## ON-VEHICLE INSPECTION

## 1. TRANSFER SYSTEM <br> NOTICE:

- To shift from H2 to H4, reduce the vehicle's speed to less than $50 \mathrm{mph}(80 \mathrm{~km} / \mathrm{h})$ and move the transfer shift lever.
- To shift from H4 to L4, stop the vehicle, move the shift lever to $\mathbf{N}$ and then move the transfer shift lever.
- To shift from L4 to H4, stop the vehicle, move the shift lever to $\mathbf{N}$ and then move the transfer shift lever.


2. CHECK H2 (2WD) - H4 OR L4 (4WD) SHIFT
(a) Start the engine.
(b) Move the transfer shift lever from the H 2 position to the H 4 or L 4 position.
(c) Check that the 4WD indicator light illuminates.
(d) Move the transfer shift lever from the H 4 or L 4 position to the H 2 position.
(e) Check that the 4WD indicator light turns off. HINT:

- If the indicator light does not turn off when you move the transfer shift lever into H 2 , drive straight ahead while accelerating or decelerating, or drive in reverse.
- If a shift remains incomplete for 30 minutes, the 4WD indicator light will begin flashing.


## 3. CHECK 4WD CONTROL ECU


(a) Measure the voltage and resistance of the connector.

## Standard voltage

| Tester Connection | Wiring Color | Condition | Specified Condition |
| :---: | :---: | :---: | :---: |
| F14-10 (IG) - F14-5 (GND) | B-Y - W-B | Ignition switch ON | 11 to 14 V |
| F14-7 (IND1) - F14-5 (GND) | W-R - W-B | Ignition switch ON and transfer <br> shift lever position H2 | 11 to 14 V |
| F14-7 (IND1) -F14-5 (GND) | W-R - W-B | Ignition switch ON and transfer <br> shift lever position H4 or L4 | 0 to 3.5 V |


| Tester Connection | Wiring Color | Condition | Specified Condition |
| :---: | :---: | :---: | :---: |
| F14-8 (ADD) - F14-5 (GND) | R-B - W-B | Ignition switch ON and A.D.D. NOT LOCKED | 11 to 14 V |
| F14-8 (ADD) - F14-5 (GND) | R-B - W-B | Ignition switch ON and A.D.D. LOCKED | Below 1.5 V |
| F14-6 (4WD) - F14-5 (GND) | B - W-B | Ignition switch ON and transfer shift lever position H2 | 11 to 14 V |
| F14-6 (4WD) - F14-5 (GND) | B - W-B | Ignition switch ON and transfer shift lever position H4 or L4 | Below 1.5 V |
| F14-1 (DL1) - F14-5 (GND) | R-Y - W-B | Ignition switch ON and A.D.D. NOT LOCKED | Below 1.5 V |
| F14-1 (DL1) - F14-5 (GND) | R-Y - W-B | Ignition switch ON and A.D.D. LOCKED | 11 to 14 V |
| F14-2 (DL2) - F14-5 (GND) | R-W - W-B | Ignition switch ON and A.D.D. LOCKED | Below 1.5 V |
| F14-2 (DL2) - F14-5 (GND) | R-W - W-B | Ignition switch ON and A.D.D. NOT LOCKED | 11 to 14 V |
| F14-4 (DM1) - F14-3 (DM2) | Y - R | Ignition switch ON and A.D.D. NOT LOCKED $\rightarrow$ LOCKED | 11 to 14 V or 0 to 14 V pulse generation $\rightarrow$ less than 0.5 V |
| F14-3 (DM2) - F14-4 (DM1) | $\mathbf{R - Y}$ | Ignition switch ON and A.D.D. LOCKED $\rightarrow$ NOT LOCKED | 11 to 14 V or 0 to 14 V pulse generation $\rightarrow$ less than 0.5 V |

Standard resistance

| Tester Connection | Wiring Color | Condition | Specified Condition |
| :---: | :---: | :---: | :---: |
| F14-5 (GND) - Body ground | W-B - Body ground | Always | Below $1 \Omega$ |

If the result is not as specified, the 4WD control ECU may have a malfunction.

