

# The 2018 Dodge Challenger SRT Demon

*This press release caught our eye because it referenced shot peening, but we think it will be interesting to all car enthusiasts.*

**“ROADSHOW BY CNET”** has named the high-performance drivetrain in the 2018 Dodge Challenger SRT Demon as the winner of the 2018 Roadshow Shift Award in the Driveline Technology of the Year category.

Designed, engineered and built for absolute drag strip domination, the limited-production 2018 Dodge Challenger SRT Demon is powered by a 840-horsepower, supercharged 6.2-liter HEMI® Demon V-8 engine, making it the most powerful muscle car ever and the world’s fastest quarter-mile production car with an elapsed time of 9.65 seconds at 140 miles per hour, as certified by National Hot Rod Association.

To make all that horsepower and immense 770 pounds-feet of torque transfer to the pavement, Dodge//SRT engineers used a variety of proven drag racing strategies and several technology-firsts to build the first-ever production car to produce a front-wheel lift as certified by Guinness World Records.

“We saw some amazing innovations on the powertrain front this year, and this was a hotly contested category, but in the end, the Roadshow team couldn’t resist the lure of the Demon,” said Tim Stevens, editor-in-chief, Roadshow by CNET. “The power output is of course phenomenal, but

it’s the extent of the technology that really impressed us, like ducting the air conditioning to chill the intake air. It’s a hell of a package.”

“Our performance-minded designers and engineers worked tirelessly to shake the foundation of the entire performance car industry with the 840-horsepower Dodge Challenger SRT Demon,” said Tim Kuniskis, head of passenger cars, Dodge//SRT, Chrysler and FIAT, FCA North America. “In the quest for domination at the drag strip, Dodge//SRT engineers reviewed and strengthened every piece of the drivetrain to ensure it provides the ultimate in performance and durability.”

#### Updates include:

- Supercharged 6.2-liter HEMI Demon V-8 engine produces 840 horsepower and 770 pounds-feet of torque when equipped with available Direct Connection engine controller (first ever for production car) and fueled with 100+ high-octane unleaded fuel. Engine develops 808 horsepower and 717 pounds-feet of torque with 91-octane fuel
- Air-Grabber™ induction system includes the largest





*The supercharged 6.2-liter HEMI® Demon V-8 in the 2018 Dodge Challenger SRT Demon is rated at 840 horsepower and 770 lb.-ft. of torque.*

functional hood scoop (45.2 square inches) of any production car

- First-ever, factory-production car with TransBrake combined with Torque Reserve, to deliver the highest g-force acceleration of any production car
- After-Run Chiller (production car first) runs the cooling fan and the low-temperature circuit coolant pump after engine shutdown
- Award-winning and factory production car first SRT Power Chiller™ redirects air conditioning refrigerant to help cool compressed air entering the supercharged Demon V-8 engine
- Bilstein Adaptive Damping shocks have been tuned for drag racing, shifting as much weight as possible on the rear tires at launch for maximum traction. The weight transfer improves rear tire grip by 11 percent.
- Drag Mode Launch Assist (factory car first) uses wheel speed sensors to watch for driveline-damaging wheel hop at launch and in milliseconds modifies the engine torque to regain full grip
- Factory-installed, 315/40R18 Nitto street-legal drag radials for improved grip and 40 percent more launch force compared with standard SRT Challenger Hellcat tires
- Available narrow “front runner” wheels for use at drag strips to cut front-end weight and rolling resistance

The Dodge Challenger SRT Demon’s driveline components were also upgraded to get all that power and torque to the rear wheels, on every run. Changes include:

- Upgraded prop shaft with a 15 percent increase in torque capacity. The prop shaft uses high-strength steel. Shaft tube thickness increases by 20 percent, and the stub shafts are heat treated for enhanced durability.
- The rear differential housing has 30 percent more torque capacity. The housing is made from heat-treated A383 aluminum alloy. New material for the gear set has higher

fatigue strength, with a deeper case hardening depth **and two-step shot-peening manufacturing process to increase compressive residual stress.**

- The rear halfshafts are larger in diameter; use a high-strength, low-alloy steel; and have 41 splines (up from 38), delivering a 20 percent increase in torque capacity. Eight-ball joints handle more torque, while reducing operating temperatures by more than 86 degrees Fahrenheit.

#### **More about the 2018 Dodge Challenger SRT Demon**

Production of the 2018 Dodge Challenger SRT Demon is limited to 3,300 vehicles—3,000 for the United States and 300 for Canada—with a U.S. Manufacturer’s Suggested Retail Price (MSRP) of \$84,995, including \$1,700 gas guzzler tax, excluding \$1,095 destination.

The Challenger SRT Demon is covered by FCA US LLC factory warranty, including three-year/36,000-mile limited vehicle warranty and five-year/60,000-mile limited powertrain coverage.

All 2018 Dodge Challenger SRT Demon owners receive one full-day session at Bob Bondurant School of High-performance Driving in the newly announced Dodge//SRT Bondurant Drag Racing School.

The Roadshow Shift Awards highlight the best in innovative, disruptive technologies and products in the automotive world. With cars becoming more complex as transportation and tech sectors converge, it’s become harder for consumers to know what developments and products matter most for their lives. The Roadshow Shift awards cut through the confusion and the sizzle to recognize the most innovative and important developments in the car industry each year. Award winners aren’t just class benchmarks, they’re driving the industry towards a smarter, more sustainable and entertaining future.

#### **About Dodge//SRT**

Dodge//SRT offers a complete lineup of performance vehicles that stand out in their own segments. Dodge is FCA North America’s mainstream performance brand, and SRT is positioned as the ultimate performance halo of the Dodge brand, together creating a complete and balanced performance brand with one vision and one voice.

For more than 100 years, the Dodge brand has carried on the spirit of brothers John and Horace Dodge, who founded the company in 1914. Their influence continues today. New for 2018, the 840-horsepower Dodge Challenger SRT Demon, the fastest quarter-mile production car in the world and most powerful muscle car ever, is taking the world by storm, along with the new 2018 Dodge Durango SRT, America’s fastest, most powerful and most capable three-row SUV, and the 707-horsepower Dodge Challenger SRT Hellcat Widebody. These new SRT ultimate performance models join a brand lineup that includes the Durango, Grand Caravan, Journey, Charger and Challenger, including the 707-horsepower Challenger SRT Hellcat and the Charger SRT Hellcat, the quickest, fastest and most powerful sedan in the world. ●