

By Gil LeSage

## Outrageous Horsepower

What do you do with an internal combustion engine that is too powerful to test on a dyno? What do you do with a draconian engine if it is designed to run at full power for only 5 seconds? Do you drop it in a Nano or a Ford Focus? That would be ill-advised. You want to install it securely in a Top Fuel Dragster or Funny Car. And don't forget to strap down the blower.

And now you are ready to clear the quarter mile in about 4.5 seconds with out-of-this-world G forces. You might hit 330 mph before you deploy the chute. The quickest time recorded by the NHRA was by Doug Kalitta in 2004 (4.42 seconds). Sadly, another race driver from this same family, Scott Kalitta, died in a Funny Car accident on Saturday June 21st this year.

But 7000 to 8000 horsepower? Who says so? It doesn't seem possible with an internal combustion engine. Ladies and fellow gearheads, these outrageous hp figures are mere estimates of output from these alleged 426 cubic inch Chrysler Hemi motors. There is nothing stamped on the engine that says 8000 hp! And why not? Simply because that impressive invention designed to measure horsepower at the wheels (the dynamometer) will break if the load on it goes into the thousands instead of the hundreds of hp. The most typical reading on a dyno would show ratings in hp from 160 to 800 (from a strong XK 120 engine to a Nascar engine).

So take comfort in the fact that with your Jaguar, whether she has 160 horses or 390 plus, you can drive her full throttle for more than 5 seconds. And you can take her to the nearest Starbucks without having to rebuild the engine after.

Modest horsepower is miraculous and "green friendly", especially in this Brave New Exxon World. But modest can be boring. So do allow me to shake you out of your horsepower complacency for a moment. I would like to enlighten you of 6 astonishing things that occur at a top fuel dragster event.

Here they are, though not in order of astonishment:

1. The fuel that creates the most power, Nitromethane, will set you back \$30 per gallon.

2. Your 8,000 hp race machine will consume about 13 gallons of Nitro during your one run (staging, burn out and quarter mile run).

3. The fuel pump or "heart" of this monster engine can pump enough fuel in 25 seconds to fill a bathtub. Don't try this at home!

4. These big engines have to be torn down after every run. And I consider the mechanics who rebuild and tune these engines to be the best in the world.

5. A crew of 5 to 7 mechanics can tear down, rebuild and tune these big hp engines in 40 minutes! You can actually go to Infineon the last week end in July and watch them close-up. But if they test fire it, get out your earplugs and gas mask! It's potent.

6. In the time it takes an 8,000 hp dragster (rail) or Funny Car to get down the quarter mile track, this frightening engine will use up 4.5 gallons of Nitro...this at the rate of one gallon per second. I read where this is the same rate of fuel consumption as a Boeing 747 fully loaded on take off! No one would be surprised to learn that the 747 will take 15 times longer to get up to 330 miles per hour.

Anyone feeling less anxious about spending \$4.50 per gallon when you fill up?

## Give Tata Credit, —you might do us proud...

Every once and a while there will be bits and pieces of information on Tata Motors that I hope we will all find of interest. For example, Tata Motors was once known as TELCO or Tata Engineering and Locomotive Company headquartered in Mumbai (Bombay).

It won't surprise many JAG members if I were to say that TATA is the largest passenger and commercial vehicle manufacturing company in India. But, did you know that:

1. Tata is the 2nd largest bus manufacturer in the world?
2. Tata is the 4th largest truck manufacturer in the world?
3. There are 4 million Tata vehicles driving around India.
4. Tata's annual revenue exceeds 320 billion dollars.

TELCO was established in 1945 when it first began building locomotives. It reminds me of a Canadian company, Bombardier, which began by manufacturing snowmobiles and now builds subway cars and some airplanes.

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