

exposed to the elements for several years.

"I drained the water and oil out of the crankcase, but the starter motor wouldn't budge it. I tried using a socket and bar on the crankshaft but that didn't help, either. I even removed the spark plugs and filled each cylinder with diesel, and then waited a few days. No luck.

"I observed that only the no. 4 cylinder still had diesel in it, so I sucked the fuel out and filled that cylinder with Mystery Oil. Then I waited a few days and put a ratchet strap on the socket and bar. It moved just a bit so I was able to take up the slack in the ratchet strap. I kept that up, off and on, over the next 2 days until finally the engine broke free.

"Now the crankshaft spins like new."

Dennis Strahle, Eagle, Mich.: "I didn't like the 4-ft. fluorescent light fixtures in my shop. They burn out too often and make a humming noise. I finally decided to replace



all the fluorescent lights with modified compact fluorescent lights (CFL's).

"My solution was simple: a 2 by 4 with light fixture boxes screwed to its underside, and then wired to plug into existing outlets on the shop ceiling. The CFL's are perfectly quiet, use far less electricity, and light up my shop nicely. The shop ceiling is 13 ft. high so I'm not in danger of swinging a board high enough to accidentally hit the lights, but for lower ceilings you might need to cover the lights to keep from breaking the bulbs."



Richard Rogers, Bentley, La.: "The charger went bad on my Alemite 14.4-volt battery-powered grease gun due to a bad transformer. A replacement charger from the company would have cost about \$150. Instead, I replaced the bad transformer with a 16-volt doorbell transformer that I bought at Home Depot for \$11.

"A friend who is an electrician placed the doorbell transformer inside the charger in place of the original transformer and then stuffed material in around it to hold it in place. The 16-volt doorbell transformer has a little less wattage than the original transformer so the charger now works slower than before, but that's not a problem."

Howard Wright, Sabina, Ohio: "Old, dead batteries can sometimes be revived by putting a couple drops of Motorkote engine

lubricant in each cell and then slow charging the battery overnight. The lubricant washes the acid off the lead plates in the battery to remove corrosion. Over the years I've used Motorkote successfully on several old tractor batteries that were sitting around."



Worthington Ag Parts, ph 888 845-8456; www.worthingtonagparts.com: Their new gearshift plate kit is designed to fit all Case IH Magnum tractors. For 2-reverse gear tractors, the kit expands your reverse gears by making the third and fourth gears operational – thus making your 2-reverse tractor a 4-reverse model.

The kit uses a lock lever to block off the lower 6 gears, allowing you to shift from forward to reverse without entering the lower gears. The kit includes a shift plate cover, park lock lever, decal and instructions. It installs in less than 2 hours.

Don Hipp, Auburn, W. Va.: "I own 3 different size chainsaws and need 2 different kinds of files to keep the chains sharp. To save money I buy a dozen Oregon round files at a time. The files come packaged in a cardboard box and are individually wrapped in paper. However, moisture gets inside the box which causes the paper to get wet and stick to the files. Eventually rust starts to form so that by the time I get to the last 4 or 5 files in the box, they're not even useable.



"To solve the problem I decided to store the files inside big diameter soda straws that I then place inside pvc tubes. The straws keep the files from bouncing around and rubbing against each other and becoming dull. I can store up to a dozen 5/32-in. round files inside a 1 1/2-in. dia. tube. I place a silicon bead pouch (the kind you often find in shipping boxes) at the bottom of the tube in order to draw away any moisture.

"I glue a cap onto one end of each tube and screw a cap onto the other end, using a male thread and a female cap.

"I keep the tubes with me on my ATV or in my toolbox. The tubes are airtight and watertight and will keep the files in great shape for a long time. I haven't thrown away a new file for years. In fact, files that I placed in a tube 5 years ago are still rust-free. The tubes can be painted any color to make them easier to see."



"It lets me use both my air and electric-operated shop tools anywhere in my shop without getting them tangled up," says Steve Brubaker, who made this ceiling-mounted, 12-ft. long boom. It swings in an almost 360 degree arc.

Rotating Boom Holds Air Hose, Electric Cords Above Shop Floor

Steve Brubaker got tired of stumbling over air hoses and electric cords in his 50 by 80-ft. shop, so he used car parts to make a ceiling-mounted, 12-ft. long boom to hold them. It swings in an almost 360 degree arc.

"It's really handy and lets me use both my air and electric-operated shop tools anywhere without getting them tangled up. As far as I know there's nothing like it on the market," says Brubaker. "I use my shop to construct small sheds that I sell commercially, so I spend a lot of time operating these tools and moving them around. The electric cord is attached to a screen door spring and the air hose to a coil, which causes them to retract. A stop keeps the cords from getting tangled up. Since both cords are 50 ft. long and the boom is only 12 ft. long, there's always some excess cord that I have to tie up. If I did it again I'd use cords that were only 25 ft. long so I wouldn't have that problem."

He mounted two 8-ft. long by 1-in. sq. tubes parallel to each other on the shop ceiling and drilled holes in them, then anchored them to the building's trusses. A car wheel axle bearing is bolted to a pair of 3-in. wide, 1/4-in. thick steel brackets that hang down from the tubes.

A brake rotor mounts on the same threaded stud where the car wheel would normally bolt onto the axle. The air hose and electric cord run down from the ceiling through a short



air hose and electric cord run down from ceiling through a pvc tube that runs through a car wheel axle bearing.

vertical length of pvc tube that runs through the bearing and the axle shaft's splines. "The pvc tube keeps the cords from rubbing against the splines and wearing through," says Brubaker.

He welded a 2 1/2-ft. long steel tube to the bottom side of the rotor. One end of the boom fits inside the tube and is held in place by a pair of set screws. A silo unloader weight is welded onto the back end of the boom to keep it balanced, and a series of U-bolts spaced about 3 ft. apart are welded to the bottom of the boom to support the air hose.

"If I want I can easily shorten the boom by loosening the 2 set screws on the tube that the boom fits into," notes Brubaker.

Contact: FARM SHOW Followup, Steve Brubaker, 3427 State Hwy. 22, Oconto, Wis. 54153 (ph 920 604-0208; steveandemmy81@gmail.com).



Bishop bolted a steel plate onto a vise and then welded the plate to a length of 2-in. sq. tubing, which fits into vehicle's receiver hitch.

Receiver Hitch Vise

"Many times when I'm away from my shop I've wished I had a vise to use on some job. So, I came up with this vise-mounting bracket that works with any standard 2-in. receiver hitch," says Connor Bishop, Guilford, Ct.

"I bolted a steel plate onto the vise and then welded the plate to a length of 2-in. sq. tubing. I also drilled a 5/8-in. dia. hole in the

tubing to accommodate the hitch pin. Now whenever I'm away from the shop I slide the vise into the hitch, insert the hitch pin, and have a vise wherever my pickup is."

Contact: FARM SHOW Followup, Connor Bishop, 400 Moose Hill Rd., Guilford, Ct. 06437 (ph 203 313-5362; themadmailler@yahoo.com).