Money-Saving Repairs & Maintenance Shortcuts



John Travis, Dundee, N.Y.: "The pedal that's used to raise or lower the 60-in. deck on my Ferris zero-turn riding mower was hard to push down, so hard that I eventually suffered a torn meniscus knee injury. Ferris makes a deck lift assist for some of their mowers but not mine. My neighbor, who owns a fabrication shop, suggested we could use an electrohydraulic cylinder from an old Deere small square bale thrower to raise or lower the deck automatically.

"He removed the pedal from its vertical support lever and attached one end of the cylinder to the lever and set the other end at a fixed position. The cylinder is wired to the mower battery, so now I just use a toggle switch to raise or lower the deck."



Russell Nemtschk, Thorndale, Texas: "Here's an idea I use when I need to change spark plugs but don't have much room to maneuver. I attach a piece of 3/16-in. dia. vacuum hose onto the plug and then thread it into place. Twisting the spark plug this way gives me a good sense of feel so I don't accidentally strip the threads."

Josh Wilks, Jr., Tillatoba, Miss.: "To paint smaller items, I screw several wood screws part way into a couple boards so they hold the item above the surface of the wood. When I want to flip the item over to paint the other side, I put the other board over the top and flip both boards over."

Thomas G. Fargen, Plain, Wis.: "One of the handiest additions to my shop was hanging a cheap electric winch from the rafter that I can use to lift riding mowers, wood splitters, boat motors and motorcycles. Cheap and easy."

Leonard O. Nolt, Owen, Wis.: "We can buy 2 4-ft. LED bulbs for less than what it costs to replace the ballast in the fluorescent lights in our dairy barn. So when a ballast goes out, we remove it and then replace the lights with LED bulbs. When purchasing LED bulbs, remember that some LED's are made to be direct replacements and work with the ballast. We use ones that bypass the ballast because they're more efficient. You can find YouTube videos that show how to rewire the light fixtures as needed."

Gary F. Thomsen, Arion, Iowa: "Our H Farmall was very hard to start. It cranked very slowly. I shortened one of the 6-volt battery cables by 10 in. Problem solved.

"The remote for our garage door opener stopped working. A new one would have cost a whopping \$168 because the opener was 25 years old. I took it apart and found that a soft plastic plunger had deteriorated. I cut off a piece of the soft grip on a ballpoint pen and installed it into the remote. Worked great."

Larry J. Fenske, Blue Earth, Minn.: "I don't like to heat my entire shop so I save money by keeping everything that needs to be kept warm in a 10 by 12-ft. lean-to on the side of my shop. I have a 30,000-btu non-electric propane heater to keep it warm."

Dan Deal, Vernon Center, N.Y.: "I keep a cup of used anti-freeze to dip drill bits in when drilling instead of cutting oil. Works better to keep bits sharp, lubed, and cooled."

William Sanford, Roxboro, N.C.: "I had an electric clutch fail on a 140 Deere lawn tractor. Instead of paying \$400 plus for a new part from Deere, I sent it off to be repaired by a clutch rebuild company at a cost of just \$175.

"Another tip I have is to buy oil change kits from auto parts stores and substitute mower or tractor filters for the automotive filters. Saves a lot of money.

"The best modification I made in my shop is to put 2-in. pads of foam rubber on all my creepers. My back thanks me at the end of the day."



Ryan Van Der Bill, Sioux Falls, S. Dak.: "I hang a box fan in my shop with a square 1-in. thick furnace filter mounted on the back side. It pulls dust out of the air above my power saw. It's probably best to use a cheap fiberglass media filter since a better pleated filter would slow down the flow of air. Just vacuum the filter off once in a while.



"Here's another shop idea. If you have a small bench grinder or other tool that you don't want to mount permanently on your workbench, mount it to a piece of plywood fitted with a couple screws that you can use to hold it tightly on your workbench when needed. Quicker and easier than using C-clamps."



Andy Kozlowski, Califon, N.J.: "I use a car bumper jack from the 1970's to lift my zero-turn mower so I can clean the deck and sharpen blades. I put a ring on the bumper jack's hook and then put an

S-hook on that. I place a jack stand under the deck for safety. Best of all, the bumper jack takes up little space when not being used."





Andy Kozlowski came up with a way to make steel rings from discarded or broken springs.

Make Rings From Springs

Making steel rings for shop projects or quick fixes is easy if you have some old springs lying around. Andy Kozlowski has a foolproof method that's fast and easy if you take the right precautions.

"Use protective eyewear, and don't put your fingers or anything fragile or of value between the coils of large springs," warns Kozlowski. "Broken or discarded garage door springs and others that are strong and tight can be hard to separate. If one hand gets pinched in a spring, it will be hard to get it out with only one free hand."

The first step in cutting one or more coils loose from a spring is to run a wire or cord through the center of the spring as a restraint. It will keep the cut coil(s) from flying loose.

Kozlowski points out that metal rings are two coils thick except where the ends overlap. When cutting coils loose, find the existing end and then back off from that point on the coil being cut.

"It is customary to cut the new end on a slant like the old one, but not required," adds Kozlowski

With the restraint in place, identify the spot to be cut. Use a screwdriver to separate the coils to provide access to the cutting target.

"The bigger the screwdriver, the more room you will have to work; however too large and it may stretch the coils, leaving space between them," says Kozlowski.

He suggests using a Dremel tool with a steel cutting disk. If creating a one-coil ring, simply make a lateral cut the length of the spring to release the desired number of rings.

"You can use a Dremel, an angle grinder with a cutting disc, a pair of bolt cutters or even a hacksaw for this," says Kozlowski.

When first cut away, the ends will not line

Rings made from springs work great as hangers.



up due to the coiling of the spring. The cut also leaves a space between ends; however, both problems are easily solved.

"Use 2 screwdrivers to bend the ends further out of alignment until they clear each other," says Kozlowski. "Using a pair of groove joint pliers, compress the ring until the space between ends is as small as desired. Then use the screwdrivers again to realign the ends."

Kozlowski suggests using a bench vise on larger spring coils. He adds that if using the rings to hold items like keys, add them to the ring before compressing and aligning ends. Rings to be closed permanently can be tack welded at the joint.

For a full set of pictures and more detail visit http://www.instructables.com/id/Rings-and-Split-Rings/.

Contact: FARM SHOW Followup, Andy Kozlowski, 61 Old Readingsburg Rd., Califon, N.J. 07830 (ph 908 399-8886; andyk 00@yahoo.com).

From Snapper Mower To Mobile Forge

An old Snapper riding mower inspired Jim Blackford to build the forge he had wanted for decades. He flipped the mower deck upside down and welded it to a stand that puts it at the perfect working height.

And since it is on wheels, it's easy to move wherever he needs it.

After removing the mower blades, motor and seat, Jim mounted the deck to use as the firebox for the forge. He welded parts from an old chain hoist to the mower frame to create a flat area for an anvil. A used blower fan from an industrial furnace provides air for the fire.

"He had some issues with the pump, getting the air to circulate right," Michael notes, but got it to work by adding a plate with a few drilled air holes.

Blackford burns wood to make coals for his forge, and when the coals are burned up, they are easy to remove using the deck's side chute.

Since he can roll it to wherever an extension cord reaches to power the fan, Blackford uses it to fix pieces of equipment like a 3-point



Blackford flipped mower deck upside down, then welded it to a stand to serve as the firebox for his mobile forge.

hitch on a sickle mower. He's also used the forge to create knives for relatives.

Contact: FARM SHOW Followup, Jim Blackford, 8926 Shelby 486, Hunnewell, Mo. 63443 (ph 660 346-6285).