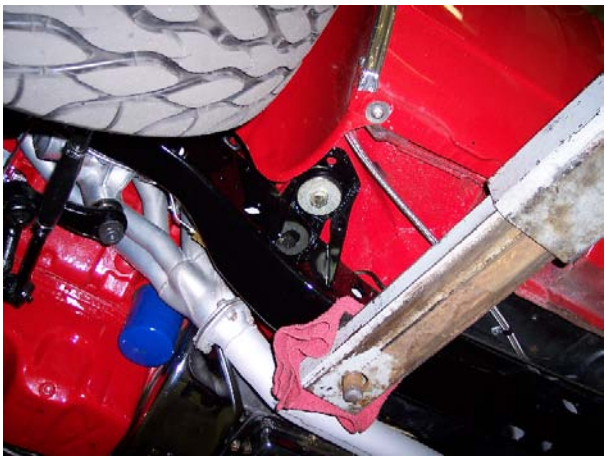
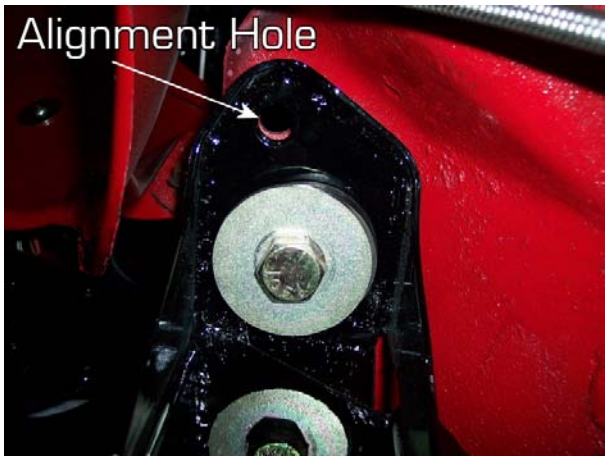
Please read the following key points before installing this kit.

1 – Before performing the subframe connector installation, the vehicle must be completely assembled with all body and component parts installed (e.g. fenders, hood, quarterpanels, trunk, full interior, engine, glass, etc.). Basically, the subframe connectors should be one of the last components installed on your vehicle. Reason being is you want the vehicle settled with all of it's own final weight. The car's body is always in constant tension, with forces pushing or pulling within the chassis & body. You want to make sure these forces don't change after you install the subframe connectors. For example, if you installed subframe connectors before installing the engine and body panels this may result in having misaligned fenders, door panels and/or hood later on. The car must be in it's final state before the subframe connectors are installed.

2 – Make sure your front subframe is aligned with the body before you installed the subframe connectors. This can be done in many ways e.g. use alignment holes in the body (***see pictures***) or using a chassis jig. Note: When using a full chassis jig, the alignment holes for the rear frame rails are needed to square the body and front subframe. If you install the subframe connectors before you do this, you will not have access to these alignment holes. This is one of the reason why you should square the front subframe before installation.

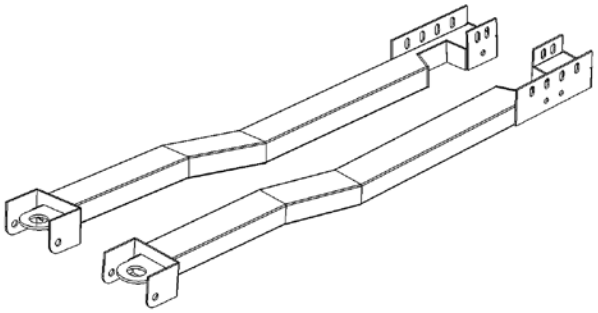




3 – The subframe connectors must be installed on an alignment rack or floor ramps (all 4 wheels). The vehicle must be sitting on it's wheels at ride height in order to install the subframe connectors. Do not use a two-post lift, as this will load the chassis/body in the wrong points causing the chassis to tweak.

Subframe Connectors:

Your new subframe connectors will increase the overall rigidity of your chassis and improve handling and response. These engineered components connect the rear frame rails with the front subframe to simulate a complete full frame chassis.



Notes:

The subframe connector is essentially a Weld-In component, effectively connecting itself to the front subframe and rear frame rails. However, you may choose to bolt-in the front connection to allow front subframe removal if need be. Hardware for the bolt-in procedure is included.

Before You Start:

The installation of these subframe connectors will require you to grind and weld. It is recommended that a trained professional install this product. Always wear eye protection when grinding or welding. Please read the entire manual before starting. All images will depict the driver side installation.

1. Raise Vehicle

It is best to install the subframe connectors at ride height. To do this properly, please use a 4-Post lift or alignment rack. Disconnect the negative battery cable.

2. Replace Subframe Body Mount Bushing

Your kit comes with 2 new polyurethane front subframe body mount bushings. Having proper bushings will ensure correct fitment of the subframe connectors.

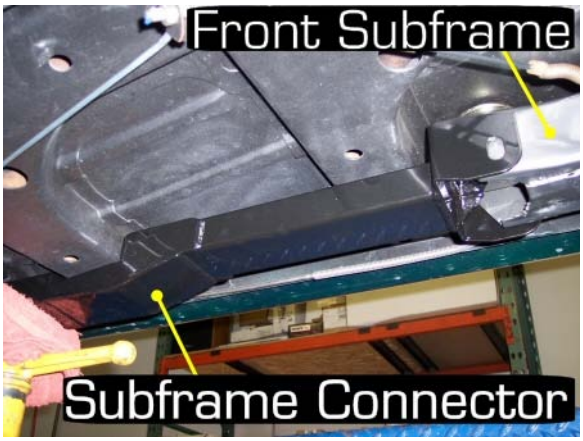
Remove stock bushings.

Install Hotchkis bushings.

3. Mock up Subframe Connector

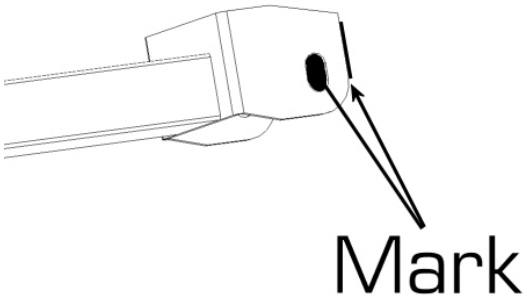
Preparation is needed before any welding can begin. First, decide whether you will be welding in the connector to the front subframe or bolting it in.

Install the subframe connector using the provided 5/8" bolt and the thick washer. Use a transmission jack to hold the rear end of the connector up. Fully tighten the 5/8" bolt to see where the connector will position itself. Make sure the rear end of the connector is butted up against the rear frame rails. This mock-up should simulate how the connector will be mounted on the vehicle.

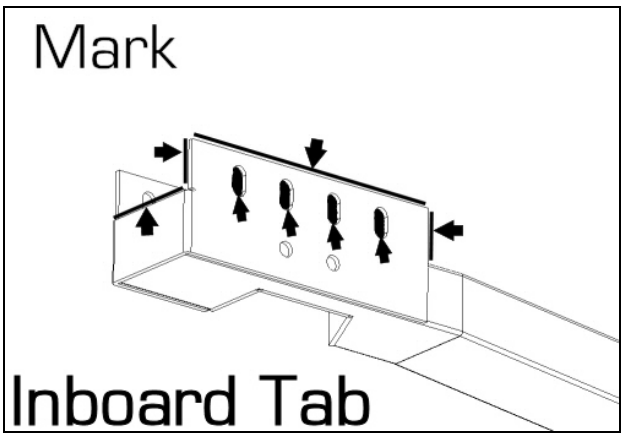


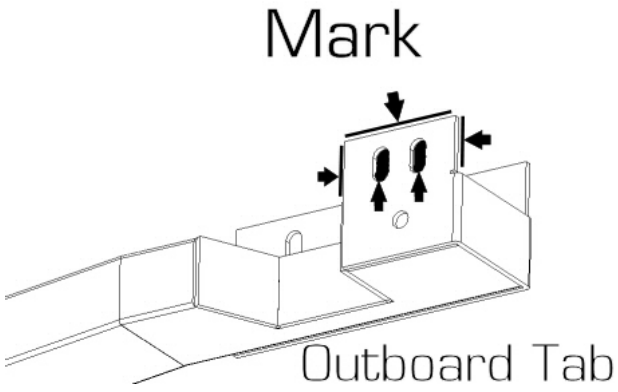
Bolt-In: Mark the front subframe to indicate where your bolt holes will be.

Weld-In: Mark the front subframe to indicate where you should grind/sand the paint for welding. The connector hole will allow you to apply a rosette weld instead of a bolt. You may also want to mark where the leading edge of the connector lies on the subframe so you can run a weld bead there as well.



Mark the rear frame rails along the edge of the connector. This will show you where to grind the paint/grime off the frame. Don't forget the outboard tab. This area will be difficult to access since the leaf spring and bracket are in the way.





The inboard Tab will need to be bent inward for a tight fit. Do this by using large channel locks and squeeze the tab in. Don't worry if there's a little gap near the bottom. You can fill the gap during welding. Leaf Spring Bracket will need to be detached. See next step.

4. Prepare mounting points for welding / bolting

Remove the connector and start grinding/sanding the paint and grime off of the vehicle's frame rail. Unbolt the leaf spring bracket & lower shock mount and raise the vehicle to access the outboard tab area for grinding. You will have to move the brake and fuel line out of the way. Remove any tube clamps necessary to achieve this.

Bolt-in: At this time you can drill a ½" hole in the designated mark made earlier on the front subframe. A right angle drill may work the best for this situation.

Weld-in: Grind/sand near the designated area marked earlier on the front subframe.

5. Prepare Subframe Connector for Welding.

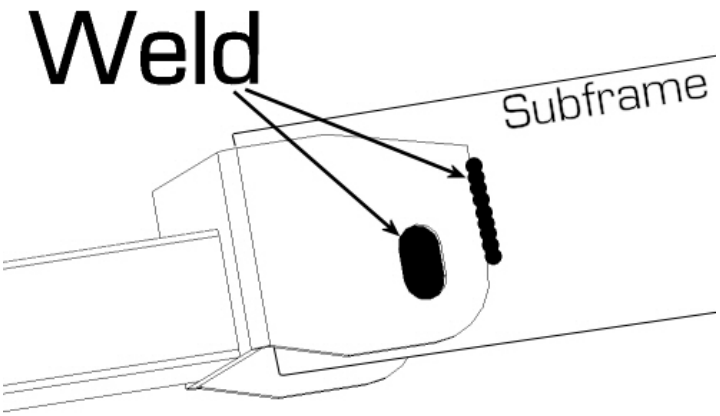
Grind around all rosette holes on the connector. Grind/sand anywhere on the connector that is going to be welded. Use a "rat tail" file to take the paint off the inner surface of the rosette holes. If you are welding the front, make sure to sand near the ½" holes and front edges.

6. Install the Subframe Connectors onto the Vehicle

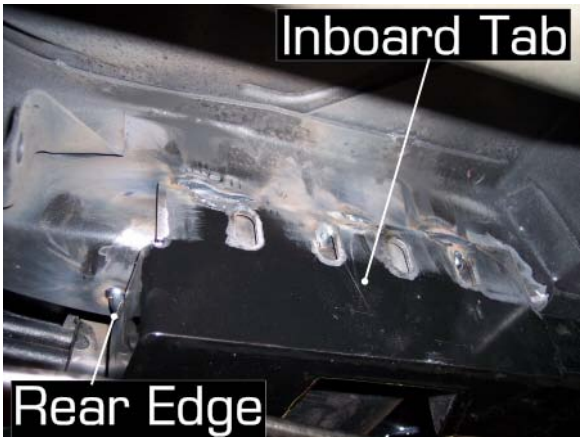
Make sure the vehicle is returned to ride height. The front leaf spring mount should be positioned to its installed state with the weight of the car on the leaf. You do not need to reinstall the mount bolts at this time. Reinstall the connector like before. Fully tighten the front 5/8" subframe bolt and use the transmission jack to hold up the rear end of the connector.

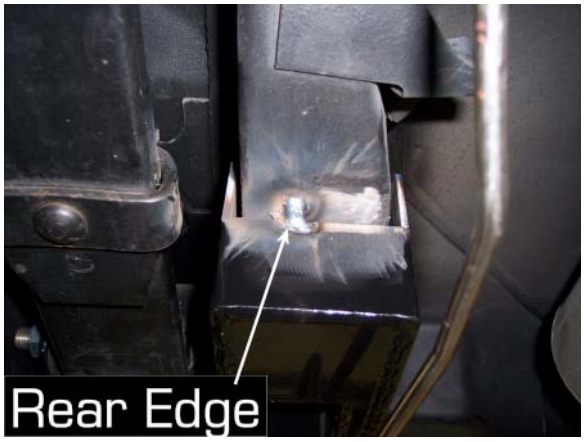
Bolt-in: Install the ½" bolts in subframe holes as shown in the picture. Fully tighten these bolts at this time.

Weld-in: Rosette weld the front hole on each side. Weld a bead along the leading edges of the connector.

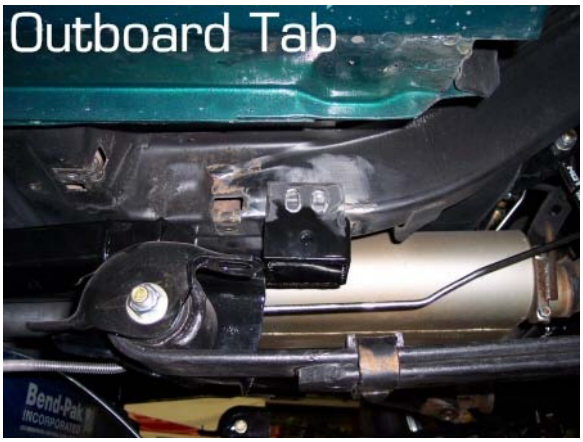


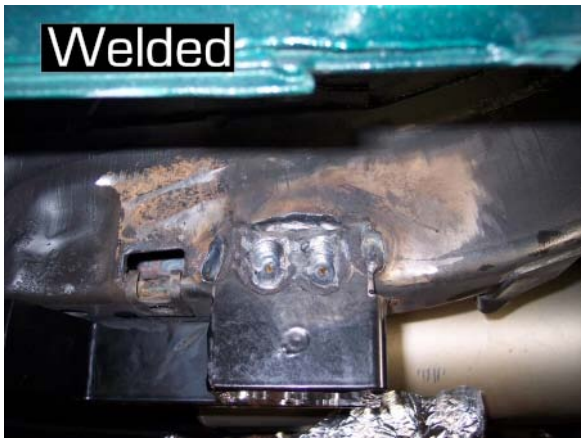
Tack weld 2-3 of the rosette holes on the inboard tab to the frame rails. Tack weld the rear edge of the connector. Once you have these minimum welds complete, you may raise the vehicle again to access the outboard tab. Completely weld both rosettes and any edges. Lower the vehicle back on it's wheels and finish the inboard rosette welds and remaining edges to be welded. To protect the brake line (driver side) and the fuel line (passenger side) from the welding radiation and sparks, cover them with aluminum foil.





Outboard Tab





7. Optional Metal Finishing

Depending on how pretty your welds turn out, you might want to grind down any "high" welds or weld mistakes before proceeding any further.

8. Paint the Exposed Metal

You may use any paint or undercoat you wish to coat the exposed welded/grinded areas. We recommend Duplicolor's Truck Bed Coating. This coating has the perfect texture and color for this project. It is up to you on how and where you want to mask off for the coating.

9. Reattach Everything

Reattach your brake line and fuel lines. Fasten the 3 bolts on each leaf spring bracket. Reattach the lower Shock mount. Double-check to make sure all hardware is fully tightened.