



**INSTALLATION INSTRUCTIONS**  
**BOLT-ON WHEEL-E-BAR™**  
**P/N C2044**

The Competition Engineering Wheel-E-Bar™ is designed to function as part of the rear suspension. They designed for the street enthusiast.

When adjusting the Wheel-E-Bar™ and “tuning” it to your particular application, keep a record of what is changed and what resulted from the change. Only change one function at a time until you become more familiar with what happens when the changes are made.

### **LENGTH**

Standard length is 44”. The configuration of the Wheel-E-Bar™ is such that the length is essentially non-adjustable. The length was arrived at after many hours of test and evaluation on our Pro style Wheel-E-Bar set.

### **HEIGHT**

We recommend you set the bottom of the wheels at 3-1/2” from the ground to start. But, only trial and error will tell you where they need to be.

### **PARTS LIST & DIAGRAM KEY**

2- Aluminum Lower Struts <b>(A)</b>	2- Axle Housing Brackets <b>(B)</b>
2- Upper Strut Bars <b>(C)</b>	2- Welded T-Pins <b>(E)</b>
2- Quick Release Pins <b>(D)</b>	2- Wheel Housings <b>(F)</b>
2- Rubber Wheels <b>(G)</b>	4- Wheel Spacers <b>(J)</b>
1- Axle Tube <b>(H)</b>	2- 3/8” x 1-3/4” Bolts
6- 5/16” x 1” Bolts	6- 5/16” Locknuts
8- 3/8” x 1” Bolts	10- 3/8” Locknuts
2- 1/2” Jam Nuts	2- 1/2” x 4” Bolts
4-1/2” Locknuts	
2- Saddle Brackets	

Using the supplied diagram as a guide, assemble the Wheel-E-Bar™ as follows:

### **UPPER STRUT ASSEMBLY**

1. Lubricate the threads of the T-Pin with a lithium grease or a anti-seize product.
2. Thread the 1/2” jam nuts on to the welded T-pins **(H)**. Thread this assembly into the ends of the Upper Strut Bars **(G)**.

### **LOWER STRUT AND WHEEL ASSEMBLY**

1. Assemble the Rubber Wheels **(G)** to the Wheel Housings **(F)** using the supplied 1/2” x 4” bolts and Wheel Spacers **(J)** on each side of the Rubber Wheel **(G)**. Make sure to slide the supplied 1-3/4” wheel axle tube into the center of the wheel. This will prevent binding of the wheel bearings.
2. Fasten the Aluminum Lower Struts **(A)** to the Wheel Housings **(F)** using the supplied 3/8” x1” Bolts and locknuts. The strut should be cradled by the Wheel Housing.

3. Attach the Axle Housing Brackets **(B)** to the opposite end of the Aluminum Lower Struts **(A)** using the supplied 5/16" x 1" Bolts and Locknuts.
4. Join both lower strut assemblies together using the Axle Tube **(N)**. It is recommended that a thread-locking compound be used on the 1/2" x 4" Bolts that thread into the Axle Tube **(N)**. Tighten to 70 ft-lbs. Make certain that the Wheels turn freely.
5. Attach the upper strut assemblies to the top of each Axle Housing Bracket using the 3/8" x 1-3/4" bolts and locknuts. Adjust the length of Upper Strut Assembly so that the Welded T-pins **(H)** line up with the holes in the Wheel Housings **(K)**. Insert the Quick Release Pins **(J)** through the Wheel Housing **(K)** and the Welded T-pins **(H)**.

## INSTALLATION

1. Jack up the vehicle and support it with jack stands. Make sure that the weight of the vehicle is on the rear axle housing and that it is level from front to rear and side to side.
2. Take a measurement from the ground to the bottom of rear tires. Write this number down for later reference.
3. Locate the assembled Wheel-E-Bar™ under the car with the axle housing brackets **(B)** up against the housing tubes. Make sure that the assembly is centered under the car between the rear tires.
4. Hold the rear of the Wheel-E-Bar™ assembly in place with a rigid support so that the bottom of the Rubber Wheels **(L)** are approximately 3-1/2" higher than the measurement taken in step 2. (Ground to bottom of rear tire + 3-1/2")
5. Install the Saddle Brackets by sliding them over the threaded portion of the Axle Housing Brackets.
6. Install and tighten the supplied 1/2" lock nuts.

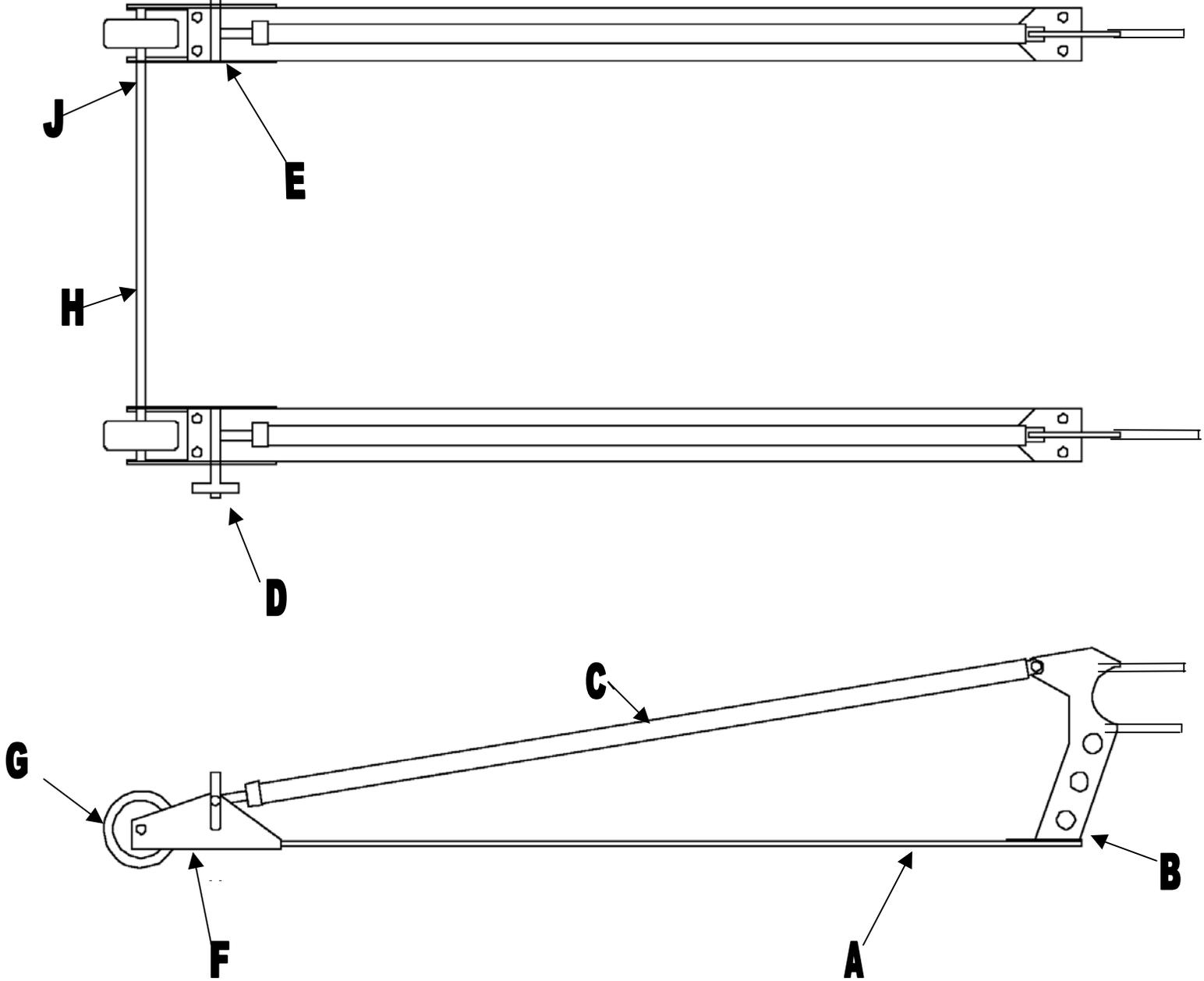
## IMPORTANT

In some chassis configurations, the gas tank, frame, or other components may interfere with the installation of the Wheel-E-Bar™. Whenever possible, the interfering member should be notched, or relocated to permit installation. If necessary, the upper strut can be relocated by drilling new mounting holes up to 1-1/2" lower in both the Axle Housing Brackets **(B)** and the Wheel Housings **(K)**. **UNDER NO CIRCUMSTANCES SHOULD THE UPPER STRUT BAR BE CLOSER THAN 1" FROM ANY CHASSIS OR SUSPENSION COMPONENT.**

7. When proper clearance of the upper strut bars has been assured, finish installing the Axle Housing Brackets **(B)** to the rear axle housing.

## ADJUSTING

Changes in height can be made by removing the quick release pins and threading the welded T-pin in or out or by setting the height of the Wheel-E-Bars before tightening the Loc Nuts on the Saddle Brackets.



For Technical Assistance, call Competition Engineering's Tech Line at  
*(203) 458-0542, 8:30am-5:00pm Eastern Time*

**COMPETITION ENGINEERING**  
80 Carter Drive • P.O. Box 1470 • Guilford, CT 06437  
Phone: (203) 453-5200 • Fax: (203) 453-6906