

## Money-Saving Repairs & Maintenance Shortcuts

man gearbox on the bottom of the head. I control it with one of the hydraulic outlets on the Uni-System. It works great now and I can vary my cornhead speed and I can stop it on headlands, or any time I need to."

**Bill Randall, Toledo, Wash.:** "Galvanized water tanks will last 20 years or more without any sign of rust if you set them on a simple wood frame made out of treated wood, rather than just setting them on the bare ground. I did this 20 years ago on some tanks and they still look like new."

**Dan Grewe, Arlington, Wash.:** "I had an old tractor that sat for 20 years without running. All the pistons were stuck. I used a solvent from Kano Laboratory, pouring it into the plug holes. It took two years but they finally loosened up. I ground down the valves and seats and now it's running fine."

**Wilbur J. Black, Plum City, Wis.:** "The drinking cups in our stanchion barn are mounted on rigid pipe. They would often break off when cows rubbed on them. I replaced the rigid pipe with flexible 3/4-in. hydraulic hose. It doesn't break and should last a lifetime."

**Glenn Sethre, Longview, Wash.:** "Putting motion detector lights in shops and around the farm adds both safety and convenience. You can put them anywhere – in the house, garage, shop, or whatever. That way you never have to turn on lights outside or in the shop."

**Bill Fisher, Bourbon, Ind.:** "I use a scoop shovel a lot on concrete so it seemed like I'd wear one out every year. To solve the problem, I riveted a 1 1/2-in. strip of stainless steel on the leading edge of the scoop to take the wear. After one year of use my shovel is almost like new."

**Kent Dinwiddie, Jeffersonville, Ohio:** "To make sealed bearings last 2 to 3 times longer on combines and other equipment, drill a small hole in the side of the bearing. Inject grease with a needle attachment on a grease gun. Then wipe excess grease off and plug the hole with a small amount of silicone pushed into hole."

**Charles Wochley, Mt. Pleasant Mills, Penn.:** "I've found that older gas-powered tractors tend to foul the plugs. I solved the problem by putting 1 gal. of diesel fuel to 25 to 35 gal. of gas. Adding diesel fuel also lubes the engine."

**Matthew Lebold, Kennbeck, Ontario:** "In our shop, we have worked on a number of stuck priority valves. To remove them, we slip a 4-in. length of plastic fuel line onto a piece of 1/4-in. threaded rod. Next we put a nut on each end of the rod and slip the assembly inside the priority valve. Then we simply tighten the lower nut so that it pushes on the tube and expands it. Then you just pull and the valve comes out."

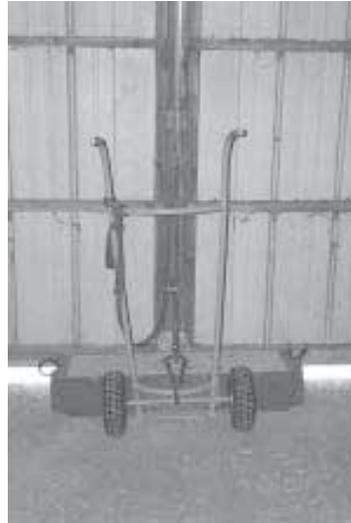
**Ken Smith, Marshalltown, Iowa:** "The strainer screen on the hydraulic reservoir on my IH 300 utility tractor plugged up twice, resulting in major overhauls. To keep the problem from happening again, the internal screen was removed and a high capacity screw-on type cartridge filter was installed in the return line at the rear of the pump."

**Leonard Seltzer, Manhattan, Ill.:** "The sliding double doors on my Morton machine shed open from the middle and would rattle around in the wind. To hold the doors in place I tried using a truck tire filled with concrete, but it weighed about 850 lbs. and was a hassle to move.

"To solve the problem I bought a used

ammunition box at a gun show, filled it with concrete, and set it on a two-wheeled hand truck. To hold the doors shut I place the box against the inside of the doors. It weighs about 230 lbs.

"The wooden box measures 1 ft. wide, 44 in. long and about 8 in. high. After filling the box with concrete I put a 3/4 in. dia. loop of rebar into the center of the concrete be-



fore it hardened. A nylon ratchet strap runs from the loop about 3 ft. up to the outside door handles. This strap will help keep the doors from flopping around in windy conditions.

"I nailed a small chunk of 3/4-in. thick plywood under each end of the box so that the box sits off the ground far enough for me to get the hand truck under it. I leave the hand truck with the weight most of the time. Whenever I want to open the doors, I simply unhook the strap from the door handles and hand truck to move the weight away. You can buy these old ammunition boxes at gun shows for only about \$5 apiece."

**Leonard Olson, Terog Mfg. Co., 387 Atlantic Ave., Stephen, Minn. 56757 ph 800 423-3918 or 218 478-3395; fax 3622:** "Our new Track Guards are designed to keep the tracks on Caterpillar Challenger tractors in line so they don't come off to the inside.

"The Track Guards are designed to bolt



on. Three holes have to be drilled into each side. The kit comes with a template for proper bolt hole location.

"The guards are a must if you're using your Challenger for ditching or excavating work. Turning on an incline while pulling a heavy load can cause the track to come off toward the inside. If the tractor's final drive drops on top of the track it can fray or even tear out cables embedded in the track. Eventually you'll have to replace a costly track.

"The kit comes with instructions. Installation time is about one hour. Fits all Challengers with 30-in. tracks. Other models are available.

"Sells for \$495 plus S&H."



**Air hose runs through hole cut into side of pipe and up to quick coupler.**



**To unwind the hose the operator turns a crank at bottom of unit and pulls out hose.**

### Easy-To-Use Wall-Mounted Air Hose Reel

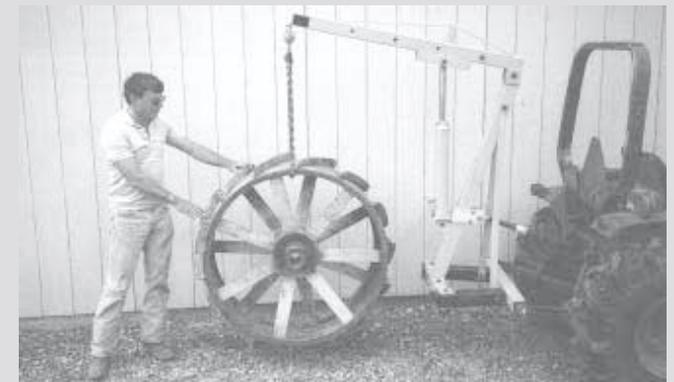
"Our wall-mounted air hose reel is easy to use and doesn't take up a lot of space. It keeps the hose up off the floor so it always stays clean," says Joel Waldner, Lethbridge, Alberta.

The reel is made from a short length of drill stem pipe with a circular steel plate welded onto its top and bottom. A steel arm made from 1-in. tubing is used to bolt it to the shop wall. A quick coupler mounts on top of the reel. A steel air line connects to the coupler with a short length of rubber air hose. The main air hose runs through a hole cut into the side of the pipe and up to the coupler equipped with a swivel fitting. To

unwind the hose the operator simply turns a crank at the bottom of the unit and pulls out the hose.

"It works great for operating any air tool or compressor," says Waldner. "The reel has 60 ft. of hose on it which is long enough that we can open a shop door and use it outside. It really comes in handy for changing shovels on tillage implements. If we want we can reach through a second hole in the pipe, disconnect the coupler, and attach an even longer hose."

Contact: FARM SHOW Followup, Joel Waldner, 67 Tudor Crescent, Lethbridge, Alberta, Canada T1K 5C7).



**Unzelman and Intlekofer mount the converted hoist on their Kubota tractor.**

### Rolling Engine Hoist Converted To 3-Pt. Mounted Crane

"It has more reach than the original engine hoist, and we can take it anywhere now," says Kirk Unzelman and Mike Intlekofer of Bellevue, Wash., who recently came up with a simple, inexpensive way to convert a common rolling engine hoist into a versatile 3-pt. mounted crane. They use it on their Kubota tractor.

The men say the conversion takes just a few minutes and the crane can be easily changed back to a conventional engine hoist when needed.

They fabricated four new parts to make the crane – a pair of short legs that replace the longer legs that come with the hoist; a cross beam that fits into the bottom beam of the hoist and attaches to the two lower pins of the 3-pt. hitch; and a metal bracket that attaches to the column and serves as the connection point for the top link.

"We can lift large loads to a considerable height using either the cylinder on the crane or the 3-pt. hitch, or both," says Unzelman.



**They fabricated four new parts to convert the rolling engine hoist into a 3-pt. mounted crane.**

Contact: FARM SHOW Followup, Kirk Unzelman, 4635 130th Ave. S.E., Bellevue, Wash. 98006 (ph 425 746-6520).