



CHAPTERS OF THE YEAR

The Chevrolet Cruze Diesel 'Victory' Tour

NSBE Officers Learn about the Engineering behind a GM Fuel Economy Leader



Officers of NSBE's 2012-13 National Chapters of the Year pose beside an engine at GM Powertrain in Pontiac, Mich.

DETROIT — Six NSBE chapter leaders from three universities visited multiple General Motors locations this past summer, for an immersion into the engineering of the Chevrolet Cruze turbo diesel. The all-new, 2.0L clean turbo-diesel-powered model achieves an EPA-estimated 46 mpg highway: better than any non-hybrid or gasoline passenger car in America. The Cruze Diesel can travel 717 miles on a single tank, or about 10 hours of highway driving.

The students visited the GM Lordstown Assembly plant and Toledo Transmission plant, both in Ohio, and the GM

Milford Proving Ground, Powertrain Engineering Headquarters and the Tech Center, all in Michigan. Transportation was by 2014 Cruze Turbo Diesels.

The students were top-ranking officers of NSBE's 2013 Distinguished Large Chapter of the Year, Prairie View A&M University; Distinguished Medium Chapter of the Year, Louisiana Tech University and Distinguished Small Chapter of the Year, the University of Miami. The nominations were based on the chapters' execution of programming in academic excellence,

Pre-College Initiative, community outreach, professional development and membership retention, and the awards were made during NSBE's 39th Annual Convention in Indianapolis last March.

"The look behind the scenes at GM engineering opportunities is overwhelming," said Kendall Belcher, graduate of Louisiana Tech University. "Not only are the engineering departments leading-edge and dynamic, the vehicles they produce are some of the best on a global basis."

The 2.0L clean turbo diesel engine in the Cruze has resolved drawbacks consumers associated with older-generation diesel cars, such as excessive engine noise, exhaust soot and smell. Precisely controlled common rail direct-injection fuel systems

create a smooth-running engine. About one of every two U.S. service stations now offers diesel fuel, up from one in three a few years ago, according to Diesel Technology Forum.

Cruze Diesel also beats its rivals in performance, with a segment-leading, SAE-certified 151 horsepower (113 kW) and 264 lb.-ft. of torque (358 Nm), and can go from 0-60 in about 8.6 seconds. Its advanced engine produces at least 250 lb.-ft. of torque (339 Nm) between 1,750 and 3,000 rpm and has an overboost feature capable of increasing torque to an estimated 280 lb.-ft. (380

Nm) for short bursts of stronger acceleration when needed, such as when merging onto a busy freeway.

The Cruze, Chevrolet's best-selling passenger car around the world, provides the amenities, quietness, safety features, infotainment and roominess expected of a larger, more expensive sedan, but with the efficiency and value of a compact car.

NSBE members seeking further information about GM should contact Arvin Jones at NSBEJones@gm.com and visit www.gm.com/careers. ■



(above) Bianca Williams of UAM-NSBE asks a question before a tour of GM's Lordstown Assembly plant in Ohio.



(at left) Watching a demonstration at GM's Advanced Technology Center in Warren, Mich.