

Under the Hood, Sept 2019

Alternative energy research and applications continue to expand, even in the heavy duty truck market. PACCAR revealed three “Zero Emissions” (certainly a misleading term) heavy duty trucks at the annual Consumer Electronics Show in Las Vegas. As a side note I find it confusing that we have car and truck manufacturers revealing their new vehicles at a consumer electronics exposition. The two Peterbilt trucks were battery powered, but the third truck attracted all the attention. This Kenworth truck was a joint venture with Toyota and featured electric motor power, but the electricity was generated by an on-board hydrogen fuel cell. PACCAR claims the truck should have a range of 300 miles. While this range might not be acceptable in an over-the-road truck, the range would work fine for local deliveries. One logical application would be the local haul trucks that transport containers in and out of our Ports. PACCAR/Toyota are producing 10 of these trucks for a trial in the Port of Los Angeles. If successful, the local ports plan to expand this service across the entire LA area by 2020. You might be aware that the hydrogen fuel cell’s emissions are water vapor. As we all know there is no free lunch, as there is still significant energy expended to get the purity of hydrogen necessary. In other electrification news, Volvo Construction Equipment has announced that by 2020 they will have replaced diesel engines with batteries/electric motors on its compact machines, such as the smaller excavators. For now, larger equipment will still be diesel powered.

Have you ever actually seen a Koenigsegg? Although I am a frequent visitor to the Exotics at Redmond Town Center, I have never seen a Koenigsegg, or even heard that one was present at RTC. Certainly, they are a rare breed of car, and if there are any in the PNW, they are kept well hidden. Koenigsegg has announced their new model, the Jesko. With a planned production start of 2021, they will limit production to 125 copies starting at about \$3 million each. Koenigsegg claims that the Jesko will be the fastest production vehicle in the world, with a top speed of at least 300 mph. If true, it will make all those 260 mph Bugatti owners hide their heads in shame, and probably rush out to put down a deposit for the newest and greatest. The heavily turbocharged V8 in the Jesko has an output of 1280 hp on pump gas and 1600 hp on E85 fuel. Remember that E85 cools the intake air and is also ideal for high boost levels since the octane rating is higher than pump gas. This allows the Jesko engineers to greatly increase the boost level when E85 fuel is being used. Whenever I hear comments about high boost levels my first thought is “turbo lag”, or that dreaded pause in acceleration until the turbos spool up to speed. The Jesko supposedly solves this problem with a unique added feature. Each vehicle will have a high pressure air tank. Upon acceleration the 290 psi compressed air will be fed to the turbo wheel to speed up the compressor wheel before the exhaust gases can do the job. I did note that the Jesko is equipped with either Michelin Pilot Sport Cup 2 or Cup 2R tires. These are Z speed rated for speeds 186 + mph. I know that the Bugatti is speed limited due to the tire ratings. I don’t know how Koenigsegg believes that they can run the Michelin tires at 300 mph. Perhaps they anticipate that it is impossible to ever find any place to achieve that speed, so the claimed top speed is just a bragging right. If you are wondering about the name, Jesko is the name of the car manufacturer’s father. If you are at all interested in exotic cars, the Redmond Town Center Saturday morning event is not to be missed. At our first 2019 visit we got a close up look at the McLaren Senna. The Senna (named after the famed Brazilian F1 racer) is McLaren’s latest super car with a \$1 million dollar cost. Only 500 cars will be made, all of which are already sold. The Senna is powered by a 4.0 liter twin turbo V8 rated at 789 hp (US rating) and 800 hp (EU rated). One striking feature has the twin large exhaust outlets pointed upward right at the monstrous rear wing. I would image the carbon fiber rear wing must cost in excess of \$10K

and all I could think is how quickly it is going to deteriorate with the extreme heat of that 789 hp engine under full boost.

GM is in the process of closing 5-6 plants in the USA and Canada. A stated reason is to concentrate on electric vehicles and self-driving vehicles. Ford has announced that they are discontinuing most of their sedan models to concentrate on pickups, SUVs and crossovers. I suspect that GM's real reason is similar to Ford, but GM is just being more politically correct with their expressed rationale. Isn't it nice to know that some manufacturers are sticking with their original stated purpose? Porsche has always been building sports cars and somehow we expect those 911's to be built forever. However, even Porsche has changed over the last few years. The last report I read indicated that 73% of all Porsches sold had 4 doors. Now Porsche has a very nice grand touring sedan with their Panamera, and you might think that the Panamera is tilting the numbers. Still the Panamera isn't the main reason. Almost 60% of all Porsches sold last year were of the SUV/Crossover design. I remember when Porsche first introduced the Cayenne and the Porsche faithful were predicting doom and gloom. Now, Porsche sells far more Cayennes and Macans than they do sports cars. Porsche has become the most profitable car manufacturer in the world. Perhaps Ford and GM are right, but I know that I will miss the sedan/coupe selection we had in the past. Should we be expecting a C8 crossover version?

Thinking of C8. Corvette calendar year 2018 sales were a dismal 18,791 units (gmauthority.com) down 25% from the 2017 totals of 25,079. The sports car segment that is compared to Corvette is down 15% for the same period which tells us Corvette did worse than the segment. However, as GM Authority explains the C7 Corvette is an "older model" compared to all the vehicles in the segment. What they don't try to explain is how many potential buyers were simply delaying a Corvette purchase waiting for the C8 mid-engine. I am sure that is the reason for much of the decline in CY 2018 sales. Perhaps at a different price extreme, I was surprised to read the Rolls-Royce had their best year ever in 2018. They delivered 4,107 cars to customers in over 50 countries. North America is still the largest market with about a third of those sales. I see a fair number of Bentleys on the road but very few Rolls-Royce. Of course, I also don't live in the area where we would expect to see daddy or mommy commuting to work, or the country club, in their Rolls.