



## **S197 Rear Suspension Installation**

### **Lower Control Arms:**

1. Remove the stock lower control arms
2. Set the TRZ control arms to the same length as the stock ones by adjusting the rod end in or out.
3. Install the TRZ control arms using the stock hardware. The rod end and aluminum spacers go towards the front of the car and the delrin bushing end attaches to the rearend. The small aluminum spacers should face inwards while the larger ones should be facing outwards. This is an important step because the arms will not line up if this is wrong.
4. Find a fixed point that is the same on both sides of the car (i.e. wheel well, front spindle, holes in the frame) and measure each side from that point to a fixed point on the rearend (i.e. edge of tire, center of axles, centerline of rearend control arm bolts). Adjust the control arms until both sides of the car are equal.
5. Once the rearend is square with the car, tighten the jam nuts on the rod-end side of the control arms.

### **Upper Control Arm:**

1. Remove the bolt that holds the upper control arm to the rear-end housing itself first.
2. To remove the control arm mount, you must loosen and remove the bolt that holds it to the body. This bolt is accessible underneath the back seat. Remove this and the upper control arm and mount should be loose.
3. In order to remove the upper control arm and mount, you must lower

the gas tank down slightly. There are 2 straps that need to both be loosened. It may be necessary to tap the top of the gas tank from inside the car under the back seat as the tank has some glue holding it to the body from the factory.

4. Remove the stock upper control arm from the mount and replace it with the TRZ upper arm using the stock hardware.
5. Install the TRZ control arm and stock mount back into the car and tighten everything up including the gas tank straps. Now set the car at ride height to fully tighten the upper control arm bolts.
6. At vehicle ride height loosen both jam nuts and turn the hex in or out to reach the desired pinion angle. Stock pinion angle with the stock 2 piece driveshaft is around  $-0.5$  to  $-1.0$  degree. If using an aftermarket 1 piece driveshaft, you can set the pinion angle higher to around  $-3$  to  $-4$  degrees. Once you have achieved your desired pinion angle be sure to tighten both jam nuts.

#### **Anti-roll bar and panhard bar:**

1. Remove the stock panhard bar, panhard brace, and sway bar.
2. Before installing the TRZ anti-roll bar, attach the rod-end side of the panhard bar to the bracket on the anti-roll bar using the supplied hardware.
3. Install the pre-assembled TRZ anti-roll bar unit into the car using the stock mounting holes and stock hardware. It will only fit one way and the aluminum adjustable links should now be hanging just behind the rear-end housing. Start all the bolts and wait to tighten it until the end. If you are using the stock sway bar (which is unnecessary with the TRZ anti-roll bar), then install this back into the same position it came out of. If not, use the supplied aluminum spacer and fit it into the original sway bar mount on drivers side then tighten using the stock hardware which will go through a tab off the side of the TRZ anti-roll bar unit. Once this is all in and all the bolts are started, go ahead and tighten them all up.
4. Install the double-adjustable TRZ panhard bar using the supplied aluminum spacer and hardware. The TRZ panhard bar mounts outside of the original location (which is where the aluminum spacer goes) and allows clearance for aftermarket rearend covers / girdles.
5. Before welding the tabs onto the rearend, you must first center the

rearend in the car while at ride height. Adjusting the panhard bar will move the rearend side to side, do this until it is centered then tighten up the jam nuts on the rod-end side. The anti-roll bar arms should be pointed on an uphill angle facing forward while the car is at ride height. Now you can **tack weld** the tabs to the rearend housings, keeping the adjusting links as close to vertical as possible. **Remove the rod ends from the rearend tabs**, and completely weld the tabs in place. Set the adjustable links at a neutral setting to start, and then adjust from there as needed (all with the car at full race weight w/ driver and all in the car). Adjustments, if needed, should be made to the passenger side link. Lengthening the link may be necessary if the car is still rolling over to the passenger side on launch, adjust until you have achieved a level launch or equal rear weights if using scales. Normally a half to a full turn of preload is needed.

