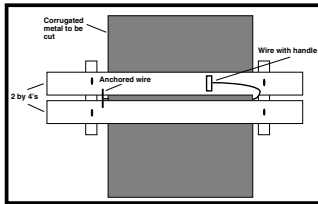


apart. The top two 2 by 4's fit over the bottom two 2 by 4's. Four bolts go down through the 2 by 4's and the bottom 1-in. boards.

A long piece of galvanized wire is anchored at one side of the unit. A handle is tied to the loose end.



To make a cut, you simply slip a piece of sheet metal between the four 2 by 4's, and then tighten down the four bolts. Then you loop the wire under the metal and pull it up between the 2 by 4's on the other side of the metal. When you pull back on the wire, it'll cut right through the metal.

"I recommend using oak 2 by 4's on top that have good square edges to make a cleaner cut," says Roberts, who lays the cutting frame down flat on the ground and stands in the middle of the 2 by 4's when pulling up on the wire."

Bill Reeks, Cromwell, Ky.: "Tin cans are great for carrying a quart bottle of oil under the hood of your car or pickup. Just find a tin can that's large enough to hold a 1-qt. container and screw, wire or bolt it under the hood in an out-of-way place that's easy to get at."

Alice & Robert Tupper, Canton, S. Dak.: "We've discovered we can keep our shop vac clean by slipping a section of panty hose over the filter to keep large and small



material from collecting in the folds of the filter. It gives you better pickup longer."

R.S. Burrow, Wilson, Texas: "I made a gated irrigation pipe puller when I hurt my back in 1980 and still use today. It consists simply of a 32-in. length of 3/8-in. dia. rod with a 4-in. J-shaped hook on one end and a 4-in. straight handle on the other. You can pull pipe apart at the joints as well as put it back together without having to bend over. It's the handiest tool I've ever come up with."

Marion Calmer, Alpha, Ill.: A Rapid-Reel air hose reel that bolts to the top of Marion's 3 1/2 hp, 15 gal. portable compressor makes it a lot easier to use air tools in his



"Pin Eliminator" Solves 3-Pt. Problems On Magnum Tractors

The 3-pt. hitch on popular Case-IH Magnum tractors is controlled by a set of load sensing pins. Jay Bottolfson, Vermillion, S. Dak., had problems with the pins so he came up with a modification kit called the "Pin Eliminator".

"It bypasses the original load sensing pins," says Bottolfson. "The pins often fail. I got the idea one day last fall while V-ripping with my Magnum and a pin went bad. Whenever this happens, control of the 3-pt. becomes so erratic as to make it unusable. This was the third pin I had replaced on the tractor which has otherwise been totally reliable. The pins sell for about \$500 apiece, but since I don't even use the draft control on the tractor, I decided to eliminate the problem for good."

"I contacted my cousin, an electronics engineer with 20 years of experience,

and together we developed an electronics module that eliminates the pin function from the system altogether."

Here's how it works. Unplug both sensor pins from plug-ins at the back of the tractor and plug in a Pin Eliminator on each side in place of the sensor pin wire. "Because it uses miniature electronic components, the Pin Eliminators are small and out of the way," says Bottolfson. "At \$149 per pair, they save you about \$350 over the cost of one pin and \$850 over the cost of a set. You won't have any more load sensing pin problems for the life of the tractor, and it comes with a 1-year replacement warranty."

Dealer inquiries invited.

Contact: FARM SHOW Followup, Jay Bottolfson, B & L Electronics, Rt. 1, P.O. Box 143, Vermillion, S. Dak. 57069 (ph 605 670-1796).

shop. He purchased the reel at his local TSC store. The reel carries 100 ft. of extra hose but Calmer uses only 50 ft. That's plenty to reach any corner of his shop.

Al Kelley, Athens, Texas: "We specialize in replacement starters for Belarus tractors. Our starters are more reliable and cost less than the ones made by Belarus, which have lots of problems. We adapt new Delco starters made for 6.2-liter GM diesels to fit all Belarus tractors. Cost is \$275 to \$350. Also, if an armature ever goes out on one of our starters, it costs just \$40 to \$50 to repair." Contact: FARM SHOW Followup, Kelley Industries, 412 B South Palestine, Athens, Texas 75751 (ph 800 256-2142 or 903 675-8311, fax 4594).

Leonard Donovan, E E Donovan & Sons, Mallorytown, Ontario: "Our Deere 3130 (2840 model in U.S.) was a hard starter in cold weather. So I bought new higher-cranking batteries than the Deere originals and wired them up differently to solve the problem. I used two new 950 cold cranking amp batteries. I then ran separate lines from each battery directly to the starter instead of from one battery to the next and then to the starter. The engine cranks faster and longer and starts easier."

Ernest Wagner, Delta, Ohio: "You can make an older IH tractor steer like a brand new Cadillac with a power steering system like the one I made for my 1939 Model A. The identical design could probably be used on any Farmall A built between 1937 through the mid-1940's since they all had the same manual steering system."

"I got a power steering control unit and hydraulic cylinder off a junked Massey combine and a power steering pump off a car. I removed the tractor's steering shaft and attached the combine's power steering unit to the tractor's steering wheel. I mounted the power steering pump on the side of the engine and belt-drive it off a pulley on the generator. I mounted the ram end of the hydraulic cylinder on the front axle and the rear end on the tie rod. I plumbed the system together with 3/8-in. dia. copper tubing."

"It cost only about \$50 and works like a dream."

Dave Waldner, Shaunavon, Sask.: "We were constantly breaking knife guards on our four Versatile 400 swathers when harvesting lentils. So we came up with a money-saving way to recycle guards with one usable side.

"We cut these guards apart in the center and use a home-built jig, which is set up to assure bolt holes are properly spaced, to weld the good guards back together. We estimate we're saving \$800 in a year in replacement costs."

Joe Ross, Waynesburg, Pa.: "We specialize in rebuilding magnetos for 1920's to mid 1950's Farmall tractors. We use only stock parts when replacing ignition coil windings, which will cost anywhere from \$40 up to \$180 depending on which brand magneto your tractor was equipped with. We also replace magnets, condenser or points if necessary. The complete package runs from \$100 to \$300. All you have to do is unbolt the magneto and bring or send it to us at: Ross Tractor Sales, 40 S. Woodland Ave., Waynesburg, Pa. 15370; ph 412 627-6966."

Brian Yokimas, East Selkirk, Manitoba: "When it comes to heading off potential mechanical problems with your combine, there's nothing quite as effective as an ordinary mechanic's stethoscope."

"You can buy one at any good auto parts



or tool supply store for around \$30 (U.S.). I've used one ever since I began farming 27 years ago and wouldn't be without it. Thanks to the stethoscope, my 13-year-old New Holland TR 85 combine got through another 1,000-acre small grain harvest last year without a hitch. I use the 12-in. probe on the stethoscope to listen to every bearing as I run the machine real slowly. A bearing in good condition will make a smooth whirring sound, while one that needs replacing will growl or clunk. You'll catch a bad bearing much faster this way."

"You can keep the retracting fingers on the feeder drum in your combine from wearing prematurely by making a simple modification. I've done it on 10 used combines in my 27 years of farming and know it really helps prolong finger life."

"I simply change to smaller drive

(Continued on next page)



Double Boom Has Chain-Drive Sprocket

Here's one of the most useful and innovative overhead shop booms we've ever seen.

David Buss, Clayton, Ill., built the overhead boom using a big 18-in. heavy I-beam. One end rolls back and forth on a heavy-duty trolley with a heavy-duty upright post. The other end is hinged. The boom has two unique features.

The frame of the boom is so strong Buss mounted a second boom on one of the posts. Set at about 8 ft. off the ground, it swings 180° and extends out about 10 ft. It's ideal for smaller lifting jobs. For example, you could use it to lift off the cylinder head on an engine and swing it out

of the way, and then lift the engine with the main hoist.

The other feature that makes the overhead boom handy is that the hoist hangs from a roller with a large sprocket mounted on one end. A loose piece of roller chain hangs from the sprocket. When Buss has a heavy load on the hoist and needs to move it a short distance, he just reaches up and turns the chain by hand, easily "walking" the load into position as needed.

Contact: FARM SHOW Followup, David Buss, Clayton, Ill. 62324 (ph 217 894-7070).