

Money-Saving Repairs & Maintenance Shortcuts

straighten out the entire pipe.

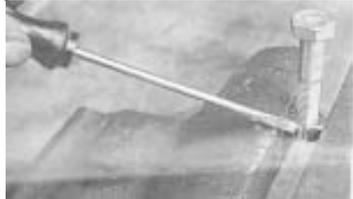
"The cylinder is operated by a car power steering pump that's belt-driven by a 1 hp electric motor. I can bolt on different size pans according to the pipe size. The unit has a handle at one end, allowing one person to push it in or out of my shop."

Profi Magazine (www.profi.com): Here are a couple ideas we recently spotted in Profi, a do-it-yourself farm magazine published in England.

Have you ever wanted hot water out in the field? British farmer Philip Partridge of Ipswich mounted a 1/2-gal. metal tank on the side of his tractor engine, just below the exhaust manifold. The engine heats up the water, which is released by a small spigot below the tank.



When you have to clamp a bolt in a vise, most people try using wood or some other soft material to avoid damaging threads. But that often does not provide enough gripping power. Another alternative is to cut a slice



out of the side of a nut, and then screw the nut onto the bolt and clamp it into the vise. The nut will clamp down on the threads without damaging them, holding tightly. When the vise is released, the nut will screw right off.

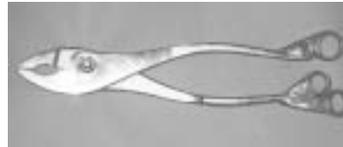
Roger Kuntz, K-Tech, 5251 County Road X, Grainfield, Kan. 67737 (ph 785-673-5560): If you've got a blade plow, chances are at one time or another you're going to need a replacement turnbuckle, says Roger, who makes an extra heavy-duty replacement for Flex-King, Richardson, and Noble blade plows. "It features a massive 1

1/2-in. hardened right and left hand threaded screw for 'on plow' easy leveling. It's far



stronger and less costly than original equipment and comes with leveling instructions. Sells for \$69.95, including shipping."

Bob Hudspeth, Era, Tex.: "I was surprised to see the article in your last issue on the 3-headed box-end wrench because on



the day I read it, I had a similar wrench all clamped together in my shop ready to be welded. I had already made another special tool out of a pair of pliers and three box end wrenches. I added 9/16, 1/2, and 7/16-in. wrenches to the handles of an ordinary set of pliers. It lets me make minor adjustments and repairs to many pieces of equipment without going to the shop for a handful of various tools. An added benefit is that the box ends also make the pliers easier to hang onto. They also add extra leverage for extra tight nuts and bolts."

Craig Saugstad, Minot, N.Dak.: "In a recent issue of FARM SHOW, a reader took issue with a previously submitted method of breaking beads on tires by driving up on them. I have a different method that involves a handyman-type jack or hydraulic jack. Just lay the tire under a heavy, immovable object such as a grain truck or pickup, and put the foot of the jack on the sidewall of the tire, right next to the bead. When you jack up against the vehicle, the foot of the jack will break the bead."

Farley Cole, Girard, Ill.: Farley needed a hydraulic press in his shop so he made one (Continued on next page)

Where To Get Hydraulic Parts, Repairs

If you need hydraulic components for a machine you're building, or if you just need repair parts for an existing machine, here's a company that specializes in everything hydraulic.

Cylinder Services in Rochester, N.Y., runs a booming mail order business and also handles repairs of hydraulic motors, cylinders, valves, and other components. Their state-of-the-art shop can handle everything from the smallest 1/2-in. dia. cylinders up to huge industrial cylinders measuring 24 in. in dia.

Owned by Don Welch, Scot Anderson, and Marty Lathan, Cylinder Services has been in business since 1974. The three owners get involved in every aspect of the business, maintaining a high level of quality.

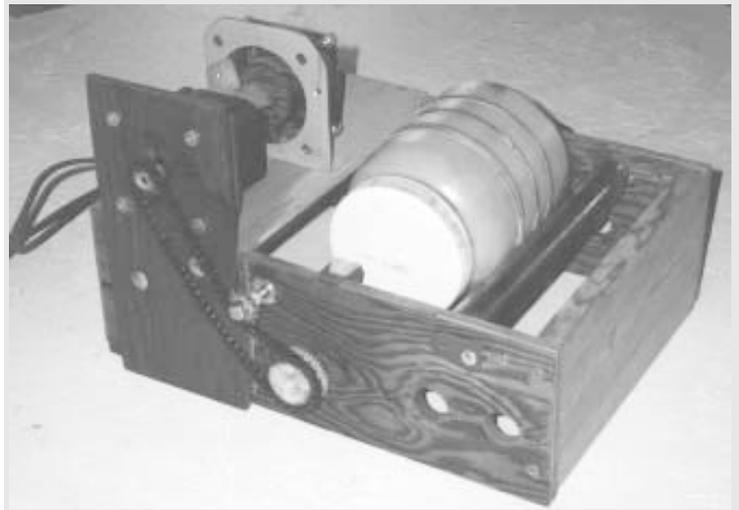
The company's mail order catalog stocks a full line of hydraulic equipment from Prince Hydraulics, an OEM supplier to many large manufacturers. Cylinder Services also carries components from other manufacturers, and offers custom services like custom machined rods, chromed rods, seal kits, and more.



Cylinder Services, Inc., says it can handle everything from the smallest 1/2-in. dia. cylinders to huge industrial cylinders measuring 24 in. in diameter.

They're willing to consider any custom job. Their shop is equipped with custom-built equipment you won't find anywhere else.

For a free copy of the Cylinder Services' catalog, featuring hundreds of hydraulic components and more information about the company, contact: FARM SHOW Followup, Cylinder Services, Inc., 900 Maple St., Rochester, N.Y. 14611 (ph 716 328-0670).



Dale Simon, 1993 E. 1650th St., Coatsburg, Ill. 62325 (ph 217 936-2459; Website: dsimon2@adams.net):

"I used parts from old photocopy machines, including the electric motor, rollers, bearings, chains and sprockets, to make a tumbling parts cleaner. It's not very high tech but it works great. It uses two rollers, spaced 5 in. apart, inside a plywood box. One of the rollers is chain-driven by the motor while the other roller rotates freely. I put the parts I want to clean into a 1/2-gal. plastic jar along with some degreaser and some drywall screws or 1/4-in. square nuts that act as an abrasive to help clean the parts. Then I place the jar between the two rollers and let it tumble for a while. The parts come out nice and clean. To give the jar more 'traction' against the rollers I

place large rubber bands around it.

"I made a second model using a smaller 1/8 hp electric motor and rollers made from 5/8-in. dia. wooden dowels covered by rubber hose. The motor is geared down by a jackshaft so the jars don't turn too fast. I use a 1-gal. jar with this model. I also mounted a mechanical counter on it. I let it roll 70,000 rounds or about 7 to 8 hours. The motors on both models are cooled by small computer fans.

"I had a problem with some of the contents sliding rather than tumbling inside the jar. To solve the problem I wedged a block of wood or wire mesh inside the container. I plan to make another model using a 5-gal. bucket, which would be big enough to clean couplings clevises and old antique tools."

Do-It-Yourself Air Filter Cleaner

Cleaning dirty air filters is a piece of cake at Miller's Golden Acres, Donnybrook North Dakota, since Doug Miller made his own filter cleaner that uses a blast of air to instantly clean filters.

Miller, who farms with his father Dave, started with a small air tank that he bought at a local farm supply store.

At the farm supply store, he also picked up a 2-ft. length of 2-in. steel pipe, with threads already cut at both ends. And he bought a valve that would fit on the 2-in. pipe.

Back at the shop, he cut a hole in the bottom of the air tank and fitted it with a 1-ft. long piece of 2-in. dia. pipe. He welded the pipe into the hole.

He then cut a 15-in. circle from a piece of 1/8-in. thick sheet metal. He cut a hole in the center of that and welded in another 1-ft. long piece of 2-in. pipe.

He screwed the free ends of the two pipes into a shut-off valve.

To clean a filter, he puts about 80 lbs. of air pressure into the air tank. Then he places the filter on the shop floor or on the ground and sets the tank on top of it with the sheet metal circle over the filter. "I just press down a little to help seal it on the filter and then open the valve," he says. "The big burst of air pressure cleans the dirt and debris off the filter instantly."

"Before I made this, we held the filters in our hands and tried to blow out all the dirt with a hose from the air compressor. This works much better and it takes less time, too," he says. He figures he spent less than \$100 on the filter cleaner.



To clean a filter, Miller places it on the shop floor and sets the tank on top of it with a sheet metal circle over the filter. He then opens a valve to release air pressure.

Contact: Farm Show Followup, Doug Miller, Miller Golden Acres, 32400 380th St. NW, Donnybrook, N. Dak. 58734 (ph 701 482-7873; E-mail: doumiller@hotmail.com).