

Book Review Red 4WD Tractors

BIG RED REVIEW

ABOUT THE BOOK

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If you like IH, Case IH and Steiger muscle tractors built in the United States, the latest book from Octane Press, *Red 4WD Tractors 1957-2017*, is surely worth adding to your Christmas wish-list. Rory Day provides a flavor of its fascinating content.

THE LATEST IN Octane Press' trilogy of books on the International Harvester and Case-IH brands is, like its two predecessors, best described as an 'event'. The first of the US publisher's IH and Case-IH bibles, *Red Tractors 1958-2013*, met with critical acclaim, as did the titles that followed – *Red Combines 1915-2015*, published in 2015, and *International Scout Encyclopedia: The Complete Guide to the Legendary 4x4*, which came out last year.

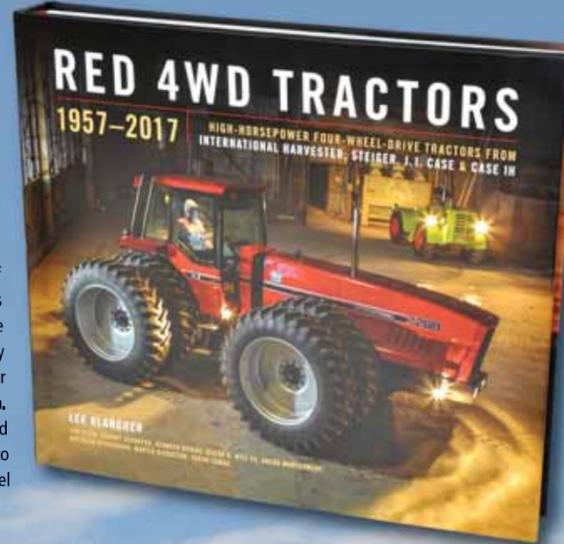
When *Red Tractors 1958-2013* was published (see CLASSIC TRACTOR'S review in the September 2013 issue) it raised the bar in the tractor book publishing sector by several notches. The large format title, measuring almost a foot square, contained a plethora of new information and previously unpublished images on IH and Case-IH tractors manufactured during what has become known as the classic era.

Expectations were therefore high when it was announced that Octane Press was working on another big IH and Case-IH book, this time focusing on the larger, high-horsepower machines produced by the two companies. So now the waiting is over, what can readers of *Red 4WD Tractors 1957-2017* expect?

The same lavish production standards, for one. This mighty hardcover volume, in common with Octane's previous 'Red' titles, runs to no fewer than 384 pages, making it of truly biblical proportions.

Within all those pages, readers can expect to learn about International Harvester and Case-IH's involvement in the top-end of the tractor market. But there's more to this book than meets the eye, because contrary to its title, *Red 4WD Tractors* doesn't just cover 'red' tractors – it also delves deep into the histories of the Steiger and J. I. Case brands that would ultimately become part of the Case IH family.

In fact, *Red 4WD Tractors* contains one of the most comprehensive historical accounts yet published on Steiger, the four-wheel drive manufacturer founded in the late 1950s by brothers John, Douglass and Maurice Steiger on their farm near Red Lake Falls in Minnesota. The story of how the Steiger company evolved from building tractors in the family's barn to become a worldwide leader in four-wheel



Below: The flagship IH 7388, 7588 and 7788 models were discontinued very shortly after their launch in 1981 following the company's decision to sell its third share of Steiger, which made the tractors, to Deutz. Consequently just two of each model, all pre-production machines, were built. Photo: Lee Klancher.





drive tractors is told in considerable depth. Interviews with dozens of the people who were involved with the company in the 1950s, 60s, 70s and 80s are accompanied by a host of unseen archive images.

As well as the histories of the pioneering units of the 1960s and the highly successful Series II and Series III models of the 1970s, some of Steiger's less well known experimental machines are also documented. These included Big Jack, the triple-unit 750hp tractor developed using three Cougar frames, each fitted with Caterpillar 3306 engines; the Twin Panther TST650, which as its name suggests was built in 1976 using two Panther units with Caterpillar 3406 engines totaling 650hp; and most curious off all, the Steiger Jaguar, a high-horsepower two-wheel drive prototype that was produced in the mid-1980s solely to distract John Deere from its aim of conquering Steiger's market.

The story of Steiger continues through the 1980s and beyond. The reasons for its sale to Case-IH are explained in a section called, rather fittingly, 'Better red than dead', which alludes to the fact that had Steiger, which lost \$8.1mn on sales of \$80mn in 1985, not become part of Case-IH, it would have faced a very uncertain future. Prior to being acquired by Case-IH in September 1986, it had run out of money in June of that year and filed for protection from its creditors as part of the US Chapter 11 bankruptcy code. The sequence of events is described in detail by some of the people who witnessed the negotiations that took place between the two companies.

Also chronicled, quite naturally, are the four-wheel drives built by International Harvester, from the first machine built in 1912 to the final Super 70 Series models of the mid-1980s, of which only a handful were made before IH was taken over by J. I. Case.

IH entered the big league when it launched the 4300 (214 drawbar hp) in 1961. This model, developed and built by its Hough subsidiary, was an absolute behemoth, but with its torque converter transmission, it was designed more like a loader than a tractor and wasn't well-suited to farming. Fewer than 50 units were produced and those that survive are highly sought-after by IH collectors. IH went on to achieve greater success with the smaller 4100 model which, like the 4300, had a rigid chassis with selectable four-wheel steering.

The later connection between Steiger and IH – the former supplied the latter with high-horsepower articulated tractors from 1973 until the early 1980s – is thoroughly explored and accompanied by a fascinating first-hand account of how a small team of Steiger development engineers produced the very first prototype IH 4366 in great secrecy in an isolated building close the Steiger factory at Fargo in North Dakota in early 1972. Steiger was initially contracted to supply IH with 925 tractors over a three-year period, but the supply agreement proved so successful that it was extended by several years.

IH acquired a third share of Steiger in 1972 and in 1980 it was eyeing up the rest of the shares it didn't own, but by then its finances were becoming seriously

Top left: Fewer than 50 of IH's giant 4300 models were produced between 1961 and 1965, all in the same yellow livery as the company's construction equipment. The Terra-Tires fitted to this otherwise very original survivor are non-standard. Photo: Lee Klancher.

Top right: The Steiger brother's second tractor, known as the Model 105, arrived in 1959 or early 1960. It was smaller than the first machine and was powered by a 118hp Detroit Diesel 3-71N three-cylinder engine, linked to a five-speed transmission. Photo: Lee Klancher.

Above right: Series production of the Steiger Model 2200, pictured, and Model 1700 began in 1963. This superbly restored 1968 Model 2200 is owned by early Steiger employee Todd Oschner, who went on to establish a successful grain merchants and haulage business at Aberdeen in South Dakota. Photo: Lee Klancher.

Right: A factory-fitted Coleman mechanical four-wheel drive front axle was available as a factory-fitted option on the IH 06 and 86 Series tractors. This IH 1456 Wheatland tractor is equipped with a Coleman axle. Drive was transmitted from a transfer box bolted to the left-hand side of the transmission. Photo: Lee Klancher.



Fascinating facts

- **1959:** Elwood 4WD axle is approved by IH as an official field/dealer installed attachment.
- **TX-160:** The internal project code name given by IH to the four-wheel drive 2+2 Series.
- **JOHN MELLBERG:** Designer who gave Case tractors their look in the 1970s and 80s.
- **CASE 5090:** The early project name for the tractor that became the V8-powered 4994.
- **M-R-S DEAL:** Licensing deal between M-R-S and IH, set to begin in 1971, fell through.
- **CVT:** IH commenced work on a hydro-mechanical CVT transmission in the US in 1981.
- **JAGUAR:** Name of the prototype two-wheel drive Steiger produced in the mid-1980s.
- **FRONT AXLES:** Early IH 50 Series models had 4WD front axles produced by Elwood.
- **MERGER:** New Holland and IH discussed merging their farm divisions in the early 80s.
- **CONNIE:** Nickname given by Steiger engineers to the first prototype Cougar Series 1.
- **1963:** Year that J. I. Case began work on what would become the 1200 Traction King

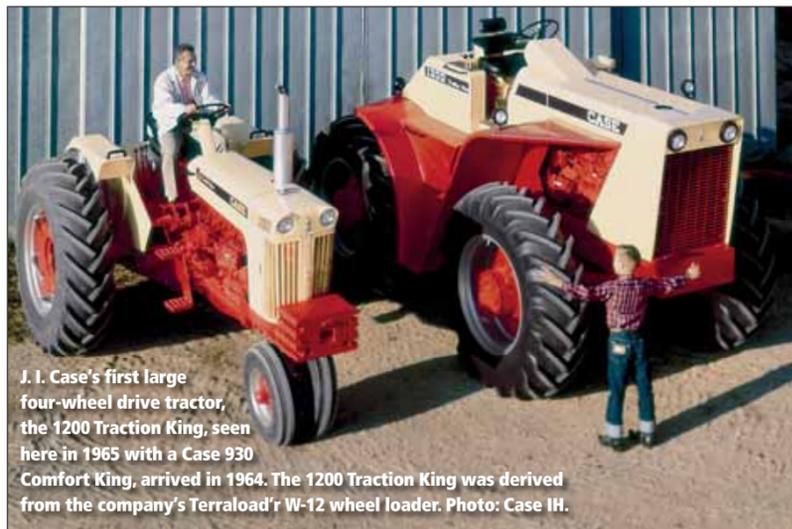
Above: IH owned a third of Steiger between 1972 and 1980, so it's not surprising the Fargo factory used a fleet of International Harvester trucks to deliver its tractors. These tractors awaiting delivery appear to be Series I models, dating this image prior to 1975. Photo: CNH Industrial America LLC, Fargo Plant.

Below right: This is where the Steiger story started, with tractor No.1, built by brothers Douglass and Maurice Steiger in a dairy barn on their North Dakota farm in 1957/1958. Photo: Lee Klancher.

Below: A rare image of the one-of-a-kind Steiger Twin Panther TST650 that was created at the Fargo factory in 1976. The experimental machine was powered by a pair of Caterpillar 3406 engines that produced a combined 650hp. Photo: Paul Nystuen Collection.

Top left: The IH 4366 was the first model produced for IH by Steiger, following the signing of a supply agreement in May 1972. The IH 4366 utilised a 225hp H DT466 six-cylinder engine and final drives from the two-wheel drive 1466 model. A total of 3166 units were built from 1973 to 1976. Photo: Lee Klancher.

Top right: This giant experimental four-wheel drive tractor, code-named 4WD-1, was developed by IH's Hough industrial division in the late 1950s. It led to the launch of the IH 4300 in 1961. Photo: Wisconsin Historical Society.



J. I. Case's first large four-wheel drive tractor, the 1200 Traction King, seen here in 1965 with a Case 930 Comfort King, arrived in 1964. The 1200 Traction King was derived from the company's Terra-load'r W-12 wheel loader. Photo: Case IH.



Top left: The TX160 designation on the bonnet of this IH 2+2 early styling mock-up was the company's internal codename for the project. Photo: Wisconsin Historical Society.

Top right: This sketch of the experimental Case Magnum 2+2 tractor that was under development in the late 1980s was drawn by industrial stylist, Gregg Montgomery. Photo: Montgomery Design International.

Above: Producing a scale model was part of the design process. This tabletop-sized model of the Case 2870 was created in 1973. J. I. Case's managing designer John Mellberg was responsible for the new styling and bold look. Photo: John Mellberg.

Below right: Before it was taken over by J. I. Case in late 1984, IH was working on a number of new projects, one of which was an upgrade of the 2+2 Super 70 Series. This is a 1/4-scale model of the proposed IH 7688, complete with a cab design that would form the basis of the unit used on the later Magnum. Photo: Gregg Montgomery Collection.

Below: A prototype Case-IH Quadtrac and an experimental Magnatrac on display in the early 1990s. The Quadtrac entered production in 1996, but it would be 2014 before a half-track version of the Case-IH Magnum became available. Photo: Case IH.



stretched and in 1982, in an attempt to raise much-needed funds, it ended up selling its shares in Steiger to Deutz. As a result of the severing of links between the two companies, the newly announced IH 7388, 7588 and 7788 models, now the holy grail of many IH collectors, were dropped after no more than a handful of pre-production machines had been built.

Steiger would later be reunited with IH, or rather Case-IH as it became, in 1986. *Red Tractors 1957-2017* doesn't just stop at the classics and it goes on to tell the story of what happened next. The background to the development of the Magnum was told in *Red Tractors 1958-2013* and isn't repeated here, although there is a fascinating section on the top secret Magnum 2+2 experimental articulated tractors that were evaluated in the late 1980s and very early 1990s. The project was put on the back-burner during the development of the Magnum 7150 and was never resurrected.

The involvement of J. I. Case in the high-hp four-wheel drive tractor market isn't forgotten. Case became active in this sector when it launched the 1200 Traction King in the 1960s and it went on to produce a range of ever-larger rigid-chassis models during the 1970s and into the 80s.

The book also tells the story of how IH and J. I. Case came together under the Case-IH banner in the mid-1980s, and how the new company's team of development engineers went on to create the Quadtrac in the 1990s. The first prototype, described as a 'very harsh, harsh vehicle limited to only 8mph' by a member of the original development team, was up and running by the spring of 1990 and was initially tested at night to keep its identity a secret.

A prototype was tentatively shown at the 1992

Farm Progress Show, but it would be another 4-5 years before Case-H's engineering team signed off the design for full production. The UK received its first supplies in 1997 and a brief summary of the impact of the rubber-tracked machines in this country is provided by guest author, Martin Rickatson.

Publisher and principal author Lee Klancher is assisted by the same supporting cast of worldwide authors who created the award-winning *Red Tractors 1958-2013* and *Red Combines 1915-2015* books. This ensures that this volume contains information on North American, British, German, Australian, and French models from some of the world's leading experts on red four-wheel-drive tractors, people such as Sherry Schaefer, Kenneth Updike, Oscar H. Will III, Jim Allen, Todd Markle, Guy Fay, Martin Rickatson, Sarah Tomac, Matthias Buschmann, Jean Cointe and Johann Dittmer. It is an impressive cast.

The 'Harvester 4WD Abroad' section contains a reference to a Doe-type IH tandem tractor that operated in Holland in the early 1960s. The conversion by a Dutch dealer in 1960 involved the joining together of two 36hp IH D-436 models using an articulated frame. Sadly, the original doesn't survive but a replica was created in 2012.

Throughout the book there are numerous fascinating first-hand accounts from the engineers and other product development specialists at IH and Case IH who brought the machines to life. These accounts and the histories of the various models are accompanied by more than 400 images of IH and Case IH tractors – not just production machines but also concepts, prototypes and test mules that have never been seen before.

