2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

#### 2003-06 ACCESSORIES & EQUIPMENT

**Keyless/Power Door Lock System - Element** 

# **COMPONENT LOCATION INDEX**

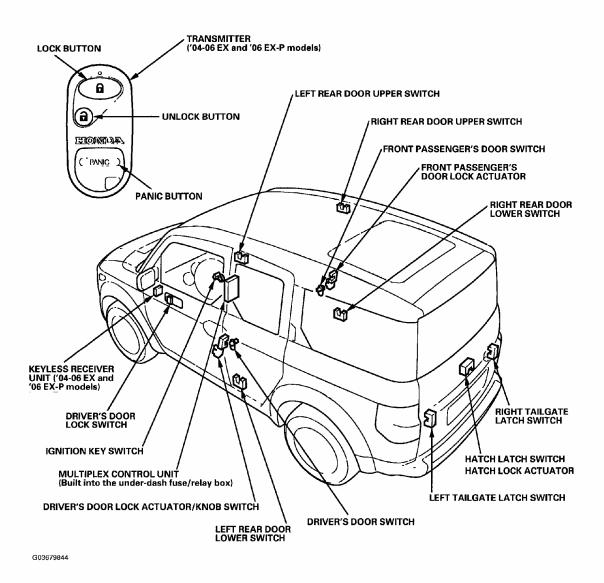


Fig. 1: Identifying Keyless/Power Door Lock System Component Locations Courtesy of AMERICAN HONDA MOTOR CO., INC.

# **CIRCUIT DIAGRAM**

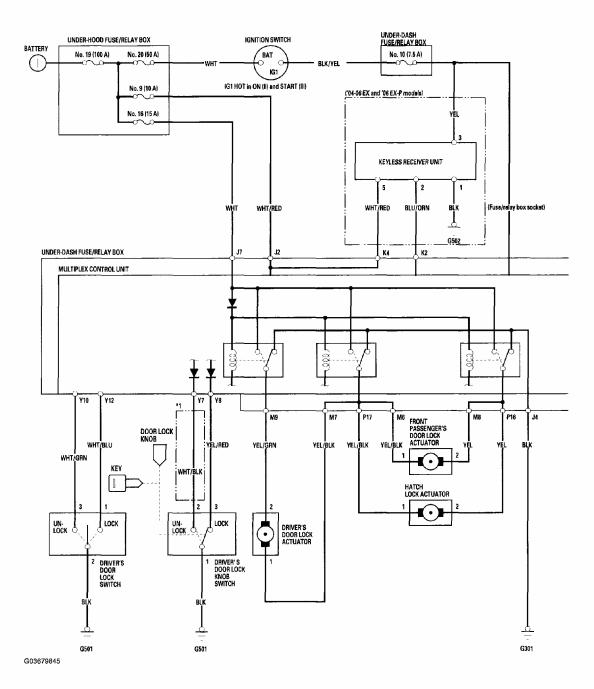


Fig. 2: Keyless/Power Door Lock System Circuit Diagram (1 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

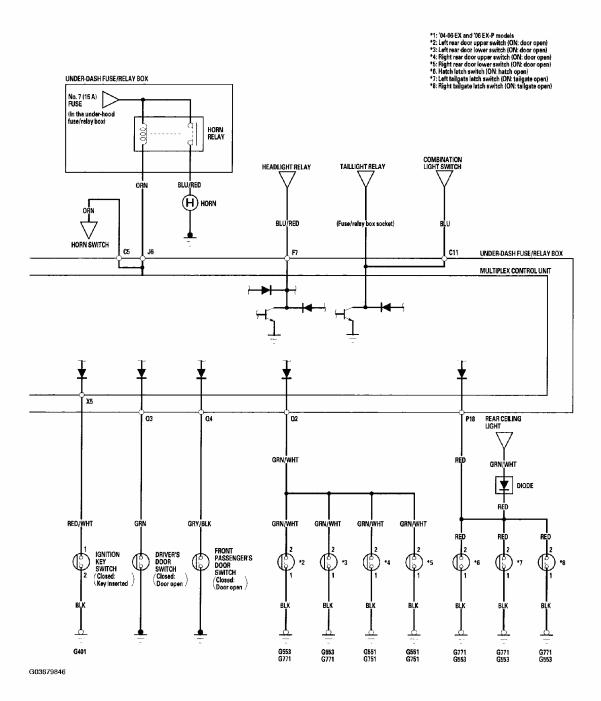


Fig. 3: Keyless/Power Door Lock System Circuit Diagram (2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

# **KEYLESS RECEIVER UNIT INPUT TEST**

1. Remove the driver's dashboard lower cover (see <u>DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION</u>).

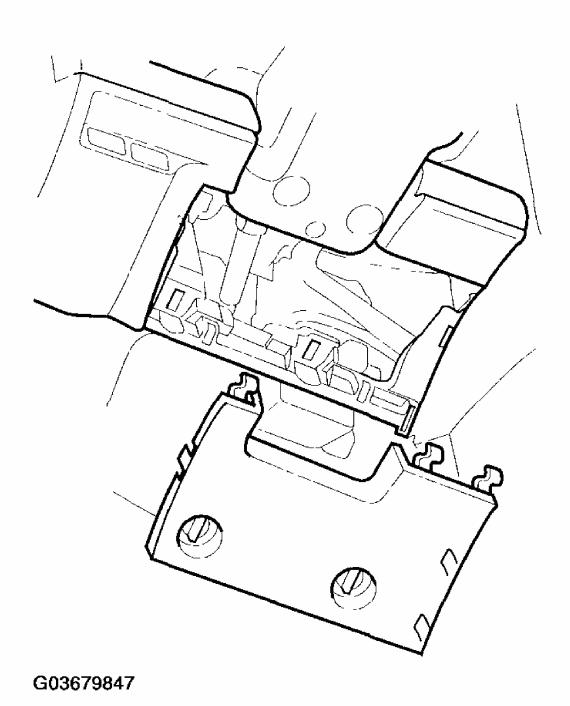


Fig. 4: Removing Driver's Dashboard Lower Cover Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the 5P connector (A) from the Keyless receiver unit (B).

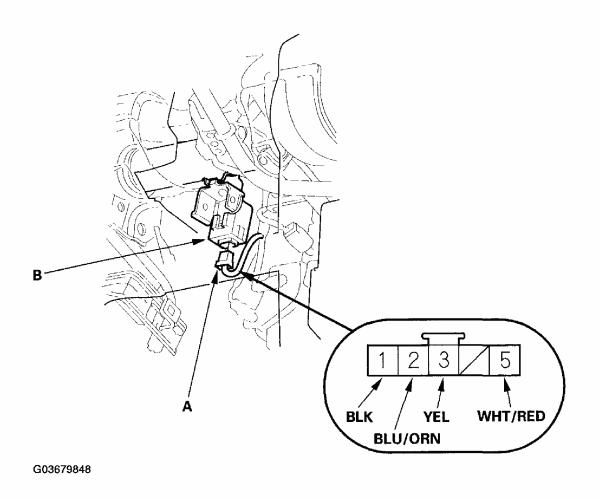


Fig. 5: Disconnecting 5P Connector From Keyless Receiver Unit Courtesy of AMERICAN HONDA MOTOR CO., INC.

- 3. 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 4.
- 4. Reconnect the connector, and 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 5.

#### **TEST CONDITION**

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	BLK	Under all conditions	Check for voltage to ground: There should be less than 1 V.	<ul><li>Poor ground (G502)</li><li>An open in the wire</li></ul>

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

3	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	<ul> <li>Blown No. 10 (7.5 A) fuse in the under-dash fuse/relay box</li> <li>An open in the wire</li> </ul>
		Ignition switch OFF	Check for voltage to ground: There should be no voltage.	Short to power on No. 10 (7.5 A) fuse circuit
5	WHT/RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	<ul> <li>Blown No. 9 (10 A) fuse in the under-hood fuse/relay box</li> <li>Faulty under-dash</li> </ul>
				fuse/relay box  • An open in the wire

- 5. Disconnect the connector, and make this input test at the connector.
  - If the test indicates a problem, find and correct the cause, then recheck the system.
  - If the input test proves OK, replace the keyless receiver unit.

# **TEST CONDITION**

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
2	BLU/ORN	Ignition switch OFF, under-dash fuse/relay box connector K (17P) disconnected	Check for continuity between the No. 2 terminal and the No. 2 terminal of the under-dash fuse/relay box connector K (17P): There should be continuity.	An open in the wire
			Check for continuity between the No. 2 terminal and body ground: There should be no continuity.	A short to ground in the wire

# **CONTROL UNIT INPUT TEST**

NOTE: Before testing, troubleshoot the multiplex control system (see TROUBLESHOOTING).

1. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION** ).

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

2. Disconnect the under-dash fuse/relay box connectors C, F, J, K, M, P, Q, X and Y.

NOTE: All connectors are wire side of female terminals.

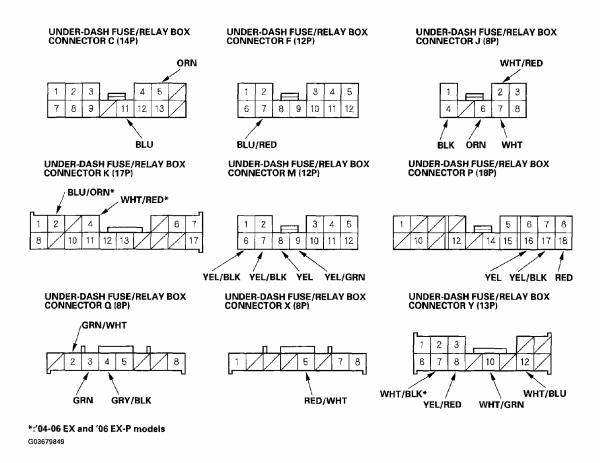


Fig. 6: Identifying Under-Dash Fuse/Relay Box Connectors C, F, J, K, M, P, Q, X

And Y

GAMERICAN HONDA MOTOR CO. INC.

Courtesy of AMERICAN HONDA MOTOR CO., INC.

- 3. 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 4.
- 4. Reconnect all connections to the under-dash fuse/relay box, and make these input tests at the appropriate connectors on the under-dash fuse/relay box.
  - 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 5.

#### **TEST CONDITION**

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
C11	BLU	Under all conditions	Attach to ground: Parking, side marker, license plate lights and taillights should come on.	<ul> <li>Blown No. 2 (15 <ul> <li>A) fuse in the under-hood fuse/relay box</li> <li>Faulty taillight relay</li> </ul> </li> <li>Faulty under-dash fuse/relay box <ul> <li>An open in the wire</li> </ul> </li> </ul>
F7	BLU/RED	Under all conditions	Attach to ground: Headlights should come on.	<ul> <li>Blown No. 15 or 17 (15 A) fuse in the under-hood fuse/relay box</li> <li>Faulty headlight relay</li> <li>An open in the wire</li> </ul>
J2 K4	WHT/RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	<ul> <li>Blown No. 9 (10 <ul> <li>A) fuse in the under-hood fuse/relay box</li> <li>An open in the wire</li> </ul> </li> </ul>
J4 BLK		Under all conditions	Check for voltage to ground: There should be less than 1 V.	<ul> <li>Poor ground (G301)</li> <li>An open in the wire</li> </ul>
P18	RED	Hatch or tailgate open	Check for voltage to ground: There should be less than 1 V.	<ul> <li>Faulty tailgate latch switch</li> <li>Faulty hatch latch switch</li> <li>An open in the wire</li> </ul>
		Hatch or tailgate closed	Check for voltage to ground: There should be 5 V or more.	<ul><li>Faulty tailgate latch switch</li><li>Faulty hatch latch</li></ul>

Q2	GRN/WHT	Rear passenger's door open	Check for voltage to ground: There should be less than 1 V.	<ul> <li>switch</li> <li>Short to ground</li> <li>Faulty rear door switch</li> <li>Poor ground (G551, G553, G751, G771)</li> <li>An open in the wire</li> </ul>
		Rear passenger's door closed	Check for voltage to ground: There should be 5 V or more.	<ul><li>Faulty rear door switch</li><li>Short to ground</li></ul>
Q3	GRN	Driver's door open	Check for voltage to ground: There should be less than 1 V.	<ul><li>Faulty driver's door switch</li><li>An open in the wire</li></ul>
		Driver's door closed	Check for voltage to ground: There should be 5 V or more.	<ul><li>Faulty driver's door switch</li><li>Short to ground</li></ul>
Q4	GRY/BLK	Passenger's door open	Check for voltage to ground: There should be less than 1 V.	<ul><li>Faulty passenger's door switch</li><li>An open in the wire</li></ul>
		Passenger's door closed	Check for voltage to ground: There should be 5 V or more.	<ul><li>Faulty passenger's door switch</li><li>Short to ground</li></ul>
X5	RED/WHT	Ignition key inserted into the ignition switch	Check for voltage to ground: There should be less than 1 V	<ul> <li>Poor ground (G401)</li> <li>Faulty ignition key switch</li> <li>An open in the wire</li> </ul>
		Ignition key removed from the ignition switch	Check for voltage to ground: There should be 5 V or more.	<ul><li>Faulty ignition key switch</li><li>Short to ground</li></ul>
Y7 <sup>(1)</sup>	WHT/BLK	Driver's door lock knob switch unlocked	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G501)

		Driver's door lock knob switch locked	Check for voltage to ground: There should be 5 V or more.	<ul> <li>Faulty driver's door lock knob switch</li> <li>An open in the wire</li> <li>Faulty driver's door lock knob switch</li> </ul>
				<ul><li>Short to ground</li></ul>
Y8	YEL/RED	Driver's door lock knob switch locked	Check for voltage to ground: There should be less than 1 V.	<ul> <li>Poor ground (G501)</li> <li>Faulty driver's door lock knob switch</li> <li>An open in the wire</li> </ul>
		Driver's door lock knob switch unlocked	Check for voltage to ground: There should be 5 V or more.	<ul> <li>Faulty driver's door lock knob switch</li> <li>Short to ground</li> </ul>
Y10	WHT/GRN	Driver's door lock switch unlocked	Check for voltage to ground: There should be less than 1 V.	<ul> <li>Poor ground (G501)</li> <li>Faulty driver's door lock switch</li> <li>An open in the wire</li> </ul>
		Driver's door lock switch in neutral or LOCK position	Check for voltage to ground: There should be 5 V or more.	<ul><li>Faulty driver's door lock switch</li><li>Short to ground</li></ul>
Y12	WHT/BLU	Driver's door lock switch locked	Check for voltage to ground: There should be less than 1 V.	<ul> <li>Poor ground (G501)</li> <li>Faulty driver's door lock switch</li> <li>An open in the wire</li> </ul>
		Driver's door lock switch in neutral or UNLOCK	Check for voltage to ground: There should be 5 V or more.	<ul><li>Faulty driver's door lock switch</li><li>Short to ground</li></ul>

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

	p	osition		
(1) '04-	-06 EX and '06	EX-P		
mo	dels			

- 5. Disconnect the connectors, and make these input tests at the connectors.
  - If any test indicates a problem, find and correct the cause, then recheck the system.
  - If all the input tests prove OK, the multiplex control unit must be faulty, replace the under-dash fuse/relay box assembly.

# TEST CONDITION

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
M6	YEL/BLK	Connect J7 terminal toM7 [M9] terminal, and M9 [M7]	Check actuator operation: The driver's door lock actuator should lock [unlock].	Blown No. 16     (15 A) fuse in     the under-hood     fuse/relay box
M9	YEL/GRN	terminal to J4 terminal.		<ul> <li>Faulty driver's door lock actuator</li> </ul>
				<ul> <li>An open in the wire</li> </ul>
M7	YEL/BLK	Connect J7 terminal to M6 [M8] terminal, and M8 [M6] terminal to J4	Check actuator operation: The front passenger's door lock actuator should lock [unlock].	• Blown No. 16 (15 A) fuse in the under-hood fuse/relay box
M8	YEL	terminal.		<ul> <li>Faulty front passenger's door lock actuator</li> <li>An open in the wire</li> </ul>
P16	YEL	Connect J7 terminal to P17 [P16] terminal, and P16 [P17]	Check actuator operation: The hatch lock actuator should lock [unlock].	Blown No. 16     (15 A) fuse in     the under-hood     fuse/relay box
P17	YEL/BLK	terminal to J4 terminal.		<ul><li>Faulty hatch lock actuator</li><li>An open in the</li></ul>

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

				wire
J6 C5	ORN	Connect J6 terminal to C5 terminal	Check horn operation: With the horn switch pressed, the horn should sound.	
J7	WHT	Under all conditions	Check for voltage to ground: There should be battery voltage.	<ul> <li>Blown No. 16 (15 A) fuse in the under-hood fuse/relay box</li> <li>An open in the wire</li> </ul>
K2 <sup>(1)</sup>	BLU/ORN	Under all conditions	Check for continuity between the K2 terminal and the keyless receiver unit 5P connector No. 2 terminal with the 5P connector disconnected: There should be continuity.	An open in the wire

# DOOR LOCK ACTUATOR TEST

## **DRIVER'S DOOR**

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

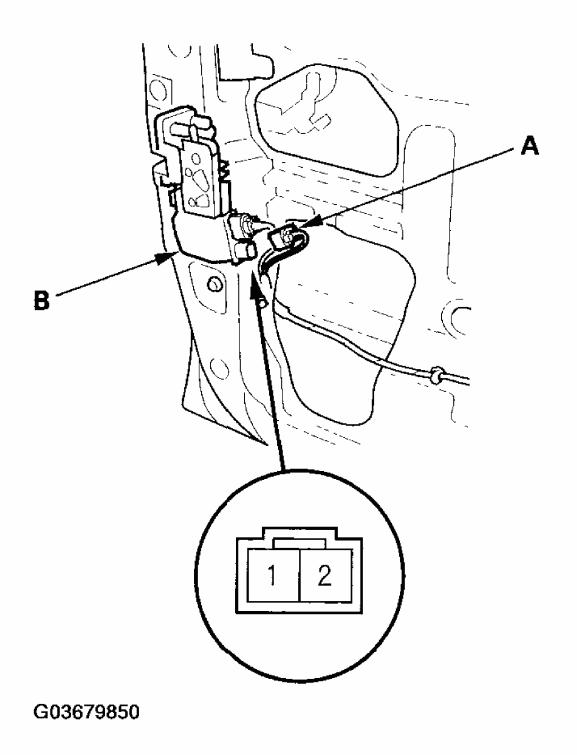


Fig. 7: Disconnecting 2P Connector From Actuator Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check actuator operation by connecting power and ground according to the table. To prevent damage to the actuator, apply battery voltage only momentarily.

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

Terminal Position	1	2
LOCK	$\oplus$	$\ominus$
UNLOCK	$\bigcirc$	$\oplus$

G03679851

Fig. 8: Actuator Operation Description Table Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the actuator does not work as specified, replace it.

#### **PASSENGER'S DOOR**

- 1. Remove the passenger's door panel (see <u>FRONT DOOR PANEL REMOVAL/INSTALLATION</u>).
- 2. Disconnect the 2P connector (A) from the actuator (B).

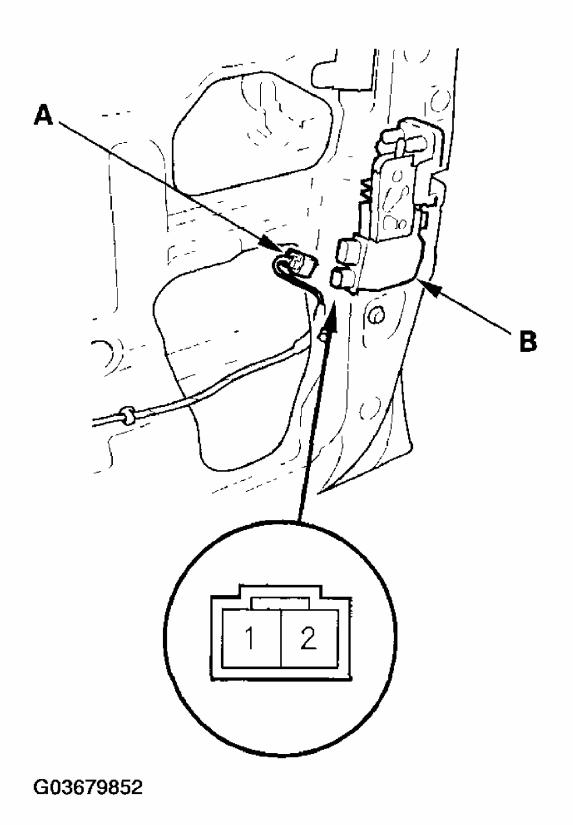


Fig. 9: Disconnecting 2P Connector From Actuator Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

3. Check actuator operation by connecting power and ground according to the table. To prevent damage to the actuator, apply battery voltage only momentarily.

Terminal Position	1	2
LOCK	$\oplus$	
UNLOCK	$\bigcirc$	$\oplus$

G03679853

Fig. 10: Actuator Operation Description Table Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the actuator does not work as specified, replace it.

# DOOR LOCK KNOB SWITCH TEST

- 1. Remove the driver's door panel (see <u>FRONT DOOR PANEL</u> <u>REMOVAL/INSTALLATION</u>).
- 2. Disconnect the 3P connector (A) from the driver's door lock actuator (B).

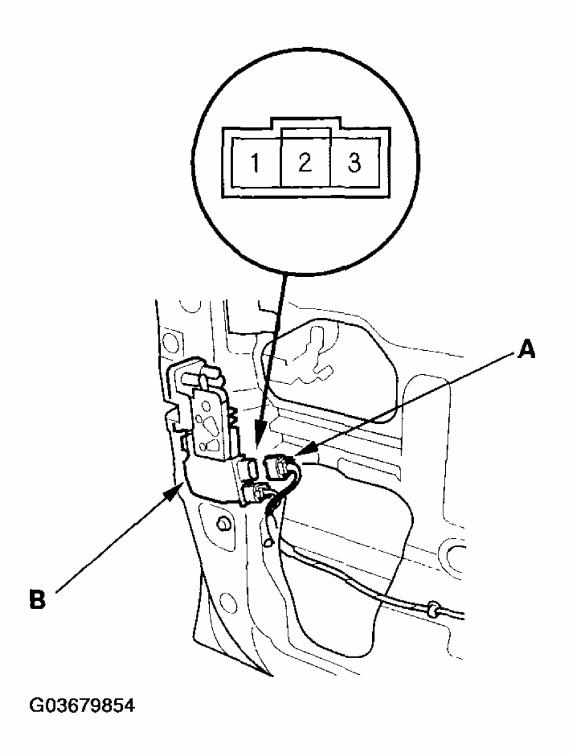


Fig. 11: Disconnecting 3P Connector From Driver's Door Lock Actuator And Connector Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

Terminal Position	1	2	3
LOCK	0		9
UNLOCK*	0	0	

\*: '04-06 EX and EX-P models

G03679855

Fig. 12: Switch Terminals Position Description Table Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the continuity is not as specified, replace the driver's door lock actuator.

# **DOOR LOCK SWITCH TEST**

- 1. Remove the door panel (see <u>FRONT DOOR PANEL REMOVAL/INSTALLATION</u>).
- 2. Remove the two mounting screws and the door lock switch.

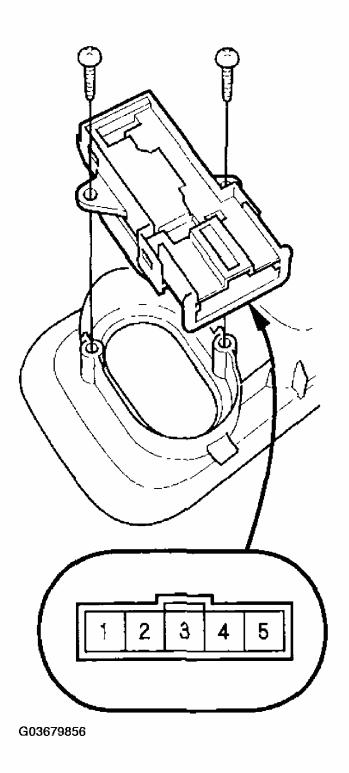


Fig. 13: Removing Mounting Screws And Door Lock Switch And Connector Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- 3. Check for continuity between the No. 1 and No. 2 terminals:
  - There should be continuity when the door lock switch is in the LOCKED position.

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

- There should be no continuity when the door lock switch is in the neutral or UNLOCKED position.
- 4. Check for continuity between the No. 2 and No. 3 terminals:
  - There should be continuity when the door lock switch is in the UNLOCKED position.
  - There should be no continuity when the door lock switch is in the neutral or LOCKED position.
- 5. If the continuity is not as specified, replace the door lock switch.

## **REAR DOOR SWITCH TEST**

- 1. Remove the rear door panel (see **REAR DOOR PANEL REMOVAL/INSTALLATION** ).
- 2. Disconnect the 2P connector (A) from the rear door upper and rear door lower switch.

#### **UPPER:**

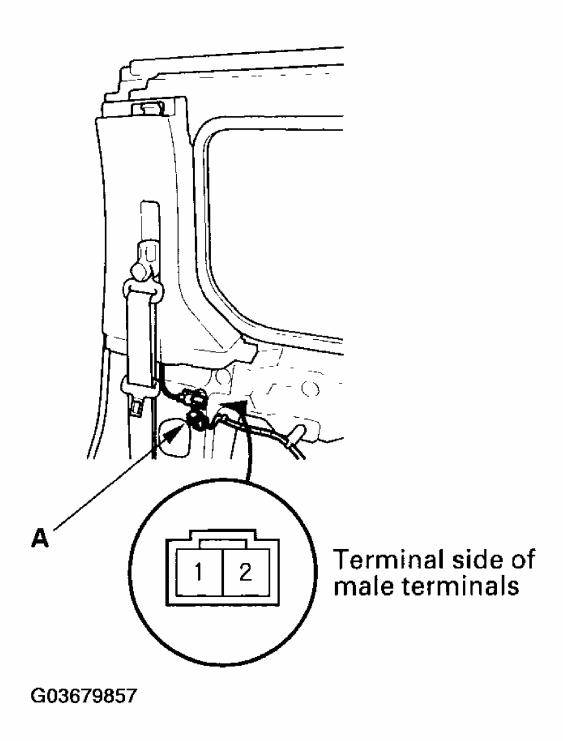


Fig. 14: Disconnecting 2P Connector From Rear Door Upper And Rear Door Lower Switch - Upper Courtesy of AMERICAN HONDA MOTOR CO., INC.

# LOWER:

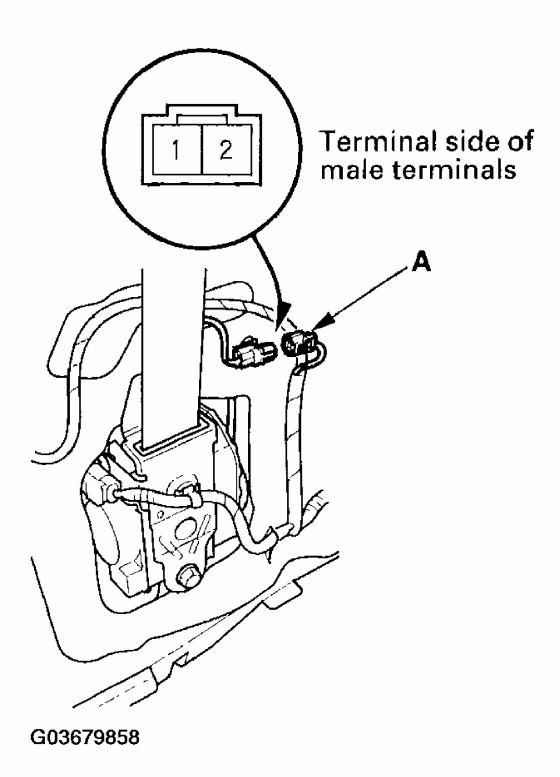


Fig. 15: Disconnecting 2P Connector From Rear Door Upper And Rear Door Lower Switch - Lower Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

- 3. Check for continuity between the 2P connector terminals No. 1 and No. 2.
  - There should be continuity with the rear door open.
  - There should be no continuity with the rear door closed.
- 4. If the continuity is not as specified, replace the faulty switch.

# HATCH LOCK ACTUATOR TEST

- 1. Remove the hatch trim panel (see <u>TRIM REMOVAL/INSTALLATION HATCH AREA</u>).
- 2. Disconnect the 2P connector (A) from the actuator (B).

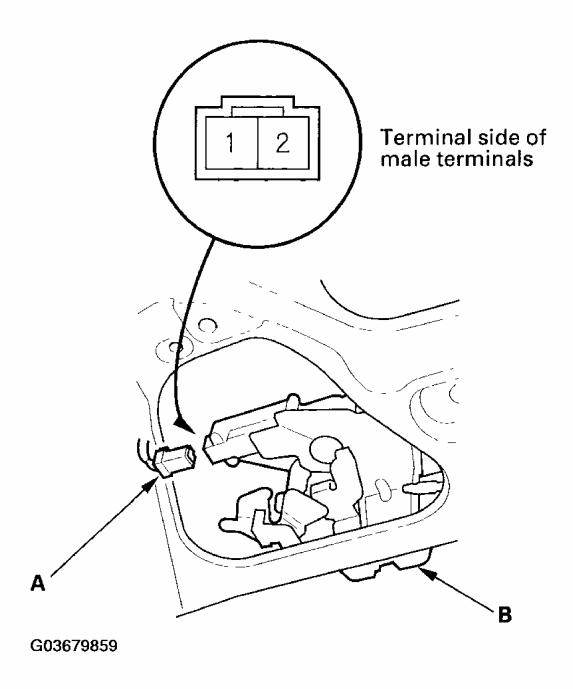
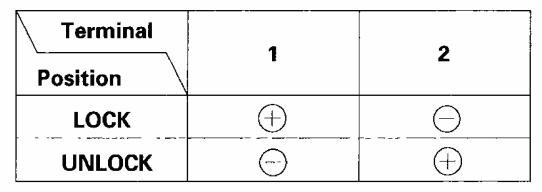


Fig. 16: Disconnecting 2P Connector From Actuator Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check actuator operation by connecting power and ground according to the table. To prevent damage to the actuator, apply battery voltage only momentarily.

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element



G03679860

Fig. 17: Actuator Operation Table Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the actuator does not operate as specified, replace it.

# TRANSMITTER TEST

#### NOTE:

- If the doors unlock or lock with the transmitter, but the LED on the transmitter does not come on, the LED is faulty; replace the transmitter.
- If any door is open, you cannot lock the door with the transmitter.
- If you unlocked the doors with the transmitter, but do not open any of the doors within 30 seconds, the doors relock automatically.
- The doors do not lock or unlock with the transmitter if the ignition key is in the ignition switch.
- 1. Press the lock or unlock button five or six times to reset the transmitter.
  - If the locks work, the transmitter is OK.
  - If the locks don't work, go to step 2.
- 2. Open the transmitter, and check for water damage.
  - If you find any water damage, replace the transmitter.
  - If there is no water damage, go to step 3.
- 3. Replace the transmitter battery (A) with a new one, and try to lock and unlock the doors with the transmitter by pressing the lock or unlock button five or six times.
  - If the doors lock and unlock, the transmitter is OK.

• If the doors don't lock and unlock, go to step 4.

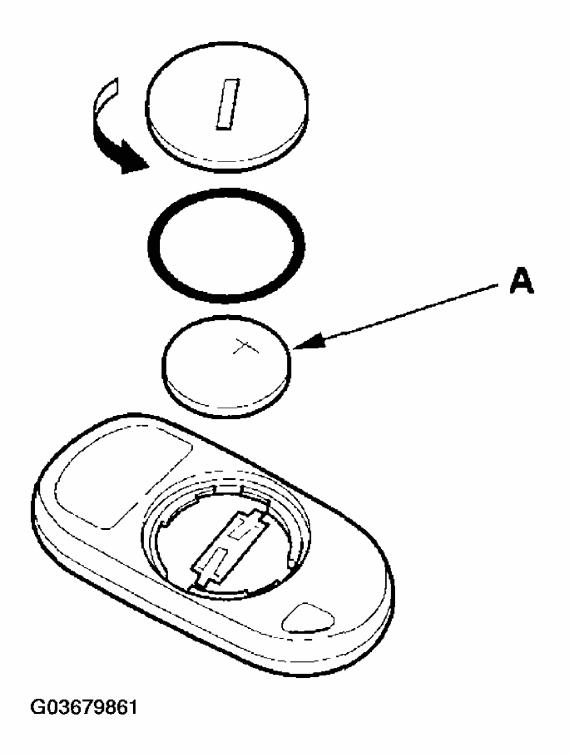


Fig. 18: Removing Transmitter Battery
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-06 ACCESSORIES & EQUIPMENT Keyless/Power Door Lock System - Element

- 4. Reprogram the transmitter, then try to lock and unlock the doors with the transmitter.
  - If the doors lock and unlock, the transmitter is OK.
  - If the doors don't lock and unlock, replace the transmitter. If the new transmitter won't lock and unlock the doors, test the keyless receiver unit (see <u>KEYLESS</u> <u>RECEIVER UNIT INPUT TEST</u>).

## TRANSMITTER PROGRAMMING

Storing transmitter codes:

The codes of up to three transmitters can be stored into the keyless receiver unit memory. (If a fourth code is stored, the code that was programmed first will be erased.)

# NOTE: It is important to maintain the time limits between the steps. Make sure the doors and the tailgate are closed.

- 1. Turn the ignition switch ON (II).
- 2. Within 1 to 4 seconds, push the transmitter lock or unlock button.
- 3. Within 1 to 4 seconds, turn the ignition switch OFF.
- 4. Within 1 to 4 seconds, turn the ignition switch ON (ID.
- 5. Within 1 to 4 seconds, push the transmitter lock or unlock button.
- 6. Within 1 to 4 seconds, turn the ignition switch OFF.
- 7. Within 4 seconds, turn the ignition switch ON (II).
- 8. Within 1 to 4 seconds, push the transmitter lock or unlock button.
- 9. Within 1 to 4 seconds, turn the ignition switch OFF.
- 10. Within 4 seconds, turn the ignition switch ON (II).
- 11. Within 1 to 4 seconds, push the transmitter lock or unlock button.
- 12. Confirm you can hear the sound of the door lock actuators. Within 1 to 4 seconds, push the transmitter lock or unlock button again.
- 13. Within 10 seconds, press the transmitter lock or unlock buttons on the two additional transmitters. Confirm that you can hear the sound of the door lock actuators after each transmitter code is stored.
- 14. Turn the ignition switch OFF, and remove the key.
- 15. Confirm proper operation of the transmitters.