### **ABOUT YOUR CLASSIC MINI**

### Information to keep your "Mini Grin" going!



# Using a Rear Sway Bar to Reduce Understeer

by **Mike Kearney** Service Shop Manager

Although it is technically an *anti-roll bar*, in the USA this component is commonly called a "sway bar". A rear sway bar is a torsion bar mounted laterally on the rear suspension, and is designed to reduce body roll. On a Mini, drop links are used to connect the rear control arms to the sway bar.

So what is the advantage of a sway bar? For those of us that like to drive our Minis in an enthusiastic manner, it is a good way to help control the car's natural tendency to understeer. On a front wheel drive car, the driving wheels and steering are combined to do both functions. With a weight distribution close to 70-30 to the front, a rear bar is really helpful to get the rear of the car to rotate. Almost every modern car that is front wheel drive has a rear sway bar installed from the factory and every aftermarket manufacturer makes a bigger (stiffer) one for those cars. Race Minis have used rear sway bars for 50 years to improve the handling in competition.

The sway bar we recommend for both function and quality on a street-driven Mini is FOR013. This sway bar has been tested on the Seven Enterprises' vintage race Mini and several of our shop-built Minis, and has been found to be very good at controlling understeer and producing a neutral steering car.

For a more aggressive approach, we recommend the solid 5/8" rear bar made by KAD, part number KAD1013207. This is the sway bar widely used on vintage race Minis and in the very competitive "Mini Miglia" series in the U.K.

To optimize your Mini's new rear sway bar, we suggest several additional suspension modifications. Good-quality adjustable shocks are a must for anyone serious about improving handling. Adding front negative camber arms along with adjustable caster/tie rods is always a great modification. Stock rubber suspension bushings should be replaced with updated ones in rubber, polyurethane or combinations of both. We would also add to the list of improvements two-way adjustable rear suspension camber-toe brackets.

Give us a call to discuss your individual needs, and basic suspension specifications. The handling needs of a road-going Mini will be different than a track-only race car. Let's talk about what level of performance you want out of your Mini. The performance experts at Seven are here to help!

## KYB AGX Adjustable Shocks

Top of the line KYB AGX Sport Adjustable shocks allow drivers to adjust dampening to match specific driving conditions quickly. Manual eightstage adjustable dampening makes it completely on-the-car adjustable within minutes. Competition-grade engineering and construction make AGX® Sport Adjustable Shocks and Struts perfect for sport enthusiasts and high performance drivers. Sold each.

Note: The rear shocks for the Mini are handed and must be fitted according to the manufacturer's instructions.

**743045** *Right rear.....* **743046** *Left rear.....* **743039** *Front .....* 

#### KAD Adjustable Rear Camber & Toe Brackets

The best on the market for this application. Fit properly out of the box and don't require a lot of frustrating fiddling and adjustments



to fit the subframe and clear the radius arm; easy to adjust to the desired settings, and stay in adjustment. Thicker metal parts, more machining, and better welds. Anyone who has tried the other competing products will always choose the KAD brackets for their race car.

KAD1012260 .....



#### Rear Anti-Roll Bar

Adjustable stiffness. Drop center section of bar allows center mounted exhausts to clear in most cases, but spacer blocks may be required under the bushing straps for additional clearance.

FOR013 .....



#### **KAD Rear Anti-Roll Bar Kit**

KAD rear blade type anti-roll bar. 5/8" diameter blade type which fits to the back of the rear sub frame. Will clear both side or center exit exhausts. Detailed mounting instructions included. This kit is for installation on drum brake cars only.

KAD1013207 .....

### Negative Camber Lower Arm

Negative camber is frequently used in the front suspension to improve cornering ability. The inner end is later type designed for improved 21A1882 steel sleeved bushing. Degrees of negative camber shown are relative to the setting of the standard arms and will state but about

dard arms and will reflect net change from what you have now, not nescessarily the end result. Bushings not included. Sold in pairs.

**C-AJJ3364** *Pair* .....

# Heavy-Duty Adjustable Diagonal Tie Rods

A useful upgrade for any road Mini, these rods are made from heavier material and allow ample adjustment to achieve accurate caster angle. Sold in pairs. Bushings and hardware not included; see website for installation suggestions.

**\$\$\$0135** Pair.....

See more shocks and suspension parts on **Page 7**