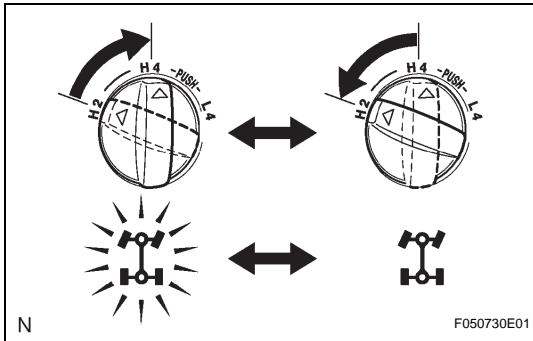


## ON-VEHICLE INSPECTION

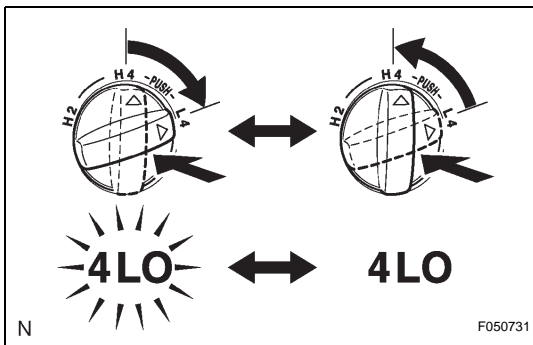
### NOTICE:

- Switch the four wheel drive control switch when the A/T shift lever is in the N position and the vehicle speed is 3 mph (5km/h) or less.
- Switch the four wheel drive control switch when the clutch start switch is turned ON and the vehicle speed is 2mph (3 km/h) or less.
- Do not change from H2 to H4 when the vehicle speed is 62 mph (100 km/h) or more.



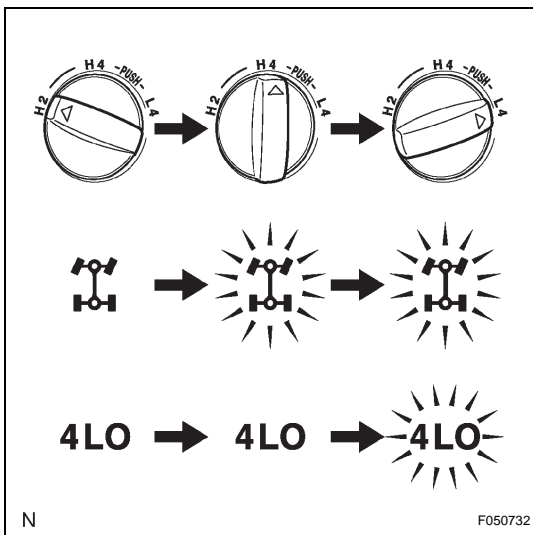
### 1. INSPECT H2 (2WD)-H4 (4WD) SHIFT

- Start the engine.
- Turn the four wheel drive control switch from the H2 position to the H4 position.
- Check that the 4WD indicator light blinks and then stays on.
- Turn the four wheel drive control switch from the H4 position to the H2 position.
- Check that the 4WD indicator light blinks and then goes off.



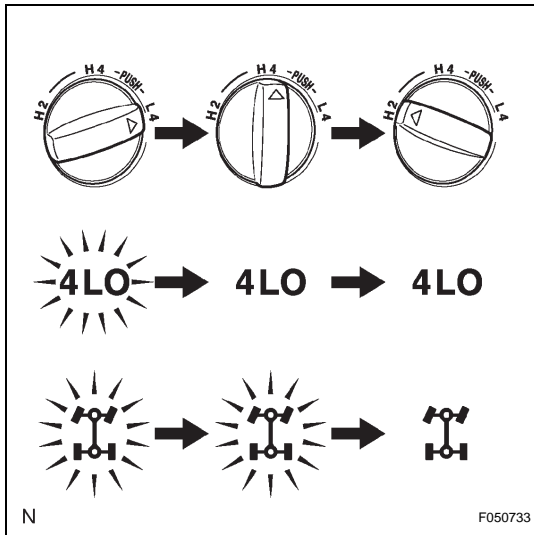
### 2. INSPECT H4 (4WD)-L4 (4WD) SHIFT

- Start the engine.
- Turn the four wheel drive control switch from the H4 position to the L4 position while pressing it.
- Check that the 4LO indicator light blinks and then stays on.
- Turn the four wheel drive control switch from the L4 position to the H4 position while pressing it.
- Check that the 4LO indicator light blinks and then goes off.



### 3. INSPECT H2 (2WD)-L4 (4WD) SHIFT

- Start the engine.
- Turn the four wheel drive control switch from the H2 position to the H4 position.
- Check that the 4WD indicator light blinks and then stays on.
- Turn the four wheel drive control switch from the H4 position to the L4 position while pressing it.
- Check that the 4LO indicator light blinks and then stays on.



**4. INSPECT L4 (4WD)-H2 (2WD) SHIFT**

- (a) Start the engine.
- (b) Turn the four wheel drive control switch from the L4 position to the H4 position while pressing it.
- (c) Check that the 4LO indicator light blinks and then goes off.
- (d) Turn the four wheel drive control switch from the H4 position to the H2 position.
- (e) Check that the 4WD indicator light blinks and then goes off.

**INSPECTION**

**1. INSPECT 4 WHEEL DRIVE CONTROL SWITCH**

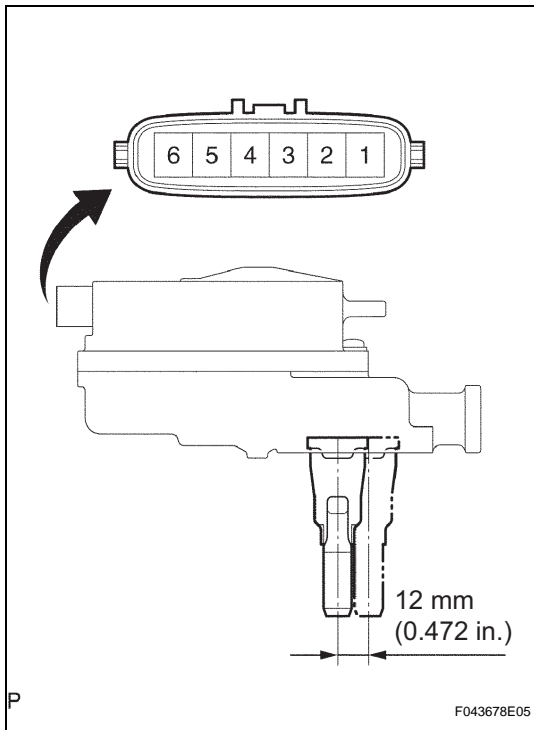
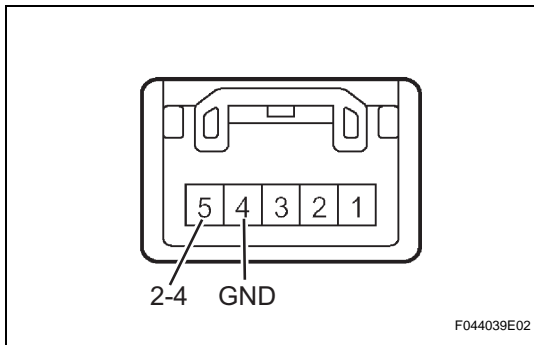
- (a) Using an ohmmeter, measure the resistance between the terminals.

Switch position	Tester connection	Specified condition
H2	5 (2-4) - 4 (GND)	Below 1Ω
H4	5 (2-4) → 4 (GND)	Below 1Ω
H4	5 (2-4) ← 4 (GND)	100 kΩ or higher

If the result is not as specified, replace the four wheel drive control switch or bulb.

**2. INSPECT DIFFERENTIAL VACUUM ACTUATOR ASSEMBLY**

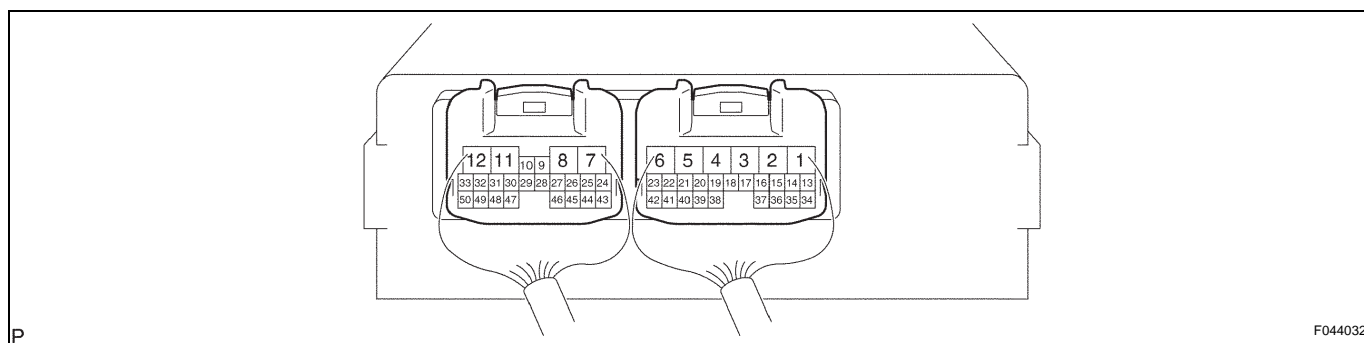
- (a) Measure the resistance between terminals 1 - 2.  
**Standard resistance:**  
**0.1 to 100 Ω**
- (b) Measure the resistance between terminals 1 or 2 and the body ground.  
**Standard resistance:**  
**5 MΩ or more**  
If the result is not as specified, replace the differential vacuum actuator assembly.
- (c) Apply the battery positive voltage between terminals 1 - 2, and check the actuator operation by sound, actuator status and resistance between terminals 3 - 4, 5 - 4 and 6 - 4.



Battery voltage applied terminal	3 - 4 terminals resistance	5 - 4 terminals resistance	6 - 4 terminals resistance	Actuator status
1 (+) - 2 (-)	Below 1 Ω	Below 1 Ω	10 kΩ or higher	Connected
1 (-) - 2 (+)	10 kΩ or higher	10 kΩ or higher	Below 1 Ω	Disconnected

**3. INSPECT FOUR WHEEL DRIVE CONTROL ECU**

- (a) Connect the wire harness side connector to the four wheel drive control ECU and inspect the wire harness side connector from the back side, as shown.



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**STANDARD VALUE OF ECU TERMINAL**

Terminals (Symbols)	Conditions	STD Voltage (V)
2 (TM1) - 1 (TM2)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Differential lock switch in OFF position</li> <li>Four wheel drive control switch H2 position → H4 position</li> </ul>	10 to 14
1 (TM2) - 2 (TM1)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Keep pressing differential lock switch for approx. 2 seconds to turn it ON</li> <li>Four wheel drive control switch L4 position → H4 position</li> </ul>	10 to 14
3 (DM1) - 4 (DM2)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>A.D.D. FREE → LOCK</li> </ul>	10 to 14 or 0 to 14 pulse generation then less than 0.5
4 (DM2) - 3 (DM1)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>A.D.D. LOCK → FREE</li> </ul>	10 to 14 or 0 to 14 pulse generation then less than 0.5
12 (GND) - Body ground	Ignition switch OFF	Below 1Ω
11 (IG) - 12 (GND)	Ignition switch ON	10 to 14
18 (DL2) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>A.D.D. LOCK → FREE</li> </ul>	1.5 or less → 10 to 14
19 (DL1) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>A.D.D. FREE → LOCK</li> </ul>	1.5 or less → 10 to 14
25 (2-4) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch L4 position → H2 position or H4 position</li> </ul>	10 to 14 → 1.5 or less
26 (SPD) - 12 (GND)	During driving	Pulse generation
28 (IND3) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H4 position → L4 position</li> </ul>	10 to 14 → 1.5 to 3.5
32 (LO) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H4 position → L4 position</li> </ul>	10 to 14 → 1.5 or less
42 (ADD) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>A.D.D. FREE → LOCK</li> </ul>	10 to 14 → 1.5 or less
23 (L4) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H2 position or H4 position → L4 position</li> </ul>	10 to 14 → 1.5 or less
38 (4WD) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H2 position → H4 position</li> </ul>	10 to 14 → 1.5 or less
39 (TL3) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H2 position → L4 position</li> </ul>	10 to 14 → 0.88 or less
40 (TL2) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H2 position → H4 position</li> </ul>	10 to 14 → 0.88 or less
41 (TL1) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H2 position → H4 position or L4 position</li> </ul>	0.88 or less → 10 to 14
45 (IND1) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Four wheel drive control switch H2 position → H4 position or L4 position</li> </ul>	10 to 14 → 0 to 3.5
48 (N) - 12 (GND)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Transmission shift lever other position → N position</li> </ul>	1.5 or less → 10 to 14

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Terminals (Symbols)	Conditions	STD Voltage (V)
49 (MTN) - 12 (GND)	<ul style="list-style-type: none"><li>• Ignition switch ON</li><li>• Clutch start switch OFF position → ON position</li></ul>	10 to 14 → 1.5 or less