



Brake Tek 3 Objectives:

1. Participants will know how the benefits of a balanced brake system:
 2. Participants will know and understand the **differences** between front bias and rear bias
 3. Participants will know and understand how to change the bias of their brake system
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Some advantages of a balanced brake system

1. A balanced brake system all 4 tires would lock up at the same time. (nearly impossible, but this is the ideal)
2. A balanced system is faster=Lower Lap times.
3. Allows all 4 tires to work at their maximum stopping ability
4. Better neutral corner entry
5. Even brake temps, cooler brakes, more even pad wear and longer lasting pads.

Front bias Front locks up first-Corner entry push or under steer

Rear bias-Rear locks up first-Corner entry loose or over steer

Factors that increase front bias

- Increased front rotor diameter
- Increased front brake pad coefficient of friction
- Increased front brake caliper piston diameter
- Decreased rear rotor diameter
- Decreased rear brake pad coefficient of friction
- Lower center of gravity
- More static weight on the rear axle
- Less static weight on the front axle
- Less sticky tires (lower deceleration limit)

Factors that increase rear bias

- Increased rear rotor diameter level
- Increased rear brake pad coefficient of friction
- Increased rear brake caliper piston diameter
- Decreased front rotor diameter
- Decreased front brake pad coefficient of friction
- Decreased front caliper piston diameter
- Higher center of gravity
- Less static weight on the rear axle
- More static weight on the front axle
- More Sticky tires (higher deceleration limit)