



INSTALLATION INSTRUCTIONS

P/N: C2140 & C2145

UNIVERSAL 60" WHEEL-E-BAR™ KIT

These Universal Wheel-E-Bar™ Kits allow the professional chassis builder to fabricate bars to fit a specific vehicle. Each kit is available in either sprung or un-sprung versions. The 60" long tubes can be cut to the desired length to suit individual needs. As an added feature, each kit includes the necessary material to install cross-bracing for increased strength.

PARTS LIST

- | | |
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| 2) Lower Strut Assembly (A) | 2) Upper Strut Assembly (B) |
| 2) Zinc Plated Spring (C) | 1) 40" Brace (D) |
| 2) Wheel (E) | 2) 20" Brace (F) |
| 2) Gold Clevis (G) | 2) 1/2" Jam Nut |
| 2) Quick Release Pin (H) | 2) 3/8"-24 x 2-3/4" Bolt |
| 4) Weld-in Tube Clevis (I) | 2) 3/8"-24 Locknut |
| 2) Threaded Aluminum Strut (C2145 only) (J) | 2) Threaded Collar (C2145 only) (K) |
| 2) Bolted Collar (C2145 only) (L) | 2) 5/16"-18 x 2" Bolt (C2145 only) |
| 2) 5/16"-18 Locknut (C2145 only) | |

ASSEMBLY

1. Thread a jam nut onto the supplied **GOLD CLEVISES (G)**. Thread the clevis assemblies into the **UPPER STRUT TUBES (B)** so that five threads are showing in front of the jam nut.
2. Bolt the **WHEELS (E)** in place on the **LOWER STRUT ASSEMBLIES (A)** using the supplied 3/8"-24 x 2-3/4" bolts and locknuts.

Spring loaded version:

1. Coat the unthreaded area of the two **threaded aluminum struts (J)** with lithium grease. Also spray the threaded portion with anti-seize lubricant.
2. Slide the **bolted spring collars (L)** over the **upper strut bars (B)** with the shoulder of the collar facing the spring.
3. Slide the **threaded aluminum struts (J)** into the end of the **upper strut bars (B)** and insert a 5/16" x 2" bolt through the hole in the assembly. Install the locknuts and make certain the threaded strut slides freely.
4. Install the **springs (C)** over the end of the **threaded aluminum struts (J)**. Thread the **threaded spring collars (K)** onto the **threaded aluminum struts (J)** with the shoulder towards the spring.
5. Tighten the **threaded spring collars (K)** until the spring compresses 1/8".

*For Technical Assistance, call Competition Engineering's Tech Line at
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6. Attach the upper strut assembly to the lower strut assembly by connecting the gold clevis end to the wheel bracket using the supplied **quick release pins (H)**.

INSTALLATION

1. With the car on a level surface, determine the mounting locations of the upper and lower strut assemblies. Most chassis builders will mount the wheel-e-bars off the 4-link brackets. This eliminates the need for additional bracketry and allows for a more compact, rigid installation.
2. Measure from these mounting points out to the desired wheel position for the wheel-e-bars.
3. Trim the upper and lower strut assemblies to meet this dimension.
4. Install the **weld-in tube clevises (I)** into the ends of the strut assemblies and tack weld into place.
5. Trial fit the assembly on the vehicle and check the ride height of the wheels.
6. If everything is correct, weld the clevis ends completely. We highly recommend that you plug weld the clevis ends to the tube to strengthen the weld area.
7. Crossbrace Installation
 - a. Mount the strut assemblies to the rear axle housing.
 - b. Using a scrap piece of tubing, space the wheels at the rear of the assembly so that they are equal to the rear axle mounting dimension.
 - c. Notch the supplied **40" brace (D)** and two **20" braces (F)** so that they form an "X" between the lower strut assemblies.
 - d. Weld the braces in place.
 - e. When the welds have cooled, remove the assembly and disassemble it for painting or plating.

TUNING

Height adjustments will control the amount of weight transfer a vehicle will have. Changes in height can be made by removing the quick release pins and threading the clevises in or out. Pre-load adjustments determine the rate at which the Wheel-E-Bar™ springs will compress. Proper pre-load settings will prevent unnecessary tire unloading. Adjustments can be made by rotating the threaded spring collars up or down. More pre-load on the springs will make the Wheel-E-Bar™ react quicker. The direct opposite is true for less pre-load.

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