INSTRUCTIONS FOR REAR BALL-END ANTI-ROLL BAR USE WITH CLIP #7154 AND CANTED 4-BAR SUSPENSION

<u>ITEM</u>	<u>QTY</u>	PART NO.	<u>DESCRIPTION</u>
1	1	A14.188-042.00	Anti-roll bar tube 7/8 x .188 x 42" long 4130
1	1	A20.188-042.00	(Optional) tube 1-1/4 x .188 4130 x 42" long
2	2	1162-0.495	Ball end .495 x 1-1/4 48-spline
2	2	1162-0.870	(Optional) ball end .870 x 1-1/4 48-spline
3	1	1465-R	Anti-roll 4° right arm 1-1/4-48, 8.20 long
4	1	1465-L	Anti-roll 4° left arm 1-1/4-48, 8.20 long
5	2	3701	Preload adjuster assembly
6	2	1262	Lock ring with 1-7/8-20 thread
7	4	3122	Bolt 3/8-24 X 1-1/2 hex cap screw
8	4	3209	Locknut 3/8-24 nylon insert
9	2	3338	Rod End 3/8" 4130 right, male
10	2	1004	Adjuster rod 5" x 3/8-24 right
11	2	3213	Jam nut 3/8-24 left-hand, yellow zinc
12	2	3339	Rod end 3/8" 4130 left, male
13	2	3214	Jam nut 3/8-24 right, clear zinc
14	4	1263	Spacer 5/8 x 3/8 x .475 long
15	2	3111	Bolt 3/8-24 X 2-1/2 hex cap screw
16	2	3222	Fender washer 3/8 X 1-1/2
17	2	3224	Lock washer 3/8 regular
18	2	3242	High collar lockwasher 3/8
19	2	3103-038C1.75C	Allen head 3/8-16 x 1-3/4 socket head screw
20	2	2196	Lower anti-roll bar axle tab

- 1. You received a 42" long 4130 tube. For a street car application the tube has a 7/8" OD; for drag race applications the tube has a 1-1/4" OD. Cut this center tube to the correct length. To determine tube length, measure the inside width of the frame rails and subtract 6-1/8 (6.125) inches.
- 2. Drill a 5/16" hole through both walls of the anti-roll bar tube 1/2" from each end. These holes will be used to rosette weld the splined adapters to the center tube.
- 3. Insert one of the splined adapters into the center tube. Weld the holes, filling the hole from the adapter to outer surface of the tube. This is a rosette weld. You can now weld the circumference of the joint. This needs to be a good quality weld.
- 4. After the weld is completely cooled, slide the #1465-R arm onto the adapter. The arm is splined at an angle. Position the arm with the pinch-bolt head up and the arm splayed out away from the splined end of the anti-roll bar. The ends of the arms that attach to the shaft are narrower than the ends of the arm that attach to the adjuster link. Secure arm with the 3/8-16 x 1-3/4" socket head cap screw and high collar lock washer which are used as a pinch bolt on the spline to remove all play.

#916259 Page 2 of 4

5. Slide the second splined arm #1465-L onto the other adapter with the pinch-bolt head up and the arm splayed out. Tighten the pinch bolt. Insert the second splined adapter with arm attached, into the anti-roll bar tube. Set the assembly on a flat surface with both arms forward and splayed out. This will index the splines and keep the billet arms flat to each other. Rosette weld the second splined adapter to the center tube through both holes. Once the rosette welds are complete, remove both billet arms and weld the circumference on the second joint. This needs to be a good quality weld.

- 6. After the welds have cooled, reinstall both anti-roll bar arms. Position the arms with the pinch-bolt heads up and the arms splayed out away from the splined ends of the shaft. Make sure the arms are indexed in the same plane flat to each other. Secure arms with 3/8-16 x 1-3/4" socket head cap screw and high collar lock washer. It is a good idea to put a small amount of Loctite® on the pinch bolt threads. If you want to paint the shaft, do it before you re-assemble it. Mask the ball ends and splines.
- 7. Apply a small amount of Anti-Seize to the external threads of the preload assemblies. Make sure the threads in the frame sockets are clear before starting to assemble and do not force the assembly. Using a 1/2-inch drive ratchet and extension, thread the preload adjuster assemblies into the threaded bosses on the frame until they are even with the inside of the bosses. Position the anti-roll bar assembly between the preload assemblies with the arm towards the front of the car and the pinch-bolt heads down. Continue to thread both sides evenly until the ball end of the anti-roll bar is bottomed out against the bearing. The anti-roll bar arms should be an equal distance from the frame rails on each side. Once the arms are centered and the bearings are seated against the anti-roll bar, tighten both preload assemblies an additional 1/4 turn.
- 8. Thread the lock ring (#1262) onto one side so it is tight against the preload assembly. Slide the 3/8" lockwasher followed by the 3/8" fender washer over the 3/8-24 x 1-1/2" hex bolt. Thread this bolt through the lock ring and into the preload assembly. Tighten this bolt to 35 lb-ft. Repeat this for the other side.
- 9. If you purchased a welded housing go to the next step. The lower end on the link rods will attach to the housing tabs. The outside mounting tab is part of the lower control arm mount. You will need to install the inner mounting tab (#2196) onto the axle tube. Slide the #2196 inner tab over the 3/8-24 x 2-1/2" hex bolt. Add one #1263 spacer, the rod end, and then a second spacer. Insert the bolt through the hole in the housing bracket and secure with the 3/8"-24 lock nut supplied. Tack weld the inner bracket (#2196) to the housing with two large sized tacks. Remove the bolt, rod end and spacers and weld the bracket only on the side toward the inside of the frame. Repeat this on the other side of the housing.
- 10. Assemble the link tubes by threading the 3/8"-24 jam nuts onto the 3/8" 4130 rod ends. The yellow-zinc jam nuts fit the left-hand rod ends. Position the jam nut 3/4" from the end of the shank. This will position the jam nut at approximately half travel. Thread the link adjuster tube onto the rod ends. The hex end of the adjuster is for the right-hand thread rod end.

#916259 Page 3 of 4

11. Attach the link adjuster rods to the billet arms with the $3/8-24 \times 1-1/2$ " hex bolts and lock nuts provided. Use the $3/8-24 \times 2-1/2$ " bolts and spacers to attach to the tabs on the axle housing. With the vehicle complete and at ride height, you should have the link adjuster tubes in the neutral position. This mean both the links should move with same resistance when twisted. Do not try to add preload with the anti-roll bar links.

Date: May 9, 2006



