Brett Gettings, Gettings Farm, Fieldon, Ill.: "In a recent issue of FARM SHOW, a North Dakota farmer detailed problems he was having with his 1987 Deere 1610 27-ft. single depth control chisel plow. I have had some experience with this problem on similar equipment and would like to make a suggestion. Check in the machine's parts manual to see if the wing lift cylinders (not the ones that fold it up) are supposed to be different sizes (diameter). If so, change the sides, putting the left on the right and the right on the left. It's possible the dealer put them on incorrectly when doing setup.

Carroll Bantz, Rowley, Iowa: "One modification we made to our shop was to mount a bank of old chicken house nests along one wall. The unit is 10 ft. long by 4 ft. high and each nest is 1 ft. square, so there are 40 boxes in all. I use them as bolt and nail bins. Each box is clearly marked with a marking pencil as to what's inside.'

Richard D. Peden, North Manchester, Ind.: "When the muffler on our 3-wheeler rusted out, I welded the brackets from the rusted-out muffler to a muffler for an IH "B" tractor. For under \$20 I put together a muffler that works fine. A new one would have been \$70.'

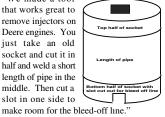
R. Berhow, Osceola, Wis.: "We had problems with the notched rings that hold the wheels on the shafts of our Farmhand wheel rake. They're made of cast iron, which was a poor choice. For one thing, replacements are too expensive. We substituted bearing retainers made of steel and we've never had a problem again."

Larry Losing, Baker, Mont.: "The 2in. shovels on our Deere 9350 hoe drills don't last very long. We cut the shovels off straight and then weld on pieces of spring leaf steel cut off automotive springs. We sharpen the pieces and hard surface them. Then they last much longer.

"Another modification we made was installing a 6-71 Detroit diesel in our 1350 Minneapolis Moline. The old engine had problems. This fix works well.'

James Johnson, Glade Spring, Virg.:

"We made a tool that works great to remove injectors on Deere engines. You iust take an old socket and cut it in half and weld a short length of pipe in the middle. Then cut a slot in one side to



Virgil Storm, Lucas, Iowa: "To prevent damage to disc brakes and calipers on our Gleaner combine, we made mud shields that go over the brakes. They keep mud out of the brakes, preventing wear and keeping the brakes from freezing in winter."

Jon Becker, Cumberland, Wis.: "Instead of replacing rusted-out silage handling conveyors, we lined them with plastic.

"Another good idea we had was moving our wet holding bin for corn drying inside our machine shed and installing a small dump pit outside with a used leg that moves grain to the holding bin. Works great. Lets us handle grain in all kinds of weather.'

John Voigt, Avon, S.Dak.: "I built a parts washer from an old water softener barrel and a salvaged electric fuel pump. The plastic barrel had a screen platform at the bottom. I cut the top half of the barrel off and mounted the bottom half on a stand. The fuel pump circulates cleaning fluid through a 1/2-in. rubber hose. The only out-ofpocket expense was for a 12-volt power supply and No. 1 diesel fuel used for fluid.'

David K. Curtis, Sedalia, Colo.: "We had a problem with our Hesston 500 swather. It was making fairly bunchy windrows. We solved the problem by changing the angle of the header and installing 'strippers' for the auger to run against to knock crop material off. In addition, we made header skids out of D-6 Caterpillar track pads and worn-out dozer blade cutting

Dale Oldenberg, Medford, Wis.: "I make replacement machinery control lever knobs by using ping pong balls as forms and filling them with steel epoxy glue.

'We had problems with U-joint failure on our older Deere 35 forage chopper. After we replaced it with an extra heavy duty joint, we had no more problems."

Richard Keeney, Cuyler, N.Y.: "I

turned a 15-gal. plastic barrel into a handy holder for redi-rod and flat stock. I cut the top off and then cut out a circle of wood with holes in it to fit the top of the barrel. The handle on the top edge of the barrel makes it easy to carry around."



Michael, Midland, Tex.: "I recently read in 'Best of FARM SHOW' about the man from Liberal. Mo., who made axle extensions for his Deere 4555 MFWD tractor. The modification was expensive - about \$800 per side. There's a much easier, and less expensive, way to accomplish the same thing. A machine shop can build a spacer that bolts between the front hub and wheel. They're similar to the spacers used on rear dual wheels. They can be moved from one tractor to another easily. They also make the tractor turn much sharper. We have a 12-in set of spacers on our 8300 Deere and

**Money-Saving Repairs** & **Maintenance Shortcuts** 

Have you come up with any unusual money saving repair methods for fixing farm equpment? 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. Mark Newhall, Editor

they work great. There are a number of people in our area who are running spacers like these in sizes ranging from 12 to 20 in. in width with no complaints. The new 8000 series Deere tractors are different from the older models, yet the same spacers will fit. unlike making an axle modification.'

Andrew Szurek, Minneapolis, Minn.:



"I got an old refrigerator from my neighbor and I felt the frame was too good to just throw away. So I got the idea of turning it into a parts cabinet to hold odd parts, tools, and other miscellaneous items. I used angle iron to make runners for the drawers to slide in. Heavy sheet metal screws hold the angle iron runners in place. I used 1/4-in. plywood to make the bottoms of the drawers and 3/4-in. pine to make the sides. The drawers slide just fine.

"I mounted the entire cabinet on an angle

iron frame fitted with old iron wheels. It's been so handy around my shop that I made another one to have at my lake cabin.

Robert Tupper, Canton, S.Dak.: "Here's an easy way to make a straight cut on pipe or round stock. Just wrap a square sheet of paper around the pipe and line it up



evenly. The edge will be square to the surface of the pipe. Just mark the edge and it'll be easy to make a square cut.

"You can make a simple screw slot cleaner out of a hack saw blade. Cut or break



off a 4-in. piece of blade and grind one end down to a blunt point. Slip it into the end of a 4-in. long, 3/4-in. dia. piece of wood dowel. Drill 3/32-in. holes through the dowel and blade and put a nail or screw through to hold it in place. This tiny tool works great for cleaning paint, varnish or

## Pressure Washer Converted To Filter For Used Motor Oil

When his Hot Shot portable pressure washer wore out, Rich Maus, Chandler, Ariz., turned it into a low-cost filtering unit that allows him to convert used motor oil into a diesel fuel additive for his semi trucks.

"It's an inexpensive source of fuel that also solves a disposal problem. I use it whenever I change oil," says Maus, who operates a commercial trucking business.

He stripped the 3-wheeled pressure washer down to the 110-volt electric motor and pump. He mounted two spin-on fuel filters (designed for Cummins diesel engines) onto lengths of angle iron welded

to one side of the cart. The filters plumb into the pressure side of the pump. To use the rig he starts the pump and puts one end of a rubber hose from the suction side of the pump into the oil drain pan. The pump draws oil out of the pan and pumps it through a rubber hose into the first fuel filter. From there it goes through a short length of hose to the second filter and then out a hose to a storage tank.

"I've been using it on the Cummins NTC and Cat 3406 diesel engines in my semi trucks for over 10 years with no problems at all," says Maus. "The filters catch all large contaminants that might harm a diesel

engine's fuel pump or injectors. Used motor oil can't exceed .05 percent of the total fuel volume. It has fewer btu's than diesel fuel but I've never been able to recognize any loss of power because the amount I add is so small. There might be more smoke in the exhaust, but it's hardly noticeable. I use it on all my diesel trucks and filter about 100 gal. per year. I'm sure that filtered used oil could also be used on diesel tractors.

"My only expense was for the two fuel filters which cost about \$8 apiece. If you're going to burn waste oil in an off-road tractor or stationary engine you don't have to pay taxes on it. However, if you're going to



use it in an on-highway vehicle you do have to pay highway taxes on it. Contact your state to find out about the paperwork that's required."

Contact: FARM SHOW Followup, Rich Maus, 20510 S. Greenfield, Chandler, Ariz. 85249 (ph 602 988-1213).