

## Manual Shifting Test

HINT: With this test, it can be determined whether the trouble lies within the electrical circuit or is a mechanical problem in the transmission.

1. DISCONNECT SOLENOID WIRE
2. INSPECT MANUAL DRIVING OPERATION

Check that the shift and gear positions correspond with the table below.

| Transmission |  |  |  |  | Transfer (Reference) |  |  |  |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- | :--- |
| Shift position | D <br> position | 2 <br> position | L <br> position | R <br> position | P <br> position | H2 <br> position | H4 <br> position | L4 <br> position |
| Gear position | O/D | 3rd | 1 st | Reverse | Pawl Lock | High Gear <br> 2W D | High Gear <br> 4WD | High Gear <br> 4WD |

HINT: If the $L, 2$ and D position gear positions are difficult to distinguish, perform the following road test.

- While driving, shift through the L, 2 and D positions. Check that the gear change corresponds to the shift position.
If any abnormality is found in the above test, the problem lies in transmission itself.

3. CONNECT SOLENOID WIRE
4. CANCEL OUT DIAGNOSTIC TROUBLE CODE (See page AT-111)

REFERENCE: Possible gear positions in accordance with solenoid operating conditions.

|  | NORMAL |  |  | NO. 1 SOLENOID MALFUNCTIONING |  |  | NO. 2 SOLENOID MALFUNCTIONING |  |  | BOTH SOLENOIDS MALFUNCTIONING |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Solenoid Valve |  | Gear Position | Solenoid Valve |  | Gear Position | Solenoid Valve |  | Gear <br> Position | Solenoid Valve |  | Gear Position |
|  | No. 1 | No. 2 |  | No. 1 | No. 2 |  | No. 1 | No. 2 |  | No. 1 | No. 2 |  |
| D position | ON | OFF | 1 st | X | ON | 3rd | ON | X | 1st | X | X | O/D |
|  | ON | ON | 2nd | X | ON | 3rd | OFF | X | O/D | X | X | O/D |
|  | OFF | ON | 3rd | X | ON | 3rd | OFF | $x$ | O/D | X | X | O/D |
|  | OFF | OFF | O/D | X | OFF | O/D | OFF | X | O/D | X | X | O/D |
| 2 position | ON | OFF | 1 st | X | ON | 3rd | ON | X | 1st | X | X | 3rd |
|  | ON | ON | 2nd | X | ON | 3rd | OFF | X | 3rd | X | X | 3rd |
|  | OFF | ON | 3rd | X | ON | 3rd | OFF | X | 3rd | X | X | 3rd |
| L position | ON | OFF | 1st | X | OFF | 1 st | ON | X | 1 st | X | X | 1st |
|  | ON | ON | 2nd | X | ON | 2nd | ON | X | 1 st | X | X | 1st |

X: Malfunctions

