

# ADVANCE ADAPTERS, INC.

P.O. Box 247, 4320 Aerotech Center Way  
Paso Robles, CA 93447  
Telephone: (800) 350-2223 Fax: (805) 238-4201

P/N: 50-9925

New Item: (12/01)  
PAGE: 1 OF 3  
Page Rev. Date: 07-08-04

## ZF 5 SPEED and C6 TO DANA 300 TRANSFER CASE

### KIT CONSISTS OF:

No.	Qty.	Part No.	Description
1.	1	51-8603	CASTING
2.	1	52-2910	31 SPLINE INPUT SHAFT
3.	1	716308	BEARING (#6209)
4.	2	716517	GASKET
5.	1	716749	NATIONAL SEAL (471870)
6.	6	723722	3/8" -16 x 1-1/4" H.H.C.S.
7.	6	723731	3/8" -16 x 1" S.H.C.S.
8.	1	JP001	JEEP INSTRUCTION MANUAL

### NOTE:

The ZF and C6 output shaft must be shortened to a .250" stickout past the stock tailhousing.

### INSTALLATION INSTRUCTIONS:

This kit is designed to use a ZF or C6 4X4 transmission to a Dana 300 transfer case.

1. Starting at the Dana 300 transfer case, remove the 6 socket head bolts from the aluminum index hub on the front side the transfer case.
2. Using the two slots on the side of this retainer, you will need to pry the retainer out of the transfer case. This retainer assembly pilots into the rear output shaft of this transfer case. If the retainer assembly seems tight to remove, try spinning the rear output shaft.



3. Once the retainer is removed, you will need a pair of snap ring pliers to remove the snap ring that retains the drive gear to the input shaft. Remove the snap ring and the drive gear from the input shaft. The aluminum retainer should now have the bearing, input shaft, seal, and a snap ring holding the bearing into the retainer. This snap ring must also be removed to allow the bearing and input shaft to be pressed out of the index housing.

4. The seal will also be required to be pressed out of the index retainer. The retainer should now be empty.



**SPECIAL NOTE:** The components packaged in this kit have been assembled and machined for specific types of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand the modifications or changes that will be required to complete your conversion, we strongly recommend that you contact our sales department for more information. This Instruction Sheet is only to be used for the assembly of Advance Adapter components. We recommend that a service manual pertaining to your vehicle be obtained for specific torque vales, wiring diagrams and other related equipment. These manuals are normally available at automotive dealerships and parts stores.

# ADVANCE ADAPTERS, INC.

P.O. Box 247, 4320 Aerotech Center Way  
Paso Robles, CA 93447  
Telephone: (800) 350-2223 Fax: (805) 238-4201

P/N: 50-9925

New Item: (12-01)  
PAGE: 2 OF 3  
Page Rev. Date: 07-08-04

## ZF 5 SPEED and C6 TO DANA 300 TRANSFER CASE

5. Install the new bearing onto the new input shaft. Install both components into the stock retainer and install the stock snap ring.
6. Install the input drive gear onto the input shaft and retain it with the stock snap ring. Make sure the gear is installed so that the cogged side of the gear is facing away from the bearing.
7. Install the new seal provided in the kit with *the open side towards the transfer case*.
8. Apply Loctite 515 or equivalent sealant to the retainer surface and install into the Dana 300 transfer case. Make sure the pocket bearing is installed in the Dana 300 output shaft.
9. Bolt the retainer to the transfer case using the stock bolts. Torque to 10 ft./lbs.
10. This kit fits the ZF & C6 4WD transmission only. The stock 4WD output shaft should have a stickout of .710" from the rear of the transmission. This shaft must be shortened to a .250" stickout.
11. Install a silicone sealant on both sides of the gasket and install the transfer case to the adapter. **Note:** The gasket will only fit onto the transfer case in one rotation.
12. This adapter allows you the option to rotate the transfer case in 4 rotation options. Once the desired rotation is obtained, secure the transmission to the adapter using the hex head bolts.

If for any reason the two bolt surfaces do not slide together, **DO NOT FORCE OR PULL TOGETHER** with the bolts. If you have any questions, please call 1-800-350-2223 for technical assistance.



AA shaft & bearing with stock parts



AA parts & stock parts assembled.

**SPECIAL NOTE:** The components packaged in this kit have been assembled and machined for specific types of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand the modifications or changes that will be required to complete your conversion, we strongly recommend that you contact our sales department for more information. This Instruction Sheet is only to be used for the assembly of Advance Adapter components. We recommend that a service manual pertaining to your vehicle be obtained for specific torque values, wiring diagrams and other related equipment. These manuals are normally available at automotive dealerships and parts stores.

# ADVANCE ADAPTERS, INC.

P. O. Box 247, 4320 Aerotech Center Way  
Paso Robles, CA 93447  
Telephone: (800) 350-2223 Fax: (805) 238-4201

## P/N: 50-9925

New Item: (12-01)  
PAGE: 3 OF 3  
Page Rev. Date: 07-08-04

## ZF 5 SPEED and C6 TO DANA 300 TRANSFER CASE



The Ford transmissions uses a dowel pin in the tailhousing that must be removed. The pin can either be pressed out or tapped flush with the stock housing surface.



**SPECIAL NOTE:** The components packaged in this kit have been assembled and machined for specific types of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand the modifications or changes that will be required to complete your conversion, we strongly recommend that you contact our sales department for more information. This Instruction Sheet is only to be used for the assembly of Advance Adapter components. We recommend that a service manual pertaining to your vehicle be obtained for specific torque vales, wiring diagrams and other related equipment. These manuals are normally available at automotive dealerships and parts stores.