



# **D5612, D5624, D5823, D5620 Installation Instructions 2019 Dodge 2500 2019 Dodge 3500 6-Bolt & 8-Bolt Transfer Case Indexing Ring Kit**

## **Read and understand all instructions and warnings prior to installation of product and operation of vehicle.**

Zone Offroad Products 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. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

### **»» PRODUCT SAFETY WARNING**

Certain Zone Suspension Products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. Zone Offroad Products does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

### **»» TECHNICAL SUPPORT**

[www.zoneoffroad.com](http://www.zoneoffroad.com) may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to [tech-zone@ridefox.com](mailto:tech-zone@ridefox.com) detailing your issue for a quick response.

**888.998.ZONE** Call to speak directly with Zone tech support.

### **»» PRE-INSTALLATION NOTES**

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

### **Difficulty Level**

easy 1 2 **3** 4 5 difficult

Estimated installation: 2 hours

### **Special Tools Required**

short 9/16" wrench or

9/16" "S" shaped wrench

Seal Puller

Cut off wheel or Reciprocating saw

**\*Important\* Verify you have all of the kit components before beginning installation.**

## Kit Contents

Qty	Description
1	Transmission Crossmember
1	Index Ring
1	Bolt Pack
1	Hose Clip
1	6mm-1 Prevailing Torque Nut - Clear Zinc
1	1/4" SAE Washer - Clear Zinc
4	Cable Ties
2	Cable Tie Tree
1	Loctite - 1ml
1/1	StainlessSteel Clamps
1	Exhaust Spacer - Drv
1	Exhaust Spacer - Pass
1	Seal Spacer (8-Bolt Only)
1	Output Seal (8-Bolt Only)
4	1/2" Spacer (Used on 6" Gas 2500 with Power Hop Damper Only)
1	Bolt Pack (8-Bolt Only)
8	10mm-1.50 x 30mm Flat Head Socket Cap Screw Class 10.9 - Black Oxide
8	3/8"-24 Hex Nut grade 8 - Yellow Zinc
8	3/8" Washer Cadmium Plate
1	Bolt Pack (6-Bolt Only)
6	10mm-1.50 x 30mm Flat Head Socket Cap Screw Class 10.9 - Black Oxide
6	3/8"-24 Hex Nut grade 8 - Yellow Zinc
6	3/8" Washer Cadmium Plate
1	Bolt Pack (Diesels Only)
1	5/8"-11 x 8" Grade 8 - Yellow Zinc
2	5/8" SAE Washer - Yellow Zinc
1	5/8"-11 Prevailing Torque Nut
1	Bolt Pack (Gas Only)
2	3/8"-16 x 4", Yellow Zinc
2	3/8"-16 x 3", Yellow Zinc
4	3/8 SAE Washer, Yellow Zinc
1	Bolt Pack (Used on 6" Gas 2500 with power hop Damper Only)
2	1/4"-20 x 3/4" Clear Zinc
2	1/4"-20 Prevailing Torque Nut, Clear Zinc
4	1/4" SAE Washer, Clear Zinc
4	10mm-1.50 x 50mm BoltClear Zinc
4	10mm-1.50 x 50mm Bolt, Clear Zinc

## IMPORTANT

*Zone Offroad recommends upgrading the transmission output shaft on vehicles with larger tires that will see heavy loads from other upgrades such as gearing, or performance tunes especially in high payload, heavy towing, or competition pulling applications.*

## INSTALLATION INSTRUCTIONS

1. Park vehicle on clean, flat, and level surface. Block the rear wheels for safety.

2. Remove the transfer case skid plate if equipped, it will not be reinstalled.
3. Remove the rear driveshaft, retain hardware. Disconnect the front driveshaft from the transfer case. It will be necessary to remove the forward most clamp on the front drive shaft boot to access the retaining clip to slide the front drive shaft off. Replacement clamps are provided (Figure 1a, 1b, 1c)



Figure 1a



Figure 1b



Figure 1c

4. Disconnect the wire harness that controls the transfer case. (Figure 2)
5. (Diesel Models only) To make removing the transfer case easier. Support the DEF Tank cross member with a jack. Remove the 2 exhaust mount bolts that are on the top of the DEF crossmember. Remove all 6 bolts supporting the cross member to the frame. Lower the crossmember where the top bolt holes lines up with the lower hole on the frame. Reinsert a bolt into each mount to support the crossmember.



Figure 2

6. Remove the 3 nuts that hold the transmission mount to the transmission cross-member. (Figure 3)



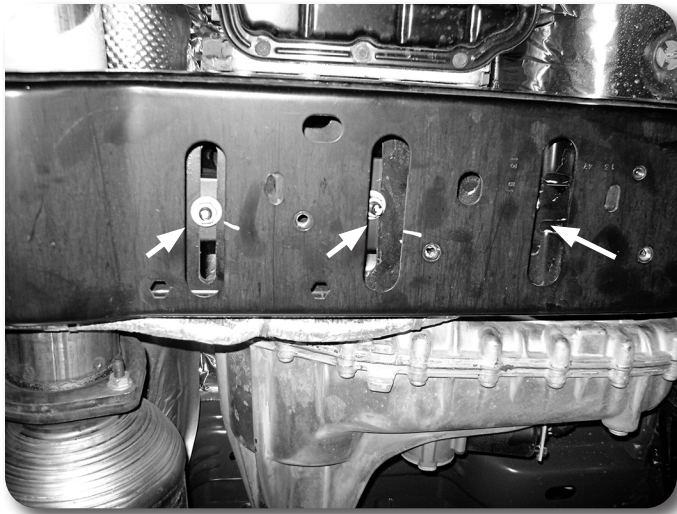


Figure 3

7. With the transmission well supported with a jack, remove the transmission crossmember and retain hardware.

*NOTE: Diesel Models Only - Loosen the inner bolt on the passenger side for the transmission crossmember. Cut the Head off of the bolt so the bolt can be removed without removing the exhaust. Replacement hardware is provided. (Figure 4a)*



Figure 4A

8. If necessary to access the transfer case bolts, remove the transmission mount from the transmission. (Figure 4b)

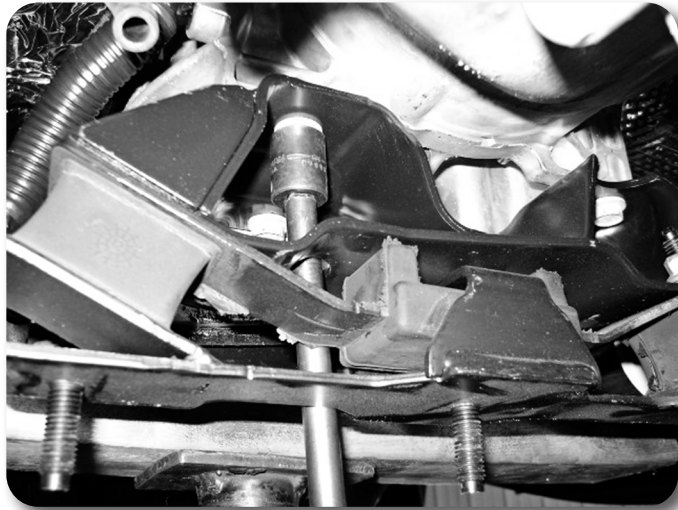


Figure 4B

9. Remove the 6 or 8 nuts that hold the transfer case to the transmission and remove the transfer case from the vehicle. Use extra caution as the transfer case is very heavy.

*NOTE: Do NOT remove the transmission output seal on a 6-Bolt!*

10. On a 8-Bolt Aisin only: Remove the output seal. Install the Seal Spacer and then the provided seal (Figure 5B). Prelubricate the sealing surface with a little bit of oil. (Figure 5A) The seal will almost be flush with the housing when installed.

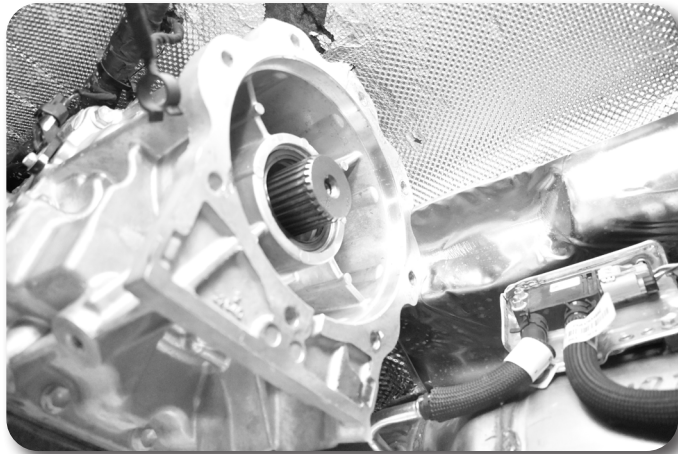


Figure 5A

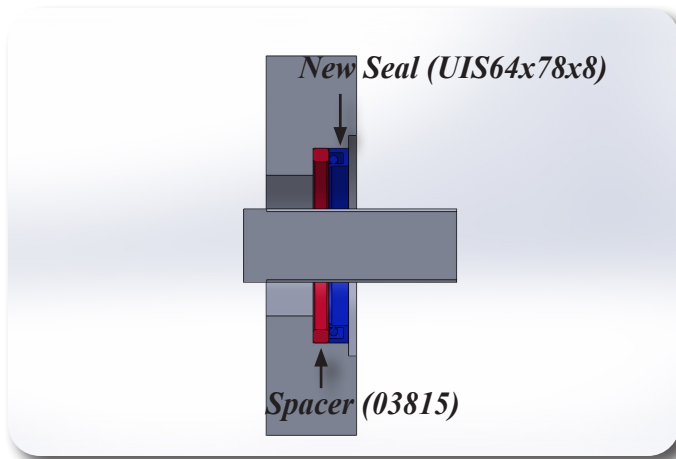


Figure 5B

### Step 11 Note

Index ring hardware is located in bolt pack 950 (6-bolt) or 486 (8-bolt).

11. Remove the studs on the transfer case by double nutting the studs. Place new indexing ring up to the transfer case. Attach with the provided 10mm flat head allen bolts. Note there is a specific orientation on the 6-Bolt and the indexing ring will need to be rotated to get the proper hole alignment. (Figure 6a, 6b)

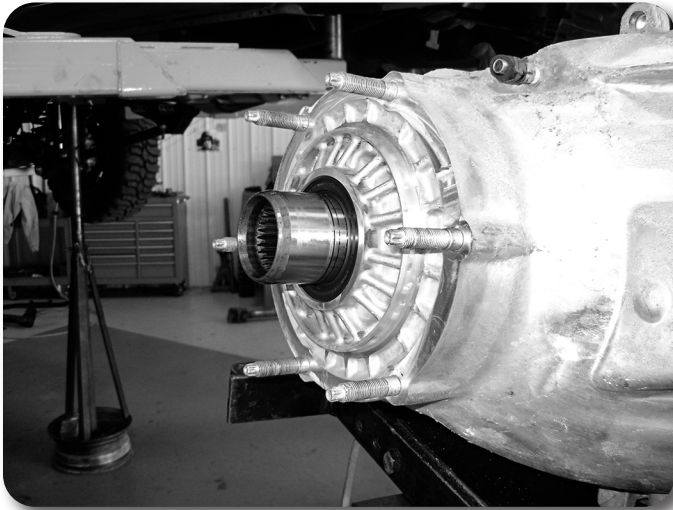


Figure 6a

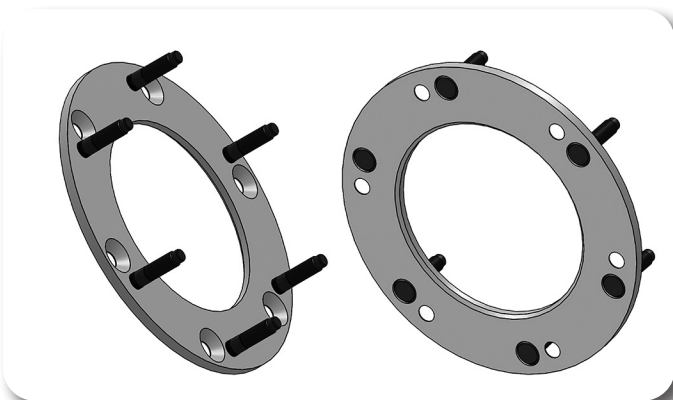


Figure 6b

12. Reinstall the transfer case and tighten with 3/8" fine thread nuts with washers. Loc-tite and tighten to 45 ft-lbs.

*Note: This torque applies with the loc-tite still slightly damp and acting as a lubricant. The max recommended torque is 55 ft-lbs when rechecking hardware.*

### Step 13 Note

Wire harness hardware is located in bolt pack 496.

13. Disconnect the wire harness on the frame rail, reroute the wires to the transmission / transfer case above the front driveshaft. Use the provided Zip Ties and 6mm nut, 1/4" washer, with hose clip and fasten the harness to one of the heat shield studs under the body. Ensure that the harness is secure and won't touch exhaust or drive shafts. (Figure 7)



Figure 7

### Step 15 Note

Replacement crossmember hardware is located in bolt pack 487.

14. If the transmission mount was removed, reinstall with factory hardware.
15. Install the provided crossmember, the taller end will face towards the front of the vehicle. run all hardware front to back. Use the provided hardware to replace the cut bolt. Torque all hardware to 177ft-lbs (Figure 8)

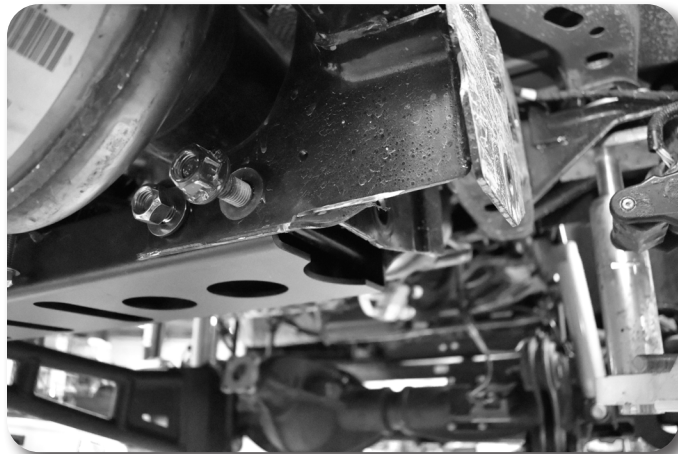


Figure 8

16. Lower the transmission and bolt the transmission to the new crossmember with factory hardware, Torque to 45 ft-lbs
17. Gas Models only: Unbolt the drive side and passenger side exhaust at the end of the headers. Insert the larger exhaust spacer on the drivers side and the shorter one on the passenger side. Using the provided 3/8" hardware to resecure the exhaust with the spacers in them. Torque the 3/8" bolts to 37 ft-lbs (figure 9a, 9b)

*Hint: It easier to install the spacers if you slide the exhaust as far back in the hangers as possible.*

### Step 17 Note

Exhaust spacer hardware in Bolt Pack 499.



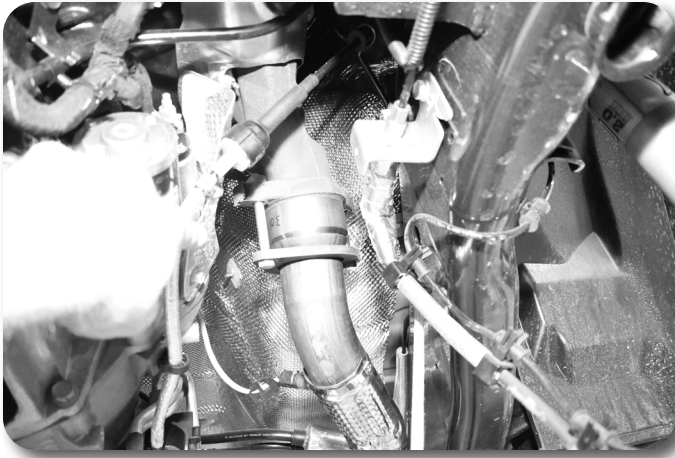


Figure 9a



Figure 9b

18. Reattach the front driveshaft to the Transfer case, new clamps are provided for the boot. Reattach the front drive shaft to the axle with OE hardware and loctite, torque to 85ft-lbs. rotate the front drive shaft to ensure it spins freely and clears exhaust and crossmember (Figure 10 gas model pictured)

### Step 18 Note

New boot clamps were provided with the front box kit. The large Clamp is for the drive shaft side of the boot.

### Step 18 Note

**6" Gas Models Only:** If you have not modified your exhaust yet you can leave the front drive shaft out of the vehicle to drive to an exhaust shop.

## Post-Installation Warnings

1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

2. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.



Figure 10

19. Reinstall rear driveshaft with factory hardware with loc-tite on threads. Tighten to 81 ft-lbs.
20. Resupport the DEF crossmember and remove the 3 bolts supporting it. Lift it back into the original position and bolt it into place with factory hardware, Torque to 35 ft-lbs. Bolt the exhaust mount back to the crossmember with factory hardware.
21. (6" Lift Gas 2500 Only) Power hop damper spacers and hardware (bolt pack 695) are only used with ZOND1258 and vehicles equipped with a power hop damper. These will be installed while installing the rear lift.
22. Recheck all hardware for proper torque. Check again after 500 miles and at regularly scheduled maintenance intervals.



<b>Component</b>	<b>Torque (FT-LBS)</b>
<i>Indexing Ring 3/8" Hardware</i>	<i>45</i>
<i>Crossmember Bolts</i>	<i>177</i>
<i>Transmission to Crossmember Hardware</i>	<i>45</i>
<i>Front Driveshaft to Axle</i>	<i>85</i>
<i>Rear Driveshaft to Axle</i>	<i>81</i>
<i>DEF Crossmember Bolts</i>	<i>35</i>