

## Steiger Tractor Years

### **Steiger Tractor #1**

By the mid 1950's, John Steiger and his sons Douglass and Maurice were farming 2,000 acres in Black River Township, Pennington County, near Red Lake Falls, Minnesota. Since Douglass and Maurice were also doing custom work for other farmers, John would do the plowing on their acreage. They soon realized they needed a larger tractor in their farming operation.

Douglass and Maurice were considering several tractor options. One of the options was a Wagner tractor – one of the largest at the time. Estimated cost to buy a new tractor large enough for their needs was \$20,000. Thinking they could build one themselves – and the machine would be better than what they would be able to buy, they determined it would cost them \$10,000 to build their own. The Steigers talked about their two options with E.O. Peterson, president of Union State Bank of Thief River Falls. Peterson encouraged them to build the tractor, and his bank loaned them the money. Douglass remembers Peterson as a supporter and one of the first people on the outside the family that helped the tractor to be built.

The three Steigers combined their talents: Douglass's ability to draw plans for tractors; Maurice's diesel mechanics, welding and steel fabricating talents; and John's blacksmithing skills.

Built in their shop (converted dairy barn) on the Steiger farm during the winter of 1957-58, the first Steiger tractor weighed 24,000 pounds. The tractor was hand-built out of used parts with the use of only a cutting torch, arc welder, small turning lathe and the miscellaneous tools usually found around a farm shop. Powered by a 6-71 Detroit diesel engine that developed 238 HP, it included the following equipment: 23.1 x 26 tires of equal size (largest ag tires available at the time), Fuller 10 speed transmission, Dart Ore Truck axles, and a transfer case that was designed and built by the Steigers.

Called a "center bend" tractor because it pivoted in the middle on a large cylinder to facilitate turning, the machine was 20 feet 3 inches long, 9 feet 10 inches wide, and 7 feet 10 inches high from the ground to the top of the hood. The Steigers later patented the swinging power splitter designed by Douglass, which allowed the chassis to articulate and provide a much tighter turning radius.

It had eight forward speeds ranging from 1.81 to 17 miles per hour and two speeds in reverse, a 120-gallon fuel tank carried above the rear wheels and behind the center pivot, and a 30-gallon cooling system. Equipped with hydraulically-operated power brakes and steering, it was steered with a lever approximately 5/8 inch in diameter and a foot long.

The Steiger tractor was painted lime-green because Douglass saw Euclid construction equipment that color, and he felt that made the equipment stand out. He wanted it to be distinctive from other farm equipment.

Used from 1958 until 1973, the tractor was retired with approximately 10,000 hours. The original tractor was refurbished in 1975 and loaned to Bonanzaville Heritage Center in West Fargo, ND, where it is presently on public display.

## **Steiger Tractor: 1961-1969**

A couple of years later, the Steigers decided to build themselves a second tractor, smaller than the first one, to be used for lighter weight tillage such as harrowing and cultivating. Neighboring farmers were impressed with Steiger #1 and asked the brothers to build them similar tractors. In 1961, three Steiger 105's were built, again out of used parts but using a conventional steering wheel. The 105, with an engine half as large as the prototype, was powered by a 3.71 Detroit Diesel 118 hp 3 cylinder 2 cycle engine. Equipment included a Spicer 5 speed transmission, 2-speed Steiger transfer case, WC Allis Chalmers rear ends that were modified and 18.4 x 26 tires.

Douglass and Maurice Steiger did not intend to develop a tractor manufacturing business; it just evolved. Implement dealer Earl Christianson saw Model 105 at an agricultural show in Crookston, Minnesota, and approached the Steigers—recommending they build tractors out of new parts. And thus, the Steiger Tractor Company was formed. Earl was instrumental in the 1960s in promoting and selling Steiger tractors throughout the northern states, into Canada, and Europe. Largely because of Mr. Christenson's efforts, 126 Steiger tractors were built at the farm by 20 employees before operations were moved to Fargo. Steiger tractors were sold direct from the factory to the purchaser until 1967.

Earl, Douglass, and Maurice conferred regarding the size and styling of the new Steiger tractors that would go to market. During the period from 1963-1968, Douglass Steiger drew plans for four models, which would be built with new parts: the 2200, 1700, 1250 and 3300. It was during this period of time that the "center-bend" was patented and included all three of these men as patent-holders. Cut into the front grill of three of the models were large Vs painted red to designate a V-type engine. An optional cab was available on these models.

Two models for the logging industry were also developed during this time – the 850 and 1250, featuring a very short turning radius, instant forward and reverse motion, and maximum oscillation with two-speed, mechanically driven, hydraulically actuated winches.

The Steigers were at the forefront of a revolution in the tractor industry. Their company focused on providing tractors for producers farming large tracts of land. Major tractor manufacturers soon learned of the Steigers' ingenuity and followed their example. Eventually, all major tractor manufacturers had tractors similar to those that the Steigers created.

The Steiger Tractor Company continued to grow, in part, due to ease of maintenance. The Steigers used standard components in their tractors. Major parts, such as engines, transmissions, and power trains were outsourced from brand name suppliers like Caterpillar, Cummins, Allison, Clark, Dana, and Spicer, thus replacement parts were readily available nationwide.

The company eventually grew to the point where the pressure of this demanding, expanding business was beginning to take its toll on the Steigers so they made a decision to sell 52% of their interest to a group of investors. Those investors, Erling Falk, Bob Johnson, Bob Kelly, Ken McIntyre and Bob Terry, moved the company to Fargo, N.D., in 1969. Bob Kelly became president and CEO at that time.

## **Steiger Tractor: 1969-1986**

Five investors bought into the company in 1969 to assist and further develop the Steiger tractor range. They moved to an expanded manufacturing plant in Fargo, N.D. At that point, Steiger Tractor began to use different names for each model rather than continue with series numbers. The first model built at the new plant in 1969 was named Steiger Wildcat; it was a 175 PTO hp tractor with a Caterpillar 3145 V8 engine. This tractor had been designed by Douglass Steiger at the farm, where it had been called the 1300. Douglass also designed the 2250, which was named Tiger at the Fargo plant. The tractors took on the big cat names of Wildcat, Bearcat, Cougar, and Turbo Tiger, with each name denoting a horsepower class; these names remained with the green Steigers tractors until the tractor color was changed to red in 1986.

Douglass Steiger was still active in the new Steiger Tractor company, serving as Chairman of the Board the first year. With the longest tenure on the board of directors, he continued his service on the board until the company was sold to Case in 1986. Maurice Steiger served on the board from 1969-1971.

Les Melroe became Steiger Tractor's major investor and Chairman of the Board in late 1970. The promotional activity of the five investors and the infusion of capital by Les Melroe set the stage for greater expansion. The company experienced financial difficulties about a year later. More investments came into the company. Under the leadership of new Officers Chairman Gene Dahl and President Jack Johnson, the company saw its greatest gain.

### **Milestones in Steiger history during this period were:**

**1970:** A Steiger 66-dealer nationwide network is established. Growth continues and production is moved to a second plant in Fargo. During this decade Steiger begins producing tractors for other companies, including Allis-Chalmers, Ford, CCIL's Canadian Co-op Implement Limited and International Harvester.

**1973:** The Hungarian firm, Raba, produces Raba-Steiger tractors based on Steiger Series II Wildcat.

**1975:** Van De Velde company builds Vandel tractors based on the Steiger Series III Bearcat and Cougar tractors for distribution in Europe and North Africa.

**1975:** Steiger Tractor Inc., breaks ground for a new production facility. The building is finished in less than a year and can produce a new Steiger tractor every 18 minutes. During the 1970's more than 1,100 people work at the new Steiger plant. The 420,000 square-foot plant is the company's current facility. Large growth comes during the years of Chairman Gene Dahl and President Jack Johnson.

**1976:** An Australian Steiger subsidiary with 50 selling dealers is established. The Series III tractors are introduced.

**1979** The Steiger Tractor, Inc. plant turns out its 10,000<sup>th</sup> tractor.

**1982:** The Panther 2000 tractor is introduced. It is the first model to have 12-speed full power shift transmission, electronic controls, comfortable deluxe cab and PFC hydraulics.

**1983:** The Tiger “KP” Series IV model is introduced with 525 horsepower and 6x4 Allison power shift transmission.

**1986:** The revolutionary Puma 1000 model is introduced – the first Steiger tractor built with articulated steering and a front axle able to be steered. The steering innovations make possible the maneuvering of a large tractor in row crop applications. A 12-speed power shift transmission also is introduced on all Steiger tractors.

Steiger Tractor, Inc. files for Chapter 11 bankruptcy protection due to the struggling worldwide farm economy. With the Steiger plant operating at 25% capacity, Tenneco Inc., then parent company of Case, buys Steiger.

With the sale to Tenneco in 1986, Douglass’s responsibilities to Steiger Tractor end.

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### **Some Steiger Family Highlights during the Case Ownership of Steiger Tractor:**

Steiger 1000 Series Tractors built in late 1986 to 1988 were the last green four-wheel-drive articulated Steiger tractors before the red Case IH 9100 series were introduced.

Due to the enormous popularity of the Steiger name some dealers retro-fit homemade Steiger decals to the 9100 and 9200 Series of tractors.

The Steiger tractor was chosen as North Dakota’s first entry into the National Inventors Hall of Fame. Governor George Sinner said, “The Steiger tractor is a significant invention that brought industrial horsepower to agriculture, and we are proud that it is manufactured here in North Dakota.”

In 1995, the 9300 Series “Powerful Heritage” tractors once again carried the respected Steiger name.

The 50,000th Steiger tractor—an STX500 Quadtract model—is produced and the keys are turned over to Mark and Dave Yaggie during a celebration at the Case IH plant in Fargo, North Dakota in January 2005. Douglass Steiger is a guest speaker. Earl Christianson, also a guest speaker, recalls that he had sold one of the first production Steiger tractors to Dave Yaggie’s father, Leo.

## Quotes about Steiger Tractors

### In the soil

Mike Delisle, general manager and sales manager for Mayo Manufacturing in East Grand Forks, says one of the big reasons for northwestern Minnesota's strength in manufacturing is that the people there have a long history of innovation. "You can go all the way back to Steiger Tractor in Thief River Falls," he says.

Steiger Tractor was founded in the late 1950s to manufacture a high-powered four-wheel drive tractor developed by Red Lake Falls farmers Maurice and Douglas Steiger. The company was purchased in 1986, and the brand name now belongs to CaseIH. But many manufacturers still cite Steiger Tractor with reverence as a business that embodied the homegrown ingenuity behind northwestern Minnesota manufacturing.

**Twin Cities Business, "Steel Prairie" Northwestern Minnesota's manufacturing strength builds on the region's agriculture base.**

by Gene Rebeck  
May 29, 2015

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"Modern super-tractors have several features in common: four-wheel-drive through equal-sized wheels, and articulated chassis to retain some maneuverability, and a massive turbo-diesel engine of six or more cylinders. This format was invented by the Steiger brothers, Maurice and Douglass, and it was so successful that most modern super-tractors still follow the same pattern."

The Ultimate Guide to Tractors by Jim Glastonbury (2003)

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"The big lime green tractors became the most popular and well-known of all the articulated tractors and the Steiger name is the most recognizable name to be associated with four-wheel-drive articulated tractors worldwide."

"Due to Steiger's enormous popularity and the fact that no name carried more weight in the four-wheel-drive articulated tractor business, the Steiger name returned to the new Case IH 9300 Series tractors in 1995. The release of a new range of big four-wheel-drive articulated tractors in the summer of 2000, the Case IH STX Series, shows just how popular the Steiger name still is, over 40 years on."

Ultimate Tractor Power – Articulated Tractors of the World, Volume 2 by Peter D. Simpson (2002)

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"The name Steiger was associated with high-power tractors and in a survey of farmers in four-wheel-drive tractor markets, this name was cited as the most popular and well-known four-wheel-drive tractor brand. As a result the name was later revived for the Case IH 9300 Series tractors

which were then claimed to be the industry's leading line of four-wheel-drive machines. For a period the Hungarian tractor-making company produced RABA-Steiger tractors under license from the Steiger company.

The Illustrated Book of Tractors – A Comprehensive Guide to the History, the Manufacturers and the Machines by John Carroll (2003)

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“When the Steiger brothers built their first articulated tractor, no major manufacturer was building anything remotely similar. But the two farmers from Minnesota knew what large acreage farmers needed and bravely struck out to provide it. By the time the company succumbed to economic pressure, every manufacturer had at least one four-wheel-drive articulated tractor in its catalog.”

The American Tractor – A Century of Legendary Machines by P.W. Ertel (2001)

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“I’m not a great inventor. I’m a good problem solver. Some of the problems that were solved became marketable items.”

Douglass Steiger (2005)

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“On practically all farm areas a tractor that will pull a 5-bottom plow is judged as a big one by most farmers. A tractor that will drag 10 acres in one round, or one that needs to be refueled only once every two days would be considered merely a long stretch of the imagination, in the minds of these farmers, however. Not so with the John Steiger family.”

“Asked whose idea the tractor was, Maurice Steiger gave most of the credit to his younger brother Douglass. However, he stated, all three of them shared in the design and work.”

Thief River Falls Times – “Steigers Build Huge Tractor as Family do-it-yourself Project”  
(March 17, 1958)

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“One gigantic tractor designed to replace three of the more conventional makes has been built by John Steiger and his sons, Douglass and Maurice, at their farm west of St. Hilaire, Minn.”

“In addition to saving time and effort, the tractor has another advantage: While doing the work of three conventional tractors it will use less fuel than would be necessary to power only two ordinary machines.”

Grand Forks Herald – “Monster’ To Haul Big Equipment” by Richard Youngblood (1958)