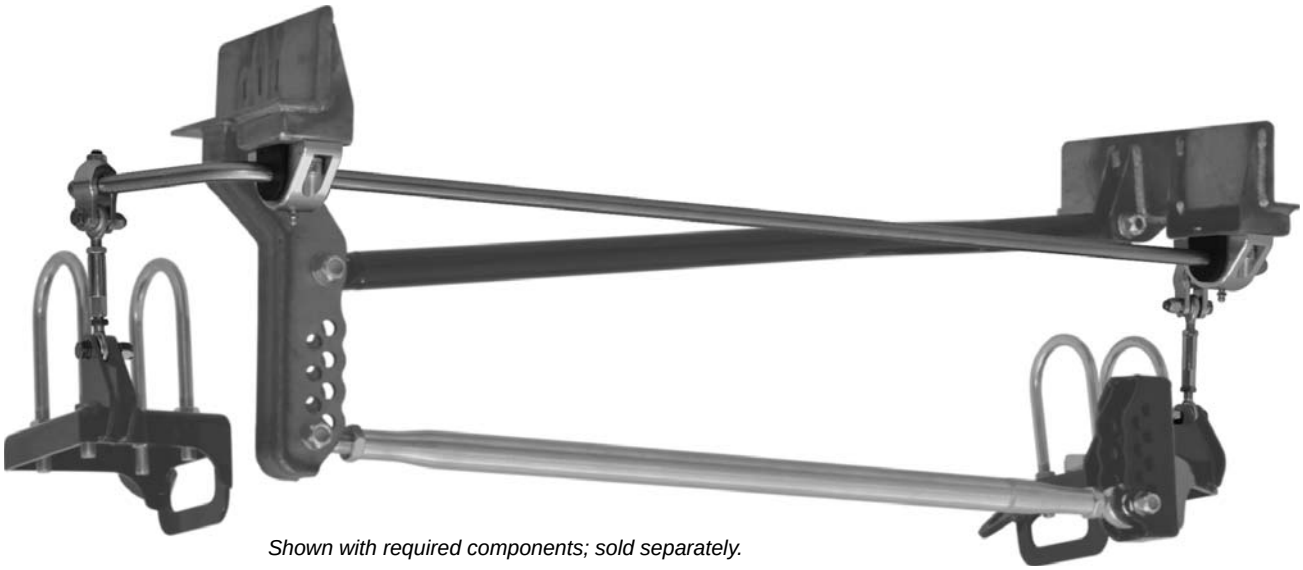
READ ALL INSTRUCTIONS COMPLETELY AND THOROUGHLY UNDERSTAND THEM BEFORE DOING ANYTHING.
CALL TOTAL CONTROL PRODUCTS TECH SUPPORT (916) 388-0288 IF YOU NEED ASSISTANCE.

INSTALLATION GUIDE

TCP PHA-M10

Sliding Link Anti-Roll Bar for Panhard Bar System for 1964-73 Mustang and 1967-73 Cougar



Shown with required components; sold separately.

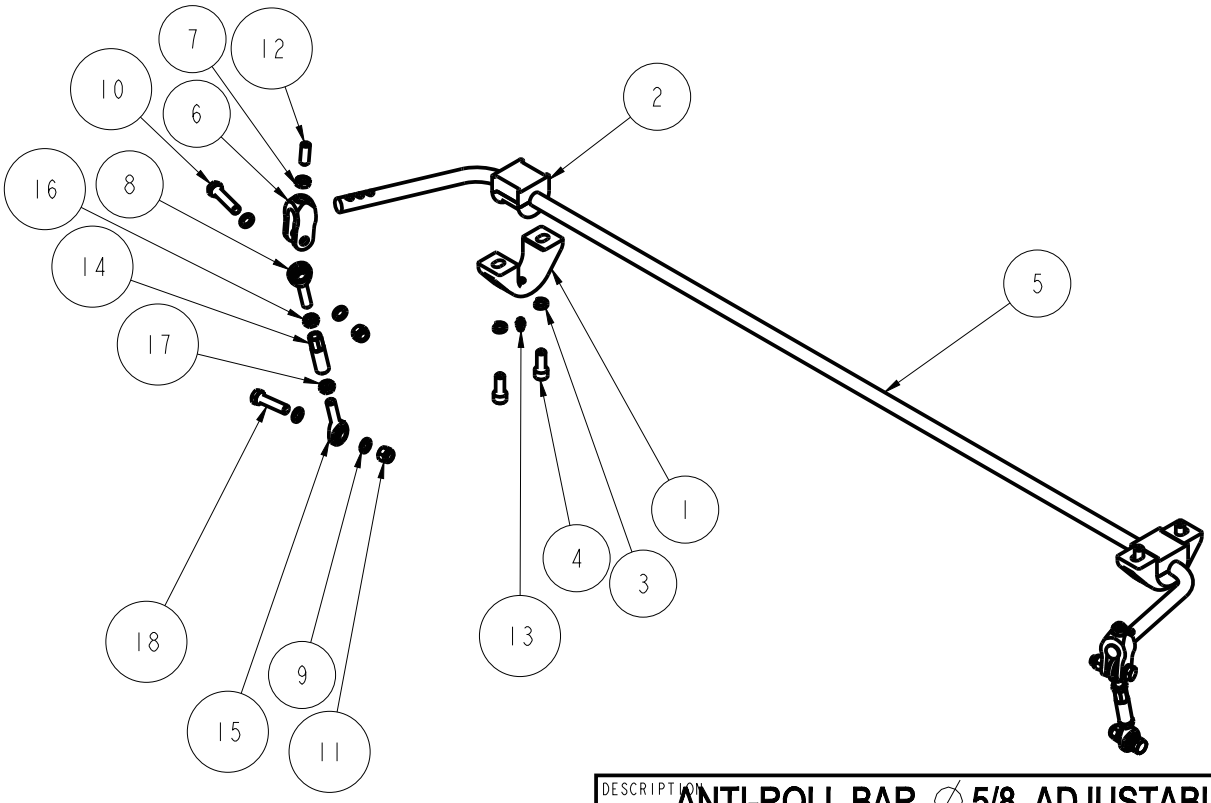
Description: Anti-roll bar with billet mounts for TCP Panhard Bar system. Features sliding endlink mount for anti-roll bar rate adjustment. Requires installation of TCP panhard bar system (TCP PHL-M10) and TCP driver-side leaf-spring plate (TCP PHS-M10).

Applications: Cougar ‘67-73, Mustang ‘64-73

Note: Exhaust system may require modification.

Fitment: Does not fit with factory staggered shocks. Both shocks must mount forward of the rearend housing.

ITEM	QTY	PART NO.	DESCRIPTION
1	2	1498	BUSHING HOUSING, SWAY BAR, D, 13/16 x 2.50, 2.88
2	2	3150-D-0.63-B	POLYURETHANE BUSHING, 5/8 SWAY BAR, BLACK
3	4	3108-038H-C	HIGH COLLAR LOCKWASHER, 3/8 STEEL, CLEAR ZINC
4	4	3103-038C1.00C	SOCKET HEAD CAP SCREW, GRADE 8, 3/8-16 x 1, CLEAR ZINC,
5	1	7902-025	ANTI-ROLL BAR, ∅5/8, REAR MOUNT, PANHARD BAR, 64-73 MUSTANG
6	2	1530-0.63	CLEVIS ADJUSTABLE LINK, ∅5/8 BAR
7	2	3134-038-24C	JAM NUT, TOP LOCK 3/8-24 RIGHT, CLEAR ZINC
8	2	3111-038X038-LT	ROD END, 3/8-24 LEFT x 3/8 BORE, MALE, TEFLON, CML6T
9	8	3109-038-S-2-Y	AIRCRAFT WASHER 3/8 x .062 THICK
10	2	3100-038F1.75Y	HEX BOLT, 3/8-24 x 1 3/4, GRADE 8, YELLOW ZINC
11	4	3101-038-24C	LOCKNUT, 3/8-24, GRADE 5, NYLON INSERT, CLEAR ZINC
12	2	3106-38FC1.00B	HEX SOCKET SET SCREW, CUP POINT 3/8-24 x 1, BLACK OXIDE
13	2	3144-25-28-0	GREASE ZERK 1/4-28 STRAIGHT
14	2	1056-02.0	ADJUSTER, 2.0 x 3/8-24, ANTI-ROLL BAR
15	2	3111-038X038-RT	ROD END, 3/8-24 RIGHT x 3/8 BORE, MALE, TEFLON, CM6T
16	2	3102-038-24LY	JAM NUT, 3/8-24 LEFT, YELLOW ZINC
17	2	3102-038-24RC	JAM NUT, 3/8-24 RIGHT, CLEAR ZINC
18	2	3100-038F1.50Y	HEX BOLT, 3/8-24 x 1 1/2, GRADE 8, YELLOW ZINC



DESCRIPTION
ANTI-ROLL BAR, ∅ 5/8, ADJUSTABLE LINK, PANHARD BAR, 64-73 MUSTANG

Chris Alston's **CHASSISWORKS INC.**
8661 YOUNGER CREEK DRIVE
SACRAMENTO, CA 95828
(916) 388-0288 FAX 388-0295

PART NO.
TCP PHA-M10

2/6/15 | DWG: TCP_PHA-M10

PARTS LIST

TCP PHA-M10 - Anti-Roll Bar for Panhard Bar System, ‘64-73 Mustang

Qty	Part Number	Description
1	7902-025	Anti-roll bar, sliding-link adjustable, 5/8” OD

7918-PHAM10 - Hardware Bag

Qty	Part Number	Description
2	1056-02.0	Adjuster rod, 2” length
2	1498	Bushing housing-D
2	1530-0.63	Clevis, sliding-link adjustment
2	3100-038F1.50Y	Bolt, 3/8-24 x 1-1/2”, hex head Grade 8
2	3100-038F1.75Y	Bolt, 3/8-24 x 1-3/4”, hex head Grade 8
4	3101-038-24C	Locknut, 3/8-24 nylon insert, plated
2	3102-038-24LY	Jam nut, 3/8-24 LH, yellow zinc
2	3102-038-24RC	Jam nut, 3/8-24 RH, clear zinc
4	3103-038C1.00C	Socket head, 3/8-16 x 1”, allen head
2	3106-38FC1.00B	Set screw, 3/8-24 x 1”, cup point
4	3108-038H-C	Lock washer, 3/8” high collar
8	3109-038-S-2-Y	Aircraft washer, 3/8” small OD
2	3111-038X038-LT	Rod end, 3/8” LH x 3/8” bore
2	3111-038X038-RT	Rod end, 3/8” RH x 3/8” bore
2	3134-038-24C	Top lock nut, 3/8-24, all metal
2	3144-25-28-0	Grease zerk, 1/4-28, straight
2	3150-D-0.63-B	Anti-roll bar bushing, style “D”
1	3151-5ML	Poly lube, 5ml tube

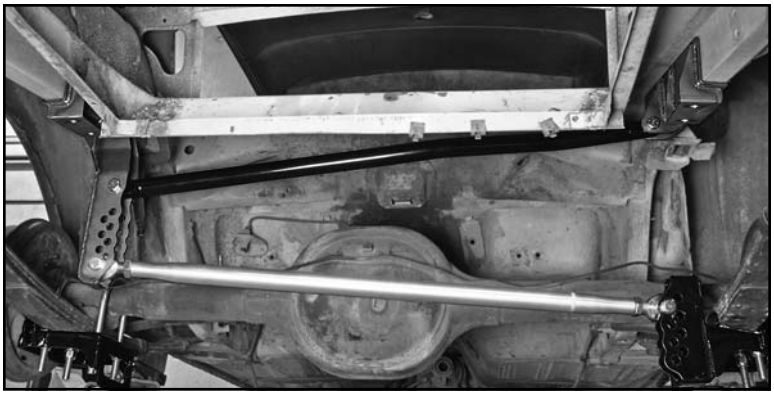
Additional Components (not included)

Qty	Part Number	Description
1	TCP PHL-M10	Panhard bar system, ‘64-73 Mustang (required for installation)
1	TCP PHS-M10	Leaf spring plate, driver side (required for installation)

INSTRUCTIONS

NOTE: A 1965 Mustang was used for the following images and may show slight differences from the later Mustang and Cougar platforms. <u>The installation procedure is identical.</u>

1. Prior to anti-roll bar installation the TCP panhard-bar frame brackets, support brace, locater bar, and passenger side leaf-spring plate must be installed. Refer to the panhard bar system installation guide for further information.

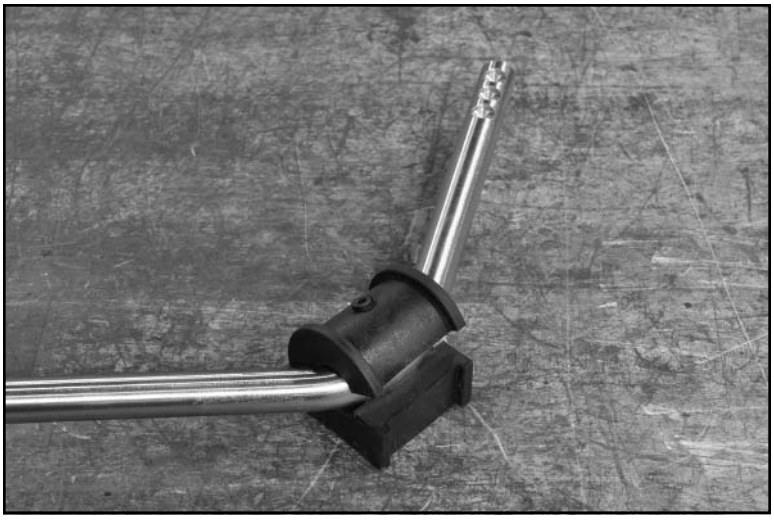


2. The passenger spring plate should already be installed. The anti-roll bar endlink will mount outboard of the leaf spring between the two tabs shown at far right of image.

3. Install the TCP driver-side spring plate. Torque specification will depend upon U-bolt size. Continue with anti-roll bar assembly once all spring plate mounting hardware is tightened.

4. The bushings and billet housings are installed onto the bar before raising it into position.
5. Coat the inside and outside surfaces of each bushing with the supplied poly lube.

6. Slide the bushing over the bar and past the bend to the straight length between the two bends.



7. Place the billet housing over the bushing and screw in the grease zerk fitting.

8. Using a 3/8-16 tap, chase the two threaded holes at each frame bracket.

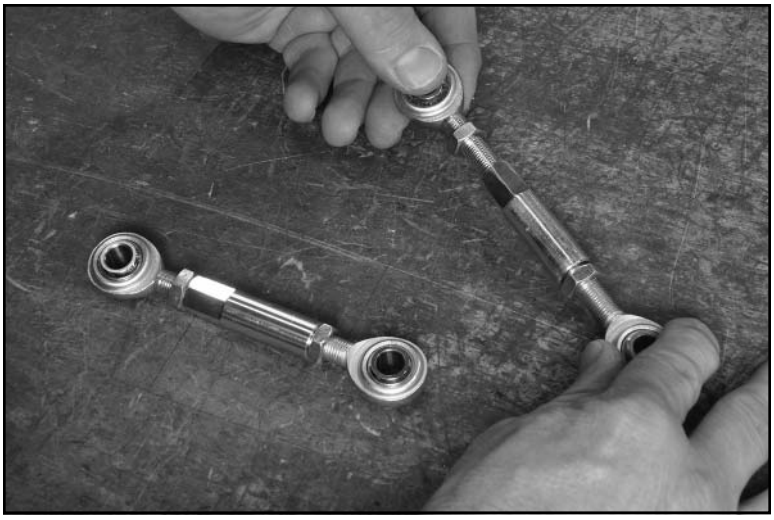
9. The bar can now raised into position and bolted to the frame brackets. Use two 3/8” socket head cap screws and two lock washers per mount.

   ORIENTATION: The three detents on the bar arms must be along the top side, closest to the vehicle body with arms pointing forward.

10. Assemble the endlinks. Thread the jam nuts onto the rod ends until there are 7-8 threads above the nut.

    NOTE: The hex end of the adjuster sleeve indicates the left-hand threaded end. Yellow zinc jam nut is left-hand threaded.

11. Screw each rod end into the adjuster until the jam nut touches. The remaining threads should be equal at opposite ends of the rod.



12. Attach the sliding-link clevis to each endlink assembly, using a 3/8” hex head bolt, two aircraft washers, and a locknut.

13. Start the set screw in the hole at the top of the clevis along with the jam nut.

14. Attach the clevis onto the anti-roll-bar arms at the outermost detent. Tighten set screw, then jam nut. This position can be changed/ adjusted later, but we begin at this position as the baseline.

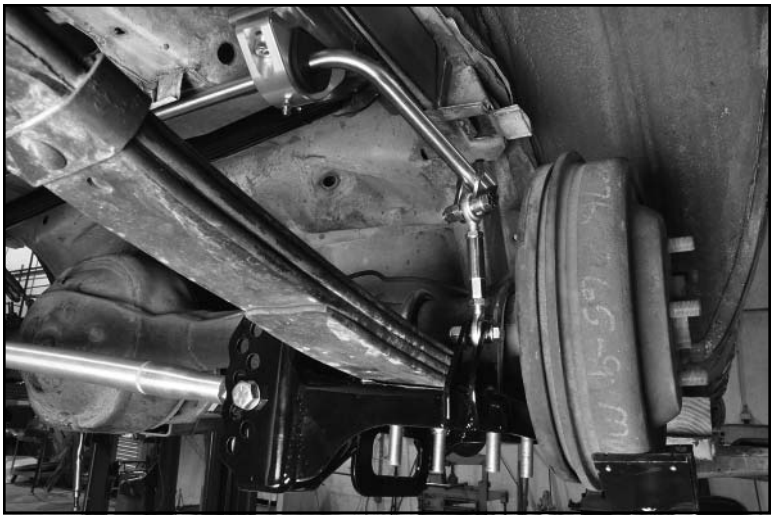
15. Attach the lower end of the endlink to the spring-plate clevis using 3/8” hex head bolt, aircraft washers and a locknut.

16. When installing the second endlink the vehicle weight should be on the suspension, ideally with the entire car resting at ride height. It may be necessary to shorten or lengthen the endlink by rotating the adjuster sleeve.

17. After tightening the mounting hardware the jam nuts must be tightened.

18. Finally, lubricate the bushings using a grease gun at the zerk fittings.

19. Initial installation is now complete and we can move on to testing and adjustment.



Testing and Adjustment

The rear anti-roll bar assits the leaf springs in controlling body roll and provides an easily accessible adjustment for tuning the understeer/oversteer characteristics of the vehicle. Changing the detent position of each upper endlink clevis effectively lengthens or shortens the anti-roll-bar arm, resulting in various torsional spring rates. There are three detent positions along each arm with five recommended bar rate adjustments.

Outer Detent Positions - Longer Arm (understeer) - The outer positions of adjustment tune toward a vehicle that understeers or pushes when cornering. Using the two outer detents provides the most traction under acceleration at corner exit and is considered to be the safest starting point.

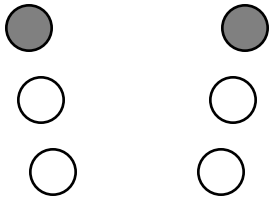
Shorter Positions (oversteer) - Moving the endlink clevis to the shorter position adjustments tune toward oversteer. Using the two inner detents provides the highest bar rate and allows the car to more easily rotate during acceleration at corner exit and should only be used by drivers with performance driving experience.

The anti-roll bar rate affects steady-state cornering as well as corner entry under braking, but its corner exit effects have been described above as this is when the bar is most heavily loaded and its tuning changes will be most noticeable.

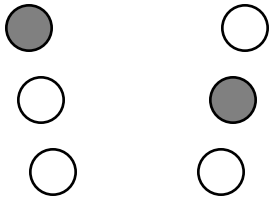
Many variables influence what the ‘correct’ anti-roll-bar adjustment position will be for each vehicle. Front suspension and modifications, relative tire sizes, ride height, spring rates, driver ability, and more all affect which position makes the car faster or more importantly make the driver more comfortable and confident.

Make incremental changes to the bar height until you find an adjustment you are comfortable with.

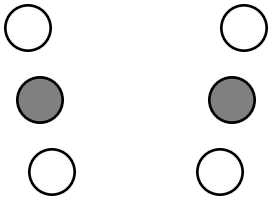
SET 1 - Softest



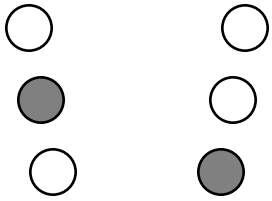
SET 2 - Mid Soft



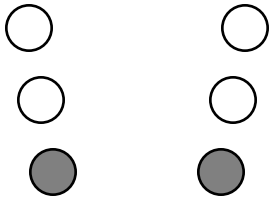
SET 3 - Middle



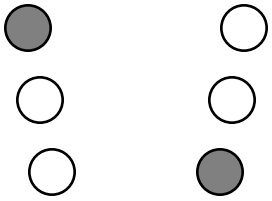
SET 4 - Mid Stiff



SET 5 - Stiffest



NOT RECOMMENDED



20. Maintenance

Poly bushings should be greased and all mounting and adjustment hardware checked for tightness at regular vehicle maintenance intervals.

NOTES:

NOTES:

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