



Alspach Farms, Mt. Pulaski, Ill.: When the engine in a Versatile tractor needed overhauling, Alspach Farms pulled it into the shop. However, it was cold outside and they wanted to shut the shop door. The tractor wouldn't fit all the way so they had to improvise by closing the door onto the articulation point, leaving the rear end hanging outside.

Bruce & Roger Elliott, Montrose, Ill.: One key to farm safety is having plenty of light when working at night but it's hard to get light exactly where you need it. Bruce and Roger Elliott came up with a simple "go anywhere" floodlight that's made up of a 2-wheeler fitted with a light pole.

The floodlight mounts at the top of a piece of conduit. A switch mounts halfway up the pole. Stability is provided by two feet at the front of the 2-wheeler. A concrete block, strapped to the platform on the 2-wheeler, anchors the light firmly to the ground. It's easy to roll the light around to wherever needed on the back two wheels.



R.D. Elder, Blue Mound, Ill.: Since Elder broke his back 18 years ago, he's developed a lot of equipment to help cope with the difficulties of farming from a wheelchair.

He farms with his father and brothers and has responsibility for many of the shop repairs. He designed a special welding table



that's lower to the ground for easy access. He also built a low level workbench which lets him get close to detail work, such as grinding and knife sharpening. He's an expert with knives.

To get around in the field, Elder modified



a Polaris ATV. It has all hand controls and a special high back support, which he "padded" with camouflaged tape. He can get on and off the ATV by himself.

Tom Hoffman, Nokomis, Ill.: Here's an easy way to seal the bottom of large doors. Tom Hoffman makes a cut through a bicycle inner tube on the side opposite from the air valve. Then he fashions two metal clamps to go over either end of the long tube and clamps them in place in a vise. Then he fills the tube with air. Once cold weather comes,



Knafelc fitted an adjustable chuck to transmission's output shaft, to hold taps and dies for cutting threads. Transmission is belt-driven by a 1/4 hp electric motor.

Pickup Transmission Powers Nut And Bolt "Rethreader"

Putting new threads on old nuts and bolts by hand can be a slow, tiresome job. To make the job easier, Stan Knafelc, Watson, Sask., uses an old 3-speed pickup transmission that's belt-driven by a 1/4 hp electric motor.

The entire setup bolts to the top of a welding table in Knafelc's shop. He attached a big pulley to the transmission's clutch shaft and fitted an adjustable chuck to the output shaft, which holds taps and dies for cutting threads.

He puts the transmission in gear, then uses a pliers to force a nut over the thread cutter. To withdraw the nut he simply puts the transmission in reverse.

"It's fast and a lot easier than rethreading nuts and bolts by hand. It doesn't take long to rethread a whole bunch of nuts or bolts," says Knafelc. "I can rethread nuts ranging from 1/4 to 3/4 in. diameter. The big pulley gears the transmission way down so that it runs slow. I keep the transmission in second gear so the thread cutter rotates at about 60 revolutions per minute. I used a synchromesh transmission so that I can shift the thread cutter into reverse without having to stop the motor."

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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 e-mail us at: Editor@farmshow.com.

Mark Newhall, Editor



he simply slips the air-filled tubes in under the gap between the door and the floor. You could also fasten the tubes to the bottom of the door.

He notes that even a small crack can let in a lot of cold air and he figures the few seconds it takes him to the seal the door is well worth the time.

Thomas Empfield, Indiana, Penn.: "You can use 1-quart oil bottles to make handy parts and hardware bins. Lets you recycle

bolts, green bottles screws, white bottles nails, etc.

"I built a shelf to hold the bottles, sizing it so they fit in tightly because the bottles have thin sides and they'll stand up better. The drawing shows the best way to cut the bottles. It keeps them as sturdy as possible."

Leroy Klesel, Hallettsville, Tex.: "Older Farmall tractors with 6-volt systems are hard to crank. We changed our electrical system over to 12 volts by installing a 12-volt battery, a 12-volt Delco alternator, and put a resistor between the switch and the coil. The tractor works great now.

"To put a bearing cone on a shaft, heat the bearing up in a container of hydraulic oil. It will slide right onto the shaft. To remove an old bearing race, just weld a bead inside the race to shrink it. It'll come off easily."

Irwin Nolt, East Earl, Penn.: "To repair hydraulic tubing that is split or worn through, braze with nickel silver coated rod. Brass weld will not last very long."

Bob Hudspeth, Era, Tex.: "I do a lot of woodwork, especially with my radial arm saw. I didn't like having to let go of the machine or the wood I'm cutting to turn the machine on or off. I wanted hands-free operation and found a simple way to do it that also lets me turn any other power tool into a "hands free" machine without modifying it at all.

"I mounted an electrical outlet on the wall and removed the little connector tab between the terminals on one side of the plug-in assembly. This let me wire the top outlet to be 'hot' at all times for use as a normal plug-in. Then I wired a foot control switch to the bottom outlet so it's 'hot' only when the foot control is pressed. Now, with the radial saw plugged in and its switch turned 'on', it will only work when I press the foot control, leaving my hands free at all times. I put a 10-ft. cord on the foot control so I can move it around and use it for any other power tool."

Fred Biddle, Waupun, Wis.: "If you twist off a bolt, weld a nut on the broken stud. As soon as it cools enough so the red is gone, turn the bolt out. The heat from welding will

the bottles and the bins as good or better than anything you can buy.

"You can use different color bottles to indicate at a glance what's in them. For example, all yellow bottles might have

