

By mounting a snowblower in his loader bucket, Wolfe Lundgren can easily control its working depth, and even lift blower high enough to remove a bank of snow.

Hydraulic-Powered Snowblower Mounts In Tractor Bucket

Snow removal is easy for Wolfe Lundgren since he built a hydraulic-driven snowblower that mounts in the bucket of his 20 hp diesel yard tractor.

The Prince Albert, Sask., man started with a front-mount, belt-driven, 2-stage snow-blower he bought for \$300.

"Where the pto shaft was, I mounted a hydraulic orbit motor on the drive shaft, and then I put on a vein-type hydraulic pump to run off the tractor pto," Lundgren says. "On this particular tractor, I have three pto speeds, the highest of which is 1,200-rpm, and that's the one that runs the pump."

Next, he mounted a hydraulic oil tank with brackets onto the 3-pt. hitch using four bolts. It takes only about an hour to remove the tank and pump if he ever wants to use his pto for something else, but Lundgren can still use the 3-pt. hitch.

He says the oil flows through a hydraulic valve, allowing him to either shut it off or switch the flow direction if the blower ever plugs up with wet snow.

"The blower is mounted with six bolts in the 4-ft. bucket. The width of it just fits," he explains. "There are 1/2-in. fast-coupling lines that run from the control valve to the snowblower, and that allows me to take the snowblower off if I want to use the bucket for something else."

With the blower sitting in the bucket, Lundgren can control the working depth, making it possible to lift the blower high enough to remove a bank of snow.

The pump originally had 1 1/4-in. inlet flow ports and a 1-in. outlet, but Lundgren "coupled them down to 1-in. and 1/2-in. so it could run freely without pulling the motor down because of too much pressure for the size of the line."

"I did this in my spare time over about two months, and got it done just in time for when the snow came," he says. "The hardest part of the project was mounting the pump at the back onto the pto shaft because it needed a universal coupling between the line and the pump."

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Ron Gardner uses a 6 1/2-ft. wide snowblower on back of his tractor and a 7-ft. wide truck snowplow blade on front.

"Blower And Blade" Snow-Moving Combo

When Ron Gardner goes out to clear snow off his driveway, he's really prepared. The Grand Valley, Ontario, farmer uses a 3-pt. mounted, 6 1/2-ft. wide New Idea snow-blower on back of his David Brown 880 tractor and a 7-ft. wide truck snowplow blade on front.

"Some people joke that I can't make up my mind which machine to use," says Gardner.

The snowblower originally came equipped with a hand-cranked blower chute. Gardner automated it with a hydraulic motor off a Massey Ferguson combine. A valve inside the cab is used to operate the motor.

He bought the truck snowplow blade at a salvage yard for \$200. It bolts onto homemade brackets that fit the loader's quick tach brackets. The blade came equipped with a pair of hydraulic cylinders that are used to adjust the blade angle. The hydraulics that were originally used to tilt the loader bucket are now used to adjust the angle of the blade.

A pair of chains connect the blade to the loader frame and keep it rigid whenever the blade is raised off the ground.

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Made-It-Myself Hot Water Boiler

"It saves us a lot of money and I don't have to fight the snow and cold while firing the furnace," says Roger Moore, Oconee, Ill., who built his own outside wood burning furnace out of a pair of old propane tanks. It's located inside a shed where Moore also keeps his wood supply.

The wood-fired boiler measures 7 ft. tall and 40 in. in diameter and is located inside a 12-ft. wide, 18-ft. long shed about 25 ft. from Moore's house. The shed has room for a dozen or more loads of chopped firewood.

Hot water is pumped by a circulating water pump through an underground copper pipe to his basement, where a heat exchanger mounts inside the plenum of his hot air furnace. The hot water is also pumped to the hot water heater.

The two propane tanks were used to build the firebox. One tank was slightly smaller than the other one. He cut the smaller tank in half horizontally and mounted it on a metal base. Then he cut the bigger tank the same way and mounted it over the smaller tank, leaving room for a 2-in. wide water jacket between the two tanks. He cut an opening for a fire door that's made of 1/4-in. thick plate steel. Then he used heavy, 1/4-in. thick catwalk to build a firebox grate. A pair of 48-in. long, 5-in. sq. tubes extend across the inside of the tank, just above the fire so they get maximum heat.

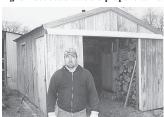
A metal pipe extends up through the bottom of both tanks and into the firebox. A blower delivers air through the pipe. If the house needs more heat, a thermostat that controls water temperature activates a blower to fuel the fire.

The outside part of the stove is covered with corrugated roofing sheet metal. The stove is vented up through the shed's roof.

"I built it when we moved into a new home three years ago and have been very happy with it," says Moore. "The tanks are thick



Roger Moore built this outside wood burning furnace out of two old propane tanks.



Stove is located inside a shed where Moore also keeps his wood supply.

and heavy and will last a long time. The firebox grate is built in three parts so it can be removed if necessary.

"A commercial wood burning system like this would sell for \$4,000 to \$5,000. We spent only about \$1,500. Most of that was for gauges and the heat exchanger inside the house."

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Mike Hoy built his own hydraulic dump trailer out of a 5 by 8-ft. trailer frame.

Hydraulic Dump Trailer

"I built my own hydraulic dump trailer out of a 5 by 8-ft. trailer frame that I got for free," says Mike Hoy, Hedrick, Iowa.

He got the trailer from his brother-in-law. The floor was rusted out so he removed it. He used 2-in. sq. tubing to build a 5 by 9-ft. frame on top of it and hinged it at the back. He rebuilt a hydraulic hoist cylinder and scissor assembly from an old hydraulic dump wagon and mounted it between the two frames. One end of the cylinder is hooked to the trailer's original frame, and the other end is hooked to the add-on frame.

He used 2 by 6's to build a new wooden floor and mounted 2 by 12's on the front and sides of the trailer, adding a tailgate on back.

"I pull it either with my tractor or pickup and use it to haul wood, rocks, and anything else that I need dumped. It works great and only cost the price of the add-on frame and my time," says Hoy. "I built a removable section of floor above the hoist in case I ever need to work on it.

"I use it a lot for hauling firewood at our



Hoist cylinder and scissors assembly mounts between two frames.

cabin. I haul cut chunks of wood and dump them close to the log splitter. We split the wood and then throw it back on the trailer. Then, I haul the split pieces of firewood close to the wood pile and dump them there to be stacked later. I've also used the trailer to haul rocks."

To make the hinge, he welded two short lengths of 1-in. dia. round tubing to the top frame and also two pieces to the bottom frame, then slid a rod through them.

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