## **Money-Saving Repairs & Maintenance Shortcuts**



nut. I just slipped the nut onto the bit and used a wrench to turn it. Worked great. The idea would work on any type of drive bit."

Jake Wadsworth, Wadsworth Mfg., Inc., 889 Dublin Gulch Rd., St. Ignatius, Mont. 59865 (800 535-2428): You can put every size bit on your drill at one time with this



new Multiple Bit Holder. It fits into the drill chuck and holds three Phillips drivers and three straight screw bits. Sells for \$9.49.

M. Hochstetler, 174 Vogel Rd., Cumberland, Va. 23040 ph 804 492-4295: "I ran PVC air lines in my shop with several outlets. I hooked a portable air tank into the line with an automatic cut-off valve. I don't lose pressure on the line when I unhook the tank. The tank is always full when I need some portable air.

"I found that a heavy duty 8-in. circular saw blade makes a good ratchet for a light duty home-built winch. I also make light duty air cylinders out of PVC pipe, with a large bolt running through a galvanized cap and washers made from rubber belting."

Gary Anderson, Bowden, Alberta: "After the 'turtle disc' on the rotary cutterbar on our Deere 935 discbine started showing wear, we simply exchanged a clockwise turning turtle with a counterclockwise turning unit, thus doubling their life expectancy.

"We have several older dressers in our shop. Each time we make a major machine purchase, we label several drawers to hold parts just for that machine."

Steve Devaney, Merkel, Texas: "I built a cheap 10 by 20-ft. storage room in my machine shed that has metal sides and top ac-



cess is provided by an old garage door that forms one of the end walls. On top of the shed is a loft where I can store things that we don't use a lot."

Calyx Manifold Dressing, Box 53277, Cincinnati, Ohio 45253 (ph 800 313-5671 or 513 923-1154; fax 513 923-1154; www.calyxmanifold.com): This company offers a paste-type dressing that lets you keep the exhaust manifold on any vehicle looking great at all times. You don't have to remove the manifold to use it. The paste applies with a flannel cloth and quickly polishes to a silver shine. The product encapsulizes the rust and dirt, which then falls away after you start the engine and allows it to reach operating temperatures. It won't burn and is non-toxic. Works great for spiffing up the manifolds on show tractors and cars. A 3-oz. container will do three sets of exhaust manifolds. Sells for \$13.95 plus \$4.50 S&H.

John McElroy, McElroy Enterprises, Inc., 411 First Ave. S., Ft. Dodge, Iowa **50501 (ph 800 397-3669):** "Your readers may be interested in our Kreem fuel tank liner. It's an epoxy-type product that's designed to prevent rust and corrosion and stop leaks in fuel tanks. It works great on old tractors and cars with tanks that are all rusted up. To use it all you do is clean out the tank, pour the liquid in, and slosh it around. As the liquid hardens, it forms a coating on the inside of the tank that seals up the rust. The product can also be used on new tanks to extend their life. It will seal up any tiny pin holes that may be in the tank. Sells for less than \$30 per quart."

Jesse Larson, 21880 431 Ave., DeSmet, S. Dak. 57231 (ph 605 854-3108): Jesse's a diesel technology student at Lake Area Technical Institute, Watertown, S. Dak. He and Steve Peters, a diesel instructor, came up with an inexpensive way to recharge 90-amp Nippondenso alternators commonly found on Deere tractors.

According to Larson and Peters, the alternator can quit charging when a diode/resistor unit - made up of two diodes and a resistor - fails. This unit is integral with the alternator's stator/rectifier assembly, so if a single diode fails the entire stator assembly has to be replaced at a cost of about \$200. "The stator assembly often costs more than it would cost to replace the entire alternator with a rebuilt unit," says Larson.

He and Peters solved the problem by removing a diode/resistor unit from a used Delco 10 SI alternator, modifying it slightly, and installing it on the Nippondenso alternator. Total cost was less than \$5.

"Delco alternators are widely available so there's no shortage of diode/resistor units," says Larson. "To install the diode/resistor we drilled out some rivets and then soldered the unit onto the old diode mounts and hooked



the resistor into it.'

Dwight Ruhlen, 2591 Halcyondale Rd., Sylvania, Ga. 30467 (ph 912 863-4398): 'Using nothing more than a 2-ft. long harrow shaft and a cast iron spacer. I made a cheap slide hammer that I use to pull keys out of a keyway on our Case-IH 8465 round baler. The keys hold a couple of pulleys in place. I installed a pair of nuts and a washer on one end of the shaft. The other end of the shaft is square. I made two different size notches in the square that fit behind the raised part of the key. The spacer weighs about 4 lbs., so a sudden pull of the slide back against the washer creates enough impact to break the key loose. I got most of the parts I needed at an agri-supply store for a total cost of \$28. Commercial slide hammers sell for \$100 to \$250.

Tony Ryba, Johnstown, Pa.: "I came up with a low-cost way to solve a problem with the throttle on my 2001 Ford F-250 pickup equipped with a 5.4-liter engine and standard transmission. The problem was that the pickup idled too fast, causing excessive wear on clutch and brakes.

"I sent two letters to Ford to complain about the problem but they never replied. My dealer told me the problem was due to an engineering defect.

"I solved the problem by rigging up a hand throttle using a small piece of beaded lightpull chain that runs from under the dash to a

(Continued on next page)

## "Tool Tree" Keeps Air Tools Organized

Air tools are always at your fingertips with this new portable air tool organizer.

The Tool Tree is a 5-ft. wide, 51-in. high metal stand that mounts on four 3-in. caster wheels. The stand's horizontal top pipe comes with 20 quick couplers and space for 20 air tools. There are 10 couplers on top of the pipe and 10 on the bottom. The tools simply snap onto the couplers.

Inventor Jerry Walstad says, "It works great for storing air ratchets, grinders, hammers, saws and so on. There's no need to go through toolbox drawers looking for the tool you need. You can roll the stand right up to where you're working. An optional heavy duty shelf snaps onto the base of the unit for storing small items."

The company also offers models that hold six, 10, or 30 tools. A wall-mounted unit is also available.

The 6-tool Tool Tree sells for \$59 plus S&H; the 10-tool model for \$95; and the 30-tool model for \$269. The shelf sells for \$50 and the wall-mount unit for \$159. A locking cover to prevent unauthorized use sells for \$50.

Contact: FARM SHOW Followup, The Tool Tree Co., 279 Shoreline Drive, Toledo, Wash. 98591 (ph 360 892-4009; fax 360 864-2428; E-mail: patstevens8@aol.com).



Metal stand mounts on 4 caster wheels. Horizontal top pipe comes with 20 quick couplers and space for 20 air tools.



Wall-mounted units are also available.



Company also offers models that hold six, 10, or 30 tools.



Deere combine final drive connects to a Datsun rear end. All drive components are enclosed inside steel cabinet.

## **Big Metal Bender Built From Pickup, Combine Parts**

Using a combine final drive, a pickup differential, and a used hydraulic motor, Clair and Warren Wilson made a bender that can handle just about any bending job on the farm. They've used it successfully on solid steel rebar up to 1 1/4 in. in diameter.

They built the bender entirely from scratch, enclosing it neatly inside a cabinet that's 3 by 4 ft. and stands 41 in. tall.

A salvaged hydraulic orbit motor chaindrives the differential which came off a Datsun pickup. Its gears were welded together solid. Above the differential is a final drive from a Deere 95 combine. It's fitted with a large steel pin that rotates in the center of a turntable that was cut from 2-in. steel plate. The piece of metal to be bent is inserted between two adjustable pins in the turntable and rested against an angled steel block. The motor is then activated until the metal is bent to the correct angle.



Piece of metal to be bent is inserted between two adjustable pins in turntable.

The top of the cabinet has three rows of pin anchor holes.

Contact: FARM SHOW Followup, Clair and Warren Wilson, 132 Hillview Rd., Winchester, Ill. 62694 (ph 217 742-3918).