Garden Tractor Converted Into Cheap Utility Vehicle

"It does the job of a Deere Gator or other utility vehicle but cost less than $200 to build," says Lennie Buscho, Kilkenny, Minn., who converted an old Montgomery Wards 10 hp garden tractor into a handy chore vehicle equipped with a hydraulic-operated dump box.

Buscho bought the tractor new in the early 1970's and used it for years to mow his lawn. When he got a new mower he decided to make something out of the old one.

He lengthened the frame about 24 in., moved the rear wheels and transaxle back 2 ft., and mounted a homemade wood cargo box on an angle iron frame that fastens onto the tractor frame just above the rear wheels. He replaced the original belt that ran from the engine to the transaxle with a longer one, and he also lengthened the transmission shift lever by 18 in. so he could still reach it from the driver's seat.

The initial conversion made the rig useful for hauling hay to his horse pens and for working around his yard. Then last fall his son Kevin read a story in FARM SHOW about a person who had added hydraulics to a garden tractor using an automotive power steering pump.

Armed with that knowledge, Lennie designed a new, longer box for the tractor which included a hydraulic lift. The box, which measures 4 ft. long and 3 1/2 ft. wide, is raised and lowered by a 4-in. stroke hydraulic cylinder that's operated by a power steering pump off a Chevrolet Celebrity car. The pump is belt-driven off the tractor's engine using the same pulley that was originally used to drive the mower deck. The valve that controls the power steering pump came off an old Minneapolis Moline tractor and is mounted on the tractor frame next to the driver's seat. The box raises to almost a 45 degree angle.

The tractor still has its original 10 hp gas engine.

"We use the rig to haul hay and grain, firewood, and also to do yard work," says Buscho. "We also use it with a 15-gal. electric-operated sprayer to control weeds along fence lines. The box is equipped with an endgate that pivots either from the top or bottom. Stake pockets make it easy to remove the sides. The only limitation is that it's a little dangerous for hauling big loads because it doesn't have real good brakes."

Lennie Buscho converted an old Montgomery Wards 10 hp garden tractor into a handy chore vehicle equipped with a hydraulic-operated dump box.

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Dump Bed Turns Old ATV Into Useful Ranch Machine

When 3-wheel ATVs were deemed unsafe and replaced by 4-wheelers, most of the old machines were parked somewhere out of the way and that's where they remain today.

"Mine was a typical 3-wheeler - parked in the corner of my barn collecting dust," says Jeff Hoard, Austin, Nevada, who finally decided to extend the frame and mount a dump bed on it. "Now I use it every day."

Hoard, owner of Hoard Manufacturing, spends a good deal of his time feeding stock at his HM Ranch. "We generally have many different animals with different needs and requiring different feeds. My modified 3-wheeler has cut my chore time in half. Besides feeding, I use it for cleaning pens. You can get into tight places to load and then dump or spread it quickly," he says. "I frequently load up to 200 lbs. in the bed and have never had a problem with it," he says.

Hoard says his modification required minimal skills, aside from the ability to weld. He cut the frame in front of the rear wheels and extended it 16 in. That meant extending the shielding over the drive chain and the chain itself.

Once he had the extended ATV back together, he built a 3 by 4-ft. box out of scrap 2 and 1-in. lumber and mounted it so it's centered just behind the rear axle. The dump hinge is in the center of the box. A manual latch in front keeps the bed from tipping accidentally. And a safety chain from the 3-wheeler frame to the box keeps it from tipping past vertical while dumping.

"The small amount of materials required can be scrounged around just about any ranch," he says. "The only thing I had to buy was the drive chain."

Hoard made notes as he progressed on the project, which took only a day and a half to complete, and then he wrote out detailed plans with diagrams and also a complete parts list. "These are written for a Honda 185 or 200, but they could be modified to other makes or sizes of 3-wheelers," he says. Hoard Manufacturing has been selling the plans for $6.50.

Jeff Hoard extended the frame on his 3-wheel ATV and mounted a dump bed on it.

Contact: FARM SHOW Followup, Jeff Hoard, Hoard Manufacturing, HC 61, Box 6108, Austin, Nevada 89310.

Box was made out of scrap lumber and is centered just behind the rear axle.

New Way To Build Rock Roller

Most rock rollers we've seen over the years are tanks filled with either water or concrete. Randy Pentz, Lost Creek, Utah, came up with a new way to build a roller by putting a 3-ft. dia. piece of pipe inside a 4-ft. dia. pipe and filling the 6-in. gap between them with concrete.

Pentz says there were two main reasons for the design: One, it would have weighed too much if either size pipe would have been filled with concrete. And two, the roller pulls easier with most of the weight on the outer edge.

Using concrete instead of water also helps strengthen the roller because the pipe wall is only 1/2 in. thick, which made it less expensive and easier to get than heavier pipe.

The ends of the inner pipe are capped and sealed tight to hold compressed air, fuel or even water for additional weight. The tongue is made from 4-in. dia. drilling pipe connected to heavy angle iron bars on the end. A pair of 3-in. shafts are welded and braced to the 3/4-in. thick end caps on the roller. The hitch pipe does not go all the way through the center pipe.

Total weight of the roller is 6 tons.

Contact: FARM SHOW Followup, Randy Pentz, Lost Creek, Utah (E-mail: x350@allwest.net).

Randy Pentz put a 3-ft. dia. piece of pipe inside a 4-ft. dia pipe and filled the 6-in. gap between them with concrete.

Design keeps the weight down and also makes roller easier to pull because most of the weight is on the outer edge.

Ed Grafke used a 500-gal. propane tank to make this roller, which he uses to level the turf on his airplane runway.

Propane Tank "Runway Roller"

Ed Grafke, Sigourney, Iowa, owns a small airport that has a pair of turf runways that measure 2,600 and 1,500 ft. long. After a few years the runways got rough, so to make them level again he built his own heavy duty roller out of an old 500-gal. propane tank.

The roller measures 7 ft. long and 38 in. in diameter. A 1 1/8-in. dia. tool steel shaft runs all the way through the center of the tank and is connected to a frame made from 6-in. channel iron. Both ends of the rod that goes through the tank fit inside short lengths of larger pipe, which set on bearings.

Grafke uses his Farmall H tractor to pull the roller, which he painted Farmall red, orange, and accented with yellow stripes.

"It works well and cost very little to build," says Grafke. "It turns easily and follows the tractor so well I can roll along in fourth gear. I chose this type of propane tank because it had flat stubby ends which made it more compact than a tank with hemispherical ends. I fill the tank as full as I can get it, which gives me about 4,500 lbs. water weight and another approximately 800 lbs. for the tank and frame. When building the roller, I removed all the fittings from the tank and welded them shut, then installed a fitting on the outside perimeter of the tank so it can be filled almost completely full of water."

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