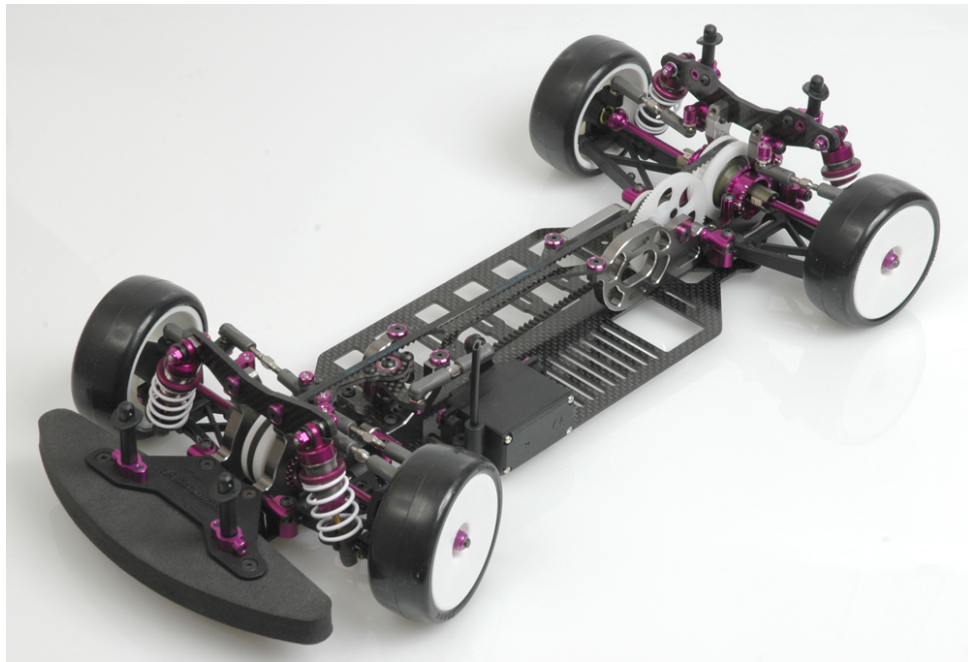




Why follow when you can lead?

Settings Guide v1.0



SPRING & SHOCK

SPRING SELECTION	
Stiffer Springs	<ul style="list-style-type: none"> Makes the car more responsive Car reacts faster to steering inputs Stiff springs are suited for tight, high traction tracks that aren't to bumpy Usually when you stiffen all of the springs, you lose a small amount of steering, and reduce chassis roll
Softer Springs	<ul style="list-style-type: none"> Makes the car feel as if it has a little more traction in low grip conditions Better for bumpy and very large & open tracks Springs that are too soft make the car feel sluggish & slow, allowing more chassis roll

Stiffer Front Springs	<ul style="list-style-type: none"> Increases mid-corner & corner-exit understeer Increases steering under braking Increases the car's responsiveness, but makes it more "nervous"
Softer Front Springs	<ul style="list-style-type: none"> Makes the car have more steering, especially mid-corner & at corner exit Front springs that are too soft can make the car understeer under braking
Stiffer Rear Springs	<ul style="list-style-type: none"> Makes the car have less rear traction, but more steering mid-corner & at corner exit
Softer Rear Springs	<ul style="list-style-type: none"> Makes the car have more rear side traction mid-corner, through bumpy sections, & while accelerating (forward traction)
SHOCK POSITION ADJUSTMENT	
Shocks More Inclined	<ul style="list-style-type: none"> Makes the spring & damping softer Makes the car more progressive, giving a smoother feel & more side bite
Shocks More Upright	<ul style="list-style-type: none"> Makes the spring & damping harder Makes the car have a more direct feel, but less side bite

SPRING CHART							
Hara Spring Rates	gF/mm	lb/in	HPI Spring Rates	gF/mm	lb/in	Schumacher Spring Rates	lb/in
66961(yellow)	230	12.89	6542(blue)	273	15.30	U2823(white)	14.00
66962(white)	250	13.98	6543(silver)	302	16.90	U2824(blue)	16.00
66963(black)	270	15.11	6548(pink)	320	18.00	U2825(green)	18.00
66964(purple)	290	16.24	6544(gold)	340	19.20	U2826(red)	20.00
66965(red)	310	17.36	6545(white)	363	20.30	U2827(yellow)	23.00
			6546(yellow)	388	21.70	U2828(violet)	27.00
			6547(red)	400	22.40		

SHOCK DAMPING			
Front Shocks			
	Shock Oil	Piston Holes	Effect
Softer Damping	Thinner	More Holes	<ul style="list-style-type: none"> Slower steering response Decreases initial steering @ corner entry Increases oversteer @ corner exit/under acceleration
Harder Damping	Thicker	Less Holes	<ul style="list-style-type: none"> Faster steering response Increases initial steering @ corner entry Increases understeer @ corner exit/under acceleration
Rear Shocks			
Softer Damping	Thinner	More Holes	<ul style="list-style-type: none"> Faster steering response Increases rear grip @ corner exit/under acceleration Decreases rear grip under braking
Harder Damping	Thicker	Less Holes	<ul style="list-style-type: none"> Slower steering response Decreases rear grip @ corner exit/under acceleration Increases rear grip under braking

ANTI-ROLL BAR

FRONT ANTI-ROLL BAR ADJUSTMENT	
EFFECT-Front anti-roll bar affects mainly off-power steering @ corner entry	
Stiffer	<ul style="list-style-type: none"> • Decreases chassis roll • Decreases front grip (increases rear grip) • Decreases off-power steering @ corner entry • Quicker steering response
Softer	<ul style="list-style-type: none"> • Increases chassis roll • Increases front grip (decreases rear grip) • Increases off-power steering @ corner entry • Slower steering response

REAR ANTI-ROLL BAR ADJUSTMENT	
EFFECT-Rear anti-roll bar affects mainly on-power steering & stability in mid-corner & at corner exit	
Stiffer	<ul style="list-style-type: none"> • Decreases chassis roll • Decreases rear grip (increases front grip) • Increases on-power steering • Quicker steering response in high speed chicanes
Softer	<ul style="list-style-type: none"> • Increases chassis roll • Increases rear grip (decreases front grip) • Decreases on-power steering

ROLL CENTER

FRONT ROLL CENTER ADJUSTMENT Front RC has most effect on on-throttle steering during mid-corner & corner exit	
Front Roll Center	Effect
Lower	<ul style="list-style-type: none"> • Increases on throttle steering • Decreases car's responsiveness • Decreases weight transfer @ front of car, but increases grip • Increases chassis roll • Better on smooth, high traction tracks with long fast corners
Higher	<ul style="list-style-type: none"> • Decreases on throttle steering • Increases car's responsiveness • Increases weight transfer @ front of car, but decreases grip • Decreases chassis roll • Better on tracks with quick direction changes (chicanes)

REAR ROLL CENTER ADJUSTMENT Rear RC affects on- & off-throttle situations in all cornering stages	
Rear Roll Center	Effect
Lower	<ul style="list-style-type: none"> • Increases on-throttle grip • Decreases weight transfer @ rear of car, but increases grip • Increases grip, decreases tire wear • Increases chassis roll • Better on low traction tracks
Higher	<ul style="list-style-type: none"> • Decreases on-throttle steering • Increases weight transfer @ front of car, but decreases grip • Increases car's responsiveness • Decreases chassis roll • Better on tracks with quick direction changes (chicanes)

ROLL CENTER ADJUSTMENT
<p>Adjusting the lower position (arms) will produce the largest change in RC. Lowering arm inner hinge pin lowers RC. Raising arm inner hinge pin raises RC.</p>
<p>Adjusting the upper position (camber links) to fine tune you're RC. Adjustments can be made to the angle & length of the camber links. Note that adjusting the upper link angle or length will affect the amount of camber gain/rise. The more angled the camber link, or shorter the length, the more camber gain the wheels will have as the chassis rolls. Changing the camber link angle affects grip throughout the entire corner, while changing the length has more affect in the middle of the corners.</p>
<p>Lowering the inner camber link position raises the RC. Raising the inner camber link position lowers the RC.</p>

DROOP

DROOP ADJUSTMENT	
Front Droop	
Less Front Droop	<ul style="list-style-type: none"> Decreases front chassis upward travel on-throttle Increases high-speed steering Increases "initial" on-throttle understeer Better on smooth tracks
More Front Droop	<ul style="list-style-type: none"> Increases upward chassis travel on-throttle Decreases high-speed steering Decreases "initial" on-throttle understeer Better on bumpy tracks
Rear Droop	
Less Rear Droop	<ul style="list-style-type: none"> Decreases chassis rear upward travel off-throttle or under braking Increases stability under braking Better on smooth tracks
More Rear Droop	<ul style="list-style-type: none"> Increases rear chassis upward travel off-throttle or under braking Increases steering in slow corners Better on bumpy tracks

CASTER/CAMBER

CASTER ADJUSTMENT	
Less Caster Angle	<ul style="list-style-type: none"> Decreases straight-line stability Increases steering @ corner entry Decreases steering @ mid-corner & corner exit
More Caster Angle	<ul style="list-style-type: none"> Increases straight-line stability Decreases steering @ corner entry Increases steering @ mid-corner & corner exit

CAMBER-THEORY	
<p>Camber affects the car's side-traction. Generally more negative camber means increased grip since the side-traction of the wheel increases. Adjust front camber so that the front tires wear evenly. Adjust rear camber so that the rear tires wear slightly to the inside. The amount of front camber required to maintain the maximum contact patch also depends on the amount of caster you are running. Higher caster angles require less negative camber, while a lower caster angle will require more negative camber.</p>	

TRACK WIDTH

TRACK WIDTH ADJUSTMENT	
Front track-width	
Wider	<ul style="list-style-type: none"> Decreases front grip Increases understeer Slower steering response
Narrower	<ul style="list-style-type: none"> Increases front grip Decreases understeer Faster steering response
Rear track-width	
Wider	<ul style="list-style-type: none"> Increases rear grip @ corner entry Increases high-speed on-throttle steering
Narrower	<ul style="list-style-type: none"> Increases grip @ corner exit Increases high-speed understeer Increases front grip in hairpin turns

WHEELBASE

WHEELBASE ADJUSTMENT	
Longer Wheelbase	<ul style="list-style-type: none"> • Car more difficult to turn around sharp corners • Increased stability • Better handling over bumps & ruts • Better on more open tracks with high-speed corners
Shorter Wheelbase	<ul style="list-style-type: none"> • Car turns sharp corners more easily • Increased steering response • Better on tighter, more technical tracks

TOE

TOE ADJUSTMENT	
Front Toe	Effect
Toe In	<ul style="list-style-type: none"> • Increases understeer (decreases oversteer) • Decreases steering @ corner entry • Increases "nervousness" • Makes car more difficult to drive
Toe Out	<ul style="list-style-type: none"> • Decreases understeer (increases oversteer) • Increases steering @ corner entry • Increases straight line stability • Makes car easier to drive
Rear Toe	Effect
Toe In	<ul style="list-style-type: none"> • Increases understeer • Increases on-power stability @ corner exit and braking @ corner entry • Less chance of losing rear traction • Increases straight-line stability
Toe Out	<ul style="list-style-type: none"> • Decreases on-power stability @ corner exit & braking • More chance of losing rear traction