

## Money-Saving Repairs & Maintenance Shortcuts

which would have cost about \$400 to replace. "One day I used a voltage meter to test the batteries and found that one was low, apparently due to an internal short. Evidently the front wheel assist wouldn't work because the module wasn't getting enough voltage, and that was also why I couldn't start the tractor in cold weather. I replaced the battery with a new one which solved both problems."

**Walt Hanefeld, Continental, Ohio:** "The 2 1/2-in. dia. exhaust pipe on my Silver King tractor goes down through the hood and screws into the exhaust manifold. Whenever



it rained, water would follow down the pipe and leak into the engine manifold and into the crankcase. To solve the problem, I brazed a belt tensioner idler pulley off a 1988 GM car engine onto the bottom part of the pipe to form an umbrella just above the manifold. I pressed the bearing out of the pulley, then used a hole saw to enlarge the hole so I could slip the pulley over the pipe. I've also used this idea on two other tractors. It works great.

"I first read about Helicoil inserts in FARM SHOW (Vol. 23, No. 5) and now use them to repair stripped threads (Emhart, Heli-Coil, 510 River Rd., Shelton, Ct. 06484 ph 203 924-9341). I also use Speedy Sleeves to repair shafts whenever a seal wears a groove in the shaft which causes the seal to leak. Speedy Sleeves provide a new surface for the seal to run on so it doesn't leak. They can be found at most stores that sell ball bearings.

"I came up with a handy way to operate air tools in my 2 1/2-car garage-shop. I ran



1/2-in. dia. PVC lines up one wall, along the ceiling, and down the opposite wall. An air compressor is hooked up to a 'T' coupler that's mounted on one wall. There's also a T coupler on the ceiling, with an air hose hanging down from it, and a coupler on the



other wall. Every time I want to use an air tool I just plug it into a coupler. It's really handy to use because I don't have to drag air hoses across the floor. I used PVC lines instead of other material because PVC doesn't draw as much moisture. I use a brass ball shut-off valve to keep air from leaking

out of the compressor, and an in-line water filter to keep water out of the lines. I use brass fittings wherever I can in order to further help keep rust out of the lines."

**Raymond A. Miettinen, Republic, Mich.:** "A U-joint went out on the front driveshaft on my Ford 3/4-ton pickup, which ruined a bearing mount on the transfer case. It would've cost a lot to repair so I solved the problem myself. I took the transfer case apart, then cut a 1 1/2-in. wide strip from a coffee can and used a disc grinder to cut notches into it to fit over the gussets. I fitted it around the ribs and used clay to seal it. I centered the new bearing, then installed the snap ring and old bearing on top. I poured lead around the bearing and also put a new seal on the outside. Now it works fine and cost very little. I drilled holes and put small bolts in the gussets in order to make a good bond for the lead."

**Richard E. Adams, Winnebago, Minn.:** "I've started using a shop vac to clean the paper air filter on my combine. It does a good job and now the filters last three to four times as long."

**Ralph Bertram, Winslow, Ind.:** "I made a portable shop light by bolting a track light on top of a music stand. I ran a cord up through the music stand and into the light. Now, if I'm working on a car, I set the light right next to the fender. I also use it often for welding work."



**Marvin Vlietstra, Kalamazoo, Mich.:** "We often use our skid steer loaders in wet manure, which gets into the sealed wheel bearings and contaminates the lubricant, ruining the bearings. The only way to get at the grease zerks was to take off the wheels, which is a big job. To solve the problem, we drilled and tapped a hole in the axle housing and then ran a length of copper tubing from the hole to the skid loader's fenders. Now we grease the bearings much more frequently and as a result the bearings last much longer."

**E. Yastrubecki, Paynton, Sask.:** "The bottom rear roller bearings starting turning on the shaft on my Hesston 5500 baler. Rather than replace the entire roller, which would have been expensive, I built the shaft back up with JB Weld. It worked 100 percent. I haven't had any problems in the two years since I made the repair. Best of all, it cost almost nothing. JB Weld is very versatile and long lasting. I've found lots of uses for it. It's hard to believe it works as well as it does."

**Vernon Bratton, San Antonio, Texas:** "I've found that ordinary distilled white vinegar works great for getting rid of rust. I can pour it onto rusted metal one day and the next day the rust is gone. However, the rust will eventually come back again if I don't treat it again with something. I've used it on a lot of things including bolts, tools, old horseshoes, and hand saw blades. One drawback is that if the vinegar spills on my clothes, I can't wash it out."

**Teddy and TJ Shambaugh, Cerro Gordo, Ill.:** "To make a low-cost creeper for our shop, we mounted the seat off an old



Four plywood panels hang from a steel frame. All eight sides of panels are fitted with tools.

### "Lazy Susan" Tool Cart

No matter what tool Jan Parker needs it doesn't take long to find it, thanks to his "Lazy Susan" tool cart.

"It's much faster and easier than digging through a tool chest, looking for a wrench or socket that might not even be in there," says the Reedsville, Ohio, farmer.

The cart measures 4 by 5 ft. and carries a 7-ft. high, 4-ft. wide steel frame that holds the "Lazy Susan" - four panels of plywood with all eight sides fitted with tools. The plywood panels attach to a metal shaft that runs vertically down the middle of the frame. The bottom end of the rod rotates on a bearing installed in the floor.

He hangs tools by category on all eight sides, with wrenches on one side, sockets on another side, screwdrivers on a third side, etc.

"I arrange the tools so the smallest one is

on the left and the largest on the right," says Parker. "If I'm working on a tractor or other equipment where I need to use several different tools, I just pull the cart over there with me instead of having to walk back and forth all the time. I mounted 500-watt Quartz lights and electrical receptacles on top of the Lazy Susan's frame so no matter where I'm working I'll always have plenty of light. I had been using a rolling tool chest, but I got tired of sorting through the drawers looking for what I needed."

"On some panels I just drive nails to hold tools. I attached 2 by 6's sideways to some panels and bored holes in them for hanging screwdrivers, chisels, pliers, etc."

Contact: FARM SHOW Followup, Jan A. Parker, Box 41484 St. Rt. 7, Reedsville, Ohio 45772 (ph 740 667-3881).

**Intromark, Inc., 217 Ninth St., Pittsburgh, Pa. 15222 ph 800 851-6030; Website: www.intromark.com:** "Our new



Propane-To-Air adapter turns 4 to 40-lb. propane tanks into compressed air tanks. It allows you to reuse older propane tanks with or without an overfill protection device. The



unit connects directly to the tank. After purging the propane completely from the tank, you attach the adapter and fill the tank using any standard tire inflation nozzle. The converted container works great to inflate

(Continued on next page)