Strut Bars & Anti-Sway Bars

One of the most common upgrades on a modified car is mounting strut bars. A strut bar (also known as strut tower bar or strut brace) is designed to tie the two opposing strut towers together as a single solid unit.

The purpose of this device is to reduce flex that these towers experience during hard cornering. When taking a turn a car's strut towers normally flex, resulting body flex and losing some traction. As strut tower bars are designed to keep your strut towers from flexing, they distribute the pressure applied to one strut tower when taking a turn to both towers instead of just one. This keeps the wheels in position. Keeping the wheels in position helps keeping the tires in the desired position on the road, and this will help to improve traction on the turns.

Rear strut tower bars are designed to work like the front bar by tying the two-rear strut to work together, increasing the overall chassis stiffness. Rear strut bars minimize understeer due to less chassis flex and improve stability during corner braking.

Strut bars are a must for any upgrade to a wider tire & wheel combination. Addition of suspension upgrades such as sports springs, shocks and low-profile tires adds additional stress to the chassis which result in chassis flex. Strut bars not only reinforce the sub frame and improve chassis stiffness but also make steering quicker and more responsive.

On most applications, strut bars install in minutes and they look shiny and cool. However, looks have little to do with performance. To reduce the flex between struts, the setup should be as rigid as possible. In fact, a true strut bar doesn't have joints and look like an "X", so go for it for a more rigid frame if you have time and money.

Sway bars (also known as anti-sway bars, anti-roll bars or lower tie bars) affect the handling of the car on the lower end of the suspension. Sway bars tie the lower suspension components together across the front or back, and affect a car's oversteer and understeer.

Sway bars will keep your car flat in turns instead of leaning over to one side. They distribute energy from the side of the car with all the force from the turn on it to the other side of the car, bringing the whole car down flat instead of leaning to one side. Of course the car will still lean some, but not as much.

Sway bars provide better cornering especially at high speeds and work very well in conjunction with strut tower bars. However, they can have an adverse affect in off-road situations by leaving one tire completely off the ground.