

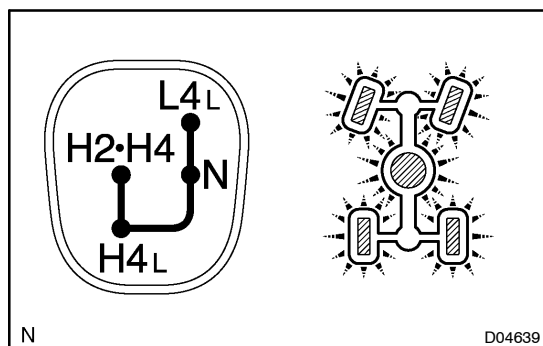
## INSPECTION

### 1. INSPECT H2 ↔ H4 SHIFT

- Start the engine, and shift the transfer shift lever to the "H2•H4" position.
- Check that the 4WD indicator light comes on when the 2-4 selector switch is in "ON" position. Check that the light goes off when the switch is in "OFF" position.

#### HINT:

- If the light does not light up, even though the switch has been turned ON, the vehicle should be moved back and forth.
- If switching is not completed after 3 seconds of shift operation, the 4WD indicator light and center diff. lock indicator light flash.

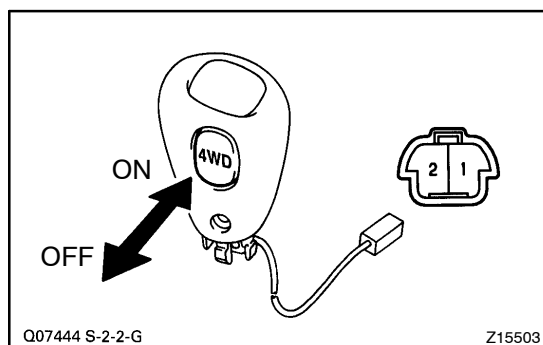


### 2. INSPECT H2•H4 ↔ H4L OR L4L SHIFT

- Start the engine, and the 2-4 selector switch turns to "OFF".
- Check that the 4WD indicator light or center diff. lock indicator light comes on when the transfer shift lever is shifted to the "H4L" or "L4L" position. Check that the light goes off when the transfer shift lever is shifted to the "H2•H4" position.

#### HINT:

- Inspection should be performed with the vehicle stopped, and shift lever in "N" position.
- If switching is not completed after 3 seconds of shift operation, the 4WD indicator light and center diff. lock indicator light flash.



### 3. INSPECT 2-4 SELECTOR SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
OFF	1 – 2	No continuity
ON	1 – 2	Continuity

If continuity is not as specified, replace the shift lever knob.

**Actuator Side:**

1e-6-2-C

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**4. INSPECT ACTUATOR RESISTANCE**

- (a) Using an ohmmeter, measure the resistance between terminals 2 and 3.

**Standard resistance: 0.3 – 100  $\Omega$**

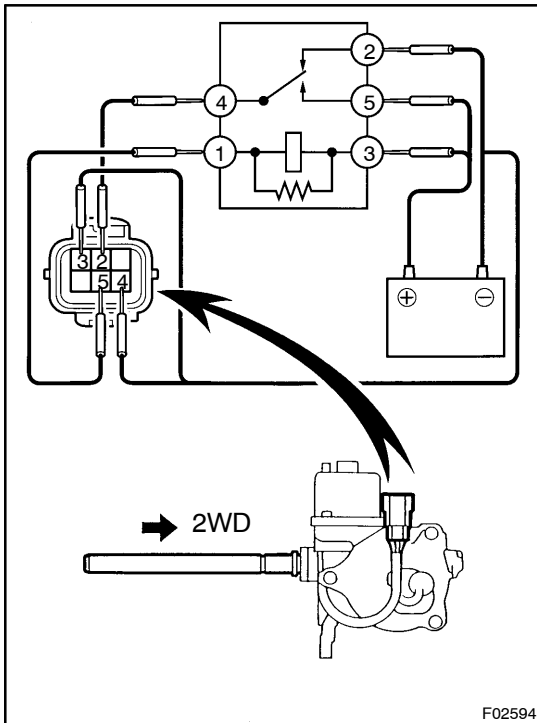
- (b) Using an ohmmeter, measure the resistance between terminals 2 or 3 and body ground.

**Standard resistance: More than 0.5 M $\Omega$**

If resistance value is not as specified, replace the actuator assembly.

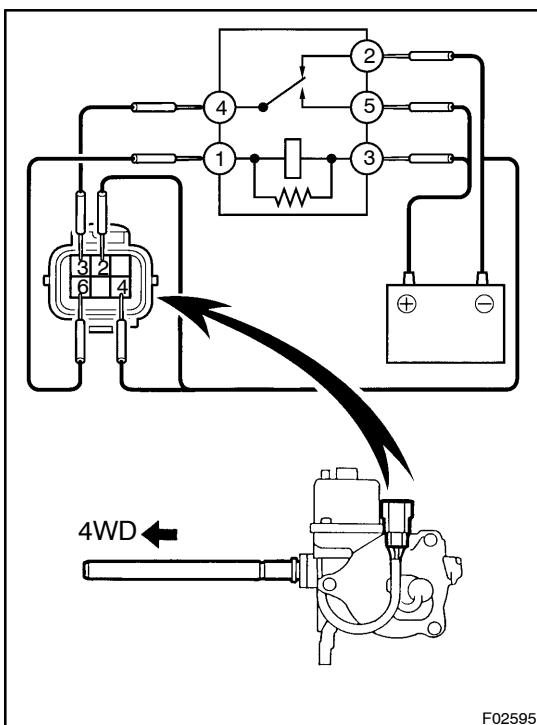
**5. INSPECT ACTUATOR OPERATION**

- (a) Connect lines via a relay as shown in the illustration, then check that the actuator fork shaft moves to 2WD position.

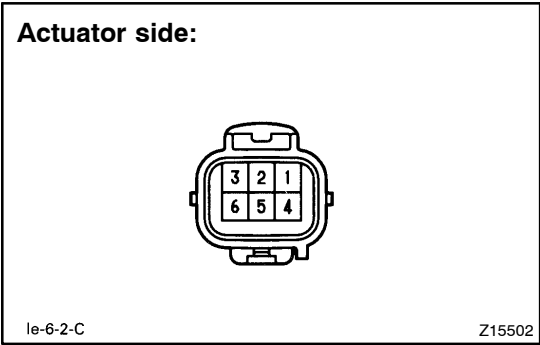
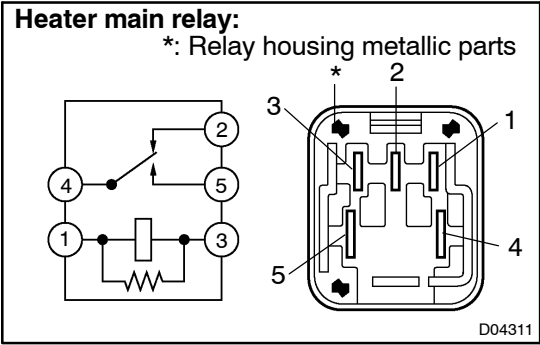


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- (b) Connect lines via a relay as shown in the illustration, then check that the actuator fork shaft moves to 4WD position.



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**HINT:**  
When inspecting the operation described on the previous page, use a heater main relay.

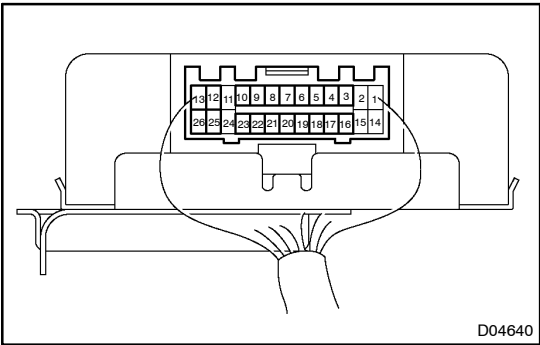
**NOTICE:**  
**Connect the terminals being careful not to touch the neighboring terminals or metallic parts of relay housing.**

- 6. INSPECT LIMIT SWITCH CONTINUITY**
- (a) Start the engine and raise the vehicle.
  - (b) With the actuator connector connected, shift the transfer shift lever and after checking the operating sound, disconnect the connector and inspect the continuity between each terminal.

**HINT:**  
When shifting the transfer shift lever, connect the connectors.

Shift position	Tester connection	Specified condition
H2 position (2WD)	1 – 4	No continuity
	1 – 5	No continuity
	1 – 6	Continuity
	4 – 5	No continuity
	4 – 6	No continuity
	5 – 6	No continuity
H4 position (4WD/center diff. FREE)	1 – 4	Continuity
	1 – 5	No continuity
	1 – 6	No continuity
	4 – 5	No continuity
	4 – 6	No continuity
	5 – 6	No continuity
L4L or H4L position (4WD/center diff. LOCK)	1 – 4	No continuity
	1 – 5	Continuity
	1 – 6	No continuity
	4 – 5	No continuity
	4 – 6	No continuity
	5 – 6	No continuity

- 7. INSPECT VEHICLE SPEED SENSOR**  
(See page [BE-42](#))
- 8. INSPECT 4WD INDICATOR LIGHT**  
Check the combination meter (See page [BE-2](#)).



- 9. INSPECT 4WD CONTROL ECU**  
Connect the wire harness side connector to the 4WD control ECU and inspect the wire harness side connector from the back side, as shown.

## STANDARD VALUE OF ECU TERMINAL

Terminals (Symbols)	Condition	STD Voltage (V)
3 (SPD) – 25 (GND)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• During driving</li> </ul>	Repeatedly changes from below 0.5 or less to 4 or more
4 (2-4) – 25 (GND)	2-4 selector switch OFF → ON	10 – 14 → 2 or less
5 (N) – 25 (GND)	2WD (2-4 selector switch OFF and transfer shift lever H position) → Transfer shift lever N position	10 – 14 → 2 or less
6 (PI) – 25 (GND)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• Transfer shift lever H4L position</li> </ul>	2 or less
7 (DL) – 25 (GND)	Transfer shift lever H2•H4 position → H4L or L4L position	10 – 14 → 2 or less
8 (TL3) – 25 (GND)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• 2WD (2-4 selector switch OFF and transfer shift lever H2•H4 position) → Transfer shift lever H4L position</li> </ul>	0.5 or less → 10 – 14 then 0.5 (after 5 second)
9 (TLI) – 25 (GND)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• 4WD (2-4 selector switch ON and transfer shift lever H2•H4 position) → Diff. lock (transfer shift lever H4L or L4L position)</li> </ul>	0.5 or less → 10 – 14 then 0.5 (after 5 second)
10 (V4) – 25 (GND)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• 4WD (2-4 selector switch ON, transfer shift lever H4L or L4L position)</li> </ul>	10 – 14
12 (IG) – 25 (GND)	Ignition switch ON	10 – 14
13 (TM1) – 26 (TM2)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• 2WD</li> </ul>	0.5 or less
	4WD (2-4 selector switch ON, transfer shift lever L4L or H4L position)	10 – 14 (for about 5 second) then less than 0.5
	2WD (2-4 selector switch OFF and transfer shift lever H2•H4 position)	10 – 14 (for about 5 second) then less than 0.5
16 (C/C) – 25 (GND)	When 4WD indicator light and center diff. lock indicator light does not flash	10 – 14
	When 4WD indicator light and center diff. lock indicator light flash	1 or less
18 (P2) – 25 (GND)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• Transfer shift lever H4L position</li> </ul>	2 or less
19 (ADD) – 25 (GND)	4WD (2-4 selector switch ON, transfer shift lever H4L or L4L position)	2 or less
20 (IND2) – 25 (GND)	<ul style="list-style-type: none"> <li>• Engine running</li> <li>• Diff. lock (transfer shift lever H4L, L4L position)</li> </ul>	10 – 14 → 1.2 or less
21 (IND1) – 25 (GND)	<ul style="list-style-type: none"> <li>• Engine running</li> <li>• 2WD (2-4 selector switch OFF and transfer shift lever H2•H4 position) → 4WD (2-4 selector switch ON)</li> </ul>	10 – 14 → 1.2 or less
22 (TL2) – 25 (GND)	<ul style="list-style-type: none"> <li>• Engine running</li> <li>• Diff. lock (transfer shift lever H4L or L4L position) → 2WD (2-4 selector switch OFF and transfer shift lever H2•H4 position)</li> </ul>	0.5 or less → 10 – 14 then 0.5 (after 5 second)
23 (V2) – 25 (GND)	<ul style="list-style-type: none"> <li>• Ignition switch ON</li> <li>• 2WD (2-4 selector switch OFF and transfer shift lever H2•H4 position)</li> </ul>	0.5 or less → 10 – 14 then 0.5 (after 5 second)
25 (GND) – Body ground	Ignition switch OFF	Continuity