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

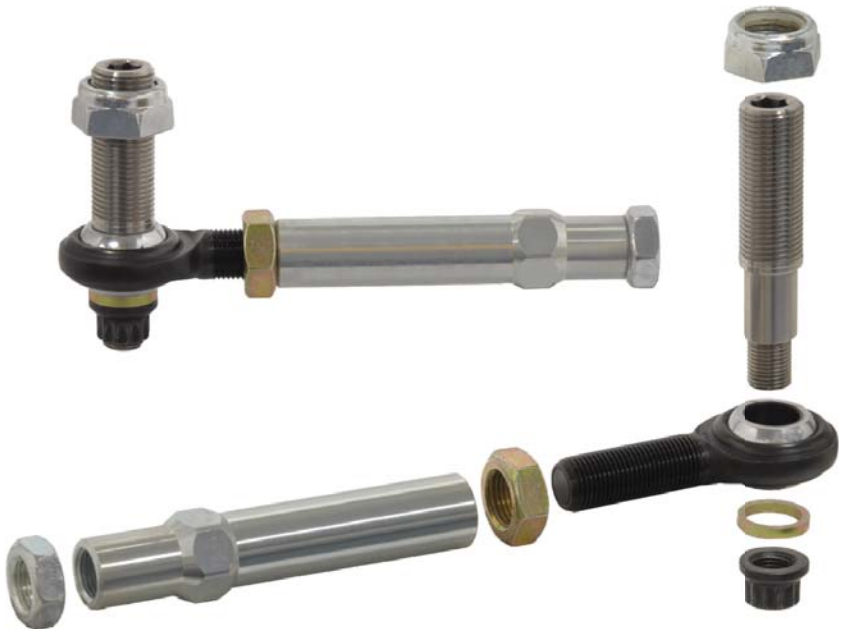
INSTALLATION GUIDE

CHRIS ALSTON'S Chassisworks
THE HOME OF HIGHER TECHNOLOGY

5736-75-56

Bump Steer Kit
Adjuster Sleeve and Threaded Outer Stud

For use with 3/4-16 thread Chassisworks steering arms and 9/16-18 RH inner tie rods

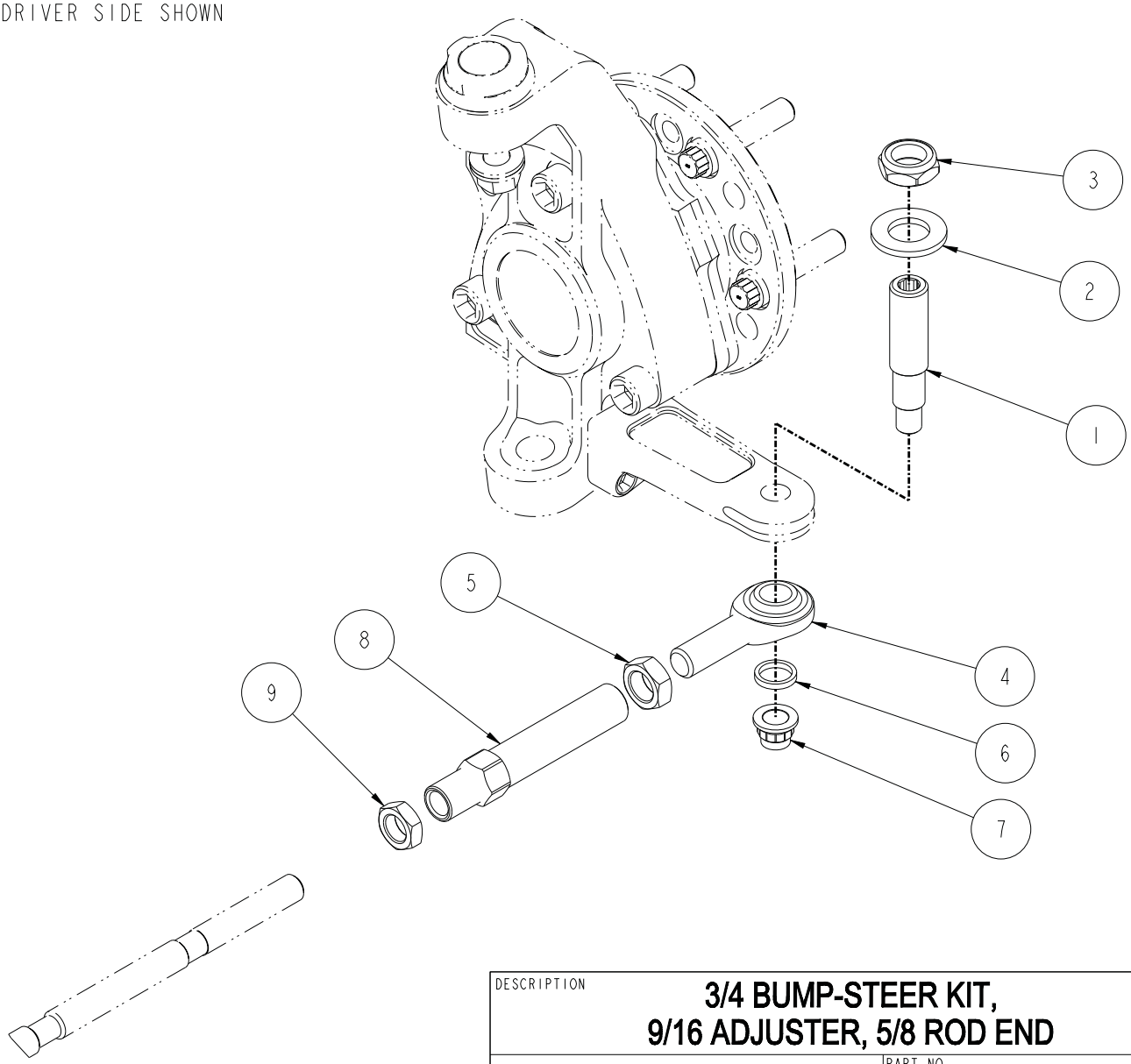


Description: Billet adjusting sleeve, threaded stud, and rod end; creates height adjustable outer pivot point.

Applications: Chassisworks' gStreet front suspension and steering system, and applications using the Chassisworks' rack and pinion with gStreet billet uprights.

ITEM	QTY	PART NO.	DESCRIPTION
1	2	7964-002	BUMP STEER STUD, ∅5/8 ROD END, ∅3/4 ADJUSTER
2	2	3120-075S-Y	FLAT WASHER, 3/4 SAE, HARDENED, YELLOW ZINC
3	2	3117-075-16C	LOCKNUT 3/4-16, GRADE 5, HALF HEIGHT, NYLON INSERT, CLEAR ZINC
4	2	3136-063X063-LT	ROD END, 5/8-18 LEFT x 5/8 BORE CMX10T-FI
5	2	3102-063-18LY	JAM NUT, 5/8-18 LEFT, YELLOW ZINC
6	2	7900-226-.125	SPACER, ∅.813 OD x ∅.646 ID x .125 LONG
7	2	3188-050-020Y	FLANGED LOCKNUT, 12 POINT H20, 1/2-20, YELLOW ZINC
8	2	7964-074	TIE ROD ADAPTER, G-STREET, 9/16-18 RH 5/8-18 LH, BILLET UPRIGHT
9	2	3102-056-18RC	JAM NUT, 9/16-18 RIGHT, CLEAR ZINC

DRIVER SIDE SHOWN



DESCRIPTION

3/4 BUMP-STEER KIT, 9/16 ADJUSTER, 5/8 ROD END

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

PART NO. 5736-75-56

3/5/14 | DWG: 7951-57367556

PARTS LIST

5736-75-56 - Bump Steer Outer Tie-Rod Set for Billet Upright

Qty	Part Number	Description
2	3102-056-18RC	Jam nut 9/16-18 RH, Grade 5, clear zinc
2	3102-063-18LY	Jam nut 5/8-18 LH, Grade 8, yellow zinc
2	3117-075-16C	Locknut 3/4-16 half-height, nylon insert
2	3120-075S-Y	Washer 3/4” flat SAE, hardened
2	3136-063X063-LT	Rod end 5/8-18 LH male x 5/8” bore
2	3188-050-20Y	Locknut 1/2-20 12-point flanged
2	7900-226-.125	Spacer .125” long, yellow zinc
2	7964-002	Bumpsteer stud 3/4-16 adjuster x 5/8-bore rod end
2	7964-074	Adjuster sleeve 9/16-18 RH x 5/8-18 LH

What is Bump Steer?

Bump Steer is the change in “toe”, or left to right angle, as the suspension moves through its range of motion. Bump steer is most evident on rough road surfaces, during hard cornering or under heavy braking. With proper installation and settings, the bump steer kit can minimize and in most cases virtually eliminate the bump steer affect, making handling more consistent and predictable. **Toe** is the measured difference in track width of the leading edge and trailing edge of a set of tires.

Toe-Out = Front wider than rear / **Toe-In** = Rear wider than front / **Zero-Toe** = Front equal to rear

Installation/Setup

Installation of this kit requires the suspension to be moved through its range of travel and the toe measured at the extremes of the range and at ride height. This can be accomplished at home using a bump steer gauge but we recommend taking your vehicle to a qualified alignment shop for installation and setup. *Continue with instructions if you plan on performing the installation and setup yourself.*

INSTRUCTIONS

1. The front end of car must be secured with jack stands or a level lift. Wheels must not be in contact with ground.
2. Remove wheels, making note of which side of vehicle they were removed from.
3. Unbolt anti-roll bar from lower control arms.
4. Install Chassisworks shock simulator (PN 6712-12) to limit suspension travel during bump steer measurement process and position suspension at ride height.
5. Install threaded stud coated with anti-seize into steering arm as shown in assembly diagram to approximately the center of the threads and start the 3/4-16 locknut. Do not tighten. A 3/8” allen wrench will be used to adjust the height of the stud.
6. Apply anti-sieze or similar thread lubricant to internal threads at each end of adjusting sleeve.
7. Thread left hand jam nut onto rod end until 1” of thread is past nut.
8. Screw rod end into billet adjusting sleeve until jam nut contacts sleeve.
9. Thread right hand jam nut onto rack tie rod until at the end of the tie-rod threads.

10. The adjusting sleeve is now screwed onto the inner tie rod until the toe is at zero. You will need to place the rod end over the stud to measure the toe.
11. Once at zero toe, place rod end onto stud followed by spacer and secure with flanged locknut.
12. Tighten adjuster sleeve jam nuts.
13. Threaded stud height adjustment can now be done to make any bump steer corrections. A dual dial indicator bump steer gauge is highly recommended for this procedure. Gauges can be purchased through many high performance racing parts distributors.


Bump Steer Gauge

Adjustment Notes:

At least one 1/16” shim must remain below rod end to prevent binding.
A minimum of 3/4” thread engagement is required at the rod end and inner tie rod.
The inner tie rod will typically have more thread engagement than the rod end.
To maintain minimum thread engagement at rod end, inner tie rod can be unscrewed from adjusting sleeve up to the point of minimum thread engagement.

General Adjustment Rules:

If compression travel toes-out and extension travel toes-in, then the outer tie rod is too high.
If compression travel toes-in and extension travel toes-out, then the outer tie rod is too low.
If compression travel toes-out and extension travel toes-out, then the tie rod assembly is too short.
If compression travel toes-in and extension travel toes-in, then the tie rod assembly is too long.

14. Once final adjustments have been made verify that minimum thread engagement has been maintained and the tie-rod end does not bind at any suspension height or wheel angle.
15. Tighten all jam nuts to 50 lb/ft.
16. Tighten stud locknut without rotating stud.
17. Reinstall shocks, springs, anti-roll bar and wheels.
18. Verify all mounting hardware is correctly torqued.

ALIGNMENT

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

NOTES:

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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