FARM SHOW

Money-Saving Repairs & Maintenance Shortcuts

Have you come up with any unusual money saving repair methods for fixing farm equpment? 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 farm 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.

Mark Newhall, Editor

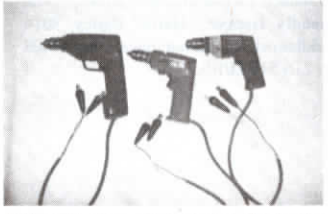
Daniel Rion, Prattsville, N.Y.: "One thing that's saved us money is learning how to weld sheet metal to cast iron using a MIG welder. Well worth the expense."

Russell Bredenkamp, York, Neb.: "To remove broken off stud bolts in cast iron, I take a flat washer and weld it to the broken stud using a wire feed welder. After securing the washer, I weld a nut to the washer, and turn the stud back and forth to screw it out."

Ernest S. Ivany, Lister, B.C.: "I had a propane kit installed in a 1991 Cummins 210 hp truck engine. The propane is piped into the air cleaner after the filter with a tube that has a lot of holes drilled in it like a sieve. When the demand for power is great, the turbo will draw heavily on air, thus drawing more propane. This increases horsepower and burns cleaner so there's no black smoke coming out the exhaust. It also increases mileage.

"I feel I've gotten a 30 percent increase in horsepower as well as mileage, therefore the air must be a lot cleaner. The oil stays cleaner longer and there's much, much less shifting on hills."

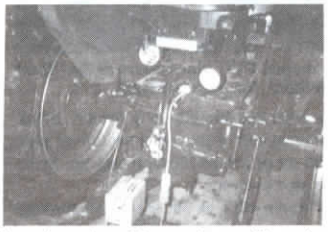
Edwin Feldt, Park, Kan.: "I've discovered a nifty way to add life to cordless



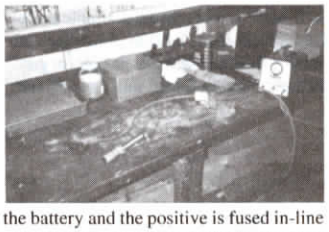
drills with worn-out batteries. I take the batteries out and wire up a cord to the drill with battery clips on it and then hook them up to batteries on pickups and other machinery. It's amazing how much power they have and how long they will last. Don't let your old drills die."

Ed Hammond, Pittsburg, Tex.: "We attended an estate sale and bought a 'lot' that included an old computer. We extracted the magnets and attached them to the end of old wood handles by drilling holes through the handle and passing gear clamps through the holes and around the magnets, pulling them up tight against the flat end of the handle. The magnets are easy to handle when mounted this way. Great for shagging tools under a car or workbench, and handy around a construction site to pick up nuts, nails, etc. One benefit is that the kids find them amusing, which helps when putting them to work."

Dick Trochta, Fransville, Wis.: He came up with a simple method to charge



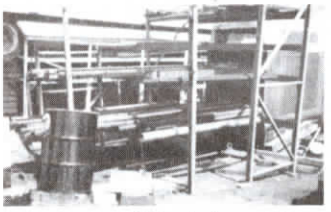
batteries using a 10-amp charger. "I use the idea on all tractors and vehicles where the batteries are hard to reach. I use a vehicle-to-trailer electrical socket and plug. These are normally used to run lights and electricity to a travel trailer. I mount the socket permanently on the tractor in a convenient location. The ground wire goes directly to



the battery and the positive is fused in-line at the battery. Then I cut off the charging cord on the battery charger and fit it with a short length of extension cord fitted with a 3-prong male plug. Then I put the quick-connect trailer plug on a short length of cord with the female end of the extension cord and I attach regular alligator clips to another short length of cord with another female extension cord end. That way I can switch quickly back and forth between the quick-connect trailer plug - for batteries wired up with the remote trailer socket - and regular battery clips for normal charging of batteries. Using the 3-prong cord also prevents hooking up with reverse polarity.

"You have to make sure you wire up all vehicles the same, negative-to-negative and positive-to-positive. I've used this practice for many years and it has saved hundreds of dollars in batteries by making it easy to keep them charged properly."

Peter Brosinsky, Bashaw, Alberta: "I use old metal shelving to make racks to hold and organize scrap metal. Gives easy



access to many different sizes and keeps everything up off the ground. I put pieces of plywood underneath to keep weeds from growing up."

Herb Cressler, Hoxie, Kan.: "When replacing center pivots with new ones, we bury the old 6-in. water pipe in the ground to supply the new pivots. We plug all the sprinkler and drain holes and put in new gaskets. We've had one buried for 5 years with no trouble. You can sometimes buy used pipe for scrap prices. It has saved us quite a bit."

John Carey, Riverton, Kan.: "I recently added a carport onto my storage building. While building it I needed several washers with holes in them a little larger than a 16 penny nail. I made the washers by drilling holes in nickels. It worked great."

Elmo Malm, Kulm, N.Dak.: "I welded a washer onto the end of the adjusting screw on a pair of vice grips. It serves a dual purpose by making it easier to adjust the pliers and it makes it handy to hang them up."

Donald Threndyle, Elmwood, Ont.: "I came up with a simple way to save shovel handles. They usually break at the rivet so I just put a radiator hose clamp at the top of the steel above the rivet and then tighten from time to time. It seems to add enough strength to take the pressure off that weak point."

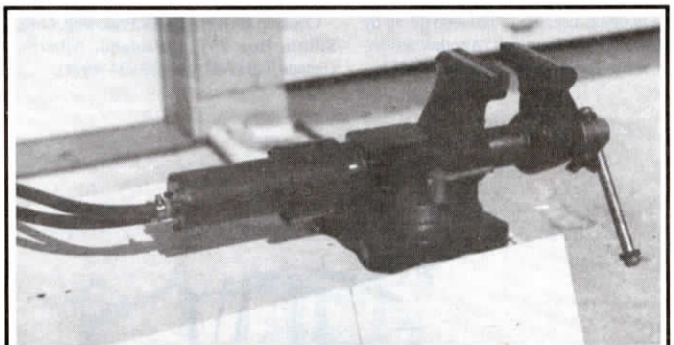
Dale Collum, Huckabay FFA, Stephenville, Texas: "I'm an instructor in our ag program. We made a pipe bender for bending small diameter pipe or rerod.

It consists of a 15-in. wheel rim cut in half with a piece of 2 3/8-in. pipe welded into the center and another piece of 2 3/8 in. pipe welded from the center pipe out to the edge of the rim. On the opposide of the rim, weld a small piece of channel iron to hold the pipe you're bending. We use a piece of 2 in. pipe, inserted into the 2 3/8-in. pipes, as a lever to roll the rim. The two pieces of pipe give you two positions for leverage for bending at different angles."

Richard Hayward, Birch Run, Mich.: "I installed eight of these workstand bases in the floor of my shop to provide sturdy workstands for bench grinders, chopsaws, drill presses, anvil work, a vice, and any other shop work. Lets you work in different areas around the shop, depending on what equipment you're working on.

"It consists of a 3-in. pipe coupler embedded in the 4-in. thick concrete floor of my shop. I have a 24 by 24 in. metal work table - made out of 3/8-in. thick steel plate - that mounts on a piece of 3-in. dia. pipe that's threaded on the lower end. It simply screws into the 3-in. coupler buried in the floor.

"To anchor the coupler in the floor, a 6 by 6 by 3/8-in. steel plate is welded to the bottom of the coupler and then six 18-in. long pieces of rerod are welded to the bottom of the plate and stick down into a hole



Air-Activated Bench Vise

"My air-activated bench vise should be on the market by the end of the year," says inventor Randy Durham, of Woodville, Texas, who made his first prototype air vise 8 years ago and eventually patented the design. He recently signed on with a manufacturer.

The powered vise allows you to keep both hands free for work. It operates automatically with a foot switch or manually with a crank. It has a 6 1/2-in. maximum jaw opening and swivels 360 degrees on its base.

The 7 1/2-in. wide vise opens and closes with a special vise attachment, air activated motor and foot valve connected with air lines to an air compressor. It'll work with any air compressor that produces up to 90 psi of pressure to produce a maximum of 3,500 psi jaw pressure.

Will sell for between $450 and $550, including vise, valve, and air lines.

Contact: FARM SHOW Followup, Bruce A. MacPherson, Vise Craft Co., 2601 Cartwright Rd., Suite D317, Missouri City, Texas 77459 (ph 713 261-7711; fax 261-7807).