## Money-Saving Repairs & Maintenance Shortcuts

ish twisting the wire.

"It consists of the gearbox out of a Black & Decker angle grinder head, with the gears



from a boat winch added to it. The gears extend the angle drive and have a slot cut into them. I used 3/4-in. sq. tubing to make straps that connect the gearbox to the drill's handle and to the top of the drill."

Dakota Riggers, 704 East Benson, Sioux Falls, S. Dak. 57104 (ph 800 888-1612; website: www.dakotariggers.com): This company offers a wide variety of wire rope



assemblies and also nylon tie-down straps for hauling big bales, etc. They also sell winch lines and overhead hoist cables for shops. "Most of our business is directed toward contractors and utility companies, but we also sell direct to farmers," says a company spokesman.

John Liska, Raymond, Alberta: "When the hydraulic pump went out on my Cockshutt 1250 tractor, I no longer could raise or lower the 3-pt. However, I still wanted to use the tractor to pull my 5-ft., 3pt. mounted, pto-driven mower. To keep the lower lift arms - and the mower - from dragging on the ground, I placed a 2-ft. long, 4 by 4 wooden block on top of the drawbar and under the lift arms.

"The block keeps the mower in a fixed position at the proper working height. The



mower is supported on back by a single wheel. Anyone could use this idea. The thickness of the block depends on the height of the drawbar and on the type of 3-pt. implement you're using."

Paul Miller, Belmond, Iowa: "Whenever the greaseless bearings go out on a roller on my round baler, I buy steel tubing from my steel supplier and press in new bearings. It costs less than 1/4 the cost of a new roller from the company."

**Brent Norton, Lodi, Ohio:** "I've found that WD-40 penetrating oil works great as a hand cleaner. I cut deep into a paper towel tube and slip the can inside it. That way, whenever I spray my hands I have a rag right there to use."

Richard D. Norman, Akron, Ind.: "In your last issue Edward B. Edelen, Jr., of Bryantown, Md., said that when the diesel fuel injection pump on his Deere 3010 tractor failed, he was able to get it working again by rigging up a system to relieve pressure on the fuel return line from the injector. Using two 'T' fittings, he plumbed in another line from the return line to the supply line and then to the fuel tank. I think he needs to get that injection pump removed right away. The governor weight retainer ring inside has failed, causing the return line to plug up. What he did is only a temporary fix. He will find that the engine will either run away after the weight retainer pins break off, or the broken pins will lock up the hydraulic head, also breaking the driveshaft, and his pump will then be totally ruined. I know because I used to work at a diesel pump shop and still take on some older pumps to repair at home."

David Huppert, Ellsworth, Wis.: "I find that a length of 3 or 4-in. dia. PVC pipe makes

a handy place to put

my arc welding rod whenever my welder is running. It leaves my hands free to do anything. I cut the pipe to whatever length, then tie it to one of the legs on my welding table. It's a simple, low cost idea."

Leo L. Stancel, Marion, Iowa: "I'm restoring my 1938 Deere G tractor and wanted to sand blast and repaint it outside my shop.



So I built this 4-wheeled dolly that lets me use my garden tractor to pull the tractor - with the wheels off - outside the shop. It pulls real easy. I used 4-in. sq. tubing to build it. Four bolts hold the dolly to the tractor, using existing tractor bolt holes. The dolly also fits Deere A and B tractors with the same bolt holes."

Tim Proksch, Abbeville, S.C.: "I remove magnets from old speakers and stick them on equipment I'm working on to hold different parts and keep them from getting lost."

Guy Ramsey, Nenana, Alaska: "I just paid \$411 to have a fuel pump replaced in my 1990 Chevrolet 4-WD pickup, plus \$240 to have it hauled 60 miles to Fairbanks. Can anyone tell me how GM came up with the absurd idea of putting a pump inside the gas tank so the whole tank has to be drained and removed just to replace a simple pump? Is there any way I can put a pump in the line?"

Daniel Krenzel, Cullman, Alabama: "In your last issue I read the article by David Sheffield on carbonized rods. I remember as a young boy my dad welded up the worn drawbar holes on our tractor using hard surface welding rods and keeping the holes open using a carbon rod. The rod came from the center anode from our telephone batteries.

"The rod was 1 in. in diameter and 6 in. long, and made from very dense carbon/ graphite. He would reduce the rod to the size he needed with a grindstone to fit the intended size of the hitch hole. He then just fill-welded the hole from bottom to top. He would cut the carbon rod away from the bottom with a hacksaw, leaving the weld locked piece in the hole and put the remainder into our welding supply box for the next time. The piece welded in place was then pulverized with a punch and we were ready to hook up and go."

Bruce Graham, Tyler, Texas: "I stripped out a thread where the flywheel bolts onto the crankshaft of an engine which was already assembled. I certainly didn't want to have to pull out the engine again in order to fix the

(Continued on next page)

## **Rotating "Tool Caddy"**

Arvin De Cook needed a tool storage rack that would carry the most commonly used tools in his shop and could be easily pulled outside over uneven surfaces. He couldn't find any commercially-built units, so he built his own 4-wheeled tool caddy that can be easily pulled by one person, or towed with a garden tractor or 4-wheeler.

"It pulls and steers like a wagon and is a great time-saving addition to our shop," says De Cook.

The caddy chassis is made from discarded riding mower axles and rides on large pneumatic tires. Ahandle attaches to the front axle and tie rods. The axle and hub from a 2-ton truck mount vertically at the center of the chassis and support a six-sided sheet metal body, with hooks welded to it to hold various tools. The caddy's body rotates on the truck axle bearings and hub, allowing easy access to any tool.

"It can hold up to 100 different tools, and each tool has a specific spot so I can see where it goes and which tool is missing," says De



"It pulls and steers like a wagon and is a great time-saving addition to our shop," says Arvin De Cook about his rotating "tool caddy."

Cook. "The large pneumatic tires allow the caddy to roll easily over rough surfaces, so I can take my tools right to the repair job whether it's across the shop or outside the shop. My out-of-pocket cost to build it was about \$60."

Contact: FARM SHOW Followup, Arvin De Cook, 9658 Hwy. F 62 E, Sully, Iowa 50251 (ph 641 594-3438).

## Dolly-Mounted Toolbox Easy To Roll Around

James Vroman, Monett, Mo., wanted a toolbox that he could easily move around. So he removed the back caster wheels from a Waterloo 3-drawer roll-around toolbox and attached a 2-wheel dolly to the back.

"I use it for my job at a hospital where I do a lot of maintenance work. It's really handy," says Vroman. "When I need to go to a different building, I tilt back on the handle and use just the dolly wheels. The big wheels spread the weight nicely, and the toolbox is only 2 ft. wide so it fits through doors easily. It'll go right across grass or gravel with no problem, and if I want I can even go up and down stairs with it.

"I paid \$70 for the toolbox and \$15 for the dolly."

The toolbox locks on solid to the dolly with six latches on each side. The latches are made from 3/4-in. conduit clamps, with two lengths of 1 1/2-in. sq. tubing used as spacers that make room for the toolbox lid to open. Bolts run from the toolbox through the tubing and into the clamps. A magnetic cabinet catch mounted on the dolly handle is used to hold the lid in the up position.

"The next one I build will have more ground clearance. When I go through doorways now, I have to lift the toolbox over the door threshold," says Vroman. "I probably didn't have to use as many latches as I did, but I wanted to make sure the toolbox would never come loose from the dolly."

Contact: FARM SHOW Followup, James com).

## "Lazy Ole" Tool Holder

Frequently used tools are easy to get a hold of in Ole Wilner's shop at Grove City, Minn., thanks to "Lazy Susan," tool holders he built (or "Lazy Ole" tool holders, as his wife calls them).

"It took only a couple of hours to make and is really handy," says Wilner.

He took an old car rim and welded 5/16in. studs every 3 in. around the top. He cut holes around the bottom for hanging big wrenches from. Then he welded a 5-in. pulley to the center of the rim, so it would rotate on top of a 3-ft. pipe which is welded to a base made from a brake drum.

Contact: FARM SHOW Followup, Ole Wilner, 17585-545<sup>th</sup> Ave., Grove City, Minn. 56243 (ph 320 877-7786).



Vroman removed the back caster wheels from a 3-draw er, roll-ar ound toolbox and attached a 2-wheel dolly on back.



Vroman, 517 S. Hwy. 37, Monett, Mo. 65708 (ph 417 235-8461; email: james@vroman.

Tool holder was made out of an old car wheel rim that rotates on top of a 3ft. pipe.

