



Dwayne Oxford, Holladay, Tenn.: "Here's how I store good pull-start springs off small engines. I drill a hole in the center of a suitable size lid, then wind the spring into the lid, beginning with the outer end. Then I thread 14 or 16-ga. solid copper wire through the hole and across the spring to keep it in place. I also label the top of the lid with the name of the motor it came out of."

Scott Willis, Monroe, Wash.: "To the fellow in FARM SHOW who uses automatic transmission fluid (ATF) in his air tools — I'm not sure that's a good idea. Some of the oil in air tools ends up as a fine mist and you breathe it. Engine and transmission oils may contain paraffins, carcinogens, etc. Air tool oil is better for your health. I know some people have used ATF for a long time without noticing any adverse health effects. But the ones who got sick probably didn't write in."

Harvey Malon, Rapid City, S. Dak.: "Ordinary 1-gal. square metal cans work great to store nuts, bolts, screws and small



parts. Cut out one side of the can and then build a simple cupboard with shelves as deep as the cans and as wide as you want. The distance between the cans should be about 1 1/2 the depth of the cans so that you can overload them and still see what's in



"Propane bottle" toolbox is bolted on back of Janssen's Deere mower-conditioner. Metal pins and pipes welded on inside the bottle are used to keep tools in place.

Propane Tank Toolbox

"I used a 10-lb. propane bottle to build a handy toolbox that's bolted on back of my Deere 946 mower conditioner. It really comes in handy to hold wrenches, ratchets, sockets, grease tubes and a complete set of new knives for the mower. Whatever I need for the machine stays with the machine, and my tractor cab remains uncluttered," says Branden Janssen, Vega, Alta.

The toolbox is bolted to metal brackets that U-bolt onto the frame on back of the mower conditioner. It has a hinged door on top.

Janssen removed the valve from the bottle and cut the stand and top handle off, then used a disc grinder to cut out the door. He used

them. Be sure to put a back on the cupboard. Mark the cans with a masking pen."

Jacob Schrock, Trenton, Mo.: "When the pto U-joint went out on my New Holland 489 haybine, the entire driveshaft pulled out when I tried to fix it. Rather than taking the tongue off the machine, I cut a small access hole by the rear joint so that I could reach in and line up the driveshaft. It was quicker and easier than anything else I could have done."



Raymond Werner, Winfield, Iowa: "I use an old tire as an in-field air transfer system. It lets me fill a flat tire in the field with enough air that I can get back to my shop or to a tire repair garage. All I do is attach one clip-on air fitting to the tire's valve stem and another fitting to a short length of hose."

Al Reed, Elmwood, Ill.: "The best feature we've built into our shop is a large gantry-style crane made out of an old IH planter frame and large caster wheels. It will lift 5 tons — and just clears the lights on our 16-ft. ceiling. It's great for handling big equipment we're working on."

Scott R. Layfield, Lima, N.Y.: "If you have a bolt that breaks off, you can weld a bigger nut over the broken end of the bolt, working through the center of the nut. It will come right out."

"Old bicycle inner tubes work well to hold trash bags in trash cans. Simply stretch them over the top of the can."

Ed Wozniak, Florence, Miss.: "I had a rusted-out rim on the front of my 1949 Ferguson tractor. I found out you can retain the center part of the wheel and just replace the outer rim. All you have to do is weld the original plug welds. Works great."



FARM SHOW

Money-Saving Repairs & Maintenance Shortcuts

Have you come up with any unusual money-saving repair methods for fixing farm equipment? What maintenance shortcuts have you found? Have you had any equipment recalled by the factory? Name a particularly tough mechanical problem you've had with a piece of equipment and how you solved it.

These are a few of the questions we asked randomly selected FARM SHOW readers. If you have a repair tip, maintenance shortcut, or other mechanical experience you'd like to share, send details to: FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 or email us at: editor@farmshow.com.

Mark Newhall, Editor



threaded a rubber line beside it, cut the steel line, and hose-clamped the rubber one to bypass the leak. A simple, quick solution."

Duane Johnson, Lohrville, Iowa: "I have renovated several wagon gears over the years when the front ends froze up. I built a cage that slips on the end and accommodates a 12-ton hydraulic jack to press out the L-shaped front spindles. Once out it's easy to clean out the rust and dried grease in the holes and on the spindles. It's like putting the front end in a press but a lot easier!"

Linda Smith, Salem, N.J.: "I have some vision problems. A friend of mine taught me to clean and then spray paint all the grease fittings on my equipment. Makes them very easy to see."

Jim Gore, Ulster, Penn.: "The brakes on my 80-06 Deutz didn't work well — sometimes they wouldn't work at all. I noticed that the brake fluid reservoir was mounted lower than the wheel cylinders. So I clamped a small hose to the reservoir and ran it up into the cab to another reservoir. They work like they should now. No problems."

Arthur Perrea, Burke, N.Y.: "I had to dig a 1-ft. deep trench across a driveway. It was so hard-packed, a plow and a roto-tiller just bounced off it. So I tried a high-pressure washer and it ate right down through the gravel. Made an easy job of it. But it was messy — wear goggles and a raincoat."

Sandy Jackson, Etowah, Tenn.: "I have a 6807 Deutz tractor that doesn't like to start under 35 degrees. I have cattle to feed so this is a problem. After using larger batteries and a lot of boosting for years, I finally bought a kerosene torpedo-type heater that puts out about 75,000 btu's. After about 5 min. of blowing on the side of the tractor exhaust manifold, it then starts like it's the 4th of July. I just have to get the exhaust so it's warm to the touch. Doesn't seem like it strains the starter at all."

Mark Vroman, Buffalo, S. Dak.: "I mounted a 6-in. vise on a piece of pipe that slides into a bigger pipe mounted on my pickup's receiver hitch and also into a pipe mounted on two stacked pickup rims in my shop. Let's me get a lot more use out of one vise."



Lloyd R. Lucas, High Springs, Fla.: "I was going through a lot of air filters on my Kubota UTV until I made this change. I ran a long piece of pvc from the filter up through the roof of the vehicle. Pulls in clean air. Big improvement and I'm running with a clean filter much longer."

"I also had a problem with vibration cracking the flanges on the muffler. So I cut the solid pipe off and replaced it with flexible exhaust pipe. It solved the problem because it's less rigid."

Bruce Branstad, Gransburg, Wis.: "I had a problem using ethanol fuel in my chainsaw. I had to have the carburetor rebuilt twice in a period of one year. The mechanic told me to use 91 octane non-oxygenated gas and I haven't had a problem since."

Kim Klocke, Arlington, Iowa: "The fuel line that runs along the rear side of the engine on my Deere 5500 tractor developed a leak. Rather than having to raise the cab, I just