

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

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

WHEELBASE	
Longer wheelbase	car is more stable, easier to drive but has less steering, less response. better on high traction tracks or big tracks
Shorter wheelbase	opposite to long, better steering response, car is more aggressive better on smaller technical tracks

STEERING BLOCK	
H	easier to drive
M	more traction and steering but more difficult to drive
ALU	for foam tires

CAMBER LINK LOCATION	
Inner hole	more traction, more roll, more push on power. recommend for small-medium tracks with low-medium traction
Outer hole	better cornering speed, less roll, less traction, recommend for large tracks with high traction

FRONT DRIVE SHAFT	
52mm	recommended for carpet and large asphalt tracks
50mm	better steering response but more difficult to drive, recommend for low-medium grip and small asphalt tracks

DRIVE SHAFT	
ECS	more steering and rotation, less traction, more difficult in chicanes
CVD	less steering, generates more traction, easier to drive in chicanes

FRONT TOE	
INCREASING	more stable on power and on the straight
DECREASING	decreases understeer, increases steering at corner entry, faster steering response, less stable under acceleration, makes car more difficult to drive

REAR TOE	
INCREASING	more traction, more stable, but push on power more and has less cornering speed
DECREASING	less traction, better cornering speed, more on power steering and rotation

ACKERMANN	
less shims	smoothen 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

SHIMS UNDER SHOCKS	
more shims	easier to drive, more stable but less steering
less shims	more difficult to drive, more steering

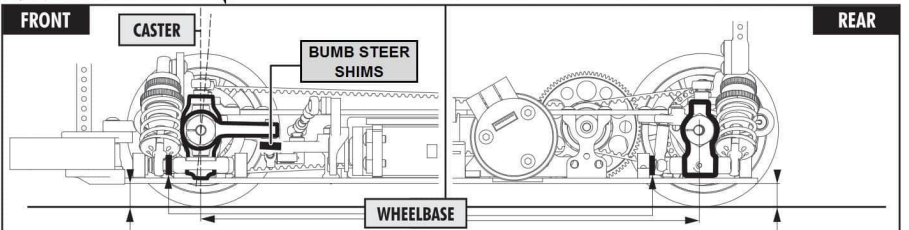
ROLL CENTER UPPER CLAMP	
FRONT	shorter link (1) more steering response, more in-corner steering, car rolls more longer link (4) less steering response, more mid-corner steering, car rolls less
REAR	shorter link (1) more rear traction, less cornering speed, less rotation, car rolls more longer link (4) less rear traction, more cornering speed, more rotation, car rolls less

ANTI-ROLL BAR	
FRONT	
Softer (sthinner wire)	more chassis roll, increases front traction, decreases rear traction, increases off-power steering (may cause oversteer)
Stiffer (thicker wire)	less chassis roll, decreases front traction, increases rear traction, reduces off-power steering at corner entry (increases understeer), quicker steering response
REAR	
Softer (sthinner wire)	more chassis roll, increases rear traction, decreases front traction, decreases on-power steering (increases understeer)
Stiffer (thicker wire)	less chassis roll, decreases rear traction, increases front traction, increases on-power steering (may cause oversteer), quicker steering response in high speed chicanes

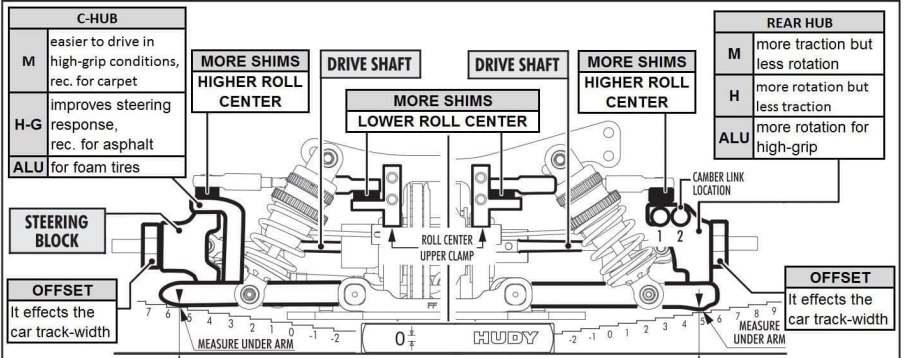
SHOCK UPPER POSITION (SHOCK TOWER)	
FRONT SHOCKS MORE DOWN	shocks more inside makes the car more stable and easier to drive but less steering response
FRONT SHOCKS MORE UP	shocks more out makes the car less stable but improves steering response and off power steering
REAR SHOCKS MORE DOWN	improves on power steering, cornering speed, rotation but decreases rear traction
REAR SHOCKS MORE UP	improves rear traction but decreases on power steering and cornering speed

DIFF. POSITION	
FRONT DIFF.	
UP	more steering but less front traction
DOWN	more front traction but makes the car push more on power
REAR DIFF.	
UP	more on-power steering but makes the rear slightly more loose, also better rotation
DOWN	more rear traction, mainly on-power traction and makes the car more stable in the chicanes, but makes the car push more on power

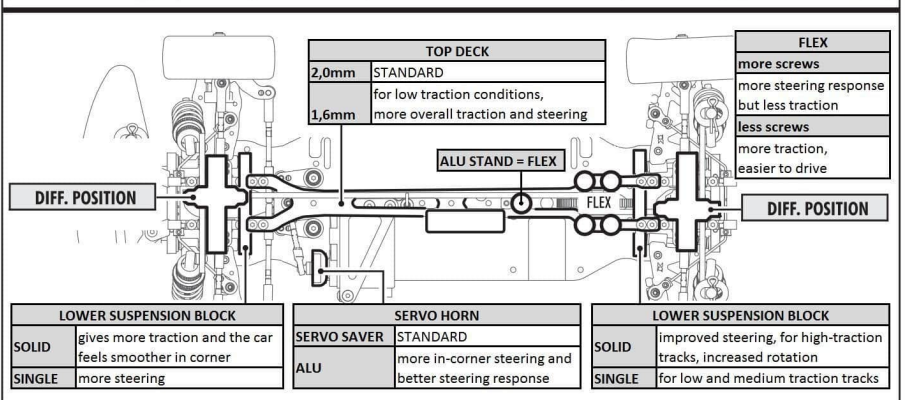
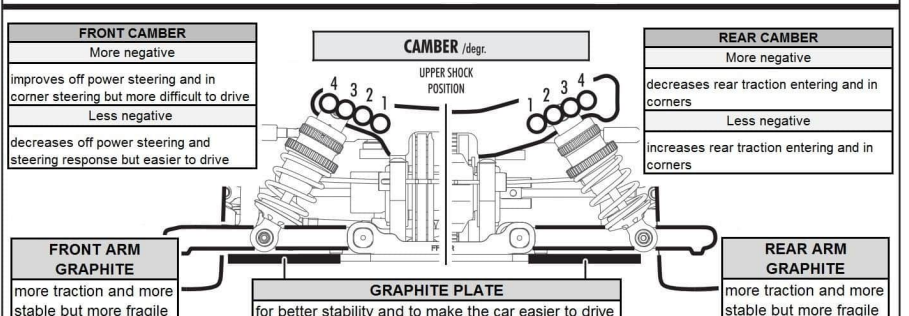
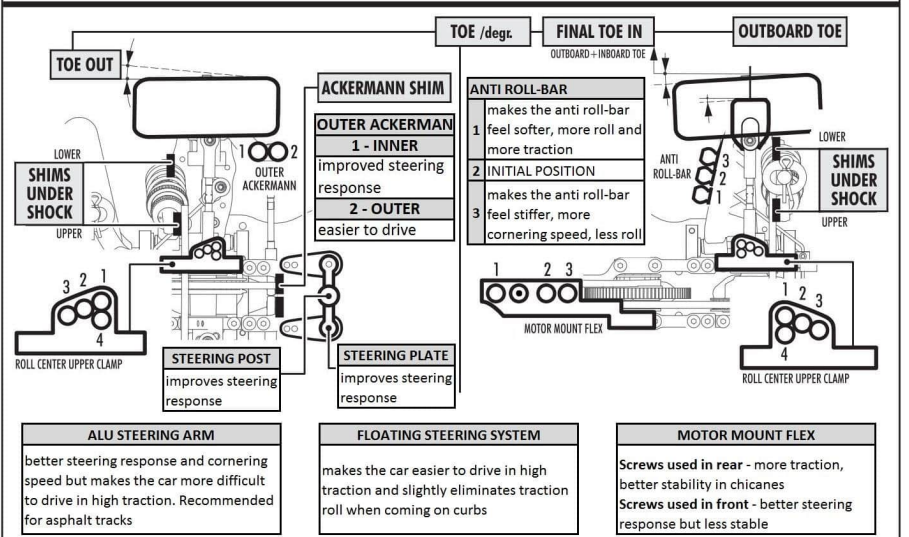
DIFFERENTIAL	
FRONT SOLID AXEL	more in-corner steering, better for breaking
FRONT GEAR DIFF.	less steering response but more cornering speed (500k - 1mln)
REAR GEAR DIFF.	SOFT more in-corner steering and more traction HARD better stability and better cornering speed



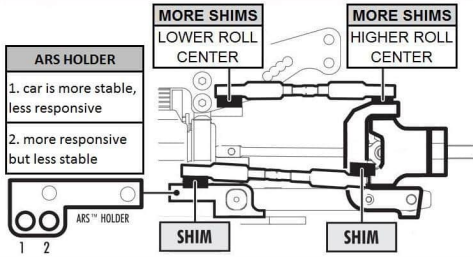
RIDE HEIGHT	
Lower ride height	better on smooth tracks, car reacts faster, more overall grip
Higher ride height	better on bumpy track, car reacts slower, increased chassis roll, less overall grip
Front lower then rear by 0,5mm	increased steering into corner, car holds into corner better, increased oversteer on-power



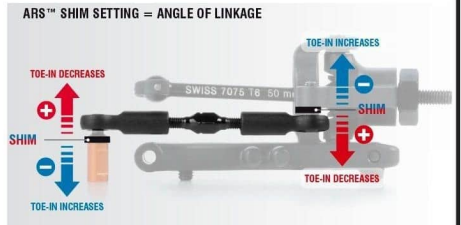
FRONT DOWNSTOP	
Higher front downstop	increases off power steering and steering response and makes the car easier to drive over chicanes
Lower front downstop	decreases steering response but improves on power steering and cornering speed
REAR DOWNSTOP	
Higher rear downstop	improves stability but push on power more
Lower rear downstop	improves on power steering and cornering speed but makes the car less stable



ARS ACTIVE REAR SUSPENSION™



SHIMS ON THE ARS
 More shims on the ARS link makes the link more angled and this makes that when the car is in the corner the toe in is decreasing.
 For example when you set the toe on 3 degree, than with 1mm shim, the toe will decrease to 2.5 degree toe in when the car is pressed.
 This means that in the middle of the corner car starts to steer more so cornering speed is better but traction is decreasing.



SCHOCKS

	SHOCK OIL	PISTON HOLES	EFFECT
FRONT SHOCKS			
SOFTER DAMPING	thinner	more holes/larger holes	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, increases initial steering at corner entry, increases understeer at corner exit/under acceleration
REAR SHOCKS			
SOFTER DAMPING	thinner	more holes/larger holes	faster steering response, increases rear grip at corner exit/under acceleration, decreases rear grip under braking
HARDER DAMPING	thicker	less holes/smaller holes	slower steering response, decreases rear grip at corner exit/under acceleration, increases rear grip under braking
SPRINGS			
FRONT	STIFFER	increases initial steering into corner, decreases steering mid-corner and out, car more responsive, can become nervous off centre	
	SOFTER	car will have less initial steering, especially under braking, car will have more steering through and out of corners, car will feel smoother	
REAR	STIFFER	car will have less rear grip, more steering, especially on power	
	SOFTER	car will have more rear grip in all stages of cornering, car will feel smoother	
REBOUND			
MORE REBOUND	car generates more grip, car is more responsive, car more easily upset by curbs/corner markers, can cause car to traction roll in high grip situations		
LESS REBOUND	car generates less grip, car is smoother and more forgiving to drive, can be useful in high grip conditions		



FRONT ECCENTRIC BUSHINGS

KICK-UP

FF	FR	(°)
[Diagram]	[Diagram]	= 9°
[Diagram]	[Diagram]	= 8°
[Diagram]	[Diagram]	= 10°
[Diagram]	[Diagram]	= 8°
[Diagram]	[Diagram]	= 7°
[Diagram]	[Diagram]	= 9°
[Diagram]	[Diagram]	= 10°
[Diagram]	[Diagram]	= 9°
[Diagram]	[Diagram]	= 11°

ROLL-CENTER

FF	FR	(mm)
[Diagram]	[Diagram]	= +0.75mm
[Diagram]	[Diagram]	= 0mm
[Diagram]	[Diagram]	= -0.75mm

TRACK-WIDTH

FF	FR	(mm)
[Diagram]	[Diagram]	= +1.5mm
[Diagram]	[Diagram]	= 0mm
[Diagram]	[Diagram]	= -1.5mm

TOTAL CASTER = C-HUB CASTER + KICK UP

C-HUB CASTER	KICK-UP				
	7°	8°	9°	10°	11°
0°	7°	8°	9°	10°	11°
2°	9°	10°	11°	12°	13°
4°	11°	12°	13°	14°	15°
6°	13°	14°	15°	16°	17°

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

FRONT ROLL CENTER
 Lower roll center: increased forward traction which improves in corner steering. Recommended for asphalt tracks and tracks with low-medium traction
 Higher roll center: decreases forward traction, makes the car easier to drive as it is less responsive. easier to drive in chicanes and high traction conditions. Recommended for carpet or high traction tracks

FRONT TRACK WIDTH
 Wider: decreases front traction, less steering response. easier to drive, avoids traction rolling, recommended for higher traction
 Narrower: increases front traction, better steering response, recommended for low-medium traction tracks

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.

KICK-UP (ANTI-DIVE)

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 BUSHINS

ANTI-SQUAT

RR	RF	(°)
[Diagram]	[Diagram]	= 2°
[Diagram]	[Diagram]	= 3°
[Diagram]	[Diagram]	= 4°
[Diagram]	[Diagram]	= 1°
[Diagram]	[Diagram]	= 3°
[Diagram]	[Diagram]	= 2°
[Diagram]	[Diagram]	= 4°
[Diagram]	[Diagram]	= 1°
[Diagram]	[Diagram]	= 2°
[Diagram]	[Diagram]	= 0°

ROLL-CENTER

RR	RF	(mm)
[Diagram]	[Diagram]	= +0.75mm
[Diagram]	[Diagram]	= 0mm
[Diagram]	[Diagram]	= -0.75mm

TRACK-WIDTH

RR	RF	(mm)
[Diagram]	[Diagram]	= +1.5mm
[Diagram]	[Diagram]	= 0mm
[Diagram]	[Diagram]	= -1.5mm

TOE-IN

RR	RF	(°)
[Diagram]	[Diagram]	= 3°
[Diagram]	[Diagram]	= 4°
[Diagram]	[Diagram]	= 2°
[Diagram]	[Diagram]	= 2°
[Diagram]	[Diagram]	= 3°
[Diagram]	[Diagram]	= 1°
[Diagram]	[Diagram]	= 4°
[Diagram]	[Diagram]	= 5°
[Diagram]	[Diagram]	= 3°

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

REAR ROLL CENTER
 Lower roll center: more stable, eased to drive, less rotation and more on power push. Recommended for higher traction tracks
 Higher roll center: improves rotation and on power steering. recommended for high traction tracks

REAR TRACK-WIDTH
 Wider: more stable, eased to drive, less rotation and more on power push. Recommended for higher traction tracks
 Narrower: less stable, better rotation and cornering speed. Recommended for low-medium traction tracks

ANTI-SQUAT

No anti-squat	more weight transfer to the rear of the chassis on-throttle, chassis compresses or drops more on-throttle, increased steering response, better on a bumpy track
Positive anti-squat	less weight transfer to the rear of the chassis on-throttle, chassis compresses or drops less on-throttle, decreased steering response, increased rear traction, better on smooth track

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