

Money-Saving Repairs & Maintenance Shortcuts

loosen the bolt. This method will test how good a welder you are."

Kenneth L. Nielsen, Marshall, Minn.: "The pto shaft on my big tractor-mounted V-type snowblower operated at a steep angle and broke the yokes frequently. To solve the problem, I converted it to a chain-driven system with a jackshaft.

"I built a platform on the blower out of 7-in. channel iron. I bolted two pillow block bearings and a short shaft fitted with a sprocket to the platform. Then I put a sprocket on the



input shaft, installed an idler sprocket for the tightener, and fitted it with a #80 roller chain.

"Now the pto shaft runs level and the snowblower pulls much easier. It seems to blow more snow with the same amount of power. I know this setup takes a lot of stress off the driveline of the tractor."

John Meyers, S&H Industries, Inc., 5200 Richmond Road, Cleveland, Ohio 44146 (ph 800 253-9726; fax 216 831-9573; E-mail: shindustries@worldnet.att.net; Website: www.shindustries.com): "Our mechanical 'friction jack' provides up to 3,000 lbs. of mechanical muscle to push or pull things into place. It was originally developed for auto body repairmen to push or pull body components back into line. However, it has also become popular with plant maintenance technicians, builders, pipe fitters, welders, remodeling contractors and others who find it to be a simpler, easier to use and less expensive alternative to heavier and more complicated hydraulic positioning devices.



"It consists of a 55-in. long, 3/4-in. dia. steel rod available with five hardened friction plates. The plates provide secure locking in an infinite number of positions to either push

or pull. To use the unit, you simply depress the locking tabs to slide the rod into position and then use the jack handle to apply exactly the pressure needed to accomplish the job. It can exert up to 3,000 lbs. of push/pull power.

"We also offer a full range of chains, hooks, clamps and other accessories for further versatility."

Randall Appleton, Edgewood, Iowa: "I used 3/8-in. dia. pvc pipe to run outlets for my air compressor. If I was to do it over I'd use 1/2 or 3/4-in. dia. pipe to get more volume."

Cary Dan Roach, Aransas Pass, Texas: "Last fall I accidentally rolled my Scotts garden tractor while mowing. I was left with a broken rib and a 6-month-old garden tractor with numerous cracks in it and pieces broken off the hood and grill. I couldn't find anyone who would sell me only the exact parts that I needed.

"I tried using different kinds of glue but none of them worked. Then I decided to try welding the plastic pieces back together. I got out my little hand-held propane torch and a spoon. I heated the spoon until it was red hot and then simply rubbed it back and forth across the cracked areas where I wanted to weld. Even the parts that were completely broken welded back together extremely strong, and the welds were hardly noticeable. I was glad to find that the spoon handle didn't even get warm, much less hot. However, the cupped part of the spoon got red hot very fast. I simply let the spoon cool off and then heated it back up and started over again.

"Since making the repairs I've used the mower on my 5-acre yard several times, and not one weld out of 12 has re-cracked or broken."

John C. Morton, Janesville, Wis.: "A wheel bearing on the steering axle of my combine went bad, which caused the wheel to fall off in the field and left the bare spindle suddenly buried in dirt 16 in. deep. To get it out, I dug dirt out from under the axle and slid a scissors hoist under it. I attached a hydraulic hose to the hoist and raised the combine out of the dirt. Since then I've also used this idea for other jobs. My total cost was about \$30 for a new hydraulic hose and quick coupler. The hoist came off an old ear corn wagon."

Ezra C. Gilliam, Salisbury, N.C.: "When sharpening my chain saw I often find it difficult to determine where I started

"Power Box" Said To Boost Deere Engine Horsepower

If you have late model Deere equipment, you may have heard rumors about "magic electronic boxes" that boost horsepower from diesel engines. Reportedly, some of these have turned out to be duds but, farmers who've used a new "Power Box" from Canada say this one really works.

The electronic device was developed by farmer Dave VanSegbrook, engineer Brian Fox and Fox's son Jason, an electronics technician. All three men farm and continue to be involved in producing the Power Box.

VanSegbrook says the Power Box works only on Deere 7.6 L and 8.1 L electronically controlled diesel engines, found on 8000, 8010 and 9100 tractors, 9000, 9010 and 9050 Series combines with Bosch fuel injection systems. The engines are also found in cotton pickers and other self-propelled machinery.

The Power Box plugs into the existing wiring harness at the fuel pump and modifies the electronic control unit (ECU) signal, allowing the engine to put out more horsepower. The effect is similar to turning up the pump on older model engines.

"Our Power Box has been used on three continents now, and has proven itself in some pretty harsh conditions, from winter in Canada and Northern Europe to the hot, dry Australian Outback and the American Southwest," he says.

"We get a consistent 20 percent boost in horsepower at maximum RPM and 23 to 25 percent boost on the power bulge. Our customers tell us they use no more fuel per acre."

The Power Box can be installed quickly

sharpening and where I should stop. To solve the problem I tie a piece of thread around the chain at the point where I start sharpening and then proceed to sharpen each tooth until I reach the thread again."

David M. Welling, Ridgeway, Ohio: "Whenever I have to use a cutting torch near hoses, wires, cables, or air lines, I protect them with a heat shield, such as a piece of 16-ga. metal. I also keep a spray bottle of water handy. It saves a lot of grief."

Ross McGehee, Natchez, Miss.: "To extend the life of Bush Hog blades, we cut the cutting edge off completely and replace it with a section of grader blade, which holds an edge much longer. It costs about \$15 per

and easily. "All you do is plug it into the existing wiring and attach it to an existing fastener," VanSegbrook says. "You'll need only one wrench to



loosen and retighten the bolt in that fastener. Most people can install it in less than 15 minutes."

Complete instructions are provided with the Power Box. The box itself contains all solid-state circuitry and is made out of "military-spec components," VanSegbrook continues. "We sell it with a 2 year warranty."

Current price for a Power Box is \$800 U.S., which includes next day delivery. "We give discounts for multiple purchases," he says. Power Boxes are sold direct and through some farm machinery dealers and diesel fuel injection shops.

They're often asked about Power Boxes for other engines, but VanSegbrook says the current model works only with these two engines. "We continue to work on other new applications, but we have none on the market yet." It should be pointed out that using a Power Box will void the warranty on engines still covered.

Contact: FARM SHOW Followup, ATO, 9186 Oldfield Line, RR 3, Tupperville, Ontario N0P 2M0 Canada (ph 519 628-5816; fax: 519 628-5816), or toll free from anywhere in North America 877 773-8100; E-mail: info@ag-tech.com; Website: www.ag-tech.com).

blade."

Larry Zenz, Parks, Ark.: "I've used the welding bench shown in the photo for 40



years as an anvil for straightening, clamping, and welding work. The vise is bolted to a base (Continued on next page)

Rotating "Bolt Boxes" Eliminate Need To Dig

William Hettler doesn't have to dig for nuts and bolts since he built these handy boxes that rotate 360°.

"I keep all my nuts and bolts in big bins. I was always digging to the bottom for small bolts. That's why I came up with these rotating bolt boxes which eliminate the problem," says Hettler, Monmouth Jct., New Jersey.

The boxes have removable sliding lids on top and bottom so he can turn them upside down when looking for a nut or bolt, and remove the lids to look inside.

There's a centered pin at each end of the bolt boxes. The pins are held by a sturdy metal frame. There's one large box at bottom and two smaller bins on top that contain nuts, washers and other small parts. The entire assembly mounts on the frame of a shopping cart so it's easy to roll around the shop.

Contact: FARM SHOW Followup,



Boxes, filled with nuts and bolts, have removable sliding lids on top and bottom.

William Hettler, 650 Georges Rd., Monmouth Jct., N.J. 08852 (ph 732-329-6440).



Mark Himes, Beecher City, Ill.: If your shop is located inside a big machine shed, here's an idea you might want to consider. Mark Himes built a shop-within-a-shop inside his 40 by 60-ft. machine shed.

The inner room measures 12 by 24 ft. with a 7-ft. tall ceiling. One reason for building it was for safety when welding. He wanted to

isolate the work from the rest of the building. The photo doesn't show the drop curtain that encloses the open side of the shop room.

The room also provides handy storage space over the ceiling of the room for supplies as well as efficient space to hang tools, lights, shelves and other equipment.