How to tune properly?

One thing is for sure, there will be a moment where you will have to upgrade any of your rides. But like with any proper sim racer, upgrades do mean that your car has to be tuned in order to adapt to its new stats properly. If you don't have too much knowledge on how the game works regarding tuning, you can grasp an idea on how to by either reading the information the game gives to you, or if you want a more concise way to know how to tune your cars, follow along this guide.

Introduction

When getting a new upgrade for a car, it's important to set it up correctly. What does this mean in practice? It means that it's pretty important (although not necessarily mandatory depending on what were the upgrades) to go and set up the car according to its new stats.

But how do we accomplish this? Simple, you just go to **several** race tracks (mix up the kind of circuits you're choosing, since you'll want to make sure to it drive more or less well in most circuits) and do a couple of laps to feel the car's driving experience.

Once your hands are on the steering wheel, try to look for possible issues you car may have, for example: Does the car suffer from heavy wheelspin while driving on first and/or second gear? The car has trouble at any specific point during the turns? Is it possible to keep a high speed for long stretches?

Then, exit the race and configure the car in order to fix the detected issues, and rinse and repeat until the car feels adequate for **your** driving style.

Tuning is a pretty subjective matter, what works for someone might not be for someone else, hence why it is important to tune the car by yourself, don't ask anyone else to tune it for you. Last but not least, remember that there's no such thing as the perfect setting, so just try to find what works the best for you.

Suspension

Spring rate

- **Front:** its value will depend on the tyres equipped **(softer tyres --> stiffer springs)**, the amount of downforce the car has, the car's drivetrain, and how powerful it is **(powerful engine --> stiffer springs)**.
- **Rear:** its value will be relative to the front **(stiffer/softer rear --> oversteer/understeer)**.

If the front springs are too soft and the rear springs are too stiff, the car will lose stability when entering corners. Meanwhile, if the front is too stiff and the rear is too soft, the car will have trouble to turn around corners.

Ride height

Issue	Solution	Negative consequences
Lack of stability	Low front and high rear	Worse turning ability
Lack of turning ability	High front and low rear	Worse stability

Overall height	Positive consequences	Negative consequences
Low	Increased stability on flat surfaces	Reduced stability on bumpy surfaces
High	Increased stability on bumpy roads	Reduced stability on flat surfaces

On powerful cars, if the height is pretty low sparks will appear. Not to be worried though, since those are purely cosmetical.

Dampers/Shocks

Issue	Place	Solution
Understeer	Corner entry	Soft front bound and stiff rear rebound
Oversteer	Corner entry	Stiff front bound and soft rear rebound
Understeer	Corner exit	Soft rear bound and stiff front rebound
Oversteer	Corner exit	Stiff rear bound and soft front rebound

Camber angle

The camber angle **helps the car grip better in corners**, at the cost of **losing traction in straights and uneven tyre wear**. It is important to not set up extreme values, since higher tyre wear will be added to the list of consequences of modifying the camber angle.

So in general, you want to have **at least 0.5** of camber, but **not more than 4.5**, because at that point the car's braking distances will be noticeably worse.

Toe angle

Issue	Solution	Negative consequences
Lack of stability in straight lines and in corner exits	Positive toe angle	Worse turning ability
Bad turning ability	Negative toe angle	Worse stability in straight lines and in corner exits

Something worth noting, is that rear toe has a bigger impact on the car than front toe. Regardless of that, if you set up some toe-in or toe-out, the tyre will suffer from some higher wear than without any, so if possible try to remedy the issues discussed below by adjusting the car's height.

Stabilisers

Highest value	Impact
Front	Stability
Rear	Turning response

Brakes

Brakes balance

Drivetrain	Highest value
RWD	Front
FF	Rear
4WD	Rear

Drivetrain

Limited-slip differential initial

This sets the general severity of the effect of the *other* LSD values. Make sure to keep this at a value that is adequate for what you're looking for with the other LSD configurations.

Limited-slip differential acceleration

Issue	Solution
Power oversteer	Higher value
Difficulty to turn at corner exits	Lower value

Limited-slip differential decrease

Issue	Solution
Dive-bombing into corners	Higher value
Difficulty to turn at corner entries	Lower value

Remember to set its value alongside the brake balance, since both things are able to fix stability issues while braking.

Gear ratio

- **Step #1:** move the final gear to the right (or to the required value where this setup doesn't hamper the car's acceleration)
- **Step #2:** move the auto setting slider to the right, then back left
- **Step #3:** move the final gear to the left until the point before any of the gears disappears completely from the chart
- **Step #4:** move the 1st gear to the left
- **Step #5:** move the 4th and 5th gears to the right
- **Step #6:** position the 3rd and 2nd gears so the transitions between each gear is as smooth as possible
- **Step #7:** position the 6th gear
- **Step #8:** move the final gear to the left if that wasn't possible during step number 3

Others

Downforce

Circuit	Value
-	Maximum
Test course	Minimum

If you're configuring a car that only has an adjustable downforce for the rear, beware of your configuration, since having a value way too high may impact the car's ability to turn into corners.

AYC controller

This component does not seem to do barely anything good. In fact, a high setting makes the car's handling more unpredictable as it can randomly begin to understeer mid-corner.

ASM

Set it to 0, since this assist does nothing but prevent you from actually driving properly and just bruteforce your way to victory without any kind of effort into your playthrough.

TCS

Type of input	Value
Analog acceleration	0
Digital acceleration	1
Digital steering	2-3

VCD controller

Setting it to 10% it will make any 4WD car turn like a RWD one. Increasing its value is **not** necessary unless the car needs extra stability.

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