Money-Saving Repairs & Maintenance Shortcuts

Richard D. Hammond, Coopersville, Mich.: "The knotter on my baler kept skipping and as a result the bales would break. I switched to heavier 7,200-lb. kicker bale twine and also waxed the bale chute. Problem solved."

Ken Voigt, Wausau, Wis.: "Here's a photo of a drill press I converted to electric drive.

The drill press was probably called a blacksmith's drill and was originally designed to be hand cranked. It was patented June 8, 1907 by CB & F Co. of Lancaster, Penn. What I like about this unit is its au-



tomatic down feed, which operates at the top. A notched wheel is turned by a pawl off a cam, which turns a threaded shaft connected to the chuck shaft. I can clamp a piece down and do something else while the machine drills away. I rigged it up with a 2 hp electric motor. It can drill 1-in. dia. holes with no problem.

"I also made a sheet metal bending brake. The press measures 6 ft. 3 in. wide and can open up to 7 in., which is handy. The top part is made from chopper knives that have the right angle needed for that section. A 1/2-in.



drill, mounted at one end, drives a 1-in. threaded rod one way and then the other. I use a foot switch on the floor to hold the metal with both hands. A chain drive connects the two 1-in. threaded rods at each end so that it opens and closes evenly. The brake is also hinged to the shop wall at one end, allowing me to roll it out of the way whenever it's not needed."

Ralph Amos, R & R Engineering Co., 801 S. Main, P.O. Box 428, Summitville, Ind. 46070 ph 800 979-1921 or 765 536-2331; www.randrengineering.com: "We sell U-bolts and other special fasteners that farmers may not be able to find locally. Our



clients include AGCO, Deere, Case IH, New Holland, and many others. We're committed to being the best in the industry and to delivering the highest quality, most competitively priced parts on time, every time.

"We can supply a wide variety of parts including J-bolts; hook bolts with round or square bend or right angle bend; eyebolts; Ubolts with a round or square bend, battery bolts, anchor bolts, hanger bolts, cranks, pins, roller shafts, studs, etc.

"Our company got started in 1969. We've

grown to supply most agricultural manufacturers and can compete with China in both cost and quality. Our goal is to be the most modern, efficient and competitive manufacturer of high-quality special fasteners in the world."

Kevin Buckstead, Holden, Mo.: "I bought an ordinary drop light, sometimes described as a trouble light, and converted it to a portable unit. I cut off the electric plug and peeled back the outer covering of the cord wire for about 10 inches. Then I stripped the covering off the individual wire ends enough so I could attach a clamp to each. I replaced the original light bulb with a 12-volt bulb.



"Now I can carry the drop light in a tractor or vehicle, and when problems arise I always have a convenient, inexpensive source of light."

Eric "Inch" Petrevich, Glen Gardner, N.J.: "Storing tie-downs is always a big job. And if you leave them in your truck, it can



be a frustrating job trying to untangle them whenever you need them.

"I use a milk crate to solve the problem. I wrap the tie-downs around the outside of the crate, then tighten the straps so they'll stay put. This idea also leaves the crate empty for other items that you may need to carry in your truck.

"Here's another idea. Use shopping carts to hold miscellaneous metal parts.

"Go to your local supermarket and ask if they have any carts they're not using any more. Use the carts to toss in metal parts. It's



easy to move the carts to wherever you're working and move them out of the way when you're done. The wire carts allow sawdust and dirt to fall though. I use one cart for wood and one for metal."

Gast Mfg. Inc., P.O. Box 97, Benton Harbor, Mich. 49023 ph 269 926-6171; www.gastmfg.com: This company offers a wide variety of air-powered motors. Typical applications include mixing equipment, conveyor drives, pump drives, hoists and winches, and hose reels.

Lubricated air motors come in seven basic models up to 9 1/2 hp (7.1 kW); motor speeds are variable from 300 to 10,000 rpm's. Oilless versions, which require no lubrication, come in three basic models ranging from .18 to 2 1/2 hp with motor speeds up to 4,000 rpm's.



Air cleaner rides on four caster wheels. Suction arm on front draws dirty air into the unit before it has a chance to get out into shop.

Portable Filter System Keeps Shop Air Clean

If you're tired of breathing in welding smoke or grinder dust particles when working in your shop, you'll like this new portable air cleaner that goes where the work is.

Wayne Hughes, owner of Air-Vac Systems, Cedar Falls, Iowa, says, "It pulls welding smoke or other fumes and particles away from your face before they can get into your breathing zone," he says.

The first-of-its-kind air cleaner rides on four caster wheels and is housed in a 16gauge steel cabinet that measures 3 ft. wide by 2 ft. deep by 6 ft. high. A "step-on" brake locks the unit to the floor while it's in use.

An electric fan at the top of the unit pulls dirty air through an 8-pocket bag filter inside the cabinet. An 8-in. dia. suction arm on front draws dirty air into the unit before it has a chance to get out into the shop. The arm can be swiveled left or right 180 degrees, and also swivels at the hood and at the center of the hose. External springs counterbalance the weight of the arm, with friction joints added for stability.

"If you want you can even set the hose to reach 11 ft. straight up into the air," says Hughes.

A metal mesh spark arrestor filter is located below the bag filters and catches sparks in a slag pan, which can be pulled out and emptied. It prevents any hot sparks from going into the bag filter and catching on fire. "The bag filters need to be changed only about once a year. The spark arrestor filter should be cleaned about once a month," notes Hughes. Sells for \$3.480.

Contact: FARM SHOW Followup, Air-Vac Systems, 127 Stickfort St., Cedar Falls, Iowa 50613 (ph 800 234-2473; waybar20@ aol.com; www.air-vacsystems.com).



T.C.M. company says its rebuilt clutch for Deere 5400 series tractors will last much longer than the original.

Long-Life Clutch For 5400 Series JD Tractors

FARM SHOW readers' complaints about the short clutch life on 5400 Series Deere tractors have been heard by T.C.M., Staceyville, Iowa. The company has built its business remanufacturing clutches, water pumps, hydraulic pumps and steering valves for 10, 20 and 30 series tractors.

"When we started rebuilding clutches for the 5400 Series, we weren't satisfied with the materials being used," says co-owner, Sam Katter. "We tried different friction materials until we found one that would wear longer and take the heat better. It will double the

life on the clutch." T.C.M. markets its clutches through exist-

ing Deere dealers. Prices may vary somewhat between dealers, but suggested retail price for the replacement clutch is around \$525. "We put in new pieces where needed, test

we put in new pieces where needed, test all springs so plate loads are within specs, and put a one-year warranty on dealer-installed clutches," says Katter.

Contact: FARM SHOW Followup, T.C.M., 106 Main Street, P.O. Box 220, Staceyville, Iowa 50476 (ph 641 710-2161 or 800 447-2161; bboyd@omnitelcom.com).