

**Ted Thompson, Thompson, Iowa:** "If you have a rusty bolt and nut and can't hold the bolt end, try this. Take a same-sized nut, cut through one side, and thread it onto the exposed bolt threads. Then use a vice grip to clamp the nut and turn the stuck nut. I use this idea to change broken teeth on my belt-type windrow pickup, and it works great."



**Roger Gutschmidt, Gackle, N. Dak.:** "When I need to make a big spring longer without permanently stretching it, I have a couple of tricks that I use. These ideas work on all springs, little or big. Sometimes you have a really strong spring that you have to hook onto something at both ends. For example, there can be springs like this on hay-

bine headers or balers; I have a ft. long, 1-in. dia. spring on my baler.

"I've found that you only need to lengthen it by an inch or two and my trick is to put flat washers between the coils of the spring by prying them apart with a screwdriver. I use an inch or so worth of 1/8-in. thick flat washers, and then pound them between the coils. That temporarily makes the spring longer so you can hook it on to what you need to. Once you lift the piece of equipment up it will stretch the spring out and the washers will all fall out.

"If you can take the spring off altogether, that's when it's easiest to put the washers in because the hooks on the ends can be snubbed up to something. I hook one end to a cement post or some other strong stationary object, and stretch the other end using a steel cable come-along, or a ratchety tie strap for little springs."

**H.R. Heisley, Egg Harbor Township, N.J.:** "An easy way to collect metal fines from engine oil is to remove the drain plug, drill a hole through the center of it, and insert a pencil magnet so it sticks up into the oil pan. Glue it in place with epoxy. Watch the results at your next oil change."

## Hammer Has A Chisel Inside

"It hangs on the side of my tractor in a pvc mounting bracket. I find all kinds of uses for it," says Eric "Moose" Petrevich, Glen Gardner, N. J., about his homemade hammer with a chisel hidden in the handle.

He made the hammer out of a 2-ft. piece of threaded 1 1/8-in. dia. steel pipe. The chisel is welded to the metal end cap that screws onto one end of the pipe. A hammer head is welded to the other end.

"I made it because I found that often whenever I needed a hammer I also needed a chisel," says Petrevich. "Carrying both tools all the time was a pain, and often the chisel got lost."

He drilled a hole in the end cap and stuck the chisel through so its hitting end extends just outside the end cap.

The "Moose Mallet" fits inside a short length of pvc pipe mounted on his tractor. He also takes it scuba diving. A chain link welded to the top of the hammer head serves as a handy carrying loop.

Contact: FARM SHOW Followup, Eric "Moose" Petrevich, 210 Route 513, Glen Gardner, N.J. 08826 (ph 908 638-3433; eric@megageek.com).



A chisel is welded to a metal end cap that screws onto one end of pipe, with a hammer head welded to the other end.



Hammer fits inside a short length of pvc pipe on Petrevich's tractor.

## MF 1105 Repowered With Fox Engine

Louis Giesting added 40 hp to his Massey Ferguson 1105 when he switched engines. Repowered and cleaned up, the 1105 is back in the field again and working better than ever with its Fox engine.

"I bought the 1105 with about 5,000 hours on it, but it hadn't been used for at least three years," says Giesting. "The previous owner said he didn't know how good the engine was, and we found out. It blew a head gasket after 30 hours of use."

When Giesting opened the engine, he saw more trouble than it was worth. Instead of rebuilding, he and his brother Allen and a friend, Adam Nobbe, decided to swap engines. Since quitting dairying a few years ago, the Giesting's 6200 Fox forage harvester sat unused.

"We had about 1500 hours on it over 11 seasons," explains Giesting. "We replaced the clutch and pressure plate, had the radiator cleaned by a professional radiator shop and had new paint applied."

In addition to the newly refurbished engine and radiator, the three men gave the 1105 a major renovation. An after market cab was removed, the front end was taken off and the tractor split. The lighting system was rewired.

"The Fox engine only needed a set of rings and seals," says Giesting. "The biggest problem was modifying the oil pan. We also needed to do some work on the bell housing, but otherwise it went right in."

A few added touches included new tires, a straight pipe for exhaust and a set of used fenders.

"We cleaned up the old sheet metal and repainted it," says Giesting. "We are getting a canopy for it from a salvage yard and a few other things to dress it up. It works really well, and we will be using it heavily this spring."

Contact: FARM SHOW Followup, Louis Giesting, 24107 Pocket Rd., Batesville, Ind. 47006 (ph 812 934-2279).

## How To Do More With Battery Power

Andy Gheen, Athol, N.Y., recently contacted FARM SHOW with several examples of why you don't always have to buy new batteries when the old ones go bad.

"My Sears Craftsman 18-volt cordless drill came with two batteries and a charger. The batteries wouldn't hold a charge after only eight months. When I contacted the company I was shocked to learn that a single new battery would cost \$67, more than the entire drill kit had cost only eight months earlier.

"To solve the problem I engineered a new power system that makes use of one 12-volt battery."

He threw away the old batteries and bought a small 12-volt, sealed AGM deep cycle battery that measures only 3 in. high by 5 in. long. He connected the drill's power leads to the battery posts. Then he set the drill's handle down on top of the battery, carefully balancing it, and taped the battery to the drill with electric tape.

"I made this conversion five years ago and it's still working great. Nobody laughs when they see it," says Gheen. "AGM batteries cost only about \$20. They contain more gel than liquid so they're safe to use."

Another idea he had is using a small solar

panel to recharge cordless drill batteries.

"I bought a tiny 1.8-watt solar panel for \$16 at Northern Equipment (ph 800 221-0516; www.northerntool.com) and mounted it outside my garage. I run leads from the solar panel to the drill's power leads. The solar panel has a diode built into it so it won't overcharge the battery, and at night it prevents the battery's electricity from going back to the solar panel. These are really nice solar panels that have a lot of power," says Gheen.

He also found a unique way to make use of used deep cycle batteries.

"I use old deep cycle batteries that I get from a local NAPA auto parts store. When people are heading off on vacation they'll often turn in a perfectly good deep cycle battery and buy a brand new battery to avoid spoiling their vacation. I pay \$8 to the store for the battery core, and then I connect the battery to my solar panels and use them to light my barn. I've found that you can operate a lot of lights off a single deep cycle battery."

Contact: FARM SHOW Followup, Andy Gheen, 89 Cameron Road, Athol, N.Y. 12810.

## Combine Steering Motor "Fine Tunes" Shop Press Work

Old combine hydraulic steering motors can be used to make a shop press easier to operate, says Orvie Wideman, Wallenstein, Ontario, who replaced the spool control valve on his shop press with a hydrostatic steering motor off an old Massey Ferguson 815 combine.

He made a metal bracket to mount the motor on the press's frame. A hydraulic pump, belt-driven by a 1 1/2 hp electric motor, is used to operate the steering motor. To move the press up or down Wideman simply turns the combine's steering wheel.

"It works much better than the press's original control valve because I can 'feather'

the press up or down exactly where I want it. With such precision control I don't have to rebend material nearly as often," says Wideman. "I think the same idea would work on an H-style arbor press or leaf break.

"I bought most of the materials that I used at a salvage yard. I paid \$125 for the steering motor and \$75 for the hydraulic pump, which came off an old swather. I already had the electric motor."

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## Grease Bug Lubes Equipment Fast

With its single plunger and multiple outlets, the handy Grease Bug lube system helps ensure that grease fittings don't get overlooked when rushing to the field or to work. Just turn the dial to each of up to 6 fittings and then pump.

The Grease Bug Pump can be mounted on any equipment that needs to be greased regularly or on a stand-alone frame. Separate feeder hoses carry grease to the bearings or pivot points to be lubricated.

"Simply remove the existing grease fitting and attach the fitting supplied with the Grease Bug Pump," says Chrissa Chverchko, of InventHelp.

InventHelp sells the unit on its website for \$200 plus S&H.

Each Grease Bug comes with several different types of fittings and standard tubing. The 7-ft. tubes can be cut to length, with replacement tubing and fittings generally available at local hardware stores.

Refilling the pump is easy too. It uses standard 3-oz grease tubes. The reservoir can also be directly filled with bulk grease.

Contact: FARM SHOW Followup, In-



Grease Buster comes with a single plunger and multiple feeder hoses, which carry grease to machine's bearings or pivot points.

ventHelpStore, 217 Ninth St., Pittsburgh, Penn. 15222 (ph 412 288-1368 or 800 851-6030; www.inventhelpstore.com).