








Factory Five Racing, Inc.

<i>Part Number:</i> <u>11269</u>	<i>Revision:</i> <u>E</u>	<i>Effective Date:</i> <u>11/30/11</u>	<i>By:</i> <u>J. INGERSLEV</u>
Document Type (indicate):			
◦ Bill of Material	◦ Drawing (may be attached)	◦ Specification	
• Assembly Instructions	◦ Operating Procedure	◦ Other	

Bump-Steer Kit

Installation Instructions

BUMP STEER KIT					
FFR #	Part Name	Unit	Qty	Check-Off	Status
12078	BUMP STEER KIT				
11270	ROD END	EA	2.00		
11271	SLEEVE, OUTER TIE ROD, THREADED BOTH ENDS	EA	2.00		
11272	LOCK NUT, NYLON, GRADE 8, 5/8"	EA	2.00		
11273	BOLT, SOCKET HEAD CAP, GRADE 8	EA	2.00		
13337	ROD END SPACER	EA	16.00		
12089	JAM NUT	EA	2.00		
12387	5/8" WASHER	EA	2.00		
OPTION					

-  $15/16$ " Wrench, $3/4$ " Socket or Wrench, Adjustable Wrench, $5/8$ " Drill bit, $1/2$ " Allen Key, jack, jack stands, pliers, hammer
-  Bump steer kit
-  The Bump steer kit is designed to be adjusted the same way as a regular Tie Rod End. To adjust the Toe-in of the car, only loosen the inside jam nut and TURN THE INNER TIE ROD. The inner tie rod is a ball pivot and is designed for this. Note, you may need to loosen the outer boot clamp so that the boot does not twist.
-  If you are going to use the FFR bump steer kit, the steering arms need to be drilled out to $5/8$ ". If not done during the spindle installation, do this now.
-  An alignment will be needed after the installation of the Bump steer kit.

Jack the front of the car up and place on jack stands.

Remove the Front wheels


Using a pair of Pliers, remove the cotter pin from the Tie Rod ends.

Remove the Crown nut using a $3/4$ " wrench

Use a hammer knock the Tie Rod ends out of the Spindles.

Use an adjustable wrench and a $15/16$ " wrench to loosen and remove the Tie Rod ends.


Drill out the hole for the Tie Rod end using a $5/8$ " drill bit, make sure the hole is straight. Take your time and drill slowly as the spindle is very hard and will dull a fast bit.

 It is a lot easier and faster to take the spindle off if using a stock Mustang spindle and use a drill press to do this.


Wipe the spindle clean.

Screw the new outer Tie Rod Arm onto the Inner Tie Rod Arm approximately 1¼”.

Screw the Rod End into the new Outer Tie Rod Arm approximately ¾”.

 The location of the rod end, above the steering arm or below, depends on the alignment used on the car.

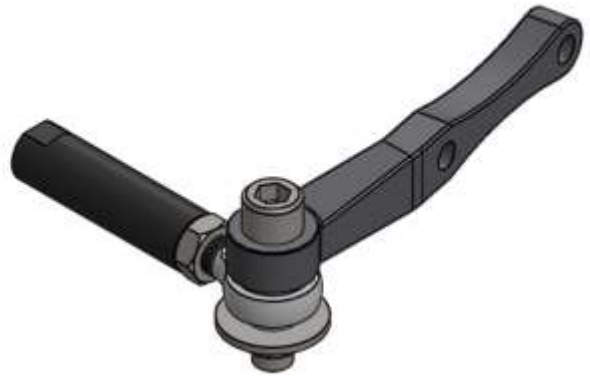
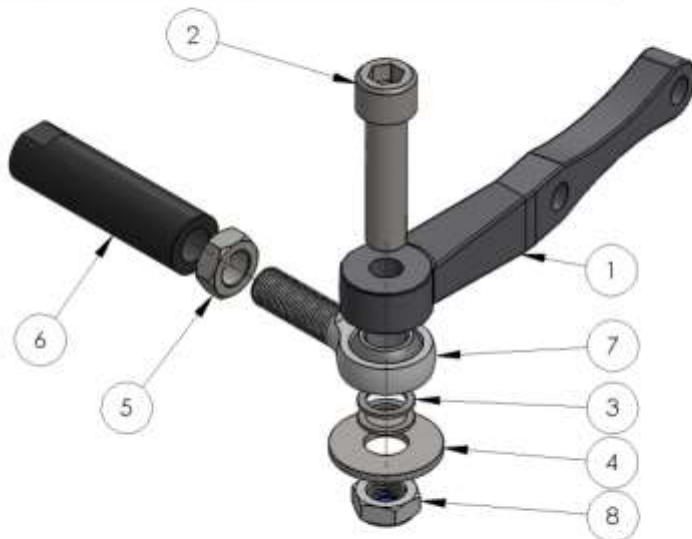
- A car with **power steering** will use more caster which raises the steering arm so the rod end will go under the steering arm.
- A car with **manual steering** will use less caster so the rod end will go on top of the steering arm.

 These instructions are written using a power steering set-up with high caster.

Insert the 5/8” bolt from the top through the steering arm and then the rod end, two spacer shims, washer and then the lock nut.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	14849	ROADSTER PASSENGER SIDE STEERING ARM	1
2	HX-SHCS 0.625-18x2.5x1.75-N	11273 5/8"-18 BOLT	1
3	13337	SPACER SHIM	2
4	Preferred Wide FWD.625	5/8" WASHER	1
5	HJNUT0.6250-18-D-H	12089 5/8" JAMNUT	1
6	11271	OUTER DE ROD SLEEVE	1
7	11270-5-8 ROD END		1
8	11272	5/8"-18 NYLON JAMNUT	1

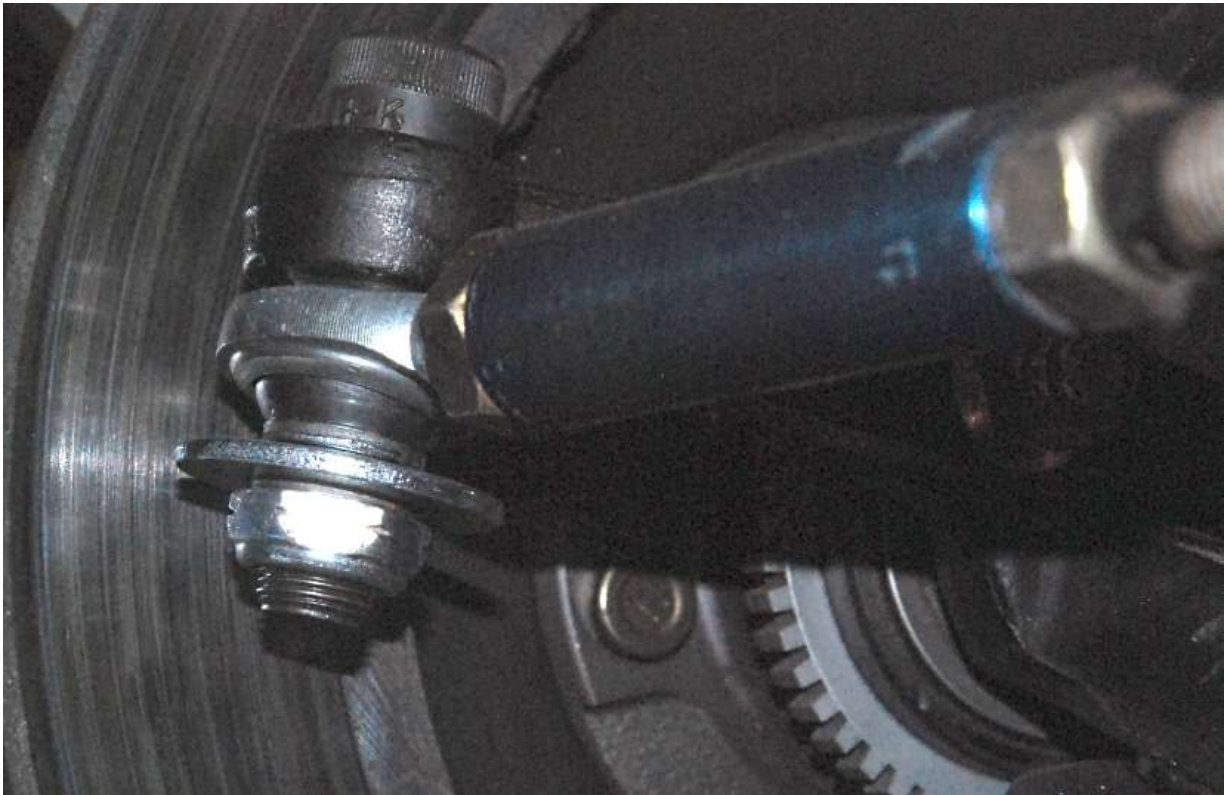
REV.	REVISION	DATE	APPROVED
A	INITIAL RELEASE	1998	
B	WASHER AND SHIMS ADDED	11/30/11	



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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 Factory Five Racing, Inc. TITLE:
ROADSTER	DIMENSIONS ARE IN INCHES	DR	11/30/11	
COUPE	TOLERANCES:	COMMENTS:		
SPEC CAR	TWO PLACE DECIMAL ±0.01 THREE PLACE DECIMAL ±0.005 FOUR PLACE DECIMAL ±0.001			
USED ON	MATERIAL:	FINISH:		SCALE: 1:2 WEIGHT: SHEET 1 OF 1
APPLICATION	STEERING	PRINTED: 11/30/2011		

Use a 1/2 inch Allen key and a 15/16" wrench to tighten the lock nut onto the bolt.



Mount the wheels on the car.
Using a jack, return the front of the car to the ground.
Take the car to an Alignment shop.

Alignment Specifications

MANUAL STEERING

Camber: -0.5° (street) to -1° (race)
Caster: 3°
Toe In: $\frac{1}{16}$ " total

POWER STEERING

Camber: -0.5° (street) to -2.5° (race)
Caster: 7° - 8°
Toe In: $\frac{1}{16}$ " total