

pontoon fenders, much like an airplane. Retractable headlights added to its sleek appearance. The back of the car was equally clean, with flush mounted tail lights. The aerial for the radio was a grid, mounted on the bottom of the car where it couldn't be seen. The fuel cap and door hinges were hidden. And instead of a conventional chrome grill for the radiator, it had horizontal slats wrapping around its box-shaped hood. It became known as the "coffin-nose" Cord. The styling team was led by Gordon Buehrig, whose career spanned into the 1960s and who is also credited for his work on the 1956-57 Lincoln Mark II coupe.

Like most radical designs, the Cord 810 had teething problems that sullied its reputation. It was offered for only two years, 1936 and 1937. In its second year, it was accompanied by a supercharged version - the Cord 812, but sales remained in the tank. The Recession of 1937-38 didn't help. Production was suspended and the body dies were sold. But the coffin-nose Cord was not forgotten. It was an instant classic.

Glenn Pray's Dream

When the Auburn Automobile Company declared bankruptcy in 1937, a man named Dallas Winslow, a Buick dealer from Flint, Michigan, bought some of the remaining assets which included the complete parts inventory of for Auburn, Duesenbergs and Cord automobiles. The price was \$85,000 plus an additional \$25,000 for the Auburn administration building. Thus, the Auburn-Cord-Duesenberg Company was formed. ACD Co. continued to offer parts and service from the Auburn, Indiana facility throughout the 1940s and 50s.

In 1960, Glenn Pray, a school teacher who was a big Cord enthusiast, bought the remaining assets of Auburn-Cord-Duesenberg Company from Dallas Winslow and moved them to a vacant pickle factory in Broken Arrow, Oklahoma. This would continue to be Pray's base of operations into the future. The venture was financed in part by an associate named Wayne McKinley.

Glenn Pray probably could have prospered by simply selling parts for these classic cars, but he had higher ambitions. He wanted to begin building replicas of them for paying customers. And to make his dream come true, he picked the boldest, most beautiful of them all. The Cord 810. While retaining his interests in ACD, Glenn Pray and several inventors established a new entity to design, manufacture and sell the replicas.

What's Inside?

It was important to Glenn Pray that his replica be a front-wheel drive car, just like the original. But during the planning stages, no front wheel drive cars were being built in America. The Oldsmobile Toronado had not yet arrived. Mr. Pray had to get creative. Luckily, Chevrolet was still producing Corvairs at that time.

The original Cord 810 had a unitary power train, meaning that the engine, transmission and differential were all bolted together as a single assembly, with the transmission in the front, differential in the middle and engine at the rear, just like the Corvair Uni-Pack power train. So, it was natural that Glenn Pray would select the Corvair power train as the basis for his

replica of the original car. It was simply a matter of positioning the Corvair power train up-front instead of at the rear.

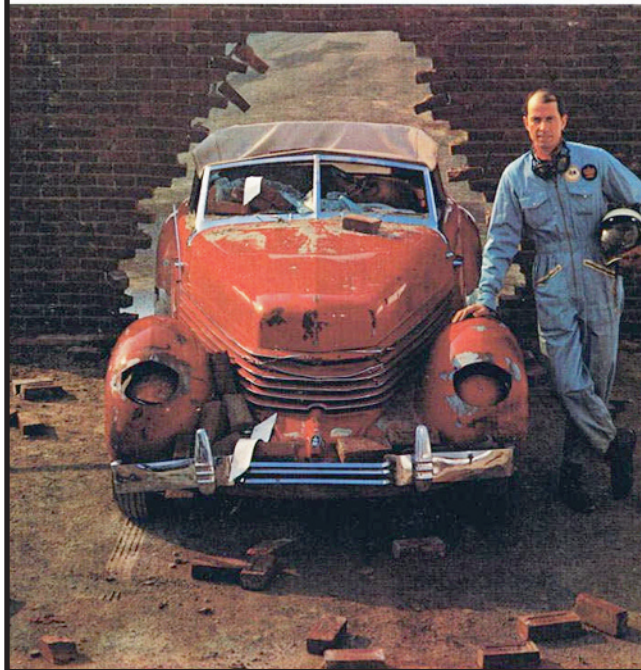
The next challenge was to design the suspension. The original Cord 810 had independent front suspension with half shaft axles. To enable the front wheels to steer as well as transmit power to the road, the axles were equipped with Cardan joints instead of simple universal joints. Aside from that, the suspension was simple: Nothing but one trailing arm on each side. Springing was provided by a transverse leaf secured to the chassis in the middle and connected to the outboard ends of the right and left trailing arms. It could be argued that a DeDion setup as found on the earlier L-29 Cord may have been a sturdier arrangement. In the rear, the original Cord 810 had a simple beam axle suspended on semi-elliptic leaf springs, like a Dodge minivan.

Glenn Pray's replica was more modern in the suspension department. Like the original, it had independent front suspension with half shafts, but instead of trailing arms, each wheel was located by upper and lower control arms. Pontoon fenders don't leave much space for springs, so Pray's engineers specified longitudinal torsion bars, just like those on Chrysler products of that time. At the rear, there was a beam axle located by trailing arms and a Panhard rod.

Like its predecessor, the 8/10 had a conventional steel frame consisting of long box sections running front to rear, cross-members, mounting points for the suspension, and pads for the body. The frame weighed about 400 pounds. Nevertheless, the entire car was rather light in weight at 2,100 pounds.

Royalite ABS takes 30mph impact.

Expanded Royalite ABS body is still intact after John Fitch drove car through wall. Doors and hood were not sprung.



John Fitch drove this Royalite-bodied Cord 8/10 through a wall!!

Plastic Body Beauty

It would have been more authentic if the 8/10's body was made of steel, like the original. But there was no way this would be financially feasible for a small upstart like Glenn Pray. He had to think outside the box.

Around the same time, U.S. Rubber Company was promoting a product named "Expanded Royalite" as a suitable material for boat hulls and heavy duty truck cabs. A specialty car made of Royalite would be a good promotional tool for U.S. Rubber. And so it came to be.

Expanded Royalite comes in large sheets. It's a laminated ABS-based plastic that has a cellular inner core sandwiched between inner and outer skins. (ABS stands for acrylonitrile butadiene styrene). Nowadays, there are probably dozens of plastics that would be suitable for molding car bodies, but back in the 1960s, Expanded Royalite had a unique combination of characteristics. It was advertised as being exceptionally rigid, light in weight, and resistant to weather, salts, alkalis and most chemicals. But it's main selling point was that it was easy to form into shapes using conventional vacuum molding techniques. That meant low tooling costs for low-volume production.

To get the ball rolling, Glenn Pray provided an original Cord convertible to U.S. Royal to serve as a pattern for the 8/10 replica. U.S. Royal's Consumer and Industrial Products Division in Mishawaka, Indiana took it from there. To get the dimensions right, they made an 8/10th scale clay mockup of Glenn's donor car. Then, to accommodate the sizes and properties of Royalite sheet, they made a five-piece plaster mold. Finally, for production purposes, they prepared an epoxy vacuum-forming mold in which Royalite sheets were formed into individual body parts. It took about five minutes to mold each piece. The pieces were assembled into a complete shell using epoxy-based adhesives and standard mechanical fasteners. The complete body assembly weighed only 200 pounds.

U.S. Rubber manufactured the body shells for all Cord 8/10s at their Mishawaka plant and shipped them to Glenn Pray's facility in Oklahoma. There, they were fixed to rolling chassis units that were assembled by Pray's staff. The rest of the work was performed there, at Pray's workshop.

Glenn Pray and his people did their best to use commonly-available parts throughout to ease maintenance and repair for future owners. Of course, some of the parts were unique, like the NOS Cord instrument panel with its full complement of gauges. Aside from it's smaller size, the Cord 8/10 was a fitting tribute to the original car.

Rave Reviews

Car magazines like Motor Trend and Automobile Quarterly gave reviews when the Cord 8/10 arrived on the scene. In addition to being faithful to the original styling, they were well-trimmed with quality components. Although the body was made of plastic, this was no kit car.

The magazines praised them for their comfort, handling and acceleration. Pray didn't skimp with the engines - Cord 8/10s came with the high-performance 140 Corvair engine, with the turbo 180 being optional.

Whether they were that good is open to debate. Some folks

who have driven them aren't too impressed with their roadability. But nobody can debate that they attract attention. They are truly handsome cars.

Aftermath

Glenn Pray and Wayne McKinley were not alone in financing the Cord Automobile Company. There were other investors and a dispute arose when sales failed to meet expectations. In January of 1966, Pray was ousted and six months later, in July of 1966, the Cord Automobile Company stopped producing cars after building just 97.

But that's not the end of the Cord story. In March 1967, the assets of the Cord Automobile Company were purchased by a new outfit underwritten by William P. Lear of Lear Jet fame. The name of the new company was Sports Automobile Manufacturing Company. SAMCO produced 13 more Cord 8/10 Sportsman cars, probably to use up existing supplies, and then introduced two new Cord replicas. Known as the Cord Warrior and Cord Royale, they were nowhere near as faithful to the original Cord design of the 1930s. Apparently, the car-buying public didn't care. They bought 400 of the them, so sales were much better than Glenn Pray's 8/10 Sportsman. Nevertheless, around 1974, SAMCO made a decision was made to produce motorhomes instead of Cords and Cords were produced no more.

Meanwhile, after leaving the Cord Company, Glenn Pray started yet another venture - to build replicas of Auburn Speedsters. Production continued from 1968 into 1981. Concurrently, Pray's Auburn-Cord-Duesenberg Company continued to sell parts and services for the original cars built in the 1930s. Glenn Pray passed away in 2011. ACD Co. is now owned by his son, Doug Pray.

From time to time, investors announced plans to introduce yet another version of the classic Cord 810, but none were ever built in any quantities. On or about November 25, 2016, another entrepreneur announced plans to build Cord replicas. Maybe so, but they certainly won't be powered by Corvair!

Author: Allan Lacki-Sources:

Auburn-Cord-Duesenberg Story

<http://www.acdfactory.com/acd-co-story.html>

The Cord 8/10 Sportsman, by Kevin Wilson.

<http://www.corvairforum.com>, Dec 18, 2009.

Plastic-Fantastic: The-Cord-Sportsman-By Glenn Pray

Debuts. <http://www.forgottenfiberglass.com>

Rebirth of Cord Made Possible with New Material, by L.

Scott Bailey, Editor. Automobile Quarterly.

Celebration to Mark 50th Anniversary of Glenn Pray's

Corvair-powered Cord 8/10, by Kurt Ernst. Hemmings Daily, April 21, 2014.

A Brief History of the Cord Automobile.

<http://www.stutzbearcat.com/>

Body Material for New Cord: Expanded Royalite. (Appears to be a U.S. Royal brochure or pamphlet).

Cord 8/10 by John Ethridge. Motor Trend. July 1966.

Cord 8/10 Photo Gallery



Many but not all Cord 8/10's had side pipes.



All Cord 8/10s were two-seaters. 100 inch wheelbase.



Profile shot reveals the compact size of the 8/10.



Sitting pretty in red! Early 8/10s had moon hubcaps.



Glenn Pray used NOS Cord parts for his 8/10 replicas.



Rock-n-roll promoter Dick Clark owned a Cord 8/10!

1936-37 Cord. The Inspiration.



1937 Cord 810 Sportsman convertible.



1936 Cord 810 Beverly "humpback" sedan.



All Cords came with full instrumentation.



Cord Lycoming V8. Supercharged & side pipes for '37.



1936 Cord 810 Westchester sedan.



Cord 810 / 812 interior.