

Detroit Speed 4-Point Roll Cage 1967-1969 Camaro/Firebird P/N: 011301DS & 011302DS

Thank you for your purchase of the Detroit Speed 4-Point Roll Cage. The exclusive Detroit Speed design follows the interior line of the vehicle, does not interfere with the interior comfort and packages close to the headliner and back window glass.



## Some key features include:

- Increased chassis strength
- Provides additional safety
- Removable crossbar with CNC machined clevis ends
- Main hoop constructed of 1 5/8" 0.134" wall mild steel tubing
- Crossbar constructed of 1 5/8" 0.134" wall mild steel tubing
- Roll Cage is <u>not</u> intended for use with back seat passengers
- Roll Cage is for off road use only
- Roll Cage does <u>not</u> meet NHRA/IHRA requirements due to removable crossbar

The Detroit Speed 4-Point Roll Cage Kit includes the following components:

ltem	Component	Quantity
1	Roll Cage Main Hoop	1
2	Roll Cage LR Down Bar	1
3	Roll Cage RR Down Bar	1
4	Roll Cage Cross Brace Bar	1
5	Front Doubler	2
6	L Rear Doubler	1
7	R Rear Doubler	1
8	Tube Adapter	2
9	Clevis – Upper Half	2
10	Clevis – Lower Half	2
11	5/16"-18 X 1" Socket Head Cap Screw	4
12	Instructions	1

**NOTE:** There is also a detailed drawing on page 6 that identifies all components.

**CAUTION:** If you are unsure about your welding abilities, have a professional welder complete the installation. Follow all safety guidelines that are provided with the equipment you are using. Always wear eye protection.

- 1. Remove the seats, carpet and padding, rear interior side panels, and package tray. Any other interior panels, including headliner, door panels, dash, etc. should be removed or masked well to protect them from grinding and welding sparks.
- 2. Install the doublers in the trunk and on the rockers. Place the doublers in the trunk rearward of the wheel tubs with the inside edge lined up with the fold in the trunk pan on the inside of the rear frame rails. Place the doubler so that it fits the profile of the rear tub with enough room to weld between the doubler and wheel tub (about 1/4"). Prep the trunk pan for welding by removing the paint where the doubler will weld to the pan. **NOTE**: The location of the frame rail flanges on the doubler and drill four holes accordingly so that it can be plug welded to the flanges. Weld the perimeter of the doubler to the floor pan.
- 3. Place the rear edge of the rocker doublers 14-1/2" from the front of the inner wheel tub. Drill three holes in the doubler to plug weld it to the rocker. Weld the perimeter of the doubler to the rocker.
- 4. Cut the template from the attached sheet on page 7. It may be helpful to transfer the template to a piece of poster board. Align the template to the corresponding stamped slots in the right and left hand sides of the package tray. Mark and cut out the material in the package tray where the rear down bars will pass through. The template allows for a flange to help strengthen the package tray. Bend the flange down around the down bar opening. The down bar opening should be toward the rear of the slot.
- 5. Position the main hoop in the vehicle. Place the bottom of the hoop so the rear edge (at the doubler) is 16-5/8" from the front of the wheel tub. Tack weld the hoop in place on both sides. The hoop should be angled so it is parallel to the angle of the trim/seal between the door window and the quarter window.

- 6. Place the down bars inside the vehicle through the package tray. Fit the down bars so they meet the rear doublers and the main hoop. The centerline of the main hoop is marked at the top of the bar with a center punch. Measure and mark the main hoop 19-1/4" from the center line in each direction. These marks will locate the outside edges of each down bar. Once in position, weld them to the main hoop as far around the tubes as possible. Tack weld the down bars to the doublers in the trunk. **NOTE:** In order to be NHRA compliant, the cross brace must be installed no more than 4" below, and not above, the driver's shoulders.
- 7. Carefully remove the entire cage in one piece. **NOTE**: This is possible with the glass out of the vehicle on most cars. Build variation or non-stock components may prevent removing the cage in one piece in certain applications. Remove the tack welds from the main hoop at the doublers. We recommend covering the ends of the main hoop and down bars with rags to protect the interior/exterior from scratches while the roll cage is maneuvered out of the vehicle.
- 8. With the cage out of the vehicle, finish welding the down bars to the main hoop. Carefully maneuver the cage back into place. Weld the down bars and main hoop to the doublers.
- 9. Use the cross brace hardware shown below (Figure 1) for the next several steps. Assemble the upper and lower half clevis together using the 5/16"-18 socket head cap screws provided. (Fig. 2)



Figure 1 - (Cross Brace Hardware)



Figure 2 - (Upper & Lower Clevis Assembly)

10.Install one end of the upper and lower clevis assembly (Figure 3) into the tube adapter. Use tape if needed to hold them together. Position the clevis tube adapter (Figure 4) and have someone help you hold the cross brace in place where it will go along with the clevis/tube adapter and scribe a cut line on the cross brace with everything mocked up in place.



Figure 3 - (Clevis Tube Adapter)



Figure 4

- 11. The cross brace can be installed at any height that makes seat fitment optimum in your vehicle. Depending on the location of your tube adapters and their position on the main hoop, you may have to trim the crossbar to fit. Repeat this step for the other side of the vehicle. **NOTE**: The cross brace is long enough that you could weld it directly to the main hoop to be NHRA/IHRA compliant without using the clevis.
- 12.Cut the cross brace at the scribed line from step 10 and tape the clevis/tube adapter to the cross brace and test fit in the vehicle. Orientate the clevis and the tube adapter so the head of the bolts in the clevis faces up. [Figure 5]



Figure 5 - (Cross Brace Location)

13.If everything fits well, tack weld the clevis adapter to the cross brace tube on both sides (Figure 6). Then place the crossbar assembly back in the vehicle to weld the tube adapter to the main hoop on both sides (Figure 7). Weld the cross brace bar to the opposite clevis end on both sides.



Figure 6 - (Tack Weld Clevis)



Figure 7 - (Tack Weld Tube Adapter)

14.Once both sides are tack welded, remove the cross brace bar and finish welding the clevis adapter to the cross brace bar. Re-install the cross brace into the vehicle and finish welding the tube adapter to the main hoop (Figure 8). Grind the weld smooth on the cross brace bar as seen in (Figure 9).





Figure 8 - (Finish Weld Cross Brace)

Figure 9 - (Finished Cross Brace)

- 15. Modify the package tray trim so that the down bars can pass through it. It can be installed now or modified so that it is removable with the cage installed.
- 16.Attach any seat harness equipment and paint the crossbar if desired. Paint the doublers and surrounding areas to protect from corrosion. Reinstall the interior. Trim the carpet to fit around the main hoop tubes.

If you have any questions before or during the installation of this product, please contact Detroit Speed at <u>tech@detroitspeed.com</u> or 704.662.3272



ITEM NO.

DESCRIPTION

QTY.

0 9

5/16"-18 x 1" Socket Head Cap Screw

0 0 4

Clevis-Upper Half

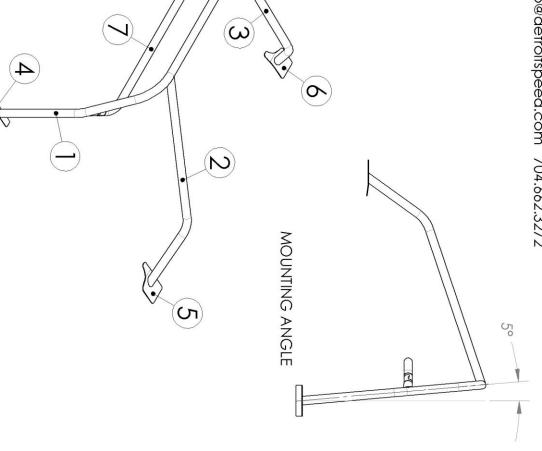
Rear Passenger Support Bar 4pt Roll Cage Rocker Doubler Rear Driver Doubler Plate Rear Passenger Doubler Plate

Roll Cage Main Hoop Rear Driver Support Bar

Roll Cage "H" Cross Bar 1st Gen Clevis Adapter

## 1967-69 CAMARO/FIREBIRD ROLL CAGE ILLUSTRATION

If you have any questions please contact Detroit Speed, Inc. info@detroitspeed.com 704.662.3272



DETAIL A SCALE 1 : 4

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