



NHRA Top Fuel champion Antron Brown gets ready for the most exciting four seconds of this day. PHOTO BY NHRA

# THE ANATOMY OF AN NHRA PASS: TOP FUEL CHAMPION ANTRON BROWN BREAKS IT DOWN

## There's more to racing 1,000 feet than just mashing the gas pedal

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Professional drag racing is simple. A 1,000-foot trip in a straight line as fast as possible.

“Our sport is not a thinking sport,” says three-time NHRA top fuel champion, Antron Brown. “It’s a reaction sport. You train to do everything but reacting is the key.”

Brown has made thousands of passes in his career, many at the wheel of the Don Schumacher Racing Matco Tools top fuel dragster he now drives. Every one is an exercise in routine and reaction.

Autoweek asked Brown for an inside-the-ropes look at a Top Fuel pass:

### T-minus 15 Minutes - Leaving the pit, Off to the staging lanes

“The nitro is really tedious,” Brown says.

Ten minutes before leaving his DSR pit, Brown is pouring 15 gallons of nitromethane into his dragster. A mix of 90 percent nitro/10 percent alcohol must be added carefully just before the run to prevent evaporation. Then Brown grabs his gear and steps to the pit car to ride to the staging lanes.

“That’s where I collect myself. I always have a bottle of cold water to pour on my neck. It wakes me up mentally.

“On the way, I put moisturizing drops in my eyes to limit blinking and put a mouthpiece in to keep from chipping teeth. I’m putting on my helmet, listening to the crew radio last-minute changes – wheelie bar height or timing-map settings”

The Matco Tools team likes to arrive “about five pairs” before their run. Every time.



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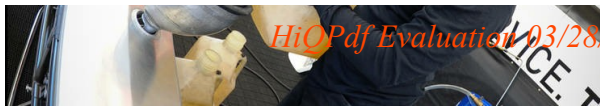
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Ten minutes before leaving his Don Schumacher Racing pit, Antron Brown 15 gallons of nitromethane into his dragster.  
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### T-minus Five Minutes - Loading in, Starting up

A teammate helps Brown with his firesuit, neck collar and gloves. He stretches and steps into the dragster where mechanic Kyle Weekley straps him into a seven-point harness with mountain climber-like thigh straps to prevent "submarining" during deceleration.

"It's like sitting on the floor with your legs in front of you."

Brown faces a small steering cane in front of a Racepak digital dash. At his left is a nitrous fuel-flow lever, at right a forward and reverse lever. Crew chief, Brian Corradi keys the radio and says "Ready AB?"

"I flip the ignition and data-logger switches. When I hear the car start, I pull the nitrous lever all the way on. As it runs I move the lever from 110 gallons per minute to about 85-90 gpm."

A monitor in his firesuit reveals that Brown's elevated heart rate actually falls below his average resting pulse with the start of the 500 cubic inch 11,000-hp supercharged V8.

"It's crazy. I just fall into focus mode, trying to think about nothing."



Antron Brown goes through his final checklist.  
PHOTO BY NHRA/NATIONAL DRAGSTER

### T-minus 90 seconds - Burnout & Backup

After 15 seconds idling at 2400-2500 rpm, the signal to roll through the water box is given.

"The fuel lever goes back to full and after three tire rotations through the water, I release the clutch to do the burnout. The engine's limited by a throttle stop that opens to three-sixteenths of an inch. I hold the burnout to the start line and counter steer as the power and any crown in the track push the rear sideways.

"Then I'll let the car come to a slow roll on the brakes and just as it's about to stop, I pull the reverse lever. It'll go into reverse easily as its moving slightly."

Brown backs up at an alarming rate. "Our cars are almost 30 feet long. Once I see the 60-foot cone go past my front wheels, I ease on the brake. There's just a little distance before I cross the starting line."

### T-minus 45 seconds - Staging

Five feet behind the starting line, Brown pauses then creeps forward on the clutch as a crewman waves him to within 6 inches of the staging beam.

"You sit until the crew chief's done with his final idle adjustment. He'll put his hand in front of my visor then point forward. I snap my visor down. I take a deep breath, turn the fuel pump full-on, take my foot off the clutch and inch the car into the staging beam with the handbrake."

With both competitors staged, it's go-time.



The car is staged and ready for go time.  
PHOTO BY NHRA/NATIONAL DRAGSTER

### T-minus Zero – On a Pass

“As soon as I see all three yellow (tree) lights at the same time, I simultaneously hit the throttle and drop the brake handle as fast as I can. BOOM!”

At the step of the throttle, the Matco Tools car hits 8,500 rpm and engages the first of six clutch discs, launching Antron at over five *gs*. By the time he glances from the tree to the track, he’s gone 50 feet.

Does he blink? “That’s a hard question. I never realize if I blink or not.”

Sixty feet and 0.8 seconds down-track he hits hit 100 mph. At 1.2 seconds the big block unleashes 16,000-plus pound-feet of torque. The clutch is fully in at 2.5 seconds by which time Brown has passed 330 feet and 220 mph.

“When everything is right and you’re getting all the power and clutch, you feel a constant pull all the way down the track.”



All eyes forward as Brown blasts off.  
PHOTO BY NHRA/NATIONAL DRAGSTER

The pull continues at four-Gs as the dragster crosses half-track (660 ft) at 295-plus mph. Brown’s eyes are locked. “I’m looking where I want to go, a straight line down the groove. If you look at the other lane, you will drive over there.”

At three seconds and nearing 330 mph, Brown set his sights the finish line. “You’ll literally shut down as you come to about 50 feet [short] of it. You hit the parachute button and step off the throttle. By the time you do, you’re crossing the line. You don’t think. You just do it.”

As two parachutes deploy, he’s hit with 5.5G deceleration but he must keep driving. “The back end gets light and might hop around.

“You feel that G and breathe a sigh of relief. I can relax. Half the time you don’t even have to use the brakes to turn off the racetrack, the parachutes slow you down so much.”

Fuel is cutoff when the parachutes are triggered. With a final “pop-pop” the engine dies and Brown toggles the ignition and computer switches off.

The world is quiet.



Chutes deploy and another pass is history.  
PHOTO BY NHRA/NATIONAL DRAGSTER

By Eric Tegler





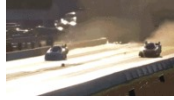
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