984.

Contact: FARM SHOW Followup, Old Air Products, 8744 Forum Way, Fort Worth, Texas 76140 (ph 817 531-2665; www.oldairproducts.com).

enough to hold the part that you want to de-rust. Place the part in the bag, and add the potatoes and enough water to cover the part. Seal up and come back in two weeks. Remove the part and power wash clean. The rotting potatoes clean off all the rust."

**New Way To Remove Rust**