

3. You will need a drive shaft loop. It installs on top of the crossmember even with the front edge. Cut the loop to the correct height. The top of the loop should be 1" above the stock drive shaft tunnel. The drive shaft will be very high in the tunnel - you need all the room you can get. Contour the tunnel around the loop and weld it on. This will give you a good seal to the interior kit. The drive shaft loop should have the same offset as the crossmember.

4. Cut 10" of straight tube off the front of the rear frame rail. Measure from the back of the crossmember to the tail light panel. Cut the frame rails to this length and tack them in place. The frame rails should be centered in the car an equal distance from the car's centerline. They should be a minimum of 20" wide on the outside. Make the frame as wide as possible while leaving enough room for the tire. Make sure the rails are centered on the tail light panel and on the crossmember. They should both be an equal distance from each side of the car and at the same height. The optional 1 5/8 rear frame installs at the same height as the 3 x 2 frame.

5. Install the crossmembers. The rear crossmember should be even with the bottom of the frame and approximately 1/2" forward of the tail light panel. Weld the shock brackets to the center crossmember at the dimension shown on the assembly drawing. Make sure they are straight to each other. Put the crossmember between the frame rails at the dimensions shown.

6. Finally, install the chassis ladder bar mount. The front edge of the ladder mount is even with the front side of the dropped crossmember and hangs straight down. The brackets are even with the outside edge of the frame. Use a rod end to get the correct spacing between them. The brackets must be straight or the ladder bars will not fit right. The chassis front mount gusset caps the front of the brackets. After you have double checked all dimensions, finish welding the frame in. Attach the ladder bars with adapter bushings and bolts (our part #6203). Also, you will need to use an adjustable lower shock mount (our part #6216) with coil over shocks.

7. Install the subframe connectors (in full frame cars like '55-'57 Chevys, Chevelles, etc., the connectors are not necessary because the frame welds to the dropped crossmember). They run from the dropped crossmember forward to the stock front subframe. The floor will have to be slotted for the connectors. In most cases, the connector will be wider spaced at the front than at the dropped crossmember, where it should be the same width as the new rear frame.

8. If you are using a tire with a diameter smaller than 32 inches, raise the adjustable shock mount on its axle bracket to raise the rear of the car.

9. If you purchased the frame clip welded, the dropped crossmember and the rear frame length will be too long. Cut them to length for your application. The rear frame crossmember is tacked between the rails for shipping purposes. Knock it out and reinstall it at the correct position after you have trimmed the rear rails to length.

Revision Date: October 23, 2002

*Chris Alston's*

**CHASSISWORKS, INC.**

**7100  
INSTRUCTIONS FOR LADDER BAR FRAME**

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	4501	Frame rail rear ladder bar
2	1	4500	Crossmember dropped, 3 x 2
3	2	1852	Tube 1 5/8 x .120 ERW 30"
4	2	1851	Tube 3 x 2 x .120 ERW 54"
5	4	2101	Shock bracket
6	2	2012	Chassis front mount gusset
7	4	2100	Chassis front mount 3/4 holes
8	1	927100	Assembly drawing

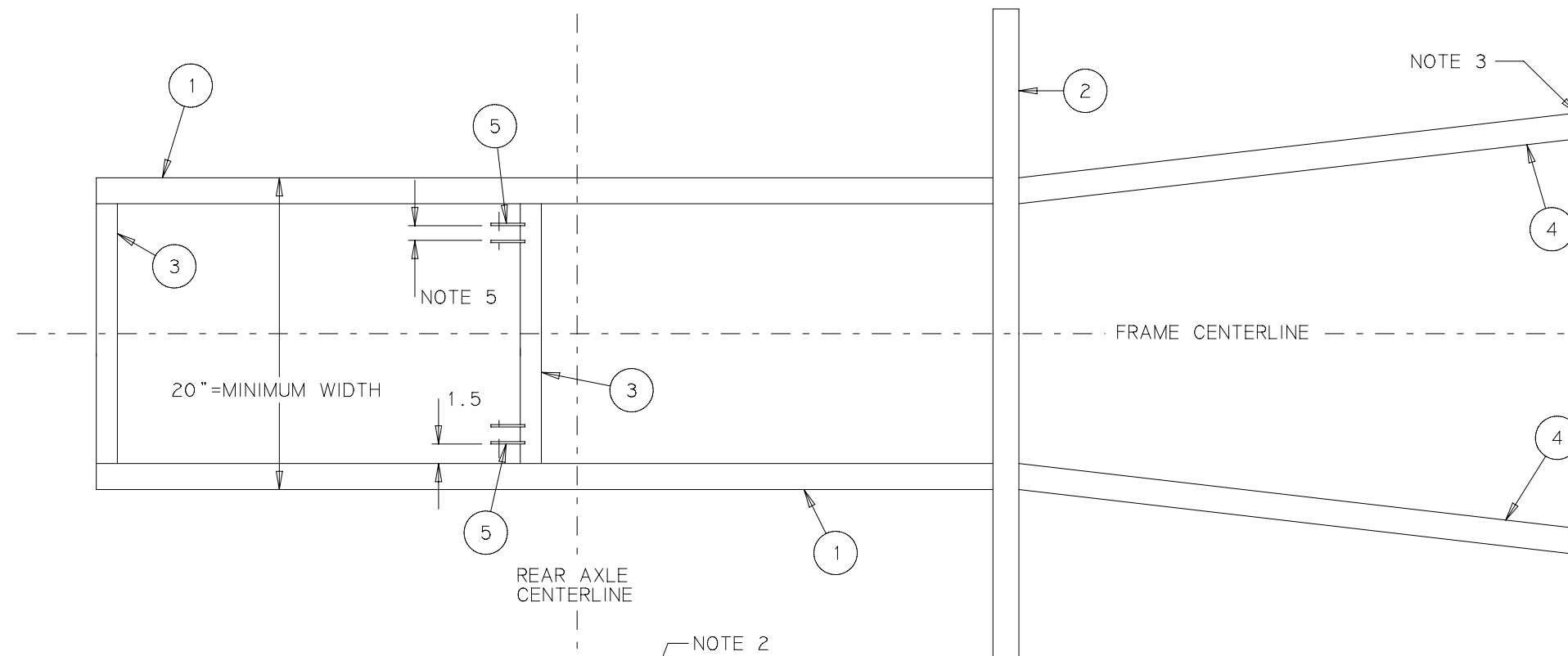
NOTE: This kit is designed to provide a rear subframe for use with coil over shocks and ladder bars. It should be used with at least an 8 point roll cage. It is a good idea to X the roll cage rear struts and add the long rear 1 1/4 strut (our part #7006). The frame can be installed one of two ways. The first method is to cut out the entire floor from the dropped crossmember to the tail light panel. This will require that the floor be replaced with aluminum or steel panels. The second method is to notch the stock floor 2" wide for the crossmember, and rear frame rails. The only part of the floor you cut out is where the wheel wells go and a portion of the floor between the frame rails above the rear end. The floor above the rear end will have to be replaced with aluminum or steel panels.

1. Measure 34" forward from the rear axle centerline to a point on the rocker panel. Draw a line between these points on the car's floor. This is sometimes easier to do under the car because of the drive shaft tunnel. Cut the entire floor and wheel wells out of the car from your line to the rear tail light panel. Cut out the package tray and the double panels against the sides of the car. In most cases, you will have to remove most of the rear window crank mechanism to make room for the new wheel wells. Usually a simple bracket welded to the body and bolted to the window will hold the window up. When you are cutting out of the stock drive shaft tunnel, leave it approximately 2" longer than the frame crossmember. This will allow for a neater installation of the aluminum.

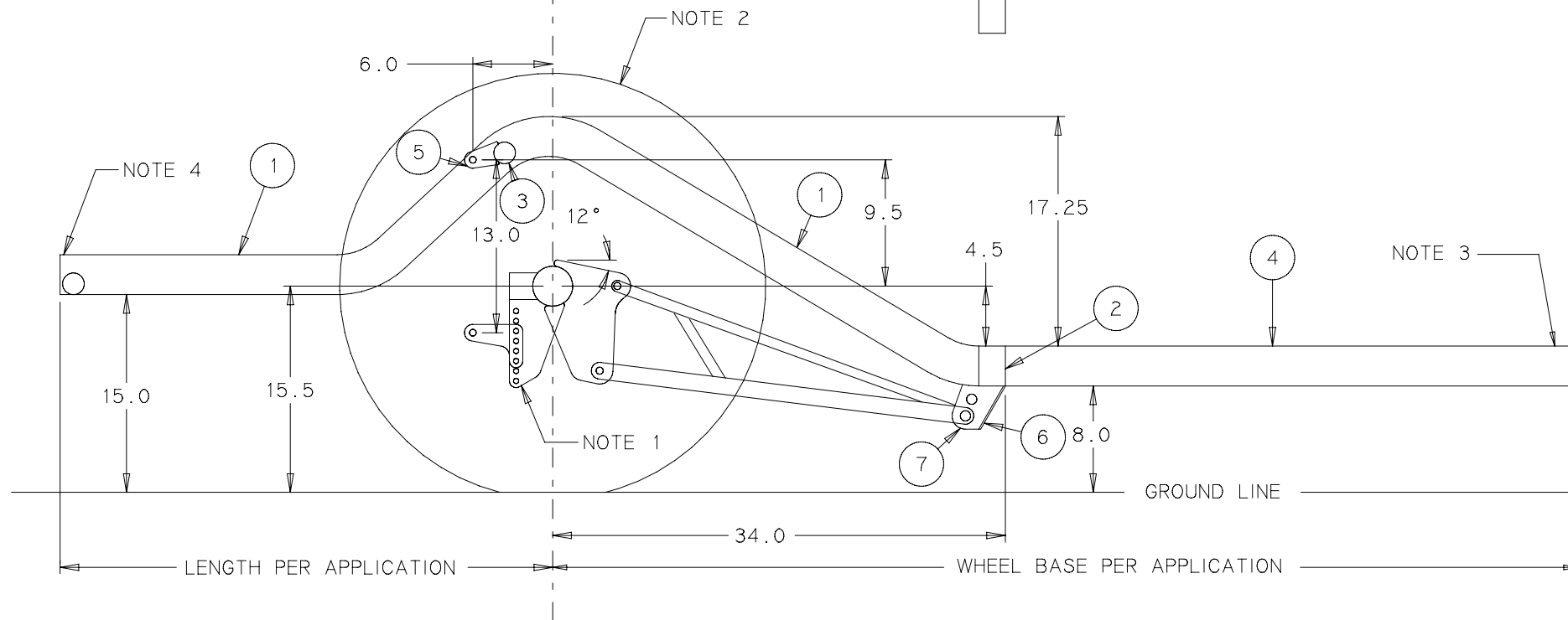
If you elect method two, cut a 2" wide slot across the car with its forward edge at 34". Leave the driveshaft tunnel intact and do not notch it, the dropped crossmember goes beneath it.

2. Install the dropped crossmember first. After you have cut the floor out and neatly trimmed all the panels, you must level the car front to rear and right to left. The door sills are a good place to put your level. When you cut the floor out, you should have left the inner part of the rocker panel in place. The rocker panel should be neatly trimmed to allow for a good fit of the dropped crossmember. The drop in the crossmember will usually be offset from the center of the car to the passenger side about 1/2". This is because most cars have an offset engine. Measure your stock rear end to determine the amount of the offset. After you have determined the crossmember offset, cut it to fit between the rocker panels. If your rocker panel is not straight, you will have to contour the ends of the crossmember. Make sure you have a good fit to the rocker panel or it will be difficult to weld. Tack weld the crossmember in place so the forward side is 34" forward of the rear axle centerline. The bottom should be even with the bottom of the rocker panel. The stock floor should butt up against the front of the crossmember with the drive shaft tunnel overhanging the top of the crossmember. In most cases, the floor will hang below the crossmember so just push it up and tack it to the crossmember.

# TOP VIEW



# SIDE VIEW



## 7100 LADDER BAR 3x2 FRAME

CHRIS ALSTON'S CHASSISWORKS, INC.  
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SACRAMENTO, CA 95828

DATE: 1/10/1992

REVISION: 3

DO NOT SCALE DRAWING

SEE THE INSTRUCTION SHEET FOR THE ITEM NUMBER DESCRIPTIONS

NOTE 1  
ADJUSTABLE HEIGHT SHOCK MOUNT AND LADDER BARS MUST BE PURCHASED SEPARATELY.

NOTE 2  
ALL CHASSIS TO GROUND HEIGHT DIMENSIONS ARE FIGURED WITH A 32" DIAMETER TIRE.

NOTE 3  
ATTACH TO STOCK FRONT FRAME OR UNIBODY SUBFRAME.

NOTE 4  
ATTACH END OF FRAME TO TAIL LIGHT PANEL OR REAR VALANCE.

NOTE 5  
SHOCK MOUNT BRACKET INNER WIDTH IS DIFFERENT DEPENDING ON THE SHOCK ABSORBER USED.  
KONI COILOVER = 1.125"  
COIL SPRING MOUNT 6225 = 1.30"