

Actuator Side:

le-6-2-C Z15502


2003 TOYOTA TACOMA (RM1002U)

## INSPECTION

1. INSPECT 2-4 SELECTOR SWITCH CONTINUITY

| Switch position | Tester connection to <br> terminal number | Specified condition |
| :---: | :---: | :---: |
| OFF | $1-2$ | No continuity |
| ON | $1-2$ | Continuity |

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

## 2. 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 $0.5 \mathrm{M} \Omega$
If resistance value is not as specified, replace the actuator assembly.

## 3. INSPECT ACTUATOR OPERATION

(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 3 , then check that the actuator fork shaft moves to 2WD position.
(b) Connect the positive (+) lead from the battery to terminal 3 and the negative (-) lead to terminal 2 , then check that the actuator fork shaft moves to 2WD position.
If operation is not as specified, replace the actuator assembly.
4. INSPECT LIMIT SWITCH CONTINUITY
(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 3.
(b) Connect the positive (+) lead from the ohmmeter to terminal 5 and the negative ( - ) lead to terminal 4.
(c) Check that there is continuity between terminals 4 and 5 .

(d) Connect the positive (+) lead from the battery to terminal 3 and the negative $(-)$ lead to terminal 2.
(e) Connect the positive (+) lead from the ohmmeter to terminal 6 and the negative ( - ) lead to terminal 4.
(f) Check that there is continuity between terminal 4 and 6. If continuity is not as specified, replace the actuator assembly.
5. INSPECT NO. 1 VEHICLE SPEED SENSOR (See page BE-39)
6. INSPECT 4WD INDICATOR LAMP

Check the combination meter.
(See page BE-37)

From Back Side:


## 7. w/ One touch 2-4 selector system:

 INSPECT 4WD CONTROL ECUConnect the wire harness side connector to the ECU and inspect wire harness side connector from the back side, as shown.

## STANDARD VALUE OF ECU TERMINAL

| Terminals (Symbols) | Condition | STD Voltage (V) |
| :---: | :---: | :---: |
| 1 (IND) - 8 (GND) | - Engine Running <br> - 2WD $\rightarrow$ 4WD (4WD Indicator light light up) | $12 \sim 16 \rightarrow 1.2$ or less |
| 3 (M1) - 2 (M2) | - Ignition switch ON <br> - 2WD $\rightarrow$ 4WD (2-4 Selector switch ON or transfer shift lever L4 position) | 0.5 or less $\rightarrow 10 \sim 14$ (for about 5 second) then less than 0.5 |
|  | 4WD (2-4 Selector switch ON or transfer shift lever L4 position) $\rightarrow 2$ WD ( $2-4$ selector switch OFF and transfer shift lever H position) | $10 \sim 14$ <br> (for about 5 second) then less than 0.5 |
|  | 2WD (2-4 selector switch OFF and transfer shift lever H position) | $10 \sim 14$ <br> (for about 5 second) then less than 0.5 |
| 4 (V4)-8 (GND) | - Ignition switch ON <br> - 4WD (2-4 Selector switch ON and transfer shift lever H position or 2-4 selector switch OFF and transfer shift lever L4 position) <br> - A.D.D. VSV Temp. $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ | 9 or less (after 0.1 second) |
|  | - Ignition switch ON <br> - 4WD (2-4 Selector switch ON and transfer shift lever H position or 2-4 selector switch OFF and transfer shift lever L4 position) <br> - A.D.D. VSV Temp. $120^{\circ} \mathrm{C}\left(248{ }^{\circ} \mathrm{F}\right)$ | 13 or less (after 0.1 second) |

TRANSFER - ONE TOUCH 2-4 SELECTOR SYSTEM

| 5 (SPD) - 8 GND) | - Ignition switch ON <br> - During driving | Repeatedly changes from below 0.5 or less to 4 or more |
| :---: | :---: | :---: |
| 6 (4WD)-8 (GND) | - Ignition switch ON <br> - 4WD (2-4 Selector switch ON and transfer shift lever H position or 2-4 selector switch OFF and transfer shift lever L4 position) | 2 or less |
| 8 (GND) - Body Ground | Constant | Continuity |
| 9 (RL-2) - 8 (GND) | - Ignition switch ON <br> - 4WD ( $2-4$ selector switch ON or transfer shift lever L4 position) $\rightarrow$ 2WD (2-4 selector switch OFF and transfer shift lever H position) | 0.5 or less $\rightarrow 10 \sim 14$ then 0.5 (after 5 second) |
| 10 (RL-1)-8 (GND) | - Ignition switch ON <br> - 2WD (2-4 selector switch OFF and transfer shift lever H position) $\rightarrow$ 4WD (2-4 selector switch ON or transfer shift lever L4 position) | 0.5 or less $\rightarrow 10 \sim 14$ then 0.5 (after 5 second) |
| 11 (V2) - 8 (GND) | - Ignition switch ON <br> - 2WD (2-4 selector switch OFF and transfer shift lever H position) <br> - A.D.D. VSV Temp. $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ | 9 or less (after 0.1 second) |
|  | - Ignition switch ON <br> - 2WD ( $2-4$ selector switch OFF and transfer shift lever H position) <br> - A.D.D. VSV Temp. $120^{\circ} \mathrm{C}\left(248^{\circ} \mathrm{F}\right)$ | 13 or less (after 0.1 second) |
| 14 (L4) - 8 (GND) | Transfer shift lever H2 (2-4 selector switch OFF and transfer shift lever H position) $\rightarrow$ L4 | $10 \sim 14 \rightarrow 0.5$ or less |
| 15 (2-4) - 8 (GND) | 2-4 selector switch OFF $\rightarrow$ ON | 10~14 $\rightarrow 2$ or less |
| 16 (IG) - 8 (GND) | Constant | 10~14 |

