

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 TIER-04

Heavy Duty Billet Tie-Rod Adjusting Sleeve Set  
Most Ford/Mercury '60-73



**Description:** Billet Adjusting Sleeve and Jam Nuts.

**Applications:** Comet 63-72, Cougar 67-72, Fairlane 62-70, Falcon 64-70, Maverick 70-72, Mustang 65-73

**Note:** ALL REQUIRE V8 SPINDLES

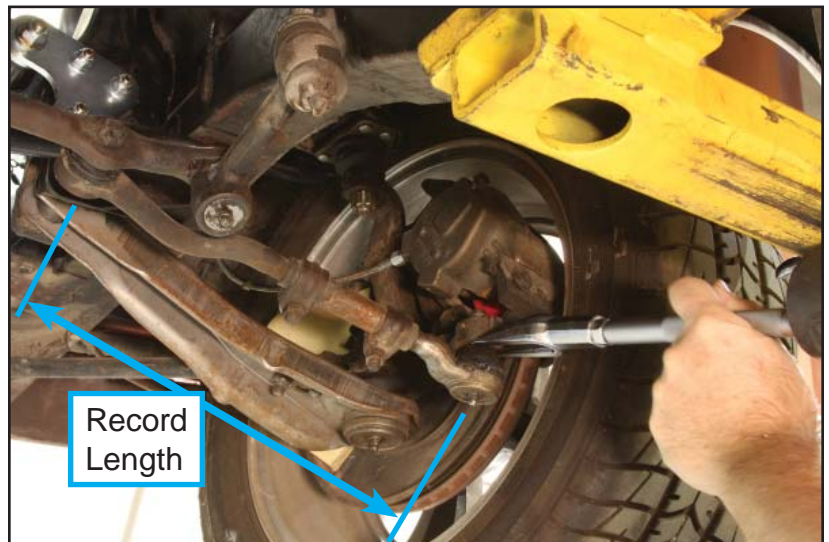
## PARTS LIST

### TCP TIER-04 HD Billet Adjuster Sleeve

Qty	Part Number	Description
2	3102-069-18LY	Jam Nut 11/16-18 Left, Yellow Zinc Plated 1" Hex x .40 Tall
2	3102-069-18RC	Jam Nut 11/16-18 Right, Clear Zinc Plated 1" Hex x .40 Tall
1	7900-173	Tie-Rod Sleeve 3.50" x 11/16-18 with RH & LH Threads with 1" Hex

## INSTRUCTIONS

1. Raise the front end of car and secure with jack stands. Wheels must not be in contact with ground.
2. Note orientation/placement of original tie rods by size or thread direction prior to removing from vehicle. Replacement components are not marked as 'inner' and 'outer'.
3. Measure length of tie-rod assembly (pivot center of inner to pivot center of outer) prior to removing. This measurement will be used to initially adjust the new tie-rod assembly.



4. Fully thread each jam nut onto its appropriate tie rod. Use one jam nut per tie rod.
5. Use anti-sieze or similar thread lubricant on the inner threads of the adjustment sleeve only.



6. Thread each tie rod into adjusting sleeve three complete turns to ensure equal thread engagement. The hex on the billet sleeve is closest to the left-hand threads.



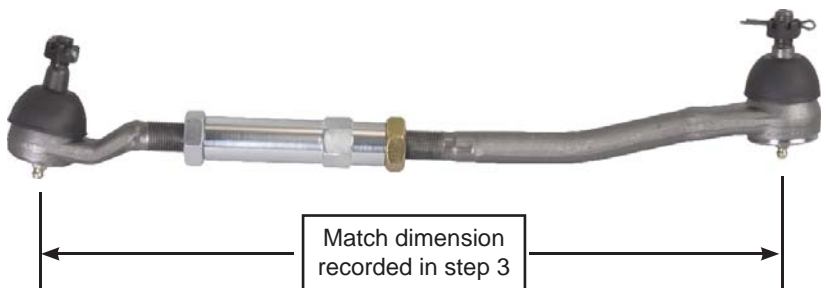
7. Install each tie-rod stud into its appropriate tapered seat without changing the thread engagement balance by more than 1/4 turn.

8. Torque castle nuts to 35-45 lb.ft.

9. Bend prongs of cotter pins.



10. Turn the adjusting sleeve to shorten the assembly to the correct length as previously measured.



11. Tighten all jam nuts against the adjusting sleeve.



12. Loctite™ or similar fastener securing lubricant should be used at the jam nuts during final alignment procedure.

13. Installation is complete.



## ALIGNMENT

***The vehicle must be professionally inspected and aligned prior to regular use.***

If a trailer is not available, your alignment will need to be somewhat close to final specs in order to safely drive your vehicle to the alignment shop. Visually determine if the front wheels look straight. They should not appear to “toe” (left to right) -in or -out. The outside of the wheels should be very close to vertical. A few degrees of negative camber (leaning in) is acceptable.

	Street Performance		Road Course		Drag Strip	
	Manual	Power	Manual	Power	Manual	Power
Caster	2-1/2° to 3° pos.	3-1/2° to 4° pos.	2-1/2° to 3° pos	3-1/2° to 4° pos	4° to 6° pos	4° to 6° pos
Camber	0° to 1/2° neg	0° to 1/2° neg	1-1/2° to 2° neg	1-1/2° to 2° neg	0°	0°
Toe (total)	1/16" to 1/8" in	1/16" to 1/8" in	1/16" out to 1/16" in	1/16" out to 1/16" in	1/16" to 1/8" in	1/16" to 1/8" in

Our recommended alignment specs serve as a starting point for your particular application. Installed components, driver preference, and specific application will have a great affect on the correct settings for your vehicle.

### 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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