



2018  
DEMON  
SUPPLEMENT



# TABLE OF CONTENTS

|  |   |  |    |                                     |    |
|--|---|--|----|-------------------------------------|----|
| <b>WELCOME FROM FCA US LLC</b> .....     | 2 | <b>FEATURES OVERVIEW</b> .....           | 8  | MAINTENANCE AND STORAGE .....       | 22 |
| INTRODUCTION .....                       | 2 | NITTO DRAG RADIALS .....                 | 8  | TRACK MAINTENANCE .....             | 23 |
| WARNINGS AND CAUTIONS .....              | 3 | DRIVE MODES .....                        | 9  | DEMON CRATE — IF EQUIPPED .....     | 23 |
| VEHICLE ALTERATIONS .....                | 4 | DRIVE MODE — AUTO<br>PREFERENCES .....   | 10 | <b>TRACK USAGE GUIDELINES</b> ..... | 25 |
| WILDWHEEL STEERING WHEEL .....           | 4 | DRIVE MODE — CUSTOM<br>PREFERENCES ..... | 12 | PRE-RUN CHECKS .....                | 25 |
| <b>GRAPHICAL TABLE OF CONTENTS</b> ..... | 5 | DRIVE MODE — DRAG<br>PREFERENCES .....   | 14 | DRAG MODE OPERATIONS .....          | 25 |
| FRONT/SIDE VIEW .....                    | 5 | DRAG MODE SELECTABLE<br>FEATURES .....   | 17 | POST-RUN CHECKS .....               | 27 |
| REAR/SIDE VIEW .....                     | 6 | AUTOMATICALLY ENABLED<br>FEATURES .....  | 21 | <b>DEMON RACING LOG BOOK</b> .....  | 30 |
| INSTRUMENT PANEL VIEW .....              | 7 |  |    | NOTES .....                         | 32 |
|  |   |  |    | <b>INDEX</b> .....                  | 35 |

Congratulations on selecting your new FCA US LLC vehicle. Be assured that it represents precision workmanship, distinctive styling, and high quality.

ALWAYS drive safely and pay attention to the road. ALWAYS drive safely with your hands on the steering wheel. You have full responsibility and assume all risks related to the use of the features and applications in this vehicle. Only use the features and applications when it is safe to do so. Failure to do so may result in an accident involving serious injury or death.

This supplement illustrates and describes the operation of features and equipment that are either standard or optional on this vehicle. This supplement may also include a description of features and equipment that are no longer available or were not ordered on this vehicle. Please disregard any features and equipment described in this supplement that are not available on this vehicle. FCA US LLC reserves the right to make changes in design and specifications and/or make additions to or improvements to its products without imposing any obligation upon itself to install them on products previously manufactured.

This supplement has been prepared to help you quickly become acquainted with the important features of your vehicle. It contains most things you will need to operate and maintain the vehicle.

**For complete owner information, refer to your Owner's Manual on [www.mopar.com/dodge/en-us/care/owners-manual.html](http://www.mopar.com/dodge/en-us/care/owners-manual.html) for further details.**

For your convenience, the information contained on this site may also be printed and saved for future reference.

FCA US LLC is committed to protecting our environment and natural resources. By converting from paper to electronic delivery for the majority of the user information for your vehicle, together we greatly reduce the demand for tree-based products and lessen the stress on our environment.

## INTRODUCTION

This is a supplement to your Dodge Challenger SRT Owner's Manual. Please review the Owner's Manual in addition to this user's supplement.

The 2018 Dodge Challenger SRT Demon is the industry's first and only purpose-built, street-legal production drag car. This vehicle has been developed with one focus: to be the dominating force at the drag strip. To achieve this goal, all aspects of the vehicle have been tuned and re-engineered with several exclusive track features that offer optimal performance on the drag strip, and relentlessly push the boundaries of what is known as a performance street car. Your Dodge Demon is the widest Challenger ever, and has 20+ industry first drag performance features that put this car in a league of its own.

Listed here are a few of the industry's first drag performance features:

- **TransBrake:** A feature that holds the vehicle stationary by the use of the transmission to achieve maximum power and torque at launch.

- **High Octane Mode:** High Octane Fuel calibration allows Demon to run on 100 octane fuel for added performance
- **SRT Power Chiller:** diverts the A/C refrigerant to the supercharger for cooler air intake temperatures and maximum power output.

This supplement offers insight into inherent characteristics of the vehicle, including its unique features and how they are operated.

This vehicle has been designed to maximize performance at the drag strip. In doing so, the standard configuration of this vehicle includes a two speaker audio system, removed sound deadening material, and removed passenger/rear seat and seat belts for increased vehicle performance. As a result, the interior (driver cockpit) NVH (Noise, Vibration, and Harshness) will be louder overall. This vehicle will likely get louder over time, but note that is not an indication of degraded durability; it is simply a character change in the NVH.

### WARNING!

- If the passenger and/or rear seats have been removed do not ride in those areas. In

### WARNING!

- a collision, people riding in those areas are more likely to be seriously injured or killed.
- Warning labels are included in the car to reinforce this point.
  - If this vehicle was not factory equipped with a passenger seat, NEVER attempt to install a passenger seat because the safety systems, including the air bags and seat-belt, may not properly protect the occupant.
  - Read and follow all instructions and warnings in the Seats and Occupant Restraints sections of the owner manual for additional information.

### WARNINGS AND CAUTIONS

While reading this user supplement, you will find a series of WARNINGS that must be carefully followed to prevent incorrect use of the components of the vehicle, which could cause accidents or injuries.

There are also CAUTIONS to prevent procedures that could damage your vehicle.

### NOTE:

Observe all Warnings and Cautions.

### WARNING!

To prevent SERIOUS INJURY or DEATH when using “Track-Use” parts and equipment:

- NEVER use any “Track-Use” equipment on public roads. FCA US LLC does not authorize the use of “Track-Use” equipment on public roads.
- The intended use of “Track-Use” parts is for race vehicles on race tracks. To help ensure the safety of the race driver, qualified technicians should supervise the installation of “Track-Use” parts.
- FCA US LLC does not authorize the installation or use of any part noted as “Track-Use” on any new vehicle prior to its first retail sale.

### WARNING!

To prevent SERIOUS INJURY or DEATH:

- ALWAYS remove any “Track-Use” equipment before driving on public roads.

**WARNING!**

- ALWAYS properly use your three-point seat belts when driving on public roads.
- In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle.

**VEHICLE ALTERATIONS****WARNING!**

Any modifications or alterations to this vehicle could seriously affect its road worthiness and safety and may lead to a collision resulting in serious injury or death.

**NOTE:**

Leaded racing fuel or flex fuels (E85, etc.) **MUST NOT** be used, as these will cause damage to mechanical and emissions compliance hardware.

Non-OEM performance upgrades are not approved by FCA, and may void the warranty for the entire powertrain system and potentially other systems on the vehicle. FCA uses telltale software to detect the use of modifications – these telltales are stored and not removed if the vehicle is returned to standard.

**WILDWHEEL STEERING WHEEL**

Superior racing grip **CLEANING:**



**Wildwheel Steering Wheel**

It is sufficient to dust the Wildwheel steering wheel using a soft bristle brush, a dry cloth, or a vacuum cleaner with care. After having dusted, run a white cotton terry cloth that has been dampened and thoroughly wrung out over the Wildwheel steering wheel. Avoid the use of printed absorbent cloths/papers, as they can release ink onto the material. Take extra care not to wet the steering wheel excessively; rinse the cloth or sponge and repeat as necessary. Leave to dry (overnight). Once dried, in order to restore the material, brush it delicately with a soft bristle brush.

## FRONT/SIDE VIEW



Front/Side View

- 1 — Hood/Engine Bay
- 2 — Windshield
- 3 — Wide Body Flares

- 4 — Wheels/Tires
- 5 — Front End Splitter
- 6 — Headlights

## REAR/SIDE VIEW



Rear/Side View

1 — Taillights

2 — Trunk



## INSTRUMENT PANEL VIEW



Instrument Panel

- 1 — Steering Wheel
- 2 — Paddle Shifters
- 3 — Instrument Cluster Display

- 4 — Drive Mode Interface In Radio
- 5 — High Octane Fuel Button (Demon Crate – If Equipped)
- 6 — SRT Button

## NITTO DRAG RADIALS

Recommended Tire Pressure:

**Street:** 32 psi cold for all tires

**Drag Strip:**

- **Rear Tires** – depending on the outside temperature and track conditions, the operating pressure recommendation is 18-24 psi hot.
- **Front Tires** – do not exceed maximum tire inflation rating.



**NITTO Drag Radials**

### NOTE:

- Always return the tire pressure to street recommended pressure levels before driving vehicle on public roads.
- This vehicle is speed limited to 168 mph (270 km/h) based on the factory tire speed rating.
- The Demon Crate Powertrain Control Module (PCM) is not equipped with a speed limiter. This will allow the vehicle to exceed the tires' speed rating of 168 mph (270 km/h). This could adversely affect the safety and handling of the vehicle. It is the customer's responsibility to equip the vehicle with the correct speed rated tires for their use above a speed rating of 168 mph (270 km/h).
- Contact Nitto Tire at 888-529-8200 for additional tire information.

### WARNING!

Serious injury or death may result from tire failure due to under-inflation and/or overloading. Always adjust your tires to the proper inflation pressure (See tire information placard). Always inspect your tires for

### WARNING!

any signs of damage before proceeding onto public roads.

### CAUTION!

The Nitto NT05R meets U.S. D.O.T. requirements, but they are not intended for extended highway use as the expected miles of wear from the racing compound is greatly reduced compared to a conventional road tire. These tires are not recommended for driving in wet weather conditions where there is a risk of hydroplaning. Drivers should drive cautiously at reduced speeds in these conditions.

### CAUTION!

Do not move the vehicle in temperatures below 15° F with the Nitto Drag Radials installed. In temperatures below 15° F, tires can lose flexibility and that can lead to cracking and other tire damage. Always inspect for signs of cracking and damage before use.

## DRIVE MODES

This vehicle is equipped with a 6.2L supercharged Demon engine that supports three power output configurations, which are selectable within the Drive Modes options screen in the radio. Key fobs provide access to various power levels.

Once you enter the vehicle, close the door, press and hold the brake pedal, and push the ENGINE STOP/START button to start the car. The instrument cluster display will begin its startup sequence, including gauge activation and bulb checks, before cycling through any stored messages if present. The instrument cluster display will then display either a “Black Key In Use” or “Red Key In Use” message for five seconds.

### Black Key Fob

Use of the black key fob limits the driver to a maximum power output level (500 HP). The Drive Mode interface indicates what key is currently in use in the lower right corner. Additional info can be found by pressing the “Information” icon next to the key indicator.



Black Key Fob

### Red Key Fob

The use of the red key fob allows the driver to unlock the full potential of the engine power output levels (808 HP / 840 HP). The Drive Mode interface indicates what key is currently in use in the lower right corner. Additional info can be found by pressing the “Information” icon next to the key indicator.



Red Key Fob

- Red Key Fob – 808 HP with premium fuel.
- Red Key Fob – 840 HP with Demon Crate PCM and 100 octane fuel.

#### NOTE:

If equipped with the Demon Crate Powertrain Control Module (PCM), peak engine power is available only with the red key fob and high octane (100 octane) unleaded fuel. **DO NOT USE** leaded race fuel or flex fuels (E85, etc).

## DRIVE MODE — AUTO PREFERENCES



Drive Mode — Auto Preferences

### Available Set-Up Options

At this point, the system has detected which key fob is present (Black/Red) and has already set the appropriate AUTO default settings.

### Engine Power Output — Auto Mode

Engine power output level is set at a default based on which key fob is used in the vehicle.

Once in the vehicle, close the door, press and hold the brake pedal, and push the ENGINE STOP/START button to start the car. With the

brake pedal pressed, a single push of the ignition button will start the car. To cycle through the ACC/RUN positions, push the ENGINE START/STOP button without pressing the brake pedal. The instrument cluster display will begin its startup sequence, including gauge activation and bulb checks, before cycling through any stored messages if present. The instrument cluster display will then display either a “Black Key In Use” or “Red Key In Use” message for five seconds.



Power Output Preferences

#### NOTE:

Power level can be set by preference.

## Transmission — Auto Mode

Transmission will be in the STREET calibration.



Transmission Preference

## Paddle Shifters — Auto Mode

Paddle shifters can be turned ON or OFF by preference.

#### NOTE:

ECO mode will disable paddle shifters.



Paddle Shifter Preferences

## Traction — Auto Mode

Traction will be in STREET calibration.



Traction Preferences

## Suspension — Auto Mode

Suspension will start in the STREET calibration, but can be set by preference.

STREET: Tuned for daily driving, shocks adapt to road and driver input to maximize ride and handling experience.



Suspension Preferences

## Steering — Auto Mode

Steering will start in the STREET calibration, but can be set by preference.



Steering Preferences

## ECO Mode — Auto Mode

ECO mode is available only in AUTO mode.

### NOTE:

ECO Mode must be disabled before engine power, transmission and paddle shifter settings can return to customer preference.



**Black Key Fob AUTO Mode**



**Red Key Fob AUTO Mode**

## DRIVE MODE — CUSTOM PREFERENCES

High Octane power mode is available once Demon Crate performance parts are installed, and red key fob is in use.



**Custom Mode Selectable Features**

The 500 HP and 808 HP preferences can be selected from the radio screen. High Octane mode is only available from the instrument panel hard button, and requires the vehicle to be in 808 HP / red key mode to activate.

### NOTE:

Custom preferences can be accessed through the "SRT Mode" on the touchscreen or a single press of the "SRT" button on the instrument panel.

## Transmission — Custom Mode

Transmission mode can be set by preference:

- DRAG
- SPORT
- STREET



Transmission Preference Settings

### NOTE:

TransBrake feature is only available in Drag Mode.

## Paddle Shifters — Custom Mode

Paddle shifters can be set by preference:



Paddle Shifters Settings

- ON — Enables steering wheel paddle shifters.
- OFF — Disables steering wheel paddle shifters.

### NOTE:

TransBrake feature is not available in the “OFF” position.

## Traction — Custom Mode

Traction can be set by preference:



Traction Preference Settings

- DRAG
- STREET

## Suspension — Custom Mode

Suspension can be set to your preference as shown below:

- **STREET:** Tuned for daily driving, shocks adapt to road and driver input to maximize ride and handling experience.
- **SPORT:** Uses firm rebound control for increased vehicle responsiveness and a higher performance feeling.
- **DRAG:** Details regarding Drag Mode Suspension can be found under Drag Mode - DRAG Preferences



Suspension Settings

## Steering — Custom Mode

Steering mode can be set by preference.



Steering Preference Settings

Steering can be set by preference as shown below:

- **DRAG**
- **SPORT**
- **STREET**

## DRIVE MODE — DRAG PREFERENCES

### NOTE:

Quick double press of the “SRT” button is a shortcut to enter the DRAG mode display, and enables Drag Mode.



SRT Button





Drive Mode — Drag Preferences

### Power — Drag Mode

With the Demon Crate new switch bank and powertrain control module (PCM) installed, High Octane power mode is then available.



Power Output Modes

### Transmission — Drag Mode

Transmission calibration is optimized for acceleration.



Transmission Calibration

**NOTE:**  
TransBrake feature is only available in DRAG Mode.

## Paddle Shifters — Drag Mode

Paddle shifters are turned ON by default in Drag Mode.



Paddle Shifters ON

## Traction — Drag Mode

Traction is optimized for straight line acceleration.



Drag Traction

## Suspension — Drag Mode

Drag Suspension calibration will change:



Drag Suspension Calibration

- Front — Soft Rebound & Firm Compression. Utilizes soft rebound damping to promote front end lift and weight transfer. Firm compression damping provides high speed stability.
- Rear — Firm Rebound & Firm Compression. This suspension setup maximizes launch traction at the rear wheels.

## Steering — Drag Mode

Steering is set to DRAG mode for high speed stability.



Drag Steering Mode

## Air Conditioning Disabled

Interior air conditioning is disabled to support the SRT Power Chiller™.



A/C Disabled

### NOTE:

While in DRAG mode, cabin air conditioning is unavailable. This is to enhance the SRT Power Chiller's ability to provide a cold denser air to the engine, improving combustion and producing more power.

## Torque Converter Lockup

The torque converter lockup point is raised in DRAG mode only to allow maximum torque multiplication.

## DRAG MODE SELECTABLE FEATURES

### NOTE:

DRAG mode selectable features (Line Lock, TransBrake™, and Launch Control) are not available within the first 500 miles (805 kilometers) of engine break-in.



Drag Mode Selectable Features Screen

## Selectable Line Lock Feature — Track Use Only

Line Lock has been developed as a burnout assist tool to warm up the rear tires by locking the front brakes independently of the rear brakes.



### Line Lock Feature

This feature is activated by selecting the Line Lock button in the radio within the DRAG OPTIONS. This feature will display instructions in the instrument cluster display.

Refer to page 25 for step-by-step instructions.

## Selectable TransBrake™ Feature — Track Use Only

TransBrake™ is specifically designed for the drag strip by holding the vehicle stationary to achieve maximum power and torque at launch. This is done by engaging an additional transmission clutch. Torque Reserve is automatically enabled while using TransBrake™, and offers a unique exhaust note. The Torque Reserve feature maintains supercharger airflow to provide faster engine torque response and improve vehicle acceleration. This feature is intended for track use only, where consistent quarter mile and zero to sixty times are desired. The system is not intended to compensate for lack of driver experience or familiarity with the track. Use of this feature in low traction (cold, wet, gravel, etc.) conditions may result in excess wheel slip at launch.

### NOTE:

TransBrake™ feature will only hold the vehicle stationary for 15 seconds once the brake pedal is released. The Torque Reserve feature is limited to 15 seconds after the engine speed reaches 950 RPM.



### Release Paddle To Launch

### NOTE:

The TransBrake™ feature provides the fastest method of launching the car which results in the lowest 1/4 mile ET.

Refer to page 25 for step-by-step instructions.

## Selectable After-Run Cooling Feature

Race Cool Down is a feature activated by selecting the Race Cool Down button in the radio within the DRAG OPTIONS.

To enable this feature, the vehicle will check to ensure the engine is off, the hood is closed, the status of the battery and system are good, and determine if cooling is required.

After making a pass down the drag strip, this feature helps cool the car after the engine has been shut down. The radiator fan and low temperature radiator coolant pump remain on after engine shutdown for a period up to five minutes or until target temperature is reached.

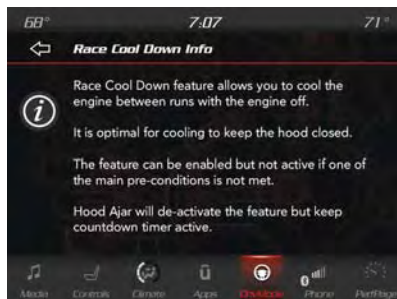
A graph in the radio can show the resulting intercooler coolant temperature in real time while the vehicle ignition is in run position with the engine off.

### NOTE:

Race Cool Down feature (After-Run) will only come on with engine off. The temperature will display with engine running also, but After-Run Cooling will not be functioning.



Race Cool Down Graph



Race Cool Down Graph

This feature will automatically deactivate after extended driving at road speeds, or when one or more of the following conditions apply:

- when intercooler coolant temperature is above a calibrated amount and ambient temperature.
- When battery state of charge is above a threshold that ensures use of Race Cool down will still result in sufficient cranking speed.
- The hood is opened.

## Selectable Launch Control — Track Use Only

This vehicle is equipped with a Launch Control system that is designed to allow the driver to achieve maximum vehicle acceleration in a straight line. Launch Control is a form of traction control that manages tire slip while launching the vehicle. Torque Reserve is also automatically enabled while using Launch Control and offers a unique exhaust note. The Torque Reserve feature maintains supercharger airflow to provide faster engine torque response and improve vehicle acceleration. This feature is intended for track use only, where consistent

quarter mile and zero to sixty times are desired. The system is not intended to compensate for lack of driver experience or familiarity with the race track. Use of this feature in low traction (cold, wet, gravel, etc.) conditions may result in excess wheel slip outside this systems control. After Launch Control is completed or canceled, the Stability Control setting will return to the last setting.

**NOTE:**

The Launch Control feature is limited to five seconds after the engine speed reaches 1000 RPM.



**Launch Control**

The launch control feature is activated by a button on the center console switch bank or within DRAG OPTIONS in the radio.

RPM range can be adjusted in 100 RPM increments from 1000 to 2500 RPM.



**Launch Control**

**NOTE:**

Launch Control and TransBrake™ cannot be used at the same time.

## Selectable Traction Features



Selectable Traction Features

### Drag

No Traction Control, but still has yaw control.

### NOTE:

Yaw control is managed when the brake system recognizes a difference between the actual vehicle direction and the intended direction of the vehicle by the driver's steering input.

### Full Off

This mode is intended for off-highway or off-road use only and should not be used on any public roadways. In this mode, TCS and ESC

features are turned OFF. To enter the “Full Off” mode, push and hold the “ESC Off” switch for five seconds while the vehicle is stopped with the engine running. After five seconds, a chime will sound, the “ESC Off Indicator Light” will illuminate, and the “ESC OFF” message will display in the instrument cluster. To turn ESC ON again, momentarily push the “ESC Off” switch.

### Street

Full traction control and stability control to help the driver maintain the intended vehicle path.

## AUTOMATICALLY ENABLED FEATURES

### Torque Reserve

Torque Reserve is automatically enabled while using Launch Control and TransBrake. The Torque Reserve feature maintains supercharger airflow to provide faster engine torque response and improve vehicle acceleration. Torque Reserve opens the throttle and prepositions the supercharger bypass valve, delivering excess air. Torque is controlled during this time by shutting fuel off to multiple cylinders and retarding spark

as necessary, holding the potential torque in reserve. As soon as the driver launches the car, fuel flow is restored and spark is advanced to instantaneously deliver the reserve torque. For a given launch engine speed, additional torque is delivered more quickly than is possible with manual control.

In TransBrake mode, the amount of reserve torque produced depends on the driver's pedal position. In Launch Control, the amount of torque at launch depends on the engine launch speed selected in the Race Options menu.

Due to the way the engine is controlled during Torque Reserve, a distinct exhaust note is generated and engine vibration increases. Torque reserve is only active for 15 seconds upon activation.

### Launch Assist

Launch assist is a feature that is intended to reduce on-throttle wheel hop when it is observed. Wheel hop (tire shake) is a condition in which the rear tires have a stick/slip condition at a very high frequency rate. This condition can be damaging to the vehicle and slows the vehicle down. Launch Assist is capable of adjust-

ing torque almost instantly once a stick/slip event is observed, allowing the vehicle to continue launching without the need for the driver to lift off of the throttle.

### SRT Power Chiller™

When the vehicle enters DRAG mode, refrigerant from the AC system is redirected from in-cabin air conditioning to the air cooler coolant circuit. The cabin air conditioning will not function in this mode.

When ambient temperature is above 55° F, this system supplements external cooling on the intake manifold / supercharger and can bring air cooler coolant temperature below ambient.

#### NOTE:

- This may bring the charge air temperature down by up to 45° F (25° C). This does not function under 55° F ambient.
- Do not use alternative refrigerants.

## MAINTENANCE AND STORAGE

### Clean Engine Air Filter

#### When Do I Clean My Engine Air Filter?

- The scheduled air filter cleaning is 30,000 miles, or if in a dusty environment the engine air filter should be checked periodically to ensure optimal air flow.
- Cleaning your engine air filter with the recommended Mopar Performance Air Filter Service Kit P5153376 is not required if you can still see the wire screen on the entire air filter regardless of how dirty it may appear. If you have not experienced a decrease in engine performance, chances are your air filter is fine and does not need to be cleaned.

When the screen is no longer visible some place on the air filter, it's time to clean your air filter.

#### 1. Apply Mopar Air Filter Cleaner:

- Spray your air filter with the recommended Mopar air filter cleaner liberally and let it sit for at least 10 minutes to loosen the dirt before rinsing.

#### NOTE:

Do not allow the cleaner to dry on the filter.

#### 2. Rinse Your Air Filter:

- Rinse off your air filter with cool low-pressure water applied to the clean side out in order to flush the dirt out of the filter. Continue to rinse the filter until all traces of cleaner are gone. It may be necessary to repeat steps 1 and 2 if the air filter isn't completely clean.

#### 3. Dry Your Air Filter:

- After rinsing your filter, gently shake off the excess water and only allow filter to dry naturally. Do not apply oil until the air filter is completely dry.

#### NOTE:

Do not use forced air pressure as it may destroy the filtering capabilities of the filter's microfibers and also void its warranty.



#### 4. Apply Filter Oil:

- Using Mopar Performance Air Filter Service Kit P5153376 spray oil evenly along the crown of each filter pleat holding the nozzle about 3" away.
- With one good coat of oil let it wick (saturate) for about 20 minutes, then if required, touch up any light areas on either side of the air filter until there is a uniform red color on all areas.

#### Vehicle Storage

Do not allow tires to be stored in a room less than 15° F (-9° C).

#### NOTE:

If vehicle is stored with tires, lift vehicle or pump tires up to max sidewall pressure. Please note that tire pressure increases as the ambient temperature increases.

## TRACK MAINTENANCE

### At Track Maintenance

1. Check engine air filter. (refer to “Maintenance And Storage”)
2. Exterior rubber cleanup.
3. Tire pressure, brakes (visual inspection of rotors and pads), battery voltage, lug nut torques.
4. Driveline checks.

## DEMON CRATE — IF EQUIPPED



Demon Crate

From street to strip, the legend of high-powered Dodge muscle cars of the 1960s and '70s was forged on both city streets, as well as the drag strip. Now, the Dodge Challenger SRT Demon is primed to take that legacy to new levels of legendary performance. This is the first purpose-built vehicle that can drive on the street to the track and excel on the drag strip. For the first time ever, Dodge offers a fully OEM developed bolt on drag strip performance package as an aftermarket option for your Dodge Challenger SRT Demon. The Demon Crate content improves performance with a selection of

direct connection accessories that function on and off the track and are personalized for collectability. This exclusive aftermarket kit which includes a crate with a serialized name plate specific to each Challenger SRT Demon leaving no doubt that it is created for one person, one car, one purpose - to go fast, giving you everything you need for a day at the track and a convenient way to get it there. This aftermarket kit is only available to new Challenger SRT Demon customers and can be purchased by calling the SRT Concierge line at 800-998-1110. For your convenience, the aftermarket kit will be delivered to your home and supports your factory vehicle warranty when installed by an authorized dealer.

The Demon Crate includes:

- Performance powertrain control module with high-octane engine calibration
- Replacement switch bank containing high-octane button
- Conical performance air filter

- Passenger mirror block-off plate
  - Narrow front-runner drag wheels
  - Demon branded track tools
  - Demon Track Pack System
1. Powertrain control module that makes use of a unique high octane engine calibration:
    - Enables use of higher octane unleaded fuel (average 100 octane fuel required for operation).
    - Increases horsepower (HP) to 840 HP and torque to 770 lb-ft.
    - This feature is available through the updated switch module containing the high-octane button.
  2. Unique integrated center console switch bank that houses the high octane button:
    - When this button is pushed, a high octane calibration is activated from the Powertrain Control Module (PCM).

**NOTE:**

Both the powertrain control module and center console switch bank have to be installed in the vehicle to take advantage of the high-octane power feature.

**3. Demon-Branded track tools:**

- Tool Bag
- Torque Wrench
- 1/2" Impact Wrench
- Impact Socket
- Air Pressure Gauge
- Jack

Refer to Mopar instruction sheet for more information and details.

## PRE-RUN CHECKS

The following instructions are meant to walk drivers through a step-by-step instruction guide on how to use the SRT Demon's unique features at a drag strip.

### NOTE:

DRAG mode features (Line Lock, TransBrake, and Launch Control) are not available within the first 500 miles (805 kilometers) of engine break-in.

Drag Strip Tire Pressures Pre-Run Checks:

- Rear Tires — depending on the outside temperature and track conditions the operating pressure recommendation is 18-24 psi hot.
- Front Tires — should not exceed maximum tire inflation rating.

Wheel Lug Nut Torque Pre-Run Check: 111 Ft-Lbs (150 N-m).

### NOTE:

Refer to page 27 for step-by-step instructions.

Fluids Pre-Run Check:

### NOTE:

- Verify all fluid levels are in the correct range and at normal operating temperature.
- Transmission is filled for life, refer to the service manual or authorized dealer for further details.
- If equipped with Demon Crate and 100 octane fuel, verify all gauges are in their normal operating ranges.

### CAUTION!

Usage of fuels other than those specified in this Supplement will damage O2 sensors and catalytic converters.

Remove all loose items from the trunk and interior.

## DRAG MODE OPERATIONS

1. **Enable DRAG Mode** — A quick double press of the “SRT” button is a shortcut to enable DRAG mode. DRAG mode can also be accessed through the radio.

2. **High Octane Fuel** — If equipped with Demon Crate and the vehicle is fueled with proper high octane fuel rating, press the “High Octane Fuel” button for peak power.

3. **Line Lock** — Warm the tires by using Line Lock (**burnout**).

#### • Initial Conditions:

- a. Vehicle speed must be 0 mph (0 km/h).
- b. Engine speed greater than 500 RPM.
- c. Radiator coolant temp less than 250° F (121° C).
- d. Odometer greater than 500 miles (805 kilometers).
- e. Cruise Control, Launch Mode, Trans-Brake and Valet Mode are disengaged.
- f. All doors closed.

• Instructions for Line Lock (burnout) are displayed in instrument cluster display, and listed below.

- a. Press the brake pedal to hold the car still while transmission is in DRIVE.
- b. Select “Line Lock” feature though the touch screen radio.

- c. Press and hold the “OK” button on the steering wheel to activate “Line Lock”.
- d. While still holding down the “OK” button, fully release the brake pedal and apply the gas pedal to begin the burnout.
  - Front brakes remain engaged.
  - Feature is exited when either the gas pedal is lifted, the brake pedal is pressed, the “OK” button is released, or the max number of tire revolutions is attained.

#### 4. TransBrake Launch

- Initial Conditions
  - a. Odometer greater than 500 miles (805 kilometers).
  - b. Vehicle must have Drag mode enabled.
  - c. Engine is running.
  - d. Vehicle speed is at 0 mph (0 km/h).
  - e. Steering wheel is straight.
  - f. Vehicle is in “DRIVE” in 1st gear.

- g. Radiator coolant temp is less than 250° F (121° C).
- h. Line Lock/Launch Control and Cruise Control are not engaged.
- i. All doors are closed.
- j. Parking brake is not set.
- k. Vehicle is on level ground.

#### • Staging The Car

- a. At or near Pre-Staging, pull and hold both paddle shifters back simultaneously.
- b. Push and hold the brake pedal firmly with left foot.
- c. Slowly apply steady throttle to a pre-staging engine speed (between 1500-2350 RPM).

#### NOTE:

Torque Reserve will be activated at 950 RPM: as a result engine vibration and exhaust tone will change noticeably.

- d. Slightly release brake pressure to roll up to the stage lights while maintaining throttle and engine speed.
- e. Stop at the full stage light and ensure vehicle speed is 0 mph (0 km/h).
- f. Release one shift paddle at or above 1500 RPM with zero wheel speed.
- g. Remove foot from brake pedal.
- h. TransBrake is fully engaged/locked when brake pedal is released and reaches the upstop.

#### NOTE:

The Electronic Stability Control (ESC) system holds brake pressure, and the transmission locks to hold driveline torque.

#### • TransBrake Engaged/Locked

- a. Remove foot from brake pedal.

#### NOTE:

The Electronic Stability Control (ESC) system holds brake pressure, and the transmission locks to hold driveline torque.

b. Adjust throttle to target launch engine speed between idle - 2350 RPM.

- **TransBrake Release/Launch**

a. Vehicle launches once the last paddle shifter is released.

**NOTE:**

If the engine speed rises above 2350 RPM the TransBrake feature will cancel.

## POST-RUN CHECKS

### Between Run Checks

#### Check Tire Condition

One important issue often overlooked is proper care of the tires. The following is a short list of suggestions for checking tire condition and tire care.

1. Check front and rear tire pressure.

- **Front Tires** — do not exceed maximum tire inflation rating.
- **Rear Tires** — depending on the outside temperature and track conditions, the op-

erating pressure recommendation is 18-24 psi hot.

2. Check the tread depth to be at a safe level.
3. Check for uneven tire wear. Uneven tire wear could be a result of one or more of the following:
  - Uneven tire pressure.
  - Low tire pressure.
  - High tire pressure.
  - Other issue.

#### Wheel Lug Nut Torque

Proper lug nut torque is very important. To ensure that the wheel is properly mounted to the vehicle use a calibrated torque wrench.

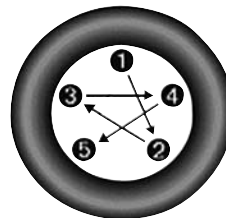
#### Torque Specifications

| Lug Nut Torque Spec  | **Lug Nut Size | Lug Nut Socket Size |
|----------------------|----------------|---------------------|
| 111 Ft-Lbs (150 N·m) | M14 x 1.50     | 22 mm               |

\*\*Use only authorized dealer recommended lug nuts and clean or remove any dirt or oil before tightening.

Inspect the wheel mounting surface prior to mounting the tire and remove any corrosion or loose particles.

Tighten the lug nuts in a star pattern until each nut has attained proper torque, verified twice each.



Torque Pattern

### WARNING!

**DO NOT** tighten the lug nuts fully until the vehicle has been lowered. Failure to follow this warning may result in personal injury.

## Fluids

Between runs check the following fluid levels:

- Engine oil level.
- Engine coolant level.
- Brake fluid level.

## Activate After Run Cooler

After making a pass down the drag strip, this feature helps cool the car after the engine has been shut down. The radiator fan and low temperature radiator coolant pump remain on after shut down for a period up to five minutes, or until target temperature is reached.

The After-Run Cooling is activated.

A graph in the radio can show the air cooler coolant temperature in real time while the vehicle's ignition button is in the RUN position with engine off.

### NOTE:

You can only view temperatures with the Key-less Go ignition in the RUN position and the engine off.

## Check For Hood Scoop Debris



### Hood Scoop Opening

Any debris moving through the air can be collected in the hood scoop, make sure hood scoop opening is free of debris. This can defeat the purpose of a scoop, by blocking air from entering the scoop inlet.

## Log Run Data

You can learn much about optimizing your car's performance and consistency at a test and tune session. Use this opportunity to carefully monitor and record vehicle, track and temperature conditions after each pass prior to staging and immediately after each run.

## CHECKS BEFORE LEAVING THE TRACK

Before returning to the street, check the following items:

- Check tire condition, refer to Check Tire Condition.
- Return rear tires to recommended street pressures (32 psi cold).
- Swap front tires if Demon front runner wheels were previously installed.
- Lug nut torque: 111 Ft-Lbs (150 N-m).

### NOTE:

Refer to page 27 for step-by-step instructions.

- Fluids
  - Engine oil level.
  - Engine coolant level.
  - Brake fluid level.

### **WARNING!**

To prevent **SERIOUS INJURY** or **DEATH** when using “Track-Use” parts and equipment:

- NEVER use any “Track-Use” equipment on public roads. FCA US LLC does not authorize the use of “Track-Use” equipment on public roads.
- The intended use of “Track-Use” parts is for race vehicles on race tracks. To help ensure the safety of the race driver, engineers should supervise the installation of “Track-Use” parts.
- FCA US LLC does not authorize the installation or use of any part noted as “Track-Use” on any new vehicle prior to its first retail sale.

### **WARNING!**

To prevent **SERIOUS INJURY** or **DEATH**:

- ALWAYS remove any “Track-Use” equipment before driving on public roads.
- ALWAYS properly use your three-point seat belts when driving on public roads.
- In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle.

|       |              |
|-------|--------------|
| DATE: | EVENT/TRACK: |
|-------|--------------|

| RUNS                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---------------------|---|---|---|---|---|---|---|---|---|----|----|----|
| Reaction Time       |   |   |   |   |   |   |   |   |   |    |    |    |
| 60'                 |   |   |   |   |   |   |   |   |   |    |    |    |
| 330'                |   |   |   |   |   |   |   |   |   |    |    |    |
| 1/8 ET              |   |   |   |   |   |   |   |   |   |    |    |    |
| 1/8 MPH             |   |   |   |   |   |   |   |   |   |    |    |    |
| 1/4 ET              |   |   |   |   |   |   |   |   |   |    |    |    |
| 1/4 MPH             |   |   |   |   |   |   |   |   |   |    |    |    |
| Tire # Of Runs      |   |   |   |   |   |   |   |   |   |    |    |    |
| Front Tire Pressure |   |   |   |   |   |   |   |   |   |    |    |    |
| Rear Tire Pressure  |   |   |   |   |   |   |   |   |   |    |    |    |





| RUNS                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---------------------|---|---|---|---|---|---|---|---|---|----|----|----|
| Tire Temp           |   |   |   |   |   |   |   |   |   |    |    |    |
| Track Temp          |   |   |   |   |   |   |   |   |   |    |    |    |
| Shift RPM           |   |   |   |   |   |   |   |   |   |    |    |    |
| Air Temp            |   |   |   |   |   |   |   |   |   |    |    |    |
| Humidity            |   |   |   |   |   |   |   |   |   |    |    |    |
| Barometric Pressure |   |   |   |   |   |   |   |   |   |    |    |    |
| Coolant Temp        |   |   |   |   |   |   |   |   |   |    |    |    |







# INDEX

|  |     |                                       |     |
|--|-----|---------------------------------------|-----|
| Automatically Enabled Features         |     | Introduction . . . . .                | .2  |
| Launch Assist . . . . .                | .21 | NITTO Drag Radials                    |     |
| SRT Power Chiller . . . . .            | .22 | Air Pressure . . . . .                | .8  |
| Torque Reserve . . . . .               | .21 | Contact Information . . . . .         | .8  |
| Black Key Fob                          |     | Post-Run Checks                       |     |
| Power Output level . . . . .           | .9  | Activate After Run Cooler . . . . .   | .28 |
| Demon Crate . . . . .                  | .23 | Between Runs . . . . .                | .27 |
| Demon Racing Log Book . . . . .        | .30 | Check For Hood Scoop Debris . . . . . | .28 |
| DRAG Mode Selectable Features          |     | Check Tire Condition . . . . .        | .27 |
| Selectable After-Run Cooling . . . . . | .19 | Fluids . . . . .                      | .28 |
| Selectable Launch Control . . . . .    | .19 | Log Run Data . . . . .                | .28 |
| Selectable Line Lock . . . . .         | .18 | Wheel Lug Nut Torque . . . . .        | .27 |
| Selectable Traction . . . . .          | .21 | Race Notes . . . . .                  | .32 |
| Selectable TransBrake . . . . .        | .18 | Red Key Fob                           |     |
| Drive Mode Auto Preferences            |     | Power Output levels . . . . .         | .9  |
| ECO Mode . . . . .                     | .12 | Feature Overview . . . . .            | .8  |
| Engine Power Output . . . . .          | .10 | Graphical Table Of Contents           |     |
| Paddle Shifter Preferences . . . . .   | .10 | Front/Side View . . . . .             | .5  |
| Steering Preferences . . . . .         | .11 | Instrument Panel View . . . . .       | .7  |
| Suspension Preferences . . . . .       | .11 | Rear/Side View . . . . .              | .6  |
| Traction Preferences . . . . .         | .11 | Drive Mode Custom Preferences         |     |
| Transmission Preference . . . . .      | .10 | Paddle Shifter Preferences . . . . .  | .13 |
| Drive Mode Custom Preferences          |     | Steering Preferences . . . . .        | .14 |
| Suspension Preferences . . . . .       | .14 | Suspension Preferences . . . . .      | .14 |
| Traction Preference . . . . .          | .13 | Traction Preference . . . . .         | .13 |
| Transmission Preference . . . . .      | .13 | Transmission Preference . . . . .     | .13 |
| Drive Mode DRAG Preferences            |     | Drive Mode DRAG Preferences           |     |
| Air Conditioning Disabled . . . . .    | .17 | Air Conditioning Disabled . . . . .   | .17 |
| Drag Steering Mode . . . . .           | .17 | Drag Steering Mode . . . . .          | .17 |
| Drag Suspension Calibration . . . . .  | .16 | Drag Suspension Calibration . . . . . | .16 |
| Drag Traction . . . . .                | .16 | Drag Traction . . . . .               | .16 |
| Paddle Shifters ON . . . . .           | .16 | Paddle Shifters ON . . . . .          | .16 |
| Power Modes Availability . . . . .     | .15 | Power Modes Availability . . . . .    | .15 |
| Torque Converter Lockup . . . . .      | .17 | Torque Converter Lockup . . . . .     | .17 |
| Transmission Calibration . . . . .     | .15 | Transmission Calibration . . . . .    | .15 |
| Feature Overview . . . . .             | .8  |                                       |     |
| Graphical Table Of Contents            |     |                                       |     |
| Front/Side View . . . . .              | .5  |                                       |     |
| Instrument Panel View . . . . .        | .7  |                                       |     |
| Rear/Side View . . . . .               | .6  |                                       |     |

|                                       |     |
|---------------------------------------|-----|
| Track Maintenance And Vehicle Storage |     |
| At Track Maintenance . . . . .        | .23 |
| Vehicle Storage . . . . .             | .23 |
| Track Usage Guidelines                |     |
| Drag Mode Operations . . . . .        | .25 |
| Pre-Run Checks . . . . .              | .25 |
| <br>                                  |     |
| Vehicle Alterations . . . . .         | .4  |
| <br>                                  |     |
| Warnings And Cautions . . . . .       | .3  |
| WildWheel Steering Wheel              |     |
| Cleaning . . . . .                    | .4  |





Whether it's providing information about specific product features, taking a tour through your vehicle's heritage, knowing what steps to take following an accident or scheduling your next appointment, we know you'll find the app an important extension of your Dodge brand vehicle. Simply download the app, select your make and model and enjoy the ride. To get this app, go directly to the App Store or Google Play and enter the search keyword "Dodge" (U.S. residents only).

[www.dodge.com/en/owners](http://www.dodge.com/en/owners) (U.S.) or [www.owners.mopar.ca](http://www.owners.mopar.ca) (Canada) provides special offers tailored to your needs, customized vehicle galleries, personalized service records and more. To get this information, just create an account and check back often.

Get warranty and other information online – you can review and print or download a copy of the Owner's Manual, Navigation/Uconnect manuals and the limited warranties provided by FCA US LLC for your vehicle by visiting [www.mopar.com](http://www.mopar.com) (U.S.) or [www.owners.mopar.ca](http://www.owners.mopar.ca) (Canada). Click on the applicable link in the "Popular Topics" area of the [mopar.com](http://mopar.com) (U.S.) or [owners.mopar.ca](http://owners.mopar.ca) (Canada) homepage and follow the instructions to select the applicable year, make and model of your vehicle.

**DODGE**

DOWNLOAD A FREE ELECTRONIC COPY  
OF THE MOST UP-TO-DATE OWNER'S  
MANUAL, MEDIA AND WARRANTY  
BOOKLET BY VISITING:

**[WWW.MOPAR.COM/EN-US/CARE/OWNERS-MANUAL.HTML](http://WWW.MOPAR.COM/EN-US/CARE/OWNERS-MANUAL.HTML)**  
(U.S. RESIDENTS);

**[WWW.OWNERS.MOPAR.CA](http://WWW.OWNERS.MOPAR.CA)**  
(CANADIAN RESIDENTS).

**[DODGE.COM](http://DODGE.COM)** (U.S.)

**[DODGE.CA](http://DODGE.CA)** (CANADA)

©2017 FCA US LLC. ALL RIGHTS RESERVED.  
DODGE IS A REGISTERED TRADEMARK OF FCA US LLC.



68400487AA  
CHALLENGER  
SECOND EDITION  
DEMON SUPPLEMENT