## Money-Saving Repairs & Maintenance Shortcuts

## Easy Way To "Winter Start" **Older Model Tractors**

Ed Brouwer, Osoyoos, B.C., used to have a lot of trouble starting his old David Brown 1200 Selectamatic tractor when temps got cold. "I needed to use a lot of starter fluid to get it to run," he says.

"The problem was that the place to spray starting fluid was 4 ft. from the tractor's clutch pedal and ignition key. I had to spray starting fluid into the pre-filter, then run over to a step, climb up into the seat, depress the clutch, and turn the ignition key. By that time all the starting fluid had evaporated. So I'd try again and again. It would normally take a dozen or so attempts, and all the running back and forth caused my asthma to flare up.

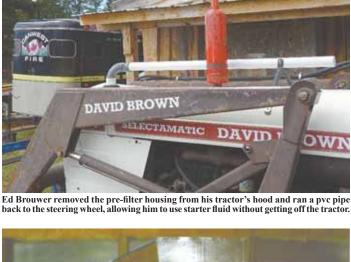
"One day when I was hurriedly trying to climb the step I slipped on some ice and fell on my butt. I was pretty frustrated and almost said a bad word. But then I asked myself. 'What would the readers of FARM SHOW do?

"A light came on, and within 15 min. I had the problem solved. I removed the pre-filter housing from the tractor hood and inserted a piece of pvc pipe with an elbow into the line that comes up from the oil bath filter. The pipe extends back to the steering wheel, so I can use starter fluid without having to get off the tractor. It's supported by a metal bracket that's screwed onto the hood.

"It works slick. All I do is spray starter fluid into the end of the pipe and turn the ignition key. It usually takes only one try and the tractor starts right up.

"This idea saves wear and tear on my body and also saves on starting fluid. And, it impressed my wife - a win-win situation all the way around."

Contact: FARM SHOW Followup, Ed Brouwer, P.O. Box 914, Osoyoos, B.C., Canada V0H 1V0 (ph 250 495-4877; akaopa@hotmail.com).





"I wanted to install 4 by 8 sheets of OSB board on my shop ceiling but had no one to help me. So I converted an old engine puller to do the job," says Richard Sands.



He bolted an 8-ft. long 2 by 4 along each side of the boom, then angled a 2 by 4 between the ends of the boards and screwed on a 12-in. sq. piece of plywood.

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## "Lift Boom" For Shop Ceiling Panels angled 2 by 4.

"I recently built a new farm shop with a 10ft. high ceiling. I wanted to install 4 by 8 by 1/2-in. sheets of OSB board on the ceiling but didn't have anyone to help me. So I converted an old engine puller to do the job," says Richard Sands, McConnelsville, Ohio.

He bolted an 8-ft. long 2 by 4 along each side of the boom using existing holes in the boom, then sandwiched a 2-ft. long 2 by 4 between the ends of the boards. He then drilled a 3/8-in, dia, hole through all three 2 by 4's and bolted them loosely together. He raised the boom to the ceiling to set the end board at the proper angle, then tightened the bolts. The last step was to screw a 12-in. sq. piece of 1/2-in. thick plywood to the

## **First-Ever 5-Stage Shop Air Cleaner**

Air-Vac Systems, long-time manufacturer of shop air vac cleaners in Cedar Falls, Iowa, recently announced a first-of-its-kind 5-stage, dual intake air cleaner.

Robert Hughes, president of Air-Vac Systems, says his company has been building and selling its 2-stage air cleaners to farm shops, welding, machine and diesel shops for almost 25 years. The 2-stage unit consists of a powerful fan that pulls dirty air through an industrial grade, 4-in. thick pleated pre-filter and then through a 95 percent efficient bagtype filter. "The 2-stage unit works great for removing any liquid or solid particulates from ambient air," he says.

Hughes says their new 5-stage Air-Vac unit will also remove odors, toxic gases, chemical vapors, and VOC's. It will also kill mold, bacteria and viruses, both airborne and on surfaces.

The 5-stage air cleaner uses the same pleated and bag-type filter as the 2-stage model. It's followed by a 75 percent charcoal bypass filter and finishes with a large

ultraviolet (UV) light encased in a titanium oxide filter. "The combination produces what's called photo catalytic oxidation or PCO technology," says Hughes. "The process creates hydroxyl radicals and super-oxide ions, which are highly reactive electrons that

convert harmful particulates and toxic gases into safer compounds, such as carbon dioxide and water. "PCO technology is many times more effective than a HEPA filter, without diminishing the air cleaner's cfm's as HEPA filters tend to do. A HEPA filter will remove particles down to .03 of a micron, whereas PCO technology takes out particulates down to .001 of a micron."

Hughes says the wife of one of his customers came into his shop a couple of days after he had installed his PCO units and couldn't believe the difference. "She was used to the smells of gas, oil and stale cigarette smoke and said she was glad that now 'the stink is gone""

One M-30 UV AIR-VAC 5-stage air 38 • FARM SHOW · vol. 38, no. 6 • www.farmshow.com • www.bestfarmbuys.com • editor@farmshow.com • 1-800-834-9665



Air-Vac Systems says its new 5-stage, dual intake air cleaner will remove odors, toxic gases, chemical vapors, and also kill mold, bacteria and viruses.

cleaner will clean up to 2,000 sq. ft. of air. For larger shops simply add more units. It sells for and eyebolts for ease of installation. Air-Vac Systems is offering a \$400 discount to FARM SHOW readers, which results in a final price of \$3,180. The company's standard 2-stage

M-30 unit is also still available.

Contact: FARM SHOW Followup, Robert Hughes, Air-Vac Systems, Inc., 1514 W. Lone Tree Rd., Cedar Falls, Iowa 50613 (ph 800 234-2473; cell ph 319 231-4711; fax 319 266-2524; rhughes@air-vacsystems.com; www.air-vacsystems.com).

to hold the 4 by 8 panel in place as I lift it.

Then I use a stepladder and a cordless impact

Richard Sands, 9050 S. River Rd. N.W.,

McConnelsville, Ohio 43756 (ph 740 674-

Contact: FARM SHOW Followup,

wrench to fasten the panel into place."



"It was an easy way to install a ceiling. The

engine puller rides on swivel wheels which

makes it easy to maneuver the panels into

place, even in hard-to-reach areas above the

garage door's overhead track," says Sands.

"I run 2 small sheet metal screws up from

the bottom of the 12-in. sq. piece of plywood

\$3,580 and is shipped complete with filters