

## **ROLL CENTER ADJUSTER**



The roll center of a vehicle is a virtual pivot point at which the cornering forces in the suspension are reacted to the vehicle body. The position of roll center affects the handling significantly and what factors must be considered when tuning the suspension.

## **RC BALL JOINT**

As soon as the height of a vehicle is dropped, the balance of suspension geometry is collapsed. The deviation of roll center will increase the amount of roll, even though the center of mass is dropped. The change of suspension geometry will lead to deterioration of mechanical grip, and also increase the burden on suspension components.

By installing HARCRACE Roll Center Adjuster, the lengthened ball stud is able to correct the geometry of suspension, putting the control arms back closer to inherent position, resulting in optimized steering response and stability of handling. Additionally, the durability of suspension components will be increased due to corrected suspension geometry. Thus, the HARDRACE Roll Center Adjuster is a must-have upgrade for any serious driver.



## **RC TIE ROD END**

The angle of the tie rod is changed as soon as the vehicle is lowered down; it would induce toe change during cornering (the bump steer). HARDRACE Tie Rod Ends, by lengthening the length of the ball joint, correct the tie rods angle for lowered vehicle and provide an appropriate geometry to restore the original steering characteristic.

Moreover, HARDRACE Tie Rod Ends are designed with high quality alloy steel, resulting a better stiffness and durability.









