

“Big Wheel” Log Splitter

A Montana man with a lot of logs to split has designed and built a flywheel log splitter that consists of a heavy spinning steel wheel fitted with an axe head that revolves continuously and splits fast. It mounts on a 2-wheel trailer that has a jack stand on front to provide solid footing.

“We had several forest fires in the area in 2016 and 2017, and local companies were selling semi loads of logs cheap,” says Pat Burrington, Stevensville, Mont. “I found some flywheel splitters from the 1920’s on the internet and thought it was a neat idea. I can split 6 to 8 pieces of wood in just over a minute. My total cost was about \$675.

“Because the splitter uses a 3/4-hp. electric motor instead of a gas engine, I can actually use the splitter inside my shop. When it’s snowing and really cold outside, I can be splitting wood inside, next to my wood stove, while wearing a short sleeve shirt.”

The key component of the splitter is the 300-lb., 42-in. dia. steel wheel. Burrington built it by welding together 8 sections of 5-in. by 1-in. thick steel flat bar and adding spokes.

He welded a 6-in. long splitting wedge onto one of the sections. The wedge is made from hardened AR400 steel and is pointed at one end. “It works just like an axe head,” says Burrington.

The flywheel rotates at 60 rpm’s, or about once every second. It’s painted bright yellow so it can be easily seen.

“I watch the wheel and when I see the wedge go by, I slip in a piece of wood,” explains Burrington. “As the wheel rotates, the wedge comes down on top of the log, catching about 1/4 of it which is enough to split it in half. I can split wood on its side as easy as standing it up, and by doing it this way my hands aren’t close to the wedge. The splitter can handle up to a 14-in. round log and can even split bigger wood, but that’s where my safety guard is currently set at.”

Burrington admits that the flywheel looks kind of dangerous at first, “but I’ve never had a close call. My wife uses the splitter as much as I do, and she thinks it’s pretty neat.

“The 10:1 right angle gearbox slows the flywheel down a lot, and if a piece of wood gets in crosswise, that’s enough to stop the wheel by slipping the belt. But stopping it won’t cause any damage. Also, plastic brush guards surround the wedge on 3 sides, and an expanded metal screen provides a safety guard around the flywheel.”

The 3/4-hp. electric motor runs at 1,725 rpm’s and goes into a 10:1 right angle gearbox. The motor and gearbox set on a slide, and a heavy-duty spring pulls them forward to tighten the belt. “Whenever I don’t need the splitter I loosen it to keep tension off the belt,” says Burrington.

He bought the jack, hitch, tires and wheels from Tractor Supply Company and got the motor, gearbox and bearings from Surplus Center in Lincoln, Neb. (www.surpluscenter.com). He got the steel he used for the flywheel from CDA Metals in Missoula, Mont.

To build the flywheel, he cut all 8 pieces



Flywheel log splitter consists of a heavy spinning steel wheel with a welded-on axe head that revolves continuously and goes through a slot cut into table.



As wheel rotates the axe head comes down on top of log, splitting it in half.



Check out a video of the splitter at FARMSHOW.com.

Contact: FARM SHOW Followup, Pat Burrington, 130 Garnet Drive, Stevensville, Mont. 59870 (ph 406 642-3155; patatrc@aol.com).

the exact same length, and set them up in an octagon shape. He then installed a center hub and 4 spokes made from 1/4-in. thick steel plate, and welded everything together. “The flywheel is surprisingly well-balanced,” notes Burrington.

Vol. 42, No. 1, 2018

Harold M. Johnson
Founder

Editor/Publisher

Mark Newhall (mark@farmshow.com)

Senior Editor

Bill Gergen (bill@farmshow.com)

Contributing Editors

Jim Ruen (edgcom@acegroup.com)

Dee George (dee_george@yahoo.com)

Lorn Manthey (redoakridge@mac.com)

Office Manager

Anne Lash (anne@farmshow.com)

Circulation (circulation@farmshow.com)

Shelly Mende, Mary Lunde, Kim Trapp

FARM SHOW (ISSN #01634518) is published 7 times per year (bimonthly plus one special “Best of FARM SHOW” issue published in December) for \$25.95 per year (\$29.95 in Canada) by Farm Show Publishing, Inc., P.O. Box 1029, 8500 210th St. W., Lakeville, Minn. 55044. Periodicals postage paid at Lakeville, Minn., and Madelia, Minn. POSTMASTER: Send address changes to FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 952 469-5572; fax 952 469-5575; email: circulation@farmshow.com; website: www.farmshow.com). Single copy price is \$5.95 (\$7.50 in Canada). Publication No. 469490.

In Canada: Publications Mail Agreement No. 40032660. Return Undeliverable Canadian Addresses To: Dycom Mail Svcs. 495 Berry St., Winnipeg, MB R3J 1N6; Email: circulation@farmshow.com

FARM SHOW does not accept advertising and focuses exclusively on new products and product evaluations.

FARM SHOW does not charge for new products or services featured in the magazine. Anyone with a new product or service of interest to farmers - whether inventor, manufacturer, marketer, distributor or whatever - is invited to contact FARM SHOW regarding possible publication.

FARM SHOW Publishing, Inc., has not tested or used any of the ideas or products described in its publications. FARM SHOW Publishing, Inc., does not promote, recommend or endorse the use of the ideas or products described in its publications. FARM SHOW Publishing, Inc., disclaims any and all responsibilities and liabilities in the event of personal injury, death, property damage or losses as the result of the use or application of any such ideas or products. Anyone applying or using such ideas or products does so at his, her or their own risk.

Printed in U.S.A. All rights reserved, including the right of reproduction, in whole or in part, without written permission.



Jan. - Feb., 2018

Combine Costume The Hit Of Halloween

What do you get when you merge cardboard boxes, Frisbees, an empty ice cream container, swimming noodle, nuts and bolts and a whole lot of hot glue? If you have an old photo of a Minneapolis Moline combine, you get a winning Halloween costume, says Christine Reigleman.

The idea came from her 4-year-old son Parker. It was not a surprise because last year, when he was 3, he dressed up as a Minneapolis Moline G900 tractor - just like one his grandpa had.

“It had to be a Moline because our family has 5 generations of Minneapolis Moline lovers,” Reigleman says. She and her husband Ryan, and their son live in a suburb of Washington, D.C. But, they spend most of their summer at tractor shows and with family in rural Pennsylvania.

Reigleman and her mother, Debbie Elder, spent a weekend covering boxes with yellow paper, making the header that spins on a swimming noodle, dowels and cardboard; tires are painted Frisbees and the grain hopper is an ice cream container.

“We fastened everything together with nuts and bolts and washers because it had to be sturdy,” Reigleman says, noting she learned that from the tractor they made the year before.

“The most challenging part was getting the proportions right. We are a little OCD, as is Parker, so we wanted it to be realistic,” she adds.

She purchased nylon straps and buckles to fit over Parker’s shoulders so he could wear



Last fall 4-year-old Parker Reigleman dressed up for Halloween as a Minneapolis Moline combine, with a header that spins on a swimming noodle. The year before, he dressed up as a Minneapolis Moline G900 tractor - just like one his grandpa had.



the combine.

“He marched around the suburbs (45 minutes from Washington D.C.). Most people down here have never heard of Minneapolis Moline,” Reigleman says, adding Parker corrected a few adults who called his combine a tractor.

Though it was made as balanced and light as they could get it, much of the night Parker’s father held up some of the costume’s weight to help his son.

Besides bringing the farm to city folks, the combine also won \$300 in a local newspaper

contest.

The money went into a savings account that Parker may one day use to purchase a real Minneapolis Moline to start his own collection, just like his grandparents and great-grandparents have.

Reigleman admits she isn’t sure what Parker will come up with this year. Though she still has the tractor and liked the combine, she laughs that she may try talking him into a purchased costume.

Contact: FARM SHOW Followup, Christine Reigleman, Stafford, Va.