



Over the years Bob Rock has produced 12 custom-built articulated garden tractors, including these Deere and Wheel Horse models. All have hydrostatic power and hydraulic steering.

Custom-Built Articulated Tractors Are A Big Hit

Bob Rock has had a love affair with Wheel Horse garden tractors since he received one as a gift from his uncle nearly 40 years ago. In 2001 that love affair took an unusual twist as Rock turned his first Wheel Horse into an articulated garden tractor. He says people who saw it thought it was factory-built.

"I've been a machinist all my life, so I wanted it to look as professional as possible," says Rock. "Eventually I sold it and figured I might as well build another one."

One classy looking tractor led to another. Over the past 12 years Rock has produced 12 custom-built rigs. All of the 4-wheel drive articulated beauties look like they just came off an assembly line.

After building 2 Wheel Horse models, Rock converted a Cub Cadet model 582. That fully articulated model attracted a lot of attention at local shows. Next he converted a Deere 318 into a 4-WD. After that he did more Deere, WheelHorse, and even Case conversions.

"I start with the garden tractor chassis and go from there," says Rock. "The original is dismantled, then I create a chassis that articulates horizontally and vertically and rides on 12 or 16-in. wheels." He builds his tractors with new hydraulic pumps, fittings

and hoses. All of them have hydrostatic power, hydraulic steering and in most cases air cooled engines, except for occasional diesels.

Rock's creations all have meticulous metal work because he knows that business well. He owns a Hypertherm Powermax 45 cutting system, has a brake press, and several welders. All the work is done on elevated stands and a lift table. He bends and shapes sheet metal to produce authentic looking fenders, hoods, chassis parts and grilles, then protects all parts with clear coat paint.

Rock's son Robert has become an able assistant the last few years. At age 13, with a mild form of autism, but a strong mechanical aptitude, Robert can completely dismantle an old tractor, take transaxles apart, flush hydraulic systems, put in new gaskets and re-assemble axles. He's gradually learning welding and takes all the new tractors on their initial test drives.

Rock and his son enjoy taking the tractors to shows and fairs because people are really intrigued by how they're made and how they run. He's sold most of the tractors he's built for \$7,000 to \$10,000. Some of them he built in a couple hundred hours and others took longer.



He and son Robert's most recent creation is this replica of a 4-WD Minneapolis Moline.

He and Robert's most recent creation is a made-from-scratch replica of a 4-wheel drive Minneapolis Moline. Rock calls that one an A4T-1400 and says it's the toughest project he's worked on. "I wanted everything done to scale, so I spent a lot of time measuring, designing and sizing before we ever worked on any metal," Rock says. He adds that replica tractors he builds in the future will probably cost \$10,000 to \$12,000 depending on options that an owner wants. Some people

have requested a high volume hydraulic system, dual wheels and a 3-pt. hitch.

"We're about a year out for anyone who wants something special made," says Rock, "but that's okay. My son and I enjoy working on these and we're able to make some money at the same time."

Contact: FARM SHOW Followup, Robert Rock, Rock & Son Fabrication, Pewamo, Mich. 48873 (ph 989 289-7858; http://articulatedgardentractors.weebly.com).

4-WD Articulated Yard Tractor Built From Scratch

"What inspired me to build this 4-WD lawn tractor was a story I read about a man in Michigan who had rebuilt a 318 Deere to look like a Deere 9630," says retired Illinois farmer Leslie Latimer. "I figured if he could make a green one, I could sure build a red one."

Latimer started with 2 old Yazoo self-propelled lawn mowers. The front of his rig is an old Yazoo with a 23 hp Kohler engine. He thinks it was built in the early 1980s. Originally it was a 3-wheeled mower with 2 drive wheels, a single swivel wheel on back with a 48-in. front deck. Latimer removed the deck and the dolly wheel and replaced the 8-in. tires with a larger 12-in. size commonly used on ATV's.

He built a frame extending back from the drive unit to attach the rear pusher unit and its dual wheels. The 60-in. wheelbase frame articulates so he can steer around obstacles easier than with a solid frame machine.

Latimer built a 48-in. undermount deck. The base mower has 3 blades and he adapted two 16-in. mowers to mount on each side for a total mower width of 80 in. The side mower "wings" fold up with hydraulic cylinders so his transport and storage width is 48 in.

Latimer says building the hydraulic system

to operate the drive train and mowers was a real challenge. "The 2 mowers I started with had different style pumps, so I had to modify, build and rebuild things to get them to work together. I used the piston pump for the variable speed and the gear pump for the mower. I had to balance the system by drilling out some of the orifices and using common size 1/2-in. O.D. hoses to connect them.

The hydraulics include 2 cylinders for power steering, 2 for the 3-pt. hitch, one for the front lift cylinder, and to swing the snow blade. Latimer bought all of the hydraulic materials from the Bailey hydraulic catalog (www.baileyhydraulics.com).

Latimer uses his tractor for plowing, pulling a 2-bottom, 10-in. plow that he made. "I tried pulling it on wheat ground, but that was a little tough. It works just fine on soybean ground," Latimer says. He also built a 5-ft. snow blade for it, has a 60-in. front mower, and uses it to power a 48-in. 2-stage snowblower. That unit, which he bought used for just \$200, runs off a power take-off on front of the tractor.

Latimer says the weight distribution of the 1,800-lb. rig is 60 percent on the front and 40 percent on the rear, typical for large articulated 4-WD tractors. To ballast the rear



Leslie Latimer started with 2 old Yazoo riding mowers and ended up with this 4-WD articulated yard tractor. The front-mounted deck is 80 in. wide.

unit he added 2 Deere tractor weights and a 90-lb. Yazoo weight. He put a 3-pt. hitch on back and that comes in handy, too.

The hood, which has 2 integral headlights, is from an old Tractor Supply tractor. He added 4 in. to the width and made a center section to cover the air cleaner. The power steering is from a Deere garden tractor and the cushioned seat and armrest he bought at Tractor Supply.

Contact: FARM SHOW Followup, Leslie Latimer, 2935 E. 29th Rd., Seneca, Ill. 61360 (ph 815 357-8100).



Latimer says building the hydraulic system that operates the drivetrain and mowers was a real challenge.