



Strut Tower Brace '03~'04 Mach1 (STB-M02)

Installing a Stiffeners strut tower brace adds strength and stiffness to the front end by integrating the strut towers and firewall, greatly reducing flex and alignment changes caused by front suspension loads during cornering and braking. This results in an increase in steering response, stability and reduction in understeer. This brace is designed to work with popular models of both 3 and 4-bolt style caster/chamber plates. If C/C plates are used, they install on top of the STB mounting brackets. Will not work with C&L aftermarket CAI.

Kit Includes:

- 1 Strut Tower Brace
- 1 Bolt Plate
- 2 5/16"-18 Nyloc Nuts
- 2 5/16" USS Flat Washers

Required Tools:

- Basic hand tools
- Floor jack
- Drill
- 1/8" drill bit
- 5/16" drill bit
- Center punch/hammer

Note: It is highly recommended to have alignment checked after installing brace.

Install Time: Approximately 3 hrs.

Installation:

1. Raise hood, remove wiper arms and weather-strip located in front of plastic cowl panel.
2. Remove 2 bolts (one each side) securing shaker to it's' mount. Disconnect drain hose and remove shaker by firmly lifting straight up.
3. Locate the 4 bolts fastening shaker bracket to engine. To ensure proper alignment when reassembling, trace around bolt heads with marker. Additionally, place reference mark at each location as shown in Fig.1.
4. Remove the 4 mounting bolts and bracket.
5. The plastic upper firewall panel must be marked and cut for clearance to allow proper installation of the brace. To do this, position STB on car by placing firewall mount plate against plastic upper firewall panel and allow strut tower mounting plates to rest above strut mounts. Brace should be centered right-to-left (Fig.2) *[NOTE: Brace will not sit flat.]*
6. Trace around top and sides of firewall mounting plate onto plastic panel. Remove brace.

7. Remove all screws holding plastic upper firewall panel and remove panel. Remove plastic cowl panel at base of windshield.
8. Cut away area marked in step 3 from plastic panel and set aside. *[NOTE: A cutting wheel or jig-saw works well for this.]*
9. Using 1/8" bit, drill out aluminum rivets (2 per side) located on strut tower plates (Fig.3). If needed, a punch can be used to tap out any remaining rivet body.
10. Before removing plates, place jack under front cross-member and raise car 3~4". This will remove some load from the strut mounts and help keep them from moving when plate is removed (tires must remain on the ground).
11. Remove retaining nuts and bolts securing plates. **Remove plates, they will not be reused.**
12. Place strut tower brace into position over factory mounting studs. Align slots in STB to slots in strut tower and mark location of the two mounting holes on the firewall.

13. Remove brace and step-drill two mounting holes using 1/8" & 5/16" bits. *[NOTE: Use a punch and mark hole locations prior to drilling to keep drill bit in desired location.]*
14. Re-install brace and loosely fasten factory nuts and bolts into strut towers.
15. Insert bolt plate through back of firewall and loosely secure to brace using supplied washers and nyloc nuts. (Fig.4)
16. Snug firewall mounting bolts. Final tighten all nuts and bolts.
17. Lower vehicle and remove floor jack.
18. Re-install upper firewall panel; trim any additional plastic from around mounting plate. (Fig.5 shows final result)
19. Install cowl panel, wiper arms and weather-strip.
20. Install shaker bracket using alignment marks made in step 3.
21. Install shaker and 2 retaining bolts. Connect drain line.
22. Have alignment checked.

Fig. 1



Fig. 2



(Bullitt shown, positioning same on Mach1)

Fig. 3

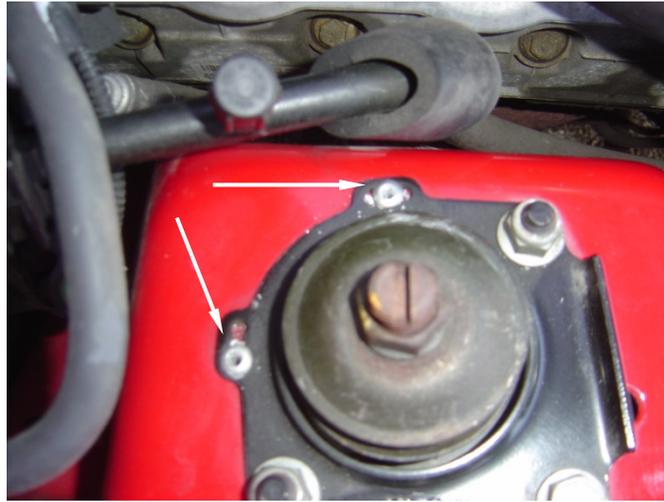


Fig. 4



Fig. 5

