



# 75 MINUTES AND COUNTING...

A look at what occurs during the 75-minute turnaround after each run in the NHRA POWERade Drag Racing Series

## THE CAR:

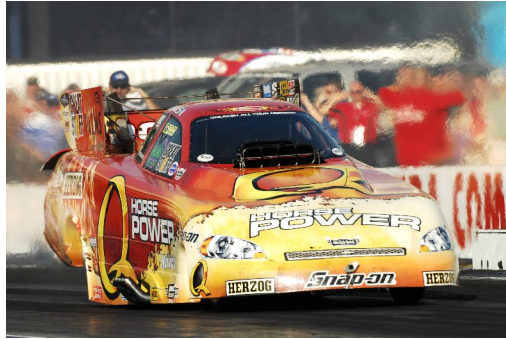
### POWERade DRAG RACING SERIES FUNNY CAR

**Horsepower:** 7,000

**0-100 mph:** 8-tenths of a second

**Fuel burned each pass:** 11-12 gallons (90% nitromethane/10% methanol)

**Body:** Carbon-fiber, or carbon-fiber/Kevlar



## THE CREW:



**Crew Chief:** Comparable to a coach on a professional team, the Crew Chief oversees all the work made on the car. The engine, body, chassis, fuel, clutch, and all other aspects and components of the car are set, mixed, and calibrated to his specifications. At the end of the day, he is the one accountable for each part, piece, rod, and cylinder

on the car and its function.

**Clutch Man:** Though only assigned to one part of the car, the duties of the clutch man are simple, yet extremely complex. His sole duty is to dismantle and re-assemble the clutch, yet his role is vital in the performance and acceleration of the vehicle.

**Body/Tires Man:** Usually away from the commotion, his duties include not only checking and setting the pressures for the massive Goodyears, but also checking the body and windshields for cracks, cleans the body, and sets the spoiler height to specifications set by the Crew Chief.

**Top Engine Assemblers:** Consisting of anywhere from 2-4 crew members, their duties include everything involving the engine and performance of the vehicle. They remove and re-assemble all the key parts in this 7,000 horsepower hemi beast, including the supercharger, cylinder heads, spark plugs, valve covers, and oil and fuel lines.

**Diver:** Eloquently named due to the fact that he spends almost all the 75 minutes under the car. His duties include draining the oil, removing the oil pan, servicing all main bearings, replacing rod caps, and helping top end guy line up the piston rack. Is usually stepped on more than once during the turnaround.

## THE TURNAROUND:

Once the car crosses the finish line, the 75-minutes begin, and each team has that amount of time to tear-down and rebuild the vehicle and return to the starting line for the next round.

**10 min. mark:** Crew has towed vehicle back to pits and have just pulled in to team's pit area.

**10-20 min. mark:** Seven crew members take body off chassis and onto body stand. Crew begins taking apart car. Clutch tech takes off chassis tin, takes drive line out of car, and takes clutch assembly out. Takes fly wheel off of engine and goes inside. Checks pressure plate for cracks and damaged pieces and re-adjusts lever heights for 16 different levers, grinds pressure plate and grinds flywheel.

Top engine assemblers take spark plugs out, valve covers off, fuel lines and air hoses out, removes supercharger and cylinder heads and begin service.

Diver drains oil, removes oil pan, services all main bearings and removes all rod caps. He also pushes pistons to top engine assembler

**20-30 min. mark:** Clutch tech re-assembles clutch. He then sets all clutch clearances and sets throttle bearing height.



Top engine assembler installs "fresh" cylinder heads with replaced head gaskets installed with proper length and tension. Other top engine assembler inspects supercharger, or blower, and re-installs (It's not uncommon for a team to have a blower specialist, whose main duty is taking apart and re-assembling of blower).

Diver is ready to receive new piston rack from top engine assembler.

Body/tire crew member has set tire pressures, checked spoiler height, cleaned body, and checked windshield and side windows for cracks.

**30-40 min. mark:** Diver puts oil in motor and driver or crew member fills fuel tank.

Driver then climbs into the seat and crew chief starts up engine, with each team member checking for leaks and temperature changes. They also check to make sure car goes into reverse and forward. Car is then shut off.

Crew chief and driver then inspect data from vehicle on the computer.

**40-50 min. mark:** Diver drains oil out and adds fresh oil to engine while the top end assembler checks torque and lash on valve train and cylinder heads. 16 fresh spark plugs are also added and car is topped off with fuel.

**50-60 min. mark:** Body is lifted back on to car with parachutes already packed. Car is then lowered off the jacks. If there is time, crew grabs a quick snack and a drink.

**60-75 min. mark:** Tow vehicle takes car back to staging lanes.



\*The Goal of each team is to have the car finished for warm-up by the 40-minute mark and be back in the staging lanes by the 65-minute mark. If all goes well, the team will perform the routine four times during the finals on Sunday.