

## GM 4L80E 4WD AUTOMATIC TO GM NP205 LONG INPUT TRANSFER CASE

## KIT CONSISTS OF:

No.	Qty	Part No.	<u>Description</u>
1.	1	51-6912	ADAPTER SPACER w/ VSS
2.	3	300617A	SCREW- RELUCTOR RING
3.	1	300619	GM VEHICLE SPEED SENSOR (TORQUE SENSOR TO 20 IN./LBS.)
4.	1	716069	RELUCTOR RING MODIFIED
5.	6	723716	STUD BOLT 3/8 -16 X 4
6.	6	723701	NUT 3/8 -16 PLATED GRD 5
7.	6	723704	LOCK WASHER 3/8 ZINC

## GM 4L80E 4 SPEED AUTOMATIC OVERDRIVE- BACKGROUND INFORMATION

The GM 4L80E has a case length of 26" and has 17 bolts for retaining the oil pan. The rear side of the transmission case will have a hex shaped bolt pattern that uses 6 bolts. There are several different lengths of output shafts that the transmission has been equipped with, but **THIS KIT REQUIRES A 4WD OUTPUT SHAFT**.

The 4L80E transmission is normally equipped with an internal reluctor ring on both the transmissions input shaft and output shaft. The computer needs both of these readings for the proper shifting and operation of this transmission. The rear reluctor ring is not always installed into the transmission. The basic rule of thumb is 4WD transmissions up to 1996 should have a rear reluctor ring in the main transmission case. All 2WD transmissions should have the rear reluctor in the main transmission case. The 1997 & newer 4WD 4L80E transmissions had a sensor provision; however, the reluctor ring in the transmission was left out. Since it is expensive to disassemble the transmission to add a reluctor ring, this kit has a vehicle speed sensor built in that can be used in place of the 4L80E Output Shaft Speed Sensor.

**Note:** The information on years and models of the 4L80E transmission mentioned in the above section is obtained from various sources. You should always verify what your transmission is equipped with before beginning a conversion with the 4L80E transmission.

## **INSTALLATION**

Install the reluctor onto the long GM input of the transfer case, if you have the short GM input we offer the long one under P/N 716044-A. The ring should slide all the way upto the ground diameter change on the input gear.

install the studs with locktight and slip the adapter on to the NP205 and verify the sensor hole lines up with the sensor that you installed on the input gear.

The sensor needs to be installed into the 51-6911 casting. Using a feeler gage, check the clearance between the sensor tip and top of the teeth on the reluctor ring. This clearance should be 0.012" +/- 0.002". This clearance may be adjusted slightly by adjusting torque used to snug the sensor. The transmission will not shift correctly if this tolerance is not correct.

Bolt the transmission adapter to the 51-6911 adapter using the nuts and lock washers

SPECIAL NOTE: The components packaged in this kit have been assembled and machined for specific type of conversions. Modifications to any of the components will void any possible warranty or return privileges. If you do not fully understand 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.