## Money-Saving Repairs & Maintenance Shortcuts



Sterling Truesale, Whitewater, Wis.: "I was tired of chimney sweep rods taking too long to screw together and take apart while making multiple passes sweeping a chimney. So, I used some old air hose couplers to speed up the process. Air couplers and chimney sweep rods have the same threading so it's as simple as just screwing on the couplers once and then hooking up is as quick as connecting an air hose."



LeRoy Momper, Fredonia, Wis.: "Whenever I wanted to use my bottle jack I would have to search for the handles. I solved the problem by clamping two pieces of conduit to the jack. Now the handles are always with the jack and the conduit does not interfere with operating the jack."



John Rochester, Deerfield Beach, Fla.: "I use plastic flowerpots to hold extension cords. I drill two holes, one near the bottom and the second on the opposite side and higher up. I put the extension cord inside and pull a few feet out of the bottom hole and coil the rest inside. You can just pull out what you need and they're stackable for storage."

Fritz Groszkruger, Dumont, Iowa: "I had a broken bolt that holds the fuel filter bracket on my 3010 diesel. My mechanic said I should convert to the modern square filter anyway. The bolt was about 1/4-in. deep into the block. After trying to weld a nut on it with no luck, I drilled a hole and tried an Easy Out. It wouldn't budge. My mechanic suggested candle wax. I heated the bolt and block and pushed a candle against it. Then the bolt turned right out."

**Thomas Smith, Moodus, Conn.:** "When mounting wheels on a tractor or other equipment with lug bolts, the easy way to do it is to find a bolt that is 5 to 6-in. long with the same threads as the lug bolts. Cut the head off and screw the headless bolt into the hub. Hang the wheel on the bolt and then slide it onto the hub."

**Robert Johnson, Canyon, Texas:** "My DR trimmer was always troublesome to start. It came with an oddball cordless battery that powers the starter and had no charging circuit. I have a lot of Ryobi 18-volt tools and some extra chargers. So, I rewired a charger and made a plate to adapt it to the housing. It works great and spins the engine so fast that the primer bulb is not needed. I used for most of two seasons before I even had to charge the battery."

Fred Schulz, Woodland, Wash.: "Punching Holes in shim stock for bearing halves without tearing or wrinkles can be done by drilling a hole in a piece of flat bar the size desired. Turn up a short piece of round stock to fit the hole. Grip the round stock in the drill press chuck and lay flat bar on the drill press table. Pull the spindle handle down to engage the two pieces. Clamp the flat bar securely for a 'hurry-up' punch press.

"If you want something more permanent for many holes, use case-hardened material. A concave grind on the punch will help. I have easily punched brass stock up to 1/32in. thick."

Vance Rannells, New Plymouth, Ohio: "I added a 12 kW pto generator to my tractor so I can do welding repairs anywhere. I also use a cracker box welder and plasma arc welder." Isaac Rankin,



Swoope, Va.: "My truck was leaking oil out of a small crack in the oil pan. I would've had to drop the axle or pull the engine except for a stick of Blue Magic QuikSteel epoxy. I got the pan as clean as I could (with oil dripping)

and mashed a glob of epoxy on the crack. It hasn't leaked now in over two years."



**Carl Stoloski, Appleton N.Y.:** "I put a used oil filter on my tractor front hub as a dust cap."



Sean Woods, Elburn, Ill.: "A trick I discovered to get tiny ports clean is to use a small fish aquarium pump. The pump creates a very fast vibration and if you put the carb in a small dish of gas and then set it on the pump, it vibrates the carb and liquid to better clean the inside. This basically replicates a more expensive ultrasonic cleaner."

## "Lift Table" Makes Repairs Easier

FARM SHOW contributor Tony Bunniss built a lift table from a 5,000 lb. truck lift modified with extra scrap steel from his shop.

Bunniss has long enjoyed restoring and retrofitting garden tractors and other lawn equipment to sell. Sometimes he has over a dozen tractors in the works and needs to transition quickly from one machine to the next.

"I looked at several commercial lift tables, none of which met my criteria," says Bunniss. "This included lifting a tractor, but the table also had to lift it to a height that I wanted to work at. I could have revamped any of the commercially available ones, but why should I spend my time correcting someone else's mistakes, especially since I knew what I wanted and had the facilities to make it happen?"

"I bought a truck lift at an auction and only paid \$10.00 for it because it had been sitting in water and the air cylinder was rusted," says Bunniss. "I had no idea if the air cylinder could be used, but I was able to hone it smooth and then had a local O-Ring manufacturer make me custom O-Rings."

The table measures 40 in. by 6 ft. and lifts from 17 to 54 in. with a stop/lock every 6 in. Bunniss torched off the original wheels on the lift and installed casters on the rear. For the front, he used two heavy-duty bearings to serve as wheels.

All the sliding points of the scissors and lift arm utilize a bearing (six total), and the pivot points are bronze bushings. The scissors brackets work to keep the table level, as all lifting is completed through the original lifting arm, which initially had U-shaped brackets designed to fit under a truck's rear axle.

As Bunniss explains, "The attached hydraulic hoist is capable of lifting the front of any of the garden tractors so that I can remove the mower or work underneath if need be. I use an adjustable jack stand if working under the tractors. It also comes in handy if I need to remove an engine which I can then place a removable, small engine test bracket, which is on the side of the table."



Bunniss bought a truck lift at an auction and only paid \$10.00 for it because it had been sitting in water and the air cylinder was rusted.

He used 6-ft. straight ramps on the table, which are long enough to allow for winching any of his garden tractors onto it while clearing the edge of the table with the tractor's deck.

While Bunniss isn't sure how much his table can lift, he has his air compressor set at the factory setting of 175 psi. As the cylinder has a 12-in. bore, he estimates it amounts to 19,000+ lbs. of push.

"This lift will move my Deere 420 garden tractor with the thatcher, vacuum, and mower or the rotary broom mounted on it," says Bunniss.

Overall costs for the project were minimal. Bunniss estimates he spent under \$500 for the lift, O-rings, boom jack, winch and ramps.

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## **Go-Anywhere 6-Wheel Hand Truck**

Michael and Connie Kenner got tired of getting stuck in soft ground with their hand truck. They turned the 2-wheeler into a 6-wheeler, and now it goes just about anywhere.

"It was great except on soft dirt or sand. "We added four wheels to the axle, and that solved the problem," says Michael.

The Kenners have a couple of acres in the city. At 76, Michael appreciates how handy the hand truck is for moving potted plants and a few 55-gal. barrels he has put to use.

"I have a lot of stuff, and some of it's getting hard to move by hand," says Kenner.

Adding the wheels was fast and easy on this particular hand truck. "Others might be more challenging, but all I had to do was pull one cotter pin," he says. "The axle slipped straight out, and I added the wheels with some pvc spacers to keep them from rubbing into each other."

Kenner says he appreciates all the great ideas in FARM SHOW and hopes the goanywhere hand truck idea will help someone else.

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Adding additional wheels with PVC spacers makes a hand truck easier to use on soft ground.