

DEF Tank Relocation

Dodge Ram | 2019-2024 3500 MegaCab or DRW DEF Relocation

Part #: 122409

Rev. 012126

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SAFETY WARNING

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

Bill of Materials - 122409

Part #	Qty	Description
05188	2	DEF Tank Drop Bracket
03819	2	Sleeve
395	1	Bolt Pack
	2	3/8"-16 Nylock Nut
	2	3/8" Fender Washer
	2	8mm-1.25 x 30mm Bolt
	2	5/16" USS Washer

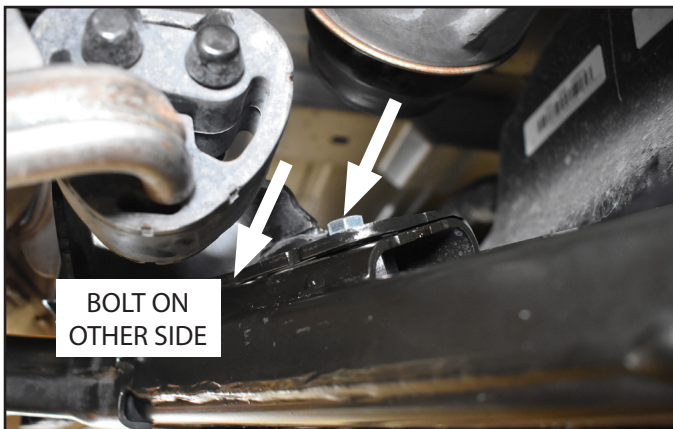
PRE-INSTALLATION NOTES

1. This kit is designed to create clearance between the DEF Tank crossmember and the Transfer Case once indexed on a vehicle with a 8-bolt Aisin Transmission with Mega Cab or/and Dually rear axle (2019-2024). Or 10-bolt Aisin with Dually rear axle (25+).
2. To complete this procedure it is recommended that the DEF tank not be more than half full. If more than half full follow factory procedure for draining tank.

INSTALLATION INSTRUCTIONS

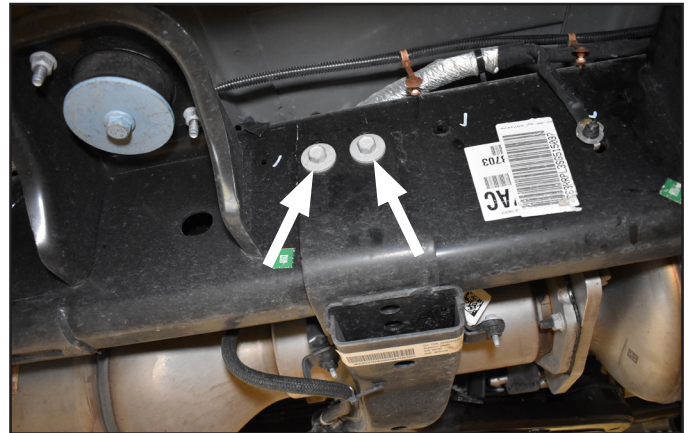
3. Park the vehicle on clean flat and level surface. Block the rear wheels for safety.
4. Remove the two bolts on top of the DEF tank crossmember securing the exhaust mount. (Fig. 1)

FIGURE 1



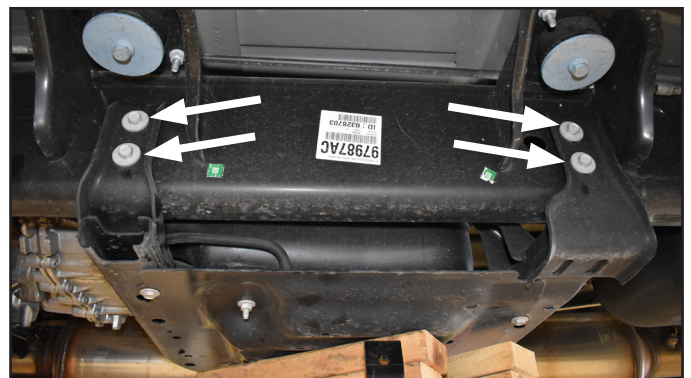
5. Support the DEF tank crossmember with a jack. Remove the two bolts holding the crossmember to the frame on the passenger side. (Fig. 3)

FIGURE 2



6. Remove the driver side crossmember bolts (4X). (Fig.4)

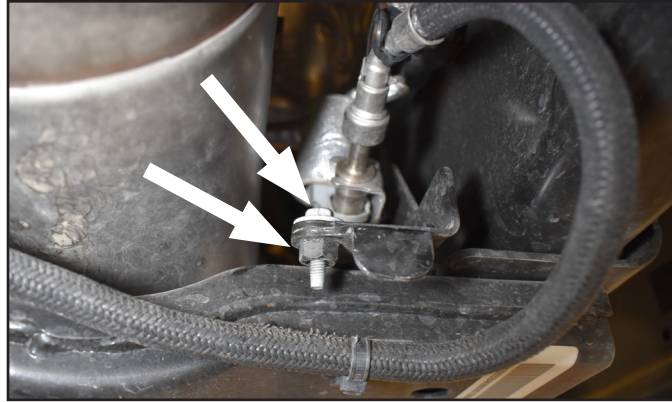
FIGURE 3



STEPS 7-19 FOR 2025+ VEHICLES ONLY. 2019-2024 SKIP TO STEP 20.

7. Disconnect the 2 bolts at the DEF line bracket. (Fig. 2)

FIGURE 4



8. Disconnect 7 fuel line Christmas tree clips 008, 015

FIGURE 5A



FIGURE 5B



FIGURE 5C



FIGURE 5D



9. Disconnect the DEF fill line and the DEF breather line from the tank by pushing the green button on the end fitting. 016,017

FIGURE 6A

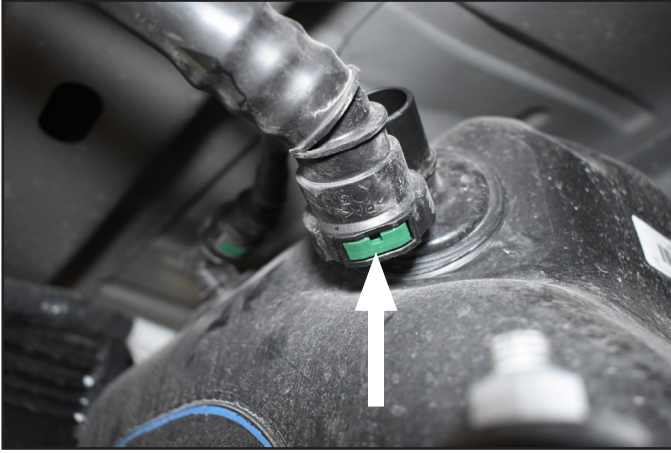
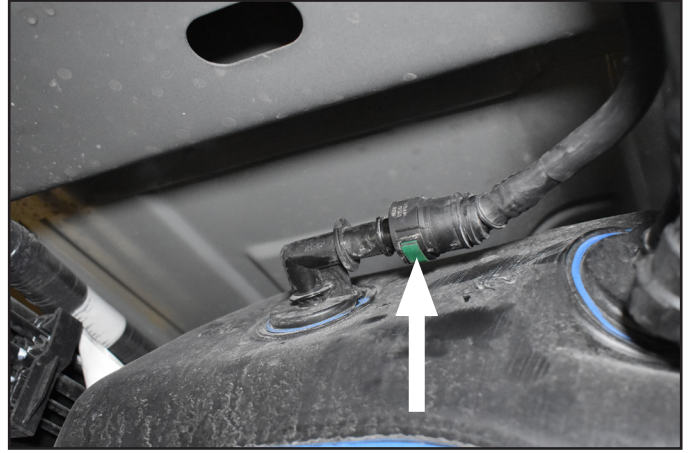
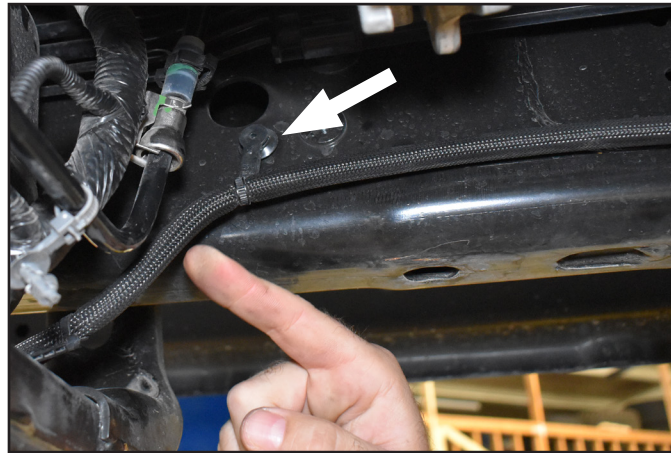


FIGURE 6B



10. Disconnect the DEF supply line Christmas tree clips from the frame. 018

FIGURE 7

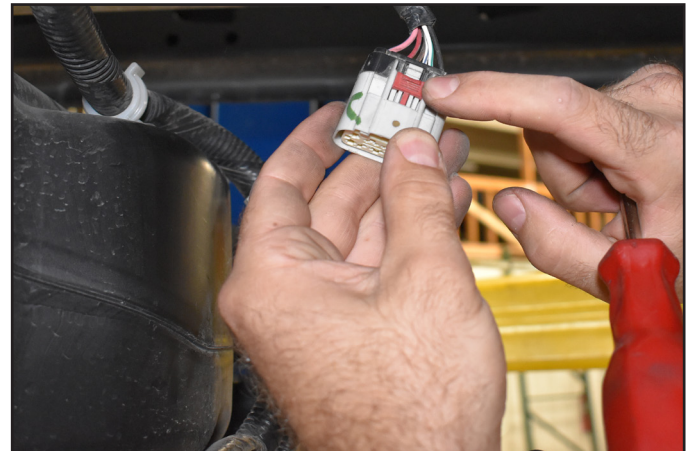


11. Lower the DEF tank enough to disconnect the wire harness connector from the harness connected to the frame. Slide the red clip back to disconnect. 021,022

FIGURE 8A



FIGURE 8B



12. Slowly lower the DEF tank and support assembly and move to make room for the transfer case removal.
2019 - 2024 models do not require full removal of the DEF tank

FIGURE 9



PROCEED WITH THE TRANSFER CASE INDEXING INSTRUCTIONS AT THIS TIME.

DEF TANK ASSEMBLY RE-INSTALLATION

13. Re-position the tank assembly to re-installation.
14. Lift using the jack to height where the wiring harness and the fill line and the breather line can be reattached. Fig. 10A, 10B

FIGURE 10A



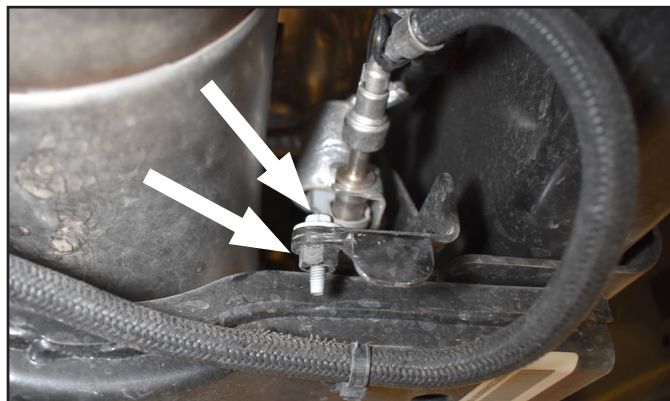
FIGURE 10B



ONLY FOR 2025+ VEHICLES

15. Re-install the 2 bolts at the DEF line bracket. (Fig. 11)

FIGURE 11



16. Reconnect the 7 fuel line Christmas tree clips Fig. 12A - 12D

FIGURE 12A



FIGURE 12B

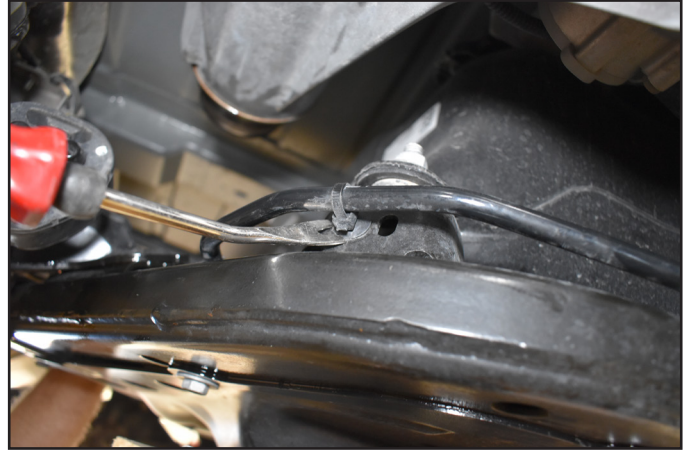
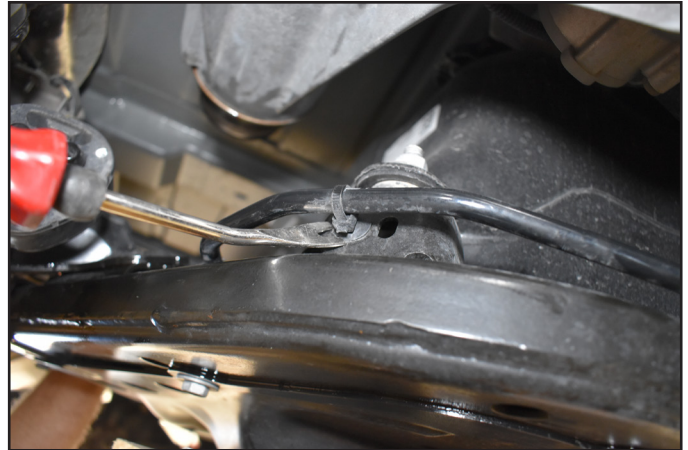


FIGURE 12C



FIGURE 12D



17. Reconnect the DEF fill line and the DEF breather line from the tank by pushing the green button on the end fitting. Fig. 13A, 13B

FIGURE 13A

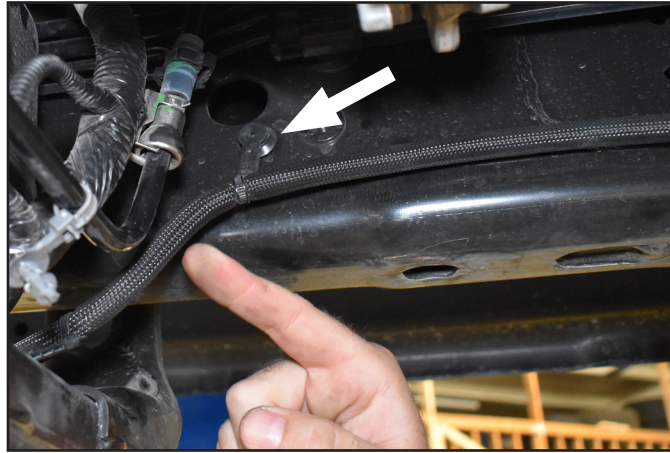


FIGURE 13B



18. Reconnect the DEF supply line Christmas tree clips from the frame. Fig. 14

FIGURE 14

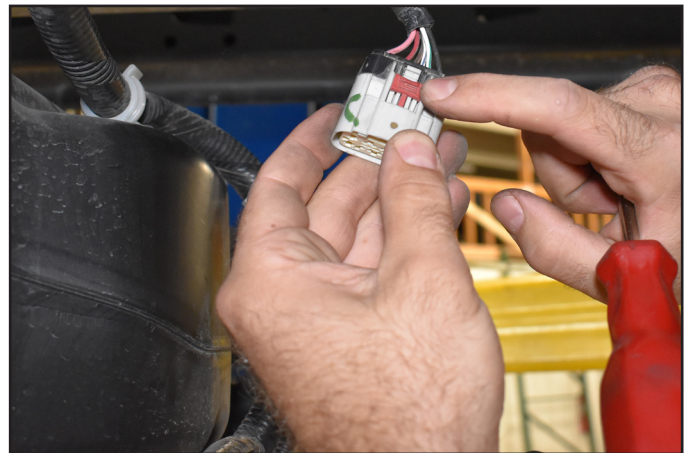


19. Lift the DEF tank enough to reconnect the wire harness connector to the harness connected to the frame. Slide the red clip in to connect. Fig. 15A, 15B

FIGURE 15A

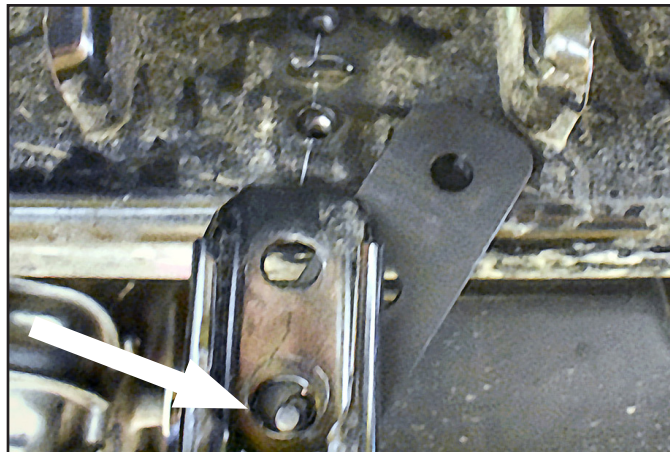


FIGURE 15B



20. Install the provided brackets so the stud goes through the bottom hole of the cross member on both driver side cross member ends. (Fig. 16)

FIGURE 16



21. Raise the crossmember back up by lifting with the jack. Align the top hole of the bracket with the top hole in the frame. While aligning the bottom hole of the bracket with the bottom hole of the frame and top hole of the crossmember. (Fig. 17A, 17B) Fasten with OE hardware. Torque all OE hardware driver and passenger side to 35 ft-lbs. New nuts and fender washer are provided in bolt pack 395 for the stud. Torque to 30 ft-lbs.

FIGURE 17A

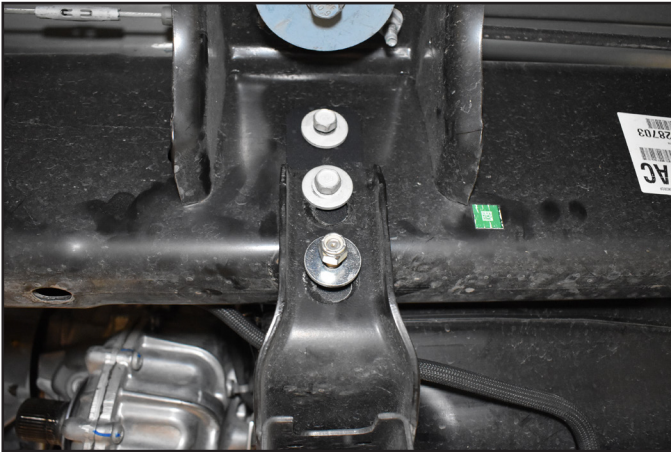
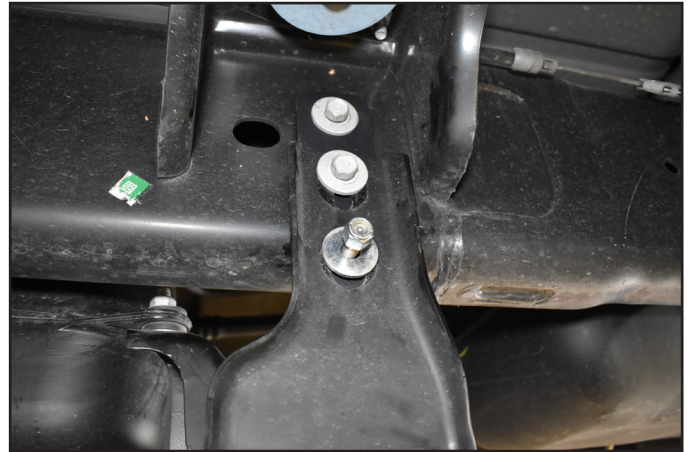


FIGURE 17B



22. Reconnect the passenger side to the factory holes. Torque to 35 lb-ft. (Fig. 18)

FIGURE 18



23. Install the provided spacers between the exhaust mount and crossmember use the provided 8mm bolts and 5/16" washers to fasten down the exhaust mount. Torque to 192 in-lbs. (Fig. 19)

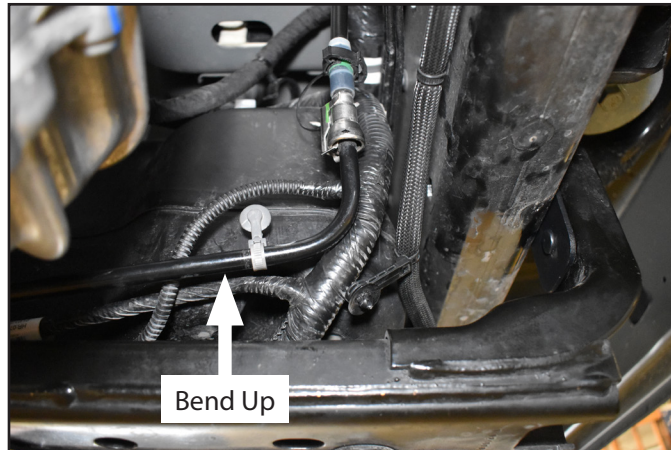
FIGURE 19



24. Reconnect various lines and hoses to the DEF cross member assembly.

It may be necessary to slightly bend the fuel line up to allow attachment of the Christmas tree clips. (Fig. 20)

FIGURE 20



POST-INSTALLATION

25. Recheck all hardware, check again at 500 miles, and again at regularly scheduled maintenance intervals.