Money-Saving Repairs & Maintenance Shortcuts

Nifty Machines Make Notches In Pipe

The pipe notching equipment from Woodward Fab in Hartland, Mich., opens up all kinds of opportunities.

They let you make quick saddle notches in pipe for making your own gates and railings. Or you can go into business making them for others.

The Variable Angle Pipe Notcher is priced at only \$69.99 and works on up to 2-in. dia. pipe. It's powered by a hand electric drill or drill press and makes cuts with standard hole saws.

The company also makes a manual notcher that doesn't require any outside power. It can mount on a wall or bench or on the back of a truck so you can take it out to the field.

There are three models of manual notchers, all of which make 90 degree cuts only.

"The manual notcher doesn't require any power and would be mounted to a sturdy bench or wall...or to the side of portable welding truck, allowing you to take it out in the field," Heck says. "There are three different manual models."

The first one notches 1/4-in., 3/8-in. and 1/2-in. pipe or tube and is priced at \$289.99 (model #WFN1)

The second model (#WFN2) works on æ-



Variable Angle Pipe Notcher is powered by a hand electric drill or drill press and makes cuts with standard hole saws.

in., 1-in., 1 and 1/4-in. pipe or tube, and costs \$349.99.

The third model (#WFN3) is suitable for 1 1/2-in. and 2-in. pipe and tube and is priced at \$399.99.

There's also an electric version of these notchers that sells for \$2,995. In addition, the company makes industrial-sized notchers that work on pipe up to 6-in. dia.

Contact: FARM SHOW Followup, Woodward Fab, Box 425, Hartland, Mich. 48353 (800 391-5419 or 810 632-5419; fax 810 632-6640; www. woodward-fab.com).

Bypass Oil Filter Extends Oil Life

Russ Reinholz, a subscriber to FARM SHOW, responded to our story in the last issue about add-on oil filters made by Ecofil International, Sutton, Quebec.

"Filtration Solutions World Wide of Olathe, Kansas, makes a similar but less expensive product that I really like. It sells for about \$500, with replacement filters costing about \$20. It does everything the Ecofilters do but for a lot less money. I use their filters on my 2005 Dodge pickup equipped with a Cummins diesel engine, and I really like it."

The company's FS-2500 bypass oil filter mounts outside the main oil circulation system and comes with a replaceable filter element. It only displaces a quart and a half of oil. The filter element captures soot, sludge and acid build-up. The super-clean oil is then returned to the oil pan.

The company guarantees that if you can't at least double your oil change interval based on oil analysis, they'll refund your money 110 percent.

"Let's say you normally change oil on your tractor every 200 hours and install our filter for the first time. The next time you change the oil, you would want to replace the full flow factory spin-on filter as well as our filter. The reason is that the first time the filter is introduced to the engine is the hardest work our filter will ever do because the engine crankcase will have a lot of soot and sludge in it, and you'll have to clean this soot out.



Bypass oil filter mounts outside the main oil circulation system.

After this initial scrubbing period, the next time you change your oil you will have to change only our filter, not the factory filter. You might want to do an oil analysis to verify the condition of the engine oil.

"The average customer changes oil every 1,250 hours, so in that period you'll change our filter at 200-hour intervals but you'll only have to change the oil and factory filter every 1,250 hours."

Contact: FARM SHOW Followup, Filtration Solutions, 230 North Monroe, Olathe, Kansas 66061 (ph 888 440-9056 or 913 829-9056; www.filtrationsolution sww.com).

Kleenoil Add-On Filter

We heard from another reader who told us he couldn't be happier with his add-on oil filter system from Kleenoil. It removes dirt to 1 micron in size, water to 0.05%, and virtually any wear particles that work their way into your oil.

Kleenoil uses a filter that looks like a roll of toilet paper but is actually a replaceable cartridge made of long fiber wood pulp paper. It pulls water out of oil yet still allows oil molecules to pass through unchanged.

The company states that oil change intervals average 3 to 5 times longer on engines equipped with a Kleenoil filtration system.

Contact: FARM SHOW Followup, Kleenoil USA Inc., 6913 Ave K #303, Plano,



Texas 75074 (ph 800 897-6937 or 972-633-2226; www.kleenoilusa.com)

Air Conditioner Provides "Air" On Service Truck

"I work for a local International truck dealer and use my 1992 Dodge Dakota 2-WD pickup as a service truck. To provide the truck with on-board compressed air, I mounted an air conditioner compressor out of a Chrysler car on the pickup's 2.5-liter, 4-cyl. gas engine," says Robert Pike, Hollandale, Minn.

Pike uses the compressor to fill truck tires with air and to operate small impact wrenches. "It cost very little to set up and doesn't take up any space in the truck box like a commercial gas engine-driven compressor would," he told FARM SHOW.

Pike's pickup doesn't have power steering or air conditioning, which left plenty of room to install the belt-driven air conditioning compressor. It came out of a 1970's Chrysler. An electric pressure switch is used to turn the compressor clutch on or off.

He brazed air hose fittings to the compressor and ran the hose to a home-built air tank mounted behind the cab. He made the "tank" by welding four 4-in. dia. steel pipes together, one on top of the other.

He mounted a control panel just behind the driver's door, complete with air gauge, regulator, and pressure switch controls.

"It works great for filling tires and to operate small air tools, but not quite as well for operating die grinders and other large impact tools. The air tanks don't provide as much capacity as I had hoped," says Pike. "I plan to make the same conversion on a 1973 Dodge van equipped with a 225 cu. in., slant 6-cylinder engine so that I can use a bigger compressor. When you run the tubing from the compressor to the tanks, be sure to use a check valve in order to keep air from backfeeding through the compressor whenever it's not running."

The hardest part of the job was mounting the compressor to the engine and getting it lined up with the other pulleys. "To make the job easier, I took one of the original brackets that was used to mount the compressor to the Chrysler engine and cut an exact copy out of a sheet of 1/4-in. thick steel. Then I mounted one bracket on either side of the compressor so that a bolt could be used as a pivot, extending from one end of the compressor to the other."

He says he used the Chrysler compressor because it has a separate crankcase that allows for more reliable operation than rotary piston-type pumps, which require lubricant to be fed into them as they're running. "The Chrysler" compressor is built a lot like internal combustion engines equipped with a crankshaft, rods, reciprocating pistons, and a crankcase," says Pike. "Since the compressor already had a clutch, all I had to do was to wire it into the pressure control switch and to an on/off switch. The switch is just like the ones on ordinary plug-into-the-wall-outlet air compressors. You can set the cut-out pressure and the differential pressure with small screws inside the switch.'

He used copper refrigerant tube to make an intercooler of sorts for the compressor. It's mounted to the radiator fan bracket. "I might switch to an aftermarket transmission cooler, because the weight of the copper one may be putting too much stress on my pickup's radiator," notes Pike.

Contact: FARM SHOW Followup, Robert (Fish) Pike, 27969 825th Ave., Hollandale, Minn. 56045 (ph 507 383-3985).

Replacement Chevy Tie Rods

Hearing customers complain about replacing tie rods on Chevy off-road trucks started the guys at SoCal Super Trucks thinking. With the help of a local machine shop, they developed a heavy-duty steering system that stands up to rough off-road use.

"We saw a lot of premature failure due to bent tie rods," explains Casey Coughlin. "We worked with the machine shop to develop tie rods made with more durable materials. They make them, and we distribute them."

Retailing at \$549, the chrome tie rods aren't cheap. Set one alongside a stock rubber-lined tie rod, though, and you can see that the noticeably heavier-duty rods are worth the investment.

An added benefit of the new tie rod is an adjusting sleeve to set toe.

"We have steering systems for all 1999 and newer Chevy 1500 series, and all 2-WD and 4-WD 2001-2006 Chevy 2500 and Chevy 3500 series trucks," says Coughlin.



Heavy-duty steering system stands up to rough off-road use, says SoCal Super Trucks.

Contact: FARM SHOW Followup, Casey Coughlin, SoCal Super Trucks, 774 South E. St., San Bernardino, Calif. 92408 (ph 909 383-5454; fax 909 383-5451; info@socalsupertrucks.com; www. socalsuper trucks.com).

Battery-Powered Adjustable Wrench

Black & Decker is getting ready to introduce a new line of "battery-powered" hand tools like this power-adjustable Auto Wrench. At the touch of a button, the 8-in. wrench uses AAA batteries to adjust to fit any nut up to 1 in. wide. The manual-adjust wheel is still usable in case the batteries are dead. Other power-adjusted tools are soon to follow, according to the company.

Auto Wrench sells for \$29.99.

Contact: FARM SHOW Followup, Black



At the touch of a button, battery-powered wrench adjusts to fit any nut up to 1 in. wide.

& Decker (ph 912 692-8902; www.black anddecker.com).