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Installation instructions

Thank you for choosing Tinworks Fabrication!!!

Note: Read the instructions thoroughly before installation of parts. Confirm that all hardware and parts are received before starting install.

Warning: DO NOT work under a vehicle only supported by a jack. Place stands under the manufacturer's specified locations.

DO NOT drive the vehicle until all work is complete and all hardware has been torqued to specification.

Reminder: Use of proper personal safety equipment including eye, face, and hand protection is necessary when using the recommended tools to perform this install.

If you have any questions about our products, you can call 866-897-2787 or email us at sales@tinworksfabrication.com

88-98 Frame Stiffener

PN: 8898-OBS-SBFS

Recommended Tools:

- Safety Glasses
- Sanding Disc / Air Chisel
- Center Punch
- Hammer
- 9/16" Wrench and Socket
- 5/8" Wrench and Socket
- Torque Wrench
- Drill
- 1/4"-3/8" Drill Bits

Included Parts:

- Front Boxing Plates (2)
- Middle Boxing Plates (2)
- Center Rails (6)
- Middle Crossmember (1)
- Transmission Crossmember (1)
- Polyurethane Transmission Mount (1)
- 3/8" x 1" Bolt (78)
- 3/8" Lock Nut (78)
- 3/8" Washer (156)

Installation Instructions:

1. Start by removing the factory gas tank and crossmember. **Note: The gas tank will need to be relocated to the rear of the truck as your new frame stiffener will occupy the same space.** To remove the crossmember locate and remove the 6 original rivets. **(Image 1)** This can be done by using a sanding disc or an air chisel.



Image 1

2. Once the head of the rivet is removed, you can take your center punch and hammer the remaining rivet out of the hole.

3. The factory transmission crossmember will also need to be removed and can now be taken out by locating and removing the 4 original bolts. **(Image 2)**

4. You can now install the front boxing plates inside the frame rail on both the driver and passenger side. Each one will be stamped D for driver and P for passenger, and will also have two locating holes on the bottom of each. These locating holes will only be used to set the location of the boxing plates front to back inside the frame rail, and will not need hardware once complete.

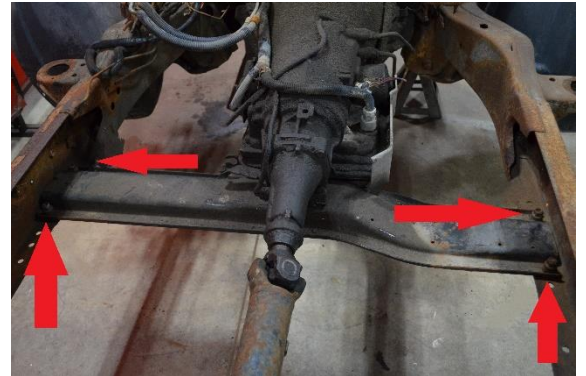


Image 2



Image 3

5. You will need to drill 6 holes per boxing plate. This is done using the boxing plate as the template and drilling from the inside outward. **(Image 4) (Image 5)** Once the holes are drilled the new grade 8 Hardware can be loosely installed, **(Image 6)** and the 2 bolts used to locate each boxing plate can be removed.



Image 4



Image 5



Image 6

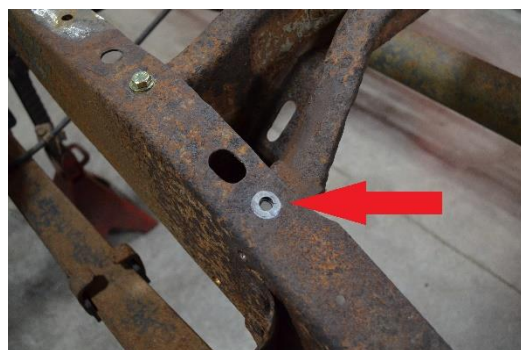


Image 7

6. Next the middle boxing plates can be installed in the same manner by locating them with the forwardmost factory hole in the gas tank crossmember. **(Image 7)** Each boxing plate is stamped D for driver and P for passenger.

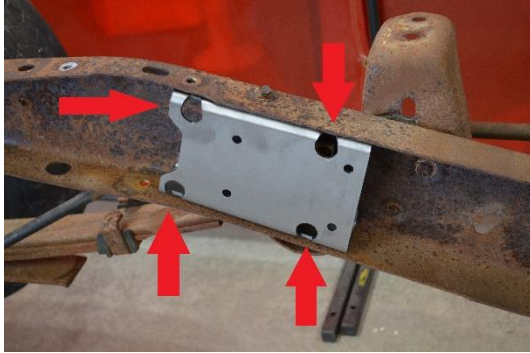


Image 8

7. Once aligned with the locating hole, the boxing plates will be used again as the template to drill the 4 holes needed for installation and the new grade 8 hardware can be loosely installed in the same way the front boxing plates were done. **(Image 8)**

8. When installing the center rails of your frame stiffener, begin with loosely bolting the front section to the boxing plates. **(Image 9)** Followed by sliding in and again loosely bolting the next inner rail which will have flanges for your transmission crossmember. **(Image 10)**



Image 9



Image 10

9. Now that the center rails are in place, the rear center rails can be loosely bolted in place. **(Image 11)** The middle crossmember can then be installed with the TW logo orientated to the rear of the truck. **(Image 12)**



Image 11



Image 12



Image 13

10. With the taper towards the front of the truck, loosely bolt the transmission crossmember to the center rails. **(Image 13)** This mount has adjustment front and back to fit a wide range of transmissions. You can also space it up or down to get your desired driveline angle.

11. You can now install the new polyurethane transmission mount provided in the kit and bolt the transmission to the crossmember.

12. Once all of your stiffener pieces are installed, torque the 3/8" hardware to 33-FT-LBS. **(Image 14)**



Image 14

13. Pat yourself on the back and grab a drink, you have successfully completed your install!!!