

Ackermann Options

Ackermann Basics

The Ackermann angle changes the relative angle between the left and the right wheel during turning. This will give a different feel on track so is driving style and track dependent. Increasing Ackermann will result in a greater difference in steering angles on either wheel. Changes are felt most at full steering lock. To adjust this on the JQ Racing Black Edition there are a selection of optional steering plates, along with 3 holes on the Ackermann plate. Moving the pivot point of the steering turnbuckle on either of these components changes the Ackermann angle.

The central Ackermann plate has an option of 3 holes along the axis of the car. Whereas optional steering plates change the position of the outer pivot point.

Steering end points and toe angles must be checked when adjustments made to steering parts.

Steering Plates

The Black Edition comes with steering plate #1. All option plates are characterised below:
 #1: Longest plate; most Ackermann. Shortest link therefore most bumpsteer. Smooth steering, less responsive. Easiest to drive. Stock.

#2: Shortest plate (3mm shorter than #1). Most responsive option, can be too aggressive.

#3: Compromise between #1 and #2 plate (1.5mm shorter plate than #1).

Ackermann Plate Adjustments

Note: Middle hole in the Ackermann plate is the rearmost recommended. Using the rear hole can limit steering lock.

Forward:

- Less Ackermann
- More initial turn in
- More responsive
- Stock setup

Rearward:

- More Ackermann
- More steering on corner exit
- Smoother feel
- Use on high bite

Ackermann plate (3 holes)



Steering plate (changeable)



Steering plates are identified by number of indents on the plate

These adjustments can be used in alongside other options. For example; the "2020 front hubs" will make the car feel less responsive and more like a "pillow ball" car. To return some of the turn in at corner entry drivers are using #2 steering plates. Have a play with these parts to get the car optimized for your conditions and style. If in doubt revert to #1 plates and forward hole.