



Tractor is powered by a 1936 Fairbanks Morse 3 hp water-cooled engine.

“STEAM” TRACTOR HAD A GAS ENGINE

Half-Scale Townsend Tractor

“My half-scale 1919 Townsend tractor looks and sounds just like the real thing and gets a lot of attention at shows and parades. I built it entirely from scratch,” says Lloyd Williamson, Luther, Okla., noting that the original Townsend was an unusual tractor because it was built to look like a steam-powered tractor but actually had a gas engine.

The 7-ft. long tractor weighs 1,230 lbs. It’s powered by a 1936 Fairbanks Morse 3 hp, water-cooled gas engine and rides on 20-in. high front cast iron wheels and 30-in. high rear steel wheels. Williamson screwed strips of retread rubber onto the rear wheels to smooth out the ride. He used a length of 12-in. dia. medium wall steel pipe to fashion the boiler. The front axle pivots on a steering box off an old pickup.

“I tried to make it look as authentic as possible so that it would run like the real thing,” says Williamson. “I built it entirely from parts I bought at swap meets and junk yards. I took photos of the real tractor in Kansas, then came home and built it. The Fairbanks Morse engine was given to me by a friend. It took almost two years to get the engine running because the magneto was frozen and I had a hard time finding parts for it. I found the cast iron wheels at an antique tractor show. I had to make wooden bearings to fit them onto the axles.

“The original tractor was manufactured by Roy Townsend of Janesville, Kansas, who worked for Fairbanks Morse as an engineer and had a lot to do with the development of the Fairmor tractor. In 1914 Fairbanks Morse quit making tractors in the U.S., although they continued to make them in Canada. Townsend quit the company and set up his own factory in 1915. He built the Townsend tractor from 1915 to 1931, offering various models up to 60 hp. He designed a 2-cyl. gas engine for the tractor in which the two pistons traveled together - one fired one revolution and then the other fired. The alternate firing gave the tractor an even firing sound, unlike the ‘Johnny Popper’ sound made by Deere tractors.

“Townsend wanted the gas engine tractor



Townsend tractors were produced from 1915 to 1931 in models up to 60 hp.

to look like a steam tractor in order to boost sales. By 1915 steam engines had plowed up most of the prairie and were becoming obsolete. Farmers were already very familiar with the look of steam tractors but wanted smaller, less expensive, gas or kerosene powered tractors which were just becoming available. The Townsend tractor’s boiler tube frame had the radiator inside it and a smokestack on front. Air coming off the engine moved through the radiator and out the exhaust stack. However, my model has a water hopper instead of the radiator.

“I used the transaxle running gear from a 1936 Shaw walk-behind tractor and turned it backward. The transaxle running gear was equipped with a Model A transmission and spider gears out of a Model T car. In low gear there’s a 136:1 reduction from the input shaft to the axle and in high gear a 36:1 reduction ratio. It’ll go 1/2 mph in low gear and 5 to 6 mph in high gear depending on the speed of the engine.

“Townsend’s first model, the Bower City, was used until 1918 when he introduced the 12-25, a 2-cyl. model with an engine that had a 7-in. bore and an 8-in. stroke. In 1919 he introduced the 15-30 model which used the same engine as the 1225 with a few minor improvements. By 1924 the company offered five different models. In 1931 a Wisconsin company took it over and offered the tractor as late as 1932.”

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Kleiber’s five Deere 8020’s all needed a lot of restoration, including replacing electrical wires, cables, linkages and sheet metal and rebuilding brakes and seat platforms.

IT WAS DEERE’S FIRST 4-WD

Wisconsin Collector

Owns Five Rare 8020’s

From the moment Paul Kleiber first laid eyes on a Deere 8020, he just had to have one. After he bought his first one, he bought another, and then another. Well, he got one. Then another and another until, by now, his collection of five rare Deere 4-WD’s is believed to be the largest anywhere.

“Deere produced only 100 of these tractors in the early 1960’s,” explains the Plymouth, Wis., contractor. “After I saw a photo of one, I started looking. It took a while, but I finally located one in Canada in 1993 and bought it over the telephone without knowing a thing about it. I also bought a 6-bottom (20-in.) plow and modified it to work on the tractor’s 3-pt.”

Within the next three years, Kleiber bought four more 8020’s, one from Kansas, two from Washington and a fifth from Iowa. Two of them have 3-pt.’s, two have diamond tread tires, two have regular tread and one has oversize tires. Serial numbers are 9, 15, 66, 74 and 89.

“All of them needed a lot of restoration work,” says Kleiber, whose sons Nick and Tim and employee Mark helped with the work. “For example, one had the fenders half torched off, so we made new ones. We made a new front grille for one and on others we replaced electrical wires, cables, linkages, sheet metal, rebuilt brakes and seat platforms, and wheel bearings. Most of the tractors came with cabs, which we removed because they

didn’t come from the factory with them. Finally, we sandblasted and repainted all five tractors.”

One of the main attractions of the 8020 is its engine, Kleiber notes. The Detroit “671” in-line six-cylinder diesel “just screams when pulling a big load,” he says.

Like the Detroit engine, which was designed for use in semi’s, the tractors also feature a number of other truck parts. They have a Clark transmission, air brakes, truck-type differentials, and heavy-duty frames. They also have payloader-type planetaries.

“The hydraulic clutch is the nicest, smoothest clutch I’ve ever operated, including the clutch in my 7520 and 8640,” he says. “The same with the heavy-duty steering. It’s built stronger and better than any 4-WD system I’ve ever seen.”

Kleiber modified one of the tractors for tractor-pulling by repowering it with a Detroit 871 turbo, which required a special bell housing, new motor mounts and a complete new hood and fan shroud. “This tractor took first place in every 22,000-lb. 4-WD pull until they banned us, because the other contestants were complaining that they didn’t have a chance,” Kleiber says.

He also shows some of his tractors at antique tractor shows.

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Modified for tractor pulls, this 8020 was repowered with a Detroit 871 turbo.

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