

Drop Link Setup Instructions

Extended Bracket Adjustment

- 1) You can start on either side. It's best to do this with the suspension loaded, but usually not practical, and not absolutely required. Disconnect the drop link from the swaybar on one side.
- 2) With the wheels pointing straight forward, rotate the other bracket on the strut, in either direction while observing the swaybar moving up and down. Stop with the bar in its lowest position.
- 3) Tighten (19 ft-lbs) the pinch screw to lock it in place.
- 4) Repeat for the other side by disconnecting the link you just adjusted, and finding the optimum position on the other side.
- 5) Lock it in position and connect both drop links.
- 6) Rotate the steering in both directions (lock to lock), making sure the rod ends are orientated such that they will allow full rotation without binding.
- 7) Rotate the steering in both directions (lock to lock), making sure that there is no contact or interference between the bracket and drop link. Readjust the brackets slightly if needed to clear.

What this does is makes it so that as you turn in either direction, the swaybar will be pulled up on both sides by about the same amount. This, in turn, will eliminate/minimize any windup of the swaybar due to steering input. The end result is more consistent handling, and less understeer on tight turns.

You'll notice that there is a left and right side bracket, that are opposite of each other. Either bracket will work on either side of the car, with the exception of the Turbos and C4s. Proper orientation shown in Figure 1 (page 3). The drop link will usually connect to the swaybar on the inner side of the bar for Turbos, and on the outer side for all others. This will vary for different bar brands, and always needs to be checked for binding or contact, as outlined below.

Setting Drop Link Length

Optimal drop link length will vary by ride height, sway bars used, and stiffness setting. The basic guideline is to try to get the swaybar arms relatively parallel to the ground when the suspension is loaded. It's in no way critical, and small variations are not a problem. Try to avoid excessive swaybar lever arm angles if they can be corrected with a simple adjustment. You should be able to establish a single length that works ok for all the possible adjustment settings. When set correctly, the swaybar may lightly contact the LCA with the suspension hanging. It will move away as the suspension gets loaded. On C4 cars, be make sure there is adequate clearance between the swaybar and axle with the suspension fully loaded.

Setting Swaybar Stiffness

Settings will vary as well, depending on multiple factors. As an initial setup, I recommend setting the front in the middle and the rear in one of the softer settings. Tune with the rear bar because it's much easier to access. Then adjust front and rear together to increase or decrease overall stiffness as desired. If you are running stock suspension, you may want to bump up the initial overall swaybar stiffness to help control body roll and improve response. Always be careful after changing settings and make small changes, as you could be caught off guard with an oversteering situation.

Setting Drop Link Preload and Rod End Phasing

With the car on flat ground, you can adjust out preload by adjusting the drop link length on one side. The front wheels need to be pointing straight ahead. With the locking nuts loose, rotate the link in either direction to make the drop link shorter or longer. If you rotate the wrong direction, the preload will increase, and it will get harder to rotate the link. Rotating the correct direction will make it easier to turn. At the point of no preload, you will feel the link be completely loose.

Next step is to phase the rod ends so they don't bind. You can do this with the car off the ground, and the wheels off for better access. Be careful not to rotate the links much and throw off your preload. The back is easy, requiring that the rod ends be relatively parallel to each other. The front requires much more attention. With the wheels pointing straight ahead, rotate both rod ends the same direction completely, as far as they will go. Tighten the loose locking nut. Rotate the steering to full lock in both directions, checking for any binding by rotating the complete link (with rod ends) in either direction. The rod ends should still have some room to allow for some rotation before they are maxed out. If they bind in one lock position, and not the other, you may need to do some fine tuning on the phase angle between the rod ends so there is no binding in either lock position. Now tighten the locking nuts on each link.

Check for Binding or Contact

With all the different swaybars on the market, there is no one setup configuration that works for all cases. The link to swaybar connection may need to be on the inner side of the bar for some brands, and on the outer for others. Rotate the steering from lock to lock and check to make sure the rod ends are not binding and the links are not making any contact with the wheel carrier or the strut. Any contact or binding will cause unwanted noise and possible damage to the links. Make whatever adjustments that are necessary. The C4 swaybars and struts have more possible variations and will take more time to setup properly.



Figure 1: Driver side drop link bracket. Note orientation of bracket in relation to swaybar.