

# Repairs & Maintenance Shortcuts

(Continued from previous page)

TABCO, 11655 Chillicothe Rd., Chesterland, Ohio 44026 (ph 216 729-51511).

**Steve Westhoff, LeMars, Iowa:** Steve turned an ordinary pliers into one of the most useful tools around his farm.

"I cut the handles down 1 in. and welded a 9/16-in. round end wrench head on one and a 1/2-in. head on the other. They're the two most common wrench sizes you need around the farm and the modification means you've always got your pliers as well as a 9/16 and 1/2 in. wrench with you. It's really handy and cost little or nothing to do."

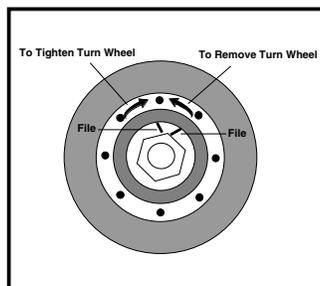
**Gary Crawford, Lyons, Kan.:** "I discovered a slick, quick way to realign the feeder chains on my 1981 Gleaner N6 combine. On this combine and many others, three feeder chains run around the drive sprockets. As sprockets and chains wear, the outer chain has a tendency to jump a tooth, especially in heavy crops. My dealer used to tell me to loosen all the chains so I could readjust the slipped one. I streamlined the process by using a pipe wrench to rotate the drive shaft that runs to the header and laying a 5/8 or 3/4-in. dia. brightly colored 1-ft. length of pipe at the pinch point between the chain and sprocket. As one man rotates the driveshaft and another holds the pipe, the feeder chain will jump the tooth and snaps back into place. Whether you rotate the shaft clockwise or counterclockwise depends on which way the chain jumped the tooth in the first place. This will work on front or back feeder chains as well as conveyor chains."

**Jerome Bruha, Comstock, Neb.:** "The only complaint we have with our 1986 OMC 590 baler is that the #80 roller chain is really a pain to repair because the spring loaded idler won't loosen completely. Rather than take the idler completely apart, which is extremely time-consuming, we came up with a shortcut. We loop a piece of baling wire around broken ends of the chain. Simply twisting the wire with a pliers tightens the chain enough to allow you to replace the broken link in a jiffy."

**Steve Matthews, Berthoud, Colo.:** Steve made a nifty adjustable welding table that mounts on a 4-in. pipe in his shop.

An old corn chopper flywheel, which is about 4-ft. in dia., slips up and down on the pipe which is cemented in the floor and runs up to the roof. Steve made a locking collar out of a piece of pipe so he can lock it in place at any height.

"It makes a dandy welding table because it spins like a lazy Susan," notes Steve. He also slipped a large disc blade onto the pipe and welded it in place above the flywheel to hold tools.



**Ed Engdahl, Aurelia, Iowa:** "I've discovered a way to remove hex nuts from ax-

les on any 18-wheeler without using a hammer and chisel. Works great to take off wheels to repair axles or bearings.

"Wedge an appropriate-size file between the outside hub and the front of the nut to be removed. Then simply turn the wheel counterclockwise to loosen the nut. To replace nuts, simply reverse the procedure.

"Works like a charm on any vehicle with hex-shaped axle nuts. You won't cut up nuts - and possibly your hands - as you can using a hammer and chisel."

**Carol A. Brannaman, Mount Vernon, Iowa:** Preventing tangles in extension cords has never been easier, thanks to this idea Carol came up with after she hauled away a pickup-full of old V-belts from a neighbor's farm sale.

"A few days later, I had to get an extension cord from our shop and, of course, came away with two that were tangled together. Then, it struck me that looping a V-belt



through cords like a rubber band could prevent tangles. It worked so well I rescued all those old belts from our burn pile. In the seven or eight months since I discovered it, I've used the belts to hang dozens of cords and have even hung garden hoses with them. I've discovered 1/2-in. thick V-belts (not too badly worn and with some pliability left in them) work best."

**Charlie Stough, Thermopolis, Wyo.:** "There are many problems with the thermal linear actuator used to engage the 4-WD on late 1980's GM pickups through current models. It's an electro-mechanical part with an atrocious failure record. GM replaces over 100,000 a year. There are a few replacement parts on the market but they, too, are



mechanically complicated so they're hard to install, not very reliable, and relatively expensive.

"We've come up with a solution to the problem. It's called the PAD (positive actuating device), a non-mechanical, static unit that's guaranteed for life. It replaces the thermal linear actuator. After installation, both front axles turn at all times, even in 2-WD. The front driveshaft is constantly engaged at the front differential, but disengaged at the transfer case until you activate 4-WD. This doesn't cause additional wear to U-joints or front driveline and you shouldn't notice any real drop in gas mileage.



## New Tool Makes It Easy To Pull Stalk Rollers

If you've ever spent hours hammering or cutting worn stalk rollers off a Deere corn header, you'll like this new hydraulic tool that pops them off in minutes.

D & R's "Stalk Roller Puller" works on all Deere heads except for 1997 models with the bolt-on knife option. It was invented by Shawboro, N.C., farmer Harvey Roberts and machinist David Dunavant.

The problem with Deere heads is that stalk rollers are an integral part of the row unit, bolting directly onto the roller shaft out of the gear drive. The design makes removal to weld on new flighting difficult and you can even damage the gear box or bearing doing so.

"Each one can take as much as an hour

to remove with conventional means," notes Dunavant.

The Stalk Roller Puller consists of a 10-ton porta-power jack in a special holder. It operates a 12-in. by 2-in. hydraulic cylinder with a 1 1/2-in. dia. ram that pushes on a rod between two extractor hooks. The rod pushes on the end of the stalk roller while the hooks pull it off.

Standard painted model sells for \$175, nickel plated for \$225 excluding porta-power jack. Add \$20 S&H. Do-it-yourself plans are also available.

Contact: FARM SHOW Followup, Dunavant's Welding & Steel Inc., P.O. Box 54, Shawboro, N.C. 27973 (ph 919 338-6533).

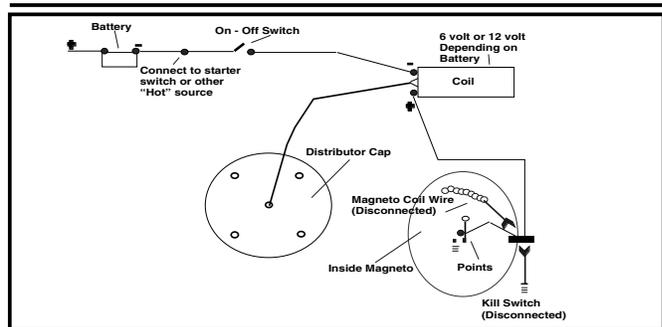
"Any shade tree mechanic can install a PAD in 10 or 15 minutes. They sell for \$64.99."

Contact: Precision Auto Parts, 210 Suite 4, Highway 20 South, Thermopolis, Wyo. 82443 (ph 307 864-3490).

**Michael Risner, Knox, Ind.:** "We've got two Case-IH Cyclo planters, a 500 (12-row) and a 900 (6-row). Both have trouble with seed spacing. That's because the plastic wheels on each of the brushes wear out because there's too much pressure on them,

causing the brush to bind when it runs too close to the seed drum.

"To solve the problem, we made a shaft out of 1/4-in. dia. threaded rod. We drilled out the ends of the wheel assembly and inserted the shaft all the way through. It puts the wheels under even pressure so there's no binding. We first tried this idea out in 1990 and it improved seed spacing so much we've since modified both planters. It costs less than \$5 per row."



**William Fannon, Plymington Gap, Va.:** "Here's a quick, simple, low-cost way to light new fire in weak magnetos on older tractors. I've used it on Farmall M's, H's, and A's but it could be used on any tractor equipped with a magneto system.

"The first thing you need to do is get a 6-volt ignition coil from any auto parts store for around \$20. Then, disconnect the remote kill switch on the magneto. Wire the positive lead from the ignition coil to the points on the magneto, which act as a ground for the system. Wire the coil's negative lead to

an electric on-off toggle switch and run the wire back to any hot point on the tractor's electrical system, such as the starter switch. With the flip of the on-off switch, you've immediately got plenty of power to start the tractor. Works like a charm and only costs about \$25. Note: The wire from the points to the coil needs to be connected to the positive or negative terminal on the coil according to battery ground. The above description is for a positive ground system. A negative ground system would be wired just the opposite."