## Money-Saving Repairs & Maintenance Shortcuts

installed receiver hitches on Chevrolet Silverado 2500 and 3500 pickups made from 2001 to 2010 have experienced failures while towing heavy loads. The hitches just aren't strong enough," says Horst.

He recently sent FARM SHOW photos of a new, heavy-duty hitch and mounting frame he began manufacturing to solve the problem. It's built from 1/4-in. thick steel and designed to bolt to the pickup's original mounting holes.

"It's built heavy and designed to last," says Horst. "I came up with the idea because a lot of farmers were coming to me with



bent hitch frames on their Silverados. The problem is getting worse with bigger and heavier trailers.

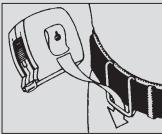
"The factory mounting frame on these pickup models consists of a round tube made from light gauge steel. One problem is the receiver hitch hangs from the bottom of the tube. When the weight of the trailer pulls the hitch down it pulls the bumper down with it, and the customer ends up having to straighten the bumper or replace it."

Horst's replacement hitch design keeps the mounting frame separate from the bumper. Also, the hitch is welded into the middle of the mounting frame so there's less leverage from the load to pull it down. "The hitch is at the same height as before, but the mounting frame is 2 in. lower," he says.

Ronnell Ott, Manhattan, Kan.: "By mounting the stator from a discarded permanent magnet motor onto a wooden plate, I can use it to store small magnetic parts such as drill bits or even sewing pins and needles. I remove the stators from permanent magnet motors found in old computer printers, VCR's, electric toothbrushes and other appliances.

"I think this idea would also work with bigger stators removed from permanent magnet blower motors in old cars."

Thomas Kane, 5131 Sand Road S.E., Iowa City, Iowa 52240 ph 319 358-8107: "I came up with a handy tape measure clip



that lets you more securely fasten a standard tape measure onto any pants belt. It's made from a no. 8 wire that's bent where the belt goes through it. The spring-loaded clip on the tape measure fastens to the bottom of the wire.

"I sold about 15,000 of these carriers to the L.S. Starrett company, which makes tape measures, and have leftovers in my garage which I'm willing to sell for 50 cents apiece plus 50 cents S&H." Cal Miner, Willmar, Minn.: "When you're drilling or milling metal, shavings can fly everywhere and make a big mess. To catch the shavings that come off my drill press, I



place a small magnet from an old car speaker on the table around the drill bit. The magnet catches 99 percent of the shavings. Once the magnet is full I just wipe off the shavings to dispose of them.

"The photo shows a compound vise that I mounted on the table, which allows me to use the drill press as a milling machine."

Red Rock Mfg., Pella, Iowa; ph 641 780-1748; www.redrockmfg.com: Their cast iron drawbar lock is a one-piece device that stops the 3-pt. drawbar from turning on



Ford 9N, 8N, and 2N tractors, as well as some smaller Ferguson tractors. No bolts or pins are required for installation.

"The drawbar on these tractors is mounted between the 3-pt.'s lower lift arms and fitted with a series of holes. It tends to flop around, which is a problem if you want to use a ball hitch on it in order to move small trailers or boats," says owner Phil Smith. "Our cast iron drawbar lock slides over one end of the lift arm, and uses a rectangular hole to lock the drawbar in place."

Sells for \$70 including S&H.

SpynTec Industries, LLC, North Lima, Ohio ph 234 759-3105; www.spyntec.com: Their fuel-saving, free-spinning hub conversion kits are designed to solve problems associated with the wheel bearings on many Ford, Dodge, and Jeep vehicles.

The kits include forged hubs with ABS tone rings gear-cut into the hub; forged spindles with an integral ABS sensor mount; all bearings, races, seals, and spindle nuts; premium locking hubs, wheel studs, and 35-spline stub shafts. The company says the converted bearing hub assemblies are far less prone to breaking, reduce drivetrain wear, and result in 2 to 3 mpg better fuel efficiency.

The company recently introduced a new line of fixed spindle conversion kits for the 1999-2008 Ford F-250 and F-350 Super Duty pickups.



Fueled by propane, the Universal PG-25-RSV engine block heater shown here is designed for engine blocks with less than 15 gal. of coolant.

## "Off-Grid" Propane-Powered Engine Block Heater

If you have an engine you need to keep running even in the coldest temps and it's a long way from electric power, Cory Miedema has a solution. Universal Engine Heater Company has been heating off-grid, engine blocks with propane for nearly 70 years. The company also sells traditional electric-powered engine block heaters.

"My grandfather patented the idea in the 1950's and started this company," says Miedema. "We have 2 models. The PG-25-RSV puts out 10,500 btu's for engine blocks with less than 15 gal. of coolant. The PG-55-RSV is a 28,000-btu heater for systems with more than 15 gal."

Miedema stresses that all the components of the company's engine heaters are made in the U.S. Installation of the propane models is simple and straightforward. The heater should be installed close to and well below the point where the heated water will enter the motor. The cold water intake on the heater

can draw from the motor coolant drain plug or the radiator petcock.

"All our parts are replaceable, but we have had very few replacement parts requested over the years," says Miedema. "They are good investments. Once you make the initial investment, it is good for a lifetime."

The PG-25-RSV is available from the company for \$1,146.80 and the PG-55-RSV for \$1,211.66. Both can be converted to natural gas. An optional 12-volt igniter is also available.

"We've had them used on tractors, log skidders, loaders, and even stock tanks. Any place where electricity is not available," says Miedema.

Contact: FARM SHOW Followup, Universal Engine Heater Company, P.O. Box 250, Nine Mile Falls, Wash. 99026 (ph 509 276-5923; toll free 888 566-1220; www. engineblockheater.net).



Alpert etched marks onto his vise to follow with his file when sharpening teeth.

## Chainsaw Chain Sharpening Tip: Make Marks On Vise

Sharpening chainsaw chains is faster and more accurate for Glenn Alpert since he added lines on his vise.

"I used a Dremel tool to mark the right angle," he explains. "I put the bar in the vise and run the file 3 or 4 times on each tooth and then move the chain ahead. I can sharpen a chain in less than 5 minutes."

The Paola, Kan., man has used the method often recently, while cutting Osage orange trees

"I have to sharpen the chain about every 2 tanks of gas. I cut 10 cords of hedge wood and sharpened the saw every time without taking the chain off," he says. "The vise is mounted on an old burr mill stand and easy to take to the field."

Contact: FARM SHOW Followup, Glenn Alpert, 15163 W. 323rd St., Paola, Kan. 66071 (ph 360 241-3622; ksbrdmkr@cs.com).



"I put the bar in the vise and run the file 3 or 4 times on each tooth, then move the chain ahead," he says.