



QuickChange™ Strut Brace - Instructions

Part Numbers 2162200, 2162202, 2162203, 2162204, 2162205, 2162206

Cars applicable: '66-'89 911/912/930



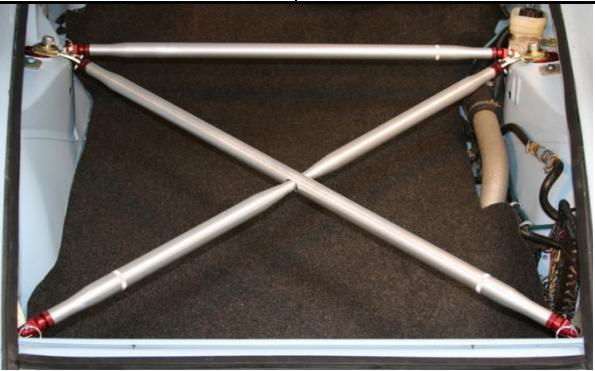
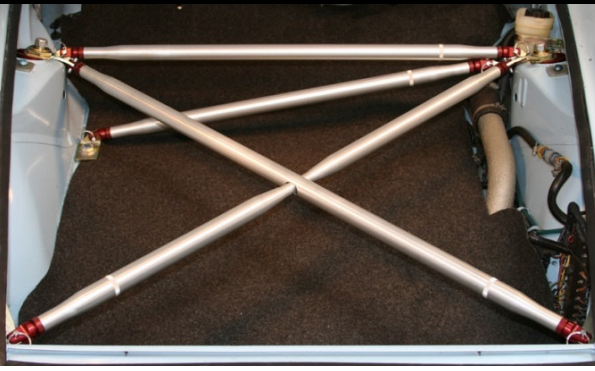
Introduction:

Congratulations on your purchase of the QuickChange Strut Brace from Elephant Racing!

The QuickChange Strut Brace system is available in each of the configurations shown on this page. Each configuration is composed of the modular components listed. The modular components are shown in Fig. 1-3.

You may purchase the modular components separately to upgrade your existing QuickChange Strut Brace system.

Follow the installation instructions for each modular component included with your kit.

									
<table border="1"> <tr> <td colspan="2" data-bbox="81 919 808 978">2162202 - Single Bar QuickChange strut brace</td> </tr> <tr> <td data-bbox="81 978 444 1060">Included modular components</td> <td data-bbox="444 978 808 1060">2162202 single bar brace</td> </tr> </table>	2162202 - Single Bar QuickChange strut brace		Included modular components	2162202 single bar brace	<table border="1"> <tr> <td colspan="2" data-bbox="812 919 1542 978">2162203 – Triangulated QuickChange strut brace</td> </tr> <tr> <td data-bbox="812 978 1175 1060">Included modular components</td> <td data-bbox="1175 978 1542 1060">2162202 single bar brace 2162205 triangulated upgrade</td> </tr> </table>	2162203 – Triangulated QuickChange strut brace		Included modular components	2162202 single bar brace 2162205 triangulated upgrade
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2162203 – Triangulated QuickChange strut brace									
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Tools Required:

- 8mm hex key
- 10mm socket wrench (935 X configurations only)
- 22mm socket wrench (Triangulated configurations only)
- 22mm open end wrench (Triangulated configurations only)
- 14mm drill bit and drill ('78+ Triangulated configurations only)
- Low tack painters tape (Triangulated configurations only)

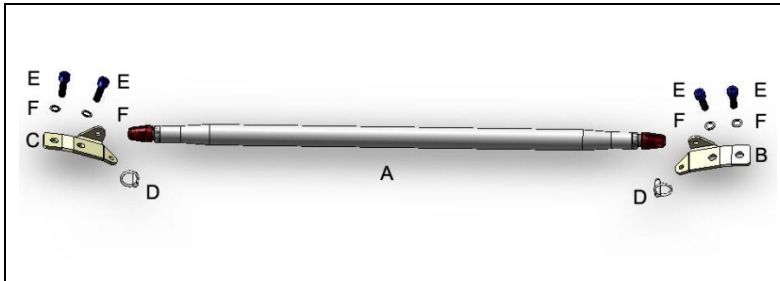


Fig. 1 - 2162202 - Single Bar QuickChange strut brace

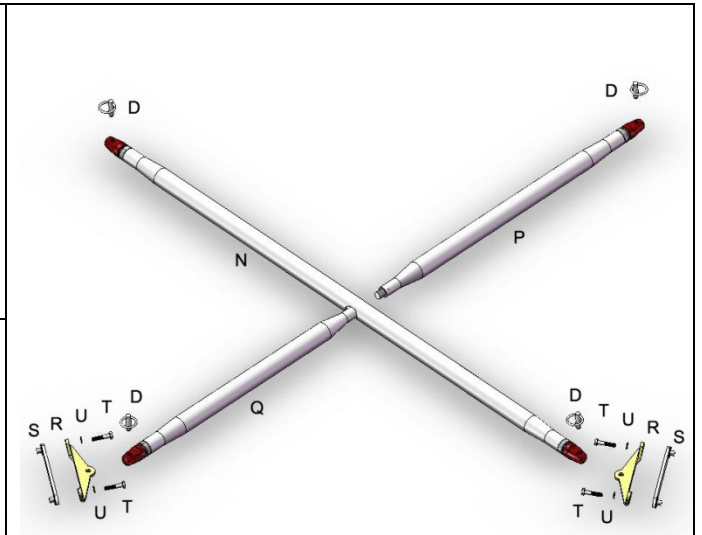


Fig. 3 - 2162206 – 935 X addition

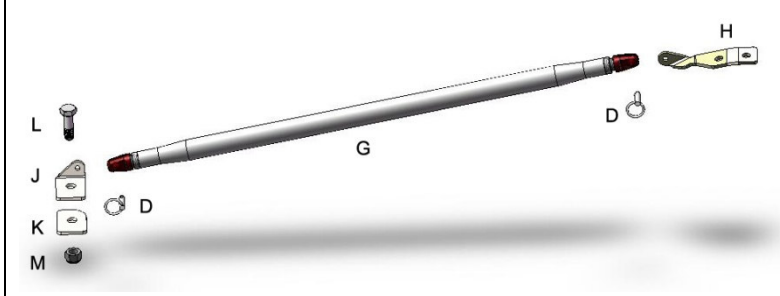


Fig. 2 - 2162205 - Triangulated addition

Item	Torque	Description	Modular Components Parts count		
			2162202 Single bar	2162205 Triangulated	2162206 935 X
A		Horizontal brace assembly	1		
B		Rear bracket driver side	1		
C		Rear bracket passenger side	1		
D		Quick release pins	2	2	4
E	34 ft/lbs	Camber plate screws - M10x35 socket head	4		
F		M10 Schnoor washer	4		
G		Triangulated brace assembly		1	
H		Triangulated upper bracket		1	
J		Triangulated lower bracket		1	
K		Triangulated backer plate		1	
L	60 ft/lbs	M14x45 Hex head screw		1	
M		M14 Nylock nut		1	
N		X brace long assembly			1
P		X brace medium assembly			1
Q		X brace short assembly			1
R		Front bracket			2
S		Front backer plate			2
T	10 ft/lbs	M6x30 Hex head screw – 10 ft/lbs			4
U		M6 wavey washer			4

Table 1 – Parts and torques

Before beginning

Your brace will attempt to hold any twist in the chassis at the time of installation. Perform installation on flat ground, with proper tire inflation, and proper corner balance to avoid chassis twist.

Assemble all brace assemblies without preload – neutral – neither in compression or tension. This will ease installation / removal of the Quick Release pins and provide the best overall performance under the alternating loads presented by left and right corner and braking.

Read the entire instructions before beginning.

2162202 - Single Bar QuickChange strut brace installation

1 – Install Rear brackets

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

Refer to Fig. 1. Install Rear brackets [B] and [C]. Re-use the factory Camber plate screws [E] and lockwashers [F] leaving them finger tight for now.

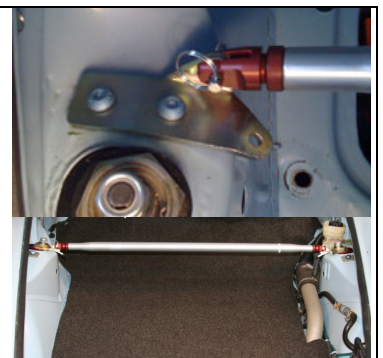


2 – Install Horizontal Brace assembly

Refer to Fig. 1. Install Horizontal brace assembly [A] by slipping its clevis ends over the Rear brackets [B] and [C] as shown. The clevis ends are left and right threaded such that assembly length can be adjusted by rotating the tube.

Loosen the knurled jam nuts and adjust the assembly length to perfectly align the clevis holes with the mating Rear bracket [B] and [C] holes with no pre-load. Secure each clevis to Rear brackets [B] and [C] using Quick release pins [D].

Tighten all screws to the torque value in Table 1. Tighten the knurled jam nuts hand tight.



2162205 – Triangulated addition instructions

1 – Install Triangulated upper bracket

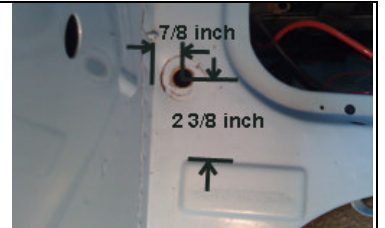
Refer to Fig. 1 and Fig. 2. On the driver's side, use an 8mm hex key to remove 2 Camber plate screws [E] from the rear of the camber plate (strut top). Leave the front Camber plate screw in place to maintain alignment settings.

Lift the Rear bracket [B] and slide the Triangulated Upper Bracket [H] beneath it. Reinstall the factory Camber plate screws [E] and lockwashers [F] leaving them finger tight.



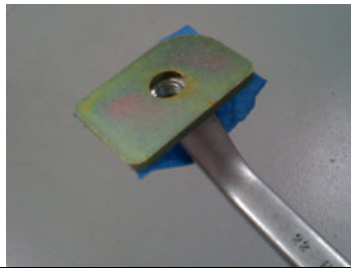
2 – Locate 14mm hole

Inspect trunk floor to determine if an existing hole is present. Cars built before 1978 should have the hole, it may be filled with a plastic plug that must be removed. Drill a 14mm hole in the location shown if not present.



3 – Install Triangulated Lower Bracket

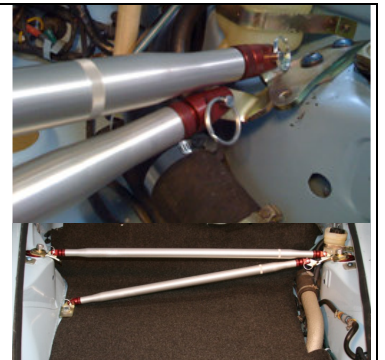
Refer to Fig. 2. Loosely install into the hole the 14mm hex head screw [L], Triangulated Lower bracket [J], Triangulated Backer plate [K] and M14 Nylock nut [M]. This can be done with the gas tank in place. Using low-tack tape, loosely affix the M14 Nylock nut [M] and Triangulated Backer plate [K] to a long-handled open-end wrench as shown in Photo 7. Hold the handle of the wrench to position the M14 Nylock nut [M] and Triangulated Backer plate [K] beneath the floor pan while threading the M14 hex head screw [L] into place. Leave the M14 screw [L] finger tight for now.



4 – Install Triangulated Brace assembly

Refer to Fig. 2. Install Triangulated brace assembly [G] slipping its clevis ends over the Triangulated Upper bracket [H] and Triangulated Lower bracket [J]. The clevis ends are left and right threaded such that assembly length can be adjusted by rotating the tube. Loosen the knurled jam nuts and adjust the assembly length to align clevis holes with mating bracket holes with no pre-load. Secure clevis to the Triangulated Upper bracket [H] and Triangulated Lower bracket [J] using Quick release pins [D].

Tighten all screws to the torque values in Table 1. Tighten the knurled jam nuts hand tight.

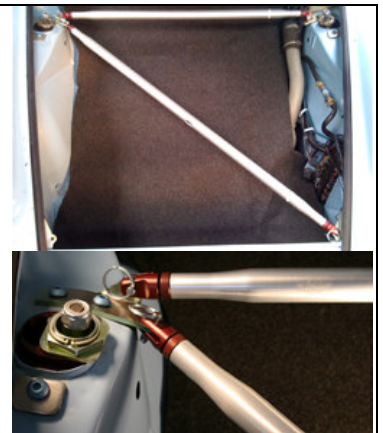


2162206 – 935 X addition instructions**1 – Install Triangulated Lower Bracket**

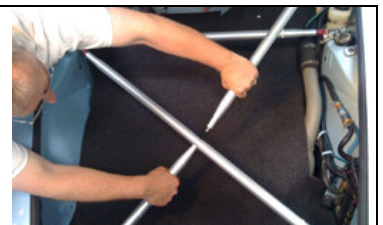
Refer to Fig. 3. Working from inside the trunk using a 10mm socket wrench, remove from each side the two forward-most screws that secure the outer fenders. Install Front brackets [R] and Nut plates [S] as shown, sandwiching the inner and out fenders. For each side install two M6x30 bolts [T] and M6 wavey washers [U] through the now-vacant fender mounting holes. It is not necessary to remove the speed-nuts from the fender, simply thread the M6x30 [T] bolts through and engage the Nut plate [E] on the outside. Tighten the M6x30 hex head screws [T] to the torque values shown in Table 1.

**2 – Install X Brace Long assembly**

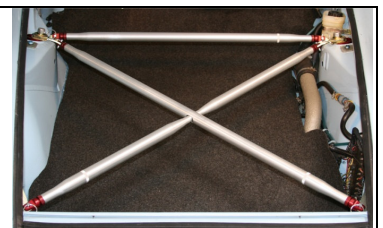
Refer to Fig. 3. Install X Brace Long assembly [N] by slipping its clevis ends over the Rear bracket [C] and Front bracket [R] as shown. The clevis ends are left and right threaded such that assembly length can be adjusted by rotating the tube. Loosen the knurled jam nuts and adjust the assembly length to perfectly align clevis holes with mating bracket holes. Secure each clevis to the Rear bracket [C] and Front bracket [R] using Quick release pins [D].

**3 – Install X Brace Medium and Short assemblies**

Refer to Fig. 3. Join the X Brace Medium assembly [P] (rear) and the X Brace Short assembly [Q] (front), threading them through the oval hole in the X Brace Long Assembly. Tighten them together like a pool cue forming one continuous assembly.

**4 – Install X Brace Medium and Short assemblies**

Refer to Photo 16 and Fig. 3 Slip the clevis of the X Brace Medium assembly [P] over the Rear bracket [C] and the clevis of the X Brace Short assembly over the Front bracket [R]. The clevis ends are left and right threaded such that assembly length can be adjusted by rotating the tube. Loosen the knurled jam nuts and adjust the assembly length to perfectly align clevis holes with mating bracket holes. Secure each clevis using Quick release pins [D].



Tighten all knurled jam nuts hand tight.