



935 Chassis Brace - Instructions

Part Number 2162201

Cars applicable:

'74-'89 911/912/930

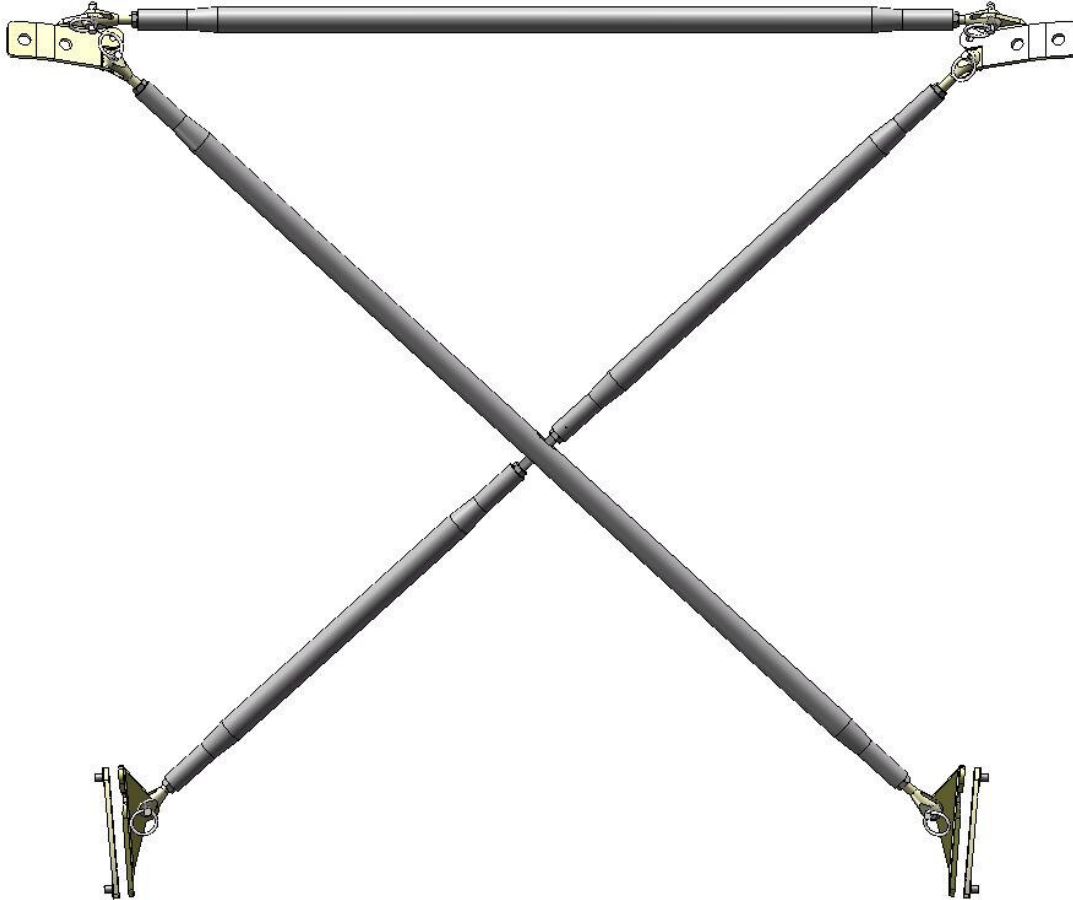


Figure 1 – 935 Chassis Brace top view

Tools Required:

- 8mm hex key (allen head wrench)
- 10mm socket wrench
- 14mm open end wrench

Introduction:

Congratulations on your purchase of the 935 Chassis Brace from Elephant Racing! Inspired by the chassis braces equipped on 935 race cars, it offers a number of benefits:

The 935 Chassis Brace prevents deflection of the strut towers thereby preventing undesired camber change under heavy corner and braking loads.

The 935 Chassis Brace reduces chassis flex and increases torsional rigidity.

The 935 Chassis Brace is equipped with quick release pins enabling rapid removal and installation, without tools. Full trunk storage functionality is thereby quickly restored, and access for maintenance un-impeded.

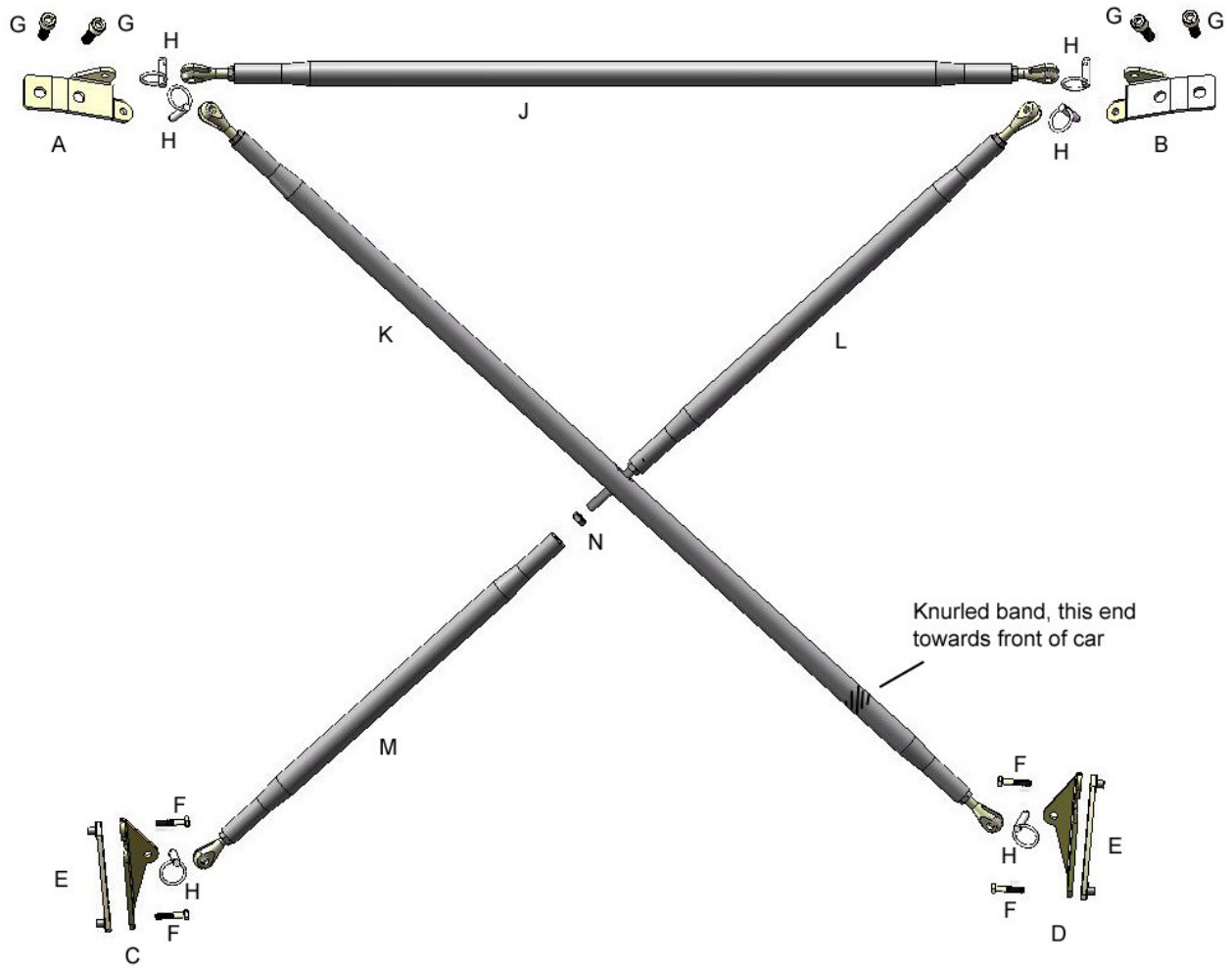


Figure 2 – 935 Chassis Brace exploded view – top

| Item # | Qty | Description | Torque |
|--------|-----|--|-----------|
| A | 1 | Rear bracket passenger side | |
| B | 1 | Rear bracket driver side | |
| C | 1 | Front bracket passenger side | |
| D | 1 | Front bracket driver side | |
| E | 2 | Nut plate | |
| F | 4 | M6x30 hex head bolt | 10 ft/lbs |
| G | 4 | Camber plate screws - M10x20 socket head – Not included, use factory bolts | 34 ft/lbs |
| H | 5 | Quick release pins | |
| J | 1 | Horizontal brace assembly | |
| K | 1 | Long diagonal brace assembly | |
| L | 1 | Medium diagonal brace assembly | |
| M | 1 | Short diagonal brace assembly | |
| N | 1 | 5/16 jam nut | |

Table 1 – Parts and torques

Installation:

Refer to Photo 1 and Figure 2. For each side, use an 8mm hex key to remove 2 Camber plate screws [G] and clamp plate from the rear of the factory camber plates (strut top). Be sure to leave the front Camber plate screw in place to maintain alignment settings.

Refer to Photo 2 and Figure 2. For each side, install Rear brackets [A] and [B]. Re-use the factory Camber plate screws [G] leaving them finger tight for now.



Photo 1 – Remove factory screws and clamp

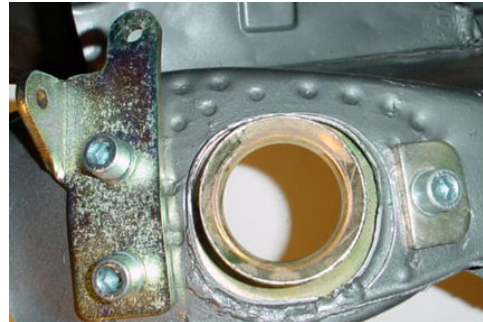


Photo 2 – Install Rear bracket, passenger side shown

Refer to Photos 3, 4, 5 (fender removed for visual clarity) and Figure 2.

Working from inside the trunk using a 10mm socket wrench, remove from each side the two forward-most screws that secure the outer fenders. Install Front brackets [C], [D] and Nut plates [E] as shown, sandwiching the inner and out fenders. For each side install two M6x30 bolts [F] through the now-vacant fender mounting holes. It is not necessary to remove the speed-nuts from the fender, simply thread the M6x30 [F] bolts through and engage the Nut plate [E] on the outside.

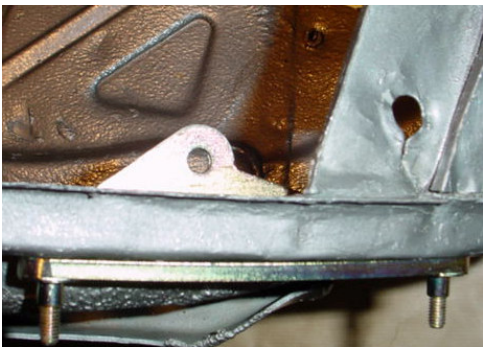


Photo 3 – Front bracket top view

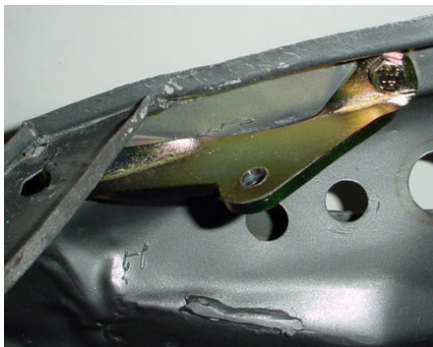


Photo 4 – Front bracket side view



Photo 5 – Nut plate

Refer to Photo 6 and Figures 1, 2. Install Horizontal brace assembly [J] by slipping its clevis ends over the Rear brackets [A] and [B] as shown. The clevis ends are left and right threaded such that assembly length can be adjusted by rotating the tube. Adjust the assembly length to align the clevis holes with the mating Rear bracket [A] and [B] holes. Secure each clevis to the Rear brackets [A] and [B] using Quick release pins [H].

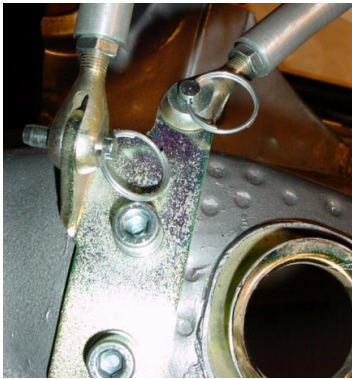


Photo 6 – Rear bracket clevis / pins

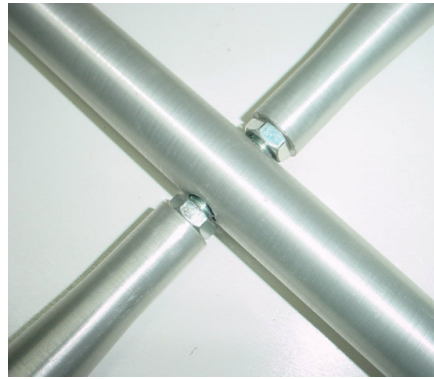


Photo 7 – Junction

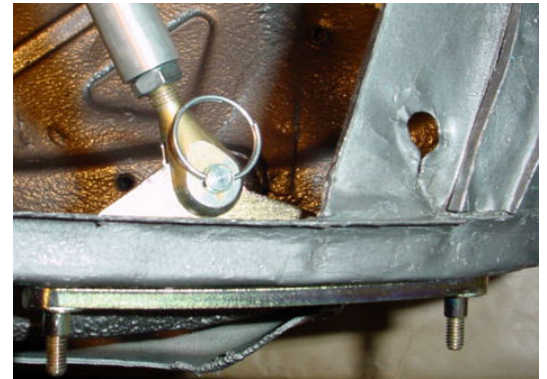


Photo 8 – Front bracket clevis / pin

Refer to Photos 6, 8 and Figures 1, 2. Install Long diagonal brace assembly [K] by slipping its clevis ends over the Rear bracket [A] and Front bracket [D] as shown with the knurled section towards the front of the car. Adjust the assembly length to align the clevis holes with the mating Rear bracket [A] and Front bracket [D] holes. Secure each clevis to the Rear bracket [A] and Front [D] using Quick release pins [H].

Refer to Photos 6, 7 and Figures 1, 2. Install Medium diagonal brace assembly [L] by slipping its clevis end over the Rear bracket [A] and the threaded stud through the junction hole in the Long diagonal brace [K]. Secure the clevis to the Rear bracket [B] using a Quick release pin [H]. Thread 5/16 inch jam nut [N] unto the exposed threaded stud.

Refer to Photos 7, 8 and Figures 1, 2. Install Short diagonal brace assembly [M] by threading it onto the exposed threaded stud protruding from the diagonal brace assembly junction, then slipping its clevis ends over the Front bracket [C]. Secure the clevis to the Front bracket [C] using a Quick release pin [H].

This step should be performed on level ground to ensure the chassis is not twisted or preloaded. Adjust the length and position of all assemblies [J], [K], [L] and [M] such that the junction of [L] and [K] is relaxed with no bending, and each rod is neutral (neither in tension nor compression). This will facilitate easy removal and insertion of the Quick release pins and yield the best performance.

Tighten all screws to the torque values shown in Table 1. Tighten all jam nuts.