## **Reader Letters**



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tion may arise at times when the hot wire inside a portable tool or an appliance becomes shorted to the case of the tool or appliance, thus energizing the case to a potential of 120 volts. If you, while using the defective tool or appliance, were to touch an object that is normally grounded, such as a plumbing fixture or a metal sink, you would get a nasty or possibly fatal shock if the defective tool or appliance were plugged into a receptacle that is not protected by a GFCI device. However, if the defective tool or appliance is plugged into a GFCI protected receptacle, a portion of the current flowing in the circuit would pass through you to ground, thus creating a difference in the currents flowing in the hot and neutral wires, and the GFCI device would immediately trip, saving you from a potentially dangerous shock.

Please note that I have made no mention of a grounding conductor because the presence or absense of a grounding conductor is irrelevant to the functioning of the GFCI device.

In fact, the National Electrical Code recognizes that the installation of a GFCI protected receptacle on a two-wire circuit is an acceptable means of increasing the safety of this receptacle. However, if this is done, the GFCI receptacle must be labeled "no grounding conductor present", since all GFCI receptacles have a round hole to accept the round grounding prong on the male plug. (Willlam MacLachlan, Glen Arbor, Mich.)

I have a trailer-mounted 4,000-gal. stainless steel tank that I use to collect rainwater for watering my garden. The rain gutters on my shop drain into the tank, which is parked next to the building. When the garden needs water, I just tow it behind a tractor. (Peter Gabriel, Oregon City, Oregon)

I've received many inquiries from FARM SHOW readers interested in the article you ran last issue about the portable windmill I built to move around my place. Some readers have been frustrated by the website that was given for more information about building a diffusion pump. Here's a complete address: http://www.quantumlynx.com/water/back/vol2no2/v22\_st5.html.

I also have a couple drawings I could email to people who contact me at 4vernons@gooselake.com. The drawings show how to build a pump and also how the tail assembly is designed. (Jack Vernon, Lakeview, Oregon)



One quick way to dress up "eyesore" corn cribs, which are often used to store all kind of junk, is to plant a climbing rose alongside. Once you do that, you'll wonder why you didn't do it before. Here, my wife, Ruth, shows off our crib with a climbing rose. Training the rose to climb is easy with pieces of wire. (C.F. Marley, Nokomis. III.)



I'm sending along this photo of a 1-yearold Holstein heifer born with a perfect
question mark on its forehead. She has
received a lot of attention in our area. We
wanted to show her at a recent county
fair but unfortunately we couldn't get her
registered in time. So instead we put up
a photo of her at our exhibit stall, and
everyone who saw the photo said we
must have painted the question mark on
because it just looked too perfect. (Lindsay Bell, G.W. Bell & Sons Dairy Farm,
786 Bell Rd., Kings Mountain, N.C.
28086 ph 704 473-4048)

I've found that I can instantly improve winter time traction and steering control on my ATV by screwing lag screw studs into the tires. The studs can be easily inserted



with a cordless drill. I just screw a stud into each lug on the tire. I put them on when winter comes and remove them in early spring. The 3/4-in. lag screws cost 27 cents apiece, and there are about 36 studs per tire.

Designed for putting up steel siding on buildings, the screws come with a rubber washer which I pull off and throw away. You want to get the hardest possible studs so they won't wear out on pavement.

I also put studs on a Bobcat skid loader and could hardly believe the improvement. It's easier to use studs than tire chains, because it's hard to get chains tight and fitted right. One limitation with studs is that you have to drive cautiously on roads to keep from damaging the pavement. Also, I don't recommend allowing kids to drive an ATV fitted with studs because if they peel out, it tends to throw the studs off or wear them out prematurely.

My homemade 21 by 36-in. hydraulic welding table is the "cats meow" for welding or grinding on smaller projects. It's



made from a foot-operated transmission jack originally designed to take transmissions out of vehicles. The jack came equipped with a 2-stage hydraulic cylinder on top of a cross frame and rode on four caster wheels. I bolted a pair of telescopic legs to the cross frame, then welded a 1/2-in. thick, solid steel plate table on top of the legs. The telescopic legs can be extended from 34 in. to 7 ft. high and the jack will lift up to 1,100 lbs. A big advantage is that I can weld parts right at waist height, which eliminates bending. Parts can be clamped to the table for welding. The unit weighs about 300 lbs.

My homemade houses greatly reduce problems with mosquitoes They're made from rough cedar and measure 1 ft high by 10 in. wide and deep. Bats enter through a hole at the bottom. The houses accommodate 15 to 20 bats. I mount them on trees about 12 ft. off the ground.

One bat can consume up to 1,000 mosquitoes in one night. The bats only come out at night when they feed on mosquitoes and bugs. ve found that two houses work best and keep one in my front yard and one in back. I'm willing to build bat houses for \$25 apiece plus S&H. (Dan Jacobson, 8913 Weaver Lake Dr., Pequot Lakes, Minn. 56472 ph 218 543-6623)



I needed a front-end loader for my 1984 Long 510 tractor, so I made brackets and



mounted a used Deere 521 front-end loader on it. I welded the brackets onto the tractor frame and added a concrete-filled barrel on back to improve the traction. A 4-in. dia. metal pipe serves as a hydraulic oil reservoir.

By pulling two pins I can quickly remove the bucket and mount a post driver in its place, which also doubles as a wood



splitter. We just replace the pounder with a homemade, 110-lb. wood splitting wedge. I had a local machine shop make the wedge from a solid chunk of steel. It measures 8 in. wide and 12 in. deep and goes on with three bolts.

I get the wood for free from a local lum-

ber yard which cuts the ends off logs for grading purposes and then gives them away. Some of the wood chunks are up to 30 in. in diameter and can weigh up to 200 lbs. so they're too big to split by hand.

The wedge wasn't heavy enough to split some of the chunks, so I welded a series of 1-in. thick steel blocks on top of the post driver. The weights also help the post driver do a better job of driving posts. (Reginald Suan, 106A Suds Run Rd., Mt. Clare, W. Va. 26408 ph 304 622-7421; regscab@wmconnect.com)

I use old tires to make inexpensive, weather-proof outdoor "no trespassing"



signs that mount on posts. I use an aerosol spray can to paint big white letters on the tire's sidewalls, then jam the tire onto a wood post. I drill a pair of holes into the top of the tire and then wire the tire onto the post. I use 16-in. tires because they're easy to handle. Before mounting the tires on the post I sometimes drill holes into the sidewalls to let water drain out.

The big, white letters really show up well and last a lot longer than posters. (Rex Gogerty, 33475 K. Ave., Hubbard, lowa 50122 ph 641 487-7617)

I've put together a 161-page shop manual that covers the L, LA, LI tractors, and LU engines produced by John Deere from



1937 to 1945. They were equipped with Hercules and Deere engines. The manual has 161 pages and sells for \$25 including postage (\$27 to Canada). The manual is filled with a lot of handy hints on how to fix these tractors and engines.

Deere never published a repair manual for these tractors. Back part of book has a list of parts suppliers and an index. (Jack W. Kreeger, 7529 Bedford Ave., Omaha, Neb. 68134 ph 402 571-2824)

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