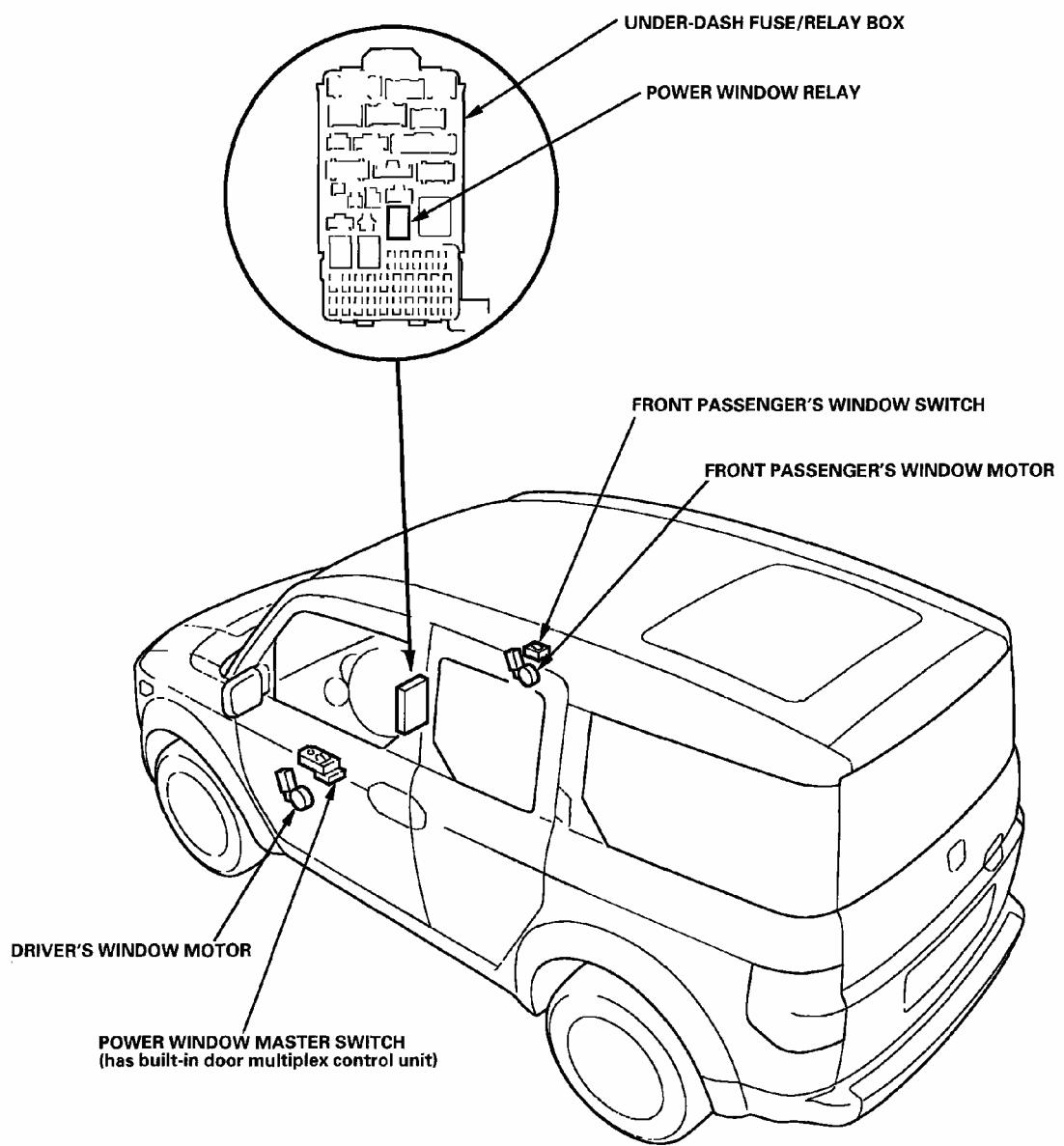


2003-06 ACCESSORIES & EQUIPMENT

Power Windows - Element

COMPONENT LOCATION INDEX



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Fig. 1: Identifying Power Windows Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

2004 Honda Element DX

2003-06 ACCESSORIES & EQUIPMENT Power Windows - Element

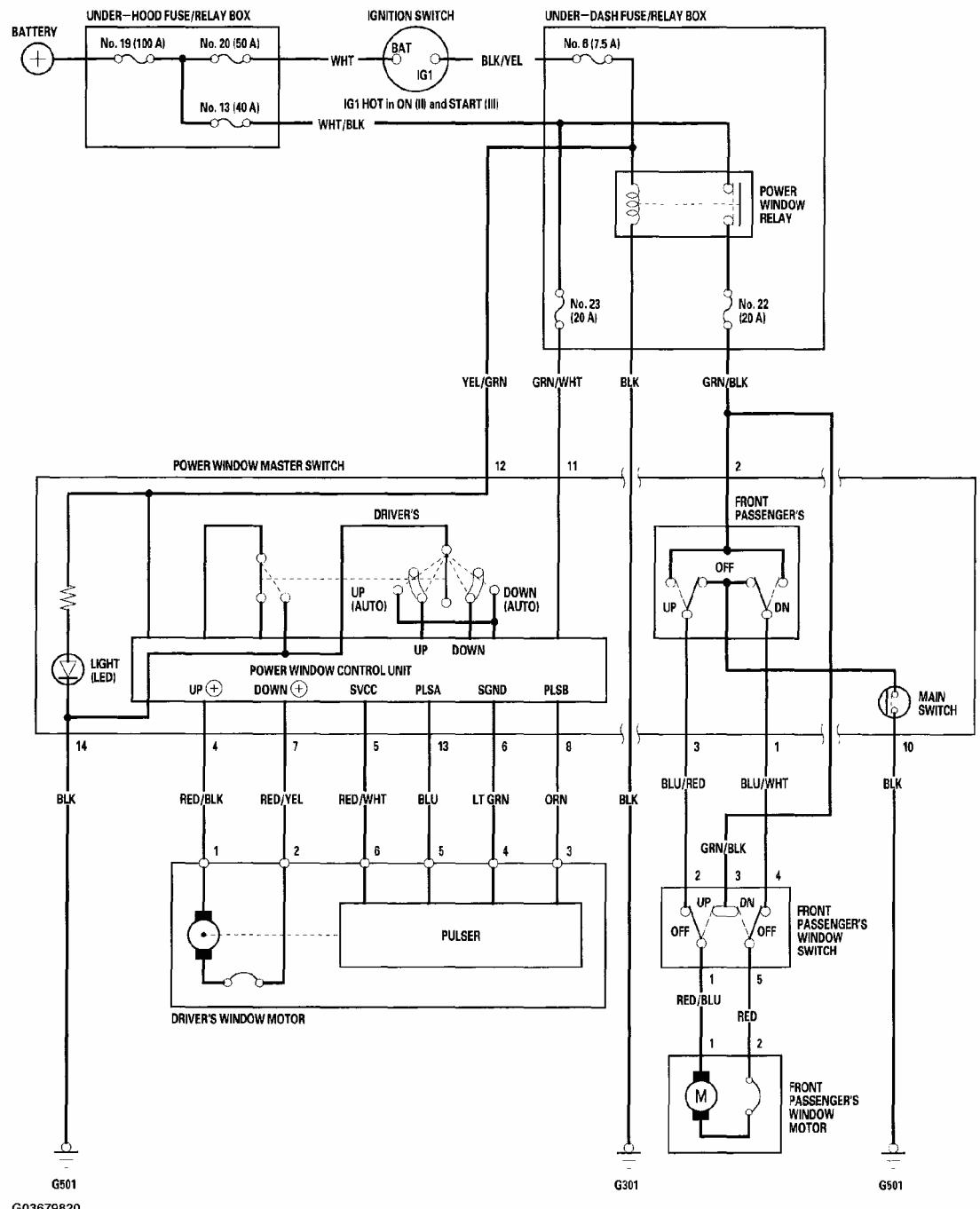


Fig. 2: Power Windows Circuit Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

RESETTING THE POWER WINDOW CONTROL UNIT

Resetting the power window control unit is required after performing the following procedures:

- Loss of battery power

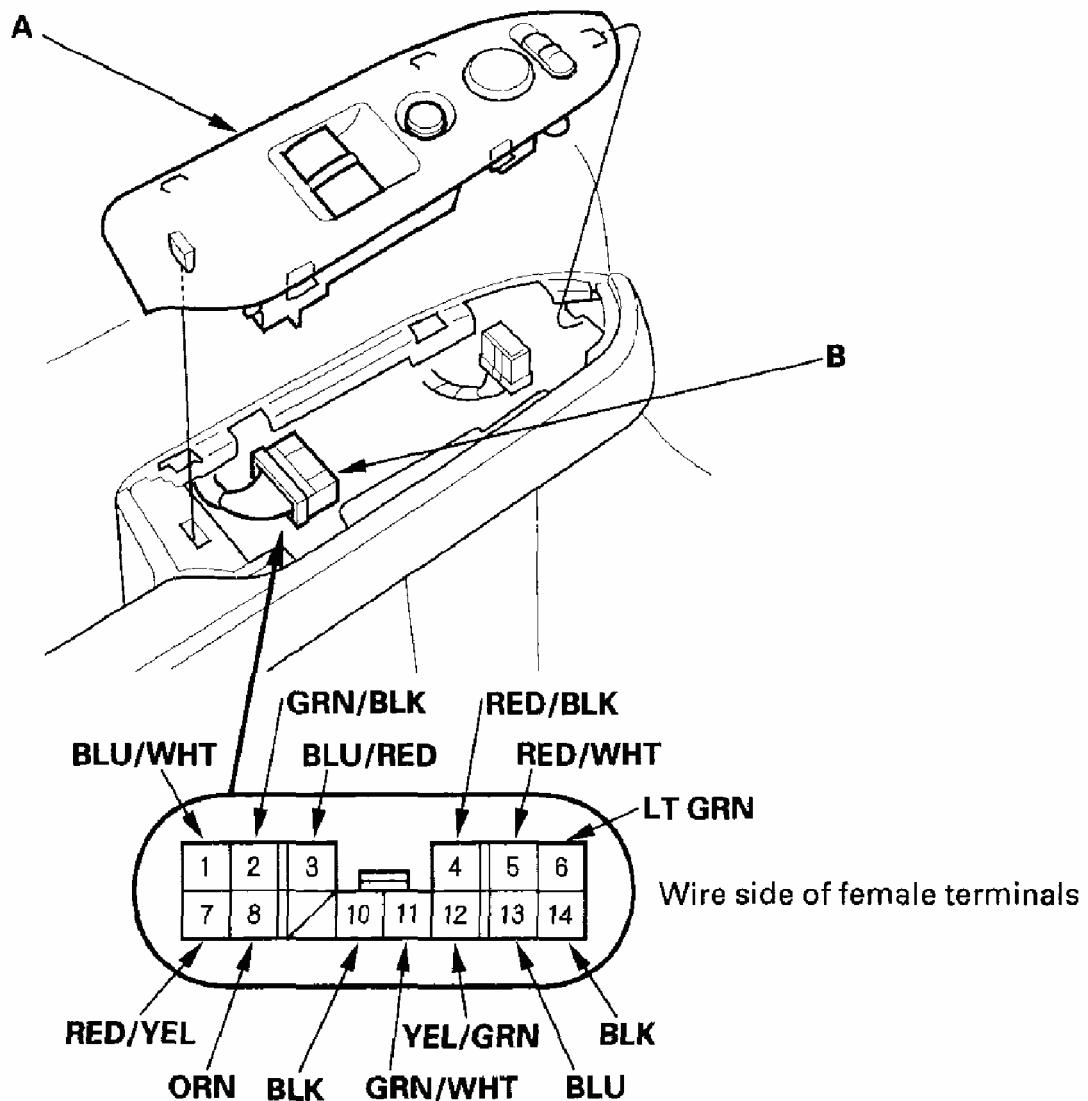
- Loss of power from the No. 23 (20 A) fuse in the under-dash fuse/relay box
- Open circuit caused by disconnecting the 14P connector from the power window master switch

1. Make sure the driver's window does not work in AUTO with the ignition switch ON (II).
2. Start the engine.
3. Lower the driver's window all the way down by pushing the driver's power window switch to the second detent (AUTO DOWN); when the window reaches the bottom, hold the switch in the AUTO DOWN position for 2 seconds.
4. Raise the driver's window all the way up without stopping by pulling the driver's power window switch to the UP position; when the window reaches the top, hold the switch in the UP position for 2 seconds.
5. If the window does not work in AUTO, repeat steps 2 through 5.

MASTER SWITCH INPUT TEST

NOTE: The power window control unit is built into the power window master switch, and it only controls the driver's window operations.

1. Remove the driver's door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**).
2. Remove the power window master switch (A).
3. Disconnect the 14P connector (B) from the master switch.



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Fig. 3: Removing Power Window Master Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 5.
5. With the 14P connector still disconnected from the switch connector, make these input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to step 6.

CAVITY TEST CONDITION CHART DISCONNECTED

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
7	RED/YEL	Connect the No. 11 and No. 7 terminals, and the No. 4 and No. 14 terminals.	Check for driver's window motor operation: It should run (the driver's window moves down).	<ul style="list-style-type: none"> • Faulty driver's window motor • An open in the wire
4	RED/BLK			
3	BLU/RED	Connect the No. 1 and No. 2 terminals, and the No. 3 and No. 10 terminals, then turn the ignition switch ON (II).	Check for front passenger's window motor operation: It should run (the front passenger's window moves down).	<ul style="list-style-type: none"> • Faulty front passenger's window motor • Faulty front passenger's window switch • An open in the wire
1	BLU/WHT			

6. Reconnect the 14P connector to the switch, and perform the following input tests.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, the control unit must be faulty; replace the power window master switch.

CAVITY TEST CONDITION CHART RECONNECTED

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
10	BLK	Under all conditions	Check for voltage to ground: There should be less than 1 V.	<ul style="list-style-type: none"> • Poor ground (G501) • An open in the wire
14				
2	GRN/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 6 (7.5 A), No. 22 (20 A), or No. 23 (20 A) fuse in the under-dash fuse/relay box • Faulty power
11	GRN/WHT	Under all		

2004 Honda Element DX

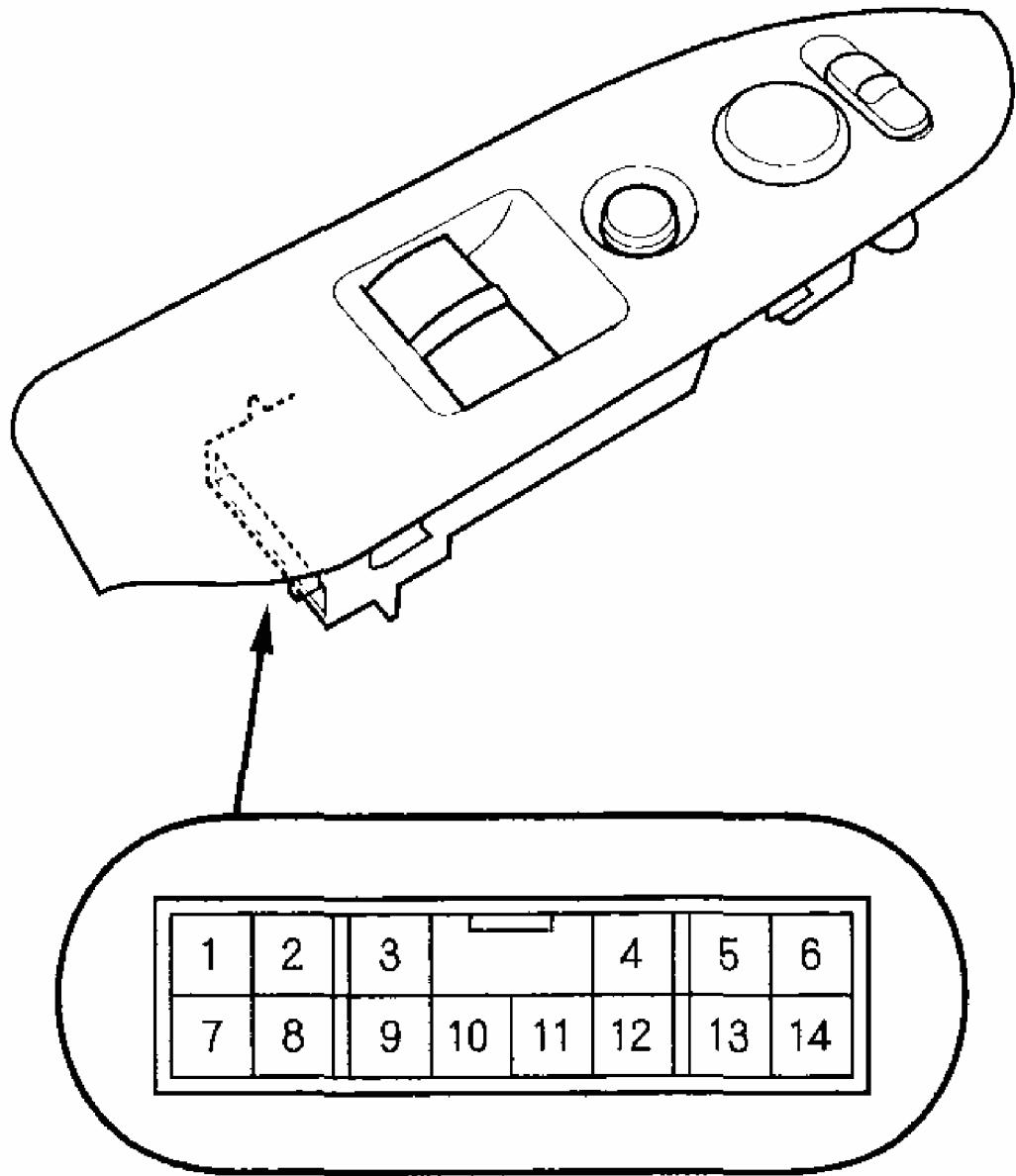
2003-06 ACCESSORIES & EQUIPMENT Power Windows - Element

		conditions		window relay • Poor ground (G301) • An open in the wire
12	YEL/GRN	ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 6 (7.5 A) fuse in the under-dash fuse/relay box • An open in the wire
5	RED/WHT	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Faulty power window master switch • Short to ground in the wire
6	LT GRN	Under all conditions	Check for voltage to ground: There should be less than 1 V.	An open in the wire
13	BLU	Ignition switch ON (II), and the driver's window switch in AUTO DOWN	Check for voltage between the No. 13 and No. 14 terminals: There should be 0 V---about 5 V---0 V---about 5 V repeatedly (a digital voltmeter reads about 2.5 V while the window moves).	• Faulty power window master switch • Short to ground in the wire • Faulty driver's window motor
8	ORN	Ignition switch ON (II), and the driver's window switch in AUTO DOWN	Check for voltage between the No. 8 and No. 14 terminals: There should be 0 V---about 5 V---0 V---about 5 V repeatedly (a digital voltmeter reads about 2.5 V while the window moves).	

NOTE: Do the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).

MASTER SWITCH TEST/REPLACEMENT

1. Remove the switch panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**).
2. Remove the door handle (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**).
3. Disconnect the 20P connector from the power window master switch.



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Fig. 4: Disconnecting 20P Connector From Power Window Master Switch
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check for continuity between the terminals in each switch position according to the tables.

Driver's Switch:

The driver's switch is combined with the control unit so you cannot isolate the switch to test it. Instead, do the master switch input test (see **MASTER SWITCH INPUT TEST**). If the tests are normal, the driver's switch must be faulty.

NOTE: **Reset the power window control unit (see RESETTING THE POWER WINDOW CONTROL UNIT) if you disconnect the switch or replace it.**

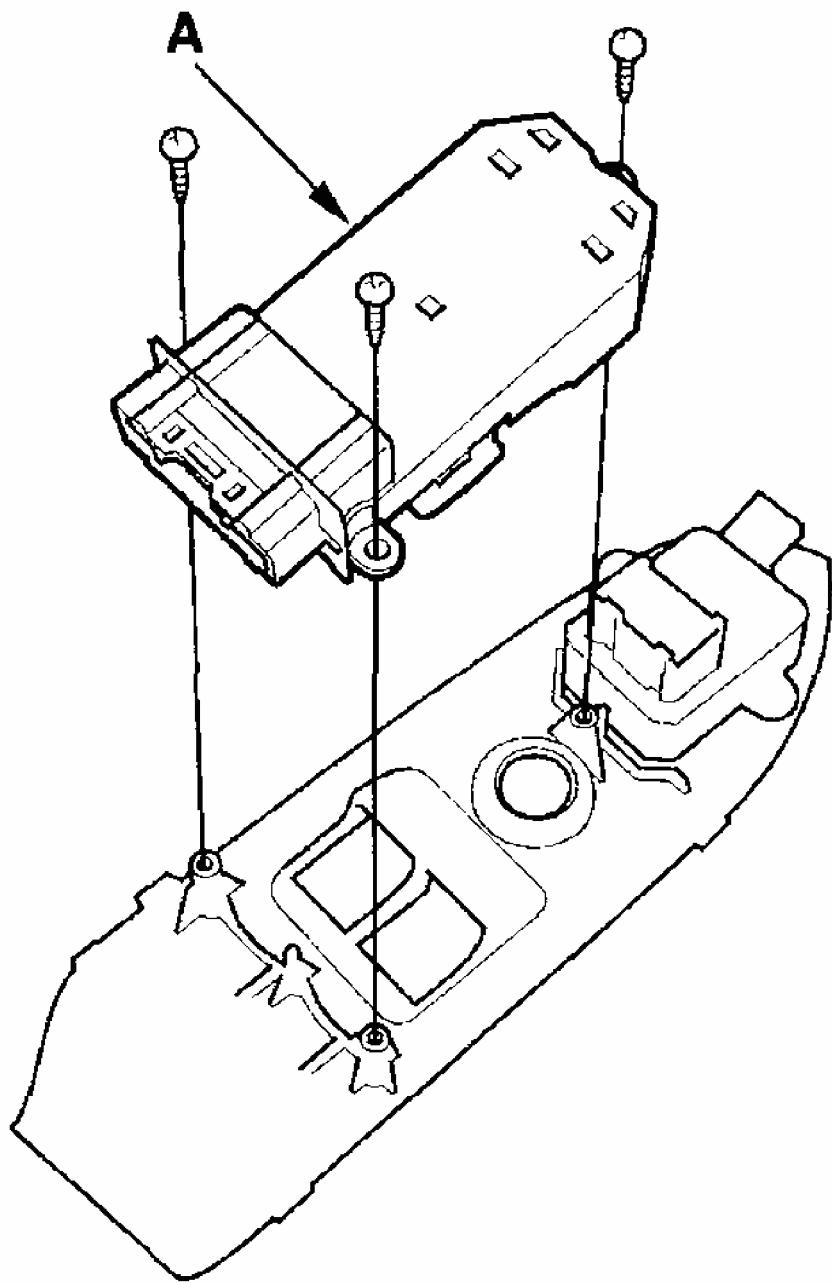
Front Passenger's Switch:

		Terminal	1	2	3	10
Position		Main Switch				
OFF	ON		○		○	○
	OFF		○		○	
UP	ON		○	○	○	○
	OFF			○	○	
DOWN	ON		○	○	○	○
	OFF		○	○		

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Fig. 5: Front Passenger's Switch Terminal Specification
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the continuity is not as specified, remove the three screws and replace the switch (A).



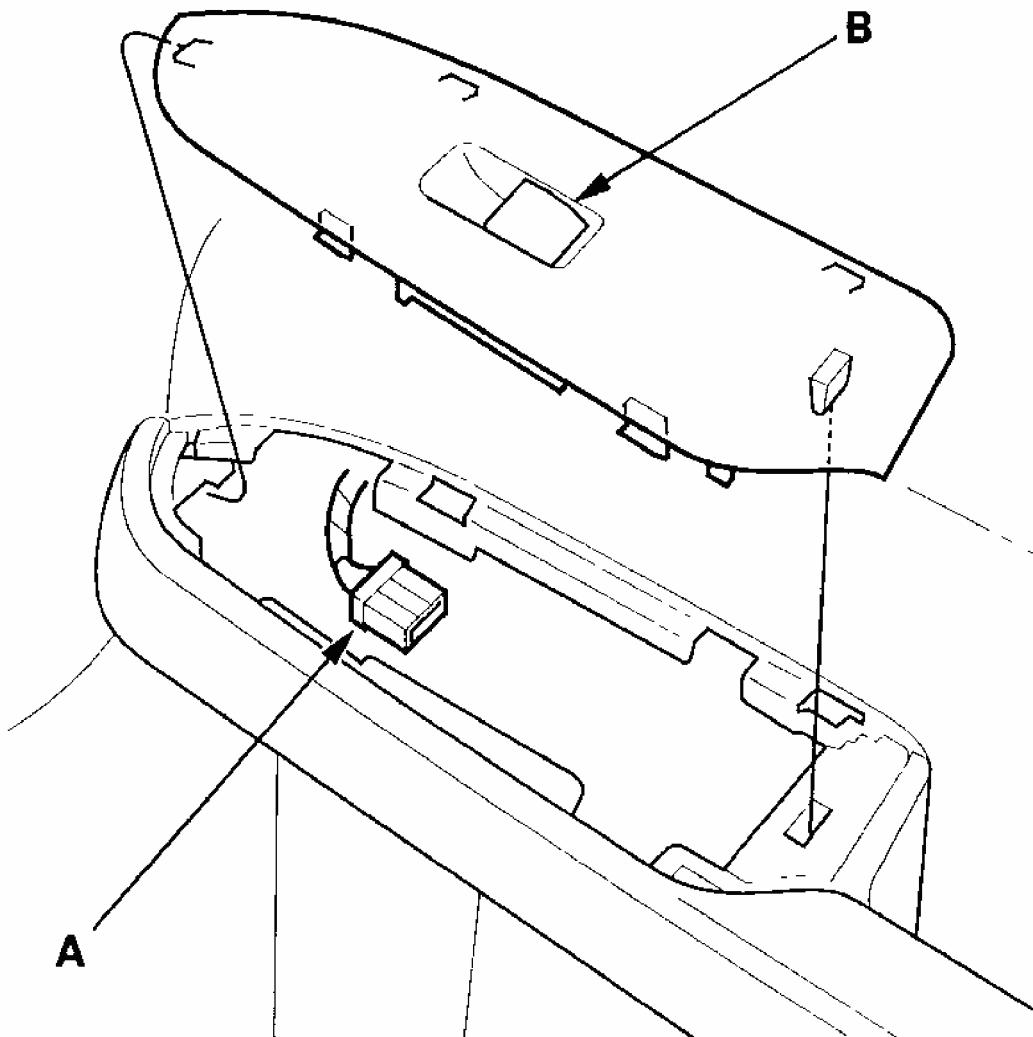
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Fig. 6: Replacing Front Passenger's Switch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

PASSENGER'S WINDOW SWITCH TEST/REPLACEMENT

1. Remove the passenger's door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**).
2. Remove the switch panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**).
3. Disconnect the 5P connector (A) from the front passenger's power window switch (B).

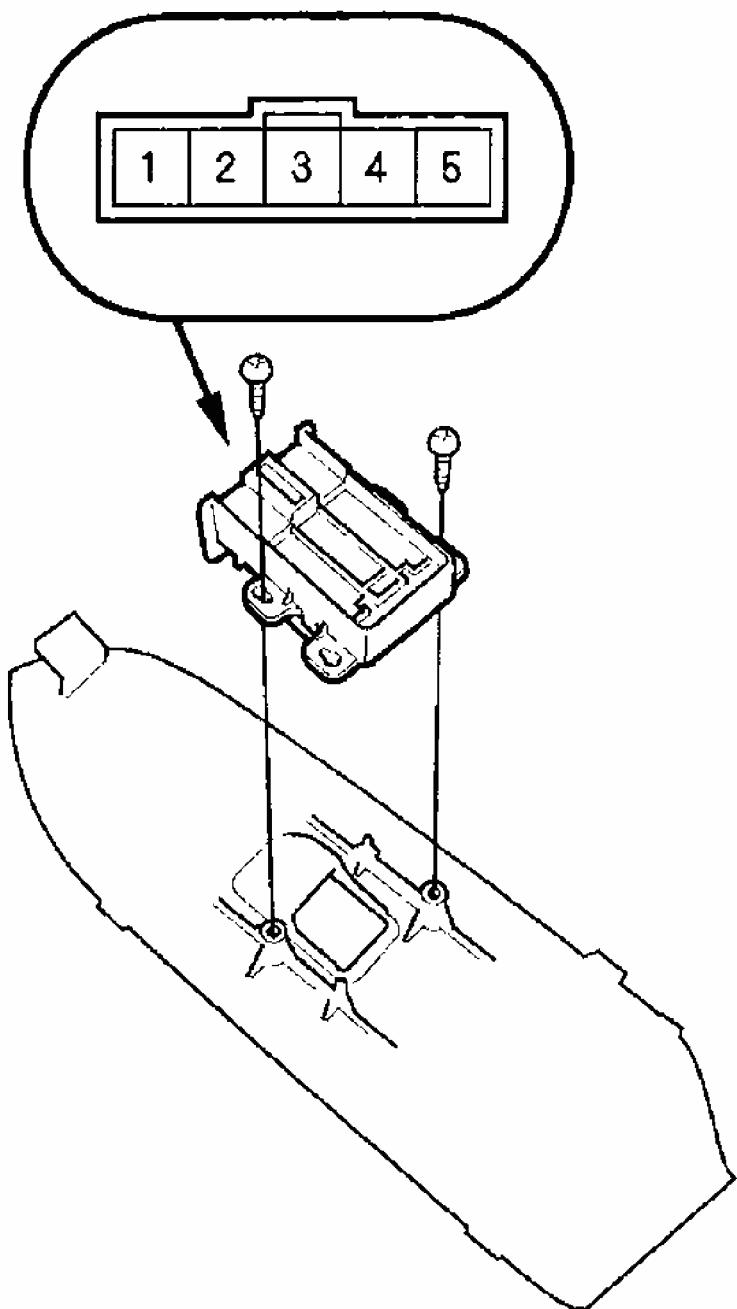


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Fig. 7: Disconnecting 5P Connector From Front Passenger's Power Window Switch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the two screws and the passenger's power window switch.



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Fig. 8: Removing Two Screws And Passenger's Power Window Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Check for continuity between the terminals in each switch position according to the table.

Terminal Position	1	2	3	4	5
UP	○	—	○	○	○
OFF	○	○	—	○	○
DOWN	○	○	○	—	○

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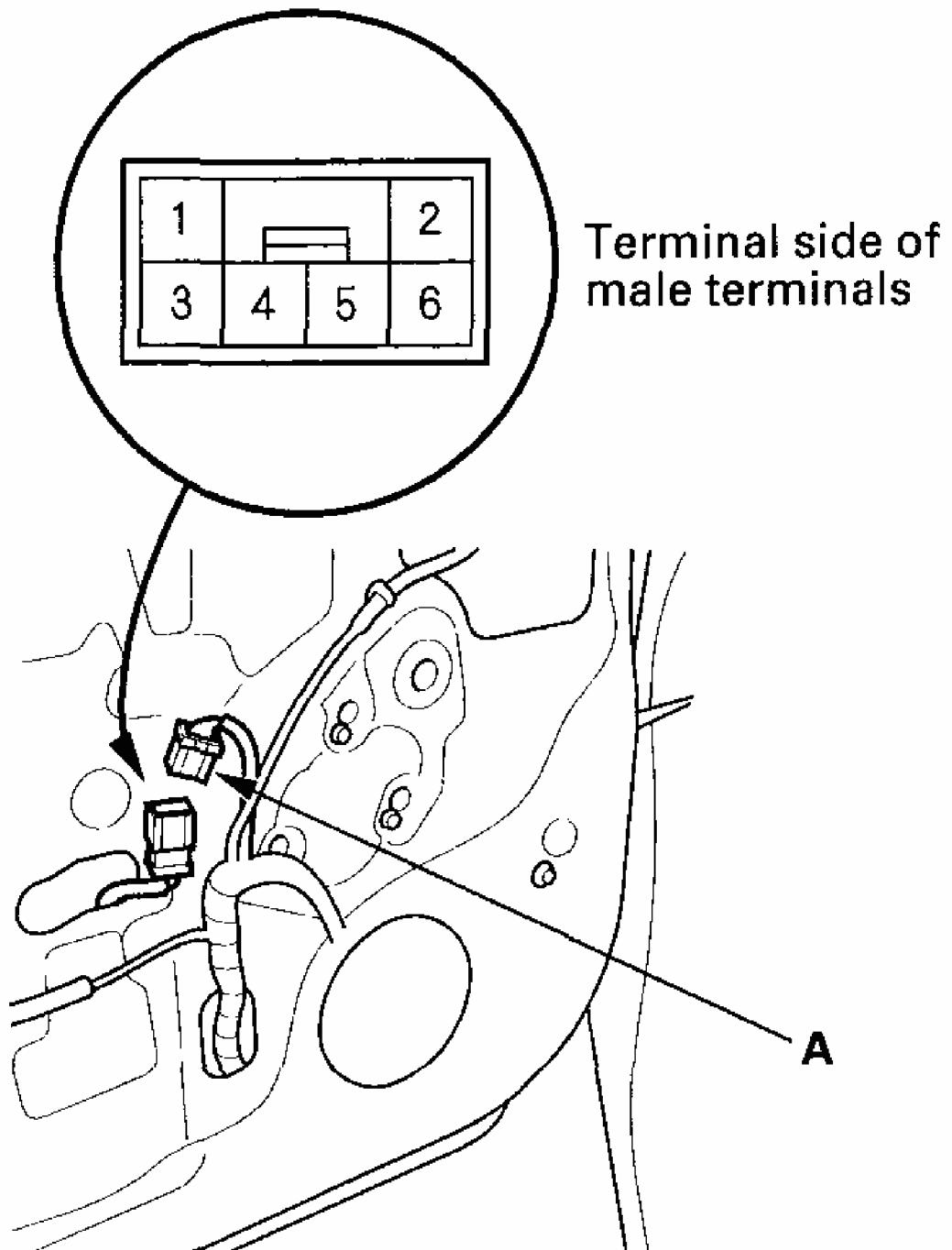
Fig. 9: Checking Continuity Between Terminals In Each Switch Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

DRIVER'S WINDOW MOTOR TEST

MOTOR TEST

1. Remove the driver's door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**).
2. Disconnect the 6P connector (A) from the driver's window motor.



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Fig. 10: Disconnecting 6P Connector From Driver's Window Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor in each direction by connecting battery power and ground according to

the table.

NOTE: To prevent damage to the motor, disconnect one lead as soon as the motor stops running.

Terminal	1	2
Direction		
UP	+	-
DOWN	-	+

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Fig. 11: Motor Testing Reference Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the motor does not run or fails to run smoothly, replace it.

PULSER TEST

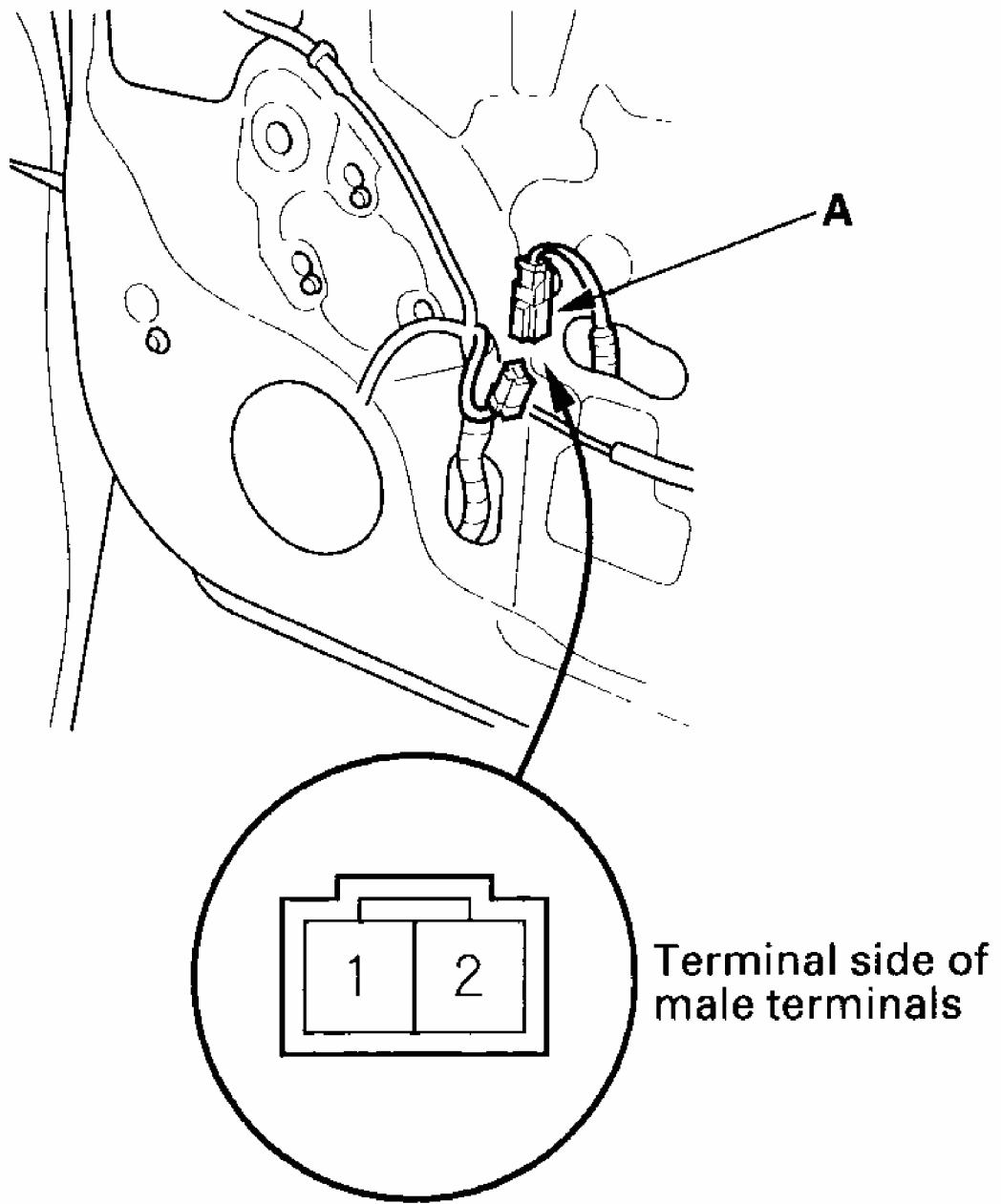
1. Reconnect the 6P connector to the window motor, and reconnect the 20P connector to the power window master switch.
2. Check for voltage between the terminals at the driver's power window motor.
 - There should be battery voltage between the No. 6 (+) and No. 4 (-) terminals when the ignition switch is turned ON (II).
 - Connect an analog voltmeter between the No. 5 (+) and No. 4 (-) terminals, and run the window motor down or up. The voltmeter needle should move back and forth alternately between 0 V and about 5 V (a digital voltmeter should show about 2.5 V).
 - Connect an analog voltmeter between the No. 3 (+) and No. 4 (-) terminals, and run the window motor down or up. The voltmeter needle should move back and forth alternately between 0 V and about 5 V (a digital voltmeter should show about 2.5 V).

PASSENGER'S WINDOW MOTOR TEST

1. Remove the passenger's door panel (see **FRONT DOOR PANEL**

REMOVAL/INSTALLATION).

2. Disconnect the 2P connector (A) from the passenger's power window motor.



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Fig. 12: Disconnecting 2P Connector From Passenger's Power Window Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor in each direction by connecting battery power and ground according to

the table.

NOTE: To prevent damage to the motor, disconnect one lead as soon as the motor stops running.

Terminal	1	2
Direction		
UP	+	-
DOWN	-	+

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Fig. 13: Motor Testing Reference Table

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the motor does not run or fails to run smoothly, replace it.