

1957 Willys

FC170 Power Hoe

Building on a Brooks Stevens design

by James Carr and John O.M. Lafian



Willys' decision to engage renowned designer Brooks Stevens following WWII was brilliant. Stevens revamped the company's entire product line and created iconic vehicles including the Jeepster, Willys Wagon, and a line of rugged pickups that included the cab-over-engine Forward Control trucks. The two main truck variations included the $\frac{3}{4}$ -ton FC150 and the 1-ton FC170.

During the FC's nine-year lifespan, it would be modified into every type of service truck imaginable. The cab-forward styling made it the perfect solution where extra chassis length or central weight distribution was critical.

One man who connected with the commercial benefits of the new design was excavator John Lafian of Massena, New York. Lafian, the owner of an excavation company, began his career as a heavy-equipment operator. Through the years he gave much thought to making the conventional truck-mounted backhoe more versatile, easier to transport and more economical to operate. Late in 1954 he began to translate those thoughts into a design for a revolutionary backhoe, dubbing it the "Power Hoe" project. Early in his design process he met with Willys Motors executives to see if his concept might work with one of their forthcoming truck designs. Imagine his excitement when shortly after their meeting they provided him with full drawings of the yet-to-be-produced Brooks Stevens-designed Forward Control 170, a perfect complement to his vision!

Lafian put together a team that included engineers and specialists to assist with the technical aspects of the design. By 1956, he had a solid design in place and was collaborating with both Willys and Cessna Aircraft's Hydraulic Group. The final design incorporated a truck-mounted backhoe that would rotate 360 degrees on its pedestal, run the excavator from the truck's main power plant (thus eliminating the weight of a conventional rear engine), and be mounted to a modified cab-forward truck, which would allow the arm and bucket to rest beside a "halved" driver's cabin, creating a vehicle with a much lower profile. The Power Hoe's overall height was significantly lower than other truck-mounted backhoes of the era, allowing for more practical movement between jobs.

Lafian was obsessed with his idea and was encouraged by the support he had from the knowledgeable companies that were assisting him. The 1957 Willys FC170 was finally released to the public and John obtained a vehicle that would be utilized for testing. This same

vehicle evolved and became his prototype, carrying the final product configuration. Initial tests were conducted to determine if the truck's chassis could handle the stress and weight of an operating backhoe. These tests were performed with the truck's stock cab configuration and with an existing manufacturer's backhoe attached. John's son, John Jr., was a child at the time and spent weekends with his dad testing the mocked-up truck.

John Jr. recounts: "Dad was a very driven man. He had a difficult childhood and it made him pretty tough. He was driven in everything he did and approached the Power Hoe project with full intensity – it was his dream. It wasn't until later in life that I realized I had picked up his determination and drive, much of which I acquired at a young age being around him and this project. This truck was an all-consuming passion for him. It was his idea, his pride and his reputation. It remains a significant part of my early childhood memories."

Late in 1957 the design work was completed, and on January 24, 1958, Lafian filed for a patent on his invention. It would take three years before he received preliminary approval, with final approval in May of 1962. The patent number issued was 3,034,670, the "J. Lafian Power Hoe." John was ecstatic. He could finally move forward with his original intention, to sell the patent to a major manufacturer.

He then began the process of finalizing the prototype truck, which he planned to drive to major equipment companies as an engineering demonstrator that encompassed all the patented ideas. The truck evolved significantly from its early testing and had a professionally reworked half-cab that provided room for the arm and bucket to rest while being driven. Additionally, it contained the 360-degree patented turntable and the hydraulic pump configuration, which was tied into the truck's power train for operating the hydraulics in the backhoe unit. The green color of the original factory truck had now given way to construction yellow, and it was complete except for the need to install the outriggers and the final arm assembly, along with other minor details.

Today it is not entirely clear how he learned of it, but Lafian received word that one of the major equipment manufacturers – from which he had purchased equipment during the years – had copied his design. He investigated further and after feeling certain that this was the case, was understandably upset. An attorney was hired to pursue legal action. At this point, the work of putting the finishing touches on the Power Hoe demonstrator took a back seat.

After the conflict had dragged on for a considerable time, Lafian was advised by his attorney to strongly consider dropping the matter. This recommendation was based on the fact that each component in the “copied” version was altered enough to make the legal outcome a 50/50 proposition, and the financial costs to pursue this to a close could be extensive. Lafian struggled to come to grips with a situation that had disintegrated to a point where the patent would be difficult to sell. Completely dejected, after much deliberation he decided to heed his attorney’s advice and drop the case.

Lafian never recovered from his disappointment and in 1967, at the age of 44, he died of a brain hemorrhage. His family was in shock. His death at such a young age left his wife and four children with a very difficult road ahead. Being the confident man that he was, he had poured a significant amount of the family’s resources into the Power Hoe project, financing virtually all of it himself.

John Jr. was forced to grow up quickly and became the prototype truck’s long-term caretaker. The family was not sure what to do with the truck as it was such a significant part of the husband and father they had lost. Having been in storage for a couple of years before John’s death, it essentially remained there for the next 45 years. During the years, John Jr. would occasionally start the truck, and once he obtained his driver’s license he would at times drive it around the storage grounds.

In 1983, John Jr. took a rekindled interest in his dad’s truck, removed it from storage and got it running again. He mounted the final version of the arm that his dad had built, which was left lying



John Lafian’s son, also named John, as a young boy during chassis testing of the truck in its initial stage. Note the cab has not yet been modified.

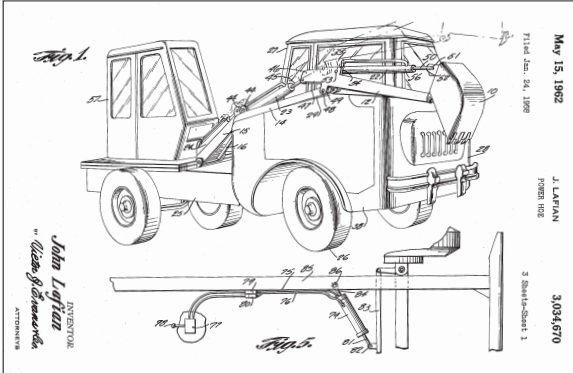
on the floor beside the truck awaiting installation. He even drove it to his home and used the machine to gently lift his kids off the ground via a handle he had attached to the end of the arm. He did some digging with it on his property, but was afraid to push it too hard as the outriggers that were designed and built by his dad had not yet been installed.

At the time, John Jr. had his own construction company and silver was the color they painted all their equipment. Before entering the truck in a local parade in 1987, John Jr. had a local body man give the truck a quick paint job transforming it from construction yellow to his company’s signature color of silver. It received a state inspection and did, in fact, participate in the parade, after which, it went back into storage for 25 more years.





The actual Power Hoe in its final patented configuration.



In 2009, John Jr. decided it was time to find a new caretaker for the truck. Although a transaction did not happen immediately, he met a car and truck collector with whom he kept in contact. In May of 2012, John Jr. came to the conclusion that this person was the right individual to own the truck and a sale was consummated.

Today the vehicle sits in time-warp condition from that last parade outing, still bearing its 1987 inspection sticker and with fewer than 2,600 miles on the odometer. The silver paint is now looking a little dingy and the construction yellow paint shows through where some minor nicks and scratches occurred. The interior of the bubble-shaped cab remains green – the color of the truck as it started life in 1957. The tires are those with which it was delivered when new. They have never been changed and even the inner tubes are all original as delivered in 1957.

The new owner, and AACA member, is serious about the history and preservation of these Brooks Stevens FC trucks, and understands how critical it was to John Lafian's family history as well. "It is going to a very good home," says John Jr., "and at some point in the future my family may acquire it back ... it was very emotional letting it go. I am very proud of my father and his determination to build this unique vehicle, and only wish it had attained the full potential he had envisioned. He and my mother must be looking down upon us smiling as they read this article, content that this machine and his efforts will not be forgotten."

