# **PROBLEM SYMPTOMS TABLE**

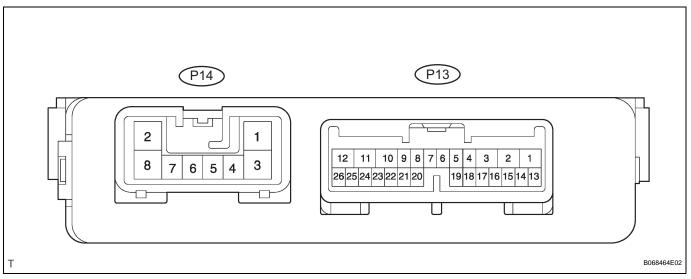
| Symptom                           | Suspected area                    | See page |
|-----------------------------------|-----------------------------------|----------|
| Back door closer does not operate | PBD, ECU-B NO.1, ECU-IG NO.1 fuse | -        |
|                                   | Back door lock motor circuit      | ED-76    |
|                                   | Back door courtesy switch circuit | ED-144   |
|                                   | Back door latch switch circuit    | ED-46    |
|                                   | Instrument panel J/B (Body ECU)   | -        |
|                                   | Power back door ECU               | -        |



# **TERMINALS OF ECU**

#### 1. CHECK POWER BACK DOOR ECU

(a) Disconnect the P13 and P14 ECU connectors and measure the voltage and resistance according to the value(s) in the table below.



### Standard voltage and resistance

| _                              |                   |   |  |  |
|--------------------------------|-------------------|---|--|--|
| Symbols<br>(Terminal No.)      | Wiring Color      | Terminal Description  | Condition                              | Specified Condition                                    |
| ECUB (P13-10) - Body<br>ground | BR - Body ground  | ECU (ECUB) power supply                                     | Constant                               | 10 to 14 V   |
| B (P14-2) - Body ground        | Y - Body ground   | +B (ECUB) power supply                                      | Constant                               | 10 to 14 V   |
| GND (P14-8) - Body<br>ground   | W-B - Body ground | Ground  | Constant                               | Below 1 Ω  |
| IG (P13-9) - Body ground       | GR - Body ground  | Ignition switch input                                       | Ignition switch<br>OFF → ON            | Below 1 V → 10 to 14 V                                 |
| CTYE (P13-7) - Body<br>ground  | P - Body ground   | Back door courtesy switch input                             | Back door<br>CLOSED → OPEN             | 10 k $\Omega$ or higher $\rightarrow$ Below 1 $\Omega$ |
| CTYO (P13-19) - Body<br>ground | BR - Body ground  | Back door courtesy switch output                            | Back door<br>CLOSED → OPEN             | 10 k $\Omega$ or higher $\rightarrow$ Below 1 $\Omega$ |
| HSW (P13-3) - Body<br>ground   | GR - Body ground  | Power back door opener switch (outside handle switch) input | Power back door opener switch OFF → ON | 10 k $\Omega$ or higher $\rightarrow$ Below 1 $\Omega$ |

#### HINT:

If the result is not as specified, there may be a malfunction on the wire harness side.

(b) Reconnect the ECU connectors and measure the voltage according to the value(s) in the table below. **Standard voltage** 



| Symbols<br>(Terminal No.)     | Wiring Color     | Terminal Description                              | Condition   | Specified Condition                      |
|-------------------------------|------------------|---|---|--|
| POS (P13-21) - Body<br>ground | LG - Body ground | Back door lock position switch input              | $\begin{array}{c} \text{Back door OPEN} \rightarrow \\ \text{Closer in operation} \rightarrow \\ \text{CLOSED} \end{array}$ | Below 1 V →<br>10 to 14 V →<br>Below 1 V |
| FUL (P13-18) - Body<br>ground | V - Body ground  | Back door lock full-latch switch input            | Back door CLOSED → OPEN   | 10 to 14 V →<br>Below 1 V                |
| HAF (P13-8) - Body<br>ground  | R - Body ground  | Back door lock<br>Secondary-latch switch<br>input | $\begin{array}{c} \text{Back door OPEN} \rightarrow \\ \text{Closer in operation} \rightarrow \\ \text{CLOSED} \end{array}$ | Below 1 V →<br>10 to 14 V →<br>Below 1 V |

| Symbols<br>(Terminal No.)     | Wiring Color    | Terminal Description                                     | Condition  | Specified Condition  |
|-------------------------------|-----------------|--|--|--|
| DC+ (P13-12) - Body<br>ground | G - Body ground | Back door lock closer<br>motor drive output<br>(Close)   | Back door OPEN → Not completely closed → Motor in normal rotation → Motor in reverse rotation → Operation completed (Back door CLOSED) | Below 1 V → Below 1 V → 10 to 14 V → Below 1 V → Below 1 V   |
| DC- (P13-11) - Body<br>ground | B - Body ground | Back door lock closer<br>motor drive output<br>(Release) | Back door OPEN → Not completely closed → Motor in normal rotation → Motor in reverse rotation → Operation completed (Back door CLOSED) | Below 1 V $\rightarrow$ Below 1 V $\rightarrow$ Below 1 V $\rightarrow$ 10 to 14 V $\rightarrow$ Below 1 V |

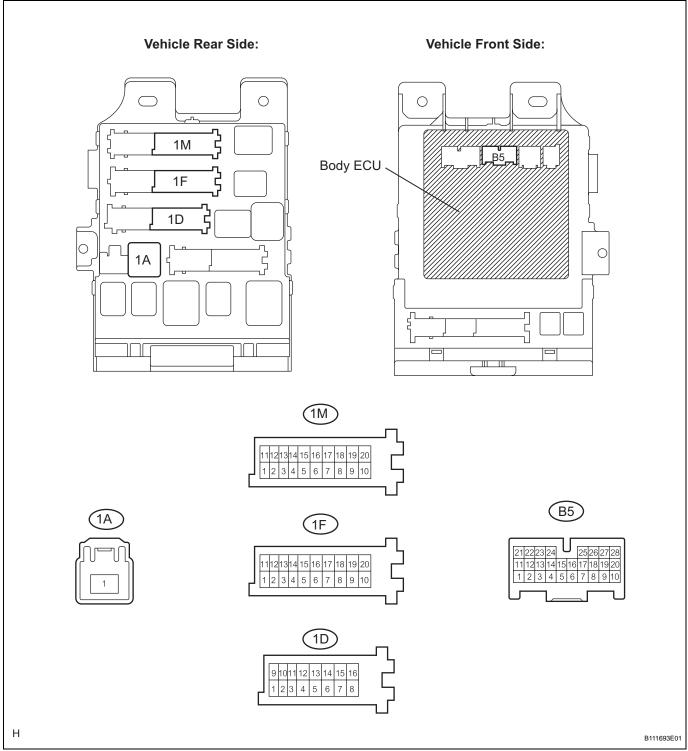
#### HINT:

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



## 2. CHECK INSTRUMENT PANEL J/B ASSY (BODY ECU)

(a) Disconnect the 1A, 1D, 1F, 1M and B5 connectors.



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(b) Measure the voltage and resistance according to the value(s) in the table below.

#### Standard voltage and resistance

| Symbols<br>(Terminal No.)     | Wiring Color    | Terminal Description   | Condition | Specified Condition |
|-------------------------------|-----------------|------------------------|-----------|---------------------|
| BECU (1D-10) - Body<br>ground | W - Body ground | +B (BECU) power supply | Constant  | 10 to 14 V          |

| Symbols<br>(Terminal No.)     | Wiring Color      | Terminal Description                                   | Condition                  | Specified Condition                                    |
|-------------------------------|-------------------|--|----------------------------|--|
| ALTB (1D-16) - Body<br>ground | W - Body ground   | +B (power system,<br>generator system)<br>power supply | Constant                   | 10 to 14 V   |
| BATB (1A-1) - Body<br>ground  | B - Body ground   | +B (power system,<br>battery system) power<br>supply   | Constant                   | 10 to 14 V   |
| GND1 (1F-10) - Body<br>ground | W-B - Body ground | Ground   | Constant                   | Below 1 Ω  |
| GND2 (1M-9) - Body<br>ground  | W-B - Body ground | Ground   | Constant                   | Below 1 Ω  |
| BCTY (B5-25) - Body<br>ground | P - Body ground   | Back door courtesy switch input                        | Back door<br>CLOSED → OPEN | 10 k $\Omega$ or higher $\rightarrow$ Below 1 $\Omega$ |

### HINT:

If the result is not as specified, there may be a malfunction on the wire harness side.

