

CAR TALK

STATISTICS:

Do like statistics? Do you need statistics to make things more believable? Ok, here's one for you.

A 2006 study found that the average American walks about 900 miles per year. Another study found that Americans drink an average of 22 gallons of beer per year. That means, on average, Americans get 41 miles per gallon. Does that make you feel better?

WHY IS OUR PREMIUM GRADE GASOLINE SO EXPENSIVE?

Now that I've got you warmed up for deep thinking, let's tackle this subject.

From 1995 through 2005, the national average price difference between regular and premium unleaded gasoline was 18 to 19 cents per gallon. Even when gas dropped below a dollar in 1999 (not in California) or broke the three dollar mark in 2005, the premium for premium remained consistent. It ticked up a bit over the next few years, with the delta growing to 25 cents by 2011. But since then, the price of high-test gasoline has been on a tear. The average upcharge reached 40 cents in 2015 and this year it's already grown to 47 cents. Why?

The cause of this widening gap is a combination of factors, according to an analyst with GasBuddy.com. One factor is there is an increasing number of cars that require premium, the share growing from 20% in 1996 to 50% today. But the refining industry is still mostly geared toward producing regular-grade gas, particularly in the Midwest, leading to a shortage of both high-octane blendstock and alkylate, an octane booster. New marketing efforts by oil companies have also raised prices.

If there is a silver lining here, it is that even with premium priced 40 to 50 cents a gallon more than regular, some unwary gas stations have been selling higher-octane gas below their cost. Some small stations don't pay attention to the cost of their premium gas, because they don't sell a lot of it. So the message to us premium gasoline users is, find one of these stations!

The bad news, again according to *GasBuddy.com*, is that refiners are likely to continue to raise prices for premium until either demand drops or production capacity catches up. "It'll probably get worse before it gets better", they say.

KEEP 'EM DAZZLED!

What's this? Another new Corvette model? Yes. And, no! This is not the wild, mid-engine C8 Zora that *Car and Driver* keeps insisting is just around the corner. This is more predictable than a totally new car. Maybe you figured it was coming, but the C7 version of the Grand Sport is now a reality. It was announced at the 2016 Geneva Motor Show, not the Detroit show. Does this seem to indicate that GM is trying to position the Corvette as a legitimate contender in the European market? I think so.

Like the C6 Grand Sport, the new one borrows performance components from the super-hot Z06 and applies it to an appearance-enhanced version of the base car. However, this year the 7th-generation GS will be offered with the most aggressive chassis and suspension hardware from the Corvette option menu. For the first time, buyers can equip the Grand Sport with a Z07 performance package, which adds carbon-ceramic brakes, Michelin Sport Cup 2 summer tires and a carbon-fiber aero package that delivers true downforce.

You basically have the opportunity to get a Z06 without the expensive engine. And the result is a car reportedly capable of cornering at 1.2g and lapping GM's Milford Proving Ground course within a second of the record time held by the C6 ZR1. (That's nuts!)

As far as distinctive looks (because you want people to KNOW that you're driving a Grand Sport), the new GS gets an exclusive makeover encompassing specific front fender inserts, a Z06-style grill and wider rear fenders (much wider—actually the same as the Z06). All of the Stingray's interior and exterior color choices are available, as is an optional Heritage package that adds hash-mark graphics for the car's fenders and interior aluminum trim.

So, unlike the old days when you ordered a specific model and got what Chevrolet decided all of those models should look like, now your choices are almost endless. With all the options available, you can now create your own Corvette Grand Sport statement like no one else's.

And, as if that wasn't enough, a limited-run Collector Edition adds an exclusive Watkins Glen Gray Metallic exterior with Tension Blue hash-mark graphics; satin-black full-length stripes; black wheels and a unique, Tension Blue leather-and-suede interior. Inside, the headrests feature an embossed representation of the original Grand Sport racecar. That emblem also appears on an instrument panel plaque that carries a unique build-sequence number.

The Grand Sport feels like what it is: a Stingray with an enormous amount of grip. And it looks like what it is; a Z06 without the completely absurd power. At \$66,445, the base price of the Grand Sport coupe is about \$10,000 higher than an entry-level Stingray, roughly \$5,000 more than the cheapest Stingray Z51, but about \$15,000 less than the least expensive Z06. This is really the sweet spot for Corvette buyers. Expect that the Grand Sport will once again be big business for Chevrolet.

The Corvette Grand Sport coupe and convertible will go on sale in the U.S. this summer. The Collector Edition will be offered later in the model year.

TAKATA AIRBAGS:

So, we've talked about the problem with airbags hurting and even killing people lately. Another young woman in Texas lost her life to an airbag incident back in March. Her Honda CRV rear-ended another car at a traffic light, not real hard, but enough for her airbags to deploy. The driver's side airbag inflator, manufactured by Japanese supplier Takata, ruptured, sending shrapnel through the bag and into the woman's neck. Unfortunately, she bled to death before help arrived.

So what's causing these lethal malfunctions? This is now the largest product recall in U.S. history: roughly 50 million Takata airbags across more than 20 vehicle makes require replacement. National Highway Traffic Safety Administration investigators have now discovered a design flaw in a component called the inflator, the chemical gas generator that fills an airbag in milliseconds during an accident.

What they've found is that one of Takata's proprietary chemical propellants is susceptible to moisture degradation, causing an extreme reaction and excessive pressure in an airbag deployment. That pressure can burst the steel inflator housing, sending metal fragments through the airbag and then into the passenger compartment. Yikes!

What about other manufacturers' airbags? Good question. It appears the combination of Takata's proprietary propellant, an inflator seal that's inadequate to keep out moisture and the absence of a desiccant (substance that absorbs moisture) appear to be a perfect storm unique to Takata; no other airbags have shown to be a problem.

So, where do they stand in fixing the problem? The NHTSA reports that more than 8,000,000 Takata airbags have been replaced, so far. Due to the sheer volume of questionable inflators, the expanded recall will occur in phases and is expected to take until December 2019 to complete. Since the root-cause is moisture-related, the recall prioritizes

June 2016

vehicles in warm, humid climates, since they are most likely to suffer from propellant degradation.

The following car makers are affected by the Takata airbag recall:

Acura	Mazda
Audi	Mercedes-Benz
BMW	Mitsubishi
Chevrolet	Nissan
Chrysler	Pontiac
Dodge	Ram
Fisker	Saab
Ford	Saturn
GMC	Subaru
Honda	Tesla
Infiniti	Toyota
Jaguar	Volkswagen
Land Rover	

Just to put your minds at ease, at least in terms of our beloved Corvettes, the only Chevrolet models on the list are Silverado pickups.

OK, let's lighten things up a bit. Here's a little Car Talk trivia question for you.

Vehicles weighing less than 10,000 pounds manufactured after April 30, 2018 must include this technology in order to be legally sold in the USA.

- A. At least one built-in child booster seat
- B. An automatic emergency braking system
- C. A back-up camera system
- D. All of the above

LESSON LEARNED:

My friend Ray in Ohio tells this story:

My wife drives an '09 Chrysler minivan with about 130K miles on it. We bought it with 75K miles and have been keeping it on the road with good maintenance practices. The oil generally gets changed every 4,000 to 5,000 miles. But, during my last oil change things unfortunately went a little sideways. The procedure started normally enough: oil was drained, cleaned drain plug back in, filter replaced and no mess on the garage floor. All that was left was to refill with new oil.

I placed a nice wide funnel in the fill hole and grabbed my jug of oil. I opened it, and as I have always done, stabbed my thumb through the foil safety seal and proceeded to fill the engine. What was that? I thought I saw a flash in the stream of oil. I stopped, looked in the funnel and it was empty. I pulled the funnel, looked into the valve cover and saw nothing. Maybe I had just caught a flash from the work light I had hanging overhead. Worry set in. I re-looked at all the same things one more time, then investigated the oil jug. Through a bit of forensics, I tried to reassemble the foil seal and yep, about a third of it was missing. It was not in the jug, the funnel or the fill hole.

As the valve cover has a baffle that precludes direct contact with the valve train, I inserted my fingers and then a dental mirror and could neither see nor feel any foil. Convinced the foil was in there somewhere, I removed the valve cover. I flipped it over and there was the piece of foil!

Whew! In retrospect, I was lucky to see the foil go by. It could have easily made it past me and I would have never known, until a much bigger problem arose. **PEEL THE FOIL OFF THE OIL JUG COMPLETELY BEFORE PORING!**