

2007 Lexus GS450 hybrid
The Future Now or a Means to an End?
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For: The Wheel



While touring over 100 automobiles at this year's Western Automotive Journalist Media Day, the sexy BMW M models, Mercedes AMG, Mazdaspeed, Corvette Z06's all appealed to an enthusiast like myself right off the bat. Doing my due diligence on the part of my SCCA club friends, it was the enthusiast cars that they want to hear about, right? So I pounded away on all these very special cars...the Z06 with its amazing combination of speed and drivability, the CLK 55 AMG's neck snapping torque wrapped in velvet, and the spunky Mazdaspeed 6 sedan with its pumped up 6 banger, all wheel drive and "boy racer" goodies all were tons of fun. But there was a car creating a buzz – not really an enthusiast car – but a beautiful four door sedan getting rave reviews from those at my lunch table. So, understanding what it takes to be on the pole for a qualifying session, I wolfed my lunch, acted like I was going to the potty, and headed straight for the Lexus GS450h to provide its first test of the afternoon.

Most of you know of the Lexus GS series – always a sexy sedan look, with the latest version swooping over it haunches to create a prominent stance while remaining lithe and limber in overall effect. It's a stunning car. Popping into the driver's seat, the word glitz came to mind...lots of shiny finishes. Highly glossed hardwood, polished chrome metal accents to door trim and shifter console. Not my cup of tea – hate to say this, but the watch I was wearing just wasn't at home with this atmosphere. Not enough 24 carat gold. However I have to dole out congrats on very nice seats for this type of ride. With my previous anticipation that this car was some sort of modern sacrifice to efficiency, my expectations of restraint were dashed. OK, let's see what this "Synergy Drive" is all about.

Right off the bat I make a fool of myself. I turn the key and it won't start. I decide that there must be a "Start" button, or there must be a "proximity" key and that all you need to do is the right combination of actions...I double check my seatbelt, try turning the key with the brake on, then with the emergency brake on....nothing. Then I look out the windshield to find my

colleagues howling. Apparently you just turn this bloody thing on – it doesn't actually start until it needs to!! Like Captain Kirk aiming a phaser about, I put the car in R – this must still stand for reverse....I hope. Foot off the brake, tap the "gas" pedal and the car jolts rearward in complete silence. Alright dummy, the batteries are on duty here...memories of my Dad's EZ Go golf cart come to mind.... then I make the turn to leave the parking lot. Up a slope onto the highway. As the traffic opens and I have a shot to enter the road, a punch of the "accelerator" pedal gets a nice push forward followed by a whir and suddenly the 3.3 liter V6 is pushing me onto the thoroughfare. More accelerator pedal, more push – this car has a very nice torque feel, but in a jet engine sort of way. This is most probably because of two dynamics: First, electric motors (one front, one rear) have great torque which is why they're used to pull trains, and second is the ECVT. Oh...you need me to define this future household acronym don't you? Electronic Controlled Continuously Variable Transmission – (don't ask me why the acronym isn't ECCVT). I think they made a typo. I've read up on this modern day marvel of motivation and I can't really explain it – lets say that with the combination of electric and gasoline power, the ECVT guides where the power comes from and allows a seamless acceleration without traditional shifts representing a gear set. And it works. The car just moves, smoothly and quickly as needed. Now.

Out on the road the GS450h is a dream to drive. This is a deathly quiet, incredibly tight, exceedingly comfortable car that goes very nicely, thank you. Other than a more fluid delivery of power and an incredible quiet, you would not be aware of any great sacrifice to save the whales while driving this Lexus.

Let's take just a moment and go into a brief explanation of the Toyota/Lexus Synergy Drive system as it is implemented in this GS model, and is also being utilized under license by Ford in their hybrids. The primary components are the VVT 3.3 liter V6 up front, a battery pack amidships, and electric motors stashed neatly toward the front and in the rear. The synergy in Synergy Drive, is that of the electric motor working in conjunction with the gasoline engine. At lower speeds, the electric motors are in control until there is a need for a charge. At higher speeds, the gasoline and electric motors work in tandem to provide a ready reserve for when you need to outrun that Mitsubishi on the freeway ramp. During all this, the synergy system is distributing power, electric and/or gas as needed, as well as charging the batteries any time an excess of power occurs. This is most common during braking. The term regenerative braking is used to describe the system that recharges batteries by using the heat and energy dissipated during braking. With rear wheel drive, independent wishbone front and independent multi-link rear suspension, and 330 hp from combining gasoline and electric power available, there is NO compromise with this car. A 0-60mph time of 5.2 seconds is promised by Lexus and I have no reason to doubt this number – this hybrid hauls. Fuel economy? Did they add so many bells and whistles they lost sight of the goal? Nope. The journalists were doing nothing but pounding this car, with repeated passing situations simulated all day and the clock on the dash showed 27 mpg. A good 10-12 mpg higher than any other performance sedan in hammer mode. The stated EPA figures on the car are 25 city (where the highest level of economy is) and 28 highway. For a truly kick-butt autobahn stromer, these are good numbers. So what does the value proposition look like? Base price is \$55K plus. Same neighborhood as the Infiniti M45, E class Mercedes, so it's in tough company. What about long term reliability of the hybrid technology? Toyota is putting their money where their mouth is – full warranty for 50,000 miles, and drivetrain warranty is 70,000 miles. Actually better than their gasoline powered counterparts. As the United States and other developed countries peck away at the issue of dependence on hydrocarbons, we'll all have to make some moves in the direction of being part of the solution. This is a small, but valid step in the right direction. Is hybrid technology the solution? No. Is it a viable part of a strategy toward renewable fuels (means to an end)? I think so. One of many that are on the horizon – some very close, and some still far away. Congratulations to Toyota

Motor Corporation for being good enough businessmen and women to see that efficiency can sell
– to everyone's benefit.