Albert L. Url. 4117 E. Briges Road, Elk. Wash. 99009 ph 509 292-5119: "I came up with a way to align a shaft without using any tools. I got the idea while installing a Plymouth 318 cu. in. car engine in an International 4-WD truck. The Plymouth engine has a longer tail stock, and the easiest way to make the change was on the universal joint. But when I put the new engine in, there wasn't room for two drive shafts - one for the transfer case and one for the rear wheels. So I mounted the universal joint between the car engine and the International transfer case. eveballing it as best as I could. In order to get the drive shaft correctly aligned, I idled the engine so the universal joint was going in a circle and was able to align itself. Then, with the engine running, I welded the transfer case in place (be sure to weld the old frame of the transfer case onto the truck because it saves a lot of alignment work). As the weld cooled, the transfer case centered itself so the two shafts were perfectly aligned with each. The last step was to mount the rear driveshaft.

"The bottom line is that any time you want to align a driver and a driven transmission or any driven unit, if you can operate them before they set where they've got to be they'll align themselves. But you can't be more than .3000 of an inch off or else the bearings will get out of whack and vibrate, which will quickly wear them out."

Red Rock Mfg., 1117 Park Lane, Pella, Iowa 50219 (ph 641 780-1748; www.redrockmfg.com): Anyone who owns

a Ford 2N, 8N, or 9N tractor will be interested in this new combination gas cap and gauge that's designed to replace the tractor's original gas cap. These tractors don't have gas gauges so it's pretty handy. You simply remove your existing cap and replace it with the gauge. The unit



consists of a float that moves up and down along a spiral twisted piece of metal that turns the pointer on the gauge. This same kind of gauge is used on some riding mowers.

"It lets you see at a glance how much fuel is left in the tank," says developer Phil Smith. "It fits neatly under the lid so it won't distract from the appearance of your tractor." Sells for \$23 including S&H.

The company offers other products for N-Series tractors including Dowden foot throttles, parking brakes, Sherman transmission lever, auxilliary pto lever, and Greene Drawbar lock. A free catalog is available.

Douglas J. Hart, Bethel, Vt.: "My 1996 Lumbermate Bandmill was originally powered by a 20 hp Honda engine which ran too slow and was underpowered. I solved the problem by replacing the Honda with a Suzuki 3-cyl. fuel-injected, overhead cam, water-cooled gas engine. I did the job myself and got the power and speed that I needed.

"To put up a low-cost building to work on my equipment during below zero weather, I sawed out some 2 by 4's to frame up a gambrel roof-style shop and then covered the frame with inexpensive blue tarps. I used spring clamps to hold the 'plastic' doors together. A wood stove and small kerosene heater, along with the sun, kept me warm enough to work out of the wind. It was a cheap but effective solution."

Hebert Wodtke, Loogootee, Ill.: "I replace farm wagon tires with used 16-in. pickup tires. I like tires with 8-ply or more. Rather than buy tubes, I use a liberal amount of talc seed lubricant in each tire and on each bias tube. I always inflate to the recommended pressure, and I mount my own tires. I install a grease zerk in the dust cap on each wagon wheel. It makes lubing wheels a much quicker job. In more than 40 years of farming, I've accumulated more than 23 grain wagons. Most of them are 165 bu. or smaller.

"I believe in preventative maintenance, so whenever a motor vehicle reaches 16 years of age I start checking prices for a replacement radiator even if there's nothing wrong with the one I already have. In my opinion, a total replacement is less expensive than repairing the original radiator. I don't want problems on the road, and the cost for a tow bill will go a long way toward the cost of a new replacement radiator. If you replace a radiator before it develops problems, you can do it when you have time - not on the road in a panic."

Posi Lock Puller, Inc., 805 Sunflower Ave., P.O. Box 246, Cooperstown, N. Dak. 58425 ph 800 533-5761 or 701 797-2600; www.posilock.com: This company recently introduced new Hold-Et magnetic vise clips that eliminate the need for an extra pair of hands when working with a vise. They also let you close the vise as tight as you want without damaging the threads.





Hold-Ets consist of a pair of 3-in. lengths of angle iron that magnetically hold sockets in a vise for assembling and disassembling universal joints and other jobs. They're made from rigid aluminum so they won't damage any threads. Hold a number of shapes and sizes of objects including screws, rings, cclips and springs, etc. You can use them as a jaw liner for non-marking material. The unit can hold 5 1/2 lbs. vertically and 2 3/4 lbs. horizontally.

Hold-Ets sell for \$14.99 plus S&H. **Hy-Capacity Eng. & Mfg., Inc., Hwy.**

Barrel Stopped Radiator Clogging

When bush hogging tall, thick weeds, Paul Lowrance had trouble with the weed seeds shattering and getting sucked through the front grill of his tractor, clogging up the radiator.

"I had to clean out the grill constantly," says the Soper, Okla., farmer, who went looking for an inexpensive solution to the problem.

"I cut a plastic barrel in half and drilled some holes along the edge, then wired it to the front grill guard. It protects the grill opening from flying debris and pushes everything to one side or the other," says Lowrance. "Air is still able to come in from the back side of the barrel. I also folded a double layer of window screen in between the grill and the radiator to catch whatever material gets sucked up."



Cut-up plastic barrel, wired to tractor's front grill guard, protects grill opening from flying debris.

Contact: FARM SHOW Followup, Paul Lowrance, P.O. Box 64, Soper, Okla. 74759 (ph 580 345-2713; email: lowrance@neto.



Have you come up with any unusual money-saving repair methods for fixing farm equipment? What maintenance shortcuts have you found? Have you had any equipment recalled by the factory? Name a particularly tough mechanical problem you've had with a piece of equipment and how you solved it.

These are a few of the questions we asked randomly selected FARM SHOW readers. If you have a repair tip, maintenance shortcut, or other mechanical experience you'd like to share, send details to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 or E-mail us at: Editor@farmshow.com.

Mark Newhall, Editor

169 S., Humboldt, Iowa 50548 (ph 800 247-1824 or 515 332-2125; www.hy-capacity.com): Anyone who owns an Oliver/ White 1650 or 1750 tractor will be interested in this company's new clutch conversion kit. The tractor's original clutch comes with a 3-lever Borg-Beck pressure plate with an I-bolt that tends to break prematurely. When that happens, you have to buy a new clutch.

The new clutch conversion kit uses a diaphragm pressure plate with a disc and bearing. It has the same spring pressure holding power but doesn't have any I-bolts to break. Kits are available with pressure plates and include anything from woven to padded type discs. A pressure plate with four pads per disc retails for \$236.

Wingfield Distributors, Inc., 4712 N. Cunningham Ave., Urbana, Ill. 61801 ph 800 637-6712; fax 217 643-7849; www.wingfields.com: This company offers a new screw-holding driver made in Ger-



many. The design permits single-handed operation for starting a screw, allowing easier access in tight places. It allows you to place screws through holes or in hard-to-reach places without the screw falling off.

The driver is equipped with a quick release thumb switch that allows fast, easy screw release. You place the screw inside a spring-loaded holder. Once the screw is started, you pull back on the driver shaft and pull the driver down and away, then go back and finish the operation. Two different driver models are available to handle Phillips or slotted-type screws. Call for size application.

Sells for \$24 plus S&H.



Mark Burrow, 11221 N. 100th St., Altamont, Ill. 62411 ph 618 483-5598: Mark mounted a homemade reel on top of his air

compressor, providing fast payout of the pressure hose and equally fast winding back up. He used a pair of old discs to make the reel, fashioning them into a spool which he bolted onto the tank. "The reel is ready for use whenever and wherever I need air pressure in my shop," says Mark.

He also came up with a unique way to transport gas welding tanks that makes use of an ordinary hand truck. He constructed a



metal stand for the welding tank, leaving a bit of extra space below the base. It allows him to slip the hand truck under the base. Now he can move the tank and welding torch anywhere, even if it's in a close place, and then remove the transport wheels by simply removing the hand truck.

George Wissinger, Huntington, Ind.: He fixed a common problem on his 1963 New Holland 268 small square baler.

"It's not unusual in that line of balers for the belt to slip on the pickup when you're in heavy hay or long stubble," he explains. "I found a simple modification that I was able to make in an hour and a half after I got the parts."

He removed the belt drive (V-belt and the V-belt pulley) from the pickup and replaced it with sprockets and no. 2040 roller chain. He installed the two sprockets he bought at a parts store with two "Weld-a-Hubs."

"I welded a 1 by 2-in. piece of scrap iron to the hub, and drilled a hole through this tab, and also the sprocket. Then I put in a 1 by 2 by 1/4-in. thick shear bolt for protection. If something happens to the pickup, it will shear the bolt. In the 20 years since I made the modification, I've only sheared two bolts. It's a totally different performing machine."

Wissinger says the job was quick because he only had to weld one sprocket. The other sprocket is driven by the tab with the 1/4-in. bolt in it. The more positive drive to the pickup gives the baler more capacity.

"I've done three of these balers - mine and