

| SHOCK UPPER POSITION (SHOCK TOWER) | | |
|------------------------------------|-------------|--|
| Front Shock Tower | Outer holes | faster steering, better on bumps and jumps |
| | Inner holes | easier to drive, more side bite, slower initial steering |
| Rear Shock Tower | Outer holes | less mid corner grip, more traction into corner, squares up better on exit |
| | Inner holes | more steering into corner, more mid corner grip |

| SHOCK LOWER POSITION (ARM) | | |
|----------------------------|-------------|--|
| Front Arm | Outer holes | increases stability, easier to drive, bigger turn radius |
| | Inner holes | faster steering, better for bumps and jumps |
| Rear Arm | Outer holes | more stability, more lateral grip in turns |
| | Inner holes | better for bumps and jumps, less side bite, more exit traction |

| FRONT ROLL CENTER | |
|----------------------------------|---|
| Upper holes (lower roll center) | decreases steering into corner, car is less responsive, use in high-grip conditions |
| Lower holes (higher roll center) | increases steering into corner, car is more responsive |

| REAR UPPER ROLL CENTER | |
|------------------------|-------------------------|
| Upper holes | lower rear roll center |
| Lower holes | higher rear roll center |

| FRONT TRACK-WIDTH | |
|-------------------|---|
| WIDER | decreases front grip, increases understeer, slower steering response, use to avoid traction rolling |
| NARROWER | increases front grip, decreases understeer, faster steering response |

| REAR TRACK-WIDTH | |
|------------------|---|
| WIDER | increases rear grip at corner entry, increases high-speed on throttle steering, use to avoid traction rolling |
| NARROWER | increases grip at corner exit, increases high-speed understeer |

| CASTER | |
|-------------|---|
| Less Caster | decreases straight-line stability, increases off-power steering at corner entry, increases suspension efficiency |
| More caster | increases straight-line stability, decreases off-power steering at corner entry, makes the car more stable through bumpy track conditions |

| FRONT TOE | |
|---|---|
| INCREASING (more toe-in) | makes car easier to drive |
| DECREASING (less toe-in, or more toe-out) | decreases understeer, increases steering at corner entry, faster steering response, less stable under acceleration, makes car more difficult to drive |

| REAR TOE | |
|--------------------------|---|
| INCREASING (more toe-in) | increases understeer, more stable exiting on-power at corner exit and braking, less chance of losing rear traction, decreases top speed |
| DECREASING (less toe-in) | less stable at on-power corner exit and braking, more chance of losing rear traction, increases top speed |

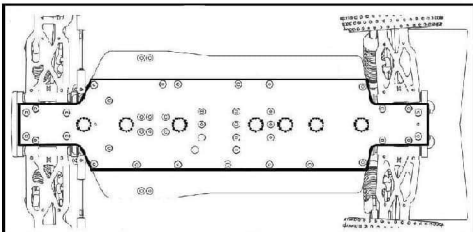
| ARM SHIM - WHEELBASE | |
|--|--|
| ARMS IN THE FRONT = WEIGHT IN THE REAR = LOW TRACTION | |
| ARMS IN THE REAR = WEIGHT IN THE FRONT = HIGH TRACTION | |

| ACKERMANN | |
|--------------------|---|
| Forward holes (2) | quikens initial steering response, car reacts faster to steering input, better suited to small and tight tracks |
| Rearward holes (1) | smoothen out steering response, car reacts smoothly, better suited to smooth flowing tracks with high speed corners |

| CHASSIS | |
|-----------------|---|
| ALU CHASSIS 2mm | STANDARD |
| ALU CHASSIS 3mm | extra-stiff, increases stability, increases cornering speed, super strong |

| SIDE GUARDS | |
|-------------|----------------------------|
| MEDIUM | for low & medium traction |
| HARD | for medium & high traction |

| CHASSIS FLEX | |
|---|--|
| The more screws used, stiffer the car is and less screws used, softer the car is. (Use stiff setting for high-traction tracks where a lot of steering and car response is required) | |



FRONT
REAR

more steering

easier to drive, less front traction

LONGER BUSHINGS

DOWNSTOP

adjust front roll center: more shims = higher front roll center

Higher downstop value: less rearward weight transfer, better on smooth tracks, more on-power steering, more responsive in direction change.

Lower downstop value: more rearward weight transfer, increases rear traction on corner exit, better on bumpy tracks.

Inner hole increases steering and decreases stability into corner, increases on-power traction slightly

Outer hole decreases rear camber gain, increases stability, slows down the car's responsiveness

Higher downstop value: less forward transfer, better on smooth tracks

Lower downstop value: less stable under braking, increases steering on corner entry, better on bumpy tracks, more turn-in

OFFSET

It effects the car track-width

CASTER

BUMP STEER SHIMS

More shims
less steering in mid-corner, smoother steering response, better on rough bumpy tracks

Less shims
more steering in mid-corner, easier to control on smooth

SHOCK MOUNTING

FRONT suited to high traction

REAR suited to low traction

WING CUTTING LINE

OFFSET

It effects the car track-width

FRONT TOE

OUT

ARM SHIM WHEELBASE

UPPER PLATE

Standard

Graphite 2mm: adjust chassis flex

Steering Brace: increases steering and improves landing

BUMP STEER SHIM

SERVO SAVER

SOFTER
less steering

STIFFER
more steering with a quicker reaction

REAR TOE

IN

GRAPHITE FOR REAR BRACE

reduces rear traction

REAR BRACE

HARD
decreases traction

MEDIUM
increases traction

ARM SHIM WHEELBASE

FRONT CAMBER

More negative more steering

Less negative less steering

LOWER SUSPENSION ARMS

COMPOSITE for low and medium traction tracks

GRAPHITE for high traction tracks, increase cornering speed, increase stability

| RIDE HEIGHT | |
|------------------------|--|
| Decreasing ride height | increases overall stability, better on smooth tracks |
| Increasing ride height | decreases overall stability, better on bumpy tracks (prevents bottoming) |
| Front higher than rear | increases weight transfer to the rear on-power, increases stability, decreases steering |
| Front lower than rear | increases weight transfer to front on-power, increases steering, decreases rear traction |

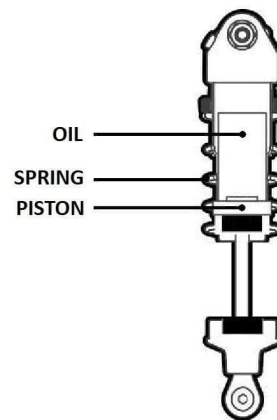
| DIFERENTIAL | | | | | |
|----------------------|--|--------------------|--|----------------------|--|
| FRONT | | CENTRAL | | REAR | |
| GEAR DIFF (standard) | Softer oil: increases steering into corners Harder oil: increases steering out of corners | SLIPPER (standard) | better acceleration, more on-power steering | GEAR DIFF (standard) | Softer oil: increases rear traction and more rotation in low speed corners Harder oil: increases on-power steering, decreases rear traction while cornering |
| BALL DIFF | increases traction, for low-traction tracks | GEAR DIFF | increases on-power steering and increases traction | BALL DIFF | increases traction, for low-traction tracks |

| ANTI-ROLL BAR | |
|------------------------|---|
| FRONT | |
| Softer (stinner wire) | increases front chassis roll, increases front traction, decreases rear traction, increases off-power steering |
| Stiffer (thicker wire) | decreases front chassis roll, decreases front traction, decreases off-power steering at corner entry, quicker steering response |
| REAR | |
| Softer (stinner wire) | increases rear chassis roll, increases rear traction, decreases front traction, decreases on-power steering |
| Stiffer (thicker wire) | decreases rear chassis roll, decreases rear traction, increases front traction, increases on-power steering, quicker steering response in high speed chicanes |

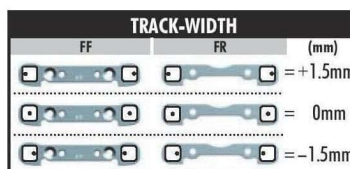
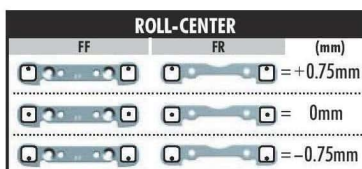
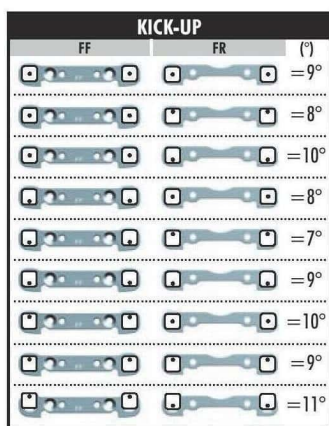
SCHOCKS

| | SHOCK OIL | PISTON HOLES | EFFECT |
|---------------------|-----------|--------------------------|---|
| FRONT SHOCKS | | | |
| SOFTER DAMPING | thinner | more holes/larger holes | increases steering on low grip surface, slower steering response, decreases initial steering at corner entry, increases oversteer at corner exit/under acceleration |
| HARDER DAMPING | thicker | less holes/smaller holes | faster steering response, decreases steering on low grip, increases initial steering at corner entry, increases understeer at corner exit/under acceleration |
| REAR SHOCKS | | | |
| SOFTER DAMPING | thinner | more holes/larger holes | increases rear grip at corner exit/under acceleration |
| HARDER DAMPING | thicker | less holes/smaller holes | decreases rear grip at corner exit/under acceleration |

| SHOCK SPRING | CHARACTERISTICS |
|--------------|--|
| SOFTER | more chassis roll, more traction, better on bumpy tracks, increases chance of bottoming out when landing |
| STIFFER | less chassis roll, less traction, more responsive, better on smooth tracks, decreases chance of bottoming out when landing |



FRONT ECCENTRIC BUSHINGS



TOTAL CASTER=C-HUB CASTER+ KICK UP

| C-HUB CASTER | KICK-UP | | | | |
|--------------|---------|-----|-----|-----|-----|
| | 7° | 8° | 9° | 10° | 11° |
| 6° | 13° | 14° | 15° | 16° | 17° |
| 9° | 16° | 17° | 18° | 19° | 20° |
| 12° | 19° | 20° | 21° | 22° | 23° |

The tables describe the amounts of adjustment using the center and outside positions of the eccentric bushings.

The track-width is directly influenced by the size of the wheels and tires used.

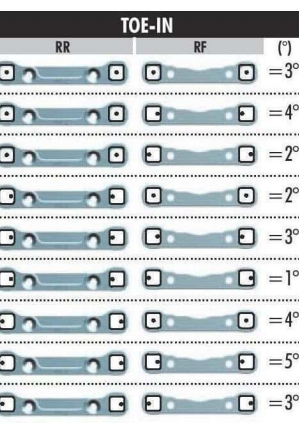
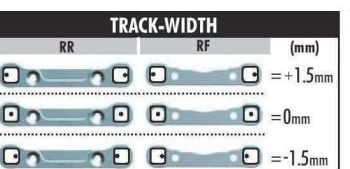
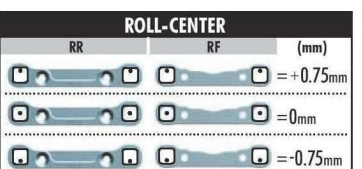
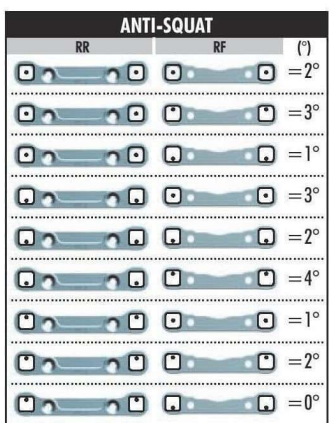
Caster is the angle between the steering pivot axis and the vertical plane. Caster is affected not only by the C-Hub caster, but also by the front kick-up angle relative to the flat chassis bottom. The table indicates how kick up angle effects total caster.

| ROLL CENTER | |
|--------------------|---|
| Lower roll center | decreases steering into corner, car is less responsive, use in high-grip conditions |
| Higher roll center | increases steering into corner, car is more responsive |

| TRACK WIDTH | |
|-------------|--|
| Wider | less steering and less traction roll |
| Narrower | increases front grip, decreases understeer, faster steering response |

| KICK-UP | |
|--------------|--|
| More kick-up | more weight transfer to the front of the chassis off-throttle or under braking, chassis compresses or drop more off throttle or under braking, handling is improved on bumpy tracks, decreased steering response |
| Less kick-up | less weight transfer to the front of the chassis off-throttle or under braking, chassis compresses or drops less off-throttle or under braking, handling is improved on smooth tracks, increased steering response |

REAR ECCENTRIC BUSHINGS



The tables describe the amounts of adjustment using the center and outside positions of the eccentric bushings.

The track-width is directly influenced by the size of the wheels and tires used.

| ANTI-SQUAT | |
|--|---|
| Less anti-squat (flatter arm) | increases rear traction off-power, decreases rear traction on-power, better on a bumpy track |
| More anti-squad (leaning more backwards) | increases rear traction during acceleration, decreases rear traction off-power, better on smooth high grip tracks, handle better numps when landing |

| ROLL CENTER | |
|--------------------|--|
| Lower roll center | more off power and low speed corner grip, but less rotation in corners |
| Higher roll center | more willing to rotate - the higher it is, more it will be able to be pushed out |

| TRACK-WIDTH | |
|-------------|---|
| Wider | increases rear grip at corner entry, increases high-speed on-throttle steering, use to avoid traction rolling |
| Narrower | increases grip at corner exit, increases high-speed understeer |

| TOE | |
|--------------------------|--|
| Increasing (more toe-in) | increases understeer, more stable exiting on-power at corner exit and breaking, less chance of losing rear traction, decreases top speed |
| Decreasing (less toe-in) | less stable at on-power corner exit and breaking, more chance of losing rear traction, increases top speed |