Kirk Dahl, Ruby Valley, Nev.: "Probably a lot of folks already do this but I wanted to pass it along because it works so well for me. I use an old tooth brush to scrub grease and grime from my fingernails and cuticles. They're softer than most fingernail brushes and easier to handle so you can do a better job when your hands are really dirty."

Richard Ackerman, Columbia, S.Dak.: "I purchased an older 440 Bobcat with a bad engine. I overhauled it but it didn't last long. I bought a new engine and before long I had to overhaul that one, too. Soon after, it blew up and I decided to go a different direction. I installed a 40-hp. Air-cooled VW engine in it.

"The engine was surprisingly easy to install. I machined the flywheel to accept the variable speed pulley and I had to weld supports on the front pulley to drive the hydraulic pump.

"This engine is a much better fit than the original one, with enough power to outperform other similar size skid steers. I have been using it now for 12 years with no problems. What's more, I've installed VW engines in some of the neighbors' Bobcats."

John Buesinger, Taylorville, Ill. (ph 217 824-5794): "I built a tripod base for an old bench vise grip. Unlike a 4-legged stand, the 3-legged base always finds solid footng. "The portable



vise can be moved easily to the job."

Dan J. Krenzel, Cullman, Ala.: "In response to Guy Ramsey's comments in Vol. 28, No. 1 regarding GMC's in-tank fuel pumps, I have a 1998 Buick Regal 308 Turbo. The car has a steel fuel tank and if you get condensation in it, the tank will rust. The intank fuel pump has a screen that gets clogged with rust particles and loses output pressure. The output line has a filter to keep the finer rust particles out of the high pressure fuel system and injectors.

"I found out my problem on the second pump when I asked for it back and did some of what I call 'Krenzel destructive analysis."

"I'll have to get a new tank and use a 'gas dry' additive on a regular basis or use ethanol fuel which will absorb the moisture to keep my tank from rusting.

"It's not the pump's fault. GM engineers created an improper tank. They put the pump in the tank because it's a small pump prone to overheating because it's made out of cheap parts, so they buried it in gasoline to keep it cool. They will deny the heck out of that but my 'destructive intuition' told me the truth."

Everett W. Gustafson, RD 2, Box 349, Brockway, Penn. 15824: "When I had to replace the starter on my John Deere 318, I had to remove the engine since the starter is between the engine and frame.



"There's not much room to get the drive shaft connected. It keeps falling off the spline at the transmission so it's difficult to reconnect the two when putting the tractor back together.

"I solved the problem by cutting a rectangular hole over the drive shaft so I can use a wire or rope to hold the shaft up while I put the engine back in place.

"You have to be careful not to cut off any pipes under the floor when cutting the hole. "To replace the cover I cut out, I bolted a 1-in. by 1/16-in. piece of aluminum to the

cut-out piece which holds it in place. "In addition to this, I also added three

wheel spinners which makes it easy to control the steering wheel with my left hand while I use my right to control the hydrostatic lever. "

Kenneth Crumpton, 161 Tidwell Rd, Winfield, Ala. 35594: "My father, two brothers and myself are always building something in our farm shop.

"The biggest problem we faced was that we never had enough room. So, when the welder wasn't used, we would carry it to the corner of the shop and clear up its space for something else.

"The welder is heavy and took two of us to move it. If I was alone, I would strain and grunt until I had moved the welder.



Service rack puts garden tractor up high, making it easy to work on belly-mount mower. **Service Rack'' For Garden Tractors**

"It puts everything up high enough that I can service it easily," says Harold Davis, Trenton, Tenn., about the service rack he built for his Deere garden tractor equipped with a 60in., belly-mount mower.

The service rack is made from 1 1/2-in. steel tubing and 1 1/2-in. angle iron. It consists of a 4-ft. wide, 8-ft. long rectangular frame mounted on four 25-in. high legs. A pair of 8-ft. long ramps attaches to one end and a 12-in. high metal bar acts as a "stop". A pair of 12-in. wide sliding ramps can be placed anywhere inside the frame to accommodate smaller tractors or ATVs. A ladder can be attached to either side of the rack. "I recently bought a new Deere X495 gar-

den tractor, and it's a lot easier to remove the deck when it's up in the air," says Davis. "By placing a piece of plywood on top of the frame, I can convert it into a work table," notes Davis, adding that the ramps can also be used to load tractors or ATVs into a pickup. He's looking for a manufacturer.

Contact: FARM SHOW Followup, Harold Davis, 5 Sally T. Cooper Road, Trenton, Tenn. 38382 (ph 731 855-9946; email: 20hdavis@bellsouth.net).



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.

"We also had to move the welder around



"I came up with the idea of building a frame with casters on each corner. After searching in the shop, I found a lawn mower frame. The engine was bad so I removed it and set the welder on top of the mower's base. I attached two 1 by 4-in. boards to the welder, then bolted it to the mower frame.

"Now, we can carry our welder anywhere in the shop or around the shop with ease."

Douglas McAlexander, 610 Hwy 220, Cedar Grove, Tenn. 38321 (ph 731 487-2306): "In 1985 I purchased a new 530 John Deere hay baler. It has a hydraulic system that puts the twine on the bale automatically when it reaches a preset diameter.

"The hydraulic system has a filter. When this filter is changed, the air has to be purged from the system before the twine arm will cycle.

"It is almost impossible to do this using the method recommended in the owner's manual. I have talked with other owners who are having the same problem.

"To solve the problem, I went to an auto parts store and got 4 in. of 1 1/2-in. dia. radiator hose, two clamps, a 1 1/2-in. dia. freeze plug, and a tubeless tire valve stem.

"I drilled a 7/16-in. hole in the freeze plug to install the valve stem and then clamped the freezer plug in one end of the 1 1/2-in. hose.

"I removed the cap from the hydraulic pump and clamped the other end of the hose to the top of the pump.

"I put a hand tire pump on the tire valve stem, put the baler in gear, pulled the rope that puts the twine arm in motion from a small bale, and then started pumping with the hand tire pump.

"The arm starts to cycle with one very short stroke.

"There are several other Deere balers this will work on."



Mark Newhall, Editor

Tannehill lengthened steering arm on his 1982 Ford 1200 (see arrow) and added a diagonal brace for support.

Paul Tannehill, Somerset, Penn.: "I have a 1982 Ford 1200 compact 4 by 4 tractor that is my handiest best buy ever. My only complaint was the lack of power steering. With a front-mounted hydraulic blade, steering could be quite a workout.

"I finally found a simple way to add power steering without adding pumps or hydraulic cylinders. I think the idea would work on other tractors as well.

"The idea involves modifying the steering arm that connects to the steering sector. After examining it closely, I realized there was a lot of travel not utilized from the steering box.

"I jacked up the front end of the tractor just to take the weight off the wheel kingpin. I removed the four bolts that hold the steering arm on the kingpin and shaped and welded a 1/2-in. by 1 1/2-in. by 2 1/2-in. plate to lengthen the steering arm.

"I drilled a new hole and tapered it with a die grinder to fit the tie rod. It's about 2 1/2 in. center-to-center from the original factory hole in the steering arm.

"I plugged the factory hole with a 1/2-in by 1-in. shoulder bolt. Then I welded on a 1/ 4-in. by 1 3/4-in. by 6 1/2-in. long plate for diagonal bracing from the new extension to the other steering arm.

"I readjusted the tie rod from the steering sector to the new arm extension to have the wheels hit the stop bolts on the axle.

"I went from 2 1/2 turns lock-to-lock on the steering wheel to 3 3/4 turns.

"The down side is more steering wheel revolutions while mowing or brush hogging, but I added a steering wheel spinner to make the wheel easier to turn. It spins so easily now it's definitely worth the inconvenience."