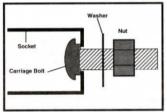


Richard Hayward, Birch Run, Mich.: "This is a handy idea I came up with for use in my pole shed. I make these 'extra hand' hooks out of 3/8-in. threaded rod. I use heat to bend one end over the top of a wood truss and attach a hook to the bottom end with a rod coupler. You can make them any length and they're easy to move around and adjust up and down for height. I use them to hold lights, wrenches, hoses, buckets for livestock, and many other jobs."

Frank H. Duffey, Newberry, Fla.: "I was doing a job one day with a socket wrench that I wanted to speed up. I fig-



ured out an easy way to mount a 3/8-in. drive socket in an electric drill chuck. I used a 3/8 by 2 1/2-in. carriage bolt, washer and nut. I ground down the head of the carriage bolt so it would fit into the socket and placed the washer and nut over the bolt outside the socket. It ightened the nut down and then inserted the threaded end of the bolt into the drill chuck. It worked great."

Carroll Kerley, Peck, Kan.: "When the heater fan on my GMC pickup started squeaking, I drilled a small hole in the end of the case and put in a few drops of oil. I sealed the hole up with silicone. That was seven years ago and the fan has been working quietly ever since."

Charlie Heffern, Iola, Kan.: "By putting a female coupler on your portable air tank, and a male coupler on the air hose that's compatible with your air tools, you can make filling the tank quicker and easier."

Duane E. Haney, Chenoa, Ill.: "I put spring clips on the right side of my Deere 6620 combine so I can lift the panel up to oil the grain tank drive chain or make other repairs.

"Plastic 5-gal. buckets sawed with a hand saw make excellent tight fitting field tile repairs. Pieces of broken field tile placed over holes in pipe don't seal tight enough."

Richard Di Nemec, Midland, S.Dak.: "Hydraulic filters on my Case 2470 are hard to remove. I fastened about 3 ft. of light cable to a piece of pipe. Then I put a strip of innertube around the filter, wrap the cable around the rubber strip, and turn off the filter with the pipe used for leverage."

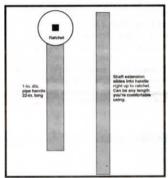
Roy Peters, Tower, Minn.: "A couple

issues ago a reader complained about the way spare tire hold-up bolts always rust. When I buy a new pickup, I loosen the hangar bolt the distance of the nut, grease it, and then tighten it again. Then I take a piece of copper tubing the length of the exposed threads, smash the end, fill it full of grease, and then slip it on the bolt. I never have problems."

Irwin Mccullough, Sharpesville, Penn.: He's come up with a couple ways to lessen the cost of plow maintenance. "I save old shin pieces and weld them on to the next worn one as it wears down. Also, I weld old plow points on for landsides. They will outwear a new \$14 landside."

Lawrence Lund, Peshtigo, Wis.: Whenever we get a tractor, wagon or some other heavy machine stuck in the mud, we usually pull it out using logging chains. After breaking some expensive chains by jerking on them, we came up with this idea. The chain on the tractor doing the pulling is looped through the center of a used car tire. The chain hooked to the stuck piece of machinery is also looped through the same tire. The tire absorbs the sudden shock loads. If you rip a tire apart, it's a lot cheaper than a good chain and it can quickly be replaced with another old tire. We've had good luck with this idea."

Kenneth D. Lee, Rt. 1, Box 87, Cullom, Ill.: "I've made a new tool that I call the Extenda Wrench. It consists of a



22-in. long piece of 1-in. dia. pipe with a 3/8-in. socket wrench ratchet welded to the end of it. For hard-to-reach bolts, you can slide a shaft into the handle that runs up the full length of the handle. You can use any length shaft extension to reach out-of-the-way places, like up into combines. Saves having to crawl up inside. This is the handlest wrench I've ever had. I'd like to sell the rights to a manufacturer. (ph 815 689-2213)."

Lloyd Nelson, Rockville, Mo.: "I always keep a couple plastic quart oil bottles around the shop to kneel on when I have to get down to work on low equipment. Just replace the cap tightly on an empty container. The air inside provides an excellent cushion."

David Dowling, Lohrville, Iowa: "When repacking wheel bearings, I drill and tap a hole in the hub for a grease zerk. After that, I can grease the bearings whenever they start squeaking."

Robert Himmerich, Peña Blanca, New Mexico: "We made trays for our toolboxes with cut-outs in the bottom of the trays that let us know at a glance if a tool is missing. We use them with socket sets, combination wrenches, and pliers, screwdrivers and visegrips.

"When the foldback grain unloading auger on our Deere 40 combine jammed where the two pieces of auger flighting couple together, we shortened the auger to Money-Saving
Repairs
&
Maintenance
Shortcuts

Have you come up with any unusual money saving repair methods for fixing farm equpment? 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 farm 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.

Mark Newhall, Editor



Giant Factory Crane Moved To Farm Shop

A giant crane salvaged from a local factory lets Marshall Litchfield, Macomb, Ill., move heavy materials virtually anywhere inside his shop. The crane pivots 180 degrees from side to side and is equipped with a 2-ton hoist. To swing the crane, Litchfield simply grabs onto the dolly hoist and pulls.

"It's one of the handiest tools in my shop," says Litchfield. "When I bought it I didn't realize how many uses I would have for it. I use it to move things from one side of my shop over to where I have my lathe, drill, grinder, and welding table. I've even used it to pick up the front end

of my pickup so I can put it on stands."

Litchfield paid \$250 for the crane which was originally 20 ft. high and had a 31-ft. long boom. He cut 9 ft. off the boom so it would fit inside his shop. Then he dug a hole 7 1/2 ft. deep and 3 1/2 ft. square to set the pole in. "The pole has to be exactly straight up and down so that the end of the crane won't coast to a low point," notes Litchfield.

Contact: FARM SHOW Followup, Marshall and Kendall Litchfield, 15340 N. 700 Road, Macomb, Ill. 61455 (ph 309 254-3481). C.F. Marley

the length of the longer piece of flighting. Then we extended the unloading spout with a section of wire screen. The screen gets rid of fines and the extra long spout makes it easy to distribute the load without having to move either the combine or the truck. You just move the spout around."

Jeff Chastain, Pocahontas, Ark.: "Here's an idea for bolt removal that I learned from a friend. I've tried it several times with excellent results. The problem I had originally was removal of a broken brass fitting from an old Deere carburetor. The brass fitting had twisted off flush with the cast iron surface of the carburetor body. Someone suggested heating what was left of the fitting and then using an Easy-Out tool to try to extract it. This didn't work because the flutes of the Easy Out dug into the soft brass, causing it to wedge in even tighter, making it even more difficult to remove. Another friend then told me a bet-