



## D5813 Installation Instructions

### 2014 Dodge 2500

### 2013 Dodge 3500

### Aisin Transmission 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

*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@zoneoffroad.com](mailto:tech@zoneoffroad.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: hours

#### Special Tools Required

short 9/16" wrench or

9/16" "S" shaped wrench

#### Tire/Wheel Fitment

N/A

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

## D5813 Kit Contents

### Transmision Crossmember Kit

- 1 2013+ Dodge transmission x-member
- 6 Zip Tie

### Indexing Ring

- 1 8 Bolt - Indexing Ring
- 1 Drive Shaft Spacer
- 1 Bolt Pack - Front Drive Shaft Spacer
- 1 Bolt Pack - Indexing Ring
- 1 loc-tite

## INSTALLATION INSTRUCTIONS

*NOTE: The transmission output seal is specific to this kit, a factory seal will not work, if a replacement is ever required it must be ordered from Zone Offroad.*

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. **Figure 1a, 1b**



Figure 1A

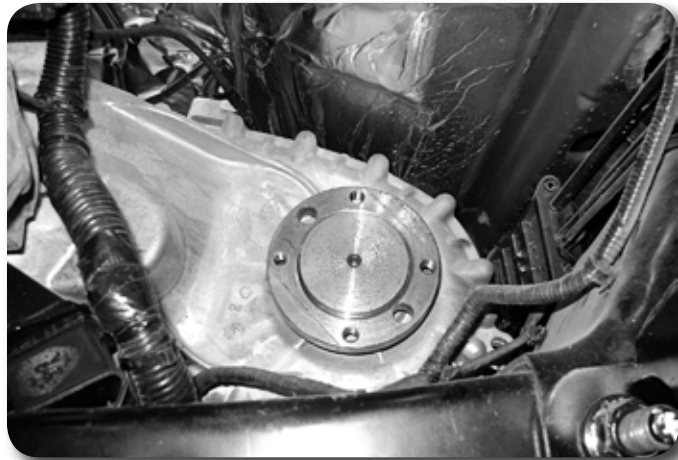


Figure 1B

4. Disconnect the wire harness that controls the transfer case. **Figure 2a, 2b**



Figure 2A



Figure 2B

5. Disconnect the breather vent tube from the top of the transfer case.
6. Remove the 3 nuts that hold the transmission mount to the transmission cross-member. Figure 3

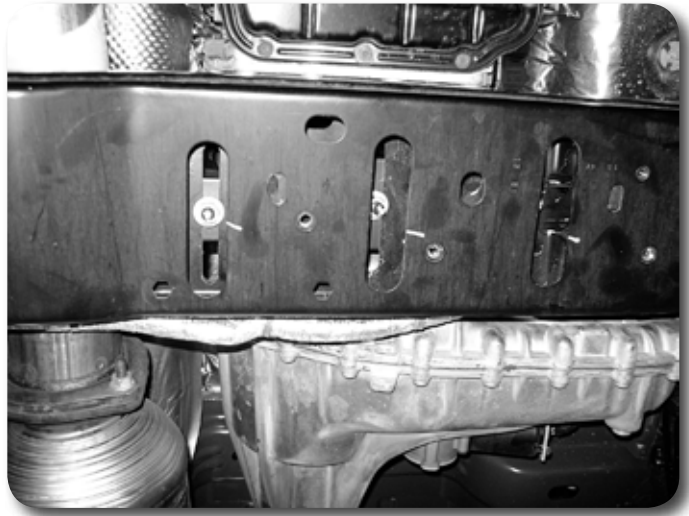


Figure 3

7. Support the transmission with a jack.
8. Remove the transmission crossmember and retain hardware.
9. Remove the mounting brackets that hold the transmission to the crossmember.
10. Manual shift transfer cases: Disconnect the shift linkage from the transfer case, retain all hardware.
11. Remove the 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.
12. Remove the factory transmission output seal. Install seal into seal adaptor. **\*IMPORTANT\* Lightly grease the new seal \*IMPORTANT\***. Install seal adaptor with new seal into the transmission output housing. Figure 4a, 4b



Figure 4a



Figure 4b

### Fig 4b Note

Lightly grease the new output seal before installing the seal and extension into the vehicle.

13. Remove the 8 studs by double nutting the studs. Place new indexing ring up to the transfer case. There are 2 sets of holes. Use the small spacing (11 degrees) for 6" and smaller kits, larger lift heights will use the large gap (15 degrees). Install the 3/8" bolts into the transfer case into the correct set of holes. Attach with 10mm flat head allen bolts. Figure 5b shows the indexing ring with only one set of holes, use correct indexing based on lift height. It is recommended to use the least amount possible for the application, the indexing ring is labeled on which holes to use. Figure 5a, 5b, 5c, 5d



Figure 5A

### Step 13 Note

Index Ring Hardware is in bolt pack #947

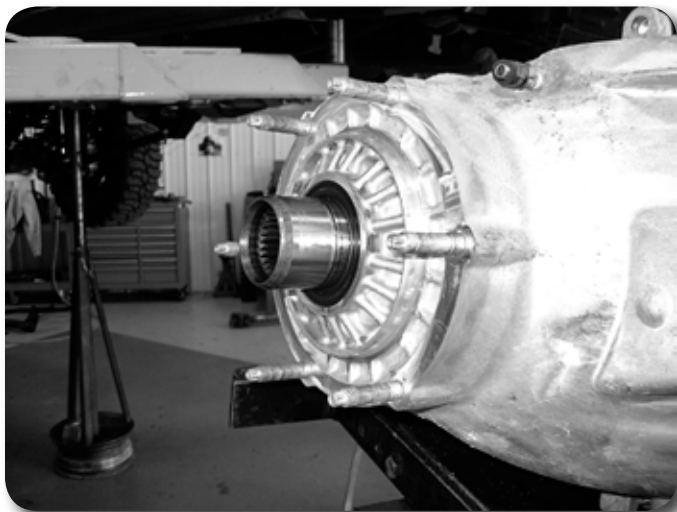


Figure 5B



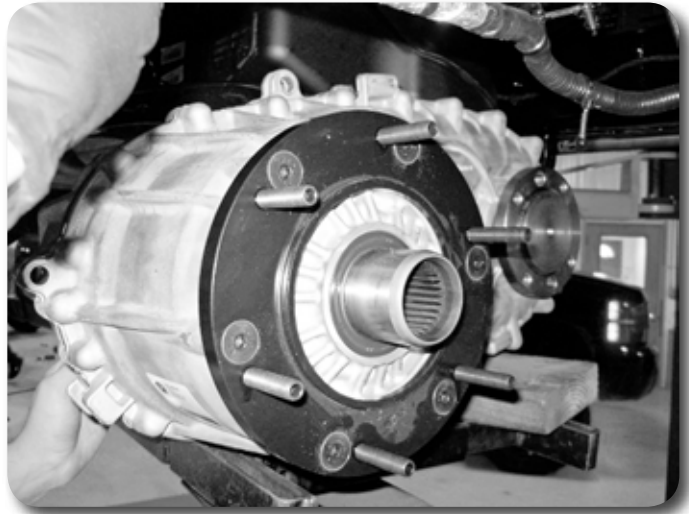


Figure 5C

14. Reinstall the transfer case and tighten with 3/8" washers and nylock nuts. Tighten to 35 ft-lbs. Fig 5d



Figure 5D

15. Disconnect the wire harness on the frame rail, reroute the wires to the transmission / transfer case above the front driveshaft. Figure 6a, 6b



Figure 6A



Figure 6B

*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!*

### Step 16 Note

Front Driveshaft Hardware is in bolt pack #932 - Torque spec is 75 ft-lbs.

16. Reattach the front driveshaft with driveshaft spacer to the transfer case with new 7/16" hardware with loctite on the threads. Tighten to 75 ft-lbs. **Figure 7**



Figure 7

17. Reinstall the factory transmission mount to the transmission with factory hardware, tighten to 35 ft-lbs.
18. Install new crossmember with factory bolts, Tighten to 150 ft-lbs. (Driveshaft not shown) **Figure 8a, 8b**

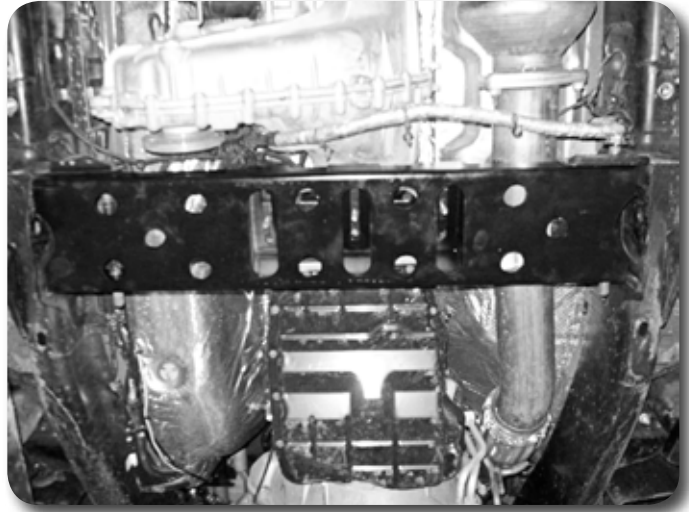


Figure 8A

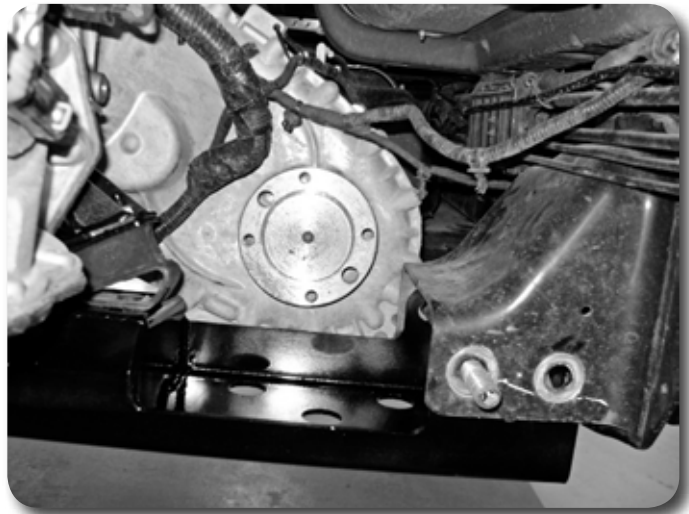


Figure 8B

## 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. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure.
  3. Perform head light check and adjustment.
  4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.
19. Attach the wiring to the transmission crossmember with zip ties and secure wires with the other zip ties to retain all wires to keep them clear of any rotating parts or exhaust.
  20. Reattach the differential wiring harness on the backside of the transfer case or reattach manual shift linkage. Manual shift linkages may need to be adjusted after installation
  21. Reattach differential breather line.
  22. Reinstall rear driveshaft with factory hardware with loctite on threads. Tighten to 75 ft-lbs.
  23. Recheck all hardware for proper torque. Check manual shift transfer cases for proper range selection, adjust linkage as necessary to get the transfer case to shift into all gears (adjust clamp approximately 1/2" further down on the shift rod)
  24. Check again after 500 miles and at regularly scheduled maintenance intervals.