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

everything from changing oil to holding tools and bolts. I got the lid from the company I work for as they didn't need it any more. I installed four 2-in. caster wheels to the top side of the lid and then turned it upside down. I had bed liner sprayed on the inside of the lid. An all-thread bolt covered with plastic hose makes a dandy handle on one side of the lid. I also painted the lid Deere green and added the Deere logo."

**Robert Ferreira, Crystal River, Florida:** "I came up with a simple, portable 12-volt battery charger that works much like a car



charging system. It works great for charging any vehicle with a dead battery. All the information on the wiring schematics that's required to build this charging system can be found in any auto repair manual.

"The idea is to use a small engine to beltdrive a car alternator, which is used to charge the dead battery. I use a 4 1/2 hp Briggs & Stratton salvaged from an old lawn edger, and an alternator off a GM car. The engine beltdrives the alternator the same way a car engine does, and it allows the alternator to produce enough voltage to 'excite' the field. Both the engine and alternator mount on a wooden platform that I bolted onto the frame of the old 2-wheeled lawn edger. I mounted a homemade control panel on the cart that's equipped with an amp meter, volt meter, and switches that came off a car.

"To charge a dead battery, all I do is start the engine and hook a pair of clip leads to the tractor's battery. A small 12-volt lawn mower battery is used for the field."



Gale Courson, Farina, Ill.: "My all steel work table has caster wheels so I can roll it anywhere I want to work on a job. The table has a vise for holding items in place."

John Hahn, 509 E. Main, P.O. Box 370, Craigmont, Idaho 83523 (ph 208 924-5538;



trseats@camasnet.com; www.hahn-tractor-seats.com): "We manufacture all makes and models of antique tractor seats including Holt, Best, Caterpillar, IH, Cletrac, John Deere, and Allis Chalmers. We specialize in antique Caterpillar seats and have hundreds of patterns available. The photo shows one of our seats on a 1935 Cat RD8 bulldozer. The seats are made with vinyl over high-density foam. We also produce leather products including crank straps, throttle-governor boots, break spring boots, equalizer spring boots, and shift tower boots."

No-Spill Research, Inc., P.O. Box 11040, Kansas City, Mo. 64119 (ph 816 454-3389; fax 816 454-4158; www.no-spill.com/ CARBcans.htm: This company offers fuel



to 3 gpm. The self-venting nozzle stops the flow of fuel when the target tank reaches full. The can has a single opening for filling and pouring. Available in 1 1/4, 2 1/2, and 5-gal. size cans. A variety of spout extensions are available.

Mr. Funnel, 3119 SW 42<sup>nd</sup> Ave., Palm City, Fla. 34990 ph 772 287-6157; www.mrfunnel.com: This company offers



a fuel filter that removes water and other contaminants from fuel, improving engine durability and performance. Mr. Funnel fuel filter is a heavy duty, fast-flow, poly funnel with a built-in stainless steel filter. It's designed to filter out water, dirt, and debris from most fuels including gas, diesel, heating oil, and kerosene. Contaminants are trapped inside the filter, allowing only clean fuel to pass through the downspout. The coated, non-stick filter requires no cleaning.

Available in four models, the funnel filters gas, diesel, kerosene and heating oil. The smaller F1 and F3 funnels are said to be ideal for yard equipment. For transferring over five gallons of fuel, the F8 model works well. With a flow rate up to 15 gpm, the F15 has dual filters and can be used at a fuel pump.

Sells for \$19.95 plus S&H.

**Don Ickes, Osterburg, Penn.:** "I used a pair of steel I-beams and other salvaged materials to come up with low-cost 'grease mon-



key' ramps. They work great for changing oil on vehicles, removing the blades from my riding mower, and many other jobs. The ramps are set up on a slight hillside, with one end of each I-beam lying on a pile of dirt. The other ends are supported by a steel post

out of an old boiler furnace.

"The I-beam simply sets on top of an 8-in. wide steel flange on top of the post. The bottom end of each post sets in a length of channel iron. I can vary the width of the ramps by simply moving the posts in or out of the channel iron, and then picking up the other end of the I-beams by hand and sliding them over. The ramps can handle a lot of weight - I've even driven a 2-ton dump truck up onto them."

Bob Bugger, Effingham, Ill.: "I found this used camper refrigerator, which turned out



to be just the right size for storage of welding rods. I keep it on top of my welding machine.

"I use discarded card file cabinets to store all kinds of parts and tools."



Gary B. Miller, Peru, Ind.: "Cleaning rust or dirt from bolt holes with your taps will dull the taps. Instead, use a cut-off wheel to cut notches in hard bolts to do the cleaning. This works just as well and it saves your taps for new threads. Also, cut the inside of nuts with a file or hacksaw to clean male threads."

Bruce Thompson, Amenia, N.Y.: "I use

an old refrigerator to store caulk, glue, etc. To keep them from freezing I use an electric heat thermostat and a light bulb located inside the hox."

Dennis Rood, Clarksville, Ark.: "When disassembling an antique 3 hp gas engine for restoration, I found that a very large 3-jaw puller would only remove one flywheel. Standing the crankshaft on end in a 30-ton press made short work of it."

Tim Force, Montrose, Colo.: "I pop riveted a piece of stainless steel screen into the air passage to my truck's air cleaner. Keeps mice and pack rats from nesting in the air cleaner."

Don W. Thomas, Eureka, River, Alberta: "I bought a used moldboard plow several years ago that needed new shares. Rather than buy new ones, I welded used shares over the old shares, low enough to equal new ones. It worked as well as installing new ones at almost no cost. I used 7014 welding rod to do the work.

"I've read several times in FARM SHOW about using melted wax to loosen stubborn bolts. Last summer I had two occasions to try the idea and I was amazed how well it worked."

Joe Eilert, Jewell, Kan.: "We installed an air-operated tire repair machine 15 years ago, wondering at the time if we could justify the cost. It has really paid off. In most cases, we can have tire repairs done in the time it would take to drive to the tire shop. It also lets us buy new tires at seasonal sales without having to have them installed at the time of purchase.

"Installing bulk oil tanks with hose reels and electronic meters has been very convenient and time-saving for us. We have tanks for both engine and hydraulic oil."

Robert Lassila, Great Falls, Mont.: When pouring the floor for a new shop, I recommend installing a grounding device in the floor between your welder and the welding bench. This avoids some of the hassles of the grounding clamp and cable. Rebar works fine for the rod."

**David A. Medley, Gordon, Ga.:** "For engines that have been sitting for a long time and that are hard to crank, I use a propane torch (not lit) at the intake area. The propane gives the engine enough boost to start."

## Tractor Restoration Expert Specializes In Deere's "H"

Anyone with a Deere "H" that needs repair, maintenance or restoration should get a copy of a book by Patrick Browning called "John Deere 'H' Restoration Guide".

What's more, Browning also offers various aftermarket parts for restoration or repair, such as bolt kits, carburetors, control rods, fuel tank assemblies, cylinder head valve guides and other miscellaneous parts. In addition, he sells a collection of Deere Field Service bulletins from 1935 to 1953 which he says are a "must have" for any "H" owner. Brown also makes a Safety Step for the Deere "H" that bolts to the side of the frame. Works like the step widely used on new generation 3010, 3020, and 4010 tractors.

Browning's Restoration Guide is an extremely detailed, 208-page manual that walks you through a total restoration. Hundreds of photos help illustrate the process and Browning doesn't miss a trick when it comes to the nuts and bolts of putting an antique tractor back together again. One thing that shines through loud and clear in the book is that Browning has done this himself.

JOHN DEERE MODEL "H"
RESTORATION GUIDE
BY PATRICK BROWNING





SECOND EDITION



In addition to describing the process, Browning supplies an index of parts suppliers who carry needed materials for a complete restoration. He also includes detailed specs for parts and fittings on the tractors.

Sells for \$24.95, S&H included.

Contact: FARM SHOW Followup, Patrick F. Browning, 1397 Timberhill Drive, New Braunfels, Texas 78132 (ph 830-627-0430).