

November 2012

## CAR TALK

### **CORVETTE NEWS:**

I think I mentioned last month that Corvette sales for the month of July had been somewhat anemic, with less than 1,000 units sold. The news was better for August, with 1,200 new Corvettes being sold. That also represents a 30% increase over August 2011.

---

### **C7 DETAILS**

More and more details of the 2014 Corvette, which will be the first of the new C7 models, are being released by GM. Chevrolet has confirmed that the seventh-generation Corvette will debut on the evening of Sunday, January 13, 2013 in Detroit, which is the night before the opening of the North American International Auto Show. They say the event will be closed to the public, but Chevrolet is planning on offering a limited number of tickets for Corvette enthusiasts with proceeds going to the National Corvette Museum in Bowling Green, KY.

Let's start with the introduction of the new C7 emblem. We know that the Crossed Flags logo has been a hallmark of the Corvette since its 1953 introduction. It has always incorporated a pair of flags, one a racing checkered flag and the other featuring the Chevrolet "bowtie" emblem and a French fleur-de-lis (which is a nod to Chevrolet founder Louis Chevrolet). Actually, the first Corvette debuted as a concept car on January 17, 1953 at the GM Motorama in New York City. That car originally featured an emblem with a checkered flag crossed with an American flag. But since the American flag couldn't be used for a commercial emblem, the logo was changed to the fleur-de-lis/bowtie design by the time the car went into production in June of 1953.

Of course, the design has evolved over the years, but it has now been featured on more than 1.5 million Corvettes between 1953 and today.

"The all-new, seventh-generation Corvette deserved an all-new emblem," stated Ed Welburn, GM vice president of global design. For the new car, the Crossed Flags design has a more technical, more angular and more swept

November 2012

appearance - a proportion that echoes the new car. It is also a more detailed representation, showing greater depth, color and attention to detail. When he said the C7 is an all-new Corvette, he wasn't kidding. Believe it or not, only 2 parts were carried over from the C6: the cabin air filter and the latch for the targa roof panel.

Chevrolet considered 100 different variations of the emblem before selecting the final design. The new Crossed Flags logo was unveiled at Road Atlanta, as Corvette Racing celebrated a sweep of the 2012 production-based American Le Mans Series GT championships. By the way, Chevrolet secured the manufacturer's championship, Corvette Racing secured the team championship, and Oliver Gavin and Tommy Milner captured the driver' championship.

OK, that was fun. But now to some real significant news. The 2014 C7 Corvette will be powered by a new 5<sup>th</sup> Generation small block V8 displacing 6.2 litres and will have the fancy new name of .....*wait for it*....."LT1". That's right, for the third time in its 60-year history, a Corvette engine will carry the option code of LT1.

"The Holy Grail for developing a performance car is delivering greater performance and more power with greater fuel economy and that's what we've achieved," said Tadge Juechter, Corvette chief engineer. "By leveraging technology, we are able to get more out of every drop of gasoline and because of that we expect the new Corvette will be the most fuel-efficient 450-horsepower car on the market."

This engine is so new that the total quantity of carryover parts will fit into a sandwich bag. Here are some details:

- The most powerful standard Corvette ever, with output of 450 hp and 450 lb-ft of torque.
- 50 lb-ft more low-end torque than the current LS3 V8, actually matching the LS7 from the Z06.
- The quickest standard Corvette ever, with estimated 0-60 performance of under four seconds.
- The most fuel-efficient Corvette ever, exceeding the 2013 EPA-estimated 26 miles per gallon on the highway.
- Engine will use cylinder deactivation; going from 6.2 V8 to 3.1 V4.

November 2012

- 11.5:1 compression ratio.
- Premium fuel recommended, but not required.
- 6,600 RPM fuel cut off.
- First overhead valve engine with Direct Injection.
- Optional 11.5 quart dry sump oil system.
- Active Fuel Management (AFM)
- Continuously variable valve timing
- All-aluminum block and oil pan.
- 40 pounds lighter than BMW's twin-turbo 4.4L, DOHC V8 with similar output.
- Spark plug centered in the chamber. Intake and exhaust valves are reversed.

Obviously, Chevrolet and General Motors are serious about the future of the V8 engine. Happily, the rumors about a V-6 Corvette can be dismissed for the time being. Over 10 million hours of computational analysis were conducted on the engine program, including 6 million hours (CPU time) dedicated to the advanced combustion system.

The new LT1 engine will be produced in the Tonawanda, New York, engine plant. GM's investment in this new Gen 5 small block engine will create or retain more than 1,600 jobs.

It is expected, at least at this point in time, that the first year of the C7 will see the introduction of only standard Coupe and Convertible models, with Grand Sport, Z06 and ZR1 performance models following later.

And then there's those new rectangular taillights.....more to come.

---

## **REGULATORY NEWS:**

In case you didn't know, there are companies out there that have been working for several years on perfecting cars that drive themselves. Google is one of those and they actually have a fleet of such cars that have racked up over 300,000 miles without an accident. That's the main idea, that cars would be safer driven by computers than by us humans. Knowing a bit about

November 2012

Google, I'm sure they have a grand plan to make a fortune off this technology, once it's perfected and properly regulated.

A step in that direction was just taken by our own Governor Jerry Brown. He signed an autonomous-cars bill. "Autonomous" refers, of course, to cars that drive themselves. The bill sought to establish some rules and regulations to govern these things, before they start swarming all over the state.

---

### **TRIVIA QUESTION:**

To help lower gas prices, the governor of California recently allowed "winter gasoline" to be sold earlier than usual. It was only by a few days and was really just a token effort. But some folks think that made him look good. **What is the primary difference between "summer" and "winter" gasoline?**

- A. Summer gas has more ethanol. Ethanol increases octane and lowers certain emissions. The additional ethanol raises the cost of summer gas.
  - B. Summer gas contains less butane. Less butane means less gasoline evaporates and pollutes the air on warm summer days. Winter gas contains more butane. Butane is relatively inexpensive, so winter gas costs less.
  - C. Summer gas must be 59 deg. F (15 deg. C) or less when it leaves the oil refinery. Additional summer-only restrictions work to keep the gas cool by controlling how long it can be in transit and stored at gas stations. Cooler gas in most cars' fuel tanks means less gas evaporation into the air and a denser fuel charge reaches intake manifolds leading to less pollution exiting tailpipes. The temperature and inventory restrictions push up the cost of summer gas.
- 

### **TRUE STORY OF THE MONTH:**

The driver's side low-beam headlight went out on my wife's car. I went online and found that the proper procedure for replacement begins with, "Remove the front bumper". Further research indicated that the bulb could be removed from the top. In order to do so, however, you need to remove the relay cover and basically work blind, unable to see the fixture. Need I

November 2012

mention that this is a halogen bulb that you need to be careful to NOT get your fingerprints on, lest the oils from your skin lead to premature failure of the capsule?

Now, I'm not a small man, and my hands are much like two canned hams. After much twisting, contorting, sweating, crying and bleeding I managed to get the original bulb out. I could see where the filament had burned out. It was getting pretty dark by this time, but I figured that since I couldn't see the socket anyway, I would go ahead and put the new bulb in.

After another round of bleeding, scratching and sweating, I got the bulb in and the assembly put back together. I turn on the light switch and, TADA!!!--it still doesn't work. Let the troubleshooting begin! Fuses are OK, wiring looks fine, multimeter says that I have power at the plug. Hmmm.....I look at the packaging and see that the bulb is correct. Then I notice.....I have reinstalled the blasted old bulb!

---

*Answer to trivia question: B*