

| 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 | quikens 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         |

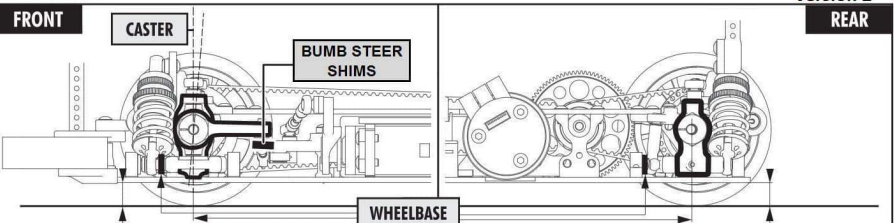
| ROLL CENTER UPPER CLAMP |   |
|-------------------------|---|
| FRONT                   | shorter link (1) more steering response, more in-corner steering, car rolls more<br>longer link (4) less steering response, more mid-corner steering, car rolls less                |
| REAR                    |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

| ANTI-ROLL BAR          |   |
|------------------------|---|
| FRONT                  |   |
| Softer (stinner 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 (stinner 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 |

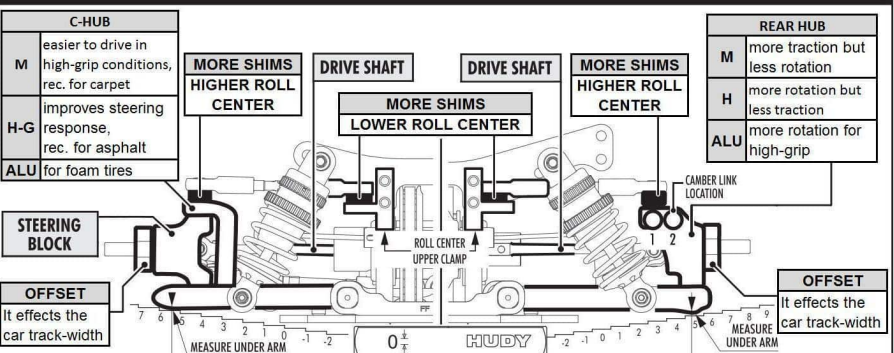
| SHOCK UPPER POSITION (SHOCK TOWER) |  |
|------------------------------------|--|
| FRONT SHOCKS MORE DOWN             | decreases entry steering but improves cornering speed    |
| FRONT SHOCKS MORE UP               | gives more entry steering                                |
| REAR SHOCKS MORE DOWN              | gives you better cornering speed and rotation of the car |
| REAR SHOCKS MORE UP                | gives more rear traction                                 |

| DIFF. POSITION   |  |
|------------------|--|
| FRONT DIFF. UP   | more steering but less front traction  |
| FRONT DIFF. 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  |
| REAR DIFF. 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 |

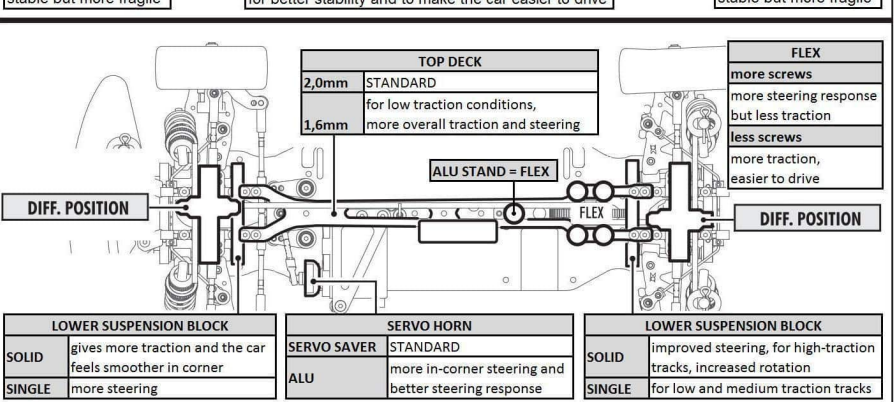
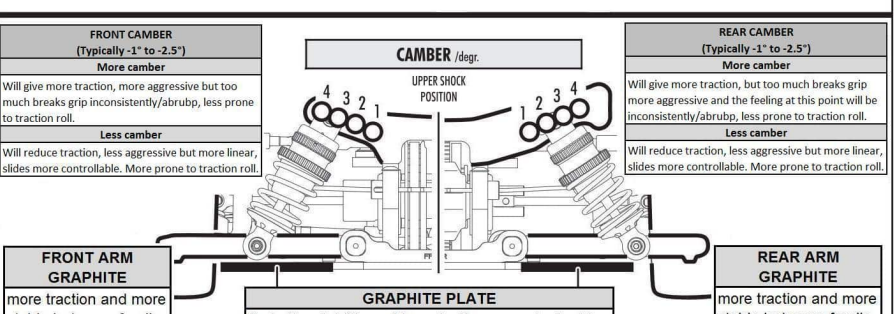
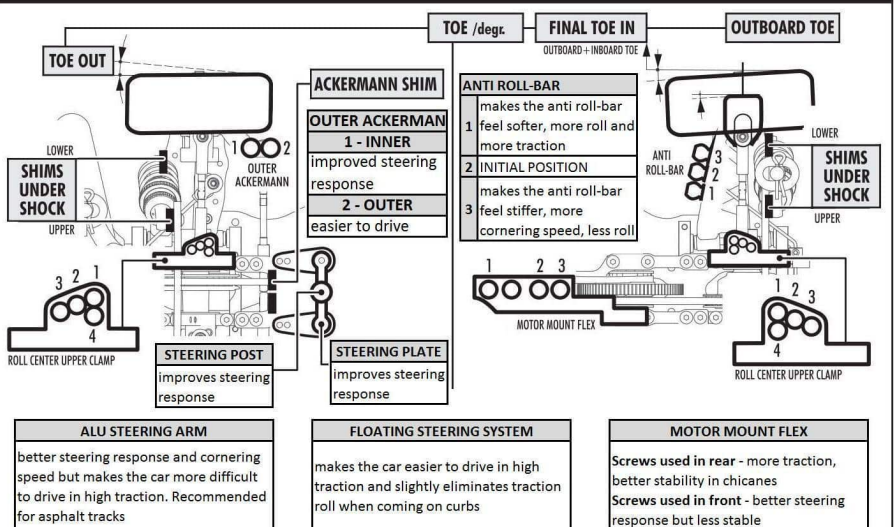
| DIFFERENTIAL         |   |
|----------------------|---|
| FRONT SOLID AXEL     | more incorner steering, better for breaking                   |
| FRONT GEAR DIFF.     | less steering response but more cornering speed (500k - 1mln) |
| REAR GEAR DIFF. SOFT | more incorner steering and more traction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



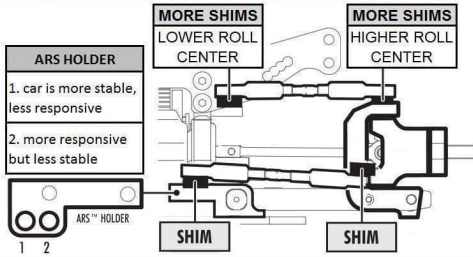
| RIDE HEIGHT                    |  |
|--------------------------------|--|
| Lower ride height              | better on smooth tracks, car reacts faster, more overall grip                              |
| Higher ride height             | better on bumpy track, car reacts slower, increased chassis roll, less overall grip        |
| Front lower than 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                       |

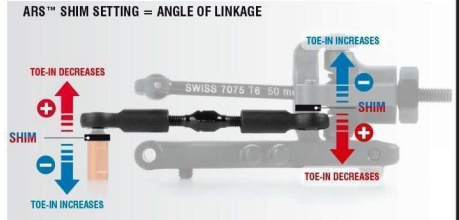


# ARS ACTIVE REAR SUSPENSION™



**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

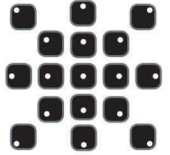
|                     | SHOCK OIL  | PISTON HOLES  | EFFECT   |
|---------------------|--|---|--|
| <b>FRONT SHOCKS</b> |  |   |  |
| SOFTER DAMPING      | thinner  | more holes/larger holes   | slower steering response, decreases initial steering at corner entry, increases oversteer at corner exit/under acceleration  |
| HARDER DAMPING      | thicker  | less holes/smaller holes  | faster steering response, increases initial steering at corner entry, increases understeer at corner exit/under acceleration |
| <b>REAR SHOCKS</b>  |  |   |  |
| 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           |
| <b>SPRINGS</b>      |  |   |  |
| 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   |  |
| <b>REBOUND</b>      |  |   |  |
| 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 & ANTI-DIVE (°) |    | ROLL-CENTER (mm) |    | TRACK-WIDTH (mm) |    |
|---|-------------------------|----|------------------|----|------------------|----|
|   | FF                      | FR | FF               | FR | FF               | FR |
| KICK-UP   | 0°                      | 0° | +0,5             | +1 | +1               | +2 |
|   | 0°                      | 0° | 0                | 0  | 0                | 0  |
|   | 0°                      | 0° | -0,5             | -1 | -1               | -2 |
| ANTI-DIVE   | 0,5°                    | 1° |                  |    |                  |    |
|   | 0,5°                    | 1° |                  |    |                  |    |
|   | 1°                      | 2° |                  |    |                  |    |
| <b>FRONT ROLL CENTER</b>  |                         |    |                  |    |                  |    |
| <b>Lower roll center</b> increased forward traction which improves in corner steering. Recommended for asphalt tracks and tracks with low-medium traction   |                         |    |                  |    |                  |    |
| <b>Higher roll center</b> 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                                  |                         |    |                  |    |                  |    |
| <b>FRONT TRACK-WIDTH</b>  |                         |    |                  |    |                  |    |
| <b>Wider</b> decreases front traction, less steering response. easier to drive, avoids traction rolling, recommended for higher traction  |                         |    |                  |    |                  |    |
| <b>Narrower</b> increases front traction, better steering response, recommended for low-medium traction tracks  |                         |    |                  |    |                  |    |
| <b>KICK-UP &amp; ANTI-DIVE</b>  |                         |    |                  |    |                  |    |
| <b>More kick-up (less anti-dive)</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>More anti-dive (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 |                         |    |                  |    |                  |    |

All possible mounting alternatives of eccentric bushings



Middle position = 0.5 mm or 0.5° from center  
Outer position = 1 mm or 1° from center

## REAR ECCENTRIC BUSHINS

|   | ANTI-SQUAT & PRO-SQUAT (°) |    | ROLL-CENTER (mm) |    | TRACK-WIDTH (mm) |    | TOE-IN (°) |    |
|---|----------------------------|----|------------------|----|------------------|----|------------|----|
|   | RR                         | RF | RR               | RF | RR               | RF | RR         | RF |
| ANTI-SQUAT  | 0°                         | 0° | +0,5             | +1 | +1               | +2 | 3°         | 4° |
|   | 0°                         | 0° | 0                | 0  | 0                | 0  | 3,5°       | 4° |
|   | 0°                         | 0° | -0,5             | -1 | -1               | -2 | 2,5°       | 2° |
| PRO-SQUAT   | 0,5°                       | 1° |                  |    |                  |    | 2,5°       | 2° |
|   | 0,5°                       | 1° |                  |    |                  |    | 3°         | 3° |
|   | 1°                         | 2° |                  |    |                  |    | 2°         | 1° |
| <b>REAR ROLL CENTER</b>   |                            |    |                  |    |                  |    |            |    |
| <b>Lower roll center</b> improves traction of the the car but less cornering speed and more on power push. recommended for low traction tracks                          |                            |    |                  |    |                  |    |            |    |
| <b>Higher roll center</b> improves rotation and on power steering. recommended for high traction tracks   |                            |    |                  |    |                  |    |            |    |
| <b>REAR TRACK-WIDTH</b>   |                            |    |                  |    |                  |    |            |    |
| <b>Wider</b> more stable, easied to drive, less rotation and more on power push. Recommended for higher traction tracks   |                            |    |                  |    |                  |    |            |    |
| <b>Narrower</b> less stable, better rotation and cornering speed. Recommended for low-medium traction tracks  |                            |    |                  |    |                  |    |            |    |
| <b>TOE</b>  |                            |    |                  |    |                  |    |            |    |
| <b>Increasing (more toe-in)</b> increases understeer, more stable exiting on-power at corner exit and braking, less chance of losing rear traction, decreases top speed |                            |    |                  |    |                  |    |            |    |
| <b>Decreasing (less toe-in)</b> less stable at on-power corner exit and braking, more chance of losing rear traction, increases top speed                               |                            |    |                  |    |                  |    |            |    |

| ANTI-SQUAT & PRO-SQUAT |   |
|------------------------|---|
| Pro-squat              | more weight transfer to the rear of the chassis on-throttle, chassis compresses or drops more on-throttle, increased steering response                          |
| 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 |

| 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                               |