

Mike Graham, Edison, Ohio: "You can fix a loose head on any size wooden handled hammer using this simple, low-cost method. "You simply apply JB Weld generously to the end of the handle and inside the head, then put the head back on the handle and reset the head. I first clean the handle thoroughly with sandpaper or steel wool. Likewise, I clean up the inside of the head with a small wire brush. In 24 hours, after the JB Weld sets, you've got a hammer that's as good as new."

"I've also used this repair on a couple of 4-lb. sledges I use to break up firewood. It's a permanent repair."

Ronald J. Fitzgerald, Seely's Bay, Ont.: Ronald's come up with a fool-proof way to remove bolts that break off flush, such as broken bolts in engine blocks.

"I take a nut the same size as the broken bolt and hold it over the bolt with a pliers. Then I take my MIG welder and weld the hole in the nut full, heating the nut red hot. When you're finished, just as the color's going out of the nut, take a wrench and turn out the bolt by the nut. It'll work every time, guaranteed."

"In cases where you're concerned the weld will stick to the surface around the broken bolt, first place a brass or copper washer over the broken bolt end and apply a wee bit of weld to build it up. Then use the same procedure described above."

"I've removed broken bolts this way ever since I got my first MIG welder years ago. It's never failed."

Allen Polyoek, Zenda, Wis.: You can keep air brakes on trucks and trailers in top condition using Allen's simple maintenance technique.

"I've used it on all the trucks we've owned over the past 30 years and it works great. I take off the main feed line of the compressor at the engine and let the air out. Then I simply pour 1/2 pint of brake fluid into the line and reassemble the system. The brake fluid, which does not harm rubber, circulates through the lines to prevent internal rusting and to ensure valves work properly. It also prolongs valve life."

"I do this twice a year, once in the fall and once in the spring."

Jared Metzger, Steen, Minn.: "To put 90W oil into hard-to-reach gearboxes, I put an old milk inflation on the end of a funnel that I fill with oil. The inflation can be bent to pour oil into even the hardest to get at spots. It also allows you to squeeze just the right

amount of oil into the gearbox.

"I also make new gaskets for parts out of cardboard cereal boxes, cutting them to fit. They work as well as any store-bought gasket."

Donald Tryor, Bemidji, Minn.: Donald's had no problem paying for his investment in his 12-in. metal lathe. He makes replacement parts for his 1959 Oliver 660 tractor.

"I made a new oil filter base that allows me to use Fram 3600 spin-on oil filters, which sell for \$2, instead of the original filters, which cost \$8 and have a tendency to leak around the gasket. I made the 3-in. dia. base out of cold rolled steel in about eight hours. It bolts onto the tractor and the Fram filter simply screws onto it."

"I also made a speed jet for the Oliver's carburetor when I accidentally broke the original by overtightening it. Like the original, I made the 1-in. long, 3/8-in. dia. jet out of brass. It took about three hours and works as well as the original."

David Anderson, Burr Oak, Kan.: "I use a high-volume, gas-powered leaf blower I bought for \$10 at a garage sale to unplug radiators in the field. I've used it to blow straw, grass and dirt off tractor radiators and the knotters on both my Deere 4900 and 4750 big square balers and the radiator on my Hesston 8500 swather. It's a lot more compact than hauling an air compressor along to the field and it saves an immense amount of time over going back to the shop to clear radiators. That's important to me because I'm in the custom baling business."



Gene Trybom, Lawrence, Kan.: Gene got tired of going back to his shop to get tool after tool and still not always having every one he needed. So he mounted a big tool chest on a shop-built trailer that he pulls to the field with his 4-WD ATV.

"I bought a big Craftsman tool chest with 15 or 16 drawers. I built a 26 by 40-in. frame out of 1 1/2 by 3-in. scrap metal and mounted the tool chest on the back. I fitted the front of

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 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 or go to our web site at www.farmshow.com.

Mark Newhall, Editor

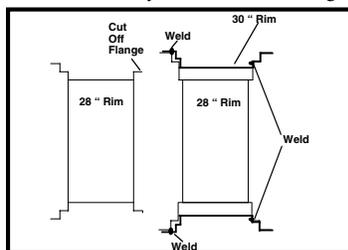
the trailer with a small work table I made out of 1/4-in. thick steel plate and tapped a 1/4-in. dia. hole in the left front corner of the table



so I could mount my 5-in. vise on it. I made a hitch for the trailer out of 1 1/2-in. sq. tubing. It telescopes from 18 to 25 in. and folds underneath the table when not in use. The trailer rides on two 5/8-in. dia. steel shaft axles fitted with 3 by 10-in. pneumatic tires. I made my own front wheel swivel assembly so the rig trails my Honcho 4-WD ATV perfectly.

"It saves a lot of time because you've got all your tools with you. And it cost less than \$225 to build, including \$180 for the tool chest, since I used mostly scrap materials."

Floyd Lebold, Exeter, Maine: When the 28-in. rims on Floyd's 1958 Allis D17 began



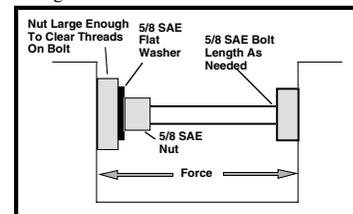
to rust out, he modified them with a pair of 30-in. rims he'd had on an Allis 175.

"I cut the front edge of the flange of the 28-in. rim down until it matched up with the bottom edge of the 30-in. rim. I welded all the way around both sides of the rims. It's a cheap way to get 'new' rims and increase tire size on your tractor. I went from 14.9 by 28-

in. tires to 16.9 by 30-in. tires, which increases ballasting capacity and traction and improves stability."

Donald R. Nutt, Center, Mo.: "Hay kept wrapping on the spiral starter roller on my 1993 Vermeer Super J baler when it was first new. The problem was that the roller scraper was made of the same weight steel as that used on the company's smaller 4-ft. balers. It just was not heavy enough to stand the pressure in the new larger, 5 by 6-ft. balers."

"To solve the problem, I reinforced the scraper with a 1 in. by 5-ft. piece of steel, 1/2-in. thick. I simply welded it to the scraper on edge to take full advantage of the 1 in. width. The modification gave me wrap-free baling ever since."



Floyd Stivers, Stroud, Okla.: Floyd says a common problem on small block Chevrolet V-8 engines from the late 1960's through the early 1980's is this: The heat from the engine causes the cast iron exhaust manifolds to "draw up" so much that bolts cannot be started in the original holes when reinstalling them.

"To solve the problem, I came up with a bolt spreader tool consisting essentially of a bolt and a couple of nuts. It exerts several thousand lbs. of torque to spread out the manifold to its original shape and is ideal for tight spaces where a pry bar won't reach."

"Get a bolt that's a little shorter than the space you need to spread, then screw on a nut that fits the bolt threads. Put a slightly larger nut over the first and insert the tool into the area you need to spread. As you turn the smaller nut out, it, in turn, forces the larger nut outwards to spread out the exhaust manifold. The technique also works well for many

(Continued on next page)

Speed Ratchet Works Like A Power Tool But There's No Battery To Charge

"I made it because I was tired of using conventional ratchets that would stop turning once the nut or bolt was loose. My Speed Ratchet makes four complete turns with every squeeze of the handle until the nut or bolt is off," says Gary Smith, inventor of the Speed Ratchet.

Smith says the Speed Ratchet is almost as fast and convenient to use as a powered wrench but you don't have to worry about keeping batteries charged or keeping an air compressor nearby.

A reversing switch makes it easy to change directions with your thumb. The tool can be fitted with sockets, screw driver bits, torx bits or any other add-on tool. For stationary work, it could also be fitted with a foot-operated lever that attaches to the hand model by flex cable.

Many marketers are interested in selling



the idea but he has yet to work out a deal with a manufacturer to produce the patented tool.

You can read more about the tool on the internet at www.inventing.com/ratchet.htm or contact: FARM SHOW Followup, Gary A. Smith, 110 Oakcliff Dr., Laguna Niguel, Calif. 92677 (ph 949 249-9953; E-mail: gary.a.smith@compaq.com).