Money-Saving Repairs & Maintenance Shortcuts



Bruce Ashick, Pembroke, Ont.: "The rubber on the crimp rollers in my Deere mower-conditioner started coming off in pieces. To solve the problem I removed the rollers, stripped off the rubber, and then welded straight 3/4-in. sq. rod on the rollers to replace the rubber. The spacing of the bars is very important, and when welding you don't want to warp the rolls with heat. The mower-conditioner still runs just as quiet as it did with the rubber crimp rollers, which surprised me.

"The rubber gearshift boots on my tractors

kept tearing and getting hard, even though the tractors are stored in a shed when not in use. To solve the problem I took a heavy rubber tube and cut round boots, leaving a hole for the shift lever, and slipped them over the original boots. They're still in good shape.

"I built my own arc air gouging tool from an old welding lead, some small steel tube, and air hose. It lets me burn carbon rod with air blowing on the end, which lets you remove old cracked weld in seconds or gouge 1 to 1 1/2-in. plate steel for welding up cracks."



Ken Hardesty, Battery Equalizer (ph 888 851-4431; www.batteryequaliser.com): "Battery Equalizer was developed 25 years ago and is used by the U.S. military. It will

double or triple the life of any vehicle's battery. It's a waterbased product that reverses the built-up sulphation that kills batteries as they get older. As a result, the battery will gradually return to like new condition. "Use it as a



regular top-up fluid. A 12-oz. bottle will treat up to 4 batteries and sells for \$19.95 plus S&H."

Rick Arnzen, Kelso, Mo.: "Don't throw away that old ironing board – it just might be the handiest portable tool bench around. Ironing boards are lightweight and easy to handle, especially the newer ones. I find they work great for storing tools any time I'm working alongside a truck, tractor or car.

"For example, if I'm working under the hood I keep my wrenches on the ironing board instead of having to bend over for them on the floor. And when I'm done, the ironing board folds up out of the way. I got the idea when I went camping one time and took an ironing board with me. I used it alongside my barbeque grille to hold my utensils."

Larry Genge, Glovertown, Newfoundland; ph 709 533-2798, Ldgenge @yahoo.ca: "I built this 20-ton press from scrap metal, using 10-in. channel iron for the side posts and 6-in. channel iron for the bed. I can use 3 different sizes of interchangeable dies with it, ranging from 3/4 to 1 1/2 in. The hood springs off an old car help raise the bed. My cost to build it was next to nothing - the biggest expense was \$100 for the jack. I got the channel iron in return for repairing someone's road tractor, which was a day's work.

"I got tired of the flimsy handles coming unscrewed on my imported drill press. The



press had three short, thin screw-in handles that stuck out at an angle and provided no leverage. The handles pulled hard, and I couldn't keep them tight because the threads often stripped where the handles were screwed on.

"To solve the problem I replaced the



handles with a big 12-in. dia. wheel that came off a valve. The wheel has four 11 by 1/2-in. dia. metal handles welded on with knobs, scrounged from hydraulic control levers, friction-fitted to the ends. When using small bits with the drill press I just hold onto the wheel, but when using large bits I hold onto the handles to get more leverage. The improvement in the way my drill press handles now is beyond belief."

Peter C. Cabout, De Pere, Wis.: "I cut off 6-in. long pieces of old high pressure air hose and use them as handle cushions on 5-gal. buckets."

Crane Makes Big Jobs Easy

Not too many welding shops have their own full-sized construction crane. But Royal Weber, who has a crane at his shop in Nokomis, Ill, says you'd love it if you had one.

He picked up an old crane for next to nothing because it had a frozen Buda engine. He had a truck that had been hit by a train but still had a good engine. He traded the truck for the crane and kept the engine. He installed it in the crane which now works perfectly, positioned off to the side of the opening to his shop.

Weber says it's great for handling very heavy pieces of steel and equipment. The crane pivots 360° so he can pick up steel and other parts from his inventory and move them to the front of the shop where he does his work.

Contact: FARM SHOW Followup, Royal Weber, 19234 E. 128th Rd., Nokomis, Ill. 62075 (ph 217 563-8504).



Crane pivots 360 degrees, allowing Royal Weber to pick up heavy pieces of steel and move them to the front of his welding shop.



Kees Koster is able to turn a car on its side with his custom made roll bars. Roll Bars Turn Car On Its Side

Kees Koster really dislikes working on the underside of a car. His answer is to turn the car on its side with his custom made roll bars.

"I got the idea from a commercial unit I saw at a car show," explains Koster. "Using a battery powered drill and some pivot arms, they laid a Mercedes safely on its side. I came up with a simpler version, and it didn't cost \$1.500 like the show model."

He first takes the wheels off one side of the car and then attaches roll bar brackets to both hubs. The brackets are pieces of curved pipe.

"I welded two of them to each of two rims that matched the rotors on the car axles that I wanted to lay on its side," explains Koster. "I then put a chain around the front wheel on the opposite side and lift, being careful to keep the chain away from the car body panels."

With the car "rolled" over, he could easily work on it. However, he recognized a couple of ways to improve the process. One was to modify the brackets so they could be used on other cars. To do so, he cut away most of the rims and torched two holes in what remained.

"When I want to work on a different car, all I have to do is find two discarded rotors that matched the car," says Koster. "Once I've burned two holes in the rotors, I can bolt them to the brackets."

Koster says to safely roll the car over, the brackets need to be attached to the car with at least four if not five bolts. Using matching rotors makes that easy to do as the bolt holes match up exactly.

He also realized that as the car was rolled, it placed tremendous torque on the steering wheel. Simply engaging the steering wheel lock is not enough. However, attaching a straight edge such as a 2 by 4 to both brackets eliminates the problem.



A chain suspended from front-end loader is put around car's front wheel and used to "roll" car over.



He first takes the wheels off one side of car and then attaches roll bar brackets – pieces of curved pipe - to both hubs.

A third problem involved lifting the car. Instead of hoisting it from a wheel on the soon to be "high" side, he now removes the former lift wheel and bolts a steel bar to the under-frame. Using a bar slightly longer than the underside of the car is wide gives him a lift point that is safely removed from the car body. Finally, he puts two posts under the car to hold it in place.

"It works great, especially for working on the exhaust system," says Koster. "I only take the battery and engine oil out, though you do need to empty heavy objects out of the trunk. I've had a car sit on its side like that for a month at a time and have it start right up when returned to all four wheels."

Contact: FARM SHOW Followup, Kees Koster, 131 Cogmagun Rd, RR # 1, Center Burlington, Nova Scotia Canada BON 1E0.