

## Tractor-Mounted Pressure Washer

"We think it's better than any other pressure washer on the market," says Herb Post, manufacturer of a new pto-powered high pressure washer that's virtually maintenance-free and mounts on any tractor equipped with a Cat. I 3-pt. hitch.

"It's less expensive than comparable powered electric, gas or diesel-powered washers. And because it's pto-driven, you don't have another motor to maintain," Post told FARM SHOW.

The new washer is rated at 3.9 gal. per minute and 3,500 psi. It uses a high quality Giant pump and is virtually maintenance-free, says Post. The tractor pto-drives a big pulley that belt-drives the pump.

The pressure washer rides on two 10-in. wheels so it can be easily moved by hand when disconnected from the tractor. It weighs 120 lbs. and comes with a 50-ft. hose and wand, a 4-piece nozzle set, a chemical injector and nozzle, and an adjustable pressure regulator. A rotary nozzle is optional.

"It's made with commercial quality components and is built to last," says Post. Sells for less than \$1,500.



**Pto-powered high pressure washer mounts on any tractor equipped with a Cat. I 3-pt. hitch.**

Contact: FARM SHOW Followup, Herb Post, Markin Products, Inc., 2829 Stachler Road, Fort Recovery, Ohio 45846 (ph 419 852-1809; markinproducts@bright.net).



Self-priming pump can be operated manually or with a cordless drill at low speeds.

## High-Volume Handcranked Pump

"For its weight and size, this new self-priming pump moves higher volumes at lower rpm's than any other pump on the market. It can be operated manually or with a cordless drill at low speeds. And it can handle almost all liquids including inoculants, herbicides, pesticides and even thicker materials such as gear oil, waste oil, and paint," says Dan Patterson, Dbest Pump, St. Marys, Ontario, about his company's new Crank EZ Pump. The low cost, positive displacement pump is made from ABS plastic and nylon and weighs less than 5 lbs. It's equipped with a carrying handle on top and a crank on one side. Inlet and outlet tubes are 2 in. dia. Slots at the base of the pump allow it to be bolted down. A cordless drill equipped with a 1/2-in. socket can be fitted onto the same shaft that supports the crank.

"It's handy to use and works fast at up to 60 gpm with your drill set at low speed, which means you can transfer 300 to 500 gal. with one 18-volt battery," says Patterson. "Most battery-powered or manual transfer pumps work at a volume of only 10 to 20 gpm," says Patterson. "It works great for transferring liquid inoculants from a bulk container to an air seeder or for transferring insecticides or herbicides to a sprayer. It also works great in the field for pumping liquid preservatives from a bulk tank into big square balers.

"Because it self-priming, there's no need to

use a foot valve to get it started. With a drill the pump will self-prime 10 to 15 ft., and when you pump by hand it'll self-prime up to 4 ft. which in most cases means it can reach down to the bottom of the barrel."

According to Patterson, the Crank EZ Pump works better than diaphragm pumps. "Diaphragm pumps are limited in their volume and the amount of pressure they can achieve, because the diaphragms are made from product-sensitive neoprene which can stretch causing the pump to lose a lot of volume. Gear pumps are very limited in their priming capabilities. Centrifugal pumps need high rpm's and will not self-prime; therefore the pump has to be placed into the fluid or primed which means you can't use a drill with them.

"Our positive displacement pump pushes the material through and keeps a large volume moving, even with head pressure. It's hugely efficient when using a drill at low speeds. Even using the manual crank you can still pump at a higher volume and pressure than any other manual-operated pump on the market."

Sells for \$155 to \$160 plus S&H.

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**Horse-powered bale mover uses a mechanical braking system, but ground-powered hydraulics to pick up and handle bales.**

## Horse-Powered Hydraulics Move Bales

Moving big round bales on hillsides can be tricky with a tractor, but a horse-powered bale mover does it with ease. This two-bale mover uses a mechanical braking system, but ground-powered hydraulics to pick up and handle bales.

"A friend wanted to use horses to bring round bales back to the barn," explains Albano Moscardo, Noi e il Cavallo, an Italian non-profit that develops machinery for small farms. "We developed the mover to do this without relying on an auxiliary engine. The principle has been used on other animal drawn farm equipment."

The bale mover easily handles two bales. The operator activates the hydraulics to lower the bale arm to the ground and extend it past the bale as he pulls alongside. When the operator retracts the arm and raises the bale up, it rolls on to the platform. Powered rollers move it to the rear. The mover then has to travel about 80 ft. to recharge the hydraulic accumulator before picking up a second bale.

Once at the barn, the rollers smoothly unload the bales.

The bale mover is about 11 ft. long, 7 1/2 ft. wide, nearly 7 ft. high and weighs 1,874 lbs. It was designed to handle round bales 4 1/2 to 5 ft. diameter and up to 1,000 lbs. The pressure accumulator can build to 2,175 psi before a bypass valve kicks in.

"It took us two years to build this prototype, and it still needs some updates," says Moscardo. "It was designed for mountainous terrain, but on flat ground, I think it could be designed to handle four to five bales at a time."

Moscardo says his non-profit plans to get the bale mover patented. He admits the high quality hydraulic components make the unit pricey with an estimated cost of more than \$16,000.

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Operator uses hydraulics to lower bale arm to ground, then raises bale onto platform.



**MDS Mfg. makes buckets and grapple forks for both old and new Deere loaders.**



## Add A Grapple To Deere Loaders

Wish you had a grapple fork on your older model Deere loader? MDS Manufacturing makes buckets and grapple forks for both old and new Deere loaders.

"We figure there are millions of older Deere loaders that have worn out their grapple forks and buckets, and that's what we provide," says Cliff Court, national sales manager. "We work with the Deere dealer network. You can order a unit directly from us, but we ship it to your dealer and sell it through them."

The 4-tine grapples, which start at \$1,850, are available for 145, 146, 148 and 158 loaders. They can be mounted on factory-installed original buckets or new replacement buckets from MDS. The grapple forks feature twin hydraulic cylinders, hose kits to a center mount, a 72-in. protective screen above the bucket and removable, heavy-duty T-1 steel

grapple tines.

The frame uses 1/4-in. thick, heavy-duty tubular steel with a wide stance to prevent twisting. The design provides easy installation, excellent visibility and a 70-in. grapple opening. Installed with a modern bucket, the operator has true rollback and dumping action that works as well or better than the original, suggests Court.

"Our grapples are available with Sur-Lock Quik Tach, which the original John Deere models didn't have," he adds. "We are also making these for newer loader models, including the 260, 265 and 280 and will also make them for the 640 and 670."

Contact: FARM SHOW Followup, MDS Mfg. Co., 1301 S. SD Hwy. 37, Parkston, S. Dak. 57366 (ph 605 928-7951 or 800 658-4703; fax 605 928-7952; salesw@mdsmfg.com; www.mdsmfg.com).