



bucket to fill the transmission takes a long time, so I developed a system that uses a cordless impact wrench to do the job. I mounted the oil pump off a Chevrolet car on the bucket lid and run the pump's pickup tube down into the bucket to pump the oil into the transmission."

John Grady, Norwalk, Ohio ph 419 681-1233; hdpartsbyjohn@gmail.com: "I sell a conversion kit that uses gear reduction starters to convert the 2-cyl. diesel engines on Deere tractors to electric start. It's designed for Deere 70, 720, 730, 80, 820, and 830 models. Switching to a 12-volt system provides the starter and gear reduction starter with more torque and reduces the power requirement. A 24-volt electric start system is also available.

"I developed a 13-tooth gear reduction adapter that mounts in place of the original starter. A flange adapter attaches to the original starter's mounting bracket, eliminating the need for any modification."



John Stuber, DeSoto, Mo.: "I turned a rolling walker into a handy, portable workbench. It's sturdy, lightweight, easy to maneuver, and quickly folds up for storage. I used a piece of scrap aluminum to make the 16 by 24-in. top and screwed wooden pieces onto 3 sides to contain the tools. A piano hinge off an old aluminum cabinet is screwed onto the back side, which allows the walker to fold.



"A pair of short 1 by 6 boards connect the piano hinge to the walker's tubular frame. The boards attach to the piano hinge with hex head screws and to the walker with carriage bolts. A metal strip is screwed onto the piano hinge for extra strength.

"To fold the workbench I raise the top and then push down on factory buttons at the walker's front corners, which releases the legs so I can fold them in.

"It's tremendously handy and takes up much less room than my roll-around cart. All my tools are always right there where I need them and at a convenient working height so I don't have to bend over. I use it in my wood shop, garage, and even my house."

Tom Hohl, Duluth, Minn.: "I tipped over a wheelbarrow full of wood going into my woodshed," Hohl says. "It was more



an inconvenience than a big problem, but I thought of a way to keep it from happening again as I was picking up the pieces."

A 2-ft. long plank ramp leading into his woodshed had slipped off a narrow concrete ledge. The 5-in. drop stopped his wheelbarrow dead in its tracks and over the load went. Hohl's solution was to bend a 3/4-in. lip at a 90-degree angle on one end of a 1/4-in. thick by 18-in. long piece of aluminum. Using heavy wood screws he attached the metal to the 2 by 10-in. ramp. The lip end extends about 4-in. beyond the end of the ramp, sliding over the wooden sill of Hohl's woodshed entry door, holding the wood ramp securely on the concrete foundation ledge. "It's a simple idea that just required a big hammer and wise to bend the lip before I attached it to the ramp."



Gene Boehler, Farmersville, Ill.: "My 10-year-old Work Sharp knife sharpener does an excellent job (www.worksharptools.com; ph 800 597-6170). I can use it with 3 different sanding belts - an 80-grit to shape the blade and remove any knicks; a 220-grit to put a nice edge on the blade; and a very fine 6,000-grit to polish the blade edge. It works so well that I could probably get a knife sharp enough to shave with it.

"It was definitely worth the \$75 I paid for it. My only complaint was that I could only sharpen one side of the blade at a time, which prompted me to build my own sharpener that sharpens both sides using 2 sets of sanding belts."

Boehler made the double-sided sharpener by using the electric motor and main bearing shaft and pulley off an old Sears Craftsman belt sander. The entire assembly sets on a rectangular steel plate, with the motor mounted on an 8 1/2-in. length of 2-in. square tubing attached to the plate. A pair of spring-loaded clamps are used to adjust belt tension.

"I had acquired a supply of small electric motor bearings in various lengths, and used various sizes of aluminum shaft to make shafts and pulleys," says Boehler. "I bought O-ring drive belts at a NAPA store and mounted them on grooves that I cut into the shafts. It's designed to use the same sanding belts that Work Sharp uses on its sharpener."



Ewen's oil station has 4 individual tanks filled with different types of oil and one filled with solvent. Keeping things neat makes maintenance easier, he notes.



Orderly Oil Change Setup

Overhead oil tanks, drip collectors and organized filters keep Howard Ewen's shop clean and neat, making oil changes a lot easier. With 4 IH 4586 diesels, around 30 Olivers, 5 or 6 farm trucks, 3 pickups and several pieces of homemade equipment, he goes through a lot of oil and filters.

"I have five 75-gal. oil tanks mounted on a rack above my head with a fill cabinet for pitchers and 2 1/2-gal. jugs mounted at one end of the rack," says Ewen. "Rack space at the other end holds a case of transmission fluid, other windshield washer fluid, and other liquids."

Like most farmers, Ewen used to keep his oil in barrels with a hand pump on each. When he had a chance to pick up an old service truck bed with the tanks on it, he grabbed it.

"I have 4 tanks filled with different types of oil and one filled with solvent," explains Ewen.

A 2-in. outlet on the bottom front corner of each tank has an elbow with a 1 1/2-in. reducer on it and pipes that lead to ball valves above a fill shelf. The shelf is expanded metal with a catch tray beneath to collect drips and spills.

"Any drips from ball valves or containers drain into a 5-gal. bucket and are used for oiling parts," says Ewen. "Even a few drops at a time count up, and it keeps the shop

clean."

The fill cabinet doors are sealed with rubber foam to keep dust from collecting on the pitchers and jugs.

A large steel cabinet nearly 7 ft. tall and the width of the rack does double duty as filter storage and as a walkway for filling the oil tanks. A ladder on one end gives Ewen easy access. When one of the tanks runs out, he retrieves a barrel from nearby storage and lifts it into position above the tanks with his shop hoist.

"I made a harness for the barrel so it tips it forward," says Ewen. "Each tank has a 2-in. inlet on it at the rear. I lower the barrel's faucet end into the inlet pipe and open it up. Once I loosen the bung, it empties out quickly."

Ewen's wife Pat maintains inventory on the filters. When a filter is used, a slip of paper is filled out with the filter number and the date and dropped in a box. When filters go on sale locally, Pat pulls the slips and determines how many filters of various types are needed.

"We usually keep around 100 on hand," notes Ewen. "Having a place for them and always having them on hand makes maintenance of equipment easier to do."

Contact: FARM SHOW Followup, Howard Ewen, Jr., 6997 W State Rd. 8, Lacrosse, Ind. 46348 (ph 219 754-2365).



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