Volume 12, Issue 10

October —2012

CHAPTER "99" NEWSLETTER
ASC-CA-NORTH

Membership Meeting

When: **Wednesday, October 24, 2012**

Time: **Dinner — 6:00 PM … Program at 6:30 PM**

Where: **Lulu's Banquet Room**
2230 Pine Street (Pine St. & Cypress Ave.)
Redding CA 96001

Program: **Pacific Management Services**

Speaker: **L. Dean Lowe—**

Shasta County Environmental Health is requiring Electronic Reporting starting 2013. Pacific Management Services offers a full plan and filing for you. This is a very good meeting especially

Current News

UPDATED 9:43 a.m. EDT: Toyota Motor Co., still in recovery mode after a series of problems that plagued its global operations over the last three years, announced Wednesday it is recalling 2.5 million vehicles sold in the United States due to a potential risk of fire.

The recall involves 7.43 million vehicles worldwide sold under the Toyota and Scion brands. This is the largest safety-related service action the maker has announced since it began a series of recalls related to the risk of unintended acceleration in late 2009. That and other safety issues led Toyota to recall 14 million vehicles in 2009 and 2010.

It's the biggest single recall since Ford Motor Co pulled back 7.9 million vehicles in 1996.

Many of the vehicles involved in the new Toyota recall also were called back one or more times due to unintended acceleration issues.

The latest recall is the result of a problem with a potentially defective power window switch on the driver's side of the affected vehicles which, the maker says, "may experience a 'notchy' or sticky feel during operation. If commercially available lubricants are applied to the switch in an attempt to address the 'notchy' or sticky feel, melting of the switch assembly or smoke could occur and lead to a fire under some circumstances."

Toyota already announced recalls for several models involving similar window switches and in February, the National Highway Traffic Safety Administration announced it would open an investigation into the issue. But at the time it focused on just 830,000 Camry and RAV-4 models sold during the 2007 model year.

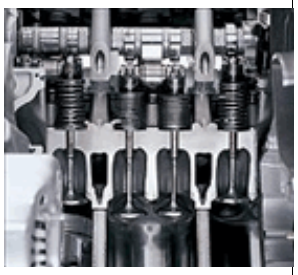
The massive size of the new recall underscores the risks manufacturers like Toyota face when they share basic components on a wide range of vehicles hoping to improve manufacturing economies of scale.

"Most people don't recognize opportunity when it comes, because it's usually dressed in overalls and looks a lot like work." ~~~Thomas A. Edison

Engine Technologies

Variable Valve Timing & Lift (VVT&L) - Engine with Variable Valve Timing & Lift

Also called variable valve actuation (VVT), variable-cam timing and variable valve timing and lift electronic control (VTEC®)



Valves control the flow of air and fuel, into the cylinders and exhaust out of them. When and how long the valves open (timing) and how much the valves move (lift) both affect engine efficiency.

Optimum timing and lift settings are different for high and low engine speeds. Traditional designs, however, use fixed timing and lift settings, which are a compromise between the optimum for high and low speeds. VVT&L systems automatically alter timing and lift to the optimum settings for the engine speed.

Potential Efficiency Improvement: 5% — Savings Over Vehicle Lifetime: $1,700

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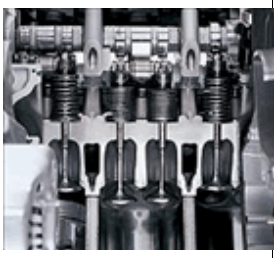
Cylinder Deactivation



Also called multiple displacement, displacement on demand (DOD), and variable cylinder management

This technology merely deactivates some of the engine's cylinders when they are not needed. This temporarily turns a 8- or 6-cylinder engine into a 4- or 3-cylinder engine. This technology is not used on 4-cylinder engines since it would cause a noticeable decrease in engine

Efficiency Improvement: 7.5% — Savings Over Vehicle Lifetime: $2,500

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Turbocharging and Supercharging

Turbochargers and superchargers are fans that force compressed air into an engine's cylinders. A turbocharger fan is powered by exhaust from the engine, while a supercharger fan is powered by the engine itself.

Both technologies allow more compressed air and fuel to be injected into the cylinders, generating extra power from each explosion. This allows manufacturers to user smaller engines without sacrificing performance.

Potential Efficiency Improvement: 7.5% — Savings Over Vehicle Lifetime: $2,500

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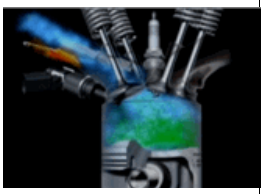

Also called fuel stratified injection or direct injection stratified charge

In conventional multi-port fuel injection systems, fuel is injected into the port and mixed with air before the air-fuel mixture is pumped into the cylinder. In direct injection systems, fuel is injected directly into the cylinder so that the timing and shape of the fuel mist can be precisely controlled. This allows higher compression ratios and more efficient fuel intake, which deliver higher performance with lower fuel consumption.

Potential Efficiency Improvement: 12% — Savings Over Vehicle Lifetime: $4,000

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Integrated Starter/Generator (ISG)

These systems automatically turn the engine off when the vehicle comes to a stop and restart it instantaneously when the accelerator is pressed so that fuel isn't wasted for idling. In addition, regenerative braking is often used to convert mechanical energy lost in braking into electricity, which is stored in a battery and used to power the automatic starter…..Potential Efficiency Improvement: 8% — Savings Over Vehicle Lifetime: $2,700

What I have learned

This year after going on line and reserving a Dodge Avenger to go to Speedweek, when I went to pick it up, Budget only had one car left...a Ford Fiesta. Oh well I took it. A surprise was awaiting me. Of course, the car wasn't as roomy, but adequate and the mileage blew me away. Fueling up in Lovelock NV, it took 7.5 gallons (40 mpg), watching the computer current mpg I found that, at 80 mph, it was averaging 42.2 mpg the rest of the trip. For the complete trip of near 1400 miles, it averaged 36.6 mpg. In September, I rented a Ford Focus, it was not quite as good on mileage, but still averaged 36 mpg. In October the car I rented was a Mazda 2 which I found to be just about as good on mileage. However, the Mazda 2 would not do well at 80 mph so I dropped the speed to 70 mph and averaged 35.3 for the trip. Direct injection is just around the corner all cars...even better mileage is coming!

World Finals

October 2nd, I left Redding at about 8 AM in my rented Mazda 2 to journey to the Bonneville Salt Flats again to take in the event. The meet ran from Wednesday through Saturday AM. I enjoyed visiting with longtime friends and watch the competitors seek speed. The Redding Shasta Roadster's Denton Hollifield joined me in the Bonneville 200 MPH Club driving the Paul Ogden '68 Barracuda AA/ BGC (528 cu in Turbocharged Chrysler), qualifying at 242 mph and returning on the record run at 256 mph with an average record speed of 249 mph.

The fastest car of the meet was the astonishing "Black Salt Racing" Triumph C/BMS (Blown Modified Sport -358 cu in Turbocharged Chevrolet motor). Last year this car set the record @ 305 mph, besting the "1/2 million dollar" Ferraris record by 65 mph. This year the car ran an "off-the-trailer" 372 mph...on record runs next morning it ran 306 mph due to being too lean setting the record @ 338 mph. A couple of days later it qualified at 380 mph... Saturday morning, do to some transmission shifting problems, ran 339 mph averaging 364.051 mph for the record.

The Team Vesco Racing's #444 C/GS (368 cu in Chevrolet), after struggling most of the year trying to qualify on a 223 mph record finally ran 339.946 mph...next morning ran a bit slower and set the record @ 339.339 mph. This car first ran in 1957 running a Ford 4 cylinder engine. Over the years it has used various engines, updated on safety, aerodynamics and lengthened to it as present condition. Rick says the "It's dad's fault". The Vescos have a history that goes back into the early 1930s when father John began his love affair with the sport. Rick's older brother, Don who holds the current wheel-driven record @ 458.44 mph, raced both motorcycles and landspeed cars. He succumbed to prostate cancer in 2002.

For more than 50 yrs., I have been an avid addict to speed and ingenuity. Bonneville is a place where you may see just about anything the mind can't dream up. Vehicles running over 300 MPH is commonplace today. When I began in 1957, 200 MPH was the Holy Grail and less than 25 people had set records

CODE of ETHICS

1. To promote good will between the motorist and the industry.

2. To have a sense of personal obligation to each individual customer.

3. To perform high quality repair service at a fair and just price.

4. To employ the best skilled personnel obtainable.

5. To use only proven merchandise of high quality distributed by reputable firms.

6. To itemize all parts and adjustments in the price charged for service rendered.

7. To retain all parts replaced for customer inspection, if so requested.

8. To uphold the high standards of our profession and always seek to correct any and all abuses within the automotive industry.

9. To uphold the integrity of all members.

10. To refrain from advertisement which is false or misleading or likely to confuse or deceive the customer.

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(Updated 2/29/12)

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