Money-Saving Repairs & Maintenance Shortcuts

Corn Crib Converted Into Farm Shop

"I needed a workshop and considered tearing down my old corn crib and putting up a new building, but I didn't want to spend the money. Instead, my boyfriend and I covered the old crib with some used steel siding, built a pair of large sliding doors, and painted the building red with white trim. I'm happy with the result," says Sue Edwards, Dodgeville, Wis.

"Structurally, the corn cribs were very strong," says Edwards, who made the conversion last spring. "The oak and pine lumber in it was in excellent shape."

The 22 by 40-ft. corn crib had two 7-ft. wide bins with a 7-ft. wide drive-through alley running down the center where a corn sheller's dragline could be laid down. Workers would then rake ear corn into the dragline. The bins had raised wooden floors on concrete foundations, while the alley was made of dirt and located one foot below the bin floors.

"I show horses and ponies and use the building to store my carts and a buggy. I also refurbish the equipment and needed a nice, dry place where I could work on them over the winter," says Edwards. "I was going to tear the building down and start over because of the uneven floor, but then decided to fill the alley with enough gravel to make everything level. I installed lights above the center alley and below the crib's loft. I also removed some cross braces that supported a loft in order to open up the alley."

She bought used sheet metal from a local Amish salvage yard and used self-tapping screws to attach it to the crib. She plugged the screw holes with metal epoxy, and then applied two coats of exterior latex paint to the metal. She also installed a small dusk-to-dawn floodlight at each end of the building. Her boyfriend used 2 by 4's and 2 by 6's to build the sliding doors.

"The crib's metal roof was too steep for us to safely paint it, so it'll have to wait until we reroof it some day," says Edwards. "We spent a little more than \$1,000 for the steel, lumber to frame in the door, door tracks, and paint."

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Sue Edwards and her boyfriend converted this old corn crib into a low-cost farm shop. The crib had two 7-ft. wide bins with a 7-ft. drive-through alley running down the center.





They covered the crib with used steel siding, built a pair of large sliding doors, and painted the building red with white trim. They also filled the alley with gravel.

Tractor's power steering kit works like factory steering, yet doesn't affect tractor's antique value by requiring you to drill holes or do any welding.

Farmland



"Built-To-Last" Power Steering Kit

"The factory steering valves on older tractors eventually break down internally. Our new power steering kit is built strong to last and will eliminate troublesome rebuilds. It works like factory steering, yet doesn't destroy the tractor's antique value by requiring you to drill holes or weld anything in place," says Randy Raschein, Farmland Tractor Supply, Tangent, Oregon.

The kit is designed to replace the factory steering boxes on Deere 10 and 20 series tractors including the 2510, 3010, 3020, 4010, 4020, 4320, 4520, and 4620 models. Kits for Deere 30 series tractors should be available by the end of the year.

Kits are also available for Ford New Holland tractors including the 4110, 4610, 4630, 4380, and 5030 series; and the 5000, 5600, 5610, 5900, 6600, 6610, 7600, and 7610 models. All kits come with a modern

hydrostatic steering valve.

According to Raschein, the kits are made with 100 percent American-made components and come with a 2-year warranty. "These kits include self-lubricating bronze bushings and stainless steel hardware. No modifications are needed, as the kits use all the original steel lines, fittings, throttle control, and steering wheel. All kits come with everything needed to install and instructions are included," he says.

The kits sell for \$950 plus S&H. The price does not include steering pump or steering arm

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Thermostat And Timer Operate Block Heater

"I've got a 45 year old Allis Chalmers 185 diesel that's really hard to start when it's below 50 degrees. I used to have it plugged in continuously about 6 months of the year and I know for a fact that the heater was using a lot of electricity," says Ohio farmer Ron Post. "I figured out a clever way to use the heater intermittently rather than continually and save myself money in the process."

Post built a simple junction box that connects a thermostat and a timer, so when the block is maintained at a certain temperature, usually 50 degrees, the heater won't engage. When the block drops to around 40 degrees, the thermostat triggers the block heater switch so that device warms up the block.

"I took a regular electric source and ran a line into a 4-way junction box," says Post. "I plugged in the hot line first, then plugged the other line into the thermostat. Then I used power from the hot side and ran that into the thermostat, then into the junction plug. I have it set up from the hot side to a timer, which I bought at the local hardware store. When I'm not using the thermostat, I just go into the timer and

flip out the indicators so it starts and stops intermittently a couple times in the night."

Post says the device worked so well on his tractor that he made another one that turns a heater on in his pump house. He uses a third one to warm up his snowplow truck in the winter. "I've also used it to run a small heater in an old freezer where I keep my tools in the wintertime. It keeps them nice and warm, and I don't have to bring them into the house. The device is so simple I think it would work on anything where a person needs to control a heat source and not have it run continually. On the tractor I think it kicks in maybe once an hour for 15 min. when it's really cold, and probably once every 2 or 3 hrs. when it's around freezing."

Post says he's probably got about \$60 invested in each device, about \$40 of which goes for a good thermostat and 10 ft. of cord with a junction box. The indoor/outdoor timer he says is only about \$6.

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Coolant Filter Protects Powerstroke Diesel Engines

Contributors to online diesel forums say that adding a filter to your Ford Powerstroke diesel engine coolant system is an economical way to ease maintenance requirements and provide operator peace-of-mind. This \$120 accessory, available from aftermarket companies such as Riffraff Diesel, is easily installed even if you have limited mechanical experience. The payoff is a product that keeps coolant clean by filtering out sand, metal and dirt particles that cause abrasive wear and plugging of small cooling system passages.

Riffraff's coolant filtering system for the Ford 7.3L Powerstroke filters a small amount of coolant with each pass. It uses a Donaldson

spin-on filter that's easy to change as needed, usually 3 times in the first nine months and once yearly thereafter. The filter removes casting sand and metal shavings in a new engine to keep those abrasive nuggets from aggravating the water pump, ERG cooler and engine oil cooler.

The device comes with a special bracket that mounts to factory holes on the Super Duty and includes all fittings needed for installation.

Sand and metal particles get in a coolant system during manufacturing because Powerstroke blocks are molded in casting sand and holes are drilled for cooling ports. Chris Carter is a knowledgeable diesel mechanic who says you cut open the first filter from an aftermarket installation and see almost a teaspoon of abrasives removed from the coolant. He says people who don't want to add the aftermarket kit should change the coolant in a new engine at least twice in the first 6 months and flush the system before refilling it each time.

Contact: FARM SHOW Followup, Riffraff Diesel Performance, Inc., P.O. Box 416, Eagle Point, Ore. 97524 (ph 866 446-3360; www.riffraffdiesel.com).



Riffraff coolant filter keeps coolant clean by filtering out sand, metal and dirt particles that cause abrasive wear.