Improve Fuel Economy by Cutting Weight

Improved gas mileage isn't just a matter of better technology. Making a vehicle lighter also greatly contributes to better mileage – and Cadillac officials say that's what they've done.

According to Cadillac, greater use of structural adhesive and aluminum is helping Cadillac reduce overall weight of the ATS and all-new CTS sedans, contributing to better ride and handling and reduced cabin noise in both models.

The new CTS uses 387 feet of structural adhesive – more than the length of a football field – as a bonding agent that holds together and stiffens load-bearing parts and components. The extensive use of adhesive provides a damping effect, which reduces the transmission of vibration through the body structure. That pays off in fewer squeaks and rattles reaching a driver.

The heavy-duty material, along with traditional metal-joining processes like spot welding, also makes a stiffer, more durable joint. These advanced techniques, in addition to the use of high-strength steels and efficient geometry helps make the new CTS sedan 40 percent stiffer than the previous model.

To further improve performance, aluminum was used extensively to save weight. For the first time, all four doors will be constructed of aluminum, cutting 55 pounds compared with the steel doors on the previous generation CTS.

With a base curb weight of 3,600 pounds, CTS is the lightest vehicle in its class, roughly 200 pounds lighter than a comparable BMW 528i.

"Reducing overall weight is a key element in producing a car that delivers agile handling dynamics," said John Plonka, CTS Program Engineering manager. "By rethinking very traditional elements, such as such as materials used for bumpers and doors, we are able to save precious weight and stay true to delivering a vehicle that is fun to drive."

Other aluminum contributions to weight savings:

• 13.1 pounds by replacing steel bumpers on the current generation CTS.

• 14 pounds by making front strut towers of cast aluminum compared with steel used in current CTS.

• 7.2 pounds from the instrument panel structure, where extruded and stamped aluminum replaced cast magnesium.

• 36.5 pounds by using extruded and cast aluminum vs. a steel powertrain cradle on the current model.

• Strategic use of aluminum is also an integral component of the ATS luxury sport sedan, which shares architecture with the new CTS sedan. At just 3,315 pounds, ATS is among the lightest vehicles in its class.

The ATS powertrain features extensive use of aluminum, which not only helps cut weight, say Cadillac officials, but also contributes to the car's nearly 50/50 weight distribution for improved driving dynamics. The ATS also has an aluminum hood, suspension cradle and cylinder heads.

According to a Cadillac news release, "The 2014 Cadillac CTS ascends into the heart of the midsize luxury market with expanded performance, elevated styling and sophisticated technology."

The vehicle arrives in showrooms this fall. The ATS is Cadillac's entry into what Cadillac officials call the most significant luxury car segment.

Since its launch last fall, ATS has received several accolades, including the first Cadillac to win the North American Car of the Year award.

Grand Prixmiere to Launch Weekend Of Competitive Racing on Belle Isle

The Belle Isle Conservancy (BIC) will host the Grand Prixmiere, the official launch party of the Grand Prix race weekend on Belle Isle, on Friday, May 31, at DTE Energy's Town Square in Detroit, located at 2000 Second Ave.

The event begins at 6 p.m. with a VIP reception in celebration of a weekend of races at Belle Isle Park. The Grand Prixmiere kicks off the 2013 Chevrolet Detroit Belle Isle Grand Prix weekend, May 31-June 2.

The event also helps support the BIC's mission to preserve, protect and restore Belle Isle Park.

"We are relishing the opportunity to host the Grand Prix's opening benefit for the fourth year. The excitement of race weekend fills the room," said Sarah Earley, chair of the Belle Isle Conservancy Board of Directors. "The support of our beautiful Belle Isle Park is wonderful and so essential."

The Detroit social event will be filled with cocktail receptions, dinner, entertainment and more. VIP guests – sponsors and those holding Winner's Circle tickets – will have a private cocktail reception and an opportunity to meet and mingle with Grand Prix

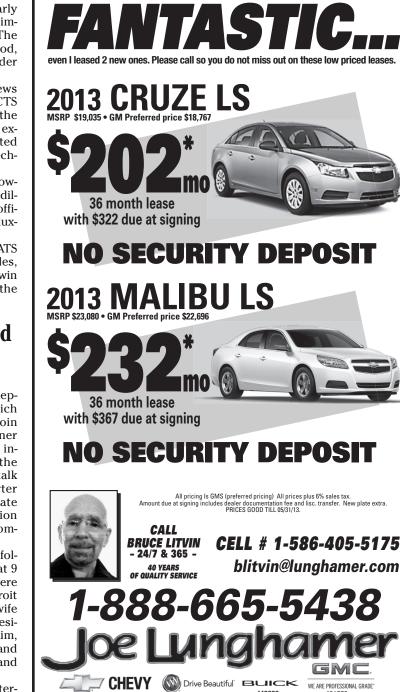
drivers starting at 6 p.m.

The general cocktail reception starts at 6:30 p.m., at which time Finish Line guests will join VIP guests. A gourmet dinner will be served at 7:30 p.m., including entertainment and the main program, featuring a talk by ESPN/ABC IndyCar reporter Jamie Little, who will moderate a question-and-answer session with several of the drivers competing this year at Belle Isle.

The main program will be followed by an Afterglow Party at 9 p.m. The 2013 Grand Prixmiere honorary chairs include Detroit Mayor Dave Bing and wife Yvette, GM North America President Mark Reuss and wife Kim, Sarah and Tony Earlely, and Grand Prix Chair Bud Denker and wife Melissa.

"The Grand Prixmiere is a terrific event and truly one of the highlights of race weekend," said Denker. "This event has really become one of the top social events of the year in Detroit and it provides a great opportunity to meet some of the world's best race car drivers while helping to raise money for our city's beautiful jewel – Belle Isle Park."

For information on tickets and support, call 248-336-8360.







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