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Subframe Connector 1979-2004 Mustangs (SFC-M01)

Give your pony some backbone by installing **Stiffeners** brand full length subframe connectors from **Innovative Performance Technologies**. Stiffeners greatly reduce the inherent flexing and twisting motion of the unibody experienced during hard acceleration, cornering, braking and road inputs by adjoining the front and rear subframes. Eliminating unibody movement allows the suspension better control and puts more horsepower to the ground. Engineered to be the stiffest, lightest and easiest to install weld-on subframe connectors on the market today. Due to its one-piece design and pre-masked welding areas, installation is quick, with no extra gussets to weld or powder coating to grind away! Get the most out of your Mustang, go with **Stiffeners!**

*To achieve the ultimate in chassis stiffness, go with Stiffeners' **Fully Integrated Technology (FIT) System!***

See buystiffeners.com for more details or ask your dealer!

(Please read all instructions prior to beginning installation. Contact your dealer with any questions.)

Kit Includes:

- 1 Driver Subframe Connector (marked "D")
- 1 Passenger Subframe Connector
- 4 10x1.5-40mm Hex Head Bolts
- 4 10x1.5 Nyloc Nuts
- 8 3/8 Washers

Install Time: Approximately 2 hrs.

Installation:

1. Disconnect battery.
2. Remove reward two mounting bolts from driver and passenger front seats and replace with supplied bolts.
3. Raise vehicle to allow access for installation. [NOTE: It is recommended the vehicle's weight be supported by the suspension during installation. This can be accomplished by using a drive on style lift, ramps or raising the car and positioning jackstands under the suspension.]
4. [NOTE: If installing on '96~'98 Cobra, refer to additional installation details on page 4 before continuing.]
5. If equipped, remove screw holding shifter cable bracket that attaches to bottom of driver's side front frame rail. Place a vertical reference mark on inner face of rail in line with screw hole.
6. [NOTE: If installing on '79~'93 convertible, skip steps 6~11 and refer to additional installation details on page 3 before continuing.]
7. Locate Driver SFC, has letter "D" cut in seat bracket. With bracket facing up, find and remove tape tabs located along top edges of SFC rail (10 places). Position in place over newly installed reward seat bolts; loosely fasten with supplied washers and nuts. It is intended for both ends of the SFC to touch the subframes before the seat brace contacts the floorpan. This ensures there will be minimal gap between the subframe and SFC for welding. [NOTE: Confirm SFC is not touching flange on body plug hole (Fig.1); grind or bend tab to allow for clearance. Also, check bottom of subframes for any prior damage that might keep the subframe connector from setting flush; if found, repair before installing.]
8. Using the bare metal areas as a guide, mark the 10 locations for weldments on car's subframes.
9. Remove SFC and grind paint from marked areas.
10. Replace SFC on vehicle and loosely fasten nuts. Position rear inner face of SFC to be flush with the inner face of rear subframe (Fig.2). Center front of SFC so equal amounts of subframe are exposed on each side. Tighten nuts.



11. Place tack-welds at front, then rear of the SFC within the designated welding areas.
12. Finish-weld inner and outer sides of SFC starting at the front and working towards the rear. Do not weld across ends. **[NOTE: Use caution around fuel and brake lines.]** For 96~98 Cobra, weld cross-member bracket to SFC (Fig.9).
13. Clean weldments with wire brush. Remove the additional six tape tabs located along the outer lower edge. Spray all bare metal areas with rust preventative paint. If color matching is desired, use Textured Matte Black paint. *[Note: If Stiffers*

FIT System was purchased, perform painting after complete system is installed.]

14. Repeat process for Passenger side.
15. Reconnect automatic transmission cable bracket (if so equipped) by aligning right side of bracket to mark made in step #4 and bottom even with SFC (Fig.3). Mark screw hole location and drill pilot hole with 3/16" bit, fasten bracket to SFC with factory screw.
16. Lower vehicle and reconnect battery.

Fig. 1



Fig. 3

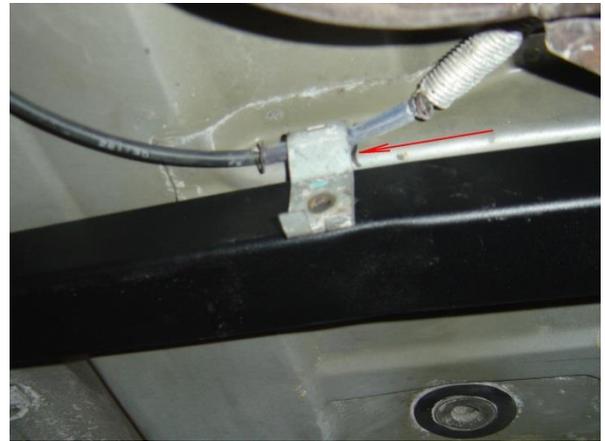


Fig. 2

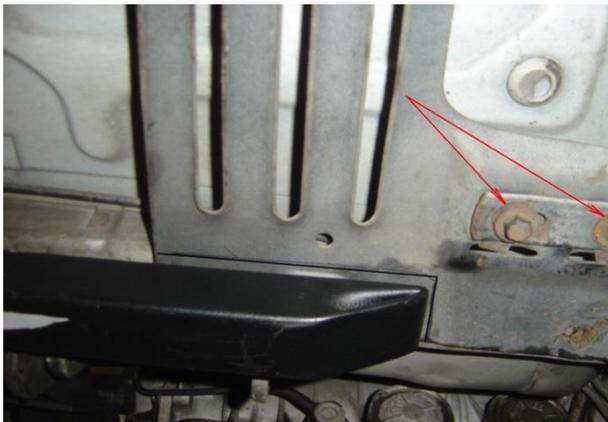


Convertibles ('79~'93)

Due to having no upper roof structure, convertibles are inherently prone to chassis twist and deflection in comparison to hard tops. To compensate for this, it is routine for auto manufactures to place additional reinforcement plates under the vehicle in selective locations. In order to properly install the SFC, these plates must be slightly modified to allow the SFC to sit flush against the front and rear subframe.

1. Complete Step 6 above by loosely fastening the SFC to vehicle over the factory front and rear reinforcement plates.
2. Trace outline of SFC on front plate (Fig.4*).
3. Repeat for rear plate, stopping at step location indicated by red line (Fig.5*).
4. Remove SFC and set aside.
5. Loosen and remove two bolts from factory cross-brace where secured to front plate (Fig.4*). Allow brace arm to hang.
6. Remove plate by drilling rivet heads with 3/16" bit to full diameter, then use a 1/4" punch to tap out remaining rivet body. Alternatively, a grinder or chisel could be used to remove rivet heads.
7. Cut along traced lines to remove marked section (Fig.7*).
8. Remove rivets from rear plate in same manner. From end of traced line, extend at 90 degrees to inside edge of plate, cut out marked section (Fig.6*).
9. Reinstall SFC and using the bare metal areas on it as a guide, mark the 10 locations for weldments on car's subframes.
10. Remove SFC and grind paint from marked areas on subframes.
11. Loosely reinstall SFC leaving enough room to place rear reinforcement plate into position.

Fig. 4



- [NOTE: If complete FIT System was purchased, these plates will not be required.]*
12. Position rear inner face of SFC to be flush with the inner face of rear subframe (Fig.2). Center front of SFC so equal amounts of subframe are exposed on each side. Tighten retaining nuts.
 13. Position rear plate back to original location but leave a small gap (1/16") between its' edge and the SFC (Fig.6). Tack-weld into position.
 14. Reinstall front reinforcement plate into position, leaving small gap (1/16") between plate and SFC. Tack-weld into position. (Fig.7).
 15. Place tack-welds at front, then rear of the SFC within the designated welding areas.
 16. Finish-weld inner and outer sides of SFC starting at the front and working towards the rear. Where noted, include reinforcement plates (Fig.6 & 7). Do not weld across ends. ***[NOTE: Use caution around fuel and brake lines.]***
 17. Finish-weld rear reinforcement plate to Z-rail and floor at all contacting points.
 18. Install factory cross-brace bolts and torque to 32lb-ft.
 19. Return to Step 13 on page 2.

*Photo shows passenger side.

Fig. 5



Fig. 6



Fig. 7



Cobras ('96~'98)

The '96~'98 Cobra's came equipped with the T-45 transmission which has the cross-member brace located further towards the rear of the tailstock. Because of this, a bolt-on cross-member mount was installed at the factory to allow the same cross-member brace to be used on all models. In order to properly install the SFC, this mount must be slightly modified to allow the SFC to sit flush against the front subframe. Modification of this mount will still allow for cross-member brace removal.

1. Notch both front and rear sides of bracket to allow SFC to sit squarely against subframe and bracket (Fig.8).
2. Weld mount to subframe (Fig.9).
3. Repeat process for Passenger side.
4. Return to Step 7 on page 1.

Fig. 8

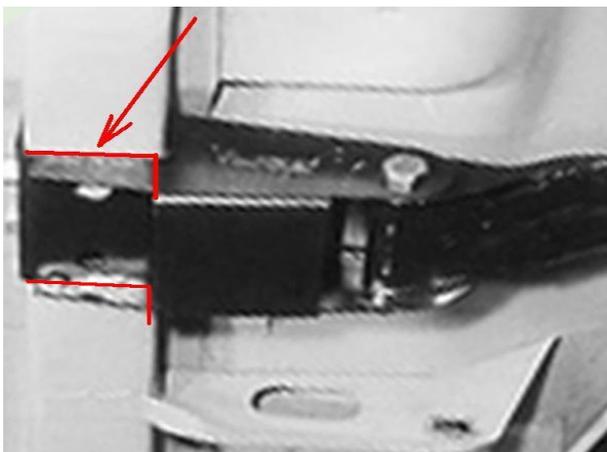


Fig. 9

