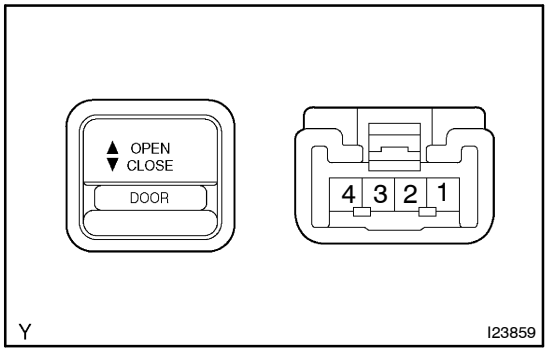
BE2B8–01

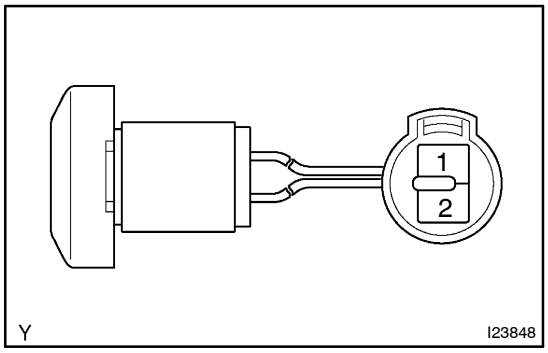
INSPECTION



1. INSPECT AUTOMATIC DOOR CONTROL SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
OPEN	1 – 4	Continuity
NEUTRAL	–	No continuity
CLOSE	2 – 4	Continuity

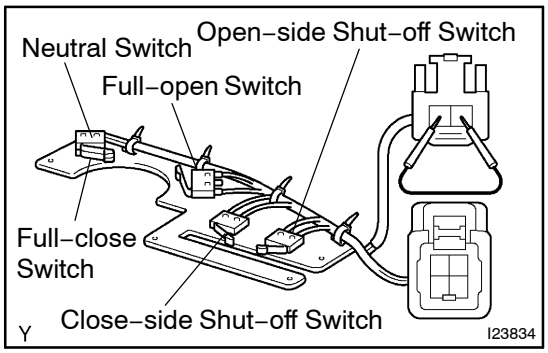
If the continuity is not as specified, replace the switch.



2. Australia and Hong Kong: INSPECT AUTOMATIC DOOR EMERGENCY SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
Free	–	No continuity
Push	1 – 2	Continuity

If the continuity is not as specified, replace the switch.



3. INSPECT AUTOMATIC DOOR SWITCH CONTINUITY

(a) Connect the 2–polarities connector.

(b) Check the continuity between terminals 1 and 2 when each switch is operated.

Standard:
Full–close switch ON ..... Continuity
Close–side shut–off switch ON ..... Continuity
Except above.....No continuity

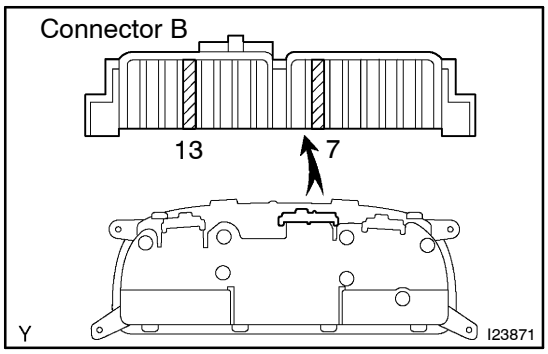
(c) Check the continuity between terminals 2 and 3 when each switch is operated.

Standard:
Full–open switch ON ..... Continuity
Open–side shut–off switch ON ..... Continuity
Except above ..... No continuity

(d) Check the continuity between terminals 2 and 4 when each switch is operated.

Standard:
Neutral switch ON ..... Continuity
Except above ..... No continuity

If the continuity is not as specified, replace the switch.

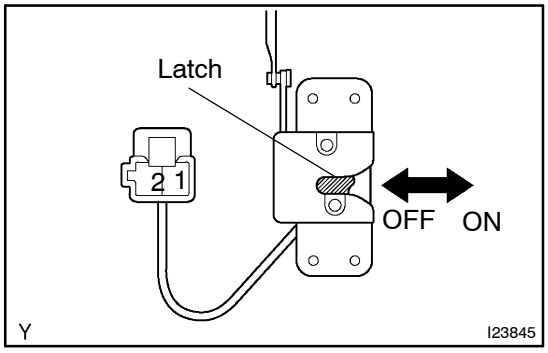


4. INSPECT SPEED SENSOR CONTINUITY

(a) Remove the speed sensor in the transmission side.

(b) Check the voltage between terminals 7 and 13 of the connector B in the back side of the combination meter while turning the speed sensor shaft slowly.

Standard: While the shaft is turning around, a switch of ”HI” and ”LO” repeats 4 times in 1 rotation.

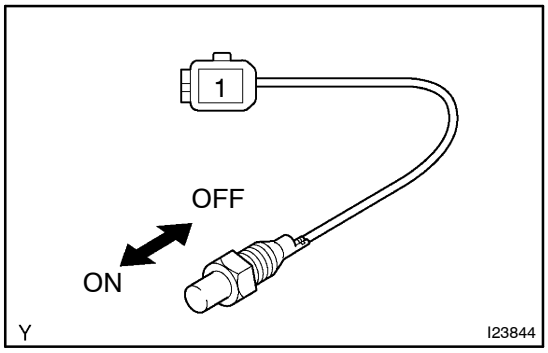


5. INSPECT CENTER DOOR FRONT COURTESY SWITCH CONTINUITY

(a) Check that continuity exists between the terminals with the switch ON (Latch released: door opens).

(b) Check that no continuity exists between the terminals with switch OFF (Latch pushed in: door closes).

If the operation is not as specified, replace the switch.

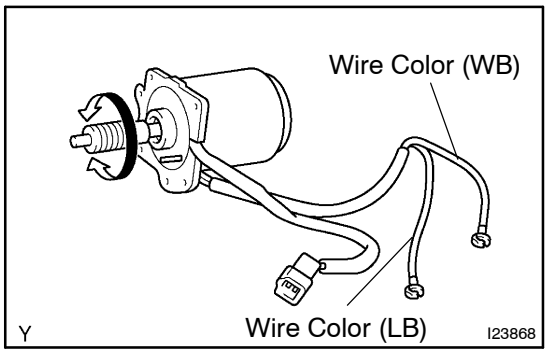


6. INSPECT CENTER DOOR REAR COURTESY SWITCH CONTINUITY

(a) Check that continuity exists between the terminal 1 and the switch body with the switch ON (switch pin released: door opens).

(b) Check that no continuity exists between the terminal and switch body with the switch OFF (switch pin pushed in: door closes).

If the operation is not as specified, replace the switch.

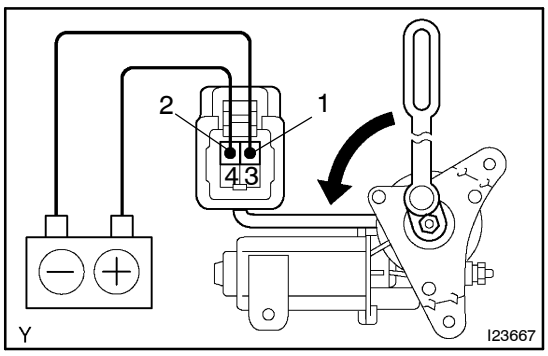


7. INSPECT AUTO DOOR REGULATOR MOTOR OPERATION

(a) Connect the positive (+) lead from the battery to the wire harness (WB) and the negative (–) lead to the wire harness (LB), and check the motor turns clockwise.

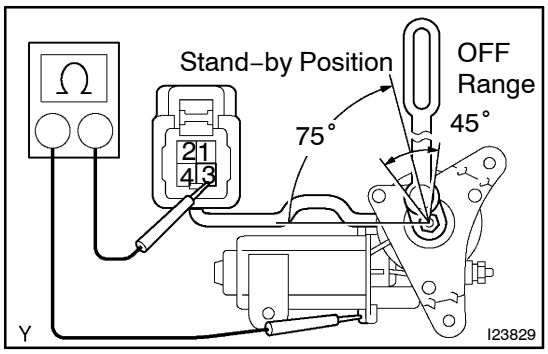
(b) Reverse the polarity, and check that the motor turns counterclockwise.

If the operation is not as specified, replace the motor.



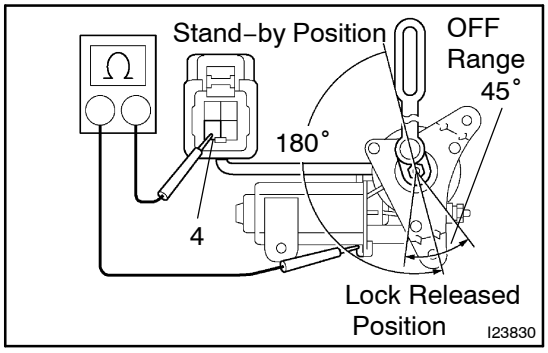
8. INSPECT DOOR CONTROL MOTOR OPERATION

(a) Check that the door control motor continuously turns counterclockwise when the positive (+) lead from the battery is connected to terminal 1 and negative (–) lead to terminal 2.

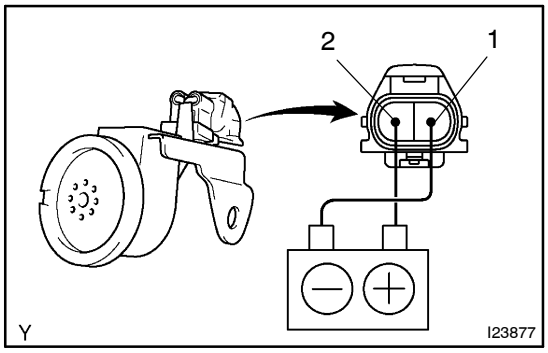


(b) Check the continuity between terminal 3 and the body ground while the motor is operating or stopping.

OK: No continuity (OFF range) exists in the range of approximately 45° from the stand–by position.

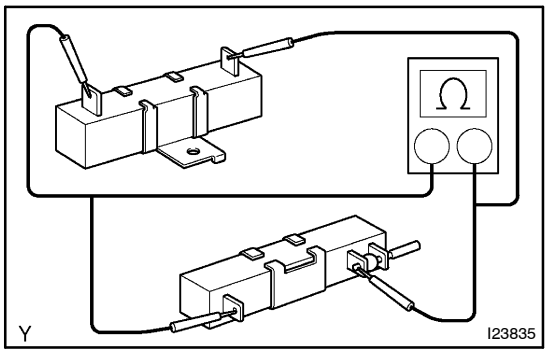


(c) Check the continuity between terminal 4 and the body ground while the motor is operating or stop.
OK: No continuity (OFF range) exists in the range of approx. 45° from the lock released position.



9. INSPECT AUTOMATIC DOOR WARNING BUZZER OPERATION

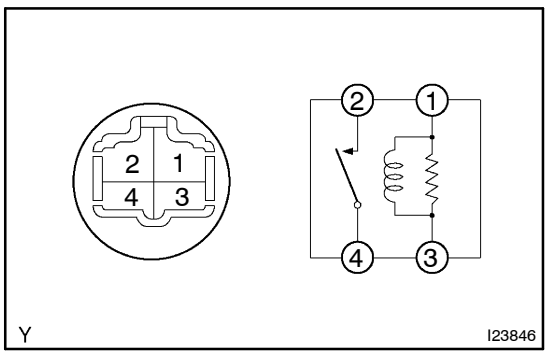
Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 1, and check the buzzer sounds.
If the buzzer does not as sound, replace the buzzer.



10. INSPECT AUTOMATIC DOOR RESISTOR RESISTANCE

Resistor (at 20°C (68°F))	12 V Vehicles	24 V Vehicles
R1	1.9 – 2.1 Ω	11.4 – 12.6 Ω
R2	–	21 – 23 Ω
R3	0.29 – 0.32 Ω	1.9 – 2.1 Ω

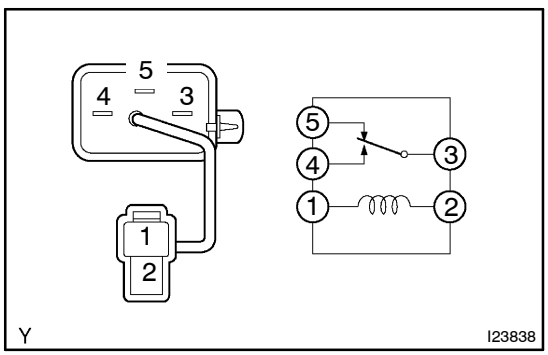
If the resistance is not as specified, replace the resistor.



11. INSPECT AUTO–DOOR RELAY CONTINUITY

Condition	Tester connection	Specified condition
Constant	1 – 3	Continuity
Apply B+ between terminals 1 and 3.	2 – 4	Continuity

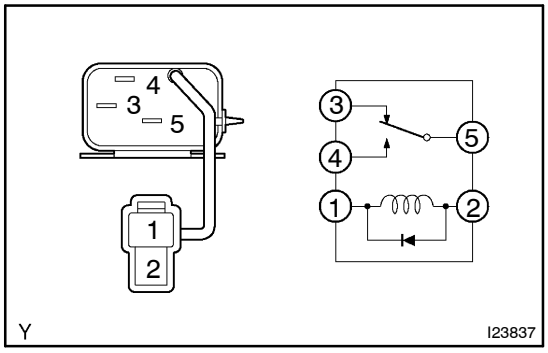
If the continuity is not as specified, replace the relay.



12. INSPECT AUTOMATIC DOOR RELAY CONTINUITY (For Open and Closed)

Condition	Tester connection	Specified condition
Constant	1 – 2 3 – 5	Continuity
Apply B+ between terminals 1 and 2.	3 – 4	Continuity

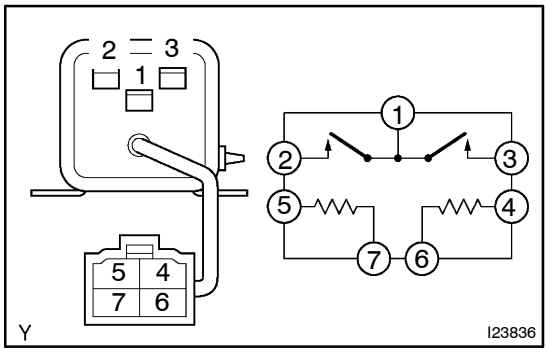
If the continuity is not as specified, replace the relay.



13. INSPECT AUTOMATIC DOOR RELAY CONTINUITY (For Accel)

Condition	Tester connection	Specified condition
Constant	1 – 2 3 – 5	Continuity
Apply B+ between terminals 1 and 2.	4 – 5	Continuity

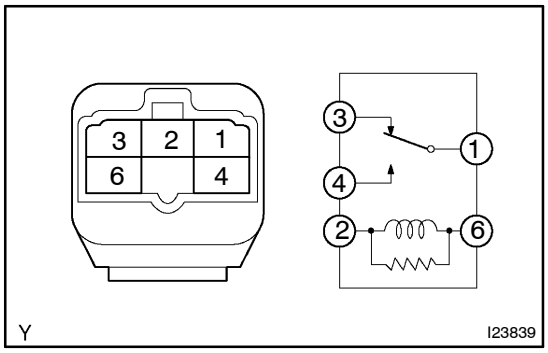
If the continuity is not as specified, replace the relay.



14. INSPECT AUTOMATIC DOOR RELAY CONTINUITY (For Brake)

Condition	Tester connection	Specified condition
Constant	4 – 6 5 – 7	Continuity
Apply B+ between terminals 4 and 6.	1 – 3	Continuity
Apply B+ between terminals 5 and 7.	1 – 2	Continuity

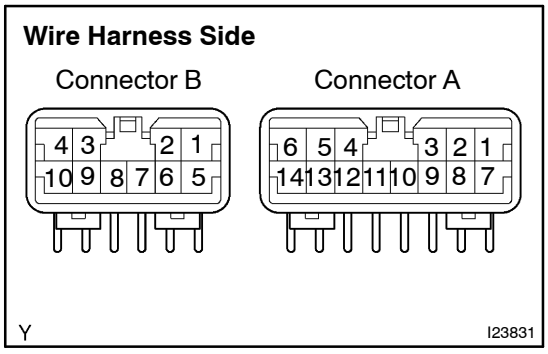
If the continuity is not as specified, replace the relay.



15. INSPECT AUTOMATIC DOOR RELAY CONTINUITY (For Unlock)

Condition	Tester connection	Specified condition
Constant	1 – 3 2 – 6	Continuity
Apply B+ between terminals 2 and 6.	1 – 4	Continuity

If the continuity is not as specified, replace the relay.



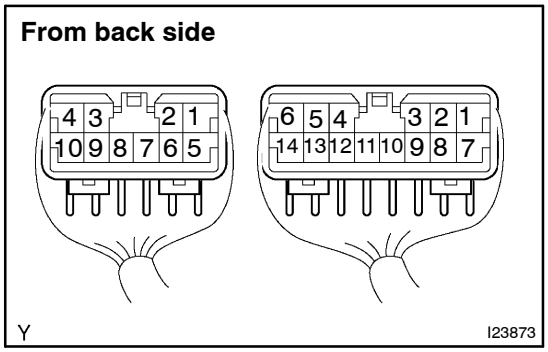
16. Connector disconnected: INSPECT DOOR CONTROL RELAY CIRCUIT

Disconnect the connector from the relay and inspect the connector on the wire harness side.

Tester connection	Condition	Specified condition
A1 – Ground	Constant	60 – 90 Ω (200 – 300 Ω)
A3 – Ground	Ignition switch ON	Battery voltage
A5 – Ground	Full–open switch and open–side shut–off switch of auto door switch operated OFF → ON.	Continuity → No continuity
A6 – Ground	Full–close switch and close–side shut–off switch of auto door switch operated OFF → ON.	Continuity → No continuity
A7 – Ground	Neutral switch of automatic door switch operated OFF → ON. *1	Continuity → No continuity

A13 – Ground	Constant	Continuity
B1 – Ground	Constant	Continuity
B2 – Ground	Constant	15 – 25 Ω (30 – 45 Ω)
B3 – Ground	Constant	45 – 90 Ω (180 – 350 Ω)
B4 – Ground	Constant	22 – 34 Ω (47 – 72 Ω)
B5 – Ground	Constant	22 – 34 Ω (47 – 72 Ω)
B7 – Ground	Constant	60 – 90 Ω (200 – 300 Ω)
B8 – Ground	Constant	60 – 90 Ω (200 – 300 Ω)
B9 – Ground	Constant	Continuity

*1: Inspection for automatic regulator lever No. 1 should be done in the automatic position.
( ): 24 V voltage battery
If the circuit is not as specified, inspect the circuits connected to other parts.



17. Connector connected:
INSPECT DOOR CONTROL RELAY CIRCUIT

Connect the connector to the relay and inspect the connector from the back side, as shown in the illustration.

Tester connection	Condition	Specified condition
A1 – B9	Ignition switch ON	9 V (18 V) or more
A4 – B9	Ignition switch ON and slowly move the driving wheel	0 V ↔ 5 V repeated
A5 – B9	Fully closing → Fully open	0 V → 9 V or more (0 V → 18 V or more)
A6 – B9	Fully open → Fully closing	0 V → 9 V or more (0 V → 18 V or more)
A7 – B9	Fully open → Fully closing *1	9 V or more → 0 V (18 V or more → 0 V)
A8 – B9	Operating door control switch OFF → OPEN	0 V → 9 V or more (0 V → 18 V or more)
A9 – B9	Operating door control switch OFF → CLOSE	0 V → 9 V or more (0 V → 18 V or more)
A10 – B9	Regulator motor operating	Pulse generate
A11 – B9	Operating door control switch OFF → OPEN	0 V → 9 V or more → 0 V (0 V → 18 V or more → 0 V)
A12 – B9	Operating door control switch OFF → OPEN	0 V → 9 V or more → 0 V (0 V → 18 V or more → 0 V)
A13 – B9	Fully open → Fully closing	0 V → 9 V or more (0 V → 18 V or more)
A14 – B9	Ignition switch ON	5 V
B3 – B9	Fully open → Fully closing	0 V → 9 V or more → 0 V (0 V → 18 V or more → 0 V)
B4 – B9	Fully closing → Fully open	0 V → 9 V or more (0 V → 18 V or more)

B5 – B9	Fully open → Fully closing	0 V → 9 V or more (0 V → 18 V or more)
B7 – B9	Fully closing → Fully open	0 V → 9 V or more → 0 V (0 V → 18 V or more → 0 V)
B8 – B9	Operating door control switch (during buzzer sounding)	9 V or more (18 V or more)
B10 – B9	Ignition switch ON	0.5 – 0.75 V (1 –1.5 V)

*1: Inspection for automatic regulator lever No. 1 should be done in the automatic position.
( ): 24 V voltage battery
If the circuit is not as specified, inspect the circuits connected to other parts.