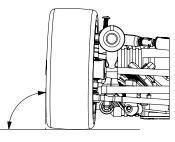


# Front/Rear ride height

Always use the ride height as low as possible. Find the best compromise between track conditions (grip & asphalt smoothness) and drivability. Indoor  $5 \sim 5,5 \text{mm}$  (5mm+ is mostly mandatory) Outdoor  $4,4 \sim 5,5 \text{mm}$ 



# Front/Rear camber

More camber results in more lateral grip up to a certain point. The aim is to set the most suitable camber for each tire. The usual range is between  $1\sim2^{\circ}$ .

# Dynamic front toe

A bigger increase of front toe-out results in less response. Fewer spacers mean more gain of toe-out and vice versa.

# **Dynamic rear toe**

A bigger increase of rear toe-in results in more steering at corner entry with good mid corner and exit stability. Less gain of toe-in increases mainly stability at corner entry. Fewer spacers mean more gain and vice versa.

# **Upright spacers (Lower arm)**

Less spacers lowering the roll center. Adjust according to track conditions and feeling of the car. A higher roll center might suit better to high grip conditions.

# Lower arm spacer (Chassis)

A higher arm position raises the roll centre. Adjust according to track conditions and feeling of the car. A higher roll center might suit better to high grip conditions.

# UI Ba

# **Upper arm position (Upright)**

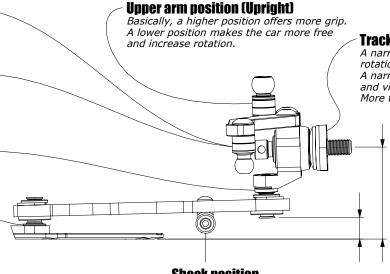
Basically, a lower position offers more grip. A higher position makes the car more free and increase rotation.

# **Caster angle**

More castor means more steering in the middle of the curve with smoother turn-in up to a certain point. The usual range is between 3~5° from high to low grip conditions. The rear castor can mainly be used for wheelbase adjustement.

# **Uptravel limit**

With the upstop you can set a limit of suspension uptravel preventing the chassis from touching the ground on bumpy surfaces.



#### Track width

A narrower front offers more aggressiveness, higher rotation and vice versa.

A narrower rear offers less stability, more rotation and vice versa.

More track width is better suited to high grip conditions.

# Downstop

A higher value makes the car more direct and quicker at direction changes.

At high grip conditions a lower value is recommended.

# **Shock position**

The position of the shock inluences the stiffness of the suspension.

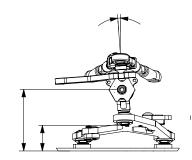
The team prefers the inside position.

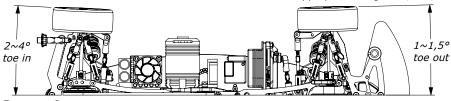
# Front toe out

Increasing front toe out gives less initial response.

Driving straight becomes easier.

The appropriate range is 0,5~1,5°.





#### Rear toe in

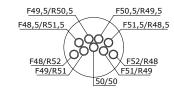
Increasing rear toe-in results in more grip, stability, foreward traction and vice versa.
The appropriate range is 2~4 degrees depending on the track conditions.





#### Damper setup

Damper oil influences the behaviour on bumps and the weight transfer of the car. When there is little traction, softer oil improves weight transfer and generates more grip. When traction is high, harder oil makes the car smoother. Stiffer springs increase responsiveness, forward traction and stability at high speeds. Softer springs slow down the change of direction but can provide more overall grip. It can also help to prevent traction roll.



# **Weight distribution**

Most neutral balance is 50/50. More weight to the rear increases steering and makes the car more aggressive and vice versa.



#### Damper angle

With the shock angle you can fine tune the suspension stiffness. More upright often suits to lower grip condions and vice versa.



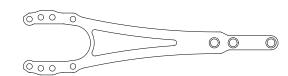
#### Anti roll bars

Stabilizers affect roll stiffness of the car. A harder rear reduces steering on corner entry but increases it on throttle. A harder front increases steering at corner entry but reduces it mid corner.



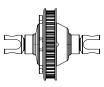
#### **Shock (damper) towers**

With active shock towers, the car remains more stable over bumps. It can help to prevent traction roll. The team prefers active on the rear and fixed on the front.



# **Chassis flexibility**

Chassis flex can be influenced by several components such as upperdeck thickness, upperdeck screws, upperdeck cuttings and motormount screws. In general, the more traction on the track, the stiffer it should be set.



#### Differential

A harder diff makes the car smoother at corner entry and prevents over rotation at th same point. At corner exit it provides more steering and can tend to oversteer.



#### Ackermann

The steering linkage in the front hole makes the car more aggressive and vice versa.



# **Progressive shock case/spring**

With the progressive shock case, the steering characteristics can be improved under certain conditions same as with the progressive shock spring.



# Servo horn length

The longer the servo horn the higher the response. A shorter servo horn can improve driveability and makes it easier driving straight.



# **Inclined king pin axle**

The optional part can provide improved steering in certain conditions.



# MSE low diff/spool eccentric MA2051

With the optional MSE diff/spool eccentric you can lower the diff or spool by 2mm compare to original. This can provide more grip in low grip conditions.

