

# The Little Red Tillers That George Built

by Charlie Zuck



In my last article on the Roto-Ette Home Gardener, I mentioned CW Kelsey's chief engineer, George Done. George thought the Home Gardener's cost was too high for the average gardener so he designed a much simplified tiller for about half the price of the HG. He worked on this project in his basement workshop and when orders for the HG stopped early in 1949, he was ready to present his little red tiller.

Kelsey was impressed with the design and with the production cost estimates. A prototype was built in three weeks and tested. Its performance was just as George promised and Kelsey ordered it into production. Kelsey thought this new tiller was a great feat in that it was a high quality product produced at the low price of \$194.50 – a dollar a pound. George called it “the poor man's machine” and both compared it to the Ford Model

T in its price and quality. So the Roto-Ette Model T was born.



The HG had 36 bearings and many moving parts, while the T had three bearings, two gear sets, and two rotating shafts.

It had a 1 1/2hp engine, four speeds by using a four-step sheave arrangement

on the engine and tiller input drive, as shown in the photo below. It had a tilling width of 16-inches. George kept it simple. The “clutch” for the drive was done by mounting the engine on a hinged plate with a lever to move the plate and tighten the drive belt. Note the block of wood behind



the bottom driven sheave. That functioned as the brake to stop the tiller when disengaging the “clutch”. The block of wood came in contact with the smallest sheave, which was simple and trouble free.

As with many walk-behind tractors of that day, many attachments were developed and built.

This is a 36” cut field mower. It works quite well as my brother and I used it this year to cut a patch of alfalfa in a part of his garden. You can see it in action by following the link to my YouTube



channel on my website [www.zucksrototillers.com](http://www.zucksrototillers.com). The Model T Log saw would cut logs up to 14” in diameter and had a retail price of about \$40. The Burden Iron Works Museum has one of these on display. It seems a little crude and unsafe by today's standards.

In 1952 the Model 2 and 3 were introduced. The Model 2 had a 2hp engine while the Model 3 had a 3hp engine. Tilling width was increased to 20”. Rototiller used Briggs & Stratton and Clinton engines on their tillers. These new tillers had almost all their attachments installed on the front on what Rototiller called “Lightning Change Front”. Basically it was a heavy casting with a pin where all the attachments were installed and held in place with a clip.

Here is my 1956 Model 2 with a Rotary Mulch



Mower attached to the "Lightning Change Front". Unfortunately, it is missing the gearbox that drives the blade that mounted in the left corner near the front of the tiller. In the photo below you can see there is a difference in the hood arrangement over the tines. My 1957 Model 3 has an adjustable flap called the Tiller Hood Depth Regulator. This was new for 1957 and it seemed to me more of a bother than it was worth.

Somewhere along the line, this Model 3 had bolo tines installed. I have not found any information indicating Rototiller used bolo tines at this time. It should have tines like the Model 2 has as shown in the photo at the beginning of the article or tines that resemble a hook, as shown below. These were also used on the Troy-Bilt tiller in the early years. The drawback of these tines is their inability to chop up weeds or crop residue like bolo tines can do. The Burden Iron Works Model 3 has the chopper-digger tine which can slice through crop residue left in the garden.



Beside the attachments shown here, they also offered a trailer, water pump, roller, buck rake, and a dozer blade.

I've seen references in print that they made a Model 3 with reverse, but have never seen one in person. Rototiller also made a Model 3 with a lever to disengage the tiller drive. The Burden Iron Works Museum has one on display as shown in the photo below.

Notice the lever sticking up through the tiller

hood.

On my 1956 Model 2, a much larger sheave was used for a real low speed. It required two belts (one for the real large sheave and one for the other three speeds). That caused a need to store the unused belt. The late George Dunham Jr. came up with a unique idea. He took a piece of the strapping that held the bundles of steel together and spot-welded it to the inside of the belt guard. George was a Rototiller dealer and worked for Rototiller, Inc. and Troy-Bilt for many years. It is said he was responsible for making over a million hoods for the Troy-Bilt tillers.

In 1959 Rototiller sold public stock to raise capital for its operations. Porter-Cable purchased enough stock to gain controlling interest, and then moved the operations to Syracuse. Porter-Cable then sold Rototiller to Rockwell Manufacturing Co. of Pittsburg, who shortly after that sold Rototiller to Moto-Mower Co. By 1961, gone were the names of Rototiller and Roto-Ette. There was still a flicker left in Troy, as Rockwell was required to carry replacement parts for five years. A lot of the necessary machinery was still in Troy to do this and George Done was there as well. Watco Machine Company was formed to manufacture replacement parts. George was not content to just make parts. He was working on another tiller in his basement machine shop and four months after Watco was formed, the Trojan Horse rear tine tiller was produced.

In 1968, Eaton, Yale & Towne's Trojan Division, who manufactured large earth-moving equipment, forced WATCO to change the name of the tiller. The Trojan Horse became Troy-Bilt Horse.



George Done came to Rototiller, Inc. in 1936, starting as a machinist before becoming the chief engineer at Rototiller, Inc. and ultimately Senior Vice-President of Garden Way. George died August 8, 1982 at the age of 76 while still working at Troy-

Bilt/Garden Way. It was probably a blessing that he never witnessed the bankruptcy of Garden Way in 2001.

A special thanks to Allen Cluett, a former service manager for Troy-Bilt/Garden Way, for providing information and many interesting stories about C W Kelsey, George Done, and many others who made Rototiller and Garden Way the great company that it was. 🍀