



FRAME CONNECTOR FOR CAMARO/FIREBIRD PART# C3017

PARTS LIST

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|--------------------------|-----------------------------------|
| 2) Frame Rail Assemblies | 1) Pass. Side Frame Mount Assy |
| 1) Crossmember | 1) Driver's Side Frame Mount Assy |
| 2) Crossmember Mnt. Assy | 2) 3/4" X 3" Bolts |
| 2) 3/4" Lock Nuts | 14) 3/4" Flat Washers |

- NOTES:**
- a. Accurate Measurements are an absolute must.
 - b. Try to obtain as much weld surface as possible. This will help to create a very rigid weld.
 - c. Grind thoroughly all paint and rust preventative coatings to make welding much easier.
 - d. Read instructions carefully before you start installation of this product.

INSTALLATION INSTRUCTIONS

1. Start by removing the following from the vehicle; Gas Tank, Fuel Lines, Brake Lines, Exhaust System, Entire Interior.
2. Raise the car as high as possible and place jack stands under the rocker panels.
3. Now simulate the final ride height.
4. With the stock rear housing in place (or something to simulate it), remove the rear coil springs and shocks and raise the housing to a point 6" from the centerline of the housing to the bottom of the rocker housing.
5. Now take a measurement from the rear housing centerline to the back of the door opening and save for future reference. **Measure both sides.**
6. With the rear housing in place, measure from the centerline of the housing forward to a point 34-1/4". This determines the location of the tubular crossmember and will eventually locate the front ladder bar mount so make this measurement carefully and as accurately as possible.
7. Scribe a line across the floor from side to side using these points as a reference.
8. Cut through the floor along this line. (No higher than 3" above the floor in the drive shaft hump area)
9. Bend up tabs on both sides of this cut line wide enough to allow the crossmember to fit up inside. **Note: these tabs will be bent back later and welded to the crossmember to seal off the floor area.**
10. The two 6" X 6" plates with the 1-1/2" tubes attached slide into the end of the crossmember and will eventually be welded to the rocker panels and crossmember.
11. Measure between the two rocker panels side to side and cut the crossmember accordingly, allowing for the two 6" X 6" plates.
12. Slide the end plates into the crossmember and tack weld the assembly in place between the rocker boxes.

13. Be sure the crossmember is exactly 32-1/4" from the rear axle centerline and 2" above the floor to the centerline of the crossmember. **(Again measure accurately!).**
14. The two short assemblies in the kit are frame supports for both sides of the car. These locate at the front of the frame connector and tie the stock frame rail to the rocker panel under the front of the door.
Note: The side with the flat roll bar plate mounts on the driver's side and the one with the bent plate mounts on the passenger's side.
15. Wedge each side into place and push it as far forward as possible keeping the 1-1/2" x 2" frame rail piece parallel with the rear cross member.
16. Tack each side into position. **Note: You may have to drill a clearance hole in the roll bar plate to clear the fender-mounting nut in this area.**
17. Position the main frame rail/ladder bar mount. Note positioning of these (side to side) depends on your chassis limitations. We suggest that a car using stock inner wheel wells, position the rails 44" apart center line to center line.
18. A car with enlarged wheel wells can mount the rails/ladder bar mounts as close together as the chassis dictates. **Note: We will continue on the assumption that you are using stock wheel wells although the installation is basically the same either way.**
19. Scribe lines perpendicular to the crossmember along the centerline of the frame rail location and again cut and bend tabs up as needed for clearance as done previously for the crossmember.
20. The radius portion of the ladder bar mount fits directly to the crossmember and the front end of the rail attaches to the front frame supports previously installed.
Note: Trimming the front of the rail may be necessary to obtain the proper length.
21. Tack weld the rail in place on each ends.
22. Our goal is to be able to remove the entire structure to complete the welding. However to prevent distortion and misalignment, weld any accessible area before removal. Once removed complete all welding of the assembly.
23. Reinstall in place and weld the entire assembly.
24. Bend back those tabs bent upwards in step #19 and weld to the crossmember and frame rails.
25. The area directly behind the ladder bar mount will have to be removed and boxed in with sheet metal to provide clearance for the ladder bars due to low ground clearance and low floor pan of this car.

***For Technical Assistance, call Competition Engineering's Tech Line at
(203) 458-0542, 8:30am-5:00pm Eastern Time***

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