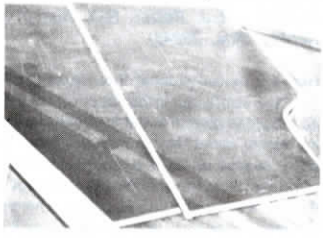




A.J. Poirier, La Salle, Manitoba: "My shop vac does not have a place to carry attachments like some newer models so I made my own using a piece of plywood, cut to fit over the top of the vac, with tin cans screwed to the top of it. Two cans also fasten to the legs of the vac. The cans hold the attachments and the ends of the hose."

"I'm also sending along better photos of my easy-to-make lockable compartment for pickups that was featured in FARM SHOW's Vol. 17, No. 1, issue. It only takes a minute



or two to install, and is held in place by the lip of the pickup box. It doubles as an air deflector. It consists of a couple of pieces of plywood, held together at center by a pair of bolts. I put a keyed hasp on the tailgate latch so when it's closed, the compartment is locked. It's much easier to put cargo in and out of this compartment than a standard pickup toolbox because you don't have to lift so high. I'm willing to sell plans if people are interested."

Robert Hughes, Nevada, Mo.: "One money-saving repair method we've come up with is to use hubs and spindle kits from discount parts manufacturers - like Shoup - to repair our disk and field cultivator. We save over \$200 over factory parts per repair job with the discount parts. It usually takes a little lathe work or welding to make the spindles work."

Alvin G. Deatherage, Odessa, Mo.: "I mounted an air compressor on a well-braced overhead platform on an outer wall of my shop and then piped the air to several locations in my 40 by 60-ft. shop, and also to a smaller 20 by 30-ft. shop added onto the side of the building. This gets the compressor up off the floor and reduces the amount of air pipe needed. I've used it this way for 17 years with no problems."

Neil Jamieson, Cambridge, Ontario: "My 4240 Deere tractor was a slow starter. Here's how I got it to start much faster. I changed it from two 6-volt batteries hooked in series to two 12-volt batteries hooked in parallel. Works great."

Joseph Murray, Shaunavon, Sask.: "I wired an auto dimmer switch onto my drill press. When the bit jams, you just release your foot to stop it. Prevents motor damage."

Robert Buldhaupt, Hadley, Minn.: Here's a quick and easy way to thaw out frozen pipes. "Remove a connector, coupler or valve and hook up a piece of 1/4-in. copper tubing to the flexible hose of a hand held sprayer. Stick the copper tube into the

frozen line and then pump hot spray water into the line. It will unfreeze any water line in minutes. Works every time."

Gary Siewert, Hanna, Alberta: "I have an upright air compressor mounted in my quonset building. The problem is that it doesn't have enough pressure to power air tools at the back of the building via long hoses. To solve the problem, I ran a metal air line to a 100-lb. propane tank in the back half of the shop, and I run tools off that tank. The compressor keeps it charged up so there's always enough pressured air to power tools. Lets me get by with a smaller compressor."

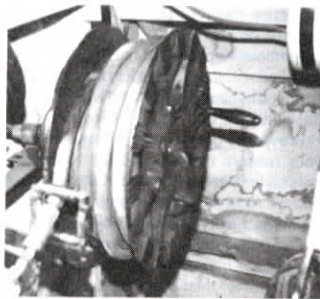
Alan Pegram, Lincoln, Ill.: Pegram converted an old chest-type Coke cooler into a parts washer for his farm shop. He says the cooler was ideal because of the stainless steel interior. To wash parts, he hooked up a 1/4 hp. electric washing machine motor and pump. Since the pump is a positive displacement model, Pegram drilled a "weep hole" in it to reduce the pressure somewhat.

To make a washing chamber, Pegram installed a perforated false floor about 3 in. off the bottom of the chest, which allows sediment to collect below. The suction pipe on the pump is positioned about an inch above the floor.

Robert Sharp, Bashaw, Alberta: "The chain drive to the header hydraulic pump on my Gleaner N7 combine was always a problem. I improved it by installing a set of double sprockets and duplex chain and braced the bearing bracket to make it more rigid. I haven't had any problems since."

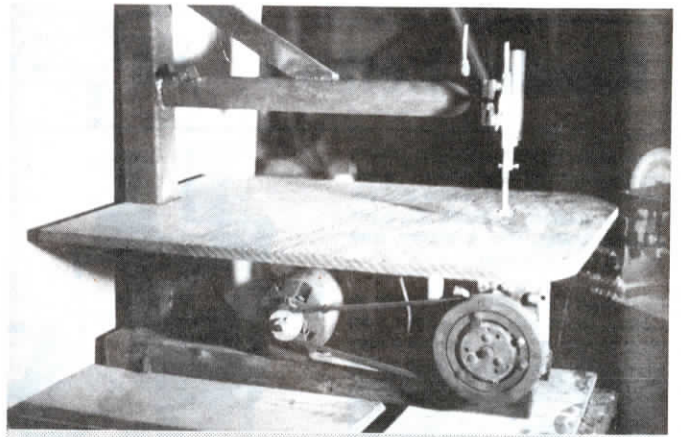
Dan Baumann, Drayton Valley, Alberta: "I installed a surplus vacuum fan on a 4-in. sewer pipe which runs from near my welding table to a clothes dryer outlet mounted on an outside wall. It sucks fumes away from the table when I'm welding. Keeps the shop warmer in winter because I don't have to open a door to clear away welding smoke."

Charles H. Kouba, Regent, N.Dak.: "One of the handiest ideas I ever came up with for my shop is an air hose reel that I made out of a variable speed pulley from a



Deere 55 combine. The reel mounts on a metal bracket and turns on a pillow block bearing. For the air hose coupler, I used a Pioneer hydraulic coupler with the guts removed so it wouldn't restrict air flow. This reel easily handles 150 ft. of air hose and is built heavy. I screwed a hand crank onto the outer edge of the outside disc. I think you could make a similar reel using two disc blades with a piece of 4 to 6 in. dia. steel tubing between them."

J.D. Miller, Balaton, Minn.: "I made a deep-well socket for tightening J-bolts on band-type duals. I just welded a regular socket to one end of a pipe to fit over the nut and then welded a worn socket to the other end of the pipe to fit to the air wrench."



Scroll Saw Built From Old Air Conditioning Compressor

"I wanted a scroll saw with a deep throat but I didn't need it bad enough to pay for one. I ended up having almost as much fun building it as I do using it," says Cecil Fitzpatrick, Bee Branch, Ark., who used an old air conditioning compressor as the key component on the saw.

"It's a 2-cyl. reciprocating compressor. I removed the head (valve assembly) and discarded it. Then I drilled and tapped one of the cylinders to accept two 3/8-in. bolts and made a plate of 1/4-in. thick steel plate that's slightly smaller than the top of the piston. This plate bolts to the top of the piston with the 3/8-in. two bolts.

"Before bolting the plate to the piston, I drilled a hole in the center of it and inserted a piece of round stock 3/4-in. dia. by 1 1/2 in. long, brazing it into place. Then I used a hack saw blade to cut a slot in the top of this round stock to accept the scroll saw blade. Then I drilled and tapped holes on either side of the slot for set screws to hold the blade in place.

"The compressor is driven by a 1/4-hp. electric motor with a single 1/2-in. V-belt. I used a 2 1/4-in. pulley on the motor and left the 7-in. dia. pulley on the compressor. With the 1,750 rpm motor, that gives me

about 600 strokes per min. One change I might make later is to speed it up since I think it might cut even better.

"For the top blade holder assembly, I bored out a piece of hot rolled steel that's 1 5/8-in. dia. A spring-loaded retention assembly goes inside with a steel rod that I slotted with a hack saw to hold the top end of blade like the blade holder at the bottom.

"The base of the saw frame is made out of 8-in. channel iron 32-in. long. A piece of 3 by 3-in. sq. tubing 28 in. long is welded to the base to form the upright and a 24-in. piece of 2-in. pipe holds the top blade support assembly. The blade assembly is positioned about 18 in. above the base channel iron.

"I bolted a plate over the other cylinder on the compressor to add check valves that make it possible to use the air to blow dust from the area being sawed. The top blade assembly support pipe is airtight. I added fittings to it so I can use it as a small air tank.

"I also plan to build a powered metal hack saw using a junked 5 hp. mower engine to furnish the reciprocating motion."

Contact: FARM SHOW Followup, Cecil C. Fitzpatrick, Rt. 2, Box 86A, Bee Branch, Ark. 72013 (ph 501 654-8852).

Permanent Replacement Seals For Load Shaft On Deere Tractors

A Missouri machine shop that got tired of replacing leaky load control shaft seals on Deere 30 and 40 Series tractors came up with heavy-duty "permanent" replacement seals.

Boling Machine Shop, Clarence Mo., says Deere's seals often start leaking after 6 months or less. Boling has been making heavy-duty replacements for 7 years and has yet to have a leak or a worn-out seal.

The replacements are steel bushings with inset O-rings or neoprene washers, depend-

ing on the model. Both O-rings and washers can be replaced without replacing the steel bushings.

The 4020 seals also fit 4010, 5010, 5020, and some applications of 4000 models. The 3020 seal also fits 2510, 2520, 3010, and 4030 tractors. A 4520 seal also fits 4620, 7020 and 7520 tractors. All sizes sell for \$50 a set.

Contact: FARM SHOW Followup, Boling Machine Shop, Rt. 3, Box 176, Clarence, Mo. 63437 (ph 816 699-3717).

Torque Converter For Allison Transmissions

New torque convertor is designed to provide the full range of power from a Cummins 6BTA 5.9 diesel engine that's coupled with an Allison 542/545 transmission.

According to the manufacturer, Valley Fuel Injection, the Allison 542/545 transmission's fluid coupling takes place at 1,800 engine rpm's, which means it's not able to take advantage of the low torque rpm that the Cummins engine develops. Another problem is that the engine revs at close to governed rpm at 60 mph, and at low

vehicle speeds high rpm is required to overcome the load.

Once installed, the BD converter provides more power at low rpm's, reduced rpm's at highway speeds, and lower transmission temperatures.

Sells for \$550 and takes about 10 hrs. to install.

Contact: FARM SHOW Followup, Valley Fuel Injection, P.O. Box 231, Sumas, Wash. 98295 or Rt. 2, Abbotsford, B.C. Canada (ph 604 853-6096).