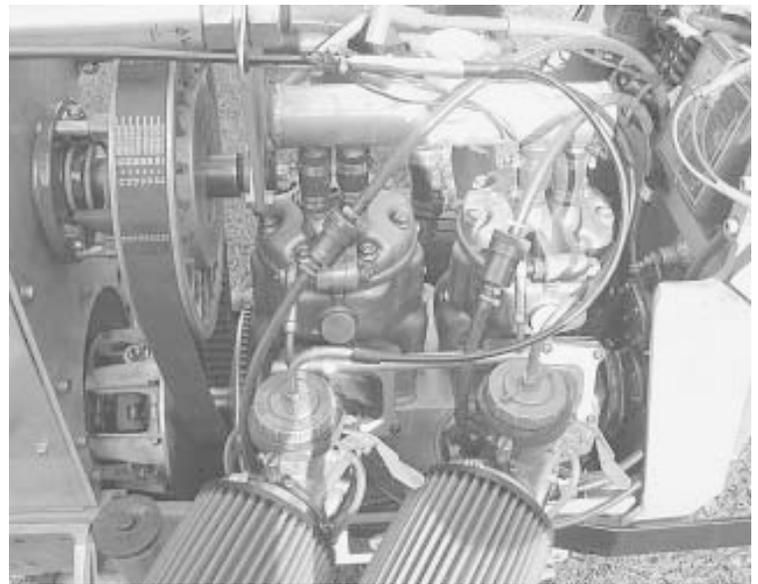




Hasbrouck's 126 Cub Cadet garden tractor is equipped with 31-in. rear "pulling tires".



Tractor is powered by a custom built 2-cylinder, 2-cycle engine with just under 200 hp.

High-Horsepower Garden Tractor Fitted With Custom-Built Engine

At first glance, Brett Hasbrouck's model 126 Cub Cadet garden tractor looks pretty much like it did when it rolled off the assembly line in the 1970's. Once you notice the 31-in. "pulling tires" on the rear axle, though, you might suspect it's not quite stock.

"When I rebuilt the tractor, I wanted it to look as close to stock as possible," says the Middletown, Connecticut, garden tractor puller.

A closer look at Hasbrouck's little tractor reveals individual brakes on the rear wheels, but not much else - until you look under the hood. There, in the same amount of space occupied by the original 10 hp single-cylinder 4-cycle engine, sits a custom built 2-cylinder, 2-cycle powerhouse that turns out just under

200 hp.

Hasbrouck built the engine in his home metal shop, based on a design used for motocross bike engines. "The idea is to put two motocross bike engine cylinders together on one crankshaft to make a high horsepower pulling engine," he says.

Working with a friend who has a computer program for designing engines, Hasbrouck put together a design that uses two Honda single cylinder castings, machined to fit together and mount on a crankcase Hasbrouck built in his shop. "I also had to make the crankshaft because there was nothing available that would work in the engine we designed," he says. The twin-cylinder engine has a displacement of 1,000

cc. When they used a fuel mixture based on methyl alcohol, the engine turned out about 150 hp. When they switched to a gasoline-based mixture, it upped the output to more than 190 hp.

Because the original transmission and rear end weren't designed to handle the horsepower and torque the little engine puts out, Hasbrouck dropped in a Jeep transmission and a Ford 9-in. rear end, narrowed to just slightly wider than the original Cub Cadet axle. Instead of a clutch, he installed a constant variable transmission (CVT) between the engine and the Jeep transmission. "It's the same belt drive transmission used in snowmobiles, and gives you increased torque as the engine speed and

forward speed of the tractor increases," he explains.

Hasbrouck's Cub Cadet still has factory steering but he added individual rear wheel brakes, complete with separate hydraulic reservoirs for each, to help steer it while pulling.

"The front end tends to come off the ground when it has a load behind it," he says. That, and the tractor may reach speeds of more than 20 mph while attached to the 8,900-lb. weight transfer sled used in garden tractor pulls.

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4-H'er Restores 130-Year-Old Corn Planter

Fourteen-year-old Parke Miller, Williamsburg, Iowa, was looking for a unique 4-H project last year. When he and his dad, Brad, came across an auction bill listing an old horse-drawn corn planter for sale, they decided restoring the planter would be just the thing.

Brad says the circa 1870 Union Corn Planter, built by James Selby & Co., Peoria, Illinois, was in very good condition considering its age. The planter had been hanging in a barn for decades.

Parke bid against two other would-be buyers, but neither of them was willing to go higher than the \$210 the Millers bid. "We were surprised to be able to buy it for that," Brad says.

Once they got the planter home, Parke and Brad carefully dismantled it, taking photos as they proceeded, so they'd have a record of what it looked like and how each piece fit together.

Someone had painted the planter with red barn paint and the wheels had received a coat of silver. The Millers stripped dirt and old paint off the steel and wood parts. When they found orange and green paint in the grain of the stripped wood, they figured they'd found the original colors. They also discovered that the wheel spokes had originally had pinstriping on them.

Parke found the original instructions for the plates printed on the underside of one of the seedbox lids.

As he worked on cleaning it up, Parke also searched for printed information on the planter, hoping he could find some original literature on

it. While he wasn't able to find much on that particular planter, he did find some literature on a later model Union planter.

The restoration involved soaking wooden parts in linseed oil to preserve them and sandblasting metal parts. The long tongue is original. Only two of the old wooden pieces had to be replaced and as far as they know those are the only pieces on the entire planter that aren't original.

Everything on the planter now works but they haven't actually used it. The planter attracted a lot of attention when Parke displayed it at his local county fair and at the Iowa State Fair.

Jon Kinzenbaw, president of Kinze Mfg., Williamsburg, Iowa, was so impressed with Miller's restored planter that he's now displaying it in the company's corporate office showroom.

Parke has already begun work on his project for next year's fair. He's restoring an Oliver 66 for a local tractor collector. He's still interested in learning more about his planter and would love to hear from anyone who can tell him more about it or James Selby & Co.

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Fourteen-year-old Parke Miller and the horse-drawn 1870 Union Corn planter that he restored.

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