

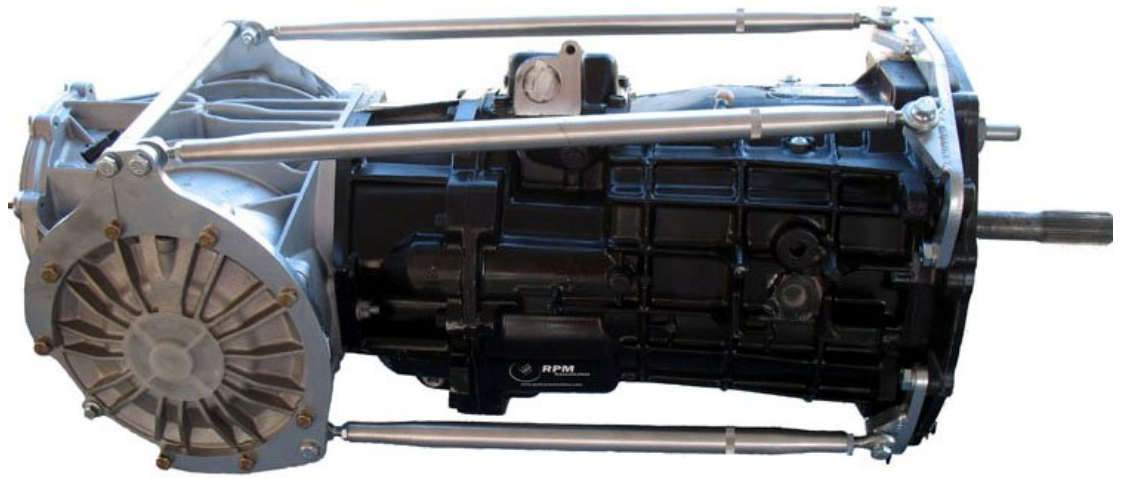
ECS Transmission /
Rear End Brace
C5
V1



**EAST COAST
SUPERCHARGING**

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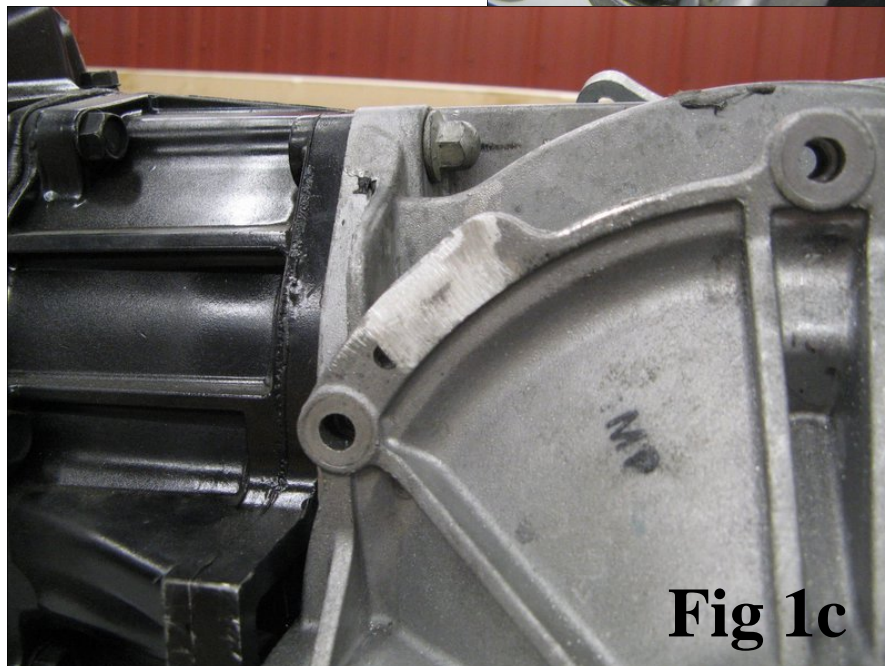
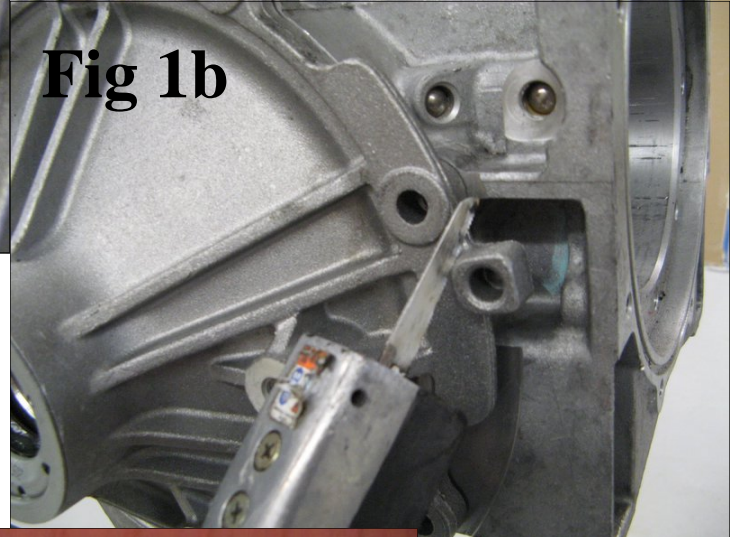
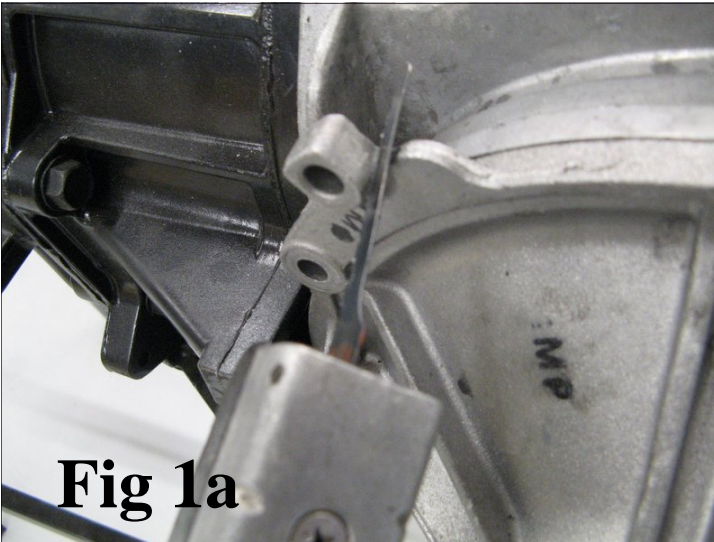


Kit contents:

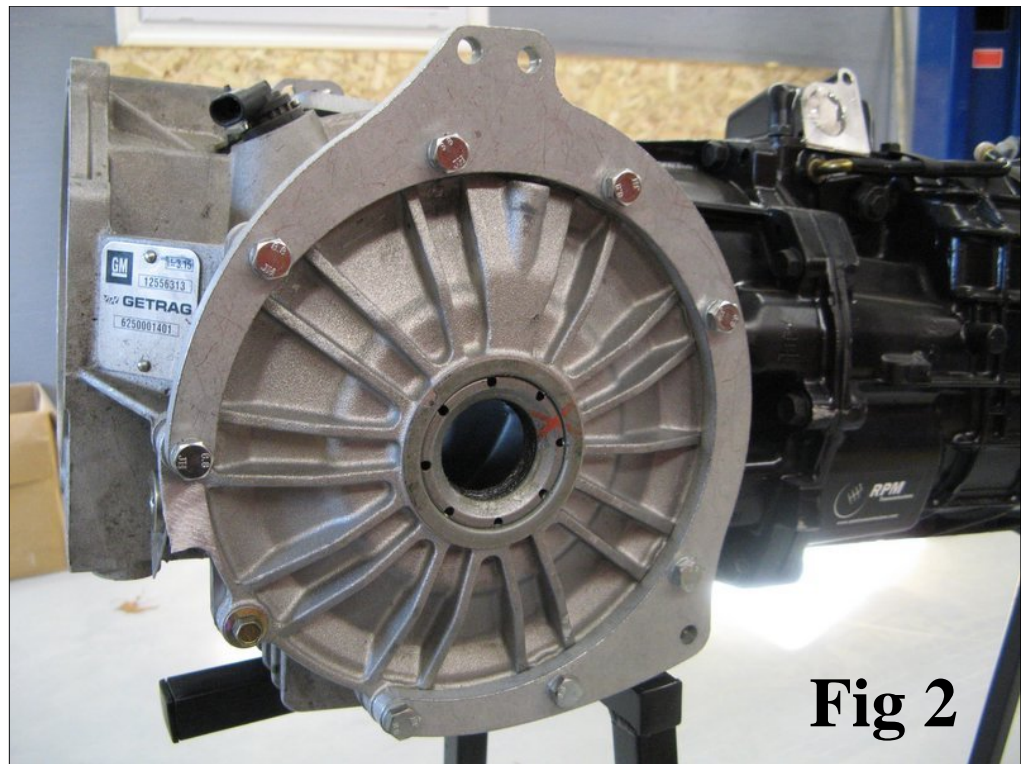
- (1) Left side differential plate
- (1) Right side differential plate (has welded spacer)
- (1) Upper transmission mount
- (1) Lower right transmission bracket (shorter bracket)
- (1) Lower left transmission bracket (longer bracket)
- (2) Long strut bars
- (2) Short strut bars
- (1) Differential cross support bar
- (4) 3/8 24 X 1" bolts
- (3) 3/8 24 X 1 1/2" bolts
- (1) 3/8 24 X 1 3/4" bolt
- (4) 3/8 24 locknuts
- (6) 3/8 lock washers
- (2) 3/8 16 X 1" bolts
- (7) 10mm X 55mm bolts
- (7) 10mm flat washers
- (14) 8mm X 40mm bolts
- (14) 8 mm lock washers
- (4) 3/8 Right thread rod ends
- (4) 3/8 Left thread rod ends
- (4) 3/8 Right hand thread jam nuts
- (4) 3/8 Left hand thread jam nuts

Installation Instructions:

1. Unpack and check contents of the brace kit.
2. Remove vibration dampner from the differential.
3. Remove and discard left side differential cover bolts.
4. On certain side covers (Z06) there will be casting squares that need to be cut off. Using an air saw cut the squares off and grind the area flat with an airgrinder. (Figs 1a-c)



5. Install the left side differential plate using the supplied 8mm x 40mm bolts and lock washers. Torque the bolts to 25 ft lbs.
6. Remove and discard the right side diff cover bolts, leaving the stock bolt in the 7 O'clock position. (fig 2)



7. Install the right side diff plate with the welded spacer facing inwards towards the rear and using the supplied 8mm x 40mm bolts and washers. Torque the bolts to 25 ft lbs. (fig. 2)
8. Remove the top 2 transmission bolts and the next bolt down on the

passenger side of the transmission. (fig. 3)

9. Install the top transmission bracket with the supplied 10mm x 55mm bolts and 10mm lock washers. Torque bolts to 45 ft lbs. (fig. 3)
10. Remove lower 2 left side transmission bolts. (fig. 4)

11. Install the left side transmission bracket with the supplied 10mm x 55mm bolts and torque to 45 ft. lbs. (fig. 4)

12. Remove lower 2 right side transmission bolts.

13. Install the right side transmission bracket with the supplied 10mm x 55mm bolts and torque to 45 ft lbs

14. Unpack the 8 rod ends keeping the left and right hand ends separate.

15. Unpack the 3/8 jam nuts. The jam nuts with the line in the center of the hex are the left handed ones.

16. Screw the jam nuts onto the threaded portion of the rod ends all the way to the ball end.

17. Keep the left hand and right hand rod ends separate to ease future installation.

18. Locate the 4 strut bars and take notice that the bars have a knurled end on one side. The knurled end is the left handed thread.

19. Apply some anti-seize onto the threads of the rod ends and screw them into the rods until they bottom out.

20. Attach the two longer bars onto the top transmission bracket using the supplied 3/8 24 x 1" bolts and lock washer. Position the rods so that the knurled or L/H end is towards the rear. (fig. 5)

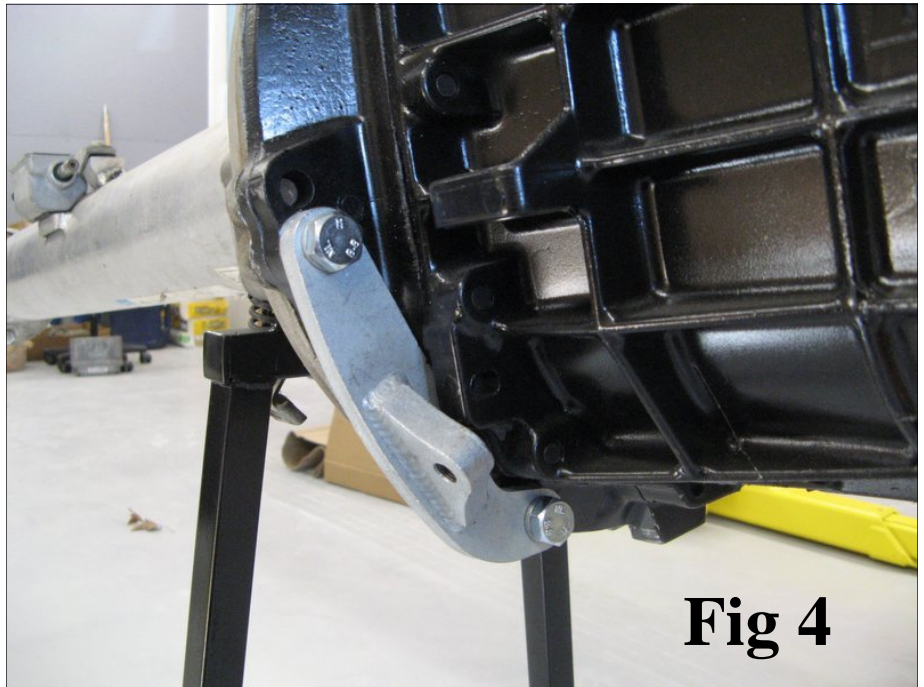


Fig 4

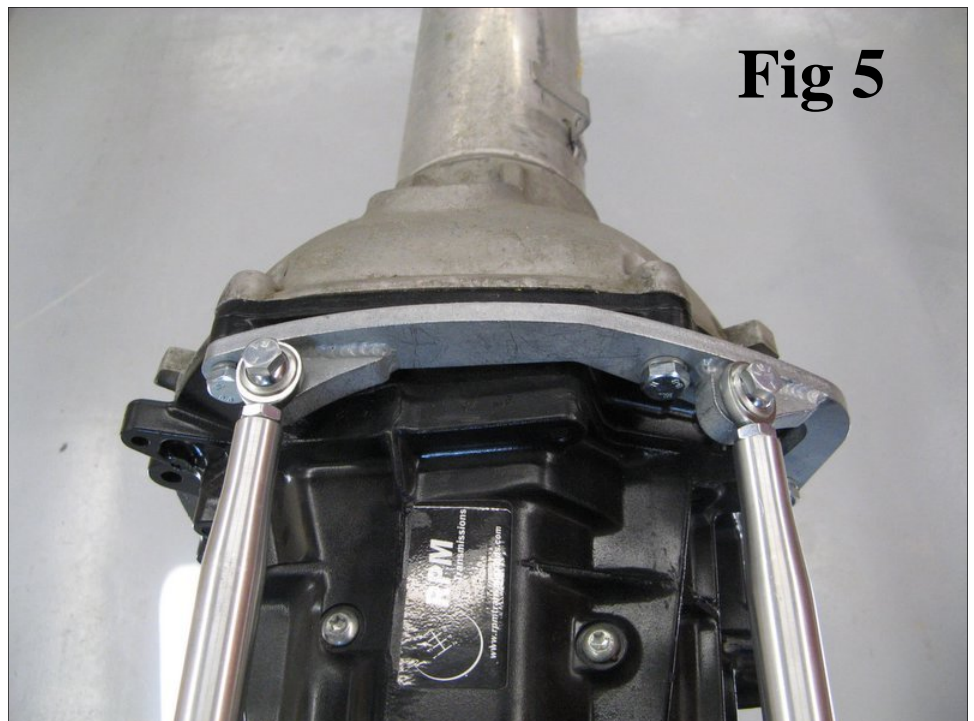


Fig 5

21. Install the 2 supplied 3/8 24 x 1 1/2" bolts into the top front holes in each differential bracket. Be sure the bolts face in towards the center of the rear. (fig. 6)

22. Holding the rear rod end with your fingers, spin the counter clockwise until the ball end goes onto the 3/8 bolt. (fig. 6)

23. Once both top rods are connected install the supplied 3/8 24 locknuts. Tighten all 4 bolts attaching the top rods.

24. Install the 2 short lower rods onto the front transmission brackets using the supplied 3/8 24 x 1" bolts and lock washers. Be sure the knurled end is towards the rear. (fig 7)

25. Install the 3/8 x 1 3/4 " bolt into the welded spacer on the right side diff plate. Be sure the bolt faces inward towards the rear.

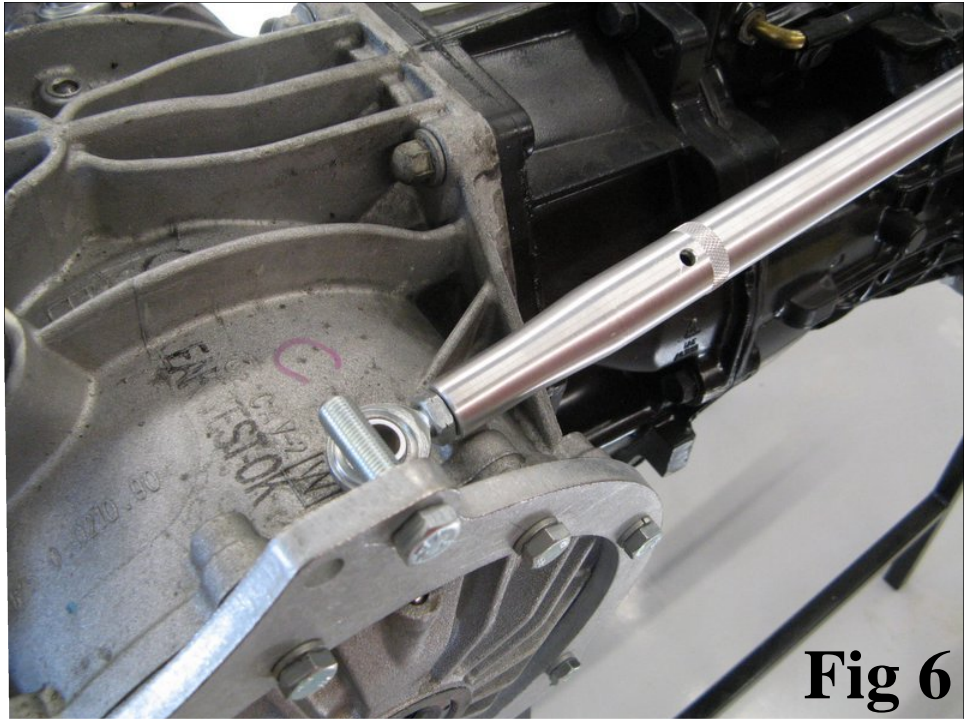


Fig 6

26. Install the 3/8 x 1 1/2" bolt into the left side diff plate. Be sure the bolt faces outward away from center.

27. Holding the rear rod ends spin the rods Counter clockwise until the rod ends attach to the 3/8 bolts. The left side lower strut rod attaches onto the outside of the differential bracket unlike the other three rods.

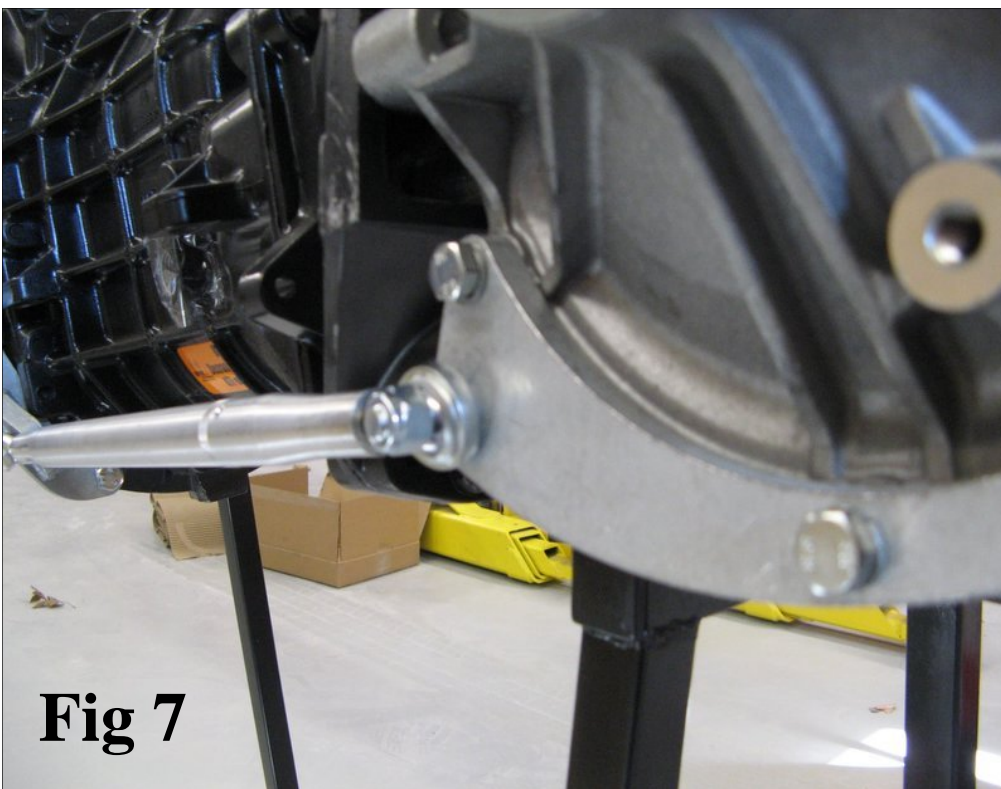


Fig 7

28. Install the 3/8 lock nuts onto the rear lower rod end bolts. Tighten all four bolts holding the lower strut rods.
29. Install the differential cross bar using the 2 supplied 3/8 16 bolts. Torque the bolts to 40 ft lbs. (fig. 8)
30. Turn the four strut rods by hand clockwise until they snug up. (fig. 9)
31. Mark a black line at the 12 O'clock position on each strut rod by the drilled hole.

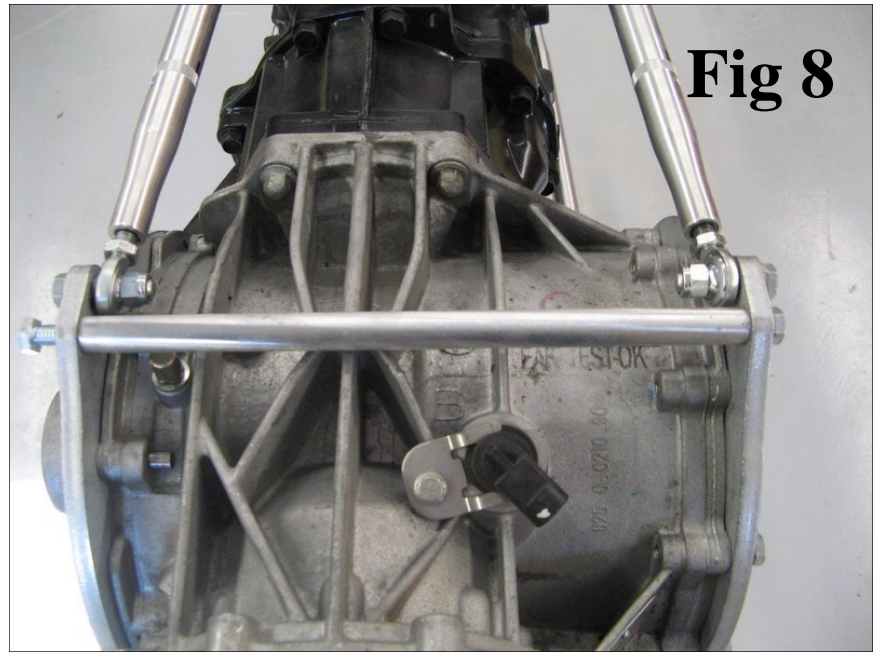


Fig 8

32. Insert a punch into the hole and turn each bar clockwise one half turn using the black line as your measurement. Be sure all strut bars are being shortened while turning, the object of tightening the strut bars is to bring the rear and transmission assembly together. (fig. 9)
33. Once all four rods are pre-loaded tighten the 8 jam nuts.
34. Reinstall the vibration dampener onto the rear.

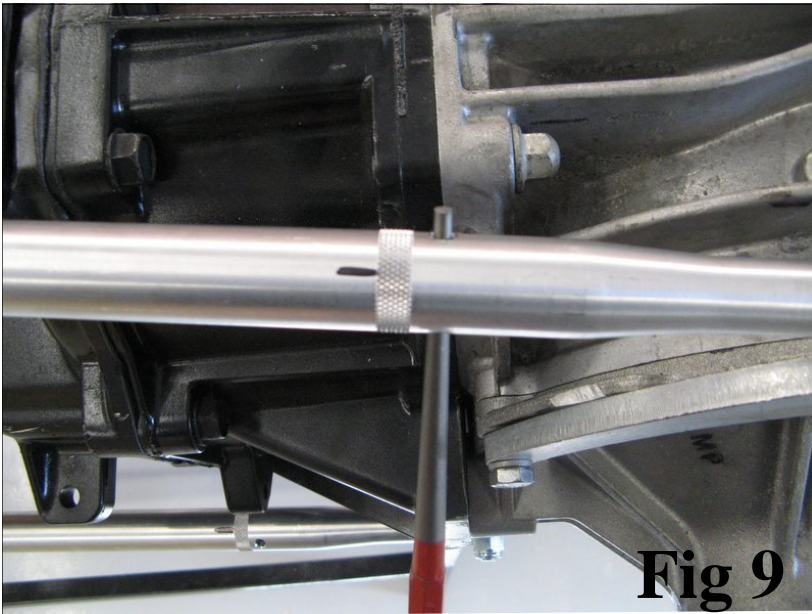


Fig 9

Thank you for purchasing the ECS manual transmission brace. Feel free to call the shop with any problems or questions. 609-752-0321. Log on to Eastcoastsupercharging.com for all the latest custom Corvette products and accessories.