## Money-Saving Repairs & Maintenance Shortcuts

Milton Webster, Taylor, Texas: "I came up with an inexpensive way to add water and antifreeze to my tractor tires, using the filter basket from an old automatic coffee maker and a 3-ft. length of clear plastic tubing. The filter basket forms a perfect funnel, and the tubing runs from it down to the tire valve stem.

"I've used an old Chicago Pneumatic air hammer for years with a blunt chisel, to break down tire beads on yard tractors so I can remove tires without taking wheels off."

Christopher Spicher, North Las Vegas, Nevada: "My dad and I made a super bright workbench light on the cheap. We bought



2 Snap-On LED work lights for \$33, took the mount off the bottom of each light, and mounted them on the ceiling above our workbench, using a 4-in. lag bolt with a washer between the base and light that allows the light to swivel. We plugged the lights into a remote switched socket on the ceiling and used a wall wire covering to hide the wires

Lane Cummins, Austin, Texas ph 512 363-8555; titiantech@netzero.net: "I've come up with a patent pending, disposable cardboard tool that makes it easy to pour out of paint buckets and cans. I call it a Container Drainer. It comes in a flat piece and with instructional drawings on how to fold it out and apply. I can send out samples once I know there's enough interest."



Tri-Vice Industries, Westlake Village, Calif. ph 805 370-5487; www.tri-vise.com: Anyone who needs to cut pipe, metal bars or lumber, but doesn't have a vise handy will like this device. With the material safely locked in place you can measure, cut, drill, finish, tighten fittings, solder, weld, etc., all on the ground. Separate units are available for lumber and pipe.

Glen Allan, Ontario, Canada: "In regard to Jerry Brandt's problem with his LX188 Deere riding mower that was detailed in the last issue, the surging he experiences when he's not running the mower deck could be caused by something loose in the governor linkage. It may be a loose arm where it comes off the engine or attaches to the carburetor.'

Richard Delage, Malone, N.Y.: "Engine surging when not under load could be a lot of things but the most likely culprit is worn or mis-adjusted parts in the governor linkage. However, there could also be an air leak in the intake system. You can test for leaks with an unlit propane torch. With the engine running, hold the torch so propane hits the suspected areas. If there's a leak, propane will be drawn in and you'll notice a change in the engine.

William Necessary, Tombstone, Ariz.: 'To find an engine intake air leak, I've had good luck starting the engine and spraving WD-40 on the suspected areas. If there's a leak the engine will stumble when the WD-40 hits it.

William, Hildebeitel, Kenyton, Penn.: 'I had a similar problem to Jerry Brandt with my Deere 50 garden tractor. I suspected an air leak in the intake manifold gasket. After

Abner Stoltzfus, Leola, Penn.: "Some of the grease zerks on my farm equipment are located in tight corners where I need a hose on the grease gun, and some are in narrow



corners too small to reach with my hand and therefore require a solid pipe. I didn't like having to take both kinds of grease guns with me all the time. So I unscrewed the

hose from the pump and slipped a 3/8-in. dia., 8-in. length of conduit over the hose, and then screwed the hose back on. The conduit is just the right diameter to hold the hose tip solidly.

Whenever I need to use the hose I just slip the pipe back toward the pump to expose the hose. I started using this idea more than 2 years ago and haven't found a grease zerk yet that I can't reach."

Dennis Strahle, Eagle, Mich.: "I use 5-gal. gas/diesel cans to fill my antique tractors, but the fuel flows out really slow and I got tired of holding onto them. The fuel flow is restricted because the air vent is too restrictive. To speed up the flow I drilled a 27/64-in. dia. hole into the air vent and tapped it for a short 1/2-in. dia. bolt. It lets me empty the gas can a lot faster and with much less arm fatigue."

Mark Yax, Solon, Ohio: "I find that a piece of bandsaw blade works great for scribing out lines on a rounded surface. The rake of the blade's teeth gives the blade some grip and keeps it from sliding around."

Cal Miner, Willmar, Minn.: "I use the metal cages around plastic bulk chemical totes to store metal tubing, pieces of pipe, conduit, and other parts. I flip the metal cages upside down. By inserting crossbars I'm able to stack items too short to go all the way through. The cages have about the same footprint as a pallet so I can easily move them around with a forklift or skid loader

"By triple rinsing the plastic totes and then hooking up a trickle hose, they work great to water plants and trees."

I replaced it, the engine ran like new with no surging.

Fred Welton, Grove City, Penn.: "Engine surging when not under load could be caused by fuel that's too rich. If he's running premium, try switching to regular and it might solve the problem.

Lee deVries, Crawfordsville, Ore.: "Regarding Jerry Brandt's 'surging' Deere garden tractor, I had a similar experience with a Deere mower that's also equipped with the Kawasaki engine. It was surging badly when not under load and I had tried all the simple things I could think of until finally I was at the end of my rope. I called my Deere dealer and they said they'd had many complaints about this motor and suggested that before bringing mine in for expensive repairs. I should try a can of Seafoam additive in the fuel tank to neutralize the effect of ethanol. I did and after about an hour, the tractor ran like new again Since then I now use non-ethanol fuel and I installed a fuel shut-off valve in the fuel line so I can run the carburetor dry after use. I bought this mower in 1996 and it has many hundreds of hours of hard use. The Kawasaki engine still runs like new, especially now that I figured out this problem."

## Where To Buy New Idea Picker Parts

If you're looking for parts to get a New Idea corn picker running better, Glendale Repair can help. If they don't have the part, Steve Zook says they can fabricate a replacement or rebuild the original. He maintains contact with several other picker repair shops that also fabricate parts. Glendale makes new snouts and carries new cast iron toes for snout ends. They also carry a special straw walker for the New Idea model 325.

"It replaces the first and second flapper and moves trash through better," says Zook.

Another of Zook's special touches is building up the steel snapping rolls with a thin laver of carbide. In the past he used nickel, but after trying carbide on his own picker, Zook is sold.

"They should last longer," he says. "However, the difference is in how they work. They take the ear through faster and pop it right off."

Glendale can rebuild gearboxes and rubber rolls. Zook suggests that customers call for prices on parts and availability. "We can rebuild rubber husking rolls with new bearings and seals," he says. "The price will vary depending on the model and the extent of repair. It can cost from \$500 to \$900 for a set.

The company also specializes in tractorpowered pickers to horse-drawn units, with special tandem wheels and 12-volt brakes.

"Our steel tandem wheels mounted on a rocker arm are easier on the machine." says



Glendale Repair supplies parts for New

Idea corn pickers, including this horsedrawn unit with special tandem wheels and 12-volt brakes.

Steve Zook, Glendale Repair. "When it hits a bump, the picker just rides through it instead of dropping. It is easier on the elevator too.'

The brakes are an added safety feature. As Zook notes, horses can pull a picker and wagon, but it can be hard for them to stop it on a hill.

Glendale also offers crawler repair and parts. They carry sputnik casters with replaceable sealed bearings in the swivel, as well as plastic 8 to 10-in. wheels with nvlon bearings for the sputnick.

"We have designed and fabricated quick attach units that let you use nearly any skidsteer loader attachments on your crawler," says Zook

Contact: FARM SHOW Followup, Glendale Repair LLC, 241A Williams Run Rd., Christiana, Penn. 17509 (ph 610 593-2942)

> Andy and Tony Mulvihill's home-built crane stands 24 ft. tall, is 42 ft. wide and can lift 15 tons.

## **Giant Shop Crane Lifts 15 Tons**

When Andy and Tony Mulvihill learned they'd have to spend at least \$2,000 a year to rent a truck crane to switch out the dry and liquid tanks on their new Rogator, the brothers quickly decided to build a large A-frame crane to do the job.

"Renting a truck crane costs \$400 to \$500 a pop," says Andy, "and one isn't always available when you need it. Having our own crane lets us make the switch ourselves whenever we need to."

The 24-ft. tall A-frame is 42 ft. wide and can lift a whopping 15 tons. The vertical upright beams are 10 by 10 in. by 3/8-in. thick tube steel. They're supported by angled braces on each side made from 4 by 4-in. tube steel. Each of the uprights is welded to a tubular steel base that's 4 in. by 10 in. by 5/8 in. thick. Both bases are bolted onto concrete slabs that are 2 ft. wide, 16 ft. long and 24 in. thick.

We can also lift the front or the back of the Rogator to change from narrow wheels for spraying to wider wheels for lime and dry fertilizer application. It sure beats trying to raise it up with hydraulic or air jacks."

The Mulvihills built the crane tall and wide to suit their specific needs. The 42-ft. I-beam cross member is 24 in. deep, 3/4 in. thick, and has 12-in. flanges. It weighs more than 4,300 lbs. Six 1-in. bolts through the base flange at each end attach the cross beam onto the uprights through 2-ft. sq. by 5/8-in. thick plates. Lateral support is provided by angled gussets welded to the inside of the uprights and to the base of the cross beam. One of the uprights is also attached to the 14-in. thick concrete building foundation about 3 ft. above grade.

The hoist is powered by a 5 hp electric motor that raises and lowers the load on a true vertical lift. The operator raises and lowers the cargo with a handheld remote.

Andy says the cost for building the crane was somewhere around \$4,500 and he figures it will pay for itself in about 2 1/2 vears.

Contact: FARM SHOW Followup, Andy and Tony Mulvihill 25789 Northfield Blvd., Hampton, Minn. 55031 (ph 651 226-3255)

