### Money-Saving Repairs & Maintenance Shortcuts

Continued from previous page three sections. The outside section slides into a sleeve and clamps on. When they get worn, they're very hard to get out. The inner end screws on over the center sleeve so I took a chop saw and cut that end off and welded a 5/8-in. nut onto it. Then I screwed a 5/8-in. threaded rod through the nut and to push out the outside tie rod end. It worked great and saved a lot of time.'

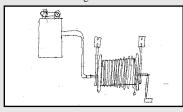
Denis Seewald, Mustang, Okla.: "I've come up with a cheap way to hang tools in my shop. I hang a 4 by 8-ft. sheet of plywood on the wall, then drill holes as desired and glue in 5/16 or 3/8-in. dowel rods to hang tools on. It's much less expensive than buying hangers at hardware stores. If you're creative you can hang almost any object in just a few minutes."

Tom Carey, Jr., Boulder, Mont.: "I've found that I can replace 6 and 12-volt generator-equipped engines with 12-volt alternators. Some minor modifications to the ignition on 6-volt systems are necessary, but everything else is simple.

"I built a drive-over pit in my shop for changing oil, greasing, and doing other ser-

vice work under equipment. I built steps down into it and I have a cover when not in use. This makes routine chores much easier and saves countless hours "

Gaston Homoline, Domremy, Sask.: Jody Lagerquist, Westby, Mont.: "You can use a standard garden hose reel to hold



air hose. Attach the hose to an air supply pipe on the wall, using a quick coupler. The quick coupler serves as the swivel.'

"While knocking off the flyweight on a Case-IH 8380 haybine's sickle drive, I almost broke the puller. I had trouble putting it back on, too. I applied a product called Never-Cease to the shaft and flyweight and it slipped on almost by hand. One year later, it came off just as easy. Now I use the same method to slide bearings on shafts." It works wonders."



Poly tubing runs from Seubert's compressor up through the building's trusses to wall-mounted steel lines, which drop down to about 3 ft. above the shop floor.

#### Compressed Air System Uses Poly Tubing

John Seubert of Sunman, Ind., installed an 80-gal. air compressor in his shop and used 1/2-in. dia. black polyurethane tubing to run air to quick-disconnect fittings, which he mounted at various locations throughout his shop.

"It eliminates the need to drag an air hose across my shop floor to operate air tools. The poly tubing is lightweight and flexible, which makes installing it a quick and easy job," says Seubert, who bought the entire system as a kit from Affordable Fastener (102 S. Bowles St., W. Harrison, Ind. Ph 812 637-2658).

"The whole system is very eye appealing and safe to use. It took me only about four hours to set it up," says Seubert.

Poly tubing runs from the compressor up through the building's trusses to wallmounted steel lines, which drop down to about 3 ft. above the shop floor.

In addition to the hookups inside the shop, Seubert ran tubing through the shop wall to a fitting that he mounted outside the shop. He also ran tubing underground - through PVC pipe - to a barn about 60 ft. away where he stores his combine and tractors.

"The poly tubing is easier to install than either PVC pipe or steel lines because it doesn't require elbows to go around corners. It's also easier to expand - all I have to do is splice into it with a T bracket. It doesn't collect as much moisture as steel lines and costs about the same. The tubing can withstand up to 2,500 psi.



Seubert installed this 80-gal. air compressor in his shop.



A length of tubing runs through shop wall to a fitting mounted outside the shop.

Seubert, 24953 Van Wedding Rd., Sunman, Contact: FARM SHOW Followup, John J. Ind. 47041 (ph 812 623-2608 or 3336). 40 • FARM SHOW • web site: www.farmshow.com • e-mail: Editor@farmshow.com • phone 1-800-834-9665

### "Made It Myself" Shop Hoist

"I manufacture big bale feeders in my shop and work alone so I needed a way to handle heavy loads of steel," says Henry Pirok, Highland, Ill.

"I looked at different hoists on the market but most were made too low and too short in length. Or the wheels were too small, making it hard to push around. I also needed more reach to extend over tables to pick up loads. "I built my hoist with 10-in, tires, all mounted on swivels so it'll turn in its tracks. And the hoist has a boom that can reach out as far as 104 in. and as high as 12 ft. A manual hydraulic pump raises the boom.

"The back two wheels can be controlled with two handles and the front two by use of a tie rod which is turned by my foot. Lets me turn tight without swinging the load or bumping into everything with the long boom. I can spot a big load with precise accuracy.

"I added an equalizer that has three positions. It can be removed so you can just use a cable and hook.

"The hoist makes it easy to turn pieces over for welding on the back side. And I can hang pieces on the equalizer for painting at the right



level. Really speeds up the work, keeping my costs down on the feeders I make.

"Anyone who's used another hoist would appreciate how handy and easy to use this one is. It's one of the best tools in my shop."

Contact: FARM SHOW Followup, Henry Pirok, 111405 Lake Rd., Highland, Ill. 62249 (ph 618 644-5853).

# 4020's Weak Spindle Problem Solved

Norman Fiddler, Webb, Saskatchewan, really likes the old 4020 John Deere he uses as a loader and chore tractor, but he got tired of repairing broken spindles.

"My dad bought the tractor new in 1968, so it has sentimental value, too," he says.

"I'd broken spindles four or five times, usually when loading big bales with the front end loader. Once, while raking hay, the spindle broke on one side, and before I could even push in the clutch, it had put enough side pressure on the other one that it snapped, too," he says.

Fiddler's breaking point came when a spindle broke and chipped about an inch and a half notch out of the axle where the bearing mounted, forcing him to have to go back about 2 1/2 miles home in the snow, using the bucket as a runner to keep the front end off the ground.

Fiddler decided there had to be a way to solve the weak spindle problem without giving up his 4020. He talked it over with his Deere dealer, who helped him find a wrecked 5010 Deere with the front end intact. He knew the 5010 front end was heavier and wider.

Fiddler had a local machine shop cut the saddle plate to the same width as the one on the 4020. Then he took the plate off the 4020 and cut holes in the 5010 plate to match.

When he bolted the 5010 saddle plate in place, he used heavier bolts than the ones Deere used originally.

The brackets for power steering cylinders on the 5010 were cast into the rear motor mount brackets, so he had to make new brackets for the 4020. "I made new brackets from heavy flat iron and bolted them to holes I drilled in the frame of the 4020," he says.

"At first, I used the 10.00 x 16 tires that were originally on the 4020, but because of the way the 5010 axle is made, the front end of the tractor sat lower. I replaced the tires with 11.00 x 16 tires and now the hood is level," he says. "Steering and handling is still the same as original, but I think it has a shorter turning radius.

"I can lift as much on the front end loader as the hydraulics will allow without worrying about spindle or axle failure. Also, the wider stance gives the tractor better stability when lifting, loading and moving large round bales. I can even carry two large round bales on the loader if the terrain allows it," he says.

Contact: FARM SHOW Followup, Norman Fiddler, Box 97, Webb, Sask., Canada S0N 2X0 (ph 306 672-3921).

# Flashlight Headband Frees Up Your Hands

You can attach any mini flashlight to this headband holder which frees up your hands when doing mechanical or other work at night.

An elastic pocket on the side holds most any small light. Adjusts easily to any size head. Comes in a variety of colors.

Sells for \$5.99 plus S&H. A variety of flashlight holders and positioners are available from the company.

Contact: FARM SHOW Followup, Accessor-Ize (ph 888 843-9200 or Nite Izse, Inc., 5735-E Arapahoe Ave., Boulder, Colo. 80303 (ph 303 449-2576; fax 303 449-2013; Website: www.niteize.com).



Headband has an elastic pocket on the side that holds almost any small light.