

Pickup-Mounted Air Compressor

"It's the most valuable tool on my farm," says Wayne Hagen, Lake Alma, Sask., who built an air compressor that mounts in his pickup. He says the idea will work on any pickup or farm truck.

The idea was first published in GRAIN-EWS magazine in Canada. It stirred up a lot of interest and Hagen is still responding to farmers who had questions about how his compressor works.

"It has volume to compare to a 2-hp. commercial air compressor. I use it to pump tires and to run air tools, spray painters, foam markers, and other equipment," says Hagen.

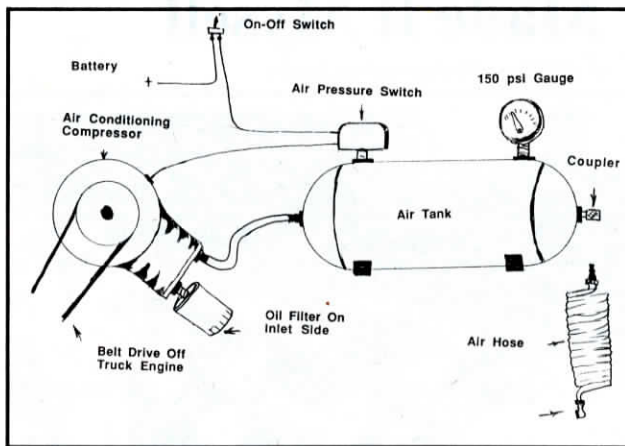
He simply mounts an old air conditioner pump on his pickup engine and pumps air to a 2-gal. holding tank behind the seat. He notes that the holding tank could just as well be mounted under the hood if there was room.

The electric clutch on the air conditioner pump is engaged by a toggle switch on the dash and controlled by a pressure switch on the tank so it's fully automatic. When you flick the switch on he says you have up to 100 psi air. At highway speeds Hagen says the compressor will go from 0 psi to 100 psi and then shut off automatically in less than 15 sec. "It's much faster than a 3/4-hp. shop compressor and it

doesn't spoil the truck's looks at all. It can be removed from the truck in less than 1/2 hr.," says Hagen. "I hardly use my shop compressor now because this one is so fast. I've used it for five years with no problem."

The one question everyone asks is how he lubricates the compressor. Air conditioner compressors are normally lubricated by the oil that circulates with the refrigerant. The pistons on the compressor do not have oil rings for oil control so most mechanics assume that the oil will just pump out past the rings and mix with the air but Hagen says he doesn't modify the compressor at all. He simply keeps the oil compartment filled with regular motor oil. Only small traces of oil go through the system, he says. He puts an oil filter on the inlet side of the the compressor and a short air hose on the outlet side. Normally, he says, you have to rig up special fittings to fit the compressor. Then you mount the compressor on the side of the truck engine the way any air conditioning compressor would be mounted.

Herb Killn, a Strasbourg, Sask., farmer who read Hagen's original article in GRAINEWS, put a Chrysler compressor on his Dodge pickup. "I put oil in the



compressor and check it regularly. There never seems to be oil in the compressed air. My son used the compressor to paint my 18-ft. stock trailer. The only problem we had is that after 1/2 hr. of continuous use the compressor gets very hot. When he finished painting and the compressor

had cooled down, I checked the oil and had to add only about 2 ounces. That's after about 2 hrs. use."

Contact: FARM SHOW Followup, Wayne Hagen, Box 215, Lake Alma, Sask. SOC 1M0 Canada (ph 306 447-4721).

Remote-Control Planter Disc Marker

Bill Kreitzer, Elliott, Ill., mounted an electric fan speed control system from a Deere 9500 combine on each end of his planter's marker arms, allowing him to remote control the angle of his planter marker discs.

By flipping a switch in the cab, Kreitzer can adjust the angle of the discs on-the-go to keep the marker furrow at an even depth for optimum performance of his automatic guidance system which uses the marker furrow as a guide.

Kreitzer uses the Robotic Driver automatic guidance system, made by Tri-R Innovations, Gibson City, Ill., to cultivate and combine. The electronic system has a steerable wheel that follows the marker furrow. A sensor mounted on the tractor's tie rod constantly monitors position of the wheel and sends signals to a control box in the cab that activates a small rubber wheel that turns the tractor's steering wheel. The "hands off" system virtually eliminates "cultivator blight" and, when combining, leaves Kreitzer free to monitor the workings of the machine.

"It takes the fatigue out of cultivating and combining and does a better job than I can do," notes Kreitzer. "The problem is that the furrow has to be at least 1 1/2 in. deep for the guidance wheel to follow it. In hard soil it's difficult for the marker disc to cut a furrow 1 1/2 in. deep. In soft soil the disc often cuts too deep. You can control furrow depth by adjusting the angle of the disc to point inward or outward, but that means getting off the tractor and changing the position of two bolts that secure the disc to the marker arms. I used my remote-control system on 1,300 acres last spring without a hitch."

Each fan speed control consists of a motor, gear, and threaded rod connected to a rectangular bracket. Kreitzer clamped the motor to the marker arm and wired it to two switches mounted in the cab. When Kreitzer flips a switch, it activates the



motor which rotates the threaded rod to push the disc out or pull it in.

Kreitzer spent — to install the remote-control marker disc systems.

For more information, contact: FARM SHOW Followup, Bill Kreitzer, P.O. Box 1, Elliott, Ill. 60933 (ph 217 784-4646).



Lawn Sweeper Picks Up Grass, Leaves

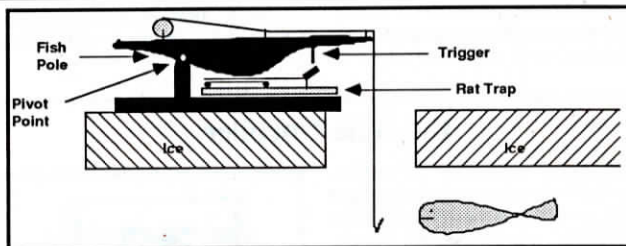
"I built it three years ago. We never have to rake any more," says Archie Smith, Mora, Minn., about the 6-ft. wide powered lawn sweeper he built to pick up leaves and grass from his farmyard.

The sweeper is powered by a Briggs & Stratton motor with a 6:1 gear reduction drive that belt-drives the sweeper brush, which consists of 12 broom heads mounted on a drum.

Smith can pull the sweeper with any

garden tractor since the sweeper requires no outside power and it'll work as fast as you can pull it. The carrying compartment is about 4 ft. wide and 4 ft. deep across the full width of the sweeper. Leaves and grass dump out the back by pulling out a piece of loose canvas that lines the carrying compartment.

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"Rat Trap" Fish Pole

If you're a winter fishing enthusiast and you're getting ready for another year on the ice, you'll like this idea from Mark Hoffman, Munich, N. Dak.

"Ice fishing is fun when fish are biting. When they don't, I like to read the paper or take a nap. I came up with this idea after staring at a bobber all day," says Hoffman.

What he did was to mount a fish pole on a platform so it pivots up and down over a rat trap positioned just below it. When the hook is in the water, with the pole extended out over the hole, the trap is set

and ready. If a fish bites, it pulls down on the pole setting off the trap, and the catch arm of the trap springs up lifting the fish pole and setting the hook.

"It hooks the fish and makes enough noise to alert you from your paper or nap," says Hoffman, noting that in certain states the rat trap idea may be illegal so you should check with your local wildlife office.

For more information, send \$1 to: FARM SHOW Followup, Mark Hoffman, Rt. 2, Box 116, Munich, N. Dak. 58352 (ph 507 682-5363).