Chevrolet Throws Down the Gauntlet With Spark Mini-EV, on Sale in 2013

by Irena Granaas

Today's auto buyers have a number of manufacturers jockeying for their attention with state-of-the-art hybrid electric or all-electric vehicle options, and Chevrolet has come out swinging with a new EV designed to be practical, yet fun to drive.

In the fast-evolving mini-EV class, Chevrolet has served notice that it's ready to take "charge" with the 2014 Chevrolet Spark EV, unveiled last week at the Los Angeles International Auto Show.

Touting what it says will be a best-in-class battery range, attractive pricing (under \$25,000 after federal tax incentives) and other advantages, the Detroit-based automaker initially hopes to win consumers' favor in key small-EV markets such as California and South Korea.

The new EV is also slated to go on sale next year in participating dealerships throughout Oregon, Canada and other global market locations to be announced.

The car, which shares a platform with its IC-powered sibling of the same name, bursts onto the scene of a crowded EV minicar field to vie with rivals like the Mitsubishi i-MiEV, Fiat 500e EV, Nissan Leaf, Smart Fortwo Electric Drive and the Scion iQ, said Chevrolet spokeswoman Annalisa Bluhm.

According to various sources, these cars have estimated ranges from 50 up to just under 90 miles on a single charge.

At press time, Chevrolet was keeping the Spark EV's driving range under its hat, but GM is confident the car will defuse potential EV buyers' well-documented range anxiety.

"Our initial numbers are really positive," said Bluhm, "and we know we're going to be best in segment . . . And I think when the numbers come out, we'll be right at the top with the Nissan Leaf, so the numbers so far are very encouraging."

Range estimates for the Leaf vary from 47 to 105 miles on a single charge, according to Nissan;

and Wikipedia rates the 2012 model at up to 87 miles per full charge.

Although it's not in the mini-EV segment, Bluhm acknowledged the current EV range champion is the California-built Tesla Model S, which has an EPA estimated range of 265 miles. But GM isn't running scared.

"We wish them very well, because the more people that are in this race, it helps us, really, because that competition helps drive down costs in terms of components, " said Bluhm.

The Spark EV shares the same platform as its IC engine-powered sibling, the Chevrolet Spark.

Bluhm noted that, while a majority of the EV's components have already been created and designed for the non-electric version, the Spark EV benefits from a revised transmission, better shock absorbers, improved ride and handling, and an aerodynamic do-over that enhanced the car's range by 2.5 miles.

The Spark EV's motor shares 40 percent of its components with the Chevrolet Volt, said Bluhm, which in contrast to other OEMs that have had to start from scratch with an EV, Chevrolet engineering teams, design teams and dealers have benefited from years of EV experience thanks to the Volt.

"They understand the EV space," said Bluhm, "so when it comes to a cost and viability perspective, our position is a little better than other OEMs, because we've got the people, we've got the technology and we leveraged all that in the Spark EV."

Of course, range is not the only consideration. GM and Chevrolet have paid close attention to the real-world issues of relying on an EV for daily transportation. While owners will do the majority of charging with a 240-volt charger – which takes seven hours – GM will be announcing a quick-fix option in the near future.

"We're the first in the industry to have a car available with the SAE combo DC fast charger," Bluhm said, "and with that, you would be able to charge up to 80



2014 Spark EV

percent in around 20 minutes.

"Since it's a pure EV, it doesn't have an onboard range extender . . . It's kind of critical to have a fast-charging option to get you home or to get you from point 'A' to point 'B."

Climate conditions and driving habits can affect the vehicle's range. For example, moderate speeds and smooth acceleration tends to extend the range. Cold temperatures and extreme sun and heat reduce its range, Bluhm explained.

"Climates such as those you find in California and Oregon are pretty perfect and provide an excellent environment to really extend and optimize the battery's range . . . That's not to say that the vehicle won't operate in extremes," she added.

There are a variety of apps accessible to Spark owners with smartphones, including BringGo – a full-function navigation app available for a 30-day free trial – and internet radio links like Tunein and Stitcher.

These apps make use of a smartphone to connect the apps, through the MyLink OnStar remote link, to one of the Spark's two, high-resolution seven-inch color LCD screens.

Chevrolet's MyLink comes standard with the Spark EV and the car also comes with three years of OnStar service.

Drivers should find tooling about in the Spark EV far from dull, said Bluhm. The car's advanced electric motor and battery system, teamed with a GM-designed coaxial drive unit and electric motor is slated to deliver 130 hp and 400 lb.-ft. of torque for instant acceleration.





