

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

UPPER ARM SHIMS	With the shims you adjust the cars front camber and track-width
LOWER ARM SHIMS	

REAR ROLL CENTER	
Upper holes	lower rear roll center
Lower holes	higher rear roll center
Inner holes	more rear traction, less cornering speed, less rotation, car rolls more
Outer holes	less rear traction, more cornering speed, more rotation, car rolls less

UPRIGHT ROLL CENTER	
Inner holes	increases steering and decreases stability into corner, increases on-power traction slightly
Outer holes	decreases rear camber gain, increases stability, slows down the car's responsiveness

LOWER ROLL CENTER	
Upper hole (2)	lower roll center
Lower hole (1)	higher roll center
This change also effects the rear ride height.	

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

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

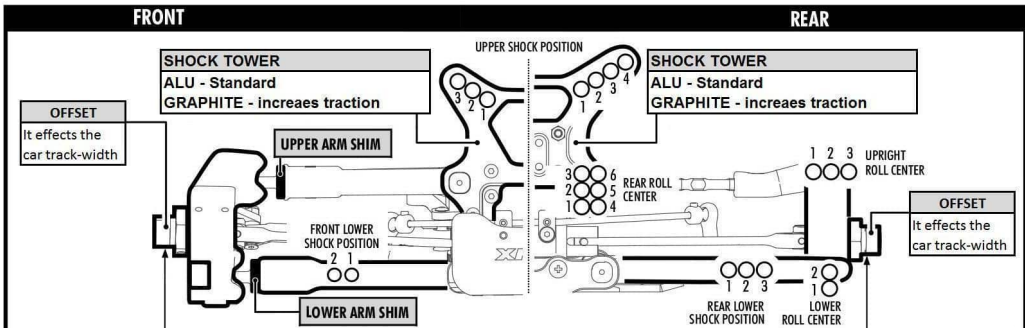
FRONT TOE	
INCREASING (more toe-in)	makes car easier to drive and more stable
DECREASING (more toe-out)	increases steering at corner entry, faster steering response, less stable under acceleration, makes car more difficult to drive

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

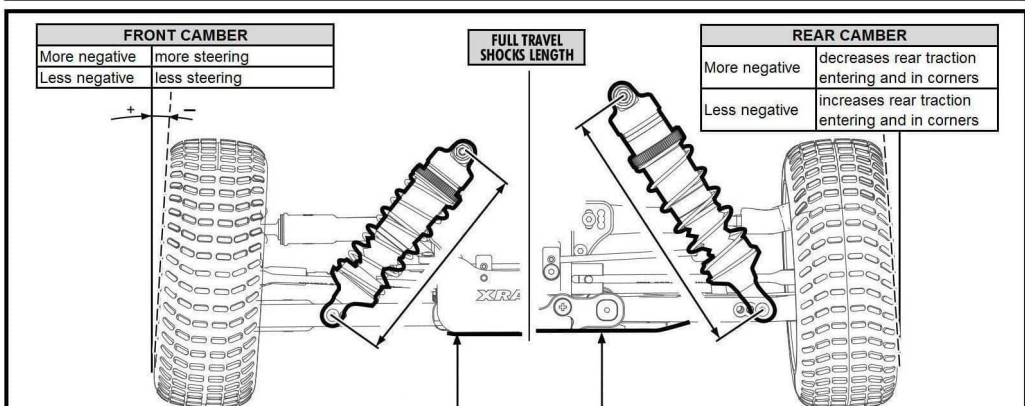
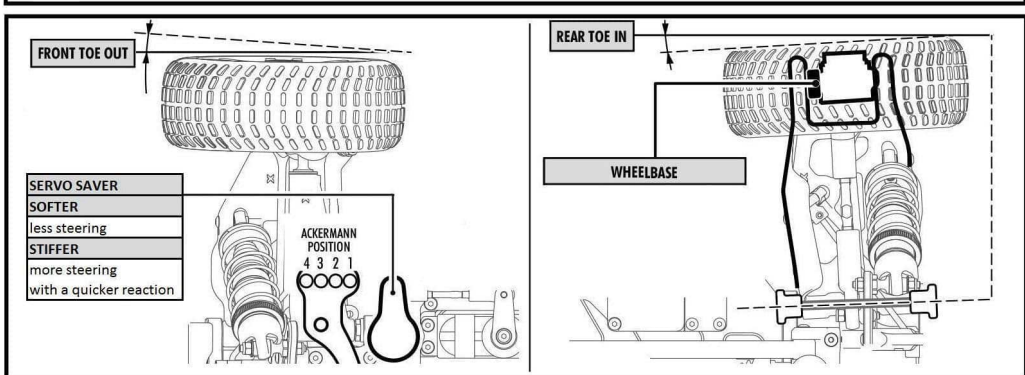
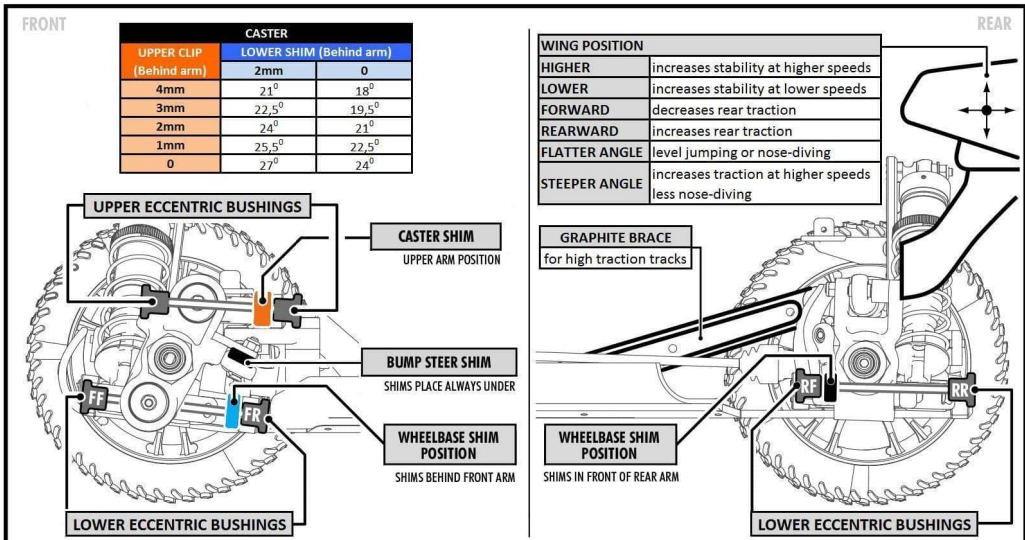
ACKERMANN	
Forward holes (4)	quiskens initial steering response, car reacts faster to steering input, better suited to small and tight tracks
Rearward holes (1)	smoothen out steering response, car reacts smoothly, better suited to smooth flowing tracks with high speed corners

FULL TRAVEL SHOCKS LENGHT	
With the shock lenght you adjust the downstop of the car	
Longer	Lower downstop value
Shorter	Higher downstop value

DIFERENTIAL	
FRONT	
Thinner oil	increases steering into corners
Thicker oil	increases steering out of corners
CENTER	
Thinner oil	car is easier to drive, recommended for rough tracks, more off-power steering, less on power steering, less forward to traction. If you go too low, you can burn the oil, so always think about temperature, race length, traction,
Thicker oil	car accelerates faster / more forward traction, more on power steering, less off-power steering. It makes car however more difficult to drive, so always think about that when going to thicker oil
REAR	
Thinner oil	increases rear traction and more rotation in low speed corners
Thicker oil	increases on-power steering, decreases rear traction while cornering



FRONT DOWNSTOP	
Higher front downstop	less rearward weight transfer, better on smooth tracks, more on-poeer steering, more responsive in direction
Lower front downstop	more rearward weight transfer, increases rear traction on corner exit, better on bumpy tracks
REAR DOWNSTOP	
Higher rear downstop	less forward transfer, better on smooth tracks
Lower rear downstop	less stable under braking, increases steering on corner entry, better on bumpy tracks, more turn-in



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

ANTI-ROLL BAR	
FRONT	
Softer (thinner 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 (thinner 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**

**FRONT**

<b>THINNER</b>	increases steering on low grip surface, slower steering response, decreases initial steering at corner entry, increases oversteer at corner exit/under acceleration
<b>THICKER</b>	faster steering response, decreases steering on low grip, increases initial steering at corner entry, increases understeer at corner exit/under acceleration

**REAR**

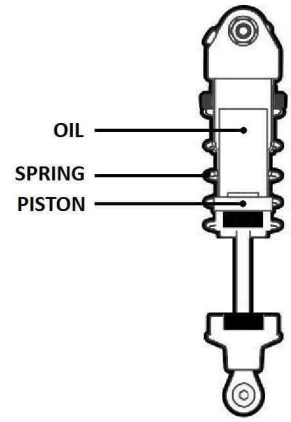
<b>THINNER</b>	increases rear grip at corner exit/under acceleration
<b>THICKER</b>	decreases rear grip at corner exit/under acceleration

**PISTON**

<b>SMALLER HOLES</b>	creates more pack - more pack should be used when running on high speed, high grip tracks and tracks with big jumps
<b>LARGER HOLES</b>	creates less pack - less pack should be used on bumpy, loose tracks

**SHOCK SPRING**

<b>SOFTER</b>	more chassis roll, more traction, better on bumpy tracks, increases chance of bottoming out when landing
<b>STIFFER</b>	less chassis roll, less traction, more responsive, better on smooth tracks, decreases chance of bottoming out when landing



**FRONT ECCENTRIC BUSHINGS**

KICK-UP (°)		0.5	1
FF	FR		
		9°	
		8,5°	8°
		9,5°	10°
		8,5°	8°
		8°	7°
		9°	
		9,5°	10°
		9°	
		10°	11°

ROLL-CENTER (mm)		0.5	1
FF	FR		
		+0,5	+1
		0	
		-0,5	-1

TRACK-WIDTH (mm)		0.5	1
FF	FR		
		307	306
		308	
		309	310

UPPER ROLL-CENTER (mm)		0.5	1
FF	FR		
		+0,5	+1
		0	
		-0,5	-1

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

**UPPER ECCENTRIC BUSHINGS (upper roll center)** are responsible for setting the front roll center. Also by using the upper eccentric bushings you can adjust the front **CAMBER**, by moving the bushings more outside or inside.

KICK-UP	
<b>More kick-up</b>	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
<b>Less kick-up</b>	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

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

TRACK WIDTH	
<b>Wider</b>	less steering and less traction roll
<b>Narrower</b>	increases front grip, decreases understeer, faster steering response

**REAR ECCENTRIC BUSHINGS**

ANTI-SQUAT (°)		0.5	1
RR	RF		
		3°	
		3,5°	4°
		2,5°	2°
		3,5°	4°
		3°	
		4°	5°
		2,5°	2°
		3°	
		2°	1°

ROLL-CENTER (mm)		0.5	1
RR	RF		
		+0,5	+1
		0	
		-0,5	-1

TRACK-WIDTH (mm)		0.5	1
RR	RF		
		307	306
		308	
		309	310

TOE-IN (°)		0.5	1
RR	RF		
		3°	
		3,5°	4°
		2,5°	2°
		2,5°	2°
		3°	
		2°	1°
		3,5°	4°
		4°	5°
		3°	

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

ANTI-SQUAT	
<b>Less anti-squat (flatter arm)</b>	increases rear traction off-power, decreases rear traction on-power, better on a bumpy track
<b>More anti-squat (leaning more backwards)</b>	increases rear traction during acceleration, decreases rear traction off-power, better on smooth high grip tracks

ROLL CENTER	
<b>Lower roll center</b>	decreases rear traction into corner, increases steering into corner, use to avoid traction rolling mid-corner and corner exit
<b>Higher roll center</b>	increases on-power traction, use to avoid traction rolling at corner entry, use under low-traction conditions

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

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