

Harold Quint, Kirksville, Mo.: “One of the best additions to my shop was a Challenger 10,000-lb. capacity car hoist that I had shipped in for a total cost of \$2,632 (www.challengelifts.com). I’ve tested it with up to 15,000 lbs. with no problems. Sure beats crawling around underneath cars and pickups like a worm.



“One of the best repairs I ever made on the road was on a 1975 Ford 5-150 while traveling from Missouri to New York. The rear axle started smoking due to a bad bearing. We were able to locate a new bearing but not the axle, so the mechanics were not sure what to do. I said I knew a few tricks and asked for a torch, center punch, and hammer. I punched some offset dimples in the axle where the bearing would be seated and started building it up. I then ‘miked’ both the bearing and axle. When I got the axle to the exact diameter, I lightly heated the bearing inner race and slid it onto the axle and tapped it into place. The pickup ran for 6 years after that without ever getting a new axle.”

Paul Moore, Batavia, Ohio: “A hydraulic gear came off an Allis Chalmers 3500 engine on my place. My dealer said we have to pull the engine, but a neighbor boy with long skinny arms was able to reach through a 4-in. hole and retrieve the gear, which was stuck behind the starter. Those skinny arms saved us a lot of money. “Some county workers gave me an old steel bridge deck. I set it up over a drainage ditch and now use it to steam-clean equipment.”

James Taylor, Athens, N.Y.: “The mechanical gearbox on an old hay tedder failed. We replaced it with a hydraulic

drive motor and it works great.”

AARC (www.aarc-us.com; ph 715 639-2042): AARC has a new bearing cleaner that flushes out wheel bearings fast. The company also makes a bearing packer that lubricates the bearing just as fast.



The bearing cleaner consists of a plunger inside a cylinder-shaped chamber; a screw-on, cone-shaped plastic base; and a small black cone. The operator fills chamber at least 3 in. deep with cleaning solvent. He then places the cone over the bearing and pushes down on the plunger to flush all the grease out of the bearing. At the same time, the cleaning solvent will be forced up through the bearing’s rollers.

The bearing packer uses a similar principle to pressurize grease into the bearing. It can be used with any size standard grease tube.

Allen Pederson, Nashua, Iowa: “I was having trouble with flat tires on my gravel driveway because of all the nails scattered around. I tried some fancy nail grabbers, but could only pick up a few. Then I tried using a round microwave magnet tied to a 3-ft. chain. It churns through gravel and grabs lots of nails. Amazing how many I picked up.”

Allen Davenport, Godfrey, Ill.: “I use an infrared temperature gun to check for bad bearings on our combine. I wait until I’ve been going for about an hour and then check them. Infrared temperature guns are relatively inexpensive now on the internet.”

Stephen Hewes, Lyme, N.H.: “The splines on the power steering sector shaft on my Massey Ferguson 175 tractor stripped. Instead of replacing the entire assembly, I drilled through and used a tapered grade 8 bolt to secure it. I also welded to build up splines and then ground them down.”

“Mechanic Lift Seat” Great For Getting Around Shop

“This new mechanic lift seat raises, lowers and rolls for less stress on the body. We designed it to help farmers with leg impairments work on projects close to the floor and then rise to sitting or standing without trouble,” says Ned Stoller with Disability Work Tools, Lowell, Mich.

The lift seat consists of a mechanic’s creeper equipped with a seat and a hydraulic floor jack. Pumping on the jack handle lifts the operator from kneeling level up to a sitting position, without using leg muscles. The seat can be lowered to within 8 1/2 in. of the ground and raised to a height of 24 in.

“The operator uses his arm strength to push and pull the unit into position, without having to crawl from one place to another,” says Stoller. “The floor jack brings him into a sitting position, and from there it’s easy to stand up by holding onto the armrests.”

A wide wheelbase and a 1-in. steel tubing frame make the lift seat stable and strong enough to support 280 lbs.

Stoller designs and manufactures the mechanic lift seat along with other adaptive tools. He also works with the AgrAbility Project, and his DisabilityWorkTools.com website lists a raft of tools to help people



Pumping on hydraulic floor jack handle lifts operator from kneeling level up to a sitting position.

continue to work.

The mechanic lift seat sells for \$649 plus S&H and is available on the website. An electric-operated model is also available for an additional \$600.

Contact: FARM SHOW Followup, Disability Work Tools, 12152 Cascade Rd., Lowell, Mich. 49331 (ph 888 354-3289; ned@disabilityworktools.com; www.disabilityworktools.com).

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

Carl Hopkins, King George, Va.: “The pto shaft seal was leaking on my 3910 Ford tractor. The repair manual said to break the rear apart to fix. Instead, I screwed two sheet metal screws into the seal and used a slide hammer to pull the seal out. Then I used a long piece of pipe to push the new one into place. Worked great.

“When I was pouring the floor in my shop, I anchored pieces of chain in the concrete to use for straightening bent equipment, anchoring vehicles, and other uses.”

Dieselscraft Engineering (www.dieselscraft.com; ph 530 613-2150): The company recently came up with a new test kit that shows you if there’s water in your diesel fuel. The kit consists of a capsule filled with yellow powder, a test tube, and a transfer pipette that’s used to take fuel samples right out of your vehicle’s fuel pump. As the powder settles in the test tube, you can see that it’s indicating water by a change in color to pink.

If there’s no water in the fuel the powder at the bottom of the tube will remain yellow. Any pink spots in the water means there are 500 to 1,000 ppm of water in the fuel. If there’s more than 1,000 ppm of water in the fuel it will turn all the powder hot pink. Test kit sells for \$44.95.

The company says adding its Technol 403 diesel fuel conditioner to your fuel can solve the water problem. Technol 403 is designed to raise Cetane, improve fuel lubricity, increase fuel combustibility, and clean the fuel system. It’s sold in 8-oz. and 1-gal. containers. An 8-oz. bottle is enough for 62 gal. of diesel fuel. It’s sold in case quantities only. A case of twelve 8-oz. bottles sells for \$160 plus \$10 S&H. It’s also available in 1-gal. size bottles that each treat 1,000 gal.



Oneida Air Systems, Inc., Syracuse, N.Y. ph 800 732-4065; www.oneida-air.com: Their Viper Scraper connects to a shop vacuum and sucks up dust and paint chips while scraping paint. It comes with a reversible tungsten carbide blade. Sells for \$19.95 on the website.

George Hillman, Jr., Batesville, Ind.: “I attached a bungee cord to the steering column on my Farmall H tractor in order to pull the slack out of the transmission gears, which keeps them from shimmying. I used the same idea on my Farmall M. Works great.”

Briggs & Stratton:

Changing the oil on lawn mowers and other outdoor power equipment can lead to messy spills. But with this new oil extractor pump, you don’t even have to remove the drain plug.

You drop the tube into the oil reservoir and then pump the air out of the container. The resulting vacuum sucks the oil up through the tube and into the container.

The oil extractor pump is sold on Amazon and at www.briggsandstratton.com in 1.6 and 4-liter models that sell for \$24 and \$40, respectively.

Ron Melchert, Seymour, Wis.: “I recently purchased a wrench extender from my local Matco Tools distributor (ph 866 289-8665; www.matcotools.com). It works great by providing extra torque and can also be used in hard-to-reach areas.

“You install your wrench – open end or box – into the jaw. There’s a 1/2-in. square drive slot at the bottom of the tool where you can also insert a 1/2-in. drive

