



## **INSTALLATION INSTRUCTIONS** **SWING OUT SIDE BAR KIT**

**C3180**

Competition Engineering designed this kit to make getting in and out of a roll bar equipped car easier. The components of this kit will replace one of the door bars supplied with an 8-point roll bar kit. Installation will require fabrication to fit individual applications. Please read the instructions completely before beginning the installation.

### **PARTS LIST**

- |                       |                                |
|-----------------------|--------------------------------|
| 1) Side Bar           | 1) Mounting Plate              |
| 1) Floor Pivot Plug   | 1) Latch Slide                 |
| 1) Plastic Handle     | 1) Spring                      |
| 1) Latch Housing Assy | 1) 1/2"-20 x 3/4" Socket Screw |
| 1) 3/8"-16 x 2" Stud  | 1) 3/8"-16 Jam Nut             |
| 1) Floor Socket       |                                |

### **INSTALLATION**

1. Determine a suitable location for the floor pivot assembly (Fig. 1) so that the side bar can swing out far enough to allow easy entry and exit from the car. This may require bending and trimming of the mounting plate so that the floor plug will be positioned straight up and down.
2. Assemble the components of the pivot by mounting the floor plug to the mounting plate using the supplied 1/2"-20 x 3/4" socket screw. (FIG 2)
3. Drop the supplied floor socket over the pivot plug. Tack the floor socket to the mounting plate making sure that it is centered on the pivot plug.
4. Mount the plate assembly to the floor.
5. Slide the side bar over the pivot plug. At this time, rotate the bar back and forth to make sure there is enough room for entry and exit from the vehicle.

NOTE: This kit is universal in design and will require modification to the side bar to make it fit your particular application. Consult the rulebook for your sanctioning body for proper sidebar location.

6. If the side bar needs to be lowered, remove material from the bottom of the bar near the pivot end. Be sure to allow for a 3/8" space between the bottom of the side bar and the top of the floor socket. (FIG 3) To shorten the length of the side bar, cut material from the latch end. Make sure to account for the length of the latch housing which will be welded to the main hoop.

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

### **COMPETITION ENGINEERING**

80 Carter Drive • P.O. Box 1470 • Guilford, CT 06437  
Phone: (203) 453-5200 • Fax: (203) 453-6906

**Visit Us At [www.competitionengineering.com](http://www.competitionengineering.com)**

7. With the side bar cut to the proper size, assemble it into the car by sliding it over the pivot plug.
8. Space the bottom of the side bar 3/8" from the floor socket and tack weld it to the pivot plug.
9. Align the latch housing with the side bar using the solid steel latch slide to index the components to each other.
10. Trim the notch in the latch housing so that it fits flush against the main hoop mounting point. Take your time when trimming this notch. Make sure the fit is good. This will make for a higher quality weld bead later.
11. Once the latch housing has been matched to the main hoop, and the side bar is in alignment with the housing, tack the housing to the main hoop. Rotate the side bar to see if it clears the latch housing. Trim the side bar if necessary for proper clearance.
12. Remove the side bar and the mounting plate from the vehicle. Disassemble the mounting plate from the pivot plug.
13. Finish welding the pivot plug to the side bar. Also, weld the floor socket to the mounting plate. (FIG 4)
14. After all the welds have cooled, re-assemble the mounting plate to the side bar/pivot plug assembly. Use Loctite 721 Threadlocker or equivalent on the bolt threads.
15. Bolt the entire assembly into the car, making sure you have adequate reinforcement in the form of back-up plates to prevent the bolts from pulling through the floor in the event of an accident.
16. Assemble the latching mechanism by inserting the spring and latch slide into the latch housing. Hold the latch slide in place with the supplied threaded stud. Thread the jam nut onto the stud and then attach the plastic knob. Tighten the jam nut against the plastic knob. (FIG 1)
17. Actuate the bar assembly and check for bind. Lightly lubricate the contact areas at the pivot plug and the latch slide assembly.
18. Paint the bar and welds to prevent rusting.

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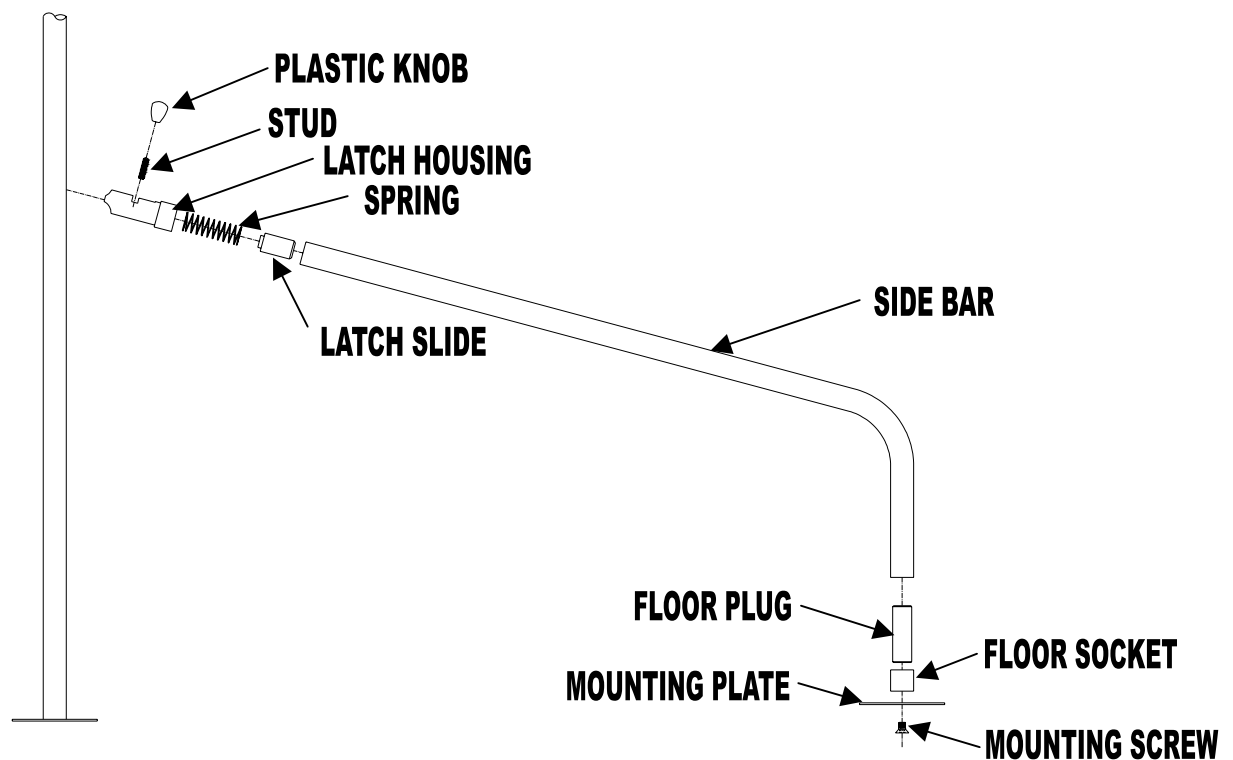
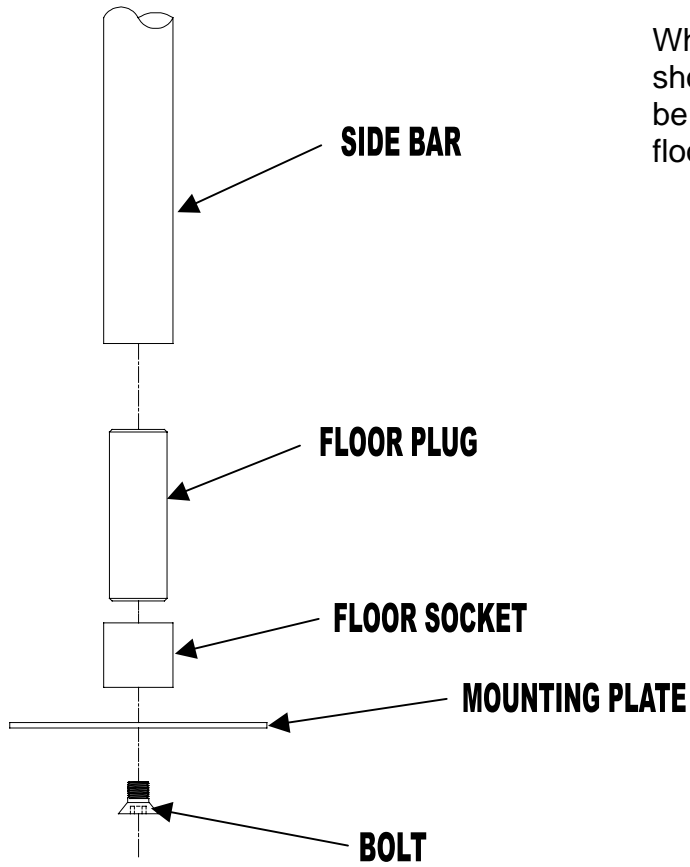


FIG. 1



When properly assembled the side bar should pivot easily. The floor plug must be bolted to the mounting plate and the floor plug must be welded to the side bar.

FIG. 2

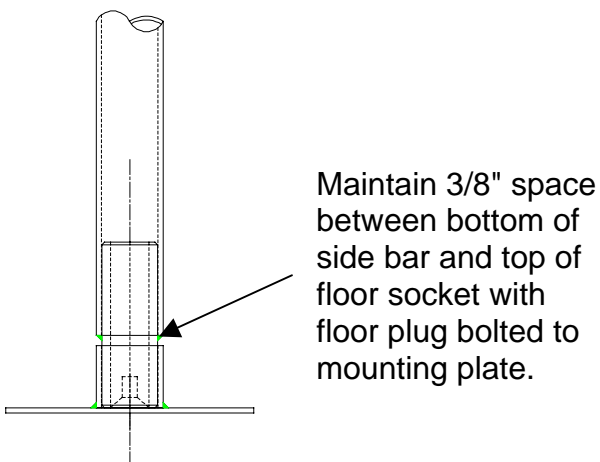


FIG. 3

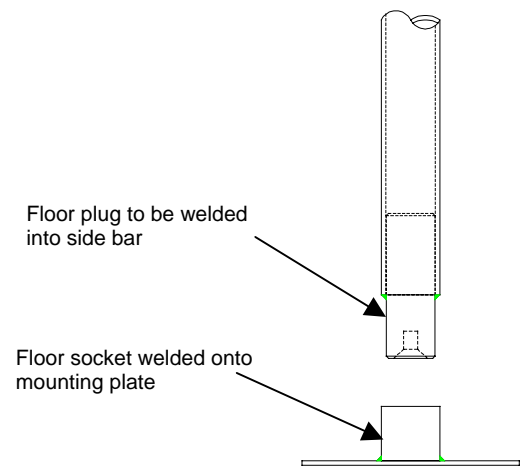


FIG. 4