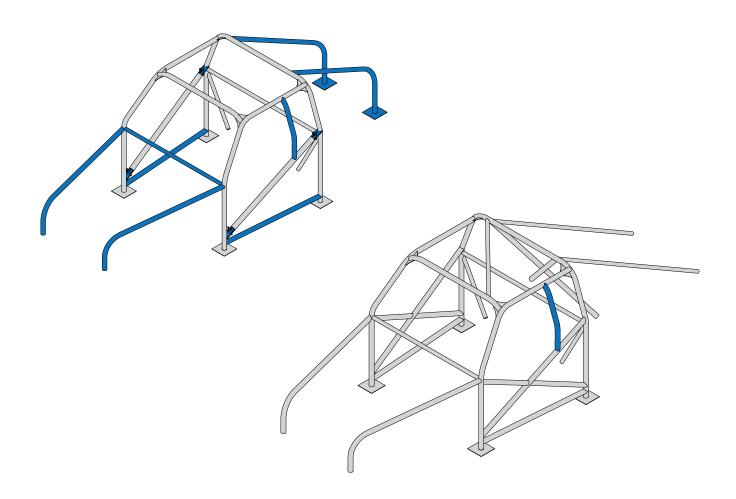
## **INSTALLATION GUIDE**



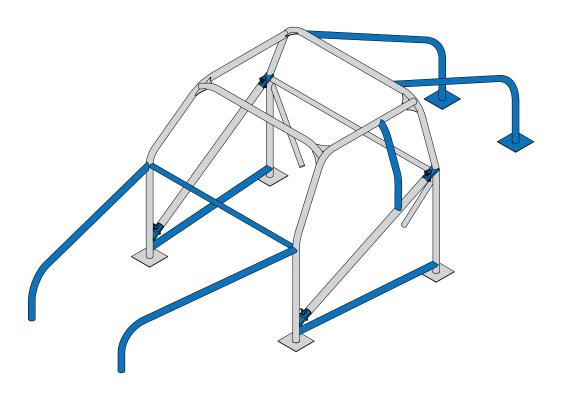
# **4400**ROLL CAGE 1-5/8" TUBE BOX



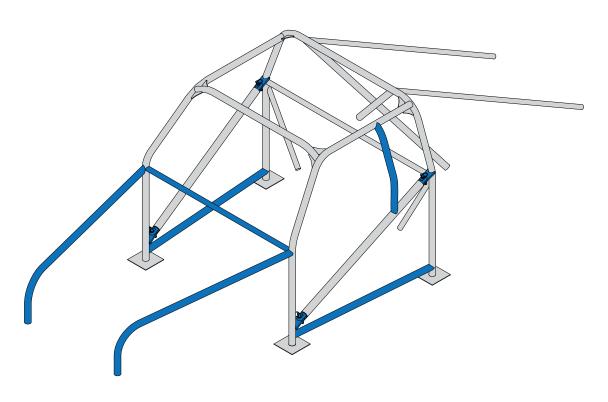
**Description:** Instructions for 1-5/8" diameter, 8-, 10-, 12-, or 14-point roll cage.

#### **8-POINT ROLL CAGE**

WITH OPTIONAL FRONT STRUTS, ROCKER, DASH, AND HELMET BARS

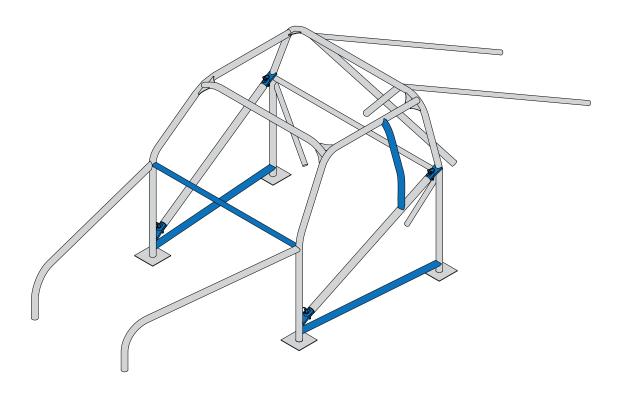


**10-POINT ROLL CAGE**WITH OPTIONAL FRONT STRUTS, ROCKER, DASH, AND HELMET BARS

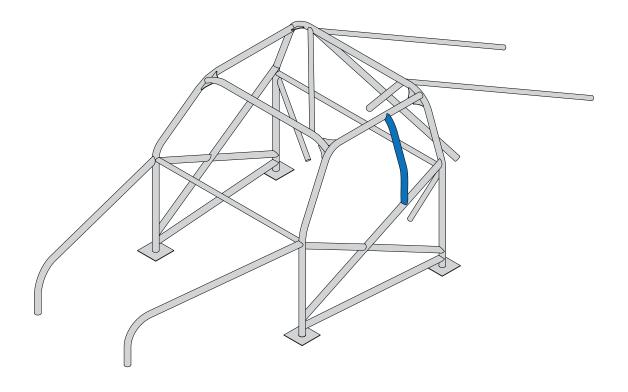


#### **12-POINT ROLL CAGE**

WITH OPTIONAL ROCKER, DASH, AND HELMET BARS



**14-POINT ROLL CAGE**WITH OPTIONAL HELMET BAR



## **PARTS LIST**

## **Straight Tube Box Contents**

ITEM	QTY	PART	DESCRIPTION
1	2	1020	Side Bars Angle Notched 1-5/8 x 60"
2	2	1019	Rear Struts 90 Degrees Notched 1-5/8 x 60"
3	2	E20.134-060.000	1-1/4 x .134 x 60" Round Tubing
			(Makes two subframe struts and one back brace.)
4	1	2006	Floor Plate Tree - 1/8 x 6 x 24" (contains four)
5	1	2168	Roll Cage Gusset Tree (contains eight)

## **Additional Components (not in box)**

ITEM	USED IN					
Main hoop	8-, 10-, 12-, and 14-point roll cage					
Cage Sides	8-, 10-, 12-, and 14-point roll cage					
Windshield Brace	8-, 10-, 12-, and 14-point roll cage					
Forward Struts	12- and 14-point roll cage					
Long Rear Struts	10-, 12-, and 14-point roll cage					
Rocker Support Tube	14-point roll cage					
Additional Strength Kit	14-point roll cage					

## **Optional Components**

Option Category	Part Numbers	Description		
Window Nets	6307	Window Net Mount Only		
Rocker Support	7024	1-5/8 x .134 HREW Roll Cage Rocker Support Bar (driver side)		
Tubes	7024 (Qty 2)	1-5/8 x .134 HREW Roll Cage Rocker Support Bar (driver and passenger sides)		
Dash Tubes	7012	1-1/4 Dash Tube Only		
	7007	1-1/4 Extra Support		
Helmet Bar	7026	1-5/8 Helmet Bar		
Forward Struts	7010	1-5/8 Forward Struts for A-Arm Suspension		
	4219	1-5/8 Forward Struts for Strut Suspension		
Funny Car Cage	7226, E26.134-060.000	1-5/8 Funny Car Cage Kit (driver side)		
	7226, 7238, E26.134-060.000	1-5/8 Funny Car Cage Kit (driver and passenger sides)		
Side Bars	1020	1-5/8 Side Bars		
Swingout Clevis Sets	7008	1-5/8 Swingout Clevis Set		

### **CLASS LEGALITY**

Verify that all roll cage tubes meet the minimum size requirements of your sanctioning body and that the cage is correctly installed for class legality. Chassisworks will replace any tube that is not at least .118"-wall minimum provided the tube has not been installed. You must return the undersized tube to Chassisworks for replacement. (Freight and installation is not included.)

### **INSTRUCTIONS**

Read all instructions and make sure you understand them before starting.

- 1. Remove all interior upholstery, seats, carpets, and front and rear kick panels. It is not necessary to remove the headliner or dashboard.
- 2. Separate the floor plate tree into four pieces. Trial fit the main hoop to locate its floor plates. It should be even with the forward edge of the B post. If it seems too long, do not cut it yet. Determine where the floor plates go. The main hoop should be centered on the floor plate. In some cases, the main hoop fits on top of the rocker panel and in others, the main hoop sits on the floor beside the rocker panels. If your car has a full frame like early Chevys, Chevelles or Corvettes, it should be attached directly to the frame. Note: Because the factory frame is very narrow on '55-57 Chevys, the roll cage kits include 3 x 2" box tube to make out-riggers for the main hoop to sit on. To bend the floor plates, clamp them in a vise and use a large hammer. The better you follow the contour of the floor, the easier the floor plates will be to weld. Reinstall the main hoop and if it is too long, cut only small amounts at a time to avoid cutting it too short. Tack weld the main hoop in place so it is 90 degrees to the rocker panel.
- 3. For all roll cages. Use the cage side to determine the exact position of the forward floor plate. It attaches to the floor by the A pillar. If the car has a full frame in that area, then attach the cage side to the frame. Form the floor plate and tack it in place. Fit the cage side in place. Position the rear end for maximum head clearance. Do not tack in place yet. Mark the dashboard where the forward strut will come through. It is easier to fit the forward strut while the cage side can still be removed.
- 4. For 12- and 14-point cages only. Fit the forward struts. Tack them in place with the cage side. The forward strut ties to the frame forward of the suspension, it can also be welded to the inner fender panel. They can pass either under or through the dashboard depending on the space available. The rear end ties to the cage side as high as possible.
- 5. For all roll cages. After fitting the forward struts and cage sides in place, install the windshield brace. Tack it between the cage sides as far forward as possible without impairing vision through the windshield. With the windshield brace still tacked to the cage sides, push the main hoop back out of the way and lower the cage sides down from the roof. This will lower the windshield brace and make it easy to weld. Install a roll cage gusset on each end of the windshield brace where it attaches to the cage side. After welding the windshield brace, reinstall the forward struts, cage sides, and main hoop and tack them all together. Weld the two remaining cage gussets to the joint formed by the cage side and main hoop. If you have trouble with the fits or the welds, it is recommended that you install an additional gusset on the cage side to the main hoop and windshield brace.
- 6. Tack weld the rear struts in place. They run from the subframe area directly in front of the rear shock mount straight up to the main hoop. They should be parallel to each other. The rear struts can be welded directly onto the subframe. One end of the rear strut is already fish mouthed and it will fit the main hoop without additional grinding. The other end will have to be cut to fit the subframe. The 1-5/8"-diameter main hoop rear struts can also be fit to form an "X" style rear brace. If this is done, then the 1-1/4"-diameter long rear strut (#7006) must also be installed.

To weld by the headliner or window without burning them, you need a piece of wet cardboard and a piece of aluminum sheet. Duct tape a piece of cardboard to the aluminum sheet about 12" square. Soak the cardboard with water. Slide the sheet between the roll bar and headliner with the wet side against the part you want to protect while welding.

- 7. Tack weld the back brace in place. The back brace is the 1-1/4"-diameter tube. It runs horizontal to the floor between the legs of the main hoop. It should be centered in the bends even with the doorsill. On Corvettes only, the straight back brace should be discarded. A large "U" shaped back brace, necessary to clear the seats, is provided with these kits. Install it in the same location.
- 8. Fit and tack the 1-1/4"-diameter subframe struts in place. They run from the main hoop and back brace joint, down to the subframe or a crossmember. The lower end should be attached as close as possible to the front ladder bar or 4-link mount.
- 9. Next, install the sidebars. They should be as low as possible in the front to facilitate entry and exit from the car. They must be high enough in the rear to pass by the driver between his shoulder and elbow when sitting in the car. Again, one end of the tube is partially fish mouthed to fit. The 14-point roll cages include a rocker tube support for each side. The tube runs from the cage side to the main hoop just above the doorsill. This tube is mandatory on the driver's side if the stock floor is removed and optional for the passenger's side. The rocker support tubes may be optionally purchased for any cage kit.
- 10. The 14-point cage has additional 1-1/4" diameter support tubes for cage top triangulator, dash support and door X-brace. Refer to the drawing for their location.
- 11. An optional helmet bar can be purchased separately (part #7026). It installs between the driver's cage side bar, forward of the main hoop. See the assembly drawing for its location. Install the helmet bar as far forward as possible without restricting entry to the driver's seat. At a minimum, the helmet bar should be forward of the driver's ear.
- 12. Double check all tube locations for symmetry and position, then final weld everything in place. Reinstall the interior. Some parts may have to be trimmed.

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#### **WARRANTY NOTICE:**

There are NO WARRANTIES, either expressed or implied. Neither the seller nor manufacturer will be liable for any loss, damage or injury, direct or indirect, arising from the use or inability to determine the appropriate use of any products. Before any attempt at installation, all drawings and/or instruction sheets should be completely reviewed to determine the suitability of the product for its intended use. In this connection, the user assumes all responsibility and risk. We reserve the right to change specification without notice. Further, Chris Alston's Chassisworks, Inc., makes NO GUARANTEE in reference to any specific class legality of any component. ALL PRODUCTS ARE INTENDED FOR RACING AND OFF-ROAD USE AND MAY NOT BE LEGALLY USED ON THE HIGHWAY. The products offered for sale are true race-car components and, in all cases, require some fabrication skill. NO PRODUCT OR SERVICE IS DESIGNED OR INTENDED TO PREVENT INJURY OR DEATH.

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