Forced Air Wood Burning Stove Heats Shop In Garage

When Tad Schreiner went looking for a cheaper way to heat his garage and shop, he couldn't find a forced air wood stove that would do what he wanted. That left him with only one option: He had to build it himself.

The wood stove he came up with is built out of three barrels - a 55-gal. one on the outside, a 35-gal. barrel inside, and a 20-gal. barrel inside of that. The 20-gal. barrel serves as the firebox. Air between the firebox and the 35-gal. barrel heats up and is pulled out through a 6-in. dia. elbow on one side of the stove. A thermostat mounts on the elbow. The space between the 35-gal. barrel and the outer barrel is packed with insulation.

The stove sends 180-degree air through insulated air ducts into the shop and garage. An old furnace fan draws air from the shop and returns it to the stove. Exhaust air exits through an 8-ft. high, 6-in. dia., high pipe that mounts on top of the stove.

"It does a nice job and didn't cost much to build," says Schreiner, of Prior Lake, Minn. "The nice thing about my stove is that after winter is over I don't have to leave it sitting in the yard all summer and mow around it. I can disconnect the stove from the air ducts, put it on a two-wheeled dolly, and roll it into my shed.

"My shop is located under the living space in my house but I didn't have a chimney down there for a wood stove. I could have bought an outside stove that pumps hot water to the house, but I didn't want to spend the money and have to deal with pipes and water lines, etc."

Schreiner had 14-ga. cold-rolled sheet metal rolled into shape to build the 20-gal. firebox. He was given the other two barrels.

To build the stove, he first cut the tops and bottoms out of the 55 and 35-gal. barrels to fit them together. He welded a door collar and fresh air inlet into the firebox and cut openings into the other barrels. The firebox was then placed inside the 35-gal. barrel, and 6-in. dia. stove pipe elbows were welded onto it. Then he used 16-ga. sheet metal to cut out new tops and bottoms for the 35-gal. barrel.

Then he put the 35-gal. drum inside the 55-gal. drum and packed the opening between them with batt-type insulation, making sure to pack it in fairly tight. Then he welded a top and bottom on the 55-gal. barrel.

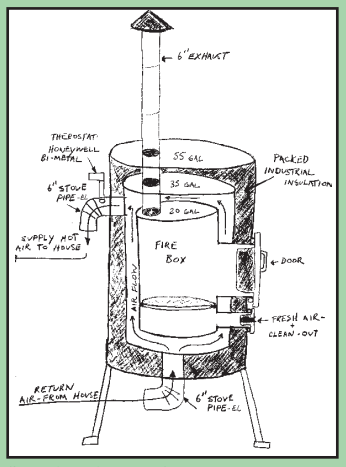
Next, he used sheet metal and angle iron to build an insulated door and painted the stove black.

"It's not as high tech as some commercial models, but it works well," says Schreiner. "Most commercial models are equipped with an automatic damper system, but I have to open and close the damper manually. However, it isn't a big inconvenience. Once I get the fire going, I turn the dampers off so the wood will burn longer. The thermostat I use came out of an old furnace and is used to turn the fan on or off. I set the thermostat to kick the fan on once the stove temperature reaches 200 degrees, and to shut off when it reaches 90 degrees. The thermostat is wired up to an extension cord that runs to the house.

"There is about 3 1/2 inches of insulation in the stove, and it really contains the heat. Even after the stove has run for 8 hours, the stove won't melt any snow that may be on it."

Contact: FARM SHOW Followup, Tad Schreiner, 16250 Suel Lane, Prior Lake, Minn. 55372 (ph 952 447-5421).

Tad Schreiner's wood burning stove sends heated air through insulated air ducts into his shop, which is located under the living space in his house.



Stove is built out of three barrels - a 55-gal. one on the outside, a 35-gal. barrel inside, and a 20-gal. barrel inside of that which serves as the firebox.

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Hand-Held Splitter Makes Wood "Chopping" Easy

Screw-type wood splitters are not new but Charlie Ellison of Dapp, Alberta, is the first person we've heard of who put one on an impact wrench. He calls it "Charlie's Wood Splitter" and says it's easier to use than anything on the market.

The threaded, cone-shaped wedge fits any 3/4 or 1-in. sq. drive. A pin slides through a hole in the splitter base and locks in the hole in the wrench's drive. Ellison says there are some impact wrenches that don't have a hole through the anvil, but for safety sake, he recommends using one that does.

"The wedge is made from specially hardened steel and it is so easy to operate that it's ideal for women, the elderly, or anyone who might otherwise struggle physically with what was once a demanding and tiring chore," Ellison says. "You can actually split wood one-handed, and it will work on any length and diameter of wood. It's not as fast as hydraulics, but the trade-off is that there isn't the lifting or carrying required. What's great is that it actually works fastest on the harder woods."

The splitter ise applied to the bark-side of the wood (not the end), since going across the grain of the wood assures that the splitter will pull itself into the wood. It can be driven by an electric or pneumatic wrench. Ellison sells impact wrenches that come in an attache case with room to carry the splitter as well. The unit can then be easily transported behind the seat of a truck.

"It's ideal for taking along on camping trips and the impact wrench becomes a dual purpose tool. You can used it to prepare wood for your campfire, or take the lug nuts off your RV tire if you get a flat," he says.

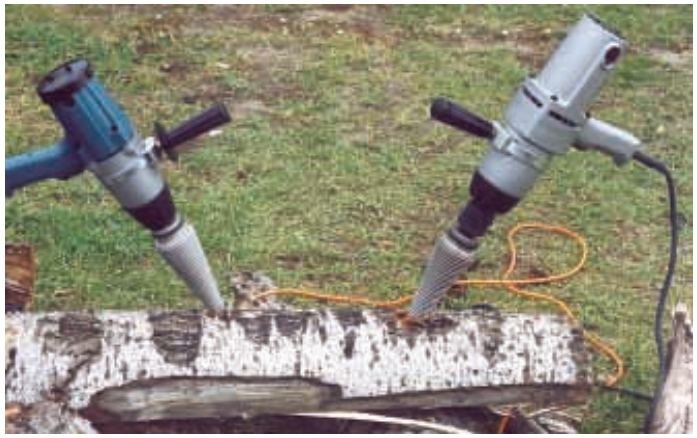
Dapp has been burning wood as his main home heat source since 1981 and says, thanks to his new wood splitter, his wife now does all the wood splitting.

When he first began experimenting with ways to drive his wood splitter, he tried using a _" drill, but because the unit relies on constant torque, it promptly twisted out of his hands and the cord wrapped around the drill. Substituting an impact wrench to drive the splitter solved this problem, however.

Ellison currently has four Alberta dealers and welcomes other dealer inquiries. There has already been a lot of interest in the unit and Ellison has had calls from Nova Scotia to Vancouver.

He sells the 3/4-in. wood splitter attachment for $195 (Canada) and the 1-in. model for $290 (Canada). He can also supply an impact wrench.

Contact: FARM SHOW Followup, Charlie Ellison, Box 9, Site 3, R.R.#1, Dapp, Alberta, Canada T0G 0S0 (ph 780 954-2528, toll free 866 954-2528, cell 780 349-1150); E-mail: dappalta@telus.net; Website: www.woodsplitter.net).



Charlie Ellison says screw-type wood splitters work great on any kind of wood.

Threaded, cone-shaped wedge fits any 3/4 or 1-in. sq. drive and is held on by a pin that slides through hole in splitter base.

Wedge is so easy to operate that you can actually split wood one-handed.