

Money-Saving Repairs & Maintenance Shortcuts

tech milling and drilling equipment, a lot of surplus "low-tech" equipment is on the market that works fine but might be a bit less sophisticated.

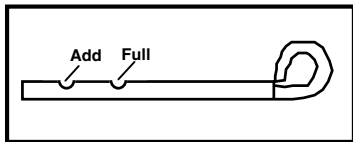
Wilson recently picked up this Cleveland-Hammond toggle drill from a manufacturer. The heavy production line drill has a swinging feature which allows exact drilling over a wide sweep. He says he uses it every day. What he likes about it is that several holes can be drilled in a heavy piece of metal without having to move the metal. It can drill holes over a 2-ft. sweep.

"We can drill holes up to 4 in. in dia. the drill has six speeds and will go all day if you need to. He says he picked it up for "a reasonable price" and notes that if he hadn't bought it, it would most likely have been scrapped.

Isaac Yoder, Blanch, N.C.: "After two years of use, I'm willing to share an unusual money-saving repair I came up with. On our farm well's submersible pump, there is a coupler between the motor and pump. On the pump side, the coupler has a hex shaft while the shaft on the motor side has finer splines. The splines on the motor wore off so we had to get a new motor. A year later, it happened again so we decided we had to do something. I just ground the end of the motor shaft back slightly and put high grade Loctite (the green color) on the shaft and collar and tapped it back on again and reassembled the pump. After giving it plenty of time to set up, we put the pump back in use again. The repair has held up for two years. That's twice as long as when it was new. So I would advise anyone to at least try what we did rather than buy a whole new motor.

"I have also used Loctite on bearings, both large and small, high speed or low speed. If an old bearing or race wears down a shaft or collar, just put some Loctite on and position the bearing and it will seize to the shaft. It's a miracle product as far as I'm concerned."

Dan Grewe, Arlington, Wa.: "I read with interest Curtis Wold's idea for drilling a 1/16-in. dia. hole in engine and transmission



dipsticks to check oil levels. Here's my way which is simpler and maintains strength in narrow dipsticks. Just grind a little notch at the full and add levels. Quick and easy to do with a file."

Bob White, South Euclid, Ohio: "I've got the slickest little trick for mounting tubeless tires. After trying every thing I could



think of to get beads to seal, I came up with this idea. It works every time and costs nothing.

"After slipping the tire onto the rim, I 'snug' the bead on the side that's opposite the valve stem. You don't have to seal that

side. I just fit it snugly to the rim with a couple pulls.

"Then I flip the tire over onto some supports. I use a couple pieces of 4 by 4's or a couple tires. The supports hold the sides of the tire as you push down on the rim. It only takes a couple of pounds of force to push the rim down enough to close the bead gap. While I hold the rim down with my left hand, I apply shop air with my right to seat the bead. To make it seat faster, I take the valve stem out to reduce restriction in the air flow. This technique has never failed me and no special tools are required. Takes only about 30 seconds."

Jerry Brown, Bixby Radiator, Inc., 15200 S. 76th E. Ave., Box 307, Bixby, Okla. 74008 (ph 800 331-2748): "I custom build radiators for tractors with engines that are running too hot. I specialize in Deere tractors but I can work on other models, too. The farmers who come to my shop need a bigger radiator but they can't get one from the company that will fit. Some of them have gone to radiator repair shops for help with no results. Others have tried installing a turbocharger but it didn't solve the problem. Often the problem is that they're using a tractor that's too small for the jobs they're using it for."

Paul Horne, 8950 Upper 240th St. W., Lakeville, Minn. 55044 (ph 612 469-4229): "I recently began marketing a hydraulic



thrower control for Deere small square ejection balers. These balers come with a steel rod that you have to manually rotate in order to adjust the bale's throwing distance. To change the setting you have to reach behind from the tractor cab and rotate the rod, which is awkward to do. My thrower control uses the tractor's hydraulics to rotate the rod and is activated by a valve in the cab.

"My thrower controls consist of a cylinder and chain contained inside a steel frame that bolts onto the baler. The cylinder chain-drives a sprocket that attaches to the rod. As the cylinder is extended or retracted, the chain rotates the rod in either direction.

"My neighbor used it last year on 10,000 bales with no problems. It'll fit any Deere ejection baler model. As far as I know, Deere is the only company that makes ejection balers equipped with hand-operated controls for setting the bale throwing distance."



Leon Dick, Mt. Hope, Kan.: "I keep my diesel fuel tank on a trailer. I didn't want to

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Bowling Ball Vice Holds Small Work Steady

When Charlie Foster retired after a career in the military followed by a second one working for a telephone company, he retreated to his shop.

"I make knives, miniature cannons, and do a lot of wood carving and other miscellaneous projects," he says.

Frustrated at not being able to hold small parts steady and at the right angle for carving or filing, he devised a swivel vice out of an old bowling ball that makes it easy to put work at exactly the right angle.

"I drilled and tapped the thumb hole in the ball to fit a big bolt. Then I welded a small 4-in. vice to the head of the bolt. With the bolt and vice screwed into the ball, I've got a vice I can turn to just about any angle," he says.

To hold the ball vice steady, Foster used the steel frame out of an old bowling ball bag. "It's sturdy and has four rubber cushions to hold the ball. The ball wedges into the frame so snugly it takes more than a little effort to get it to move once it's put in place," he explains.

The ball vice worked so well, Foster made other devices to screw into the ball. For example, he welded a flat steel plate onto a



bolt that screws onto the ball. "I drilled holes in the plate, so I can screw pieces of wood onto it to hold them in place to work on," he says.

Foster made a couple other screw-in devices to help hold odd-shaped pieces, especially for wood carving.

"I'm thinking about attaching a halogen flood light to another old bowling ball. That way, I could adjust the light just where I need it without the need for a clamp to hold it in place," Foster says.

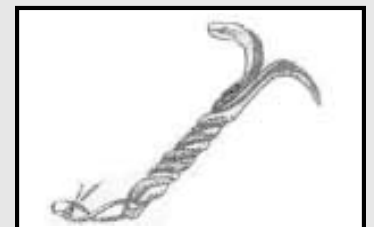
Contact: FARM SHOW Followup, Charlie Foster, 7962 Center Parkway, Sacramento, Calif. 95823 (ph 916 392-2789; E-mail: tigana@jps.net).

Big Two-Pronged Hoof Pick Has Many Uses

A hoof pick is a hoof pick, right? Not so, says Paul Muller, Arvada, Colo., who has come up with a two-headed hoof pick that's made from used horseshoes.

"It's heavier than anything on the market and has two different types of heads which lets you use it for a variety of jobs," says Muller.

The pick comes with a large, twisted, dipped-rubber handle that provides a sure grip regardless of your hand size and has a leather thong on one end to hang it up. There are two curved heads. One head is flat and semi-sharpened. It can be used to scrape out mud or fungus and can even be used as a crude hammer to pound nails. The other head is pointed and works great for prying compacted dirt, clay, ice, snow, etc., out of horse or cow hooves. It can also be used to make buckle holes in leather and even to pull fence



staples.

"It makes cleaning out hooves less of an effort because the weight works for you," says Muller. "I invented it five years ago but just started marketing it last year. It's a handy and unique tool to have hanging in the shop."

Sells for \$14.95 plus S&H.

Contact: FARM SHOW Followup, Paul L. Muller, 6937 W. 53 Pl., Arvada, Colo. 80002 (ph 303 467-1278; fax 3442).

Quick Way To Strip Paint Without Sandblasting

"We've found a way to strip paint off antique tractors that works better than sandblasting," says Bruce Baker, Ohio City, Ohio.

"We use a cutting torch with a large tip and keep the oxygen lever pressed. You have to keep it moving and never stay in one spot. It's very fast and efficient but you cannot use

it on sheet metal – the hood, fenders, radiator, etc. This method works to remove old paint, grease, and grime. Everything burns right up and you brush off the debris."

Contact: FARM SHOW Followup, Bruce Baker, 11877 Walnut Grove Rd., Ohio City, Ohio 45874 (ph 419 965-2646).