Myron Schafer, LaCrosse, Ind.: "Our 1978 Deere 12-row 7000 planter still has the original drive chains because we remove them after the season and store them in a mixture of diesel fuel and used oil until spring. It stops rust and eliminates problems with stiff link sections. We plant 1,500 acres of corn and beans every year.

"To make shanks last longer on our field cultivator, we cut 12-in. long pieces of 2-in. plastic water line and slip it over the shanks, tucking the lower end under the tops of the shovels

"To seal cold out on our shop door, we fold a piece of shag carpet in half and nail it around the door frame. Works great on older doors that won't seal up.'

Vic Stratman, Argyle, Mo.: "When a roller broke on my 605E Vermeer baler. I had to pull off a gear but couldn't get behind it. So I took a piece of roller chain long enough to wrap around the gear and laid it out on the shop floor the way it would wrap around the gear. Then I welded two lengths of threaded rod to the roller chain, positioned so that they would be straight across from each other when the chain was wrapped around the sprocket. I then installed the chain on the gear using a master link to fasten it in place. Then I was able to pull the gear off by tightening the nuts against a plate placed against the end of the shaft.

"Here's another idea that saves time in my shop. I bought a small used dishwasher to clean wheel bearings. I tie the bearing sets together and use a liquid detergent. I blow them dry with compressed air as soon as the wash cycle is complete. Works great."

Sam Lambert, Pontiac, Ill.: "We have replied most of the electric motors on our bin unloading augers and sweep augers with hydraulic motors. To run two motors at once, we hook them in series and run them on one tractor outlet. Hydraulic motors are much easier to move around and we like the variable speed.

"Moldboard plowing is almost a thing of the past on our farm but we still have 100 plus acres of alfalfa to turn over each year. We've discovered that when our landsides become worn, we can weld worn-out plow shares to the landsides and use them some more before spending money on replacements '

Scott Rayhons, Ventura, Iowa: "Here's a way I came up with to seat tubeless tires, especially wider type tires that are particularly hard to mount (wagons and implement

tires, ATV's, etc.). First take out the core in the valve stem. Then spray a few squirts of ether-type starting fluid inside the tire. Wait 20 to 30 seconds for the ether to vaporize, then toss a match into the gap between the tire bead and the rim. When the ether ignites, it'll blow the bead tight against the rim. You have to take the core out of the valve stem because otherwise it might blow the stem right out of the tire. This idea works good but you should start out with just a little bit of ether until you find out how much it takes. Also, some kinds of ether starting fluid don't vaporize as fast as others and won't work as well."

David Prause, China Spring, Tex.: "When the chain oiler broke off my 605 Super F Vermeer round baler, I used 1/8 by 1-in. strap metal to make a rectangular box to hold a plastic 1-quart oil bottle. I bolted it to the same spot where the old oiler was. positioning it over the main drive chain so when the oil bottle is turned upside down, oil drips directly onto the chain. I filled the quart bottle with used engine oil and used trial and error to punch the right size hole in the lid with an ice pick. When the baler's not in use, I just turn the bottom right side

"I also carry a small squirt bottle full of used oil for periodically oiling other chains or the cam on the rollers. I carry the squirt bottle in a 1-gal, anti-freeze container with the top cut off but the handle left on."

Dave Moore, Graham, Mo.: Problem: A sealed bearing on a combine is going out or shows excessive wear. Solution: You can extend its life by lubricating it in place with a mixture of 3 quarts diesel fuel, 1 quart chainsaw bar oil, and 2 oz. of planter box graphite, according to Moore. "This mixture stays with loose and worn bearings, thanks to the graphite and the chainsaw oil. The mixture is also an excellent chain lubricant.'

David Millsap, Abingdon, Va.: "We repair our own tractor flats. To dismount the inner side of the tire with the wheel still on the tractor, we put a 7,000-lb. hi-lift jack against the lift arm on the tractor and the jack foot against the tire. A few cranks of the jack and the bead pops off."

Lewis Dale, Great Bend, Kan.: "I run Farmall M tractors and keep two or three around for repairs so I don't have to buy new parts. You can pick the tractors up relatively cheap at sales. Some of the same parts wear out on most of the tractors but

## **Money-Saving** Repairs 2 **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 farm 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.

## **Heavy-Duty Cutting Table**

Discarded radiators make top-notch cutting tables to hold metal being cut with a torch, says Robert Cumpston, Colfax, III.

Cast iron won't cut as easily as steel and the open areas let the blown-out metal fall on through. Cumpston says he uses one side until it gets cut up too much and then turns it over and uses the other side before selling the worn-out unit to a junkyard and replacing it with another one.



there are enough good parts on different machines to make it worthwhile. I've also found that many parts from an IH W6 are interchangeable with the M.'

Royle Duncan, Alden, Iowa: "I place a magnet on the hydraulic intake screen to catch metal filings before they enter the charge pump and transmission on my Deere tractors. Works on 10 to 60 series tractors."

John Vlaminck, Vlaminck Excavating, Inc., Grass Valley, Calif.: "I read the article in Vol. 17, No. 6, about the problems Emily Coffee and other operators have had with Ford New Holland 276 tractors catching on fire. I had a similar experience with my 1986 Deere 510 backhoe and would like to pass along my ideas on what may have caused the problem.

"Last fall, when my operator started the tractor early in the morning to warm it up, a burst of flames blew out from under the hood, almost like a gas explosion. He immediately shut off the tractor and the fire went out. The cause of the fire was an electrical wire rubbing on a hydraulic hose to the point that the insulation coating was worn off the electrical wire. The electrical wire then arced to the wire braid on the hydraulic hose until it created a pin hole in the hydraulic hose. Since the tractor's hydraulic fluid runs under 2,500 lbs. of pressure, the combination of spark and pressure can create a spectacular fire.

"The same thing also happened to a friend with a Deere tractor. Because he was able to put his fire out with minimal damage, he was able to clearly see where the fire started and that it was the same problem I had.

"My suggestion is that electric wires and hydraulic hoses should be separated anywhere there is potential friction between

Tom Stanley, Gillette, Wyo.: "Our 1586 IH tractor always ran hot and then started eating valves. After a local shop rebuilt it twice with no improvement, I tore into the tractor myself and consulted the service manual. I discovered that the ring gap needed to be manually ground in and set. Since I did that, the tractor has racked up over 5,000 hrs. with no problems.

"When the shovels wear out on our Melroe drill, we take another worn out shovel and weld it onto the bottom. When that wears down, you cut it off and weld another worn one on the bottom. The savings add up since shovels for these drills are now up to \$8

"To get mobile air pressure for air-powered tools, I mounted a compressor tank on an old Wisconsin motor. I can easily load it onto my 4-wheeler or into my pickup to go to the field '

Robert Mleziva, Luxemburg, Wis.: "To better utilize space in our farm shop, we put our shop furnace up above the shop floor on a sturdy frame. We use the extra space under the furnace to store tool boxes and large tools.

"I'd like some advice from other farmers on how to vent out exhaust from tractors or trucks when running them inside the shop."

## "No Nail" Table Collapses Flat

When John Dewey, Penfield, Ill., needed a collapsible table in his shop, he remembered a sawhorse design he built several decades earlier in high school. He decided to copy the design but on a larger scale.

"It's strong. I've put two car engines on it at once with no problems," says Dewey, noting that you could use the basic design to build a table of almost any size.

There's no nails, screws, or other fasteners in the table, which is made entirely out of 3/4-in. plywood. It's held together by overlapping, deep slots in the wood. Two cross pieces fit down onto a wide leg at either end. A single piece of plywood rests on top to form the tabletop.

Dewey uses the table for everything from church benefits to shop work. When taken apart, it makes a flat pile just 4 in.

Contact: FARM SHOW Followup, John Dewey, Penfield, Ill. 61862.

