



## F5600 Installation Instructions 2017-2019 Ford Super Duty- Diesel Only 2020 Ford Super Duty- 10 Speed Transmissions 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.

#### Difficulty Level

easy 1 2 **3** 4 5 difficult

Estimated installation: 3 hours

#### Special Tools Required

Stubby Wrench Set

Combination of swivels and extensions

#### »» 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.

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

## F5600 Kit Contents

Qty	Description
1	Transmission Crossmember
1	Indexing Ring Assembly
1	Skid Plate Relocation Bracket
1	Bolt Pack 987 - Indexing Ring
11	10mm x 30mm Flat Head Bolt
11	3/8"-24 Hex Nut
11	3/8" SAE Washer
2	3/8" x 1" Bolts
2	3/8" -16 Serrated Edge Nuts
2	3/8" SAE Washers
2	Tree Cable Tie
1	Thead Locker - 1 ml

## IMPORTANT KIT NOTES:

1. Compatible with 2017-2019 Diesel trucks only, 2020 10 Speed Transmission trucks only
2. Indexing ring has not been designed to work on manual shift transfer case models. Modification to the shift cable mount will be required.
3. **DO NOT USE FILL PORT FOR FLUID LEVEL ON AN INDEXED TRANSFER CASE. THE FILL PORT WILL BE LOWER THAN OE FILL LEVEL HEIGHT:** If any maintenance requiring fluid change or refill has or is being done, before re-installing transfer case check fluid levels on bench and fill transfer case with manufacturer recommended volume of fluid.
4. 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

5. Remove the transfer case skid plate if equipped. Save hardware for later installation, Figure 1.



Figure 1

6. Mark orientation of the front drive shaft to the transfer case flange for later installation. Remove the four bolts attaching the front drive shaft to the transfer case. Save the hardware and using a strap, support the drive shaft from falling.

7. Mark orientation of the rear drive shaft to the rear axle flange for later installation. Remove the four bolts attaching the rear driveshaft to the rear axle. Save the hardware. Slide the rear driveshaft out from the transfer case and set aside for later installation.
8. Support the transmission with a hydraulic jack. It is best to use a piece of wood to prevent damage to the transmission oil pan.
9. Remove the two nuts attaching the transfer case isolator to the cross member, **Figure 2**.



Figure 2

10. Remove the four 12mm bolts attaching the cross member to the frame. Lower the cross member from the frame. The factory cross member will not be used again, **Figure 3**. Save the bolts for later installation.

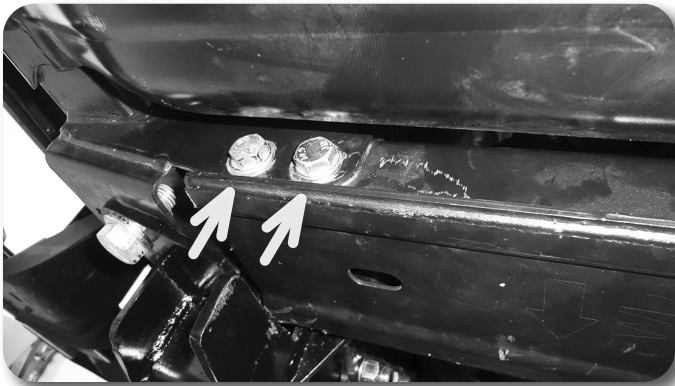


Figure 3

11. Remove the transfer case isolator from the transfer case, **Figure 4**. Save the isolator and hardware.



Figure 4

12. Disconnect the transfer case shift mechanism wiring harness, disconnect wiring harness clips from the transfer case, Figure 5.



Figure 5

13. Disconnect the breather from the top of the transfer case.
14. Remove the 11 bolts attaching the transfer case to the transmission, Figure 6A & 6B. The hardware will not be reused. A combination of 3/8" universal joint socket adapters and 3/8" extensions works best to access all of the hardware.



Figure 6A

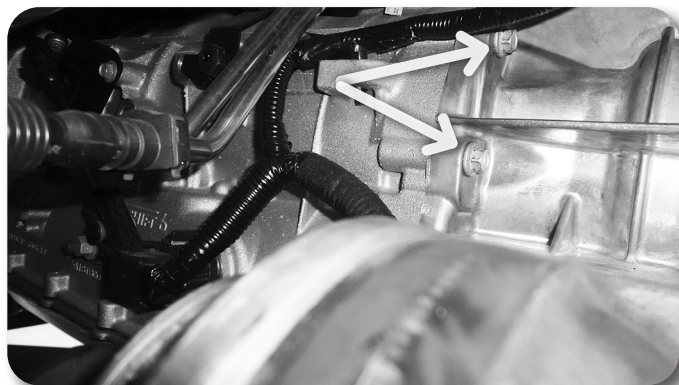


Figure 6B

15. With additional help, remove the transfer case from the vehicle by sliding it towards the rear of the vehicle. The transfer case may need to be rotated downwards to clear the body on the top side. Make sure the rear of the transfer case is supported so fluid does not spill out when set aside.
16. The transmission oil pan will need clearance for installation of the indexing ring at the driver side bolt. This can be done by either grinding the flange on the oil

pan or flattening it with a hammer, Figure 7A & 7B. Test fit the indexing ring on to the transmission to ensure a flat fit and there is no gap between the transmission and indexing ring.



Figure 7A



Figure 7B

17. Apply thread locker and attach the indexing ring to the transmission with the provided flat head Allen bolts. Tighten to 41 ft-lbs.
18. Remove the hook on the transfer case, Figure 8. This will not be reinstalled.

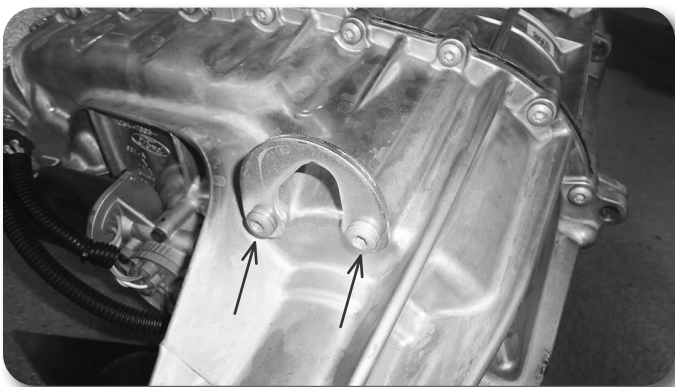


Figure 8

19. Apply thread locker to all of the studs on the indexing ring.

### Step 17 Note

The indexing ring has a specific orientation, it will only go on one way, rotate until all of the holes align.

Hardware for the indexing ring is in Bolt Pack 987.

20. Reinstall the transfer case to the transmission , ensuring the output shaft aligns with the transfer case and all of the studs on the indexing ring line up with the transfer case.
21. Using the provided 3/8” washers and nuts, tighten the transfer case to the studs on the indexing ring, Figure 9A & 9B. Torque to 41 ft-lbs.

### Step 21 Note

The transfer case can be lowered a little to help aid in tightening the nuts on the top side of the transfer case.

Hardware for the indexing ring is in Bolt Pack 987.



Figure 9A



Figure 9B

22. Reinstall the transfer case isolator with the factory hardware and thread locker.
23. Route the wire harness above the front drive shaft. Attach wiring harness using the provided cable ties as shown in Figure 10. Plug the wire harness back into the transfer case

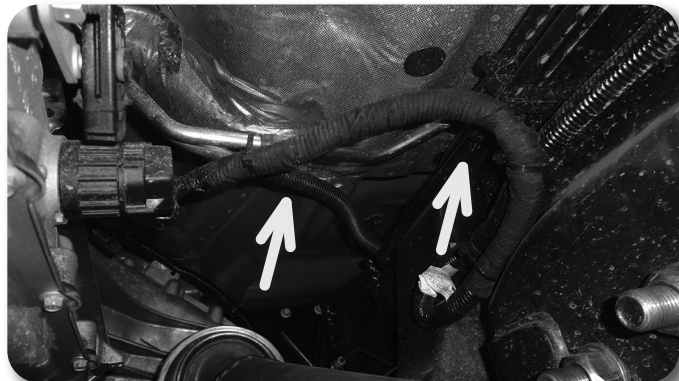


Figure 10

24. Reattach the transfer case breather into the transfer case.

25. Reinstall the front and rear driveshafts with the factory hardware and thread locker. Line up the marks for orientation of the driveshafts. Tighten the rear driveshaft bolts to 76 ft-lbs. Tighten the front driveshaft bolts at the axle to 26 ft-lbs and at the transfer case to 92 ft-lbs.
26. Install the new cross member with the factory 12mm hardware through the flanges on the frame. Tighten the factory 12mm hardware to 81 ft-lbs. The cut-out in the cross member will be on the driver's side to provide clearance to the front driveshaft, **Figure 11**.

### Step 25 Note

If the indexing ring is being installed in conjunction with a suspension lift kit, do not install the front drive shaft at this time.



Figure 11

27. Lower the transmission / transfer case so that the isolator is resting on the new cross member. Remove the hydraulic jack / support from the transmission.
28. Attach the isolator to the cross member with the factory nuts. **Figure 12**. Tighten to 85 ft-lbs.

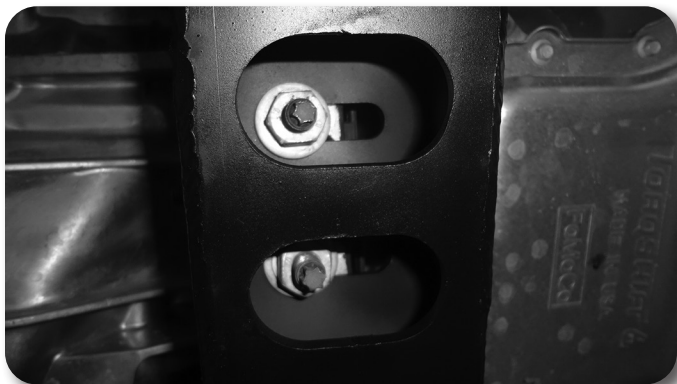


Figure 12

29. Reattach the transfer case skid plate on the passenger's side with the factory hardware.

## Step 30 Note

Hardware for the skid plate relocation is in Bolt Pack 987.

## 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.

30. Attach the transfer case skid plate relocation bracket to the driver's side with the factory hardware. Position the bracket such that it is offset towards the rear of the vehicle. Use the provided 3/8" bolt, washer, and flange lock nut to attach the transfer case skid plate to the relocation bracket, **Figure 13**. Tighten the factory hardware to 46 ft-lbs and the provided 3/8" hardware to 31 ft-lbs.

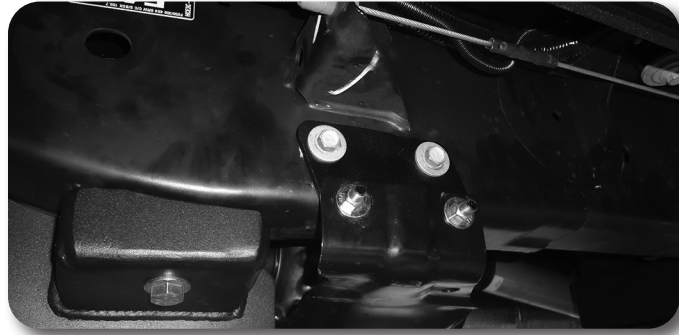


Figure 13

31. 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 to Transmission Bolts</i>	<i>41</i>
<i>Transfer Case to Indexing Ring Nuts</i>	<i>41</i>
<i>Rear Driveshaft</i>	<i>76</i>
<i>Front Driveshaft at Front Axle</i>	<i>26</i>
<i>Front Driveshaft at Transfer Case</i>	<i>92</i>
<i>Transfer Case Crossmember Bolts</i>	<i>81</i>
<i>Transfer Case Isolator to Crossmember</i>	<i>85</i>
<i>Skid Plate Relocation Factory Bolts</i>	<i>46</i>
<i>Skid Plate Relocation 3/8" Bolts</i>	<i>31</i>