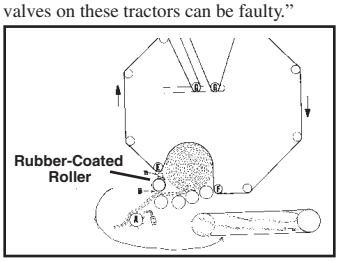
Andrew Abrams, P.O. Box 182, Marcellus, Mich. 49067 (ph 616 646-0202; Website: www.marcellus-metalcasters.com): "It's becoming nearly impossible for an individual to get castings made economically at most metal working shops. Our market niche is reproduction castings and prototypes. We produce gray, nodular, and abrasion resistant iron castings and low alloy steel castings. We can mold new castings from broken castings and make affordable patterns for replacement castings. We also help inventors get prototype castings together for presentations and testing. Castings can be a very economical alternative to welded parts, saving weight and producing stronger parts.

"With most domestic foundries increasing the automation of their processes, we thought your readers would like to know that there's still a company that gives individual attention to people and projects."

Fred Hansen, Santa Rosa, Calif.: "In the "Best & Worst Buy" section of Vol. 26, No. 3, a reader wrote about his Deere 5210 tractor. The air conditioning didn't work well on it. We solved that same problem on our 5500 by plumbing a ball valve into one of the heater lines outside the cab. We keep the valve off, with the handle removed, unless we need to use the heater. Apparently the heater control valves on these tractors can be faulty."



James Spencer, Memphis, Ind.: "After using my Vermeer 605C round baler for several years, the rubber wore off the coated roller. Instead of spending a lot of money for a new roller, I put some beads of weld on the roller like farmers used to do on snapping rollers on corn pickers. The baler now works as well or better than it did before. One hint: I put the beads on at an angle."

Jack & Dave Wock, Jerseyville, Ill.: Jack and Dave built this 18-ft. long hoist out of a piece of 8-in. I-beam. What makes it unique is that it pivots 180° on an anchor

post at the middle of the wall on one side of the shop. That lets them move it out of the way when it's not being used. Also, loads can be carried off to the side of the shop when needed.

"The hoist is 14 ft. high and rides on a couple of heavy steel wheels."

Rick Kuhn, Oconee, Ill.: Rick made an insulated shop at one end of his 60 by 140-ft. equipment shed by designing a folding door system that closes off the shop when needed.

It consists of 4-ft. wide door panels, 10 ft. high. They slide along an old hay carrier track that Rick salvaged from a hay barn. Each door has a rolling hanger attached to its top center. Once stretched out flat, they form an insulated wall.

To seal off the open rafter area above the track and below the roof, Rick made two large curtains using blue plastic tarp. There's a rod through the lower edge of the tarps. The tarp curtains are swung up out of the way when the doors are opened, using light nylon rope controlled by pulleys.

He can open the moveable wall during the summer or when he needs to work on a big piece of equipment.

Dave White, Farmersville, Ill.: Attending a nearby industrial auction paid off recently for Dave, who found two good buys for his

farm shop. The first purchase was a 15-ft. tall rolling ladder that mounts on casters. Makes it easy for him to get into the upper storage areas in the shop.

He also picked up a set of 12-ft. tall heavy-built industrial shelving. He says it's strong enough to hold just about anything. He reaches the top shelves from his rollling ladder.

W. Jacobson, Midale, Sask.: "I've come up with a simple way to patch tires. Clean around the hole with gas or other cleaner. Then push clear silicone into the hole and around it. Only the clear kind of silicone works. After an hour or so, put the tire back on and inflate. I've never had one fail yet.

"Here's another one: A hack saw will cut twice as easy and last twice as long when speared with lard. It cuts just as well but with a lot less effort."

Clarence Hilmer, Columbus, Neb.: "I've repowered machines and worked on engines for more than 50 years. Recently, I had a terrible time removing a distributor from a 1979 302 Ford engine. Having tried every penetrating oil I could find, I finally tried household vinegar. I applied it several times and let it soak in. After a bit, the distributor came off easily. It worked better than anything I've ever tried and here it was sitting in our kitchen cabinet all these years."

Betty L. Jones, Claremore, Okla.: "Here's an idea that saves me a lot of time when painting. I punch holes inside the rim around the top of the can so that when I take the brush out, paint drips back inside the can. It's out of the way when you put the lid back on."

Jeff Lang, Newport News, Va.: "I wanted a soap dispenser for my shop but couldn't

find one I liked that was easy to fill. My wife was throwing away a pump soap bottle so I mounted it between a couple pieces of wood with a hole in the top piece for the bottle neck. It holds the bottle permanently in place and I just unscrew the cap to refill. Works good."

Lewis Leon Dick, Mt. Hope, Kan.: "I've always had a problem with straw going around the end of cylinder bars on our combine cylinder. The result is a hole worn in the metal on the side of the combine.

"I solved the problem by welding 1 by 1 1/2-in. strips of 1/4-in. thick metal on top of the concave with the same curve as the concave, forcing straw through the cylinder bars but preventing it from going around the ends of the bars. This solves the problem.

Byrl Cogburn, De Leon, Texas: "My Deere 435 round baler has dual twine tie arms which allow it to wrap two lines of twine at the same time. It uses a pair of twine 'brakes' which hold tension on the baler twine as it's being wrapped on the bale. There are two of these brakes, one on each side of the baler. These brakes get grooves worn in them over time and don't hold the proper tension on

Variable Speed Controller For Shop Tools

"Often when drilling big holes on a drill press, even at the slowest speeds, it was too fast and I was always burning out bits. I decided there had to be a way to slow the drill down even more," says Stan McDonald, Foxboro, Ontario, a shop wizard who's known for his innovative electrical tools and ideas.

He devised – and now offers for sale – a variable speed controller for shop tools that lets you add variable speed control to any brush-type electric motor or DC motor.

To run his drill press, he picked up a 90-volt DC motor at a junk yard and fitted it to the press. It then plugs into the control box, which mounts on the wall in his shop. A knob on the box lets him run the press from almost a dead stop up to high speed. In addition, he can run the press in reverse so he can use the drill for tapping holes.

You can also plug hand drills, routers, skill saws and any other 110-volt AC tool into the same box and manually vary the speed.

"Speed controls on the market are generally not built heavy enough for continuous use or lots of power. Mine is overbuilt for non-stop use," says McDonald.

Larger shop motors, like a drill press, are usually induction-type motors so you have to replace them with DC motors to vary the speed. Most DC motors that you can find at a junk yard are 90 or 180 volts, says McDonald. "There are a lot of them because no one knows what to do with them."

The controller box is small enough to mount on the end of a work bench. It has plug-ins for both AC and DC motors. Sells for right at $150 U.S. He can also supply new or used DC motors to power larger shop tools. He'll supply whatever is needed for a particular machine.

Contact: Stan McDonald, 402 Mudcat Rd., Foxboro, Ont. Canada K0K 2B0 (ph 613 968-9516; E-mail: smcdonal@kos.net).

FARM SHOW®

Money-Saving Repairs & Maintenance Shortcuts

Have you come up with any unusual money-saving repair methods for fixing farm equipment? What maintenance shortcuts have you found? Have you had any equipment recalled by the factory? Name a particularly tough mechanical problem you've had with a piece of equipment and how you solved it.

These are a few of the questions we asked randomly selected FARM SHOW readers. If you have a repair tip, maintenance shortcut, or other mechanical experience you'd like to share, send details to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 or E-mail us at: Editor@farmshow.com.

Mark Newhall, Editor