



Abstract Internal Suspension

Instead of defining the geometry of the internals using pickup points, the kinematics of internal components can be entered directly using a quadratic that is a function of aRocker.

Parameters for Linear Components

The parameters of the internal suspension components are generally straightforward, and are listed in the table below. Several options are available for torsion bars, namely; none, simple, cross-linked, and collapsible cross-linked. Whilst the pick-up points for the cross link are always present in the editor, they are not required unless fitting a cross-linked setup. If the cross-link is not specified as collapsible, it's assumed to be rigid (100MN/m).

Parameter	Definition
kSpringL/R	The linear stiffness of the corner spring.
kTorsionBar	The torsional stiffness of the corner torsion bar.
MPreloadTorsionBar	Preload torque on the torsion bar with suspension in design position.
kCrossLink	Stiffness of the spring in the collapsible cross-link (if selected).
FCrossLinkPreload	Preload in the collapsible cross-link (if selected).
droopStop kSpringL/R	The linear stiffness when the droop stop is active.
droopStop FSpringPreload	Preload in the droop stop at xDroopStop = 0.
droopStop xSpringGap	Alternative to preload; droop stop gap at xDroopStop = 0.
kTriSpring	The linear stiffness of the tri spring.
kAntiRollBar	The linear stiffness of anti-roll bar.
lInerterL/R	The inertance of the corner inerter.
lTriInerter	The inertance of the tri inerter.

Installation compliances can be specified for the following:

Parameter	Definition
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