



No-pit guard is made from a series of 2-in. wide polyester belts attached to two steel pipes. A crank on one end of pipes is used to stretch belts and raise them off ground.

No-Pit Cattle Guard Installs Anywhere

"It's virtually maintenance-free and can be quickly and easily moved to a new location," says Roy Batley of Big Valley, Alberta, about his portable "no pit" cattle guard.

The 5-ft. wide unit adjusts to any gate opening up to 16 ft. It consists of a series of 2-in. wide polyester belts attached to two heavy duty steel pipes.

Spring-loaded chains hold the belts off the ground. As a vehicle crosses the guard, they drop to road level. After the vehicle passes, the belts spring back up to their original position. Belt ground clearance can be adjusted from 2 to 12 in.

"It's built simple with no moving parts so there's not much that can go wrong," says Batley. "You never have to worry about a heavy vehicle bending any pipes. The belts are highly resistant to abrasion and ultraviolet rays. One person can install it in only a few minutes without the use of any tools. A crank on one of the end pipes is used to stretch the belts and raise them off the ground. If you only use high clearance tractors and trucks to cross the guard, you can leave the belts up to 15 in. off the ground. If you're worried that a trailer hitch might catch on the belts you can lower them to only 2 or 3 in. off the ground.

"You can store the entire unit in the back of your pickup. It weighs about 95 lbs." Sells for \$495 (Canadian) plus S&H.

Contact: FARM SHOW Followup, Roy Batley Associates, Box 32, Big Valley, Alberta, Canada T0J 0G0 (ph 877 880-2664).



Chain saw extends about 5 ft. to side of tractor, allowing Baldwin to cut weeds along a railroad right-of-way.

Chain Saw Weed Cutter

"I decided to come up with a new method to cut heavy, high weeds while sitting in comfort instead of walking in the hot sun with a Weedeater," says Charles Baldwin, Pennington, New Jersey.

"I needed to be able to reach out to the side in order to cut weeds along a railroad right-of-way that borders our property. The weeds were so big I felt it necessary to cut them down before treating for kill. My solution was to mount a chain saw on the end of a piece of square tubing that fits the front of my Kubota tractor. The saw extends out about 5 ft. to the side of the tractor and I can raise or lower it as needed. The saw works good because it cuts both ways so you can back up if you miss a patch.

"Now the job is enjoyable instead of drudgery and I saved a lot of time."

Contact: FARM SHOW Followup, Charles Baldwin, Baldwin Tractor, Box 293, Pennington, N.J. 08534 (ph 609 737-2711).



Ten-year-old Tyler Gaul gets around the farm in this "wheelchair-friendly" tractor that was built by his father and others in the community.

Tyler Gaul's Magnificent Green Freedom Machine

Tyler Gaul's freedom machine is a green 30 hp wonder. Some even call it a miracle.

The 10-year-old son of Tom and Martina Gaul, New Vienna, Iowa, was diagnosed with muscular dystrophy at the age of four. As young as he is, being a part of what's happening on the farm is an important part of Tyler's life, so when the disease finally forced him into a wheel chair, he spent a lot of time watching from a distance - and wishing.

Then his mother had an idea. "If only he had a tractor he could get around on," she wished out loud one day.

With encouragement from his cousin Loren Gaul, Tom decided to make a tractor for Tyler. Tyler already knew what he wanted it to look like — and that it had to be green.

Tom says Loren is a mechanical wizard and has an extensive farm shop. He volunteered his shop, tools and time. Neighbor Terry Steffen also provided his labor, design ideas and support in working out the numerous details involved in the massive electro-hydraulic project.

They started collecting junked and discarded machines and parts. News of the project spread through the community. Salvage yard operators and equipment dealers began to donate parts and even whole machines. A 30 hp diesel engine came out of a Mustang skid steer loader. They also salvaged a lot of parts off a Case 1830 skid steer loader with a bad engine.

"Once we had the engine and the Case loader, we were able to begin work," Tom says. "The 1830 became the base for the tractor. We stripped everything off of it, including the lift arms, until all we had left was the frame. Then we used a chop saw and split the frame lengthwise right down the middle in order to make a platform on back to hold Tyler's wheelchair."

They set the rear end from an old Chevy Chevette between the two halves of the 1830 frame, making a platform out of expanded steel. The two rear wheels came from an old ground-driven John Deere 6-row planter. "They're standard 6-bolt wheels that fit the loader hubs," Tom says.

A hydraulically raised and lowered ramp behind the operator's platform gives Tyler easy access to the machine. "It's built low to the ground - only about 10 in. up," Tom says.

In front, they built a sturdy frame of square steel tubing that extended forward 6 ft. or so.

On the end of this frame, they added a front axle built from square steel tubing that pivots in the center like the front axle of many lawn tractors. The power steering cylinder is a used cylinder salvaged from a Deere 300 series garden tractor.

On the front frame, they mounted the engine and the hydraulic pump. They had to buy a bell housing so they could couple the pump to the Yanmar engine. They found an abandoned Yanmar radiator at a radiator shop in Dubuque that was made just for that model engine. The air filter, a hydraulic oil filter and oil cooler, and dozens of electrical connections, switches, hydraulic relays, etc., are all under the hood.

In the process of cutting the frame, they also had to cut the fuel tank. So they welded plates over the open ends of both halves and used one for the fuel tank and the other for they hydraulic reservoir. The capacity of the hydraulic system is about 11 gal., which is more than enough for the little tractor.

From the hydraulic pump on the engine, they ran hoses to a hydraulic motor that drives the Chevette rear end. Gears on the ends of the axle shafts power the original chain drives that powered the wheels on the skid loader (now the rear tractor wheels). There is no transmission but the hydraulic motor can be reversed, so Tyler can back up.

They built a roll cage from 2-in. square steel tubing and topped it off with the top of the cab from an old Deere tractor.

They added a dash and cowl from an old 4440 Deere tractor along with gauges for engine, amps, coolant temperature and oil pressure and temperature. A toggle switch on the dash sets the parking brake. Another raises or lowers the ramp. The hood from a Deere 2940-2950 tractor fit just right - with some minor modifications.

Exhaust pipes had to be custom made to fit the engine and tractor. A muffler built for a John Deere B was just right for the old Yanmar engine.

Rather than a steering wheel, the tractor has a joystick, similar to the one on Tyler's power wheel chair. And it operates the tractor in the same way.

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