## Money-Saving Repairs & Maintenance Shortcuts

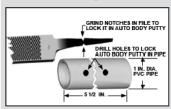
and easy way to find out if it's a fuel system problem or an electrical problem. Just take the air cleaner off and run propane into the intake with a weed burner or other propane torch. If the engine starts when you crank it, you've got a fuel system problem."



Mark Yax, Solon, Ohio: "I came up with a fast way to spray paint bushings. I cut a strip of cardboard slightly wider than the bushings' inside diameter and then space the bushings out, leaving room between the

This method lets me spray all sides of the bushings and their ends in one shot, and then hang them up to dry. It works a lot better than painting the bushings on a flat surface and having to wait for them to dry, and then having to flip them over on their other side."

Glenn Buxengard, Spring Grove, Minn.: "Here's an absolutely foolproof way to make a handle for your file that won't come out. Grind a couple of notches into



the file's tail, and also drill matching holes into a short length of 3/4 or 1-in. dia. pvc pipe. Fill the pipe with auto body putty and then stick the file's tail inside it. Some of the putty will ooze out of the pipe through the holes, which you can wipe off. The rest of the putty will harden and stay locked inside the pipe. It won't be able to slide out and neither will the notched file. The result is an absolutely indestructible file handle."



Kenny Fasnacht, Janesville, Minn.: "I have 2 artificial hips so I needed a step that would stay put whenever I lean over while working on trucks, farm machinery and construction equipment. I couldn't find what I wanted on the market so I built my own 'slip resistant' step.

"It's 12 in. wide, 16 to 24 in. long, and 9 to 18 in. high and stands on legs made from 1-in. tubing. The legs set on 3 1/2-in. sq. metal pads with diamond-shaped, rubber baler belting pop-riveted onto them. The rubber pads stick to the floor and won't slip when I lean over to work under the hood of a vehicle.

The top of the step is made from antiskid serrated plank grating, which comes in different widths. It doesn't matter if my shoes are dirty or oily, the grating will dig into the soles and clean everything off.'

Jim Westcott, Orillia, Ontario: "To keep fluid from migrating front to back on my Case 430 tractor, I run a hydraulic hose from the front drain hole to the back one. This way they self level, so I don't have to take it all apart and remove the seal in the transmission and rear end.'

Raymond Nanney, Union Mills, N.C.:

"The pto shield on my bush hog wore out, and a new one would have cost several hundred dollars. Instead, I used a piece of 4-in. dia. sewer pipe to make an inexpensive



replacement. I cut off a length of pipe and drilled 2 holes into it. Then I slipped the pipe over the pto shaft and wired the pipe to the lower lift arms on my tractor's 3-pt. hitch, in order to keep the shield from turning. To grease the pto shaft's universal joints, I just loosen the wire and move the shield either forward or backward."

Robert O. Wallrath, Houston, Texas: "I recently retired but still operate a business that services engines. I needed an inexpensive hoist so I built one that sets outside my shop, but can pivot all the way around to set objects



inside the shop through the doors. I just grab a chain and swing the hoist in either direction. The 12-ft. long I-beam on top of the hoist pivots on 3/8-in. bearings and can lift up to 2,000 lbs

The hoist is supported by a 6-in. dia. steel pipe that goes 4 ft. deep into the ground. The top of the chain is covered by a modified plastic bucket to keep the chain dry. I cut a 2 1/2-gal. sq. plastic bucket in half, keeping the bottom half. I cut a small hole in the bottom, slipped the chain hook through it, and attached it to the trolley. Then I sawed the cut-out round plug in half, put the 2 halves back into the hole, and used Liquid Nail to

'It really comes in handy. I recently used the hoist to lift 30-ft. long steel beams off a trailer and then swing them inside the shop. It cost less than \$1,000 to build. I'm willing to sell plans."



Michael Meyers, Kirbyville, Texas: 'Here's how I store air tools in my shop. I drive a 16-penny nail into a board and then cut off the nail head. Another idea: I put all my saw and tables on wheels, which makes shop cleaning a lot easier.3

Leland Nadig, Evart, Mich.: "I took a stainless steel fire extinguisher, cut off the end

of the hose, and installed an air chuck to make an inexpensive air carrier. It's important to stay under the extinguisher's limit of 190 lbs. air pressure; I usually don't go above 120 lbs. Works great for pumping up tires on riding mowers





Auxiliary pto-driven hydraulic pump is bolted on front of the transmission on Larry McPhail's Deere 4010 tractor.

## **4010 Gets Hydraulic Power Boost**

Larry McPhail loves his 4010 Deere with its 248 loader. However, he didn't love the slow hydraulics - until he added a booster pump.

"The 4010 hydraulic system is underpowered for everything it has to do," says McPhail. "The tractor is equipped with a belly 1,000 rpm pto facing forward from the transmission. A friend suggested I mount an auxiliary pto-driven hydraulic pump there."

McPhail got a pump from Prince Manufacturing (ph 605 235-1220; www. princehyd.com). He fabricated a bracket for the pump and secured it to 4 existing holes on front of the transmission.

"The holes are for mounting a belly sickle mower on the tractor," explains McPhail.

With the pump in place, McPhail ran the

pump's intake hose to the drain plug on the transmission case. He found a cheap fix for mating the hose end's hydraulic fitting to the drain's 1-in, fine thread bolt,

"Deere has a fitting with fine thread on one end and hydraulic pipe on the other with a swivel in between," says McPhail. "It's called a Seal Lock, and it cost just \$2.78."

Once he mounted control valves on a bracket on the loader frame and ran hoses to the loader, he had the speed he was missing.

"It works great," says McPhail.

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## **Parts Gurus Help Restore** Old Ford Cars, Trucks

Mark Sullivan is a car enthusiast who loves to rebuild refurbish and restore old Ford vehicles. Models range from the early 1930's to late '70's. During projects involving 12 cars of his own in the late '90's and early 2000's, Sullivan bought, bartered and sold hundreds of parts to get exactly what he needed. In 2005 he recognized that many other Ford enthusiasts were calling him for parts, so he started a business called Sullivans Garage. The business quickly gained traction and in the past 9 years the company has shipped parts to more than 45,000 customers worldwide. He adds several thousand new parts every year.

"I only sell parts I use in my own restorations," Mark says, "which means customers are getting the best parts available for the vehicle they're working on."

Sullivan stocks parts from about 20 different suppliers and sells primarily online. For older vehicles he carries gas tanks, spreader bars, headlamps, running boards, grill shells and firewalls. Gauges, script bumpers, lights and interior accessories are also available. Some parts are originals, others are rebuilt, others are replicas.

In 9 years the business has sold more than 1,500 sets of Model A brake floaters, hundreds of running boards and grills, along with countless others parts. Mark says, "If you're building a '32 Ford, send him a list of all the parts you need and I'll come up with a 'package' deal that's tough to beat. Sullivan also sells operators manuals and parts lists for many old vehicles.

Sullivan says he's continually on the lookout for cars to restore or to acquire, then inventory and re-sell. He tries to maintain at least a dozen vehicles for sale at all times and is usually working on 3 to 4 cars of his own at any given time. "I started doing this for fun



Tom Roberts built a business out of his passion for old Fords.

and it quickly grew into a business which has done extremely well," says Mark.

Contact: FARM SHOW Followup, Sullivan's Garage, 30 Hazelnut Lane, Londonderry, N.H. 03053 (ph 855 785-5988; www.Sullivansgarage.com).

Tom Roberts is another car enthusiast who built a business out of his passion for old Fords. He started building hotrods as a teenager and eventually built heads, gearboxes and blocks for dragsters, Indy cars, off-shore racing boats and even experimental aircraft. His well known Roberts/Magnuson Supercharger Kit is a true bolt-on modification for flathead Fords. It delivers complete driveability together with neck-snapping performance at an affordable price. TR Designs also has flathead manifold systems configured for a single 4-barrel carburetor, 4 Stromberg carburetors, and a Supercharger with two Strombergs. All of Tom's parts are created using CAD technology, cast in aluminum and machined to exact specs.

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