



Mark Adelman and his son cut a 14 hp Murray garden tractor down to the engine, hood and dash to build this low-cost splitter.

Garden Tractor Log Splitter

Mark Adelman cut a 14 hp Murray garden tractor down to the engine, hood and dash to build a low-cost, pull-type log splitter.

"My son and I built it two years ago. We made it entirely from recycled materials except for the hydraulic components and the trailer jack," says Adelman, who pulls the unit with his 4-wheeler.

The back end of the splitter rides on the axle and wheels off an old grain elevator. They welded a steel frame together to support the tractor's engine. A 4 by 8 by 1/2-in. thick I-beam is welded to the frame and axle. An 8-in. wide by 5/8-in. thick steel plate is welded on top of the beam and serves as the table. They used 5/8-in. plate steel to make a 14-in. high wedge and a square push plate. The push plate is operated by a 30-in. stroke cylinder with a 15-second cycle time.

"It'll split anything I can put on it," says Adelman. "I built it because I heat my house

and shop with an outdoor boiler and go through 10 to 12 cords per year. We plan to add a hoist to lift heavier blocks of wood.

"The tractor engine has plenty of power and can easily operate the splitter in high idle. The tractor still has the original ignition key, throttle, and gas tank. We installed an hour meter where the steering column used to be in order to keep track of how much we use it."

He says his dad got the tractor in trade for a set of tractor chains that they weren't using anymore. "The tractor had a bad transmission but we didn't need it. We did a lot of horse trading to get the hydraulic parts, which helped keep the cost down. Our out-of-pocket cost was only about \$300," he notes.

Contact: FARM SHOW Followup, Mark Adelman, 3141 125th St. N.E., Rice, Minn. 56367 (ph 320 393-3005; mkcrew@jetup.net).



Back end of splitter rides on the axle and wheels off an old grain elevator.

Steel Plates Extend Disc Mower Life

Donna (Dottie) Walker knows how to make a mower last. When she and her husband bought their disc mower 15 years ago, it was already 8 years old. She says it still looks like new, thanks to the wear plates she added to the bar.

"The wear plates saved the bar, preventing it from wearing down," she says. "The mower is always going over limbs and dirt clods hidden in the hay ground."

Walker welded pieces of scrap steel 5 to 6 in. square by 1/2 in. thick to the bottom of the disc mower's original wear or skid plates. She didn't worry about dressing the squares up.

"There's no need to bevel the steel," she says. "The leading edge wears down to a bevel on its own in a couple of years."

She added the plates to protect the bolt heads that hold the disc blade in place. "Without them, the dirt will wear the heads off," she says.

Contact: FARM SHOW Followup, Donna Walker, 3550 Republican Grove Rd., Atwood, Tenn. 38220 (ph 731 669-6242).



Metal wear plates under disc mower are marked in white.

Loader-Mounted "Bunk Plow"

Jeff Frederick built a loader-mounted feed bunk plow that quickly cleans out dirty feed and snow.

"It's built heavy to stand up under a lot of use," says Frederick, who operates a welding and fabrication shop in Marcus, Iowa. "I've worked around cattle yards all my life so I know that different types of feed cause different bunk issues. We built a lot of adjustment into this bunk plow so it'll work for just about any situation."

The unit quick-taches to the loader in place of the bucket and comes with a 1/2-in. thick steel blade that has a rubber "squeegee" bolted onto it. The blade bolts onto a horizontal telescoping toolbar. The toolbar can be adjusted to work with different loader widths by changing the position of a pin.

"It's amazing that something so simple can do such a good job. It has no moving parts and isn't noisy like a bunk blower," says Frederick. "It'll clean 2,000 ft. of bunk in only about 15 min."

"I use recycled rubber belting to cover the plate and used oil well pipe for the mounting frame," says Frederick. "The belting is bolted to a 1/4-in. thick steel backing plate. I usually sell the unit with a 4 by 4-ft. sq. rubber piece bolted onto the blade and let the customer trim it to fit his needs."

"I can customize the plow for different bunk sizes and styles."

The bunk cleaner comes with a pair of telescoping vertical stands. By removing a



Jeff Frederick built this loader-mounted feed bunk plow to quickly clean out dirty feed and snow.



Unit uses a rubber "squeegee" bolted to a 1/2-in. thick steel blade.

pair of pins, the stands can be rotated 180 degrees and tucked out of the way against the toolbar.

The feed bunk plow sells for \$1,500 plus S&H.

Contact: FARM SHOW Followup, Frederick Welding & Sales, P.O. Box 53, Marcus, Iowa 51035 (ph 712 376-4543 or 877 245-4543; jeff83@midlands.net; www.frederickwelding.com).



Breast pump milking machine makes milking dairy goats an easy job for Jim Criger. The hospital grade breast pump sits in his barn on a wire cart next to a homemade milking stand.

Breast Pump Used To Milk Goats

By Klaire Bruce

Milking dairy goats is easy with the breast pump milking machine designed by Jim Criger of Springfield, Mo.

The hospital grade breast pump in Jim's barn sits on a wire cart next to a milking stand built from angle iron and recycled plastic decking material. A length of plastic tubing is attached to the pump; the tube runs into the lid of a milk jar resting in a rubber bucket attached to the corner of the cart. Another length of plastic tubing runs from the jar lid to an open 35 mm plastic syringe. The syringe is hooked to the goat's teat and when the pump is turned on, milk is sucked into the jar.

Any breast pump used for a milking machine needs to have a regulator installed in order to control vacuum pressure. Goats should be milked at no greater than 15 psi. Breast pumps to use for milking machines can be found online or sometimes purchased directly from hospitals as they upgrade to newer, more sophisticated equipment.



Criger installed a regulator on breast pump to control vacuum pressure.

Contact: FARM SHOW Followup, Jim Criger, 2986 N. Farm Road 103, Springfield, Mo. 65803 (jimc417@yahoo.com).