

Steve Taphorn, Algona, Iowa: "A metal 30-gal. barrel makes a good chop saw stand. Just bend the top edge of the open end to mount the saw. Works good because small cut-off pieces of scrap fall right into the barrel."

Andrew Miller, Indiantown, Fla.: "In your last issue, a reader complained about problems with her Mighty Mule gate opener. I also had issues with mine but I found a solution and now it works flawlessly."

"The problem was the motor kept shorting out so I sealed it with RTV silicone adhesive to keep moisture out. And I replaced the little 12-volt batteries with a larger lawn mower battery. I also sealed up the solar panel with silicone. Now everything works great. On cloudy days, the larger battery holds plenty of power. No other gate opener comes close to this one when it's working right."

Roger Gutschmidt, Gackle, N. Dak.: "I do a lot of welding and repair work and often find myself welding grapple forks on loaders. Most of them break on the grapple arms that squeeze the bales tight. In my opinion,



Grapple tooth sharpened by Gutschmidt. most of the problems could be avoided by sharpening the grapple fork teeth. When grapples come from the factory, the teeth are usually pretty blunt. It takes a lot of hydraulic force to push the tines into dense bales, putting stress on the arms and tines

themselves. Any grapple fork that I work on in my shop gets the sharpening treatment. It's just like a pitch fork. If the tines aren't sharp, you can't slide them into the hay or straw.

"I'm sure manufacturers make them blunt for safety reasons because if you bump into a sharp tine, there will be blood. But you'll never do it again. Sharp tines slip into bales like a hot knife through butter. You can sharpen the tines with either a grinder or a cutting wheel."

Anonymous: "I mounted a vise on a small metal table fitted with 10-in. wheels on two of the legs so it's easy to move it around the shop wherever I need it. Very handy."

Vernon Knaack, Correctionville, Iowa: "I agree with the reader in your last issue who thinks Deere gouges farmers for replacement parts. Here are some recent examples:

"1. There are 4 linear bearings on the hydraulic seat on my Deere 4440 tractor. The seat rides on them to move back and forth. Deere wanted almost \$80 per bearing. We found the same ones at www.grainger.com for \$22 each.

"2. The 30 and 40 Series Deere tractors use the same AC compressor as General Motors vehicles did during that time period. This spring a Deere dealer quoted me \$550 for a new one. My local NAPA store sold me a new one for \$215.

"3. Finally, my 3020 Deere had a short piece of 1/4-in. hydraulic hose that split. The dealer wanted \$63 for a kit to fix it. We bought the same piece of hose at O'Reilly auto parts for \$1.35.

"I think Deere makes great long-lasting equipment, but I sometimes feel they increase parts prices to force us into buying newer equipment."

Vaun D. Mickelsen, Manti, Utah: "Two air bags gave out on my New Holland 855



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 email us at: editor@farmshow.com.
Mark Newhall, Editor

round baler. The dealer wanted \$1,100 plus labor to replace them. I went on the internet and bought 2 air bags for \$650 and installed them myself."

Brad Miller, Ridgeville Corners, Ohio: "During a recent building project I was using my impact drill to drive lag screws into 4 by 4 lumber when I accidentally snapped off

the socket adapter. It twisted and snapped off flush with the end of the drill chuck. There was no way to extract it, so I thought my drill was finished. Fortunately, I had just bought a set of high quality drill bits from Winters Drill Bit City (ph 800 950-3938; www.wintersdrillbitcity.com) and a set of Grabit extractors (ph 765 247-2248; www.thegrabitstore.com).

"I drilled a hole in the broken socket adapter and was amazed at how easily the Winter's drill bits worked. They cut into the socket adapter like it was butter."

"Next, I used the Grabit extractor to get a firm grip on the broken piece and it was out in a flash. The entire job took less than 10 min."



"I've used various extractors in the past without much success. I'm highly impressed with both the Winters drill bits and the Grabit extractors. They may be more expensive than other brands, but they're well worth the money. As the saying goes, you get what you pay for. And, they're made in the U.S."

Edwin Ruff, Boise, Idaho: "I hang a small vacuum cleaner from a rope directly above my work bench. The rope runs through pulleys to a counter balancing weight along one wall. I pull the vacuum down to vacuum up debris on my work bench. When I'm done I just lift it back up out of the way."

"The rechargeable battery on my 12-volt cordless drill went bad, so I attached 2 wires to the end of a wooden block that installs in



place of the battery to make contact with the drill's power plugs. I then attached a regular house plug to the wires. I can then plug that into an extension cord with alligator clips on the other end. They hook up to the battery on my pickup. Works great.

"I soak rusty parts in Coca-Cola overnight to clean them. Works good. And believe it or not, Coca-Cola is a great marinade for cooking meat. I use it for roasts and make gravy from the Coke and meat drippings."

Leonard Seltzer, Manhattan, Ill. (ph 815 478-3578): "I came up with a handy multi-purpose micrometer stand for my shop. It's a simple way for machinists to take precision measurements and costs much less than commercial micrometer stands."

Seltzer is willing to make plans available for a fee.

Combined Mfg., Inc., 18451 Centaur Rd., Wildwood, Mo. 63005 (ph 877 519-9898; www.ezpourspout.com): If you don't like the new-style gas and water can spouts with automatic shutoff, you'll be interested in this new EZ-Pour replacement spout kit. It lets you pour fluid from your gas and water cans without spilling gas on the ground.

The kit includes spout and cap, a second cap for the vent on older Rubbermaid

"Hanger" Lifts Pto Unit To Repair IH Tractors

"After years of struggling to remove pto units from IH 06-88 series tractors so the clutch can be rebuilt, I decided to make the job easier. I designed a hanger that bolts onto the pto unit, allowing one man to use an engine hoist to lift the unit off the tractor. The hanger balances the pto unit perfectly and makes the removal and installation an easy, one-person job," says Robert Grenzow, Sumas, Wash.

Grenzow operates a custom fabrication shop and specializes in repairing older IH tractors. "I'd rather see these old tractors go back into the field than go to the scrap yard," he says.

He explains that IH 06-86 series tractors are equipped with an external pto unit that bolts onto the tractor's differential, so to rebuild the pto clutch you have to unbolt the pto unit from the differential and then remove it. "You don't have to split the tractor like you do on many other tractor brands. However, the pto unit weighs several hundred pounds so removing it isn't easy. The hanger helps by balancing the pto unit perfectly as you lift it out," says Grenzow.

The hanger is designed to be used after you remove the cover from the top link on the tractor's 3-pt. hitch, exposing a big hole. It's made from 1/4-in. thick steel and attaches at 2 places to the back of the tractor using a welded-on pin and a bolt. The engine hoist chain attaches to a big 2-in. dia. hole near the top of the hanger.

After the pto unit has been rebuilt and bolted back onto the tractor, Grenzow uses a 5-gal. bucket and a homemade trough to fill the differential with oil. "It lets me add oil fast and without making a mess," he says.



Hanger bolts onto pto unit to lift it off.



After the rebuilt pto unit has been bolted back onto tractor, Grenzow uses this homemade trough to refill with oil.

"The trough is made from light sheet metal and measures 18 in. long by 8 in. wide at one end, tapering down to 5 in. The way I built the trough it'll stay in place by itself."

The hanger works so well that Grenzow says he has already sold several to other mechanics. It sells for \$35 plus S&H.

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