

Racing Car Setup Troubleshooting Guide

General Tips

Ride Height

- Set as low as possible to increase aerodynamic efficiency, but ensure it doesn't cause the car to bottom out or stall the aero.
- Lower ride height increases downforce due to better ground effect.
- Higher ride height reduces downforce but may help on bumpy tracks.

Dampers

- Bump setting should be lower than rebound setting.
- Use the lowest possible settings that prevent oscillation or bouncing.
- Higher values make the car more responsive; lower values make it more stable.

Aero

- Use ride height and rake (difference in front and rear ride height) to generate downforce.
- Higher rear ride height (more rake) moves aero balance forward, increasing front grip.
- Lower rake (flatter car) increases rear stability but can reduce rotation.
- Adjust wing values to fine-tune front/rear downforce.

Brake Bias

- For best stability, front tyres should lock just before the rears.
- Move brake bias forward for more front grip under braking.
- Move brake bias backward to reduce front locking or to gain rotation.

Corner Exit - Understeer

All Speeds:

1. Stiffen rear anti-roll bar
2. Increase diff power locking
3. Stiffen rear springs

Mid-High Speed:

- Reduce rear wing angle, or
- Increase front wing angle

Corner Exit - Oversteer

All Speeds:

1. Soften rear anti-roll bar

2. Decrease diff power locking
3. Soften rear springs

Mid-High Speed:

- Increase rear wing angle, or
- Decrease front wing angle

Turn In - Understeer

All Speeds:

1. Adjust front tyre pressures
2. Soften front anti-roll bar
3. Increase front toe out
4. Decrease diff coast locking
5. Soften front springs

Mid-High Speed:

- Reduce rear wing angle, or
- Increase front wing angle

When Braking:

- Move brake bias backward

Turn In - Oversteer

All Speeds:

1. Adjust rear tyre pressures
2. Stiffen front anti-roll bar
3. Decrease front toe out
4. Stiffen front springs

Mid-High Speed:

- Increase rear wing angle, or
- Decrease front wing angle

Braking - Loss of Control

1. Move brake bias forward
2. Decrease slow damper

Braking - Front Tyres Lock

1. Move brake bias backward

Braking - Car Pitches Too Much

1. Stiffen front springs

Braking - Nose Hits Floor

1. Increase ride height
2. Adjust bump stops
3. Stiffen front springs

Braking - Excessive Locking

1. Reduce overall brake pressure (use with caution)

Lift Off Oversteer

1. Increase diff coast locking
2. Increase preload value

Note: Sometimes this is a 'PICNIC' (Problem in Chair, Not in Car). Smooth driver input may help.

Other - Tyres Overheat

All Over:

1. Increase pressures
2. Decrease toe value

On Inside Edge:

- Reduce negative camber

On Outer Edge:

- Increase negative camber

In Middle:

- Reduce pressures

Other - Tyres Cold

1. Decrease pressures
2. Increase toe value

Other - Car Edgy During Weight Transfer

When Braking, Accelerating & Turning:

- Decrease slow damper setting

On Bumps/Curbs:

- Decrease fast damper setting

Other - Car Bounces During Weight Transfer

When Braking, Accelerating & Turning:

- Increase slow damper setting

On Bumps/Curbs:

- Increase fast damper setting

Other - Low Top Speed

1. Reduce wing values to lower drag