"I've added a tool holder and a rotating hose reel to my portable air compressor."

Michael Halbirt, Silverton, Ore.: "The best thread penetrating oil I've used is a 50/50 mix of acetone and automatic transmission fluid. I originally read about it in FARM SHOW and have used it ever since. The acetone evaporates pretty quickly, so you might need to keep adding it to the mix.

"I have several Black & Decker and Sears power tools. They were designed to just plug an extension cord into the tool rather than having their own cord. But, as you're using the tool, the extension cord falls out and the tool stops. I solved this problem by duct-taping a small 'ball' bungee cord to the extension cord. When you're using the tool, you wrap the bungee cord around the tool and hook it with the ball. This holds the plug to the tool pretty well."

John Mathis, Smithland, Ky.: "John Deere's disc mower has a bearing problem. The main drive bearings are enclosed in a housing. When the seals on these bearings fail and the grease dries up, the bearings fail completely. I drilled, tapped, and installed two zerk fittings and filled the cavity with grease. Now, even if the seal fails, the bearings still have grease.

"I have a 100-ft. heavy-duty air hose that I use all the time. I keep it connected and coil it in a plastic 55-gal. drum. It's easy to store and uncoils to its full length without problems."

Jim Corcoran, Sagle, Idaho: "I've found the key to my shops is to organize everything. I add sticky tags to all my cabinets so I can quickly get anything I need for any job. It's been a real time saver to me."

John Loder, Redmond, Wash.: "My dad taught me years ago how to make this simple aid. Take a small plastic hand mirror and drill a small hole, about 1/4 in. When using a hand drill or hand tapping, the mirror will show if you get out-of-square."

Grant, Ilparpa, Australia: "When using my Cub Cadet ST 100 22-in. wheeled string trimmer, the cord breaks off regularly. Carrying enough extra cord was a problem. So, I cut a 500mm length of 50mm diameter Poly Pipe, capped the bottom end, and cable tied it to the bottom upright portion of the handle, with a cap on the top. I cut cord to length and store it in the Poly Pipe and don't waste time walking back and forth for more cord. This isn't really for big farm equipment, like tractors, but it's definitely made our life easier maintaining our block. We've shared this idea with friends who do this now, too."

Roy Cowan, Edna, Texas: "I bought a large bottle of kids' bubble soap at the dollar store and used a 50/50 mix in a spray bottle as a leak detector. Even the tiniest of leaks blow large bubbles that don't dry as fast as soap. It works on any compressed gas system (tires, refrigeration, propane, oxygen) and costs almost nothing."

Larry Harrington, L & K Machine LLC, Western, Neb.: "The engine in a Cushman golf cart needed to be replaced. It was more economical to get a new engine than repair the old one. The new engine didn't have a tapered crankshaft, and a crankshaft from a generator wasn't the same taper. I bought an import engine and tapered the crankshaft to fit the Cushman pulley. I didn't take the engine apart to taper the crankshaft. Instead, I took off the shroud and plug and put the whole engine into the lathe and machined the taper on the crankshaft."

Floyd Plank, Whitewater, Wis.: "I had a carburetor that was all gummed up after I put a gas stabilizer in the gas barrel. So, I took it apart as much as I could. I took it to the house, put it all in an old pot, added a quart of tomato juice, and cooked it for a half hour. (Hint: Don't use your wife's good cooking pots!) I went back to the shop and sprayed everything with ether while the parts were still extremely hot. Everything looked and worked like new.

"If power tool batteries go too low and don't want to recharge, I take two electrical wires and bare the ends a little. I poke one end in on the plus and the other wire in the minus and then hook them up to a 12-volt car battery (plus to plus and negative to negative) and give them a boost for about half a minute. If it doesn't work the first time, I give it another try for a little longer. It's always worked for me."

Fready, Alexander, Iowa: "I recycle everything. Everything I have was someone else's junk.

"I pull fans out of scrapped microwaves. They only use about 10 watts, not much more than an LED bulb. They're the best little fans you could have.

"Most of the time, you just need to wash the plastic with window cleaner. I put USA Fluid on the metal and lube the shaft. Sometimes, one is worn or not working well, but that's rare.

"They're long-lasting and quiet. I have one I use on a small wood stove, and it runs perfectly for 24 hrs. a day, months on end. It barely picks up any dust and does a great job moving the heat around the room."

Gerald Ripps, San Antonio, Texas: "I read online that Awesome from the dollar store is a good degreaser. I found that the ZEP spray bottle is almost identical and screws on.

"The yellow cap spray oven cleaner from the dollar store cuts grease on the impossible, but it can also remove paint."

Jeffrey Mitleiser, Vesper, Wis.: "Replacing bulbs in my shop lights with 3, 4, or 5-panel LED lights really made my shop bright."

Steve Faber, Tiffin, Ohio: In Vol. 48, No. 2, someone bought large safety pins to keep small parts from being lost in the sandblaster. This is a good idea. My dad showed me how to make safety pins from almost any wire. I make them in many different sizes for various purposes."

Moped Wheels Drive Shop-Built Bandsaw

Tony Foale has designed, machined, and built over 100 homemade parts and tools in the past 5 decades. Often, he uses spare metal from one job to fashion a tool or part for another, but a recent creation used two moped wheels he found at a flea market.

Foale says the 1-in. wide by 16-in. dia. wheels were perfect to run the 1/2-in. blade on his shop-built bandsaw. One was a front wheel with bearings and a brake, and the other was a rear wheel without bearings, just right for a single-sided mounting. Foale built the frame and tilting table for the saw from his inventory metal and mounted an electric motor to drive the blade.

Foale says he knew from experience making motorcycle wheels years ago that the original rim shape of the moped wheels would need to be modified. The slightly curved edges needed to be removed and the rim well in the center had to be filled completely so the surface was smooth. He used his 55-year-old Burgess bandsaw to cut off the outside curved portion of the rims. He smoothed the cut edges to create a true outer diameter, then used stripper to remove the old paint and bead blasting to remove metal residue. Minimal machining was needed to true the outer diameter.

Foale filled the center rim well with polyester car body filler, a product he says is easy to apply, adheres well to metal, and sets hard. He machined the filler smooth to the edges with a slight crown on the center, then glued a thin rubber belt made from the moped inner tube to the surface to provide traction for the blade.

Foale machined a triangular spacer to fit inside one of the wheel housings. The spacer and wheel bolt securely to the output flange of the bandsaw's 25:1 gearbox. The idler wheel didn't require a spacer.

No stranger to design and building, Foale taught himself machining and welding, using those skills on projects small and large. For 15 years, he owned a business that designed and built chassis for racing motorcycles, many of which won championships in several countries. He also worked for 3 years as Director of Advance Design for Segway. He's written books on chassis design and authored technical articles on motorcycle and automobile handling.

Drive wheels on Tony Foale's shop-built bandsaw are from discarded moped wheels.

Foale says he'll use his bandsaw for cutting different types of sheet metal, aluminum, and some steel. His motor uses a compound reduction gearbox to slow the blade speed to less than a tenth of that required for cutting wood. The motor is mounted on a pivot so he can easily change speeds for cutting different metals.

Contact: FARM SHOW Followup, Tony Foale (www.motochassis.com).

Air Filter Pre-Cleaner Preserves Fuel

The Redekop KAS Intake Pre-Cleaner works to extend the life of air filters in farming and construction equipment by cleaning the air before it enters the engine. As a result, you'll get easier filter maintenance over the long run and better engine performance with less downtime.

Redekop's patent-pending design prevents contaminants from entering the engine's intake system, improving filter efficiency. The KAS Intake Pre-Cleaners make it possible to run equipment all day without concern about replacement filters. It's engineered for the ideal balance between airflow and particulate removal. This results in optimal engine performance and reductions in maintenance costs and downtime.

With the Pre-Cleaner, you get lower air restrictions for better fuel economy and performance. The Pre-Cleaner takes just 5 min. to install, allows for the highest particulate removal efficiency for an increase in filter life, and offers a drastic reduction in downtime and operating costs. Best of all, the filtration results in a lower overall carbon footprint.

Customer reviews show that the pre-cleaners are easy to install and work as promised. Many praised their ability to save significant money on fuel and maintenance costs. Pricing varies by model but averages $1,125.

Redekop's Pre-Cleaner takes just 5 min. to install, allows for the highest particulate removal efficiency for an increase in filter life, and offers a drastic reduction in downtime and operating costs.

Contact: FARM SHOW Followup, Redekop Manufacturing, PO Box 178A, RR #4 Hwy #16 West, Saskatoon, Sask., Canada S7K 3J7 (www.redekopmfg.com).