

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 CAMBER LINK LOCATION	
OUTER HOLE	more steering into the corner, car is more responsive
INNER HOLE	more steering out of the corner

FRONT 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
REAR 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

STEERING BLOCK	
MEDIUM	more aggressive
HARD	less steering on-power

CASTER BLOCK	
MEDIUM	absorbs bumps better, easy to drive
HARD	more steering, more aggressive

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

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

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

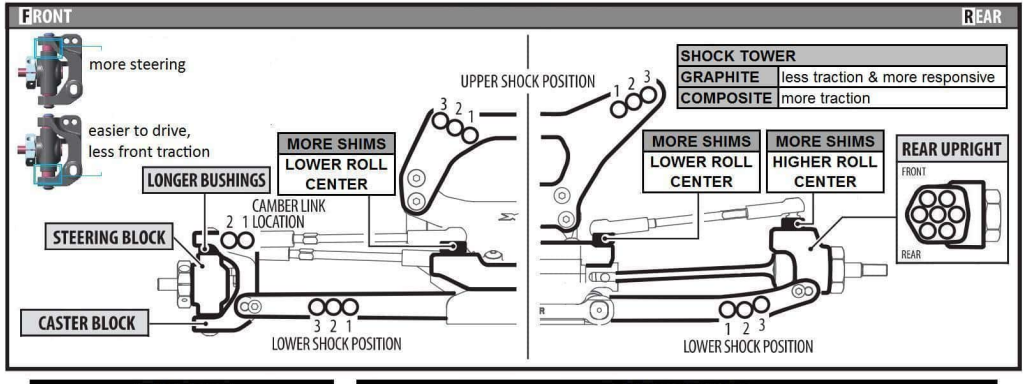
FRONT ROLL CENTER HOLDER	
MEDIUM	generates more traction, absorbs bumps better
HARD	more precise
ALU	more precise steering and increased strength

BATTERY STRAP	
COMPOSITE	for very-low to medium traction conditions
GRAPHITE	for high- and very-high traction conditions

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

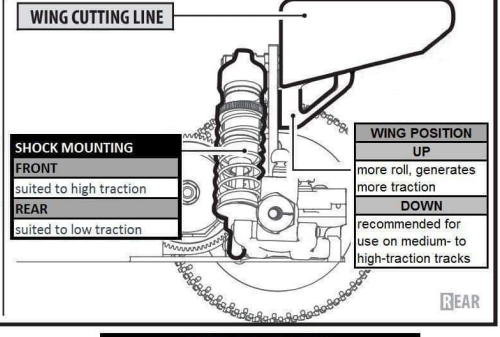
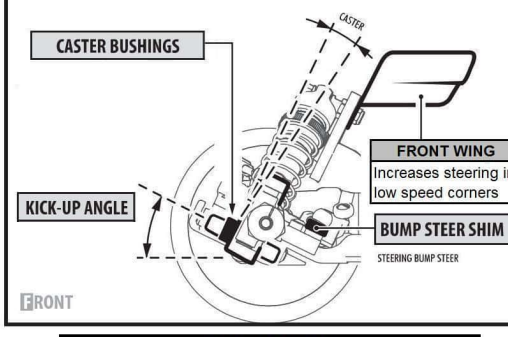
SIDE GUARDS	
MEDIUM	for low & medium traction
HARD	for medium & high traction

REAR ANTI-ROLL BAR (OPTION)	
Softer (sthinner 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



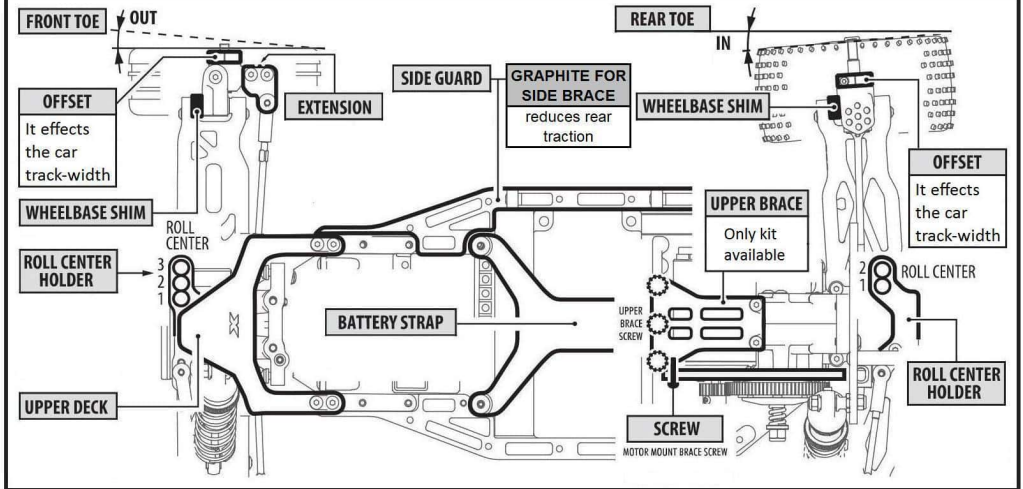
REAR UPRIGHT	
MEDIUM	for very-low & low traction
HARD	for medium & high traction
ALU	for very-high traction

REAR UPRIGHT HOLES			
HOLES IN FRONT	more rear grip	INNER HOLES	increases steering and decreases stability into corner, increases on-power traction slightly
HOLES IN REAR	less rear grip	OUTER HOLES	decreases rear camber gain, increases stability, slows down the car's responsiveness



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 tracks

WING CUTTING LINE	
+	more traction
0	initial position
-	less traction

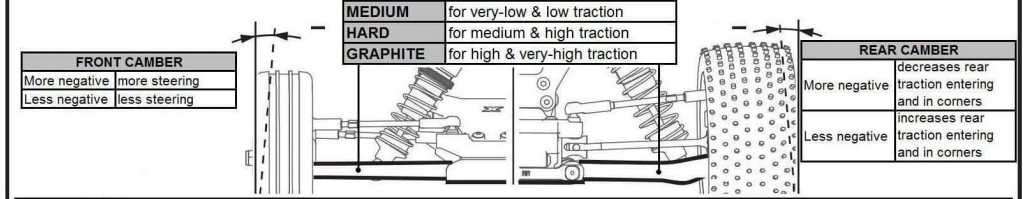


EXTENSION	
2 SLOTS	turns outside wheels less, easier to drive, less aggressive
1 SLOT	between 2 and 0
0 SLOTS	most aggressive steering, suggested for very technical small tracks

UPPER DECK	
MEDIUM	for very-low, low and medium traction tracks, generates more traction, absorbs bumps better
HARD	for high & very-high traction tracks, makes the car more precise

REAR ROLL CENTER HOLDER	
COMPOSITE	for low, medium & high traction
ALU	for very-high traction

MOTOR MOUNT SCREW	
YES	less chassis flex
NO	more chassis flex



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

## TRANSMISSION ADJUSTMENT

<b>SLIPPER</b>	tighter slipper makes the car accelerates faster and it's more aggressive but if it's tighten too much you risk front of the car getting up and you loose control over the car
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<b>GEAR DIFF</b>	recommended for medium-high traction, car is more aggressive
<b>OILS</b>	SOFTER oil increases rear traction HARDER oil increases on-power steering



<b>BALL DIFF</b>	recommended for low traction, more smooth, generates more grip
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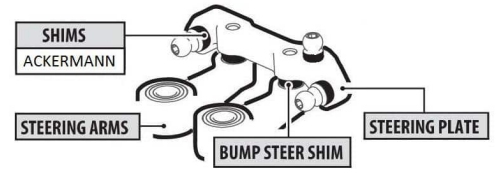


ACKERMANN	
less shims	smoothens out steering response, car reacts smoothly, better suited to smooth flowing tracks with high speed corners
more shims	quiskens initial steering response, car reacts faster to steering input, better suited to small and tight tracks

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 tracks

STEERING ARMS	
COMPOSITE	easy to drive and more forgiving
ALU	more aggressive, more precise steering

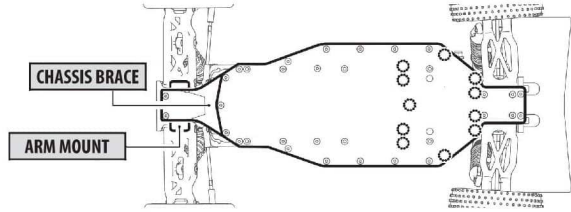
STEERING PLATE	
COMPOSITE	easy to drive, more forgiving, less steering
ALU	more aggressive, more steering, more precise steering



CHASSIS BRACE	
MEDIUM	for very-low, low & medium traction, generates more traction
HARD	for high- & very-high traction tracks, more stable and less traction on front suspension

ARM MOUNT	
COMPOSITE	generates more traction in front
ALU	makes car more stable
BRASS	adds more weight in front, less weight transfer
heavier mount adds steering & eliminates front to go up under acceleration	

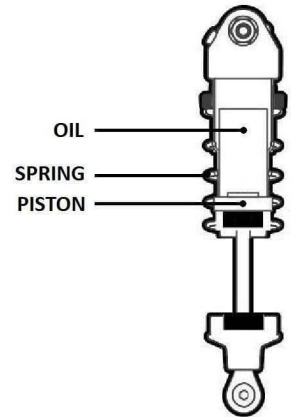
CHASSIS FLEX	
The more screws used, stiffer the car is and less screws used, softer the car is. (Use stiff setting for high-traction tracks where a lot of steering and car response is required)	



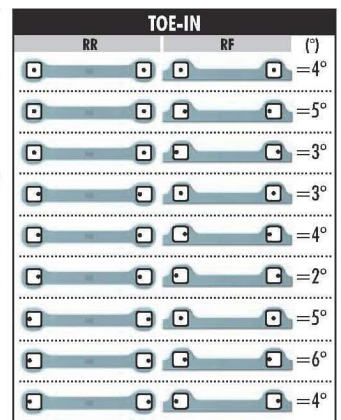
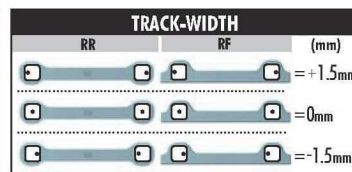
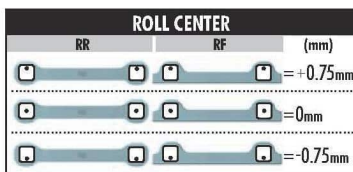
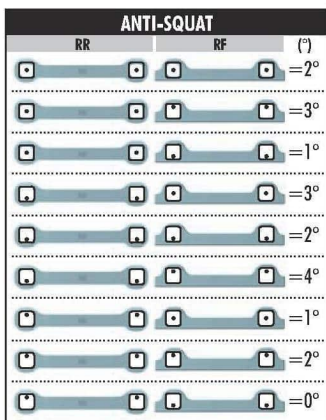
## SCHOCKS

	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



## REAR ECCENTRIC BUSHINS



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

The tables describe the amounts of adjustment using the center and outside positions of the eccentric bushings. The middle position eccentric bushings allow for finer adjustment increments.

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