



East Coast Supercharging
562 Route 539 Cream Ridge, NJ 08514
609-752-0321

C6 Z06/GS/ZR1 Transmission Brace Installation Guide



Kit Contents

Description	QTY
5 Piece Bar Set	2 x 14.25" Lower Link Bar
2 x 20.00" Upper Link Bar	1 x 5/8 Dia Cross Bar
	1.00
Lower Trans Bracket Front	1.00
Upper Trans Bracket Front	1.00
RH Side Cover Bracket	1.00
LH Side Cover Bracket	1.00
Lower Trans Bracket Rear	1.00
RH Rod End: 3/8"-24 x 1.25" Long (Front Bars)	4.00
Jam Nuts For RH Rod End: 3/8"-24 (Included w/ rod end)	4.00
LH Rod End: 3/8"-24 x 1.25" Long w/ Jam Nut (Rear Bars)	4.00
Jam Nuts For LH Rod End: 3/8"-24 (Included w/ rod end)	4.00
3/8-24 x 1" Hex Bolt	6.00
3/8-16 x 1" Hex Bolt	2.00
3/8-24 x 1.5" Hex Bolt Partial	2.00
3/8-24 Nylon Lock Nut	2.00
3/8 lock washer	2.00
8mm x 40mm Hex Bolt	9.00
10mm x 55mm Hex Bolt	5.00
8mm Lock Washer	9.00
10mm Lock Washer	5.00
10mm x 130mm Fully Threaded Rod	1.00
10mm Nylon Lock Nut	2.00

Installation:

-Unpack and check contents of the ECS Transmission Brace Kit, check packing list and make sure all components are accounted for before starting installation.

-On differential cooler equipped vehicles you will need to temporarily remove the differential cooler assembly from the driver side differential side cover. Simply remove the 3 x M10 bolts holding the cooler to the side cover and set aside. This will help access the side cover bolts to install the driver side cover bracket. (see pictures below)



-When removing the differential cooler make sure to remove the two retaining clips for the differential fluid. One from the hose coming out of the back of the differential cover, the other will be a clip holding the cooler assembly itself into the differential case. Retain clips for re-installation of the hose and cooler.

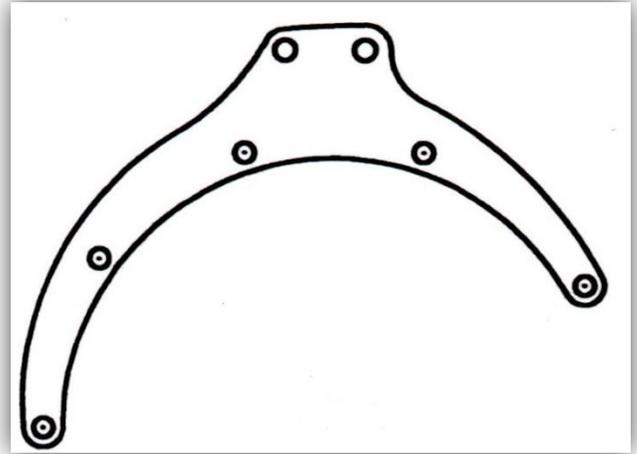
-On Z06 rears there are two tabs that need to be trimmed off the driver side differential side cover, place the side cover bracket on the side cover to mark the tabs that need to be trimmed, using an air-saw or similar tool to trim off the tabs as marked below.



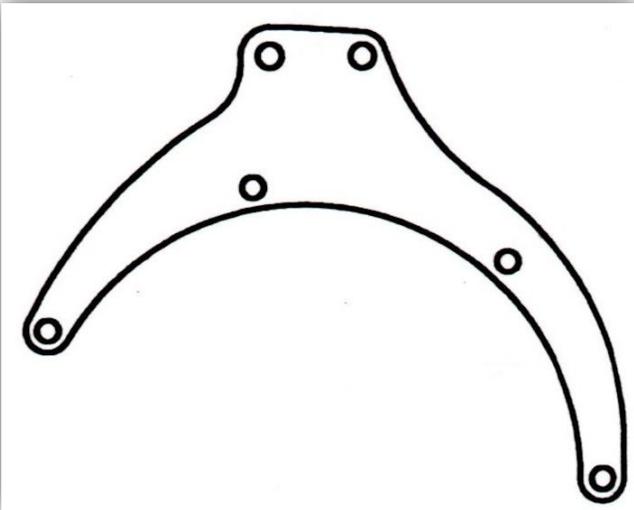
-For ZR1 rears additional trimming will be needed of both side covers to properly fit the side cover brackets, reference pictures below for trimming locations.



-After trimming, install the passenger side cover bracket by first removing the top 5 factory side cover bolts and discard. You will use 5 of the supplied M8 x 40mm bolts and lock washers and torque them down to 25 ft-lbs.



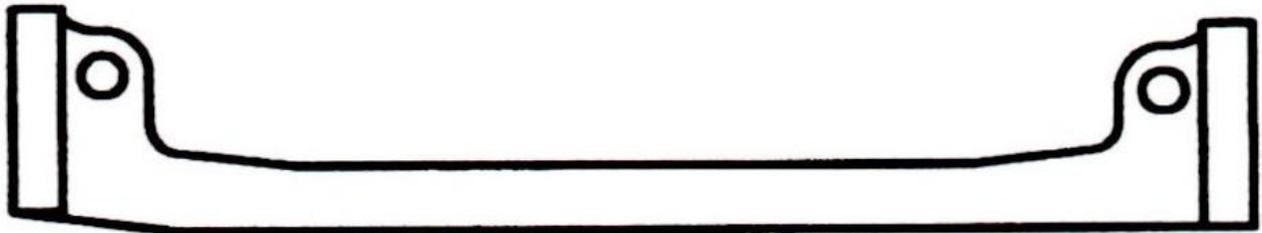
-Install the driver side diff cover bracket by removing the top 4 factory bolts and using the remaining supplied 4 M8 x 40mm bolts and lock washers. Torque bolts down to 25 ft-lbs.



-Followed by installing the diff cover bracket cross bar using the supplied 3/8-16 bolts and washers. Torque those bolts down to 40 ft-lbs. ****ZR1 Differentials require a custom 1/2" machined cross bar, see ZR1 picture below****



-Next install the lower differential bracket, install using the factory stud on the passenger side, on the driver side use the supplied M10 stud and flanged M10 nuts, insert the stud THROUGH the transmission case as pictured below and secure with the M10 nuts. ****Note some rear cases may be threaded and require you to actually thread the stud into the case with enough threads sticking out the back to thread on the M10 nut****



Driver Side Stud Detail:



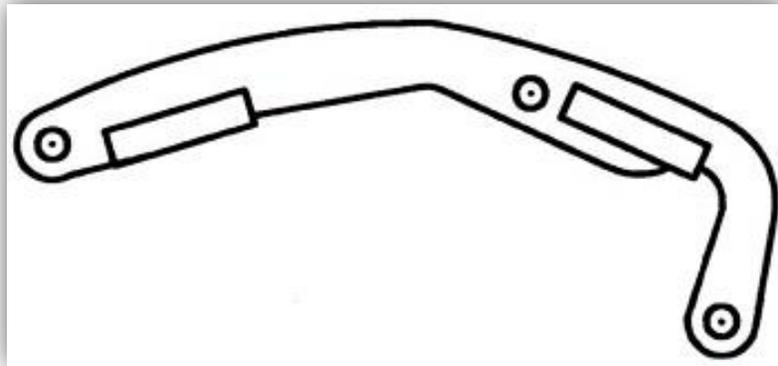
Front View



Rear View



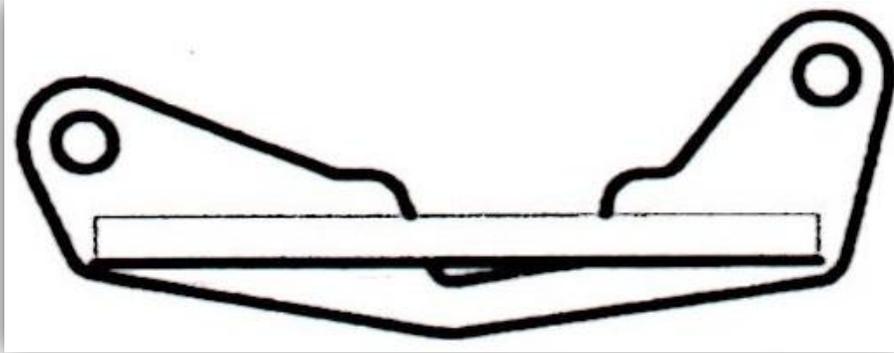
-Next to install the top-front transmission bracket, first remove the top two transmission bolts and the top bolt on the passenger side of the transmission case as pictured below.



-Install the top transmission bracket with the supplied M10 x 55mm bolts and lock washers and torque these down to 45 ft-lbs.



-Next will be the lower-front transmission bracket, remove lower factory transmission/rear bell-housing bolts.



-Next install the supplied M10 x 55mm bolts and torque down to 45 ft-lbs.



Strut bars assembly and install:

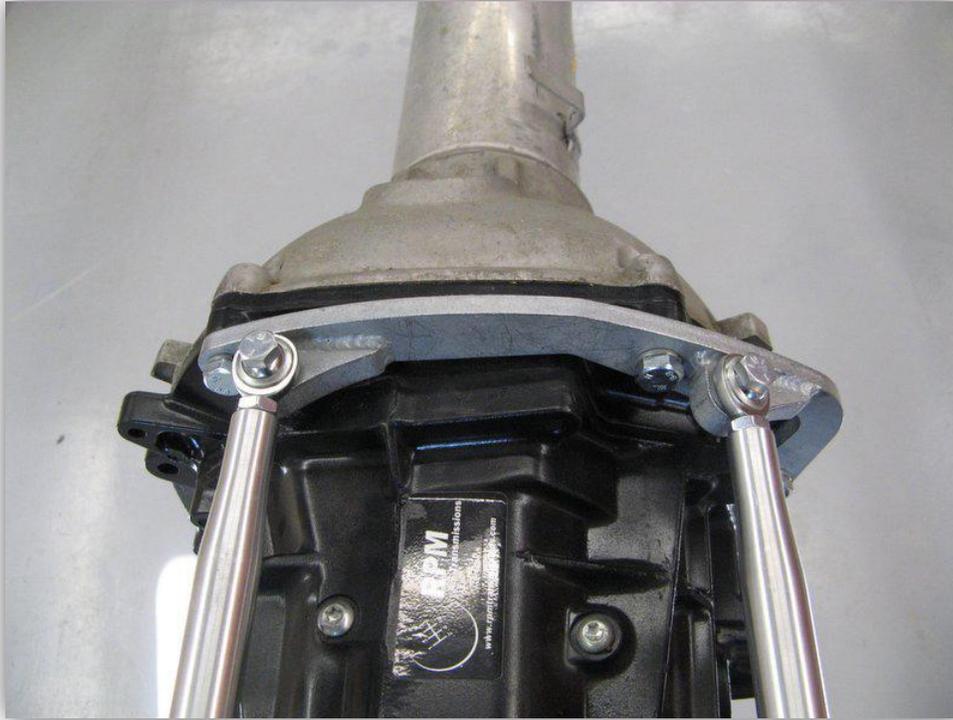
-Unpack the 4 strut bars (2 x short 2 x long) and the 8 rod ends and jam nuts (4 sets are left thread and 4 sets are right thread). The jam nuts with the line in the center of the hex are the left handed ones, keep them separate for ease of install in the future.



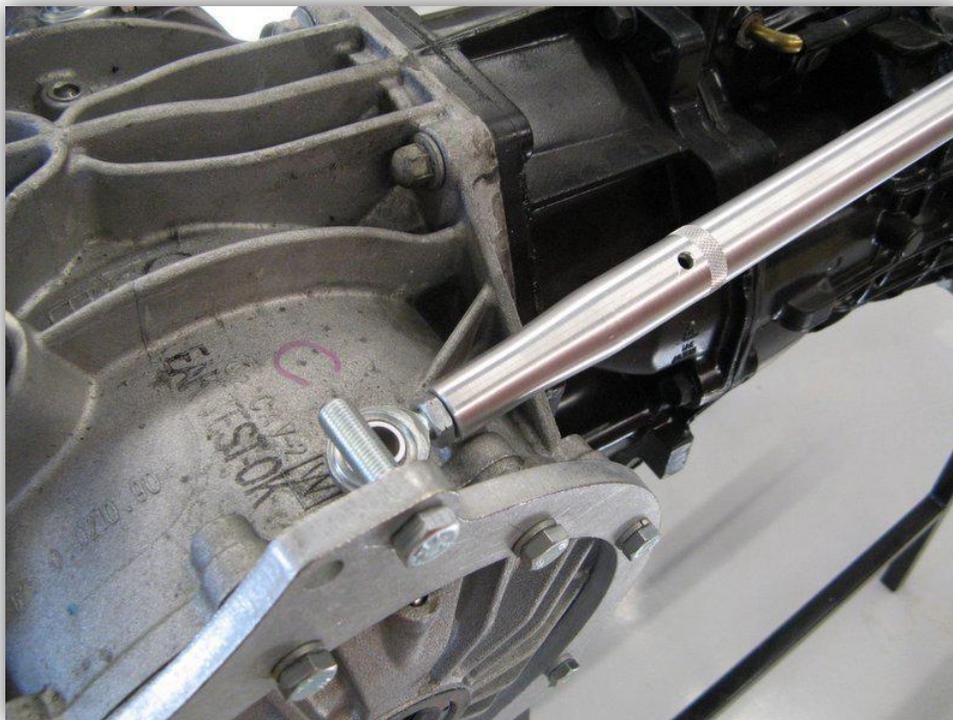
-Next Install the jam nuts on to the rod ends running them all the way down to the ball end followed by installing the corresponding rod end/jam nut assembly on to the strut bars. ****Note the bar ends with the adjuster hole and knurled end are the left hand threaded side****. Apply some anti-seize on to the threads of the rod ends and screw them into the strut bars until them bottom out.



-Attach the two longer bars on to the front top transmission bracket using the supplied 3/8-24 x 1" bolts and lock washers. The bars are reversible to accommodate different exhaust layouts but generally you want to install the adjuster/knurled end towards the rear of the car.



-Next install the two supplied 3/8-24 x 1.5" bolts into the top front holes in each of the differential side cover brackets. Be sure the bolts face in towards the rear.



-Holding the rear rod end with your fingers spin the rod counter-clockwise until the ball end can be slid over the 3/8 bolts. Once both of the top rod ends are connected install the supplied 3/8-24 lock-nuts.



-Next tighten all 4 bolts that secure the top rods front and back. At this time you can install the differential cross bar using the supplied 3/8-16 bolts, tighten to 40 ft-lbs.



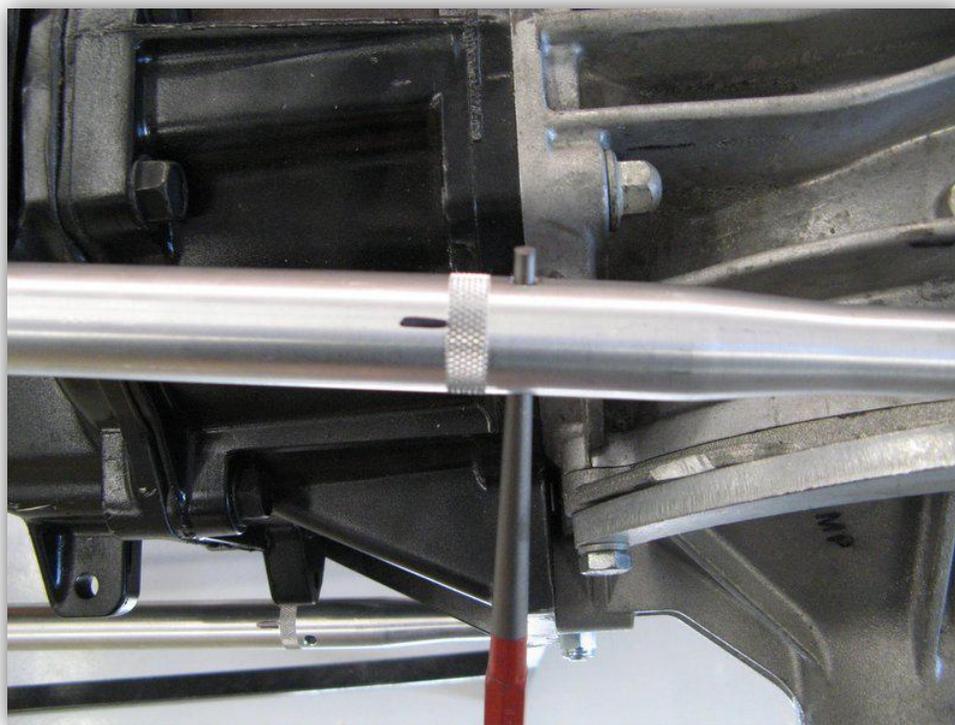
-Next install the 2 short lower rods onto the front transmission bracket using the supplied 3/8-24 x 1" bolts. Be sure the knurled end is towards the rear.



- Next it is time to set the tension for the lower rods. Start by holding the rear rod ends spin the rods counter-clockwise until the rod end will line up with the holes on the rear differential bracket. Now you can install the rear lower rods on to the rear differential bracket using the supplied 3/8-24 x 1" bolts. Make sure you place mount them on to the inside of the bracket ears.



-Turn the four strut rods by hand clock wise until they snug up. Mark a black line at the 12 o'clock position on each strut by the drilled hold. Insert a punch into the hole and turn each bar clockwise one half turn using the black line as your reference. Be sure all rods are being shortened while turning, the objective of tightening the strut bars is to bring the rear and transmission assembly together as one unit. Once all four rods are tight secure all 8 jam nuts.



If you have any questions please contact East Coast Supercharging support@eastcoastsupercharging or give us a call 609-752-0321.