

Tom Billingsly, Buckeye, Ariz: "Here's an idea that a custom manure-hauling contractor came up with for his trucks with side-mounted gas tanks. He was working in extremely dusty, dirty conditions, hauling sludge onto cotton fields. The problem was that he had to keep changing fuel filters on the trucks because of sediment that would get into the fuel when refueling, or for other reasons. He told me he finally solved the problem by screwing a short length of pipe into the bottom of each gas tank. He simply put the pipe in the drain-out hole and put a cap on the pipe."

What would happen is that as the diesel fuel sloshed around in the tank, sediment would settle down into the short piece of pipe. Every few days he would simply unscrew the cap and let a bit of fuel wash out onto the ground, clearing the sediment. "It's very simple and kept the fuel filters relatively clean. It gets the big stuff. Floating sediment still goes through the filter. The idea would work on any gas tank you can attach a pipe to."

Steve Spiering, 48594 Hwy. 158, Milbank, S. Dak. 57252 (ph 320 568-2246): "The cable on my bin's stirrator kept falling off. I had to put the cable back on up to four



times a day, which got old. I solved the problem by welding on a shield off a rolling cultivator, which provides the pulley with a deeper flange. I started with a shield that matched the size of the pulley and cut off all the teeth. Then I welded the modified shield onto the pulley. The replacement flange deepened the pulley. Since I made this modification two years ago the cable hasn't fallen off once.



"Our 7-in. dia., 55-ft. long, pto-driven grain auger wasn't big enough to meet our needs

any more, so I converted it to an electric-operated model to boost capacity. A 5 hp electric motor mounts on two lengths of 1 1/4-in. dia. steel tubing that attaches to the auger's A-frame with four muffler clamps. The motor belt-drives the auger gearbox. If I want, I can use my tractor to pto-drive the auger again by loosening eight bolts on the clamps. The clamps can be slid up or down the frame in order to tighten or loosen the belts. The auger has a capacity of about 400 bu. per hour."

Max Serr, Paul, Idaho: "Here in Idaho we use a lot of 8 and 12-in. dia. underground pipe for irrigation. Eventually, the bottom



side of the pipe rusts out. To fix it, you have to cut an entrance hole through the top side of the pipe and then go inside it and weld a steel plate over the rusted-out area. When that's done you have to weld another plate over the entrance hole. Another way is to dig a very big hole under the pipe so that you can get underneath it and weld a plate onto the bottom side of the pipe. Either way, it's a lot of work.

"I came up with an easier way by building my own giant pipe wrench. I use it to rotate 50-ft. long sections of pipe 180 degrees. Once the pipe has been rotated, I weld a plate on the bottom side of the pipe, and then I rotate the pipe back to its original position.

"I built the tool out of a 5-ft. long section of 1 1/2-in. (inside diameter) pipe, 4 ft. of no. 100 roller chain, and a 1/2-in. dia., 3-in. long metal hook. One end of the chain is welded to the pipe and loops back over the hook, which is also welded to the pipe.

"I think the same tool could be used on any object with a round surface."

Douglas V. Spencer, Fenwick, W. Va.: "I couldn't find any replacement grass seed tubes for my Massey Harris grain drill so I simply cut a cheap, plastic 1/2-in. dia. water hose to the proper length.

"To keep a pencil handy at all times, I tape a clothes pin to the pencil and then clip it to the bill of my cap. The pencil is always there when I need it."

Vic Smith, Parkville, Mo.: "While restoring my great grandfather's old 2-row Ford planter, I found that some springs were old and rusted. To solve the problem I bought surplus spring kits at Tractor Supply. I treated some of the old and rusted plates with Speed Dip, a product that's used to weatherproof traps.

Shop Brightened With Sheet Metal

Mark Siegle will never have to paint the inside walls of his shop, thanks to the bright, reflective sheet metal he lined it with. Fire risk is also less.

Siegle is self-employed as a gas pipeline insulator and sheet metal worker. He noticed that gas plant buildings have metal interior liners made from aluminum sheeting. He liked the look and decided to finish the walls and ceiling of his own 28 by 40-ft. shop with it. The bright metal maximizes light supplied by the shop windows and ceiling fixtures.

The metal lining cost him \$20 for each 3 by 8-ft. sheet, bringing his total cost to \$2,000. As a finishing touch, he added blue metal trim where the ceiling meets the walls, around the windows, and on the joints between sheets.

Contact: FARM SHOW Followup, Mark Siegle, Box 5878, Westlock, Alberta, Canada T7P 2P6 (ph 780 349-6880; email: enercon@west-teq.net).



Mark Siegle lined his shop with bright, reflective sheet metal. The bright metal maximizes light supplied by the shop windows and ceiling fixtures.

FARM SHOW

Money-Saving Repairs & Maintenance Shortcuts

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

"Instead of buying expensive penetrating oil, I mix diesel fuel with baking soda. Works just as well.

"I lined my shop walls with pegboard and mounted exhaust fans on them. The fans are hooked up to timers. They keep my shop well ventilated."

Karl Rosendahl, Spring Grove, Minn.: "I came up with a simple way to find the causes of shorts in a car, pickup or tractor. I solder a wire to each end of a blown fuse and then connect a headlight bulb to the wire. Then I plug the blown fuse into each fuse socket. The bulb will shine brightly if there's a short in a circuit. Then I disconnect the load or connectors one at a time until the bulb either glows dim or goes out. Be sure to use headlight bulbs with the same voltage rating as the system you're testing."

Elmer Pinkerton, Elmwood, Neb.: "There are several suggestions around on how to remove the nut that holds the blade on push lawn mowers. Forget them all. An air impact wrench will bring that nut off in seconds without anything holding the blade. Also, on a chain saw nut when the book tells you to block the piston with wood through the port holes - don't do it. Use the impact wrench but first be sure to determine whether it's a left or right handed nut.

"One of your readers suggested using two nuts as a gauge to sharpen drill bits. Fine idea, but it's easier to use crazy glue to weld the nuts into one gauge.

"I use 80-weight gear oil to seal the beads on all my tires. It works better than soap.

"In a recent issue someone said he used a short length of pipe to protect tire valve stems from damage. I like this idea because you can safely leave a trailer in a hog lot without having to worry about flat tires."

Bud Etzler, Motley, Minn.: "Three parts charcoal lighter fluid and one part automatic transmission fluid works good to free up frozen engines."

Cary Urka, Brethren, Mich.: "I built an inexpensive wood stove out of an old fuel barrel. I mounted the barrel on four metal legs, then cut a door into one end of the barrel and installed a baffle inside. A stovepipe chimney extends up to the building's roof. I use my forklift to haul the stove outside the shop where I clean out the ashes. A fan blows down toward the stove to help spread the heat around. A furnace filter mounts on the back



side of the fan and filters the air before it goes through the fan motor. I lined both sides of the stove with fire brick and also welded a couple of angle iron stiffeners lengthwise to both sides of the stove to keep the sides of the barrel from buckling. The stiffeners are spaced 6 in. apart and located just above the fire brick.

"I wash all my equipment outside the shop using an Alcoa hot pressure washer that mounts inside my shop. The washer's hose reel mounts about 3 ft. off the floor. I feed the hose out through a hole that I cut into the building wall and attach a wand to it. The washer's on-off controls mount outside the building. Lets me wash equipment outside the building during the winter without ever having to open the door. The pressure washer is equipped with its own fuel burner to heat the water. The gas tank and fuel burner coil mount behind the pressure washer tank. I attached a big pipe to the tank to deliver the burner's exhaust outside the building."

Newell Franks, Kansas City, Mo.: "To make furnace cement, I just mix Portland cement and wood ashes in a 50-50 ratio."

Donald Bunch, Bunch Farm Services, Inc., Box 712, Aberdeen, Miss. 39730 ph 662 369-9570: "I like the idea of using tire sealants, but I often find that it's not easy to get the sealant into the tire. To solve the problem I made this little device. It consists of a 12-in. length of 2-in. dia. PVC pipe that's threaded at one end. The flexible tube from an aerosol can of tire sealant is fitted on a hose barb that's screwed into the cap. To use the device, I remove air from the mounted