

# DIAGNOSTIC TROUBLE CODES: TRANSFER CASE MOTOR

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

**2000–96 K2500 Pickup, 1999–96 K1500 Pickup/Surburban/Tahoe, 1999 Escalade, 2002–01 Durango/Dakota, 1999–96 Yukon**

## DTC-002: Motor A or Motor B Failure

### **Description:**

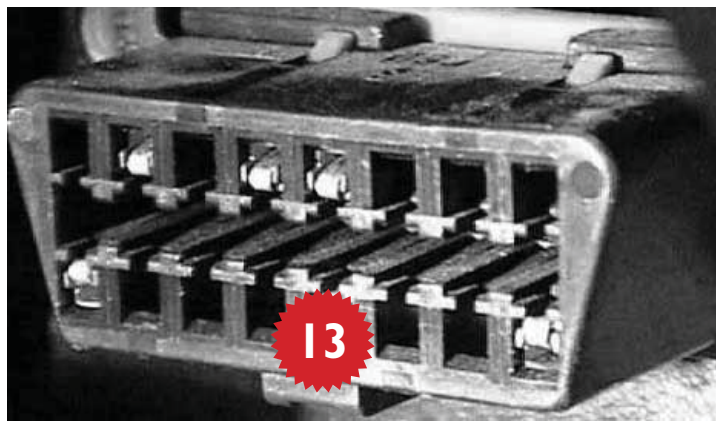
The transfer case encoder motor houses four (4) separate positions. The four positions are used to communicate with the transfer case control module (TCCM), telling it what mode (2HI, 4HI, 4LO, N) the transfer case is currently in, or if the transfer case is in between gears. While the transfer case motor is shifting to a selected position, the transfer case control module (TCCM) monitors the transfer case encoder motor circuit for the proper operating positions. While the transfer case motor is shifting to a selected position, the transfer case encoder motor is monitoring the position of the transfer case motor. If at any time the transfer case encoder motor detects a skipped position or does not follow the specified sequence, the encoder motor will set a hard encoder fault code and will default to a 2HI, 4HI, 2HI, 4LO shift pattern. The encoder motor must fail twenty five percent (25%) of the time for the transfer case control module (TCCM) to set a hard diagnostic trouble code (DTC), which would be a DTC-002.

### **How to access the diagnostic trouble code (DTC):**

The DTCs are displayed on the transfer case shift control switch. Please follow the procedure below to acquire the DTCs:

**STEP 1:** Turn the ignition off for ten (10) seconds.

**STEP 2:** Using an alligator clip or probe, connect to PIN 13 on the data link connector (DLC) and connect to a ground source. **NOTE:** The data link connector (DLC) is located under the driver side portion of the instrument panel.



Disclaimer:

Even though every attempt is made to ensure this information is complete and accurate, it is impossible to account for all possible circumstances or situations. Please consult with a qualified auto technician before attempting to perform any work you are not qualified to do. Automobiles can be hazardous to work on; be sure to take all necessary safety precautions. Failure to do so may result in property damage or personal injury. Certain motor vehicle standards and performance requirements may apply to your motor vehicle (such as Federal Motor Vehicle Safety Standards by the National Highway Traffic Safety Administration). Be sure that your work is performed in accordance with such standards and that you do not disable any motor vehicle safety feature.

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**STEP 3:** Turn the ignition to the "ON" position. **DO NOT START THE VEHICLE!**

**STEP 4:** Count the amount of flashes that the transfer case shift control switch performs.

**NOTE:** On most vehicles, there will be an initial flash to signify the start of the test and then a brief pause. After the initial pause, count how many times the switch flashes.

Once the flashes have stopped, there will be another brief pause and the diagnostic procedure will end.

## **Diagnostic trouble code (DTC) description:**

DTC-002 is an encoder circuit malfunction.

## **When to clear a DTC:**

The diagnostic trouble code (DTC) should only be erased once the encoder motor has been replaced or repaired.

## **How to clear a DTC:**

The DTC will clear once you disconnect the positive side of the battery for thirty (30) seconds and have repaired the encoder motor concern.

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