



## D5805 Installation Instructions 2003-12 Dodge Ram 2500/3500 6-8" Suspension System Index 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

*Live Chat* provides instant communication with Zone tech support. Anyone can access live chat through a link on [www.zoneoffroad.com](http://www.zoneoffroad.com).

[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@sporttruckusainc.com](mailto:tech-zone@sporttruckusainc.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: 6-8 hours

#### Special Tools Required

Pitman arm puller

Reciprocating Saw w/ long blade

#### Tire/Wheel Fitment

6" - 37 x 12.50, 17x9 w/ 4.5-5" BS

8" - 38 x 13.50, 17x9 w/ 4.5-5" BS

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

## Kit Contents

Qty	Part
1	Front Driveshaft Spacer
1	T-case Indexing Ring
1	Driveshaft Spacer Bolt Pack
1	Indexing Ring Bolt Pack - Standard
1	Indexing Ring Bolt Pack - Metric
1	Seal Extension
1	Rear Output Seal
1	Loctite

## 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

### » TRANSFER CASE INDEXING RING INSTALLATION

1. Due to variances in OE drivetrains, it may not be necessary to install the transfer case indexing ring. The indexing ring lowers the front output by approximately 2.5". Measure the distance from the driveshaft flange down to the top of the crossmember. **Figure 1** On most applications this will measure about 3" and will require the indexing ring. If the measurement is close to 2.5" some minor grinding may be necessary on the crossmember for driveshaft clearance once the indexing ring has been installed. If it is less than 2.5", do not install the transfer case indexing ring. Once the driveshaft is re-installed verify it has adequate slip engagement and does not bind when the suspension is at full droop.



Figure 1

2. Park vehicle on clean, flat, and level surface. Block rear wheels for safety.
3. Leave the transmission in neutral for the installation of the transfer case indexing ring.
4. Remove the rear driveshaft from the vehicle. Mark the driveshaft at the axle so that it can be reinstalled in the same manner it was removed. It will take 2 people to hold the weight of the driveshaft (it's heavy), remove carrier bearing hardware if equipped. **Figure 2a,b**



Fig. 2a



Fig. 2b

5. Support the transmission with an appropriate type of transmission jack. Take extra care not to damage the transmission pan or any lines around the pan.
6. Disconnect the transfer case shift linkage for manual transfer cases, disconnect the transfer case shift module for auto shift applications. **Figure 3a,b**



Fig. 3a



Fig. 3b

7. Disconnect the breather tube
8. Disconnect the transmission mount from the transmission crossmember (3 nuts). Retain nuts. Figure 4



Figure 4

9. Remove the mount from the transmission (4 bolts), retain bolts. Figure 5a,b



Figure 5a



Figure 5b

10. Remove the 4 bolts that hold the transmission crossmember into position. Mark the front side of the crossmember and remove from vehicle. Figure 6a,b



Figure 6a



Figure 6b

11. Remove the 4 bolts that attach the front driveshaft to the transfer case. Figure 7a,b



Figure 7a



Figure 7b

12. Support the transfer case and remove the 6 nuts that attach the transfer case to the transmission. Figure 8a,b



Figure 8a



Figure 8b

13. Remove the transfer case from the vehicle.
14. Clean the mounting surfaces from any corrosion or oxidation that may be present.
15. Remove the studs from the transfer case. Thread on up to 3 nuts in order for there to be enough resistance to unthread the studs. **Figure 9**



Figure 9

16. Install the transfer case indexing ring onto the transfer case. Note: This will only go on one way, rotate until the holes line up. Certain model years use metric hardware (BP# 937), earlier years use standard 3/8" hardware (BP# 933). Match up the threads from the removed studs to ensure proper hardware is selected and attach with counter sunk allen bolts with loc-tite on threads. Ensure the ring goes on square and there are no gaps. Tighten to 35 ft-lbs. **Figure 10**

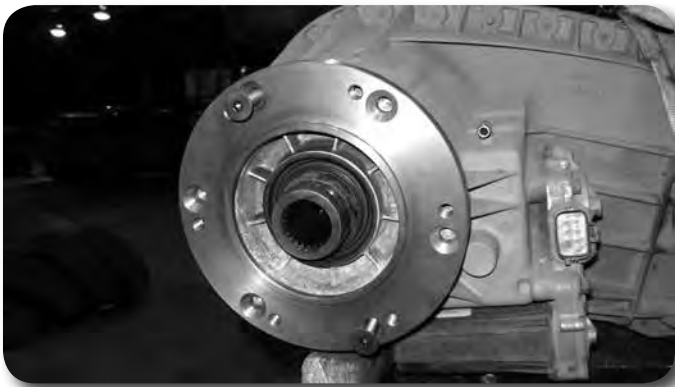


Figure 10

17. Thread in the 3/8" set screws into the indexing ring with loc-tite on threads. Securely tighten to 25 ft-lbs.
18. Remove the output seal from the transmission. **Figure 11**



Figure 11

19. Pick the correct output seal extension from the kit that matches the inside diameter of the transmission. Lightly grease the outer surface of the transmission output seal extension and install into the transmission. Make sure it is seated flush against the transmission.
20. Lightly grease the outside of the seal to aid in installation. Install the new transmission output seal into the adaptor. Ensure that it is seated flush with the extension. Lightly grease the inner lip of the seal. **Figure 12**



Figure 12

21. Reinstall the transfer case. It may be necessary to grab the output shaft of the transfer case and rotate it to get it to align with the transmission output shaft. Attach the transfer case with new 3/8" flanged nuts. Use loc-tite on the threads. Tighten to 35 ft-lbs. **Figure 13**



Figure 13

22. Reattach the breather line and electric connection for auto shift 4x4 models. Attach the shift linkage for manual transfer cases.
23. Reinstall the transmission mount with OE hardware, tighten to 35 ft-lbs.
24. Reinstall the transmission crossmember with factory hardware, tighten to 90 ft-lbs.
25. Reinstall the rear driveshaft with factory hardware, use loctite on threads and tighten to 75 ft-lbs. If the vehicle is equipped with a carrier bearing, reinstall carrier bearing, a drop bracket kit will be required if installed with over 3" of lift (sold separately D5505).

*NOTE: Before hooking up the front driveshaft, now is a great time to grease the nearly impossible to access grease fitting on the front dual cardan joint. A needle adaptor on a grease gun is required. This fitting is required to be serviced at every oil change interval. Ensure that this maintenance is not skipped!*

26. Reattach the front driveshaft to the output with included driveshaft spacer and new bolts. Use loc-tite on bolt threads. Tighten to 75 ft-lbs. If this is installed with less than 3" of lift, do not use the included spacer, reattach with factory hardware.
27. Recheck all hardware for proper torque, check again after 500 miles.