

PART 4 - THE SKY IS FALLING - THE SKY IS FALLING

Alternative fuels including Hybrids, fuel cells, and diesels are a common topic. Today lets talk about diesels.

We must all keep one thing in mind relative to vehicle fuel economy. Historically, the vast percentage of American drivers only turn their attention to small fuel efficient vehicles in time of a gas crisis. Then, after the gas crisis blows over, the large percentage of car buyers find their way back to larger vehicles that provide more room, equipment, comfort and safety. At that point, consumers have repeatedly demonstrated that fuel economy in such vehicles is no longer the overriding purchasing factor. Everything is just peachy until the next gas crisis comes along and then people, who previously wouldn't even look at a small vehicle, all of a sudden begin demanding small fuel efficient vehicles and then condemn manufacturers that don't provide a full line of them. When Domestic Auto manufacturers respond by producing small vehicles (remember Chevy Vegas, Ford Falcons, and Plymouth Valiants), they watch the sales of their small vehicles languish beginning just months after the gas crisis is over. It's happened time and again since the first gas crisis in 1973.

Foreign auto makers don't face the same dilemma because their vehicles originate in countries where gas has cost \$5.00 a gallon for years and so they only build small vehicles. They don't historically offer a full line of vehicles that Americans prefer.

- Need a 12-15 passenger van? If so, Toyota can't help you.
- Need a vehicle to tow a fifth wheel or travel trailer? If so, Honda can't help you.
- Need a 1 ton pickup to haul your work load? If so, VW can't help you.

The BIG 3 are the only manufacturers who build a full line up of vehicles to serve all motorists needs from compact cars to full size sedans - from compact vans to 15 passenger vans - from compact SUV's to full sized SUV's - from compact trucks to 1 ton diesel pickups.

Now that we've put fuel economy in prospective, let's examine some fuel alternatives to gasoline.

WHY NOT MORE DIESELS?

A common question is why don't auto manufacturers provide more vehicles with diesels? Well...at General Motors, experience sure isn't the problem. In fact it may surprise you to know that last year in Europe, the world's largest diesel market, 46% of GM vehicle sales were powered by diesel engines. And, we're not talking big truck diesels. It was in Europe where GM launched the 1.3 liter diesel, the world's smallest modern four-valve turbo diesel...and not just a few. GM builds 550,000 of them each year. GM also builds 1.9 liter diesels in large numbers. In comparison, diesels account for less than 1% of USA passenger vehicle sales.

HYBRIDS OR DIESELS?

Many diesel fans feel that diesels have an advantage over gasoline-electric hybrid power trains because they are less expensive and less complex to build. And they deliver about the same fuel economy gains as a hybrid. The executive director of GM diesel engineering, Mr. Charles Freese, stated "But, just as the applications of diesel differ from market to market, so do the reason for customer acceptance and demand. In Europe, fuel and displacement tax policies; high quality, low-sulfur diesel fuel; small lightweight vehicles; and emissions standards that are focused on carbon dioxide rather than particulates and oxides of nitrogen set the stage for diesel's explosive growth and popularity. In the United States, though, low gasoline prices, high-sulfur diesel fuel, larger vehicles, and the world's most stringent particulate and NOx emissions standards have created a market that limits the potential for diesel technology."

MORE DIESELS COMING, ONCE EMISSION STANDARDS ARE IN PLACE

The problem with old diesel technology isn't limited to just the Federal EPA's guidelines. Individual states such as California, New York, and five other northeastern states have instituted emission standards that are tougher than the Federal EPA's, which in effect, prohibits most manufacturers, including some European auto makers, such as Mercedes-Benz, from offering diesels in those major market states.

Basically, auto manufacturers haven't introduced new diesels to the U.S. market since 2000 when the government adopted new "Tier 2" rules for diesels that were set to begin in 2006 and be completely phased in by 2010. Those standards mandated that USA oil companies make ultra low-sulfur diesel fuel available beginning in 2006. The key provision requires that 80% of highway diesel fuel contain no more than 15 parts per million of sulfur. The limit now is 500 parts per million.

The oil industry challenged the rule and in 2002 a Federal appeals court rejected their challenge. In late 2004 and early 2005 the oil industry asked the EPA for "flexibility" in the rule implementation. Charles Drevna of the National Petro-Chemical and Refiners Association stated in a March 28, 2005 article, "The oil industry is merely looking for flexibility in the early months after the ultra low-sulfur rules take effect. Oil companies do not have the tools to measure minute amounts of sulfur within the range of 2 parts per million above or below the standard required by the EPA. The companies are concerned that ultra low-sulfur fuel produced in compliance with the standard can become contaminated during pipeline transmission and distribution to the point that it might miss the 15-parts-per-million requirement. What are you going to do if it registers 17 or 18? Throw the whole batch away for home heating oil? Drevna asked"

Auto makers, including import companies, citing billion dollar investments to burn the ultra low-sulfur fuel, have joined with the health and environmental groups asking the government not to delay the mandate. When these tougher tier 2 emissions are phased in, standards will require that any diesel sold in the USA run as cleanly as gasoline engines.

HOW LARGE WILL THE AMERICAN DIESEL MARKET BE?

Once the EPA's tier 2 emission standards are in place, you can bet that several auto makers will be offering diesels that are not available in America today. The question all auto manufacturers are asking themselves is...how large will the diesel market actually be? All alternate fuel vehicles such as hybrids, diesels, fuel cells, etc. cost more to build than gasoline powered vehicles. The concern is...down the road when the current gas crisis is over, will American buyers pay the premium prices that alternate fuel vehicles, including diesels, will cost?

GM WILL BE A MAJOR DIESEL PLAYER

Whatever the diesel market is, you can be assured that GM, the world's largest auto manufacturer, will be a major player. For example, GM has announced that for 2006 the duramax diesel, which is currently available in heavy duty pickups, has been re-engineered. The changes result in improved fuel economy, more power, less diesel engine clatter, and quicker starts. This sophisticated diesel engine offers more horsepower and torque than the primary competitor. Preliminary testing shows composite fuel economy of 20.2 mpg. - and advantage of more than 2 mpg when compared against the primary competitor. That's approximately 85 fewer gallons of fuel used during 15,000 miles of travel. The Duramax 6600 also is compatible with biodiesel fuel. The duramax will also be available in some 2006 full sized Chevrolet and GMC vans. Mr. Charles Freese continued "Look toward 2007 and beyond, GM will be well-positioned to compete in the vehicle segments where there is significant consumer demand."

GM... more than meets the eye. Watch this page weekly for additional articles on: Hybrids, Auto Safety & more.

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Allison Transmission. A WORD ABOUT TRANSMISSIONS

Perhaps equally important as the new Duramax diesel is the availability of an Allison transmission in a pickup truck for the first time. Up till now the Allison transmission was only available for heavy-duty use such as large motor homes and commercial buses such as Greyhounds. It doesn't matter how much power and torque an engine puts out if the transmission can't stand up to the job. Our GM pickups Allison transmission have an astounding 20,000 lbs. GVW and features "grade braking" for slowing heavy loads which will save vehicle brake repairs and maintenance similar to a Jake brake on large tractor trailers. Right here in Holmes County we have verifiable customers who never replaced a single brake part until they had 90,000 plus miles on their GM Duramax diesel trucks. The Allison has a reputation of being "bullet proof" and is not available on Dodge or Ford. The Allison transmission is also available on selected gas engine applications.

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