# **Detroit Tuned Adjustable End Links**

**These instructions** cover installing front or rear DT end links that fit all MINI Cooper & MINI Copper S models. Whenever you add coil-overs, these are a must, and the car must be corner balanced. It's also recommended for lifted vehicles.

## **READ ALL DIRECTIONS THROUGHLY BEFORE YOU START!!!**

<u>NOTE:</u> WHENEVER WORKING A VEHICLE, YOU SHOULD WEAR SAFETY GLASSES AND SUPPORTED PROPERLY WITH JACK STANDS ON A LEVEL SURFACE. IF AFTER READING THESE DIRECTIONS, YOU FEEL THIS IS WORK YOU CANNOT COMPLETE, YOU SHOULD CONSULT A TRAINED MECHANIC.

### **Tools Needed:**

- 16mm &17mm socket w/ 3/8" ratchet
- 17mm socket w/ 1/2" torque wrench
- 7mm and 14mm open end wrench's
- 3/8" drive torque wrench or 3/8" to 1/2" adapter
- Jack & Jack Sands or Lift
- Safety Glasses

### Installation Instructions:

- 1. Raise vehicle and secure on jack stands or a lift & remove wheels.
- 2. Remove sway bar links per OEM procedure. Tools needed: 16mm socket & 17mm wrench
- 3. Install your new adjustable links with the proper relationship as the OEM link. <u>ALWAYS START</u> <u>WITH THE ASSEMBLES IN THEIR SHORTEST OVER-ALL LENGTH!!</u> Secure the ball ends to the respective mounts. Tighten using the lock nuts maintaining the proper alignment to the mounts. Torque to 35 ft.-lbs. Tools needed: 17mm socket & 17mm wrench.



Proper Alignment



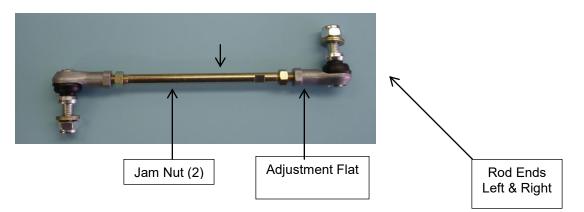
Improper Alignment

4. Reinstall wheels & Lower vehicle. Wheel Torque: M12 Lugs: 95 ft. lbs. / M14Lugs: 108 ft. lbs. Tools needed: 17mm socket.

#### Adjustment Instructions:

1. The vehicle must be sitting on all 4 tires with the front wheels pointing straight at ride height and weight on a flat, level surface to perform the final adjustments. Push the vehicle forwards and backwards about 4 feet to resettle the suspension. It's best to prepare the vehicle for the configuration that it will be driven in:

- Unnecessary objects in the interior or trunk are removed
- Full tank of fuel
- Proper tire inflation and alignment specifications
- 2. At this point, a decision must be made. Do you want to neutralize the sway bar(s) at curb weight or with the driver? If the vehicle will be driven with multiple drivers, performing this at curb weight will be a good starting point. If only a dedicated driver will be in the vehicle, it is recommended that this be performed with the driver or ballast equivalent to the driver's weight placed in the seat. If your corner balancing the car follow the correct way to do that.
- 3. Start by adjusting the rod length on the right side via the adjustment flat using an open-end wrench. This may require lengthening or shortening the assembly. Usually, lengthening the length is the trend. The adjustable links are designed with right-hand and left-hand threads, so they will never require removal from the vehicle to make any adjustments. Tools needed: 7mm wrench
- 4. When rotating the shaft, the "free" or no load situation has been achieved when the Adjustment Rod can be turned about ¼ of a revolution with the fingers. If installing on all four (4) corners of a vehicle, ensure that this scenario is achieved in two (2) of the four (4) cross-corners before finally tightening up the assemblies. The sway bar is now neutralized for that scenario.
- 5. Lock the final assembly in position by tightening both jam nuts maintaining the proper alignment of the rod ends to the mounts. Tools needed: 14mm wrench & 7mm wrench.



You are now done with the installation. If you have any questions give us a call or send us an email.

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