Global West Suspension
655 South Lincoln Avenue / San Bernardino Ca. 92408
PHONE 909-890-0759 FAX 909-890-0703

Camaro/Firebird *TracLink 84-91 auto*
TSC series (TSC-23)
Installation Instructions

Kit provides:

- (2) Rubber bushings
- (1) Traction beam
- (1) Forward race
- (1) Rear bracket
- (1) Hardware pack
- (2) Threaded male rod ends
- (1) Bolt-on forward bracket
- (1) Steel bushing sleeve w. attached washer

The *TracLink* kit requires approximately 3 hours to install. Although *TracLink* is considered a bolt-on device on a factory stock vehicle, it is reasonable to expect that additional time and effort may be necessary for proper installation, depending upon the nature and extent of other aftermarket modifications already present on the car. Although pinion angle is adjustable on the *TracLink*, we preset the angle which will work for most applications however different ride heights, various motor/trans combinations etc. may require the adjustment to be changed. We strongly recommend zero degree's measured at the rear end pinion to drive.

1. Begin installation by elevating the vehicle, as you will be required to be underneath it to install the kit. It is recommended that you support the unibody with jack stands both front and rear. Leave the axle unsupported, as this will be required for proper *TracLink* installation.

2. Once the car is safely supported, install the forward cross tube. You will notice that the 1 1/4" bar has small tube welded to it. The cross tube lays underneath the stock transmission crossmember. To install the cross tube, remove the two forward bolts on the factory transmission crossmember, one bolt on the left and one bolt on the right side. You will note that the *cross tube* only fits one way. The small tube welded to the side of the 1-1/4 cross tube should be biased toward the driver side. Bolt the cross tube up using the factory bolts. Take a 1/2 drill motor with a 1/2 drill bit and drill through the tube into the crossmember. The new hole will line up the forward mounting point of the torque arm beam. Use a 2 1/2 long 1/2 bolt and lock nut when you are ready to install the center beam.

3. Remove the factory torque arm assembly. To accomplish this, take the bolts out o the forward bracket (where the nose of the torque arm is mounted). At this point it will be helpful to have a floor jack to support the rear axle under the cover plate. Remove the nose of the torque arm from the bracket assembly. Moving to the rear of the torque arm, remove the two long factory bolts attaching it to the rear axle. You should be able to remove the torque arm completely now. A mallet may be of some assistance at the rear axle. Refasten the exhaust where the front torque arm bracket was located, using the (2) 5/16 bolts and nuts supplied in your hardware kit.

4. Inside the vehicle, remove the left rear seat bottom. This can be accomplished with a socket, extension and ratchet. Next remove the right seat belt for the left rear passenger's seat. This will allow you to obtain clearance to get underneath the vehicle's carpeting in that area.

5. Install the center beam next. In order to install the center beam it will be necessary to temporarily dismount the fuel filter and some of the lines located in the area, however none of the lines will have to

be disconnected. This unit installs down the drive shaft tunnel and has (V) shaped plates welded to the rear of the beam. This section fits up underneath the vehicle, against the floorpan directly under the left rear seat. You will note that there is a canister type fuel filter in the same general area. The plate section of the center beam fits flat up against the floorpan. On the outboard side of this area, there is a floorpan body seam. The forward brace's plate will fit up next to it. It should butt up to it. With the beam in the drive shaft tunnel, hold it up so the front of the beam lines up with the hole you drilled in the cross member. .

Take a 1/2"x 2 1/2" bolt from the hardware pack and fasten the center beam to the cross member. Tighten the bolt down but do not torque it yet.

6. Push the back of the beam up to the floor. Locate seven (1/2 " x 1" bolts and washers) from the hardware pack. In the rear most portion of the brace you will find seven (1/2" holes), using a 1/2" bit drill one of the mounting holes located inside the 1 5/8 tube. Make sure the interior is out of the way. Once the hole is drilled place a 1/2-inch bolt with flat washer though the hole from the top down and install the self locking nut. Do not totally tighten the bolt down yet. Next drill a 1 /2 inch hole at the other end of the top plate towards the outside of the car. Install a bolt/washer and nut in the same fashion. **At this time tighten both bolts to 70 foot pounds and the front bolt to 70 foot pounds.**

7. Returning to the rear, drill the five remaining 1/2" holes through the floorpan. Fasten those locations as you did before, placing a flat washer onto the bolt and dropping the bolt through the floorpan from the interior and placing a stove lock nut on the other end. Torque to 70 ft pounds.

8. Locate the steel sleeve (with a large washer welded to it) and two rubber bushings. Assemble the steel bushing sleeve by taking the small rubber bushing and sliding it onto the sleeve. Slide the bushing all the way down until it rests against the washer. Make sure that the step in the bushing faces toward the threads at the far end of the sleeve. You are now ready to install the torque arm on the car.

9. Using quality grease, pre-lube the inside of the steel sleeve and slide the sleeve over the torque arm. The threads will face away from the traction beam. Take the assembled (torque arm with sleeve) and slide the steel bushing sleeve through the large ring that is welded on to the forward main beam. Lift up the rear axle using a floor jack positioned under the rear cover plate. You will note that this has the effect of tilting the rear axle. At this time, line up the rear bracket with the axle. A mallet may simplify this task. As soon as the bracket is properly located on the axle, line up the bolt holes and slide the original factory bolts into place from the bottom, placing the nuts on top. Torque these bolts to factory specifications (100 foot pounds). Torque the 2 bolts on the side of the bracket to 70 foot pounds. These bolts attach the torque arm to the bracket.

10. Once the torque arm is in position, finish assembling the sleeve with the rubber bushings. Slide the steel sleeve (and bushing forward until the step in the bushing fits into the steel ring on the forward beam. Slide the remaining rubber bushing onto the sleeve so that the step in the bushing indexes in the steel ring on the main beam. Place the large gold washer onto the steel sleeve, concave side facing toward the rubber bushing. Install a 1-inch jam nut and tighten it down until it bottoms out on the threads compressing the bushings.

11. Install the 1-inch fine thread end cap. It is easily recognized because it has a grease fitting attached, Tighten the end cap down until it bottoms out on the steel bushing sleeve. Returning to the 1-inch jam nut that you installed in **Step 10**, loosen it until it contacts the end cap. Putting a wrench on both the end cap and the 1-inch jam nut, tighten them against each other.

12. Lubricate *TracLink's* bushing via the grease fitting in the end cap. When filled, lube will come out the back of the steel sleeve, where the traction beam slides into place. Use waterproof synthetic grease, as this will preserve the operational integrity of the bushing**,** *providing quiet* operation and *long life.*

13. Returning to the interior, reinstall the right seat belt on the left rear passenger side. Straighten and replace the carpeting that you moved aside in **Step 3.** Reinstall the left rear seat bottom

14. With the car on a drive on ramp or supported properly check the driveline pinion angle. **WE REQUIRE THE PINION ANGLE TO BE SET AT ZERO, MEASURED AT THE REAR END TO DRIVESHAFT LOCATION.** In order to adjust the pinion angle, simply loosen the jam nuts on the adjuster (bottom of the torque arm) and by rotating the adjuster you can set the pinion angle.

15. Installation is now completed. Enjoy.

16. No realignment of the front end is necessary

TECHNICAL INFORMATION

SUBJECT: VIBRATIONS

1. If you notice a vibration during your test drive through the whole vehicle, this condition is caused by the drive line or pinion angle being nose down or over center and nose up. Both of these conditions will cause a chassis vibration. Solution is to re-adjust the pinion angle.

2.Metal to metal sound over bumps --- generally intermittent.

This condition is from the length of the torque arm being too long and the taper at the end of the torque arm is hitting the steel collar over bumps (look where the rubber bushings are located). The torque arm will move ¼ to 3/8 of an inch in during bumps. This movement is required for proper suspension operation. If this distance is less than ¼" to 3/8" of an inch you may experience a thumping sound over hard bumps. This is the torque arm bottoming out on the collar.
Solution: Shorten the length of the torque arm by screwing in the rod ends at the end of the torque arm. You will have to remove the torque arm from the bracket that attaches it to the rear end. Adjust the upper and lower rod end in the same amount and reinstall.

3. Occasional thumping sound going over drive ways and speed bumps.

This is caused by over greasing the pivot at the end of the torque arm. Simply remove the grease fitting located at the torque arm end cap. Drive around the block and reinstall the grease fitting. The excess grease will have purged out and the condition will have gone away.

Installed properly this unit will be quite during normal operations. However during hard acceleration like drag racing off the line you may experience a small thump. This is the traclink activating, forcing the tire into the payment, it is normal, it's working. ENJOY!

Other components offered by Global West are:

- Tubular rear lower control arms
- Adjustable panhard rods
- Springs
- Shocks
- Subframe connectors
- Del-a-lum control arm bushings
- Tubular tie rod adjusting sleeves
- Lower steering frame supports
- Fast ratio steering boxes
- Racing and High Performance disc brake kits