**CORNER EXIT GRIP**

**Primary setup goals:** Maximize corner exit grip. Minimize understeer and oversteer at full throttle or the edge of wheelspin.

**Wheel Rate (Spring Rate x Motion Ratio)²**
Stiffer wheel rates allow lower ride height at the cost of reduced grip over bumps (smoother track = stiffer springs.) Front to rear wheel rate ratio should generally equal weight distribution (more weight in rear = stiffer rear springs.)

**Ride Height**
The minimum possible without excessive clearance problems. Rake may directly affect aero balance.

**Tire Pressure**
Adjustment needed for best grip and tire wear. Understeer + or - FRONT

**Camber**
Adjustment needed for best grip and tire wear. Oversteer + or - FRONT

**Anti-Roll Bars**
Adjustment needed for best grip and tire wear. Oversteer Stiffen FRONT and/or soften REAR

**Limited Slip Differential (ACCELERATION Lock)**
The minimum acceleration lock that prevents inside wheelspin in the slowest corner.

**Dampers (HIGH-SPEED Adjustment if separate)**
The minimum rate that avoids chassis oscillation as reduced tire load variation increases grip. Rebound rate typically 1 to 1.5 x compression rate. F/R damper rate ratio should generally equal spring rate ratio.

**CORNER ENTRY BALANCE**

**Secondary goals:** Tune corner entry balance while ideally not compromising corner exit grip (recommended order.)

**Brake Bias**
Set bias so front wheels lock momentarily before rear wheels in straight-line threshold braking.

**Engine Brake Mapping (Off-Throttle)**
- **Understeer**
  - Increase Throttle
  - Decrease Throttle
- **Oversteer**
  - Increase Lock
  - Decrease Lock

**Limited Slip Differential PRELOAD & DECELERATION Lock**
- **Understeer**
  - Increase Lock
  - Soften FRONT and/or stiffen REAR
- **Oversteer**
  - Decrease Lock
  - Stiffen FRONT and/or soften REAR

**Dampers (LOW-SPEED Adjustment Only)**
- **Understeer**
  - Stiffen FRONT and/or soften REAR
- **Oversteer**
  - Soften FRONT and/or stiffen REAR

**Dampers (LOW-SPEED Adjustment again)**
- **Understeer**
  - Bias Rearward
- **Oversteer**
  - Bias Forward

**Anti-Roll Bars (again)**
- **Understeer**
  - Soften FRONT and/or stiffen REAR
- **Oversteer**
  - Stiffen FRONT and/or soften REAR

**DRIVER PREFERENCE**

**Tertiary goals:** Within a reasonable range, these have minimal impact on grip and can be tuned based on driver preference.

**Rear Toe**
Rear toe out can greatly increase turn-in rate. Recommend 0 to minimal toe in. High settings increase tire heat and drag.

**Front Toe**
Front toe in increases turn-in rate and strengthens centering force on steering wheel. Recommend 0 to minimal toe out.

**Terminology definitions available in our Motorsport Terms Glossary on our site.**