

## 6246 INSTRUCTIONS FOR ELIMINATOR II 4-LINK KIT

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	2132	Chassis mount Eliminator II
2	4	2133	Axle mount Eliminator II
3	4	1501	Tube adapter 1.08 x 3/4-16 left
4	4	1104	Tube adapter 1.08 x 3/4-16 right
5	4	1811	Tube 1 1/4 x .083 4130 x 16 1/4
6	2	1846	Tube 1 1/4 x .058 4130 x 16
7	8	3200	Locknut 1/2 - 20
8	4	3202	Right hand jam nut 3/4 - 16
9	4	3203	Left hand jam nut 3/4 - 16
10	8	3100	Bolt 1/2 - 20 x 2 1/4
11	1	926246	Drawing Eliminator II 4-link

NOTE: Rod ends must be inspected frequently. As soon as the balls become sloppy, they should be immediately replaced. A good rule of thumb is when they are twice as loose as when new, they are used up. This does not mean they won't fail before this. In the beginning, the rod ends should be watched very closely. Check them after each pass. All cars launch differently so the life of the rod ends will vary considerably. They should be kept well greased between races. It is also very important to make sure the rod ends and jam nuts are not binding on any of the brackets. The link should be free to rotate and swing throughout the entire suspension travel. The rod ends should be replaced at LEAST once a year.

INSTALLATION: Refer to the drawing shipped with your subframe or chassis for the location of the components of the rear suspension.

1. Level your chassis front to rear and right to left. Use some jack stands to position your rear axle housing at the correct height and rearward location according to your assembly drawing. Finally, rotate the pinion until it points toward the engine. Block it steady at the correct pinion angle of zero degrees after completion and prior to running the car. The pinion angle will need to be readjusted to 1° to 3° degrees negative (pinion down in relation to the driveshaft). The axle housing must also be centered in the car. The ends of the housing must be equal distances from the side of the frame rails. Place two 3/4-inch rod ends between a pair of front brackets and bolt the brackets together with the rod ends in the top and bottom holes. Tack weld the front mount centered under the frame rail and straight. The rear edge of the lower 1 5/8 hole is 23 inches forward of the axle centerline.

2. Bolt a pair of axle brackets together by placing a pair of rod ends between them and bolting them in the top and bottom holes. Tack weld the brackets to the axle housing so that they are as wide as the front brackets, 90° to the axle centerline and the lower hole is centered on the axle centerline. If your axle housing is larger than 3" OD, the brackets will have to be enlarged to keep the holes in their correct location.

3. Screw the jam nuts and the tube adapters on to the rod ends so the rod end is threaded into the tube adapter 1 1/8 of an inch. Put the rod ends in the starting location from the chart and measure the distance from the tube adapter shoulders to determine the 4-link tube length. Cut the 1 1/4 x .083 thick tube to length and drill three 1/4 holes in each end to act as rosettes when welding the tube into the tube adapter. Tig weld the tube adapter into the tube at its joint and the rosettes. Before you weld everything up. Trial fit the links with rod ends in the brackets. You should be able to fit all the combinations and

have at least 1 inch of thread engagement in all the rod ends at all times. Check all brackets for squareness and to be sure there is no binding in the rod ends or jam nuts. If everything checks out, weld it all up.

4. Use the 1 1/4 x .058 tube to make 1 1/4" long spacers that weld in the brackets large holes. Make sure the brackets are the correct width (.880-.900 wide) for the rod ends before you weld in the sleeves. Cut 5, 1 1/4 inch long spacers from each tube. Use the remaining length from each tube to gusset the axle bracket to the rear end housing. Attach one end of the tube to the lower rear corner of the Ford 9" center. Attach the other end to the inside rear axle bracket by the lower rear hole. The tube will run up hill at a slight angle toward the center of the rear end.

5. The 1/2 x 2 1/4 inch bolts should be used where the track locator or wishbone clevis attaches.

6. Use #6247 adjustable lower mount to attach your coilovers.

7. The lower wheelie bar tube attaches to the axle bracket just under the adjustable shock mount, in between the provided tabs. The upper wheelie bar tubes attach to the rear end back brace just inboard of the rear coilovers. The tabs come with the wheelie bars.

## 6246 4-LINK ADJUSTMENTS

Adjusting your 4-link is not that difficult but it must be done carefully. You must adjust for three separate things; rear end location in the chassis, pre load, and intersection point. I will explain each one in detail.

*REAR END LOCATION IN THE CHASSIS:* The first step is to correctly position the rear end in the chassis. To do this, you need to position a string centerline under the chassis. (NOTE: The methods described here will work provided your chassis was correctly assembled and is not bent. If there is any doubt that your chassis is straight, you should first solve that problem.) First, your car must be complete and ready to race. Remove the rear tires and place jackstands under the axle housing that will hold it at the correct ride height and level right to left. At this point the pinion angle should be set to 1° to 2° negative and the rear end should be in the correct location for the wheel base. An easy way to do that is to set the axle centerline 23 inches behind the 4-link front mount crossmember. Drop a plumb bob from the center of the frame in the front and the rear of the chassis. Mark the garage floor where the plumb bob point touches the floor. Place a string centerline under the car between the points. A 20-foot piece of string tied to two bricks will work fine. This string will represent the center of the chassis. Next, attach a plumb bob to the center of each axle on its face. To adjust the rear end to be centered in the chassis lengthen or shorten the track locator until each plumb bob is an equal distance from the string centerline. Next, adjust the rear end to be exactly 90° to the string centerline.

Measure forward from the rear axle 6 feet and draw an "X" on the floor where 6 feet and the centerline meet. This is just to establish an arbitrary reference for the next step. Now measure from the plumb bobs attached to each axle flange up to the "X" on the floor. The object is to adjust the length of the 4-link bars until the length on each side is the same. This concludes step

1. *ADJUSTING PRELOAD:* The best method to adjust preload is to adjust your chassis for no preloads then add preload if necessary. This can only be determined by test launching the car for 60 to 100 foot passes. With no preload in the chassis, it should be very easy to twist the top right (passenger's side) link bar. With the jam nuts loose you should be able to feel it rotate in the threads and a 1/4 turn in either direction should make the link bar tighter. (NOTE: Raising or lowering an adjustable coil spring seat will

also preload the chassis. This is not the preferred method.) To determine if you need preload, test launch the car. If it does not initially drive straight off the line, you can add preload in the top right (passenger's side) bar. If your car continually drives to the right, shorten the upper right link bar. If it continually drives to the left, lengthen the upper right link bar. To adjust preload, loosen the jam nuts and rotate the link bar 1/4 turn at a time. Finer adjustments of 1/8 turns may be necessary. If you need over 1 1/2 turns of preload it's a good indicator that something is probably wrong.

**ADJUSTING INTERSECTION POINTS:** This is one of the most misunderstood adjustments in drag racing. The first thing to do is to map all possible intersection point locations. We have provided a map that lists all intersection points, length in front of the axle centerline, and heights above the ground (minus numbers are below the ground). Drawing 926246 (provided) shows one location drawn out to clarify the map.

Unfortunately there is no way to tell exactly what intersect point your chassis will like without experimenting. There are no rules of thumb that apply because there are lots of things that affect the ideal intersect point. A brief list would include gear ratio, converter, ignition timing, cam shaft, tire size, track condition, shock absorbers, torque curve, vehicle weight, weight distribution, center of gravity, height, plus many more. Therefore, any attempt to over simplify the determination of the intersection point is not going to be valid. The racer must test to determine the correct intersection point. By providing you with a map and some guidelines to help you select locations, we hope to get you started in the right direction. The amount of time and energy you are willing to put into testing will definitely determine your success. To help you get going, we suggest you start at location A-3 (bottom bar) E-12 (top bar). This will provide an intersection point of 54 1/4 inches (length) 3 inches height above the ground. To adjust from there you need to know that as the intersection gets shorter and higher, the chassis will tend to shock the tire slower. As the intersection gets longer and lower, the chassis will tend to shock the tire faster. You need to move slowly from the start point. Large changes will just get you lost. The object is to shock the tires as hard and as fast as possible without causing too much tire spin. The intersection point will have a considerable affect on your elapsed time through the first gear change on high horsepower cars. Therefore, you can get a lot of good testing in on only 100 feet or so. Remember that the intersection point adjustment is only part of the combination. You will have to also adjust other things to optimize your combination.

**INTERSECTION POINTS WHEN FRONT MOUNT IS 3-1/2" ABOVE GROUND**

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
A	1	F	15	161 3/4	-17 3/8
A	1	F	14	108 3/4	-9 1/8
A	1	F	13	81 1/2	-5
A	1	F	12	65	-2 3/8
A	1	F	11	54	-5/8
A	1	F	10	46	5/8
A	1	F	9	39 3/4	1 5/8
A	1	F	8	35	2 1/4
A	1	E	15	307 3/4	-40
A	1	E	14	155 1/4	-16 3/8
A	1	E	13	103 1/2	-8 3/8
A	1	E	12	77 1/4	-4 1/4
A	1	E	11	61 1/4	-1 7/8
A	1	E	10	50 3/4	-1/8
A	1	E	9	43	1

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
A	1	E	8	37	2
A	1	D	15	NO INTERSECTION	
A	1	D	14	297	-38 <sup>1</sup> / <sub>4</sub>
A	1	D	13	147 <sup>1</sup> / <sub>4</sub>	-15 <sup>1</sup> / <sub>8</sub>
A	1	D	12	97 <sup>3</sup> / <sub>8</sub>	-7 <sup>3</sup> / <sub>8</sub>
A	1	D	11	72 <sup>3</sup> / <sub>8</sub>	-3 <sup>1</sup> / <sub>2</sub>
A	1	D	10	57 <sup>1</sup> / <sub>4</sub>	-1 <sup>1</sup> / <sub>4</sub>
A	1	D	9	47 <sup>1</sup> / <sub>4</sub>	<sup>3</sup> / <sub>8</sub>
A	1	D	8	39 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>
A	2	F	15	113 <sup>1</sup> / <sub>2</sub>	-5 <sup>7</sup> / <sub>8</sub>
A	2	F	14	84 <sup>3</sup> / <sub>4</sub>	-2 <sup>1</sup> / <sub>2</sub>
A	2	F	13	67 <sup>1</sup> / <sub>2</sub>	- <sup>3</sup> / <sub>8</sub>
A	2	F	12	55 <sup>3</sup> / <sub>4</sub>	1
A	2	F	11	47 <sup>1</sup> / <sub>2</sub>	2
A	2	F	10	41 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>
A	2	F	9	36 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>8</sub>
A	2	F	8	32 <sup>1</sup> / <sub>4</sub>	3 <sup>7</sup> / <sub>8</sub>
A	2	E	15	164 <sup>3</sup> / <sub>4</sub>	-12
A	2	E	14	108 <sup>1</sup> / <sub>4</sub>	-5 <sup>1</sup> / <sub>4</sub>
A	2	E	13	80 <sup>1</sup> / <sub>4</sub>	-2
A	2	E	12	63 <sup>3</sup> / <sub>4</sub>	0
A	2	E	11	52 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>
A	2	E	10	44 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>8</sub>
A	2	E	9	38 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>8</sub>
A	2	E	8	33 <sup>1</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>
A	2	D	15	331	-32
A	2	D	14	156 <sup>1</sup> / <sub>2</sub>	-11 <sup>1</sup> / <sub>8</sub>
A	2	D	13	102	-4 <sup>1</sup> / <sub>2</sub>
A	2	D	12	75 <sup>1</sup> / <sub>2</sub>	-1 <sup>3</sup> / <sub>8</sub>
A	2	D	11	59 <sup>1</sup> / <sub>2</sub>	<sup>1</sup> / <sub>2</sub>
A	2	D	10	49	1 <sup>3</sup> / <sub>4</sub>
A	2	D	9	41 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
A	2	D	8	35 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>8</sub>
A	3	F	15	87 <sup>3</sup> / <sub>4</sub>	<sup>1</sup> / <sub>4</sub>
A	3	F	14	69 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>4</sub>
A	3	F	13	57 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>
A	3	F	12	49	3 <sup>1</sup> / <sub>2</sub>
A	3	F	11	42 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>8</sub>
A	3	F	10	37 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub>
A	3	F	9	33 <sup>1</sup> / <sub>4</sub>	4 <sup>7</sup> / <sub>8</sub>
A	3	F	8	29 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>8</sub>
A	3	E	15	113	-2
A	3	E	14	83 <sup>1</sup> / <sub>4</sub>	<sup>5</sup> / <sub>8</sub>
A	3	E	13	65 <sup>3</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>8</sub>
A	3	E	12	54 <sup>1</sup> / <sub>4</sub>	3
A	3	E	11	46	3 <sup>3</sup> / <sub>4</sub>
A	3	E	10	39 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>4</sub>
A	3	E	9	35	4 <sup>3</sup> / <sub>4</sub>

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
A	3	E	8	31	5
A	3	D	15	166	-6 1/2
A	3	D	14	106 3/4	-1 3/8
A	3	D	13	78 1/2	1
A	3	D	12	61 3/4	2 3/8
A	3	D	11	50 3/4	3 3/8
A	3	D	10	43	4
A	3	D	9	37	4 1/2
A	3	D	8	32 1/2	4 7/8
A	4	F	15	71 1/2	4
A	4	F	14	59	4 5/8
A	4	F	13	50 1/4	5 1/8
A	4	F	12	43 1/2	5 1/2
A	4	F	11	38 1/2	5 3/4
A	4	F	10	34 1/4	5 7/8
A	4	F	9	30 3/4	6 1/8
A	4	F	8	27 3/4	6 1/4
A	4	E	15	86	3 1/4
A	4	E	14	67 3/4	4 1/4
A	4	E	13	55 3/4	4 7/8
A	4	E	12	47 1/4	5 1/4
A	4	E	11	41	5 5/8
A	4	E	10	36	5 7/8
A	4	E	9	32	6
A	4	E	8	28 3/4	6 1/4
A	4	D	15	111 1/4	2
A	4	D	14	81 1/4	3 1/2
A	4	D	13	63 3/4	4 3/8
A	4	D	12	52 1/4	5
A	4	D	11	44 1/4	5 3/8
A	4	D	10	38 1/4	5 3/4
A	4	D	9	33 1/2	6
A	4	D	8	29 3/4	6 1/4
A	5	F	15	60 1/2	6 5/8
A	5	F	14	51 1/2	6 3/4
A	5	F	13	44 1/2	6 3/4
A	5	F	12	39 1/4	7
A	5	F	11	35	7 1/8
A	5	F	10	31 1/2	7 1/8
A	5	F	9	28 1/2	7 1/4
A	5	F	8	26	7 1/4
A	5	E	15	69 3/4	6 1/2
A	5	E	14	57 1/4	6 3/4
A	5	E	13	48 1/2	6 7/8
A	5	E	12	42	7
A	5	E	11	37	7
A	5	E	10	33	7 1/8
A	5	E	9	29 1/2	7 1/8
A	5	E	8	26 3/4	7 1/4

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
A	5	D	15	83 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>4</sub>
A	5	D	14	65 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>
A	5	D	13	53 <sup>3</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>4</sub>
A	5	D	12	45 <sup>1</sup> / <sub>2</sub>	6 <sup>7</sup> / <sub>8</sub>
A	5	D	11	39 <sup>1</sup> / <sub>4</sub>	7
A	5	D	10	34 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>8</sub>
A	5	D	9	30 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>8</sub>
A	5	D	8	27 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>
A	6	F	15	52 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>
A	6	F	14	45 <sup>1</sup> / <sub>2</sub>	8 <sup>3</sup> / <sub>8</sub>
A	6	F	13	40 <sup>1</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>8</sub>
A	6	F	12	35 <sup>3</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>4</sub>
A	6	F	11	32 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>4</sub>
A	6	F	10	29 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>4</sub>
A	6	F	9	26 <sup>3</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>8</sub>
A	6	F	8	24 <sup>1</sup> / <sub>2</sub>	8
A	6	E	15	58 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>8</sub>
A	6	E	14	49 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>
A	6	E	13	43	8 <sup>3</sup> / <sub>8</sub>
A	6	E	12	37 <sup>3</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>4</sub>
A	6	E	11	33 <sup>3</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>4</sub>
A	6	E	10	30 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>8</sub>
A	6	E	9	27 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>8</sub>
A	6	E	8	25	8 <sup>1</sup> / <sub>8</sub>
A	6	D	15	67 <sup>1</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>
A	6	D	14	55	8 <sup>5</sup> / <sub>8</sub>
A	6	D	13	46 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>
A	6	D	12	40 <sup>1</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>8</sub>
A	6	D	11	35 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>4</sub>
A	6	D	10	31 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>4</sub>
A	6	D	9	28 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>8</sub>
A	6	D	8	25 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>8</sub>
A	7	F	15	46 <sup>1</sup> / <sub>4</sub>	10
A	7	F	14	40 <sup>3</sup> / <sub>4</sub>	9 <sup>3</sup> / <sub>4</sub>
A	7	F	13	36 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>
A	7	F	12	33	9 <sup>3</sup> / <sub>8</sub>
A	7	F	11	30	9 <sup>1</sup> / <sub>4</sub>
A	7	F	10	27 <sup>1</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>
A	7	F	9	25 <sup>1</sup> / <sub>4</sub>	9
A	7	F	8	23 <sup>1</sup> / <sub>4</sub>	8 <sup>7</sup> / <sub>8</sub>
A	7	E	15	50 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>4</sub>
A	7	E	14	43 <sup>3</sup> / <sub>4</sub>	9 <sup>7</sup> / <sub>8</sub>
A	7	E	13	38 <sup>1</sup> / <sub>2</sub>	9 <sup>5</sup> / <sub>8</sub>
A	7	E	12	34 <sup>1</sup> / <sub>4</sub>	9 <sup>3</sup> / <sub>8</sub>
A	7	E	11	31	9 <sup>1</sup> / <sub>4</sub>
A	7	E	10	28	9 <sup>1</sup> / <sub>8</sub>
A	7	E	9	25 <sup>1</sup> / <sub>2</sub>	9
A	7	E	8	23 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
A	7	D	15	56 1/4	10 1/2
A	7	D	14	47 1/2	10 1/8
A	7	D	13	41	9 3/4
A	7	D	12	36	9 1/2
A	7	D	11	32	9 1/4
A	7	D	10	28 3/4	9 1/8
A	7	D	9	26	9
A	7	D	8	23 3/4	8 7/8
B	1	F	15	264 3/4	-41 3/4
B	1	F	14	143	-18 5/8
B	1	F	13	97 1/2	-10 1/8
B	1	F	12	73 3/4	-5 1/2
B	1	F	11	59	-2 3/4
B	1	F	10	49	-7/8
B	1	F	9	41 3/4	1/2
B	1	F	8	36 1/4	1 5/8
B	1	E	15	2185 1/2	-406 1/4
B	1	E	14	257 3/4	-40 1/2
B	1	E	13	136 1/4	-17 3/8
B	1	E	12	92 1/4	-9
B	1	E	10	55 1/4	-2
B	1	E	9	45 3/4	-1/4
B	1	E	8	38 3/4	1 1/8
B	1	D	15	NO INTERSECTION	
B	1	D	14	2654 1/2	-495 1/4
B	1	D	13	246	-38 1/4
B	1	D	12	128 1/4	-15 7/8
B	1	D	11	86	-7 7/8
B	1	D	10	64 1/2	-3 3/4
B	1	D	9	51 1/4	-1 1/4
B	1	D	8	42 1/4	1/2
B	2	F	15	151 3/4	-15
B	2	F	14	102 1/4	-7 3/8
B	2	F	13	76 3/4	-3 3/8
B	2	F	12	61 1/2	-1
B	2	F	11	51	1/2
B	2	F	10	43 1/4	1 3/4
B	2	F	9	37 1/2	2 5/8
B	2	F	8	33	3 3/8
B	2	E	15	286 1/4	-35 3/4
B	2	E	14	145 1/8	-14
B	2	E	13	97	-6 1/2
B	2	E	12	72 1/2	-2 3/4
B	2	E	11	57 1/2	-1/2
B	2	E	10	47 1/2	1 1/8
B	2	E	9	40 1/2	2 1/4
B	2	E	8	35	3
B	2	D	15	78,390	-12,102 1/8
B	2	D	14	275	-34

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
B	2	D	13	137	-12 <sup>3/4</sup>
B	2	D	12	90 <sup>3/4</sup>	-5 <sup>5/8</sup>
B	2	D	11	67 <sup>1/2</sup>	-2
B	2	D	10	53 <sup>1/2</sup>	1/4
B	2	D	9	44	1 <sup>5/8</sup>
B	2	D	8	37 <sup>1/4</sup>	2 <sup>3/4</sup>
B	3	F	15	107	-4 <sup>3/8</sup>
B	3	F	14	79 <sup>3/4</sup>	-1 <sup>1/8</sup>
B	3	F	13	63 <sup>1/2</sup>	7/8
B	3	F	12	52 <sup>3/4</sup>	2 <sup>1/8</sup>
B	3	F	11	44 <sup>3/4</sup>	3 <sup>1/8</sup>
B	3	F	10	39	3 <sup>3/4</sup>
B	3	F	9	34 <sup>1/4</sup>	4 <sup>3/8</sup>
B	3	F	8	30 <sup>1/2</sup>	4 <sup>3/4</sup>
B	3	E	15	154 <sup>1/4</sup>	-10
B	3	E	14	101 <sup>1/2</sup>	-3 <sup>3/4</sup>
B	3	E	13	75 <sup>1/2</sup>	-5/8
B	3	E	12	59 <sup>3/4</sup>	1 <sup>1/4</sup>
B	3	E	11	49 <sup>1/2</sup>	2 <sup>1/2</sup>
B	3	E	10	42	3 <sup>3/8</sup>
B	3	E	9	36 <sup>1/4</sup>	4 <sup>1/8</sup>
B	3	E	8	31 <sup>3/4</sup>	4 <sup>5/8</sup>
B	3	D	15	308	-28 <sup>3/8</sup>
B	3	D	14	146	-9
B	3	D	13	95 <sup>1/4</sup>	-3
B	3	D	12	70 <sup>1/2</sup>	0
B	3	D	11	55 <sup>3/4</sup>	1 <sup>3/4</sup>
B	3	D	10	46	3
B	3	D	9	38 <sup>3/4</sup>	3 <sup>3/4</sup>
B	3	D	8	33 <sup>1/2</sup>	4 <sup>3/8</sup>
B	4	F	15	82 <sup>3/4</sup>	1 <sup>3/8</sup>
B	4	F	14	65 <sup>5/8</sup>	2 <sup>7/8</sup>
B	4	F	13	54 <sup>1/4</sup>	3 <sup>3/4</sup>
B	4	F	12	46 <sup>1/4</sup>	4 <sup>1/2</sup>
B	4	F	11	40	5
B	4	F	10	35 <sup>1/4</sup>	5 <sup>3/8</sup>
B	4	F	9	31 <sup>1/2</sup>	5 <sup>3/4</sup>
B	4	F	8	28 <sup>1/4</sup>	6
B	4	E	15	106	-5/8
B	4	E	14	78 <sup>1/4</sup>	1 <sup>3/4</sup>
B	4	E	13	61 <sup>3/4</sup>	3 <sup>1/4</sup>
B	4	E	12	51	4 <sup>1/8</sup>
B	4	E	11	43 <sup>1/4</sup>	4 <sup>3/4</sup>
B	4	E	10	37 <sup>1/2</sup>	5 <sup>1/4</sup>
B	4	E	9	33	5 <sup>5/8</sup>
B	4	E	8	29 <sup>1/4</sup>	6
B	4	D	15	155 <sup>1/4</sup>	-4 <sup>7/8</sup>
B	4	D	14	99 <sup>3/4</sup>	1/8

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
B	4	D	13	73 1/4	2 1/4
B	4	D	12	5 3/4	3 1/2
B	4	D	11	47 1/2	4 3/8
B	4	D	10	40 1/4	5
B	4	D	9	34 3/4	5 1/2
B	4	D	8	30 1/4	5 7/8
B	5	F	15	67 1/2	5
B	5	F	14	55 3/4	5 5/8
B	5	F	13	47 1/2	6
B	5	F	12	41 1/4	6 3/8
B	5	F	11	36 1/4	6 5/8
B	5	F	10	32 1/4	6 5/8
B	5	F	9	29	7
B	5	F	8	26 1/4	7 1/8
B	5	E	15	81	4 1/4
B	5	E	14	63 3/4	5 1/8
B	5	E	13	52 1/2	5 3/4
B	5	E	12	44 1/2	6 1/8
B	5	E	11	38 1/2	6 1/2
B	5	E	10	34	6 3/4
B	5	E	9	30 1/4	6 7/8
B	5	E	8	27	7
B	5	D	15	104	3 1/8
B	5	D	14	76	4 1/2
B	5	D	13	59 1/2	5 3/8
B	5	D	12	49	5 7/8
B	5	D	11	41 1/2	6 3/8
B	5	D	10	35 3/4	6 5/8
B	5	D	9	31 1/2	6 7/8
B	5	D	8	28 1/4	7
B	6	F	15	57 1/4	7 1/2
B	6	F	14	48 1/2	7 5/8
B	6	F	13	42 1/4	7 3/4
B	6	F	12	37	3/4
B	6	F	11	33 1/4	7 7/8
B	6	F	10	29 3/4	7 7/8
B	6	F	9	27	8
B	6	F	8	24 3/4	8
B	6	E	15	65 1/2	7 1/4
B	6	E	14	53 3/4	7 1/2
B	6	E	13	45 3/4	7 5/8
B	6	E	12	39 1/2	7 3/4
B	6	E	11	34 3/4	7 7/8
B	6	E	10	31	7 7/8
B	6	E	9	27 3/4	8
B	6	E	8	25 1/4	8
B	6	D	15	78 1/4	7 1/8
B	6	D	14	61 1/2	7 3/8
B	6	D	13	50 1/4	7 1/2

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
B	6	D	12	42 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> / <sub>4</sub>
B	6	D	11	36 <sup>3</sup> / <sub>4</sub>	7 <sup>3</sup> / <sub>4</sub>
B	6	D	10	32 <sup>1</sup> / <sub>4</sub>	7 <sup>7</sup> / <sub>8</sub>
B	6	D	9	28 <sup>3</sup> / <sub>4</sub>	7 <sup>7</sup> / <sub>8</sub>
B	6	D	8	25 <sup>3</sup> / <sub>4</sub>	8
B	7	F	15	49 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>4</sub>
B	7	F	14	43	9 <sup>1</sup> / <sub>8</sub>
B	7	F	13	38	9
B	7	F	12	33 <sup>3</sup> / <sub>4</sub>	9
B	7	F	11	30 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	F	10	27 <sup>3</sup> / <sub>4</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	F	9	25 <sup>3</sup> / <sub>8</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	F	8	23 <sup>1</sup> / <sub>4</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	E	15	55	9 <sup>3</sup> / <sub>8</sub>
B	7	E	14	46 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>4</sub>
B	7	E	13	40 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>8</sub>
B	7	E	12	35 <sup>1</sup> / <sub>2</sub>	9
B	7	E	11	31 <sup>3</sup> / <sub>4</sub>	9
B	7	E	10	28 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	E	9	25 <sup>3</sup> / <sub>4</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	E	8	23 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	D	15	63	9 <sup>1</sup> / <sub>2</sub>
B	7	D	14	51 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>4</sub>
B	7	D	13	43 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>8</sub>
B	7	D	12	37 <sup>1</sup> / <sub>2</sub>	9
B	7	D	11	33	9
B	7	D	10	29 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	D	9	26 <sup>1</sup> / <sub>2</sub>	8 <sup>7</sup> / <sub>8</sub>
B	7	D	8	24	8 <sup>7</sup> / <sub>8</sub>
C	1	F	15	984	-212 <sup>1</sup> / <sub>4</sub>
C	1	F	14	223 <sup>3</sup> / <sub>4</sub>	-41 <sup>1</sup> / <sub>8</sub>
C	1	F	13	125 <sup>3</sup> / <sub>4</sub>	-19 <sup>1</sup> / <sub>8</sub>
C	1	F	12	87	-10 <sup>3</sup> / <sub>8</sub>
C	1	F	11	66 <sup>1</sup> / <sub>4</sub>	-6 <sup>5</sup> / <sub>8</sub>
C	1	F	10	53 <sup>1</sup> / <sub>4</sub>	-2 <sup>3</sup> / <sub>4</sub>
C	1	F	9	44 <sup>1</sup> / <sub>4</sub>	- <sup>3</sup> / <sub>4</sub>
C	1	F	8	37 <sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>
C	1	E	15	NO INTERSECTION	
C	1	E	14	1093	-236 <sup>7</sup> / <sub>8</sub>
C	1	E	13	215 <sup>1</sup> / <sub>2</sub>	-39 <sup>3</sup> / <sub>8</sub>
C	1	E	12	118 <sup>3</sup> / <sub>4</sub>	-17 <sup>1</sup> / <sub>2</sub>
C	1	E	11	81 <sup>1</sup> / <sub>2</sub>	-9 <sup>1</sup> / <sub>8</sub>
C	1	E	10	61 <sup>3</sup> / <sub>4</sub>	-4 <sup>5</sup> / <sub>8</sub>
C	1	E	9	49 <sup>1</sup> / <sub>4</sub>	-1 <sup>7</sup> / <sub>8</sub>
C	1	E	8	40 <sup>3</sup> / <sub>4</sub>	0
C	1	D	15	NO INTERSECTION	
C	1	D	14	NO INTERSECTION	
C	1	D	13	1143	-248 <sup>1</sup> / <sub>4</sub>

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
C	1	D	12	203	-36 1/2
C	1	D	11	110 1/2	-15 5/8
C	1	D	10	75 1/4	-7 3/4
C	1	D	9	56 3/4	-3 1/2
C	1	D	8	45 1/4	-1
C	2	F	15	247 1/4	-37 5/8
C	2	F	14	134	-16 1/8
C	2	F	13	91 1/2	-8 1/8
C	2	F	12	69 1/4	-3 7/8
C	2	F	11	55 1/2	-1 1/4
C	2	F	10	46 1/4	1/2
C	2	F	9	39 1/4	1 3/4
C	2	F	8	34	2 3/4
C	2	E	15	1957 1/4	-361 3/4
C	2	E	14	239 3/4	-36 1/4
C	2	E	13	127 1/4	-14 7/8
C	2	E	12	86	-7 1/8
C	2	E	11	64 3/4	-3 1/8
C	2	E	10	51 3/4	-5/8
C	2	E	9	42 3/4	1 1/8
C	2	E	8	36 1/4	2 3/8
C	2	D	15	NO INTERSECTION	
C	2	D	14	2335 1/2	33 1/2
C	2	D	13	227 1/2	-33 7/8
C	2	D	12	118 3/4	-13 1/4
C	2	D	11	80	-5 7/8
C	2	D	10	60	-2 1/4
C	2	D	9	47 1/2	1/4
C	2	D	8	39 1/4	1 3/4
C	3	F	15	142 1/2	-12 3/4
C	3	F	14	96	-5 5/8
C	3	F	13	72 1/4	-2
C	3	F	12	57 3/4	1/4
C	3	F	11	48	1 3/4
C	3	F	10	40 3/4	2 7/8
C	3	F	9	35 1/2	3 3/4
C	3	F	8	31	4 3/8
C	3	E	15	267 1/2	-32 1/8
C	3	E	14	135 1/2	-11 3/4
C	3	E	13	90 1/2	-4 3/4
C	3	E	12	67 3/4	-1 1/4
C	3	E	11	54	7/8
C	3	E	10	44 1/2	2 3/8
C	3	E	9	37 3/4	3 3/8
C	3	E	8	32 3/4	4 1/4
C	3	D	15	72,860 1/2	-11,247
C	3	D	14	255 1/4	-30 1/4
C	3	D	13	127 1/4	-10 1/2
C	3	D	12	84 1/2	-3 7/8

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
C	3	D	11	63	-1/2
C	3	D	10	49 3/4	1 1/2
C	3	D	9	41	2 7/8
C	3	D	8	34 3/4	3 7/8
C	4	F	15	100 1/2	-2 7/8
C	4	F	14	75	1/4
C	4	F	13	59 3/4	2
C	4	F	12	49 1/2	3 1/4
C	4	F	11	42 1/4	4 1/8
C	4	F	10	36 3/4	4 7/8
C	4	F	9	32 1/4	5 1/4
C	4	F	8	28 3/4	5 3/4
C	4	E	15	144 1/2	-8 1/8
C	4	E	14	95	-2 1/4
C	4	E	13	70 1/2	3/4
C	4	E	12	56	2 1/2
C	4	E	11	46 1/4	3 5/8
C	4	E	10	39 1/4	4 1/2
C	4	E	9	34	5 1/8
C	4	E	8	29 3/4	5 5/8
C	4	D	15	287 1/2	-25 1/4
C	4	D	14	136	-7 1/8
C	4	D	13	88 3/4	-1 3/8
C	4	D	12	65 3/4	1 1/4
C	4	D	11	52	3
C	4	D	10	42 3/4	4
C	4	D	9	36 1/4	4 7/8
C	4	D	8	31 1/4	5 1/2
C	5	F	15	77 3/4	2 1/2
C	5	F	14	61 3/4	3 7/8
C	5	F	13	51	4 7/8
C	5	F	12	43 1/2	5 1/2
C	5	F	11	37 3/4	6
C	5	F	10	33 1/4	6 3/8
C	5	F	9	29 1/2	6 5/8
C	5	F	8	26 1/2	6 7/8
C	5	E	15	99 1/4	3/4
C	5	E	14	73 1/4	3
C	5	E	13	58	4 1/4
C	5	E	12	48	5 1/8
C	5	E	11	40 1/2	5 3/4
C	5	E	10	35 1/4	6 1/4
C	5	E	9	30 3/4	6 1/2
C	5	E	8	27 1/2	6 7/8
C	5	D	15	144 1/2	-3 1/4
C	5	D	14	93	1 1/4
C	5	D	13	68 1/4	3 3/8
C	5	D	12	53 3/4	4 1/2

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
C	5	D	11	44 1/4	5 3/8
C	5	D	10	37 1/2	6
C	5	D	9	32 1/4	6 3/8
C	5	D	8	28 1/4	6 3/4
C	6	F	15	63 1/2	5 7/8
C	6	F	14	52 1/2	6 1/2
C	6	F	13	44 3/4	6 7/8
C	6	F	12	38 3/4	7 1/4
C	6	F	11	34 1/4	7 3/8
C	6	F	10	30 1/2	7 5/8
C	6	F	9	27 1/2	7 3/4
C	6	F	8	24 3/4	7 7/8
C	6	E	15	75 3/4	5 1/4
C	6	E	14	59 3/4	6 1/8
C	6	E	13	49 1/4	6 5/8
C	6	E	12	41 3/4	7
C	6	E	11	36 1/4	7 3/8
C	6	E	10	31 3/4	7 1/2
C	6	E	9	28 1/4	7 3/4
C	6	E	8	25 1/4	7 7/8
C	6	D	15	97	4 1/4
C	6	D	14	70 3/4	5 1/2
C	6	D	13	55 1/2	6 3/8
C	6	D	12	45 1/2	6 7/8
C	6	D	11	38 1/2	7 1/4
C	6	D	10	33 1/2	7 1/2
C	6	D	9	29 1/4	7 3/4
C	6	D	8	26	7 7/8
C	7	F	15	53 3/4	8 1/4
C	7	F	14	45 5/8	8 3/8
C	7	F	13	39 5/8	8 1/2
C	7	F	12	35	8 5/8
C	7	F	11	31 1/4	8 5/8
C	7	F	10	28 1/4	8 3/4
C	7	F	9	25 1/2	8 3/4
C	7	F	8	23 1/4	8 3/4
C	7	E	15	61 1/4	8 1/8
C	7	E	14	50 1/2	8 1/4
C	7	E	13	42 3/4	8 1/2
C	7	E	12	37	8 1/2
C	7	E	11	32 1/2	8 5/8
C	7	E	10	29	8 5/8
C	7	E	9	26	8 3/4
C	7	E	8	23 3/4	8 3/4
C	7	D	15	73	8
C	7	D	14	57 1/4	8 1/4
C	7	D	13	47	8 3/8
C	7	D	12	39 3/4	8 1/2
C	7	D	11	34 1/4	8 5/8

<u>BOTTOM BAR</u>		<u>TOP BAR</u>		<u>INTERSECTION POINT</u>	
<u>Axle</u>	<u>Chassis</u>	<u>Axle</u>	<u>Chassis</u>	<u>Length</u>	<u>Height</u>
C	7	D	10	30 <sup>1</sup> / <sub>4</sub>	8 <sup>5</sup> / <sub>8</sub>
C	7	D	9	26 <sup>3</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>4</sub>
C	7	D	8	24	8 <sup>3</sup> / <sub>4</sub>

Revision Date: March 7, 2005

