



## Gran Turismo 5 Guide

by [Mark Ryan Sallee](#)

You've salivated at the thought of playing Gran Turismo 5, but have you prepared? Gran Turismo isn't for the casual racing fan. It requires dedication, practice and careful execution. We've got tips to brush up your driving skills, a guide to tuning your cars perfectly, and help for conquering the game's massive GT Mode career.



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## Gran Turismo 5 Driving 101

Braking & Acceleration

Cornering Technique

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Tips

Real racing is a very complicated affair, but it boils down to three basic essentials: braking, accelerating, and cornering. Consider this a lesson in Driving 101.

### Braking

If you think braking is as simple as mashing the brake button (or brake pedal), it's time to snap to reality. Braking is as important, if not more so, than accelerating when it comes to realistic, technical racing. Poor braking can dramatically affect your lap times. Proper braking technique, conversely, will set you up to swing through corners drama-free and ready to peg the accelerator at the soonest moment possible.

As a general rule, combining braking inputs with steering inputs will result in oversteer, often to catastrophic effect. In simpler terms, *don't brake while turning*. Braking is much more effective when done in a straight line, scrubbing off speed much faster than braking while turning. If you try braking during a hard corner, you'll effectively divide the potential grip of your tires between turning and braking. This division of grip results in both poor turning and poor braking. If you're braking during a turn, you've waited far too long before using the brakes.

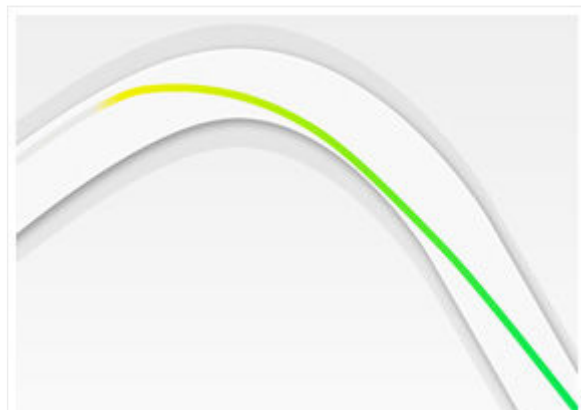
Since you undoubtedly need to drive through turns slower than the straights that precede turns, treat braking as a necessary *preparation* for turning. As you approach a turn—well before entering the actual corner—apply the brakes while making as few steering wheel corrections as necessary. If you time your braking properly, you'll have slowed down enough that you can ease through the corner without further need of the brakes.



**■ BRAKING** **■ ACCELERATION** **■ MAINTAIN SPEED**

### Acceleration

Much like braking, acceleration doesn't often mix well with cornering. The effect of acceleration on cornering is highly dependent on your vehicle's drivetrain (see our [Drivetrain Types](#) section for more details), but the general rule is the same. By accelerating during a turn, you effectively divide the potential grip of your tires between two functions, acceleration and turning. In some cars, this results in understeer, during which the turning potential of the car is compromised, and instead of turning as sharply as possible the car will push toward the outside of the turn. In other vehicles, oversteer is induced, during which the tail end of the car swings out, making the vehicle more difficult to control in the turn and crippling acceleration potential.



That said, there are very few times when you can use the accelerator without touching the steering. The lesson here is *not* that you should never steer and accelerate at the same time, but rather that you need to understand the effects of combining the two actions. The real lesson here is to practice *moderation*. If you're deep into a turn with the steering cranked to the extreme, pegging the accelerator is only going to ruin your turn. It may not be obvious in theory, but think of the opposite action: If you're running pedal-to-the-metal down a long straight, cranking the steering wheel left or right is going to severely wreck your acceleration (and probably more).

How you moderate your acceleration should be directly related to how hard you're steering. Through a slight right bend, you can ease the steering a little right without stepping off the accelerator. If, however, you've just slowed down for a sharp hairpin, you'll want to only feather the accelerator as you crank the steering to maintain the modest speed you've set up for the corner.

### The More You Know!

Though this guide is specifically intended to improve your racing ability, you can use the basic knowledge in your everyday driving. In other words, don't be a jackass and mash the gas pedal in corners. That squealing noise from your tires isn't cool—it just loudly advertises that you don't know how to drive properly.

After you've navigated a turn and pointed the car straight, center the steering and nail the gas to get out of the corner. In a perfect racing line, it's okay if your acceleration out of the turn results in minor understeer that pulls the car away from the apex and to the outside of the corner. Use the full width of the course to keep the straightest line possible when accelerating out of a bend.

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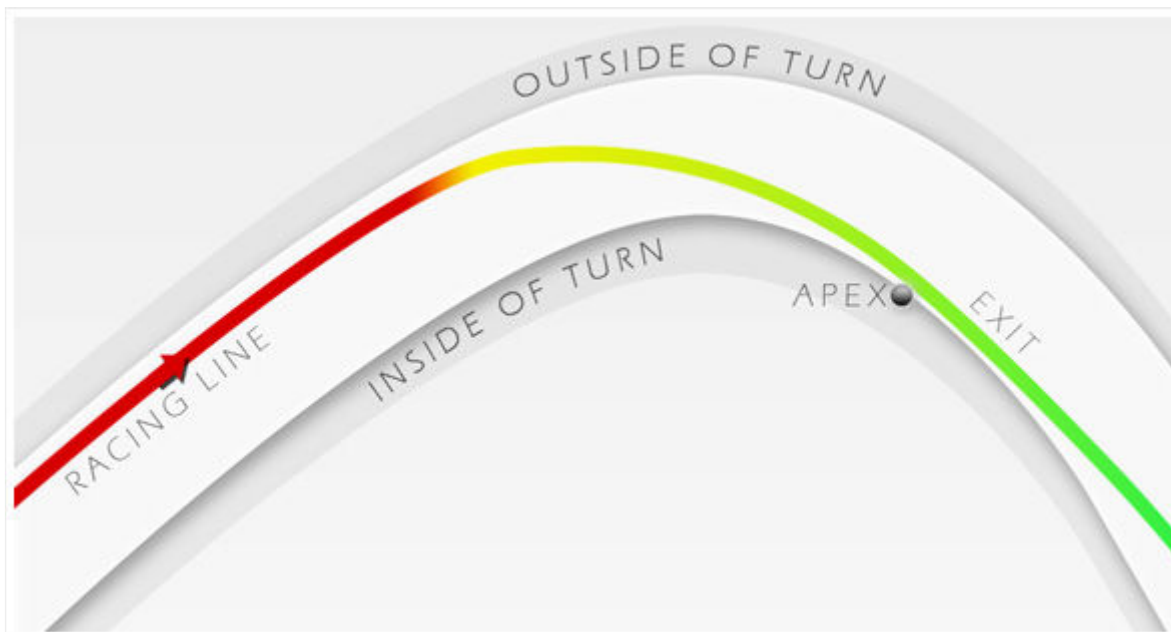
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## Cornering Technique

Now that you've got a basic understanding of the effects of braking and acceleration on your ability to turn the car, it's time to understand a key principle to cornering: *Slow in, fast out*.



The gist of the principle applies to every corner you take. Exiting the corner at the highest possible speed is the ultimate goal of every turn. If you're fast out of a corner, you'll carry that speed into the following straight. But in order to exit a corner at the highest possible speed, it's necessary to enter the corner slowly.

**BRAKING** **ACCELERATION** **MAINTAIN SPEED**

As we explained earlier, before entering a corner, you want to apply the brakes as you approach your turn. From inside the corner, feather the throttle lightly, just enough to maintain a constant, low speed. Turn into the corner and aim the car for the corner's apex (more on this later). Once you've made it through the meat of the turn, center the steering and nail the accelerator to get out of the corner as fast as possible.

When approaching a corner, you typically want to brake along the *outside* edge of the turn. Doing so will allow you to cut a gradual turn toward the apex. If you come into a corner from the inside of the track, you'll effectively reduce the radius of the turn, resulting in a loss of speed through the corner (and out of it). A more gradual turn radius, started from the outside of the track, will allow you to maintain a higher speed while adhering to your racing line.

The apex of the turn is the point in your racing line that comes closest to the inside of the turn. Typically this is where you transition from turning to straightening the car for acceleration out of the corner. Visualizing the proper apex will give you an idea of what your racing line should look like through a particular corner.

After hitting the apex on the inside of the turn, let your acceleration pull the car back toward the outside of the turn. Use the full width of the course to cut as straight a path as possible as you exit the corner. Staying straight as possible will let you accelerate more effectively, adhering to the original mantra: *Slow in, fast out*.

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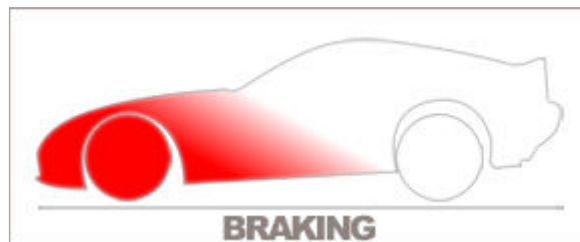
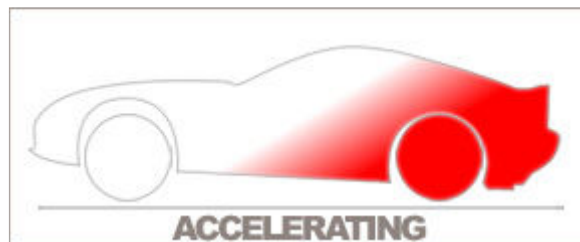
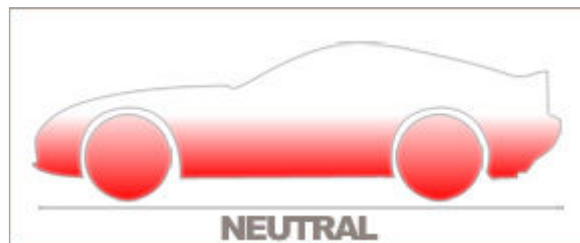
Tips

## Weight Transfer

Now that you've got a basic understanding of proper driving technique, it's time to look a bit more in-depth into the physical mechanics at play in high-speed racing. Weight distribution and weight transfer concern the effects of weight balance on the handling dynamics of your vehicle. These dynamics are always changing as you race, as everything you do affects the distribution of weight in your vehicle.

When the vehicle is at a complete stop, its weight balance is at its most neutral. A perfectly balanced car will have a 50/50 weight balance, with half of the car's weight pushing down on the front wheels and the other half of the weight holding down the rear wheels. While only a few cars actually achieve a perfect weight balance, this general idea applies.

Naturally, the weight balance of a non-moving car is instantly changed the moment the vehicle kicks into motion. Upon acceleration, the weight balance is shifted *backward*. As the car lunges forward, the front end of the vehicle lifts while the tail end of the vehicle dips down. This shift in the weight balance dramatically affects the grip of the tires. Under hard acceleration, the front tires lose grip while the rear tires gain traction from the added weight. As acceleration slows, weight balance gradually returns to a more neutral state.

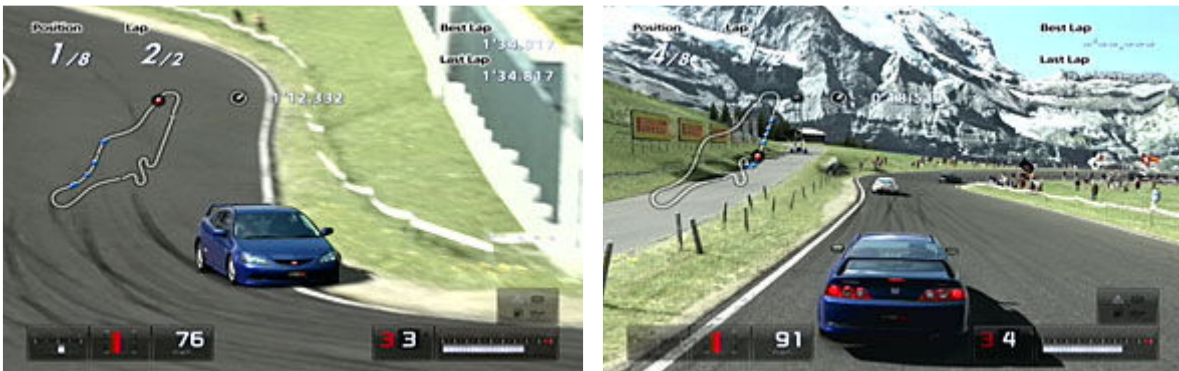


The opposite effect can be seen under hard braking. As a car brakes hard, the nose of the car dips down while the tail tends to lift. In this situation, the weight balance of the car is shifted forward. The front tires of the car gain traction from the additional weight while the rear of the car loses some grip potential as the pressure of the weight shifts away from those wheels. This shift in weight balance is why a car's front wheels handle most of the braking.

### The More You Know!

Next time you're out and about the real world, take a look at the wheels of surrounding cars. You'll note many cars' front wheels are dirtier than the rear wheels, an effect of the brake dust generated by the heavier braking of the front wheels. On a motorcycle, upwards of 70% of braking power comes from the

front wheel because of the same mechanics of weight transfer.



As weight balance transfers fore and aft of the car, dynamics such as cornering ability and grip for acceleration are affected. The effects of weight transfer vary depending on the drivetrain type of the vehicle. For more details on the specifics, keep reading.

#### ■ Lift-Throttle Oversteer

Weight transfer is a factor even when you're not braking or accelerating. Simply lifting off of the throttle will have some of the effect of braking—weight will transfer forward—which is important to remember when you're carving a corner. If you let up off the throttle too much during a corner, the forward weight transfer will reduce traction to the rear wheels. The balance upset can cause what's known as "lift-throttle oversteer." Unlike power oversteer, lift-throttle oversteer can happen no matter what drivetrain your car has. Even a front-wheel-drive car can experience lift-throttle oversteer.

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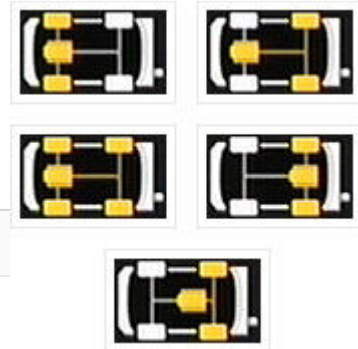
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## Vehicle Drivetrain Types

The main components of a vehicle's drivetrain that relate to weight distribution and transfer are the position of the engine and the wheels that are powered by it. Many low-end economy cars are front-engine, front-wheel-drive, while sportier rides tend to favor the front-engine, rear-wheel drive setup. There are also mid-engine arrangements and all-wheel-drive vehicles. Each variation affects the handling and acceleration dynamics of vehicles.



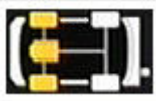
#### ■ Engine Placement

The placement of a vehicle's engine directly affects the weight balance of a car. A front-engine vehicle will tend to have a frontal weight bias. While this may help give the front wheels traction during cornering, it may also result in too little weight holding down the rear end of the car. Under extreme speed, this lack of traction in the rear quarters of the car may result in oversteer, as the tail end breaks loose and kicks out ahead of the front wheels. Still, you'll find the vast majority of vehicles have their engines located at the front of the car, from econoboxes like the Chevrolet Cobalt to performance powerhouses like the Corvette Z06.

Conversely, you'll find very few vehicles with a rear-engine arrangement. Pretty much only Porsche is crazy enough to put their engines at the far rear end of their 911 (some Volkswagens do it, too). The added weight to the rear may help keep the rear tires planted during acceleration, but may also contribute to oversteer if the weight is pushed too far in a corner. As well, having the weight of the engine at the back of the car tends to eliminate understeer. More commonly though, you'll find vehicles with a *mid-engine* arrangement. Though the engine is still located aft of the driver, it's positioned more toward the center of the vehicle, in front of the rear axle. This mid-engine arrangement gives a vehicle the benefit of improved weight balance. Vehicles like the

Lotus Elise and Ferrari F430 have this mid-engine arrangement.

### ■ Front-Wheel-Drive



A front-wheel-drive (FWD) car has engine power delivered to the front wheels. The benefit of this setup is easy, simple control that's difficult to lose. Front-wheel-drive vehicles are great cars to start with because they're typically not as rowdy as other drivetrain setups. A mistake in a FWD vehicle will generally result in manageable understeer, rather than out-of-control oversteer. The downside is that the FWD setup is inherently detrimental to acceleration.

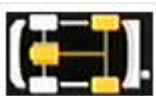
As we discussed earlier, as a vehicle accelerates its weight balance transfers to the rear wheels. As the weight shifts away from the front wheels, those front wheels lose traction. Since the acceleration of a front-wheel-drive car is dependent on the traction of the front wheels, this weight transfer limits acceleration. Also, high-powered FWD vehicles tend to suffer from torque steer. As the front tires share the responsibilities of both acceleration *and* steering, there's a real chance that quick acceleration off the line can tug the steering left or right. As such, you'll find that few performance-minded cars have FWD drivetrains.



### The More You Know!

In the real world, front-wheel-drive has many practical benefits, including cheaper manufacturing costs, less weight and less drivetrain power loss resulting in better fuel economy, in addition to generally taking up less space, leaving more space for passenger and cargo room. Still, we would never ever pay more than \$25,000 for a FWD vehicle because all the practical benefits of FWD are much less cool than the performance benefits of RWD and AWD.

### ■ Rear-Wheel-Drive



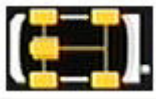
The vast majority of performance vehicles are rear-wheel-drive (RWD). The inherent strength of RWD is clear when you understand weight transfer. As we explained, under acceleration the weight balance of a car shifts backward, pushing down on the rear wheels. This added weight means added traction, a must for quick acceleration both off the line and out of corners.

The downside to rear-wheel-drive is that it tends to be more difficult to control than other drivetrains. Hop into a powerful RWD vehicle like the Corvette Z06 and you'll quickly become familiar with the monster known as oversteer. During cornering, application of the throttle will tend to break traction to the rear wheels and send the rear end of the vehicle scooting out ahead of the front wheels. In road racing, this is never a good thing. Not only does the loss of traction to the rear wheels result in reduced speed, but it's also potentially dangerous. Unchecked oversteer can quickly send your car into a spin and off the track.

Despite the learning curve for RWD vehicles, this drivetrain setup is generally regarded as the best for road racing application. Skilled drivers can work with the driving characteristics of rear-drive vehicles for an optimal balance of control and speed.



## ■ All-Wheel-Drive



In all-wheel-drive (AWD) vehicles, engine power is delivered to *all* wheels of the car, though usually not all at once. AWD vehicles have a sort of inherent, if not simple, traction control system. Most typical, low-end AWD vehicles will favor power delivery to the front wheels. However, if the car senses that the powered wheels lose traction, the car's computer automatically transfers the power away from the low-traction tires to other tires that *do have* plenty of traction.

The benefit of AWD is especially apparent during hard acceleration off the line. As the car's computer shifts power to the wheels with the most grip, AWD vehicles really hook up with the asphalt and go. All-wheel-drive strengths are even more pronounced in compromised driving conditions, like driving on a wet track or driving in dirt. The benefits are also helpful in corners where power-on oversteer is minimized by the car's computer wizardry.

Because of the smart characteristics of an AWD drivetrain, all-wheel-drive vehicles have many of the performance benefits of a RWD setup while maintaining the easy controlability of FWD setups. However, there are some compromises. Like FWD vehicles, AWD cars tend to suffer understeer more than their RWD rivals. As well, all-wheel-drive drivetrains add weight and mechanical complexity to cars, neither of which are desirable in real-life road racing. Still, AWD vehicles present a solid balance between rear- and front-wheel-drive vehicles and should definitely be considered by neophyte racers.



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## ■ Another Motto: Outside, Inside, Outside

1

By now you're familiar with the motto *slow in, fast out*. That helps you decide when and where to brake and accelerate through a turn, but it doesn't cover the line you should take through the turn. While each bend is unique, this generally applies: *outside, inside, outside*. Start the turn from the outside edge of the track, move in toward the inside edge to hit the apex, and then let the car move back toward the outside edge as you exit the corner and accelerate away.

## ■ Aim for the Rumble Strips

2

Note the red and white rumble strips that often line the edges of a race track. These strips generally run along the edge of the course that racers are most likely to be hugging. While that may seem inconsequential, you can use the locations of the rumble strips as makeshift waypoints forming a preferred racing line. If you're hugging the inside of a turn *without* a rumble strip, chances are you've missed the corner's proper apex. Try to stick to the outside edges of the course when the rumble strips are present and turn in so that your apexes coincide with the inside rumble strips.



### ■ Gas and Brake in Moderation

3

By far the most important thing for new players to learn is *moderation*. Your gas and brake pedals are analog, not digital—use them as such. If you mash the brake pedal all the way, you can lock your tires and lose control. As well, simply mashing the gas pedal all the time is counter-productive. Though you should always practice moderation in your gas and brake application, it is especially important to do so while cornering. Heavy gassing or braking in mid-corner is never a good thing.

### ■ Sliding Is Bad

4

Racing is a constant battle for traction. If your tires are sliding, you've lost the battle. Sliding is never a good thing in road racing (it can be helpful on dirt, granted). Listen to your tires to gauge the limits of their grip. If you start to hear the tires break loose, ease off the accelerator or brakes to maintain control and speed.

### ■ Mind the Blinking Gear Indicator

5

Pay attention to your gear indicator. Not only does it tell you which gear you're in, but it also tells which gear you *should* be in for the upcoming turn. As you approach a turn, a red number will appear next to the gear indicator. If the red number is flashing, the game is telling you to *slow down*. You don't need to rely on the blinking gear indicator 100%, sometimes it'll ask you to slow down more than necessary, but think of it as an aid. It's especially useful if you're driving a course that's new to you and you haven't already figured out your braking points.

### ■ Why Manual Transmissions are Better

6

Controlling which gear you're in allows you to keep your engine's revs higher more of the time—instead of putting through a corner at 45 mph in third gear at 3,000 rpm, it's better to go 45 mph in second gear at 5,000 rpm and only a manual transmission will allow you that control. Keeping the rpms high causes the engine to make more power so that when you exit the corner you've got more instant acceleration. In real life, gear changes during a corner can be a huge disturbance to the balance of your vehicle and leaving gear changes up to an automatic can cause problematic, unwanted shifts at bad times. Downshift as you enter the turn, while the car is still pointed straight. Keep the rpms high and stay steady on the throttle for optimal acceleration out of the turn.

## Gran Turismo 5 Car Tuning Guide

Transmission / Gearing

Drivetrain / Differential

Suspension & Brakes

### Note

As of the time of this guide writing, Gran Turismo 5 does *not* allow you to individually adjust your gear ratios—even with a "fully customizable transmission" the only option you're given is the adjustment of top speed. It is possible that more customization will be added later as a patch.

### Gear Ratio

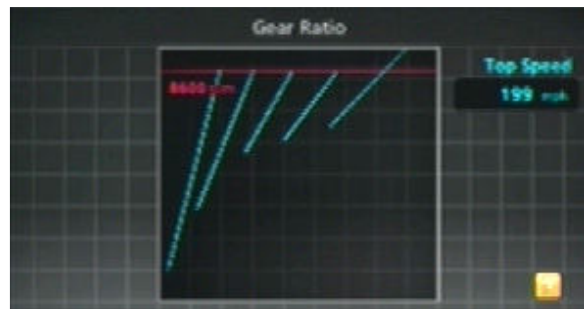
Gearing ratios determine how many turns of the driveshaft result in a single turn of the wheels (the car's wheels, not your steering wheel). A higher ratio (e.g. 3:1) makes it easier for the engine to rev high and reach max horsepower output quickly, but minimizes the top end speed of the gear. The effect of high gear ratios is quick acceleration with a sacrifice to top speed. A low gear ratio (e.g. 0.8:1) is harder for the engine to turn but improves top-end speed in that gear. The effect of a low ratio is slow acceleration with high top speed.

Lower gears, like 1st and 2nd gears, should have higher ratios, while higher gears, like 5th and 6th, should gradually move to lower ratios. Sudden drops in the ratios between gears (e.g. having a 1st gear ratio of 3:1 and a 2nd gear ratio of 1:1) will make it difficult to keep your engine revving within its peak power band. Most engines make the most power in the upper limits of their rev range (like between 4,000 rpm and 6,500 rpm). If the jump between two gear ratios is too large, your engine will drop too many revs on the upshift, dropping below the optimal powerband. This drop in revs will make for slow acceleration until you can muscle the revs back to their peak power.

Imagine a curved line on the gearing graph that connects the right edges of the ratios for each gear. A gradual curve will make it easier to keep your engine revving within its optimal RPM range. However, a curve too dull will restrict the range of your gear ratios. A sharper turn will naturally give you more range between gear ratios, but as we mentioned earlier it may also cause the engine RPMs to drop too much between upshifts. Experiment with your car to find its peak power band and adjust the gears to keep your revs within that RPM range while giving you the acceleration or top speed you need for a given track.



Default, conservative gear ratios. Note the smooth curve of the line connecting the ratio graph bars.



(Above Left) This gearing is set for quick acceleration but low top-end speed. The tightly spaced gear ratios will keep the engine revving at its peak, but limits the range of each gear. (Above Right) The low ratio of sixth gear makes for high top-end speed, but the large jumps between gear ratios may drop too

many revs between upshifts, slowing acceleration.

Many tracks will not allow you to reach the maximum speed of your vehicle. In these cases, it's a good idea to increase your gear ratios to improve your acceleration. Other tracks, however, are all about top speed. On these tracks, it's worth sacrificing some acceleration by lowering your gear ratios to make for better top-end speed.

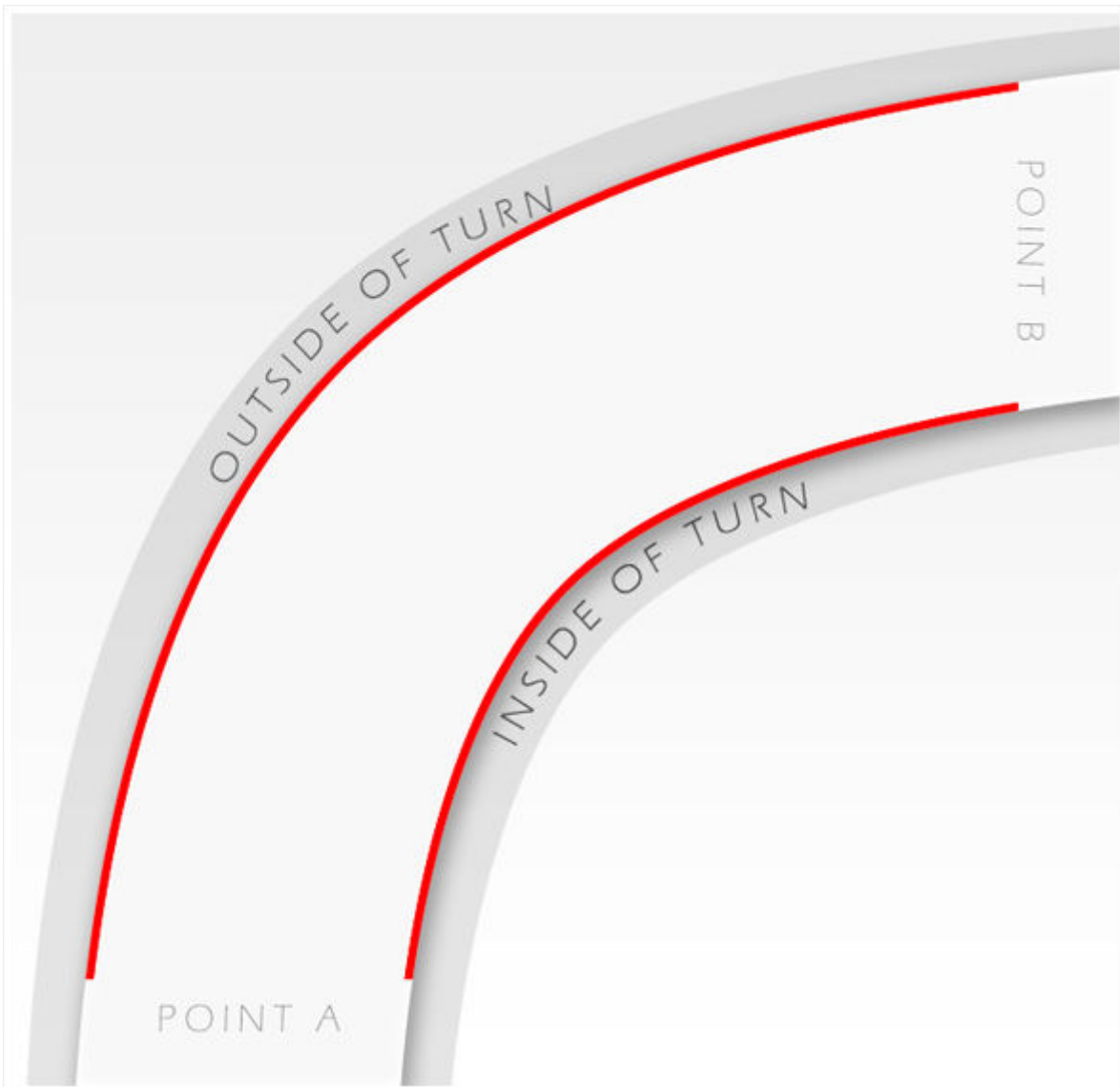
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**Drivetrain / Differential**

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## Differential

A differential splits power between the left and right halves of a car's driven axle(s) and allows either half of the axle to rotate at a different speed than the other. Letting both axle halves rotate independently—thus rotating the two wheels at different speeds—is necessary for maintaining traction in a turn. In corners, the wheel on the inside will naturally rotate less than the wheel on the outside as the inside wheel travels a shorter distance. Without the allowed slip of a differential, the wheels would be locked into the same rotational speed and either the inside or the outside wheel would skip and lose traction.



Notice that the line on the inside of the turn—where the inside wheel travels—is much shorter than the

line on the outside of the turn, where the outside wheel travels. Because of this difference in distance, a differential is required to allow the wheels to spin at different speeds to maintain optimal traction.

Performance vehicles have a special type of differential, called limited-slip. A limited-slip differential (LSD) does what it says—it limits the slip allowed by the differential. Remember, the slip of the differential is what allows the wheels to rotate at different speeds. However, there is a limit to this benefit, and an LSD helps by locking the rotation of both wheels at a certain level of slip. Slip is good for cornering, but not for acceleration and braking.

When traveling in a straight line, as in under hard acceleration or braking, you want both wheels rotating at the same speed. A limited-slip differential makes this happen. Increasing the acceleration and deceleration rates of the differential will make the LSD lock the wheels together sooner. Decreasing the rates will allow for more differential slip before the LSD kicks in.

Increasing the acceleration rate of the differential in a rear-wheel-drive vehicle will tend to make more oversteer as you exit a corner, hard on the accelerator. Increasing the acceleration rate of the differential in a front-wheel-drive vehicle will, conversely, contribute to added understeer as you accelerate out of a corner, as the wheels lock together and begin to lose traction under acceleration. Too low a setting in either drivetrain configuration will result in decreased acceleration and braking efficiency. Keep the LSD settings relatively high without adding to your vehicle's natural tendency to oversteer or understeer. If you find the car tends to lose traction to the powered wheels as you accelerate out of a corner, consider lowering the setting of the LSD.

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## Ride Height

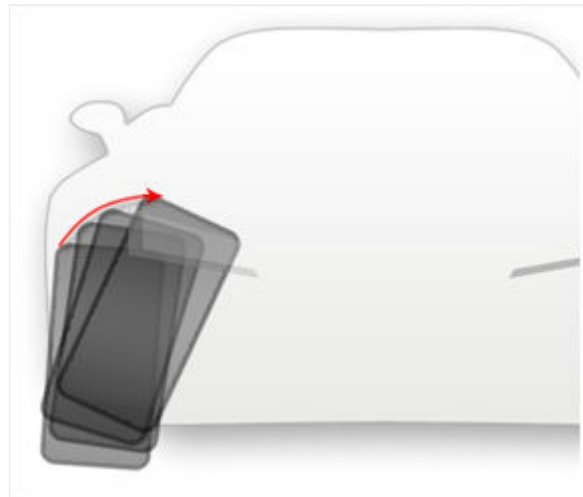
Ride height is another adjustment you can make to the suspension. Generally, you want as low a ride height as possible without bottoming out the suspension on rough roads and under heavy weight transfer. However, balancing the front and rear ride height can let you play with your vehicle's center of gravity. A higher ride height in the rear will shift the car's center of gravity forward, which may help front tire grip.

## Spring Rate

Most vehicles come from the factory with fairly soft springs made to deal with rough public roads. On the track, however, the range of lumpy road surfaces is much narrower. The generally smoother track surfaces make suspension stiffening a very helpful adjustment in the corners. However, like all things in tuning, too much of anything will negatively impact your lap times.

Stiffer suspension will better control suspension travel and the always-changing nature of your wheel camber. By holding wheel camber more constant, you can effectively keep the tires flat against the pavement for improved grip. Too much suspension travel will cause the camber angle to change—since suspension does not travel straight upward, but rather in an arc—which will result in vastly different levels of grip depending on the weight balance of the vehicle at any given moment.

Though as we mentioned, too much suspension stiffness can be a bad thing. Too-stiff suspension will not have the travel necessary to properly deal with imperfections in the road surface. Slight bumps in the road will then cause the tires to skip and lose traction. As such, stiffening the front suspension too much can cause understeer, while stiffening the rear suspension too much can cause oversteer. Conversely, you can reduce understeer and oversteer by softening the front and rear suspension, respectively.



As suspension load increases, the wheel travels into the vehicle in an upward arc. Too much travel (from too soft suspension) results in vastly different wheel camber depending on suspension load.

## Damping

While spring stiffness determines how much travel is in the suspension, dampers, also known as shocks, control the rate at which a vehicle's springs oscillate. Picture hitting a large bump at high speed in a standard road-going vehicle. After the bump, the car's suspension will continue to oscillate, bouncing up and down as the springs settle back down to their normal state. While this oscillation is good for driver comfort on public roads, it's not so desirable on the race track. The fluctuating weight balance during such oscillation can make tire grip unsteady, fluctuating with the suspension travel.

Stiffer shocks will control the oscillation of the suspension for a steadier weight balance. As well, stiffer springs will increase the speed of weight transfer, letting you more quickly and predictably redistribute the weight of the car with acceleration and braking. However, too-stiff shocks can overpower the springs, reducing their effectiveness at dealing with imperfections in the road and contributing to a loss of traction on uneven road surfaces, including bumps, dips and rumble strips.

## Anti-Roll Bars

Anti-roll bars increase the vehicle's rigidity and stability under hard cornering by effectively tying together the left and right sides of the vehicle. Hard corners will cause the body of a car to roll away from the turn. You can adjust the stiffness of anti-roll bars to counter the body roll and tweak the cornering characteristics of your vehicle.

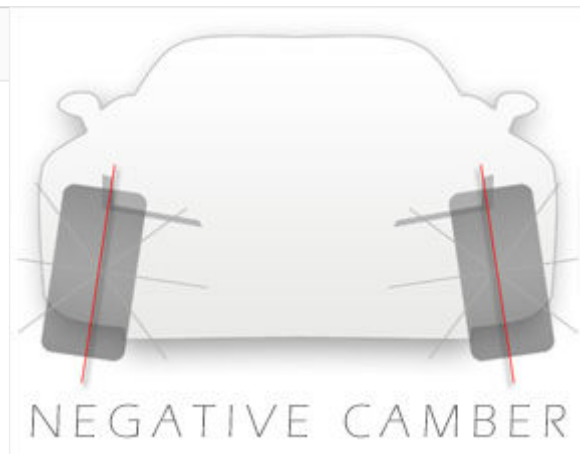
Generally, increasing front anti-roll bar stiffness will also increase the tendency to understeer. Conversely, increasing the stiffness of the rear anti-roll bars will increase the tendency to oversteer. It's a good idea to tweak the stiffness to an even level that suits the vehicle before adjusting for understeer or oversteer. When it comes time for the fine-tuning, it's often better to soften the anti-roll bars to correct understeer and oversteer rather than stiffen. If the anti-roll bars are too stiff, you'll get some instability on rough roads and hairiness in tight corners where the inside tires may lift off the ground.

### ■ Wheel Alignment

There are two categories of alignment you can adjust: camber and toe. Each setting should be adjusted only slightly between testings to avoid dramatic changes to handling. As well, these settings can negatively affect tire wear, so consider running different setups on longer races where tire wear is a factor.

## Camber Angle

Camber deals with the tilt of the wheels when viewed from the face of the car. Wheels with the tops tilted inward have negative camber, while wheels with the tops tilted outward have positive camber. There's generally no racing application for positive camber, though some degree of negative camber can help cornering. As the car hits hard into a corner, centrifugal force will naturally roll the weight of the vehicle outwards. Negative camber helps keep the tire flat on the asphalt during this weight transfer. However, too much negative camber will prevent the tires from sitting flat during straight acceleration and braking, reducing grip in those situations.



## Toe Angle

Toe is the tilted angle of the wheels when viewed from above the car. Positive toe moves the fronts of the wheels inward together, while negative toe has the fronts of the wheels pointed outward, away from each other. The effects of toe are limited, other than affecting tire wear, though a little positive toe can give the

characteristic of understeer, while a little negative toe can give the characteristic of oversteer.

## Brake Balance

Generally, you want braking to be even between the front and rear wheels. However, as you make changes via upgrades and other tuning, you may offset the balance of braking. If you find that the vehicle tends to understeer or oversteer under braking, you may have a braking imbalance.

You can correct for some amount of braking oversteer by moving the braking balance forward. Conversely, you can correct some understeer by moving the braking balance rearward. Too much braking balance to the rear, however, will upset stability under braking, while too much forward braking will contribute to understeer. Look for a neutral balance in the braking so that you feel neither understeer nor unsteady oversteer under hard braking conditions.

## Gran Turismo 5 Career Mode Walkthrough

### Career Mode Tips

#### ■ Your First Car

1

You start the game with not much cash. Forget about buying a new car—there are vehicles you can afford, but you don't want 'em. Instead, go straight for the Used Car Dealership and press the SQUARE button to sort the list of available used cars by price. There should be a Mazda MX-5 / Miata / Eunos Roadster available (all names describe the same car from different regions). We suggest you buy it.

The Mazda Miata is a fantastic starter racing car. Another good choice is the Mini Cooper. It's not as dynamically competent as the Miata on the track, but it'll hold its own against some of the early competition and, as an added bonus, will work in more of the early racing events than will the Miata.

#### ■ Buying Used? Change Your Oil!

2

Any time you buy a car from the Used Car Dealership, the first thing you should do with that car is bring it to the GT Auto shop and change the oil. Most used cars come with gross oil that reduces the power output of your motor. A fresh flush of oil will revive those lost horsepowers, and doesn't cost much at all.

#### ■ Your First Upgrade...Tires

3

There're myriad vehicle upgrade options, including horsepower boosts and chassis improvements. Before you get into pumping your horsepower to ridiculous levels, *please* upgrade your tires. Soft sport tires will make a huge difference versus standard street rubber. And the great thing about tire upgrades is that there is *no* downside—better tires help your acceleration, help your braking and help your cornering.

One note: The difference between hard, medium and soft tires is a difference in balance between grip and longevity. A soft tire will grip the best but will wear out more quickly. During most three-to-five-lap races, soft tires should be your go-tos. Hard tires sacrifice some grip for more longevity—in a long race, you'll have to decide how much grip you need and balance it against having to make pit stops too frequently.

#### ■ Event Types: Races vs. Championship

4

When you enter an event, you typically get a series of individual races to choose from within that event. Some events allow you to tackle these races in any order you'd like. However, if the first item you see is a championship icon, you'll need to enter into a rigid championship—a series of races all held back-to-back—with no option for restarting a race without restarting the entire championship.

The good news with a championship is that you don't need to get first place in every race in order to earn gold. Your position at the end of the race is worth a certain amount of points and it's the racer with the most points at the end of the championship that ultimately wins the championship. Theoretically, you could win a championship without ever winning a race.

#### ■ Do License Test Early

5

Yeah, license tests can be a bit of a drag when all you want to do is race, but we suggest you get them done early. Not only will you get good training, but even basic bronze-level completion of license tests will earn you some useful vehicles.

#### ■ Scout the Competition

6

Before entering a race, you can check a list of typical opponents to get a feel for what sort of vehicle you should bring to the table. Look for the "Typical Opponents" button on an event screen, right next to the "Entry Requirements" button.

#### ■ Do Special Events Early

7

You might have the urge to knuckle down and tear through all A-spec challenges before messing with the Special Events—we did. But fight that urge. We suggest tackling the Special Events as you unlock them. The cash prizes for completing these events is generally exceptionally high relative to the time and effort that goes into them, so they're good for building cash so you can continue your A-spec dominance.

## Gran Turismo 5 Trophies

<b>■ Gran Turismo Platinum Trophy</b>	PLATINUM	↓
Earn every single Gran Turismo 5 Trophy.		
<b>■ 111 Meters a Second</b>	BRONZE	↓
Achieve a speed of 400km/h (249 mph).		
JAY SAYS...		
Simply win the A-spec Professional Series GT World Championship. The reward car for this is the Bugatti Veyron. Tune the hell out of it, which should get it to a whopping 1,230 horsepower! (Don't forget the weight reductions and soft racing tires.) Set the transmission so the top speed is 273 mph and take it out for a practice run. From under "World Circuits," select Circuit De La Sarthe 2009 (No Chicane). When you get to the long straight simply implant your gas pedal foot into the floorboard and enjoy your new Trophy.		
DANNY SAYS...		
This is the maximum speed of the Bugatti Veyron which is pretty easy to unlock. Once you've got it, take it for a spin on the Circuit de la Sarthe (No Chicanes) and hitting the necessary speed isn't a problem.		
<b>■ A Star is Born</b>	BRONZE	↓
Train a B-spec driver up to Class 30 or above.		
<b>■ Amateur Series Complete</b>	BRONZE	↓
Complete the Amateur series of race events.		
<b>■ AMG Driving Academy</b>	BRONZE	↓
Complete the AMG Driving Academy special event.		
<b>■ Arch Rivals</b>	BRONZE	↓
Achieve a one-two finish in a Mitsubishi Lancer Evolution X and a Subaru IMPREZA WRX STI.		
D1STYLE SAYS...		
Start a split-screen race in Arcade mode and then choose the Mitsubishi EVO X and the Subaru Impreza WRX STI. Note: Make sure it's either the '07 sedan or the '10 sedan, otherwise it will not work!		
Just finish the race and you'll get the Trophy—it's that easy.		



<p>■ <b>Beginner Series Complete</b></p>	BRONZE ↓
<p>Complete the Beginner series of race events.</p>	
<p>■ <b>Beyond the Autobahn</b></p>	BRONZE ↓
<p>Drive 12,718km in total (the official length of all the autobahns in Germany).</p>	
<p>■ <b>Car Collector</b></p>	BRONZE ↓
<p>Fill your Garage with 1000 cars.</p>	
<p>■ <b>Colorful</b></p>	BRONZE ↓
<p>Collect 256 paint colors.</p>	
<p>■ <b>Course Designer</b></p>	BRONZE ↓
<p>Create and share a track.</p>	
<p>GERALD SAYS...</p> <p>Just edit any track, even if it is one corner or in a straight. Save the track and share it. Bang—you have your Trophy.</p>	
<p>■ <b>Data Analyst</b></p>	BRONZE ↓
<p>Analyze your performance using the Data Logger.</p>	
<p>SIMON SAYS...</p> <p>Go to Practice mode and pick a short track like Indy or Daytona. Do a lap, quit to the pre-race menu and then find the Data Logger icon (it looks like a graph).</p>	
<p>■ <b>Dream Drifter</b></p>	BRONZE ↓
<p>Get 10'000 points or more in a Sector Mode Drift Trial.</p>	
<p>■ <b>Dream Race</b></p>	BRONZE ↓
<p>Win the ultimate three-way showdown between a FordMark IV Race Car, a Ferrari 330 P4 R.</p>	
<p>BLADEFOXX SAYS...</p> <p>There are two parts to this Trophy. 1) Getting one of the cars, and 2) win the race. Each of the cars</p>	

costs 20,000,000 Cr. in the dealership. The Jaguar XJ13 Race Car can be won in the Indy 500 (LV 28) Endurance Race, so I suggest you wait until you get it for free. Here is a breakdown:

Ford Mark IV Race Car - LV 20 - 499BHP - 1,000 KG  
Ferrari 330 P4 Race Car - LV 21 - 449BHP - 792 KG  
Jaguar XJ13 Race Car - LV 19 - 501BHP - 998 KG [Prize Car at Indy - 500 Endurance Race - A-Spec]

When you have acquired one of them, you can buy the few available tuning parts and then go to Expert Series or Arcade and Single Race—just chose the high speed ring as it's easy to win with the Jaguar XJ13 Race car - Historic Racing Car Cup (LV 16) and win the race. I won it by using the Mark IV Race Car, which I found the easiest. If you can't win it with the Jaguar XJ13, you can get the Mark IV or the 330 P4 by doing "The Birthday Trick."

The Birthday Trick: Make an alternate account with today's birthday date and birth year being 1967. Then log into the alternate account and start GT Mode. If you don't get one of the mentioned cars as a gift, exit out and delete the save file (on the alternate account) to retry the trick. When you get the car you want, send it to your main account as a gift.

■ **Driving Music** BRONZE ↓

Use the Personal BGM function, and go for a drive while listening to your favorite songs.

ALBERTO SAYS...

On the main menu go to the options, or if you're in the GT Mode go to "My Home Settings" and then "Options." Go downward with the directional button to the Hardware menu. Now you must go to the right and find the Audio sub-menu. Scroll down to the personal BGM section and select "Select Personal BGM (Race)." Pick a folder. Then on the same menu you must select "Enable Personal BGM (Race)." Get on the race track and there you have it.

■ **Endurance Series Complete (Secret)** BRONZE ↓

Complete the Endurance series of race events.

GERALD SAYS...

See above.

■ **Excellent Driver** SILVER ↓

Reach A-spec Level 40.

■ **Expert Manager** SILVER ↓

Reach B-spec Level 40.

■ **Expert Series Complete** BRONZE ↓

Complete the Expert series of race events.

<p>■ <b>Extreme Series Complete</b></p> <p>Complete the Extreme series of race events.</p>	BRONZE ↓
<p>■ <b>Finale</b></p> <p>Reach the ending movie.</p> <p>GRR SAYS... You win this when you complete the GT World Championship in the Professional Series.</p>	GOLD ↓
<p>■ <b>Gold Standard</b></p> <p>Get a gold trophy (cup, not the system trophy) in every race event, license test and special event.</p>	GOLD ↓
<p>■ <b>Gran Turismo Karting Experience</b></p> <p>Complete the Gran Turismo Karting Experience special event.</p>	BRONZE ↓
<p>■ <b>Gran Turismo Rally</b></p> <p>Complete the Gran Turismo Rally special event.</p>	BRONZE ↓
<p>■ <b>Grand Finale (Secret)</b></p> <p>Reach the long version of the ending movie.</p>	BRONZE ↓
<p>■ <b>Grand Tour</b></p> <p>Complete the Grand Tour special event.</p>	BRONZE ↓
<p>■ <b>GT-R Official Record</b></p> <p>Achieve a time of 7?29.03 on Nurburgring Nordshleife in a Nissan GT-R 07.</p> <p>ALBERTO SAYS... This is technically an easy Trophy, however less-skilled drivers will find it rather tough. You don't have to buy a Nissan GT-R for this Trophy because it is available in Arcade mode. Select it in Time Trial, go to the Nurburgring Nordshleife track and do those laps. Keep the driving line on and use your ghost to slowly but surely improve your time. Practice makes perfect. But remember, you could always just spend the credits and do it in Career mode.</p>	BRONZE ↓

■ **Half a Century of Cars**

BRONZE ↓

Own at least one car each from the '60s, '70s, '80s, '90s and '00s (tweens).

LASSE SAYS...

This might be very obvious, but a great way to get this is to browse through the Used Cars Dealership as you'll find quite a few classics there. Also, they're much cheaper than new ones. Cars from the '80s, '90s and '00s you'll win just by playing the game for a couple of hours. From the '60s there's often times (at least for me) a Jaguar E-TYPE Coupe '61 in the Used Cars Dealership. An amazing '70s car is the Ferrari 512BB '76, which is available through the Ferrari Dealership.

■ **High Roller**

BRONZE ↓

Bought a seriously expensive car.

LASSE SAYS...

"Seriously expensive" means 100,000+ Cr. If you want it early on, the Ferrari 512BB '76 is an excellent choice (because you can win both the Italian cars only event and the Vintage Super Car event in the Amateur Series with it).

■ **Human Stopwatch**

BRONZE ↓

Complete three consecutive laps and log lap times within 0.2 seconds of the "Best Lap Time".

VERTIGO SAYS...

Start a time trial, choose the Daytona ring, select a relatively slow car so it's easy to drive three laps in a row with the same top speed (could be the factory Mazda RX-7 '90), keep the driving line on because you need to stick exactly to this driving line. Start driving and use first lap to trim the speed. When the start line is crossed after the first round, stick to the driving line and keep the same top speed on your chosen car.

MARTIN SAYS...

The Trophy can be achieved with relative ease in the Amateur Series, Clubman Cup, first race on Tsukuba driving the Nissan mm-R Cup Car '01. I did it in my first go, short course and great car, like driving on rails.

■ **International A Licence**

BRONZE ↓

Complete the International A Licence.

■ **International B Licence**

BRONZE ↓

Complete the International B Licence.

<p>■ <b>International C Licencse</b></p>	<p>BRONZE ↓</p>
<p>Complete the International C Licencse.</p>	
<p>■ <b>Jeff Gordon NASCAR School</b></p>	<p>BRONZE ↓</p>
<p>Complete the Jeff Gordon NASCAR School special event.</p>	
<p>■ <b>Loony Tune</b></p>	<p>BRONZE ↓</p>
<p>Spend an isane amount of money on tuning a car.</p>	
<p>■ <b>Maximum Mileage</b></p>	<p>BRONZE ↓</p>
<p>Buy a used car with 300'000 KM or more on its odometer (listed as travel distance).</p>	
<p>CARLOS SAYS... There's a used Alfa Romeo Giulia with 303,000+ (est.) on the odometer. Be advised the little guy is gonna run you about 111,500 cr.</p>	
<p>■ <b>Multi-Millionaire</b></p>	<p>BRONZE ↓</p>
<p>Possess an insane amount of money.</p>	
<p>AL SAYS... "Insane amount of money" in the US version is 10,000,000 Cr.</p>	
<p>■ <b>National A License</b></p>	<p>BRONZE ↓</p>
<p>Complete the A License.</p>	
<p>■ <b>National B License</b></p>	<p>BRONZE ↓</p>
<p>Complete the B License.</p>	
<p>■ <b>National C License</b></p>	<p>BRONZE ↓</p>
<p>Complete the C License.</p>	

<p>■ <b>Old-Timer</b></p>	<p>BRONZE ↓</p>
<p>Acquire a car manufactured in 1959 or earlier.</p>	
<p>LASSE SAYS...</p> <p>Unfortunately I forgot to write down the specifics on these cars, but they fit the description and are both won in the early part of the game (Beginner Series): Volkswagen Kubelwagen typ82 '44 and the Subaru 360 '58. Though I can't remember the exact details, I can tell you a rule of thumb: If it's a race for old cars, you'll most likely win an old car. This is true for any type of car in Gran Turismo. If you complete the World Classic Car Series B-spec you get a Beetle 1100 Standard (Type-11) '49.</p>	
<p>■ <b>Picture Exclusive (Secret)</b></p>	<p>BRONZE ↓</p>
<p>Take a picture of a special someone as he stands in Kyoto's Gion district.</p>	
<p>GERALD SAYS...</p> <p>There is a guy standing on the left, on the bridge. Zoom to his face and use auto focus. When he turns and looks at you, take a pic and you will earn this Trophy.</p>	
<p>■ <b>Penniless</b></p>	<p>BRONZE ↓</p>
<p>Spend every last Credit you have; you can re-earn credits after meeting this condition.</p>	
<p>LASSE SAYS...</p> <p>So, you've just realized now that you probably should have taken care of this early on, or at least that's what I thought. Spending most of your money is easy, but spending <i>all</i> of your money might seem hard if you have an odd amount of money. You can end up with so little money that it seems like you have no way of getting rid of the last bit. The solution: The Used Cars Dealership. The cars there always have odd prices, so just buy away until you have an even amount of money and the rest should be a piece of cake.</p>	
<p>■ <b>Portraitist (Secret)</b></p>	<p>BRONZE ↓</p>
<p>Take a portrait of a solitary lady who appears on the Marktgasse in Bern.</p>	
<p>GERALD SAYS...</p> <p>This is on the second photo location. There is a lady sitting on a bench with a cell phone. Zoom to her face, use auto focus and when you have a clear shot take the picture to earn this Trophy.</p>	
<p>■ <b>Professional Series Complete</b></p>	<p>BRONZE ↓</p>
<p>Complete the Professional series of Race Events - bronze.</p>	

<p>■ <b>Proud Owner</b></p>	<p>BRONZE ↓</p>
<p>Take and share a photo - bronze.</p>	
<p>■ <b>Race Ready</b></p>	<p>BRONZE ↓</p>
<p>Perform racing modifications on one of your cars.</p>	
<p>■ <b>Red Bull X1 Challenge (Secret)</b></p>	<p>BRONZE ↓</p>
<p>Complete the "Red Bull X1 Challenge" special event.</p>	
<p>GERALD SAYS... See above.</p>	
<p>■ <b>Rollover (Secret)</b></p>	<p>BRONZE ↓</p>
<p>Total a car by flipping it over.</p>	
<p>GERALD SAYS... Done by driving on Trial Mountain and hitting the S-curve before the start/finish line in a fast car.</p>	
<p>GRR SAYS... Forget the last chicane on Trial Mountain. Just head straight onto the embankment on the righthand side of the chicane. That should flip you if you are going fast enough. Also, I have hit a pit lane median at 200+ mph and that worked. I was amazed when I nose flipped that time.</p>	
<p>■ <b>Sebastien Loeb Rally Challenge</b></p>	<p>BRONZE ↓</p>
<p>Complete the Sebastien Loeb Rally Challenge special event.</p>	
<p>■ <b>Sky-High Roller</b></p>	<p>BRONZE ↓</p>
<p>Buy an insanely expensive car.</p>	
<p>■ <b>Speed Demon</b></p>	<p>BRONZE ↓</p>
<p>Achieve a speed of 300km/h.</p>	
<p>TODDATHY SAYS... Go into Arcade mode, use any NASCAR car and choose the Daytona track. Get up to speed to easily</p>	

unlock the Trophy.

LASSE SAYS...

A very easy way to achieve this is by participating in the "Using Drafting to Get Ahead" race (it's under Special Events > Jeff Gordon NASCAR School > Beginner). The race starts with you in a NASCAR car at above 250 km/h, so 300 isn't very far away. You only need to be A-spec Lvl. 2 to get it, though I can't remember exactly when it becomes available.

■ **Super License**

BRONZE ↓

Complete the S License.

■ **Take Your Honda Home (Secret)**

BRONZE ↓

Take a photo of a Honda passing in front of the Honda head office on the Tokyo R246 track.

GERALD SAYS...

Take a photo of any Honda car driving past the building on the lefthand side at the end of the pit exit.

■ **The Air of Experience**

BRONZE ↓

Raise a B-spec driver to the peak of this career.

LASSE SAYS...

Well, this one just takes time... A lot of time! But a good thing to do is to get a good in A-spec (because your B-spec drivers will only be able to drive the cars you already own) and then put a rookie driver in it. Start one of the first races available and go grab yourself a cup of coffee while the B-spec driver wins the race just because the car is so good! (By the way, putting soft tires on the car is a very good idea, else you'll risk that the rookie driver crashes all the time and loses). The Ferrari 512BB is once again a fine choice.

■ **The Right Direction**

BRONZE ↓

Win your first B-spec event race.

■ **Top Gear Test Track**

BRONZE ↓

Complete the Top Gear Test Track special event.

■ **Watch Out for Falling Objects (Secret)**

BRONZE ↓

Make a part of your car fall off while driving.

GERALD SAYS...

Intentionally make a part of your car fall off while driving. This is done a lot easier with the rally cars



where the doors come off more easily.

■ **Win Number One**

BRONZE ↓

Win your first A-spec event race.

■ **Within One Hundredth**

BRONZE ↓

Win a race by a margin of 0.01 seconds or less.

ALBERTO SAYS...

Go into Arcade mode's two-player battle. It helps to pick a short track with a finish line that is not at an angle (so no NASCAR tracks). Choose two identical cars (I choose the Zonda) and set the race to one lap. Do the lap with both cars but do not cross the finish line. Line up the cars as evenly as possible, with the tiniest advantage going to the one-player car. Accelerate both of them at the same time. As long as player one crosses the finish line in .010 seconds or less, the Trophy is as good as yours.

## Gran Turismo 5 Questions & Answers

You've got questions, we've got answers. If you need help with something you didn't find in our guide, we can still help you. We publish the best and most common questions we get here—take a look to see if your question has already been answered. If your problem isn't addressed, feel free to shoot us an e-mail via the link at the bottom of this page.

### Common Questions & Answers

■ **How do I enable vehicle damage in Gran Turismo 5?**

↓

Oddly, only some of Gran Turismo 5's are capable of showing crash damage. There is no option to enable vehicle damage, you just need to be racing with one of the game's "premium" cars. For a complete list of "premium" cars, check out the cars list in our [Extras](#) section.

See: [Gran Turismo 5 cars list](#)

■ **How do I use the in-car, dashboard camera?**

↓

The in-car dash view is only available for "premium" cars in Gran Turismo 5. We'll get a final count eventually, but only 20% or so of the vehicles are premium. The standard level car models do not have an in-car camera view.

■ **Are there motorcycles in the game?**

↓

There are no motorcycles in Gran Turismo 5. If you want a Gran Turismo-style game with motorcycles, you'll need to get Tourist Trophy on PlayStation 2.

■ **How can I get a Porsche 911?**

↓

Sadly, Porsches are not in Gran Turismo. However, a number of vehicles branded RUF are actually

Porsche models tuned by another company and they are available in Gran Turismo 5.

■ [I see cars during races that I can't buy. How do I get them?](#) ↓

Some cars you can only get by winning them as prizes. Other cars are only available at the used car dealership. The available stock at the used car dealership changes every day, so if something you want isn't there you'll need to check back later.

■ [Where do I find a truck to compete in the Pick-Up Truck Challenge?](#) ↓

You won't find a suitable vehicle available in the new car dealerships, but you can win the Dodge RAM 1500 LARAMIE Hemi Quad Cab '04 by completing the International-A license with bronze medals or better. Also be sure to check out the Used Car Dealership and the Online Dealership. Polyphony, the game's developer, has just added the Online Dealership which currently has two trucks available to purchase—we think because they made it difficult to get trucks originally that they'll be available in the Online Dealership for a while.

## Other Helpful Links

[Learn how to drive fast](#)

[The differences between drivetrains \(FF, FR, MR, 4WD\)](#)

[How to properly tune your cars](#)

## Need More Answers?

[E-mail us your question](#)