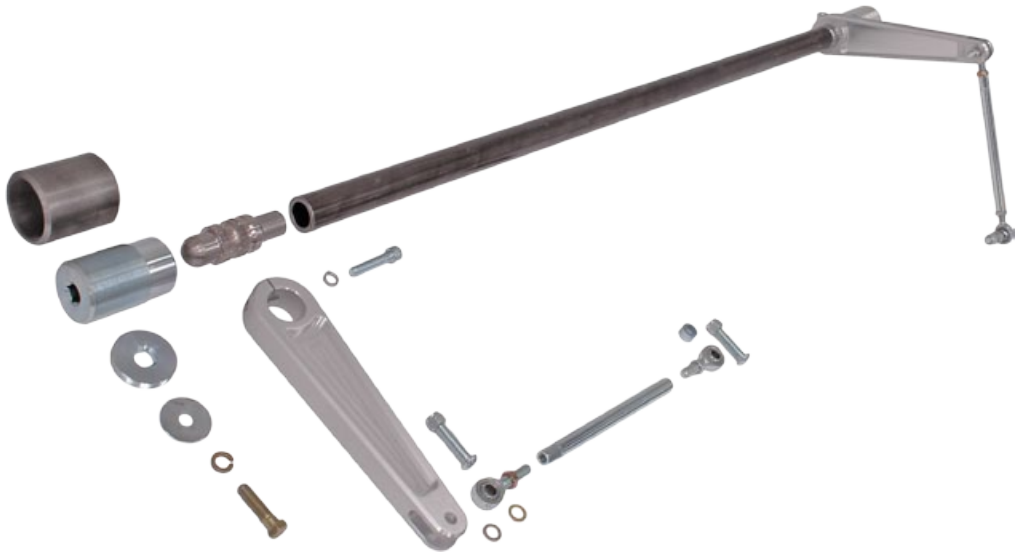
INSTALLATION GUIDE

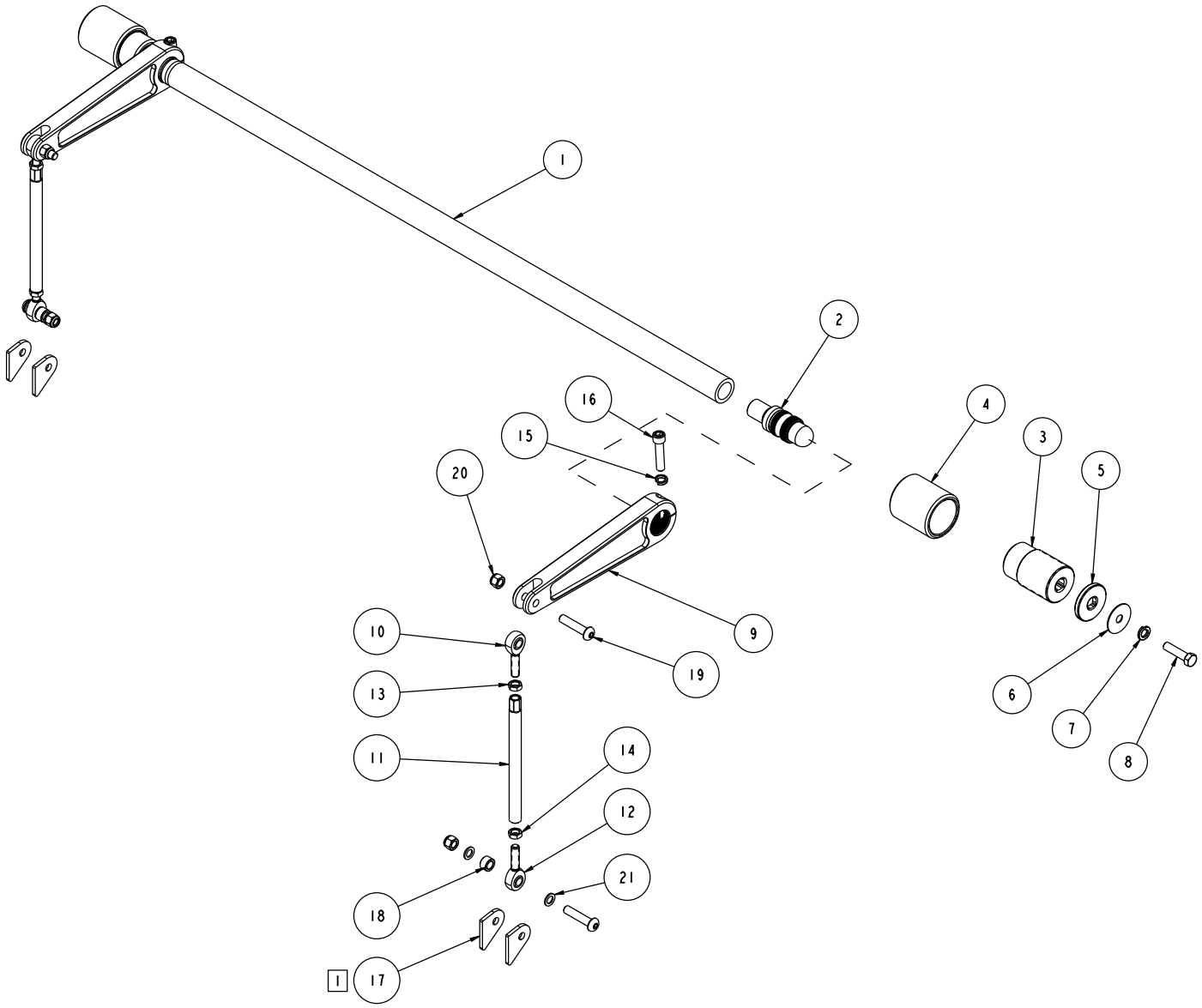
CHRIS ALSTON'S Chassisworks
THE HOME OF HIGHER TECHNOLOGY

6272
Anti-Roll Bar, Welded Ball-Pivot Style Mounts



Description: Ball-pivot style, splined, anti-roll bar with threaded frame mounts and billet arms.
Includes: 1-1/4” diameter tube anti-roll bar, billet-aluminum arms, pivot sockets, and endlink assemblies. Maximum width is 40”.

Notes: Welding is required for installation of the threaded mounting sockets and anti-roll bar ends.



NOTES:
[1] OPTIONAL ITEM

ITEM	QTY	PART NO.	DESCRIPTION
1	1	A20.188-036.000	CUT TUBE, ∅1 1/4 x .188 WALL 4130 x 36
2	2	1162-0.870	BALL END SHAFT ADAPTER 1 1/4-48 SPLINE x .870
3	2	3701	PRELOAD ADJUSTER ASSEMBLY BALL END ANTIROLL BAR
4	2	1260	FRAME SOCKET, 1 7/8-20 THREAD, BALL END ANTIROLL BAR
5	2	1262	LOCKING RING, 1 7/8-20 THREAD 1/2 DRIVE, BALL END ANTIROLL BAR
6	2	3157-038F-C	FENDER WASHER, 3/8 x 1 1/2, ZINC PLATED
7	2	3108-038L-C	LOCK WASHER, HELICAL SPRING ∅3/8, STEEL, ZINC
8	2	3100-038F1.50Y	HEX BOLT, 3/8-24 x 1 1/2, GRADE 8, YELLOW ZINC
9	2	1468	ANTI-ROLL STRAIGHT ARM, 1 1/4-48 SPLINE, 8.20 LONG
10	2	3126-038X038-L	ROD END, 3/8-24 LEFT x 3/8 BORE, 4130, MALE JMX6
11	2	1056	ADJUSTER, 7.0 x 3/8-24, ANTI-ROLL BAR
12	2	3126-038X038-R	ROD END, 3/8-24 RIGHT x 3/8 BORE, 4130, MALE, JMX6
13	2	3102-038-24LY	JAM NUT, 3/8-24 LEFT, YELLOW ZINC
14	2	3102-038-24RC	JAM NUT, 3/8-24 RIGHT, CLEAR ZINC
15	2	3108-038H-C	HIGH COLLAR LOCKWASHER, 3/8 STEEL, CLEAR ZINC
16	2	3103-038C1.75C	SOCKET HEAD CAP SCREW, GRADE 8, 3/8-16 x 1 3/4, CLEAR ZINC
17	4	2121	CLEVIS TAB ∅3/8 HOLE
18	2	1055	SLEEVE ∅5/8 x .120 DOM x .375
19	4	3104-038C1.75C	BUTTON HEAD CAP SCREW 3/8-16 x 1 3/4, CLEAR ZINC
20	4	3101-038-16C	LOCKNUT 3/8-16, GRADE 5, NYLON INSERT, CLEAR ZINC
21	4	3109-038-S-2-Y	AIRCRAFT WASHER 3/8 x .062 THICK

DESCRIPTION: BALL-END, SPLINED ANTI-ROLL BAR, WELD-IN FRAME RAIL SLEEVE

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PART NO. 6272

3/11/09 | DWG: 916272

PARTS LIST

Prior to beginning installation use the following parts lists to verify that you have received all components required for installation.

Splined-End Anti-Roll Bar - 6272

Qty	Part Number	Description
1	A20.188-036.000	Tube 1-1/4 x .188 4130 36” long
2	1260	Frame socket with 1-7/8-20 threads, 2-1/4 OD x 2-1/2” long
2	1468	Anti-roll-bar arm, 0°, 48 spline, 8.2” center length

90300-2036 - Hardware Bag

Qty	Part Number	Description
2	1055	Spacer 5/8 OD x 3/8 ID x .375 long
2	1056	Anti-roll-bar adjuster rod, 7” long
2	1162-0.870	Ball end .870” x 1-1/4-48 spline
2	1262	Lock ring with 1-7/8-20 thread
2	3100-038F1.50Y	Bolt 3/8-24 x 1-1/2” hex cap screw
8	3100-038-16C	Locknut 3/8-16 nylon insert
2	3102-038-24LY	Jam nut 3/8-24 left-hand thread
2	3102-038-24RC	Jam nut 3/8-24 right-hand thread
2	3103-038C1.75C	Socket head cap screw 3/8-16 x 1-3/4” long
8	3104-038C1.75C	Button head cap screw 3/8-16 x 1-3/4” long
2	3108-038H-C	Lock washer 3/8” high collar
2	3108-038L-C	Lock washer 3/8”
4	3109-038-S-2-Y	Aircraft washer 3/8”
2	3126-038x038-L	Rod end 3/8” 4130 left-hand thread
2	3126-038x038-R	Rod end 3/8” 4130 right-hand thread
2	3157-038F-C	Fender washer 3/8 x 1-1/2 x .073” thick
2	3701	Preload adjuster assembly

INSTRUCTIONS

Install Frame Sockets

1. Use a 2-1/4”-diameter hole saw to cut a hole through each frame rail, 8-1/4” forward or behind the anti-roll-bar endlink attachment point at the rearend housing. In most cases the attachment point is at the axle tube or suspension bracket. Position the anti-roll bar where it best fits the chassis, has adequate clearance, and will not interfere with other components.
2. Slide a threaded frame socket (#1260) through each hole in the frame rail so that it is centered in the frame rail.
3. On the inside and outside of each frame rail, fillet weld completely around each socket. We recommend using a series of stitch welding passes to form a complete bead around the socket to prevent from distorting the threads.

Anti-Roll Bar Assembly

4. If necessary, the anti-roll bar tube can be bent to clear most obstacles. The ends of the tubes must remain straight and inline where they attach to the splined ends.
5. To determine the correct length of the anti-roll-bar center tube, measure the distance between the inside edges of the frame sockets and subtract 5-5/8”. Example: inside frame width of 24” minus 5-5/8”, equals center tube length of 18-3/8”. Cut the center tube to the calculated length.
6. At each end of the tube, drill three evenly spaced 5/16” holes, 1/2” from the end. These holes will be used to rosette weld the splined adapters to the center tube and hold their correct position.
7. Insert ONE of the splined adapters into the center tube. Weld the holes to form rosette welds, filling the hole from the adapter to the outer surface of the tube. You can now TIG weld the circumference of the joint.
8. After the weld is completely cooled, slide a billet arm (#1468) onto the adapter. Secure the arm with the 3/8-16 x 1-3/4” socket head cap screw and high-collar lock washer. When tightened the bolt pinches the joint closed and removes all freeplay.
9. Slide the second splined arm (#1468) onto the loose adapter and secure with a 3/8” socket head and high-collar lock washer. The arm must be oriented so that both bolt heads will be facing the same direction.
10. Insert the second splined adapter with the arm attached, into the anti-roll bar tube. Set the assembly onto a flat surface with both arms forward to correctly index the splines.
11. Through each 5/16”-diameter hole, rosette weld the second splined adapter to the center tube. Once the rosette welds are complete, remove both billet arms and weld along the circumference of the second joint. This needs to be a good quality weld.
12. Paint the anti-roll bar, if desired, before reinstalling the arms. DO NOT paint the splines or ball ends. Doing so will prevent the billet arms from fitting correctly.
13. Reinstall both anti-roll bar arms. Position the arms with the bolt heads facing up and the arms

indexed flat to each other.

14. Secure the arms with 3/8-16 x 1 3/4” socket-head cap screws and high-collar lock washers. We recommend using a small amount of Loctite® on the bolt threads.

15. Make sure the threads in the frame sockets are clear from debris before continuing.

Preload Adjusters

16. Apply anti-seize along the threads of the frame sockets.

17. From the outside of the frame rail, thread the preload adjuster into the frame sockets. DO NOT FORCE ASSEMBLY OR USE AN IMPACT GUN. If the adjuster does not screw in easily, chase the threads with a 1-7/8”-20-pitch tap. A 1/2”-drive ratchet and extension can be used to screw the adjusters in until they are even with the inside edge of the frame sockets.

18. Position the anti-roll bar between the preload adjusters with the arm pointing toward the rearend housing attachment points. The pinch bolt heads must be facing DOWN in order to access the hardware once the assembly is installed in the car.

19. Continue to screw in the preload adjusters evenly until the ball end of the anti-roll bar is bottomed out against the bearing and all end play has been eliminated. The anti-roll bar arms should be equal distance from each frame rail. Once the arms are centered and the bearings seated against the anti-roll bar, tighten both preload adjuster an additional 1/4 turn. DO NOT overtighten the adjusters.

20. Thread a lock ring (#1262) into each frame socket so that it seats tightly against the back of the preload adjuster.

21. Slide a 3/8” lockwasher and fender washer over the 3/8-24 x 1-1/2” hex bolt and insert through each lock ring and into the preload assembly. Tighten to 35 lb-ft.

Endlink Assembly

22. Thread the 3/8”-24 jam nuts onto the rod ends so that they are 3/4” past the end of the shank. The yellow-zinc jam nuts fit the left-hand-threaded rod ends.

23. Thread the link adjuster tube onto the rod ends. The hex end of the adjuster indicates the left-hand threaded end.

24. Attach the link adjuster rods to the billet arms with the 3/8-16 x 1-3/4” button-head cap screws, aircraft washers, and locknuts. The remaining 3/8-16 x 1-3/4” button head cap screws and spacers are used to attach the endlink to mounting tabs on the axle housing.

25. Position the axle housing under the car at ride height and the billet arms level.

26. Insert one button head cap screw through the tab and then through the lower rod end. Slide the 5/8” spacer (#1055) over the bolt followed by the second tab and the locknut. Tighten the bolt. (Mounting tabs, #6221, are available through Chassisworks and its distributors.)

27. The link rod should drop straight down from the billet arm to the axle housing.

28. If the link rod is too long it can be shortened on the right-hand-threaded end and retapped.
29. Tack weld the mounting tabs to the housing. Repeat this for the other side.
30. Move the axle housing through its entire range of travel to make sure nothing binds and that the billet arms do not go over center during suspension travel. Make adjustments to the mounting tabs as necessary.
31. Once correct, remove the links from the housing tabs and complete the welds.
32. Reinstall the links and tighten the fasteners.
33. With the vehicle complete and at ride height, you should have the link adjuster tubes in the neutral position. This means both the links should move with same resistance when twisted. Do not try to add preload with the anti-roll bar links. Tighten the jam nuts on the link rod ends while holding the link with a 1/2” open end wrench on the hex.

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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