

How well do you know your Chrysler history?

By Randy Rundle

So...you think you know your Chrysler history... and you can name every application Chrysler ever put a hemi engine into. Well, I've got one I bet you never heard of. Chrysler, like most automotive companies, secured contracts during World War II to build tanks, airplanes, as well as guns and ammunition. Chrysler was no different than all the rest with one exception—the air raid siren. Chrysler earned the distinction during the war years of building the loudest most powerful warning device ever built. No company before or since has built anything like it.

Development of what would be later became known as the Chrysler Air Raid siren was started in January 1942. First attempts were built at the request of the Office of Civil Defense (OCD) in Washington, D.C. The E.D. Bullard Company of San Francisco designed an engine-driven centrifugal siren and submitted it for testing and certification. Chrysler got involved in part because the centrifugal engine-driven siren offered by the Dullard Company used their Flathead six-cylinder engine to power the siren. Despite extensive tests and modifications, the Bullard-design centrifugal siren could not produce the necessary volume of sound the OCD required.

In earlier research, the OCD had determined that a minimum of 120 to 140 decibels of sound pressure at 100 feet was the minimum requirement output for a warning siren. With the failure of the Bullard Company siren to meet the specifications, Chrysler was invited to a meeting in Washington D.C., along with a few of the sound engineers from Bell Laboratories, to work on the problem and come up with a solution.

A few months later that resulted in the intro-

duction of “Big Bertha,” a huge centrifugal engine-driven siren and one of the largest ever built up to that time. The Bell Labs siren was capable of 134 decibels of sound at a range of 100 feet. Now that the Bell siren design was proven successful, the Bell engineers drew up a series of specifications, using “Big Bertha” as a guideline. Chrysler was then awarded a contract to build the Bell designed and engineered air raid warning sirens.

The first version became known as the Chrysler-Bell Victory Siren. This first siren had a somewhat crude unrefined appearance, but despite its looks, it became certified by the OCD in March of 1942. One hundred twenty of these “Victory Sirens” were sold to 28 different cities. New York City bought 10, and Detroit and Chicago 20 each.

The Victory Sirens sold for the tidy sum of \$3,760 each in 1942 wartime dollars and were powered by a Chrysler straight-eight 324 cubic-inch engine that was rated at 140 HP. The government test results showed this siren with its two-stage blower was capable of producing a sound output of 134 decibels at a frequency of 430 Hz at a distance of 100 feet.

One of the problems with the early sirens is that the sound they produced was directional. To solve that problem the sirens were fitted onto a belt driven turntable that would rotate a full 360 degrees at 1.5 revolutions a minute. An operator was required to sit on a tractor type seat and control the operation of the siren and the direction of rotation.

In 1952, a final and more advanced model was introduced. Along with a few refinements was the addition of Chrysler's new 331 cubic-inch, hemi-head V8, which produced 180 HP at 4,600 rpm.

The latest design proved to be the best ever. It was by far the loudest at 138 decibels at a distance of one hundred feet and a range of 460 Hz. Best of all it was controlled remotely so no operator was needed to ride the siren and run the controls.

To put this hemi-powered air raid siren's output loudness into perspective the telephone in your shop rings at 80db while a city police car or ambulance measures 120db at a distance of ten feet. Imagine 138db at a distance of 100 feet!

This design became the most popular and a couple of hundred were sold to the larger cities across the United States. Besides their tour of duty for World War II, many of the sirens were again used during the Cold War when the threat of nuclear war became very real in the 1960s.

So the next time you are cruising to work in your hemi-powered pickup, think about the hemi engine under the hood. In an earlier life it may have been in service to our country powering one of the loudest and most powerful air raid sirens ever built. Who would have thought?

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