



2017 CORVETTE TRACK PREPARATION

Corvette has been designed and engineered to be a world-class sports car for the track. But before unleashing its acceleration, cornering and braking capability, there are several key procedures and steps that must be taken in order to properly experience its track prowess. For full details and information, see the vehicle Owner's Manual and reference GM Service Bulletin PI1535 (Track Use Power Steering Gear Cooling Duct).

Please Note: The Corvette Z06, Corvette Grand Sport and Corvette Stingray with the Z51 Performance Package are the recommended models for track use. A manual transmission is recommended for extended track usage at higher ambient temperatures. Please be advised that Z06 models with the 8-speed automatic transmission have ambient temperature limitations and strong potential for engine and coolant overheating on an 86 degrees F (30 degrees C and above) day. Anytime the maximum recommended temperatures are reached in any condition, the Driver Information Center will provide warnings. Once these warnings are received, several cool-down laps should be performed to bring operating temperatures back to normal so that aggressive track driving can be resumed. See your dealer for additional information.

1. ATTAIN THE RIGHT MILEAGE

NEW VEHICLE BREAK-IN

All Corvette models have a recommended break-in period during the first 1,500 miles (2414 km) that will prolong their performance and driving precision.

| PART/DRIVING BEHAVIOR | TIME PERIOD | RECOMMENDED ACTION |
|---|-----------------------------|--|
| Tires | First 200 miles (322 km) | Drive at moderate speeds and avoid hard cornering |
| Brake linings | First 200 miles (322 km) | Avoid making hard stops (recommended every time brake linings are replaced) |
| Full-throttle starts and abrupt stops | First 500 miles (800 km) | Avoid full-throttle starts and abrupt stops |
| Exceeding 4000 rpm | First 500 miles (800 km) | Avoid exceeding 4000 rpm |
| Cruise control or driving at one constant speed | First 500 miles (800 km) | Avoid cruise control or driving at one constant speed |
| Letting the engine labor or lugging the engine | First 500 miles (800 km) | Avoid letting the engine labor or lugging the engine. With a manual transmission, shift to the next lower gear (this rule applies at all times, not just during the break-in period) |
| First oil change | First 500 miles (800 km) | Change the engine oil after reaching the first 500 miles |
| Track or competitive driving | First 1,500 miles (2414 km) | Do not participate in track events, sport driving schools or similar activities |
| Engine oil maintenance | First 1,500 miles (2414 km) | Check engine oil with every refueling and add if necessary (oil and fuel consumption may be higher than normal during the first 1,500 miles) |

Please Note: It is recommended the first oil change occur at 500 miles.

For full details and information, see the vehicle Owner's Manual.

2. SEASON THE BRAKES

BRAKE BURNISH PROCEDURE

Models: Stingray with Z51 Performance Package, Grand Sport without Z07 Performance Package, Z06 without Z07 Performance Package and Z06 without J57 Ceramic Brakes

1. Apply the brakes 25 times starting at 60 mph (100 km/h) to 30 mph (50 km/h) while decelerating at 0.4 g. This is a medium brake application. Drive for at least 0.6 miles (1 km) between applying the brakes. This first step may be skipped if there are more than 200 miles (320 km) on the brake pads.
2. Repeatedly apply the brakes from 60 mph (100 km/h) to 15 mph (25 km/h) while decelerating at 0.8 g. This is a hard brake application, without activating the Antilock Brake System (ABS). Drive for at least 0.6 miles (1 km) between stops. Repeat until the brake pedal travel starts to increase. Depending on conditions, this should take no longer than 25 brake applications.
3. Cool down: Drive at 60 mph (100 km/h) for approximately 10 miles (15 km) without using the brakes.
4. Apply the brakes 25 times from 60 mph (100 km/h) to 30 mph (50 km/h) while decelerating at 0.4 g. This is a medium brake application. Drive for at least 0.6 miles (1 km) between applications.

CONTINUED



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2. SEASON THE BRAKES CONTINUED

STREET HIGH-PERFORMANCE BRAKE BURNISHING PROCEDURE

Models: Grand Sport with Z07 Performance Package, Z06 with Z07 Performance Package, Z06 with J57 Ceramic Brakes

This procedure should only be run on a track or other non-public area, and only on dry pavement.

1. From a stop, accelerate as rapidly as possible without activating traction control to a speed of 60 mph (100 km/h).
2. Use enough pedal force to completely stop the vehicle in four to five seconds. If ABS activates, braking is too hard.
3. Repeat Steps 1 and 2 – 50 times. This should take about 10 minutes.
4. After completing the 50 stops, cool the brakes by driving for 5 miles (8 km) at 60 mph (100 km/h). As with all high-performance brake systems, some amount of brake squeal is normal.

RACING/TRACK BRAKE BURNISHING PROCEDURE

Models: Grand Sport with Z07 Performance Package, Z06 with Z07 Performance Package, Z06 with J57 Ceramic Brakes

This procedure should only be run on a track and only on dry pavement. Brake pedal fade will occur during this track burnish procedure and can cause brake pedal travel and force to increase. This could extend stopping distance until the brakes are fully burnished.

1. Drive a normal first lap, not too aggressively.
2. Laps 2 and 3 should be gradually driven faster and more aggressively, while allowing for reduced brake output and increased stopping distance due to brake fade.
3. Drive Lap 4 near full speed, while allowing for reduced brake output and increased stopping distance due to brake fade.
4. Laps 5 and 6 should be cool-down laps.
5. Lap 7 should be normal driving or an easy out lap.

Z51 PERFORMANCE PACKAGE STINGRAY MODELS ONLY

Vehicles equipped with front dual-cast brake rotors include rotor cooling rings. Rotor cooling rings (provided at the time of vehicle delivery in a clear plastic bag) are recommended for track use (driving without the rotor cooling rings may result in brake pedal fade). Do not leave them installed after a track event, as this may cause corrosion with long-term use. Installation instructions are included with the rings and can be found in the Owner's Manual. If the vehicle is Z51-equipped with a one-piece brake rotor, a cooling ring is not required.

For full details and information, see the vehicle Owner's Manual.

Please Note: New brake pads must be burnished before racing or other competitive driving. Performing the brake burnish procedure on a base brake system can result in brake damage. The new vehicle break-in period should be completed before performing the brake burnish procedure, otherwise damage may occur to the powertrain/engine. Brake pedal fade will occur during any track burnish procedure and can cause brake pedal travel and force to increase. This could extend stopping distance until the brakes are fully burnished. When this procedure is performed as instructed, it will not damage the brakes. The brake pads will smoke and produce an odor. The braking force and pedal travel may increase. After the procedure, the brake pads may appear white at the rotor contact. Perform this procedure only on dry pavement, in a safe manner, and in compliance with all local and state ordinances/laws regarding motor vehicle operation.



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3. ADJUST THE FOUR CORNERS AND VEHICLE COMPONENTS

This procedure should only be run on a track and only on dry pavement.

TIRE PRESSURE AND WHEEL ALIGNMENT

The tires on Stingray, Grand Sport and Z06 (with the Z51 Performance Package and Z07 Performance Package) require inflation and pressure adjustment when driving at high speeds on a track (where legal).

- Corvette Stingray (with the Z51 Performance Package): Limit the vehicle load to the driver only, with no other cargo and inflate the tires to 26 psi (180 kPa); drive at a maximum speed of 174 mph (280 km/h)
- Grand Sport and Z06: Limit vehicle load to the driver only, with no other cargo. Inflate tires to 180 kPa (26 psi) and drive at a maximum speed of 296 km/h (184 mph). Return the tires to the recommended cold tire inflation pressure when high-speed driving has ended

Corvette Stingray (with the Z51 Performance Package), Grand Sport and Z06 wheel alignment settings should be set as follows for track use (and returned to normal when high-speed driving has ended):

| Front (per corner) | Rear (per corner) | Thrust Angle: 0 degrees |
|----------------------------|----------------------------|-------------------------|
| ▪ Caster: +7.0 degrees | ▪ Caster: 0 degrees | |
| ▪ Camber: -2.0 degrees | ▪ Camber: -2.0 degrees | |
| ▪ Toe: 0.05 degrees toe in | ▪ Toe: 0.05 degrees toe in | |

Please Note: You may need to remove one of the two washers from each of the UCA-to-body bolts in order to achieve the -2.0-degree camber. For Corvette Stingray with the Z51 Performance Package, you should remove one washer from each UCA-to-body bolt attachment (both front and rear). For Corvette Z06 models, you should remove only the front UCA washers. For Grand Sport models, you should not remove washers from front or rear upper control arm bolts. After track use, you should reinstall all washers and reset to factory alignment settings.

FRONT LICENSE BRACKET/AERO PANEL

The aero panel (if being used as a license plate holder) should be removed for track events and competitive driving to improve engine performance.

STINGRAY WITH PERFORMANCE PACKAGE – CARBON FIBER (CFZ)

Corvette Stingray models with Performance Package – Carbon Fiber (CFZ) have an installed aero package, which consists of a front splitter with short end caps, rocker panel extensions and a rear spoiler. A center transparent wickerbill for the rear spoiler is delivered but not installed. This is intended to be installed for track use only.

Z06 WITH Z07 PERFORMANCE PACKAGE (STAGE 2 AERO PACKAGE)

The Z07 Performance Package includes installed Stage 2 Aero Package components (front splitter with short end caps, rocker panel extensions and a rear spoiler). Stage 3 Aero components are delivered with the vehicle but not installed. They are intended to be installed for track use and include front splitter tall end caps (to replace the front splitter short end caps) and a center transparent wickerbill for the rear spoiler.

Z06 WITH Z07 PERFORMANCE PACKAGE (STAGE 3 AERO PACKAGE)

Changing the following track settings could reduce tire traction and could cause a crash. Do not change the track settings. The track settings for the Z07 Performance Package with the Stage 3 Aero Package are:

- The front splitter tall end caps installed
- The center transparent wickerbill installed all the way up on the rear spoiler
- The Driver Mode Selector in Track Mode

For full details and information, see the vehicle Owner's Manual.



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4. CHECK YOUR FLUID LEVELS

FLUIDS AND LUBRICANTS

Be sure to follow all service procedures before driving Stingray, Grand Sport or Z06 (with the Z51 Performance Package or Z07 Performance Package) on the track or competitively. Any fluids or lubricants that are changed should be restored back to normal before returning to street driving.

| FLUID/LUBRICANT | TO DO | WHEN |
|--|--|---|
| Oil (Mobil 1™ 15W-50 Required for Track/ Competitive Driving) | Check the oil level and keep it at or near 0.5 qt (0.5L) above the upper mark that shows the proper operating range on the engine oil dipstick <i>Please Note:</i> Stingray without Z51 Performance Package: Additional oil fill above the upper mark on the dipstick is not recommended for track events or other competitive driving. | Often (before, during and after every track event or competitive driving session) <i>Please Note:</i> After competitive driving, remove excess oil so that the level on the dipstick is not above the upper mark that shows the proper operating range. |
| Brake Fluid (DOT-4 Recommended for Track/Competitive Driving) | Replace existing brake fluid with a qualified high-performance brake fluid from a sealed container (brake fluid with a dry boiling point >534°F [279°C] is qualified) | If high-performance brake fluid is in the vehicle and the age of the brake fluid is over a month old or unknown, replace the brake fluid before track events or competitive driving (if high-performance brake fluid is used, replace it with GM-approved brake fluid before driving on public roads) <i>Please Note:</i> Do not use silicone or DOT-5 brake fluids. |
| Rear Axle Fluid | Because fluid temperatures may be higher, it is necessary to change the rear axle fluid | After the first event and every 24 hours of track events or competitive driving |

For full details and information, see the vehicle Owner's Manual.

Please Note: You may experience an engine coolant overheat condition with Corvette Z06 models if your vehicle is tracked with the ambient temperature higher than 85°F.

5. TURN UP THE PRECISION

DRIVER MODE SELECTOR

Track mode should be selected for track use or competitive driving. The outer ring of the Driver Mode Selector is located on the console behind the shift lever. It rotates to change the modes, which display in the instrument cluster.

PERFORMANCE TRACTION MANAGEMENT

Stingray (Z51 Performance Package), Grand Sport or Z06 models that have Magnetic Selective Ride Control™ incorporate Performance Traction Management (PTM), which integrates the Traction Control, StabiliTrak® and Selective Ride Control systems to provide consistent performance when cornering in track situations.

To utilize PTM:

- The vehicle must be in Track mode
- Then, quickly press the TCS/StabiliTrak button on the center console two times
- To select a mode, turn the Selective Ride Control/Performance Traction Management MODE SELECT knob on the center console

PTM contains five modes. Mode 5 is race with active handling off. It is for use by experienced drivers who are familiar with the track, requires the most driving skill and should be used in dry conditions only. StabiliTrak is off and engine power is available for maximum cornering speed.

For full details and information, see the vehicle Owner's Manual.

Please Note: Participating in track events or other competitive driving without following the instructions provided may affect the vehicle warranty. See the warranty manual before using the vehicle for racing or other competitive driving.



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AFTER THE TRACK

After driving your Stingray, Grand Sport or Z06 (with the Z51 Performance Package or Z07 Performance Package) on the track, it is important to return the vehicle back to the original factory settings with the proper fluids before normal street driving.

- Remove the brake rotor cooling rings
- Return the tire pressure settings to factory
(see the Tire and Loading Information label located below the door latch with the door open)
- Return the wheel alignment settings to factory
- Reattach the front license plate bracket/aero panel (if removed)
- Replace oil (use only engine oil licensed to the dexos1 specification of the proper SAE-viscosity grade)
- Replace brake fluid (DOT-3 Hydraulic Brake Fluid)
- Replace rear axle fluid (Dexron[®] LS Gear Oil)
- Rotate the Driver Mode Selector out of Track mode

For full details and information, see the vehicle Owner's Manual.

ADDITIONAL RESOURCES

THE STINGRAY PART YOU NEED FOR TECHNICAL ROAD COURSES

- GM Service Bulletin PI1535: Track Use Power Steering Gear Cooling Duct
- <https://theblock.com/news/stingray-part-you-need-technical-road-courses>