

A short list of Top Fuel dragster facts:

- * The 500-inch Hemi makes more horsepower than the first 8 rows at Daytona.
- * Under full throttle, a the engine consumes 1 1/2 gallons of nitro per second, the same rate of fuel consumption as a fully loaded 747 but with 4 times the energy volume.
- * The supercharger takes more power to drive than a stock hemi makes.
- * Even with nearly 3000 CFM of air being rammed in by the supercharger on overdrive, the fuel mixture is compressed into nearly-solid form before ignition. Cylinders run on the verge of hydraulic lock.
- * Dual electronic magnetos apply 44 amps to each spark plug. This is the output of an arc welder in each cylinder.
- * At stoichiometric (exact) 1.7:1 air/fuel mixture (for nitro), the flame front of nitromethane measures 7050 degrees F.
- * Nitro methane burns yellow. The spectacular white flame seen above the exhaust pipes at night is raw burning hydrogen, dissociated from atmospheric water vapor by the searing exhaust gases.
- * Spark plug electrodes are totally consumed during a pass. After 1/2 way, the engine is dieseling from compression-plus the glow of exhaust valves at 1400 degrees F. The engine can only be shut down by cutting of its fuel flow.
- * If spark momentarily fails early in the run, unburned nitro builds up in those cylinders and then explodes with a force that can blow cylinder heads off the block in pieces or blow the block in half.
- * The engines twist the crank (torsionally) so far (20 degrees in the big end of the track) that sometimes cam lobes are ground offset from front to rear to re-phase the valve timing somewhere closer to synchronization with the pistons.
- * To exceed 300mph in 4.5 seconds dragsters must accelerate at an average of over 4G's. But in reaching 250 mph well before 1/2 track, launch acceleration is closer to 8G's.

* Drivers must shut off before the finish line, or even dual parachutes will not stop the car.

* If all the equipment is paid off, the crew worked for free, and for once NOTHING BLOWS UP, each run costs \$1000.00 per second.

Bear in mind here that the engine behind all this Herculean output is a modified offshoot of a common American big-block V-8