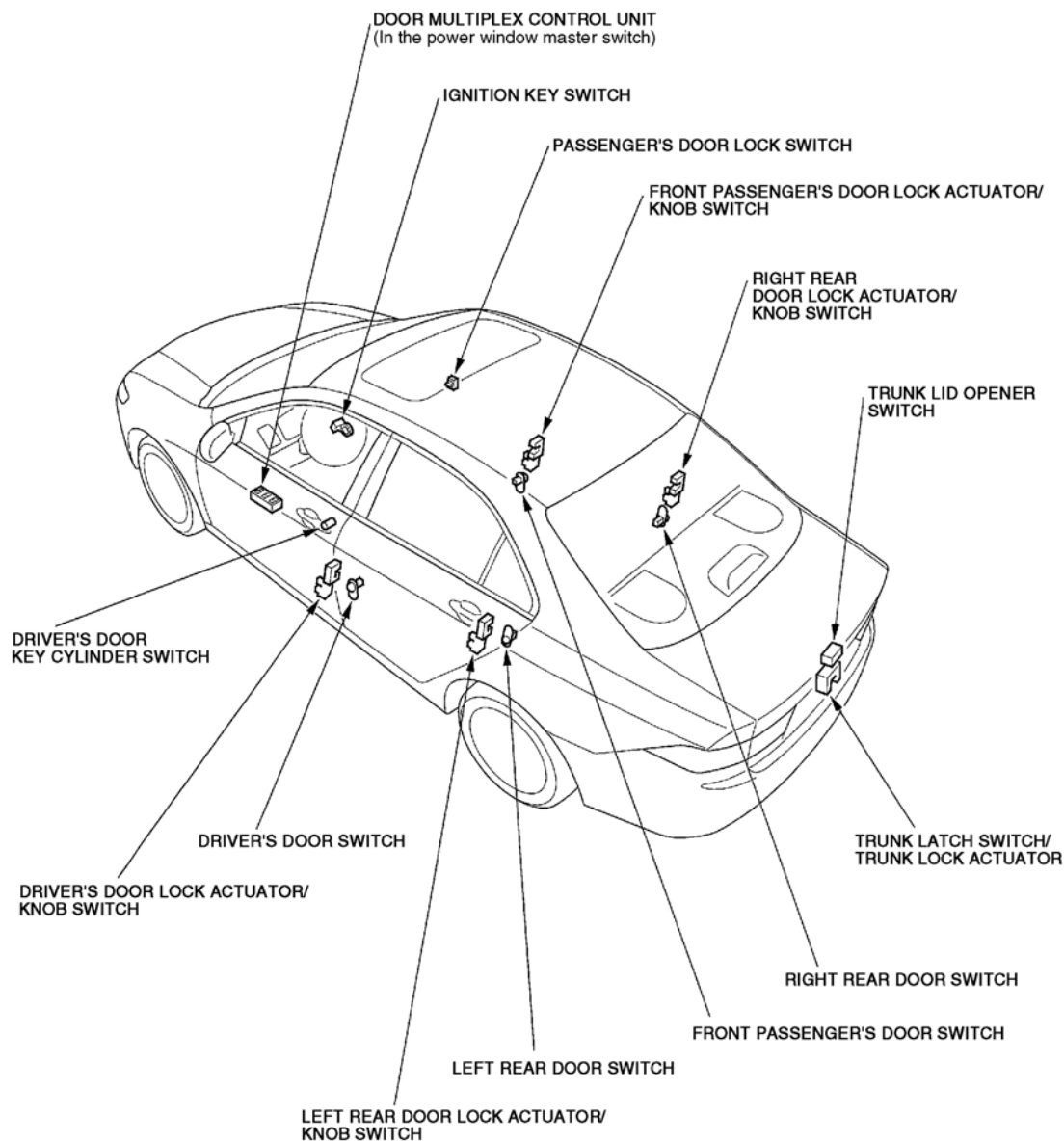


2004 ACCESSORIES & EQUIPMENT

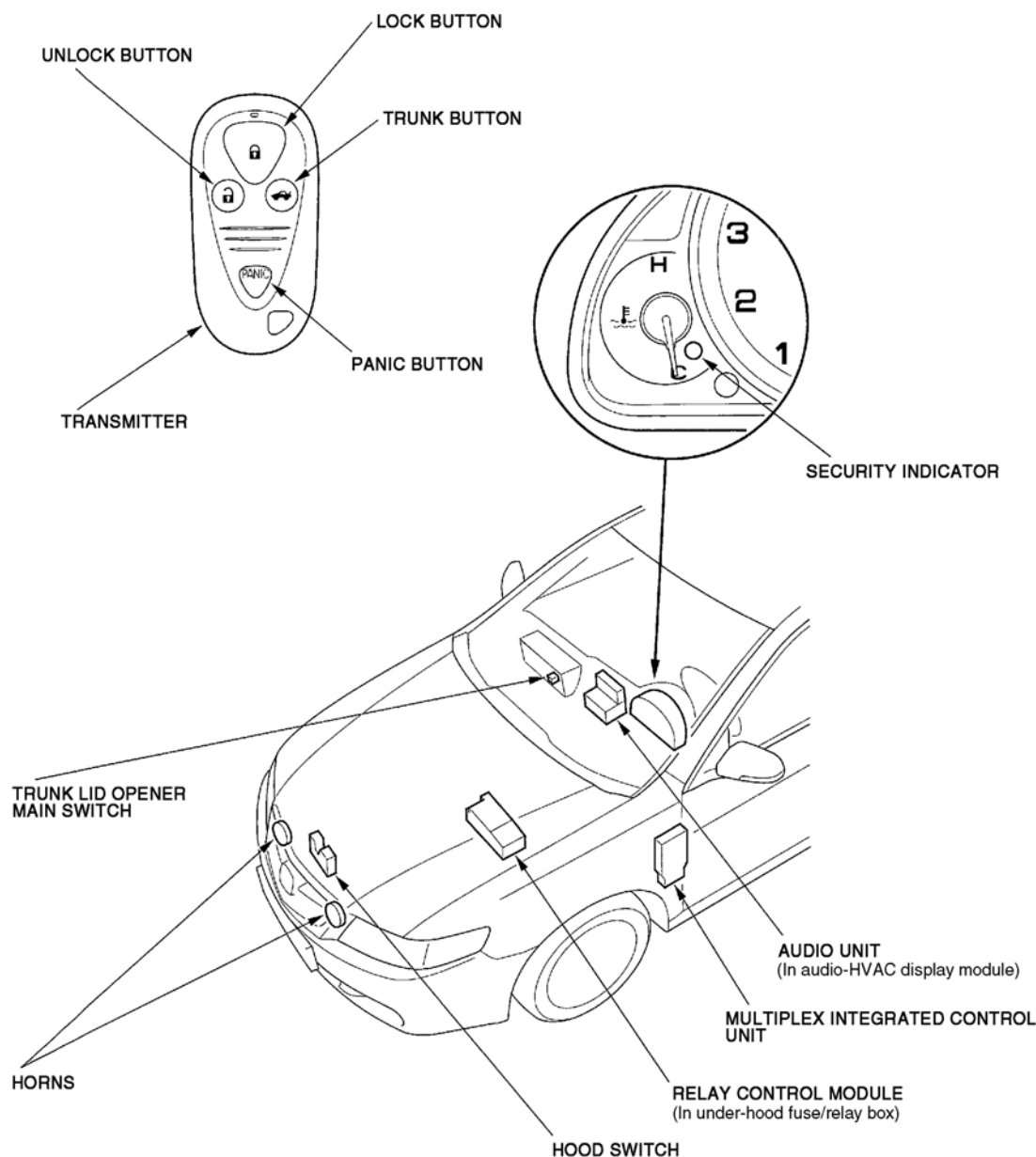
Keyless Entry/Security Alarm System - TSX

COMPONENT LOCATION INDEX



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**Fig. 1: Locating Keyless Entry/Security Alarm System Components (1 Of 2)**



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**Fig. 2: Locating Keyless Entry/Security Alarm System Components (2 Of 2)**

## SYSTEM DESCRIPTIONS

### SECURITY ALARM SYSTEM

The security alarm system is armed automatically after the doors, hood, and trunk are closed and locked. For the system to arm, the ignition switch must be off, the key must be removed, and the MICU must receive signals that the doors, hood, trunk are closed and locked. The alarm can be disarmed at any time by unlocking the driver's door with the key or pressing the UNLOCK button on the remote transmitter.

When everything is closed and locked, the only inputs that are grounded, and have 0 volts, are the driver's door lock knob switch (LOCK position), and the integrated audio-HVAC display module. In other words, all of the other switches are open, and have about 10 volts, including the key cylinder switches. The security indicator in the gauge control module begins to flash immediately after the vehicle is completely closed and locked, and 15 seconds later, the security system arms and the security indicator flashes on for a shorter amount of time than before. If the security indicator does not flash, the system is not arming. A beep sounds and parking lights flash to confirm the security alarm system is armed if the LOCK button is pressed a second time within 5 seconds.

If one of the switches is misadjusted or shorted internally, or there is a short in the circuit, the security system will not arm. As long as the control unit continues to receive a ground signal (0 volts), it senses that the vehicle is not closed and locked, and the system will not arm. A switch that is slightly misadjusted can cause the alarm to sound for no apparent reason. In this case, a significant change in outside air temperature, the vibration of a passing truck, or someone bumping into the vehicle could cause the alarm to sound. There is no glass breakage or motion detector feature.

If anything is opened or improperly unlocked after the system is armed, the control unit receives a ground signal from that switch, and the 10 volts reference drops to 0 volts. If the integrated audio-HVAC display unit is disconnected, the input loses its ground, and the input voltage goes to 10 volts. The system sounds the alarm when any of these occur:

- A door or the trunk is forced open
- A door is unlocked without using the key or the remote transmitter
- The hood is opened
- The audio-HVAC display unit is disconnected
- The remote panic is operated

When the system sounds the alarm, the horns sound and the exterior lights flash for 2 minutes. The alarm can be stopped at any time by unlocking the driver's door with the key or by pressing any button on the remote transmitter.

## **PANIC MODE**

The panic mode sounds the alarm in order to attract attention. When the PANIC button on the remote transmitter is pressed and held for 2 seconds, the alarm sounds and the exterior lights flash for about 20 seconds.

The panic mode can be cancelled at anytime by pressing any button on the remote transmitter or by turning the ignition switch ON (II). The panic mode will not function if the ignition switch is ON (II).

## **KEYLESS ENTRY SYSTEM**

The keyless entry system is integrated with the MICS. The multiplex integrated control unit (MICU) receives LOCK, UNLOCK and PANIC signals from the door multiplex control unit (keyless receiver).

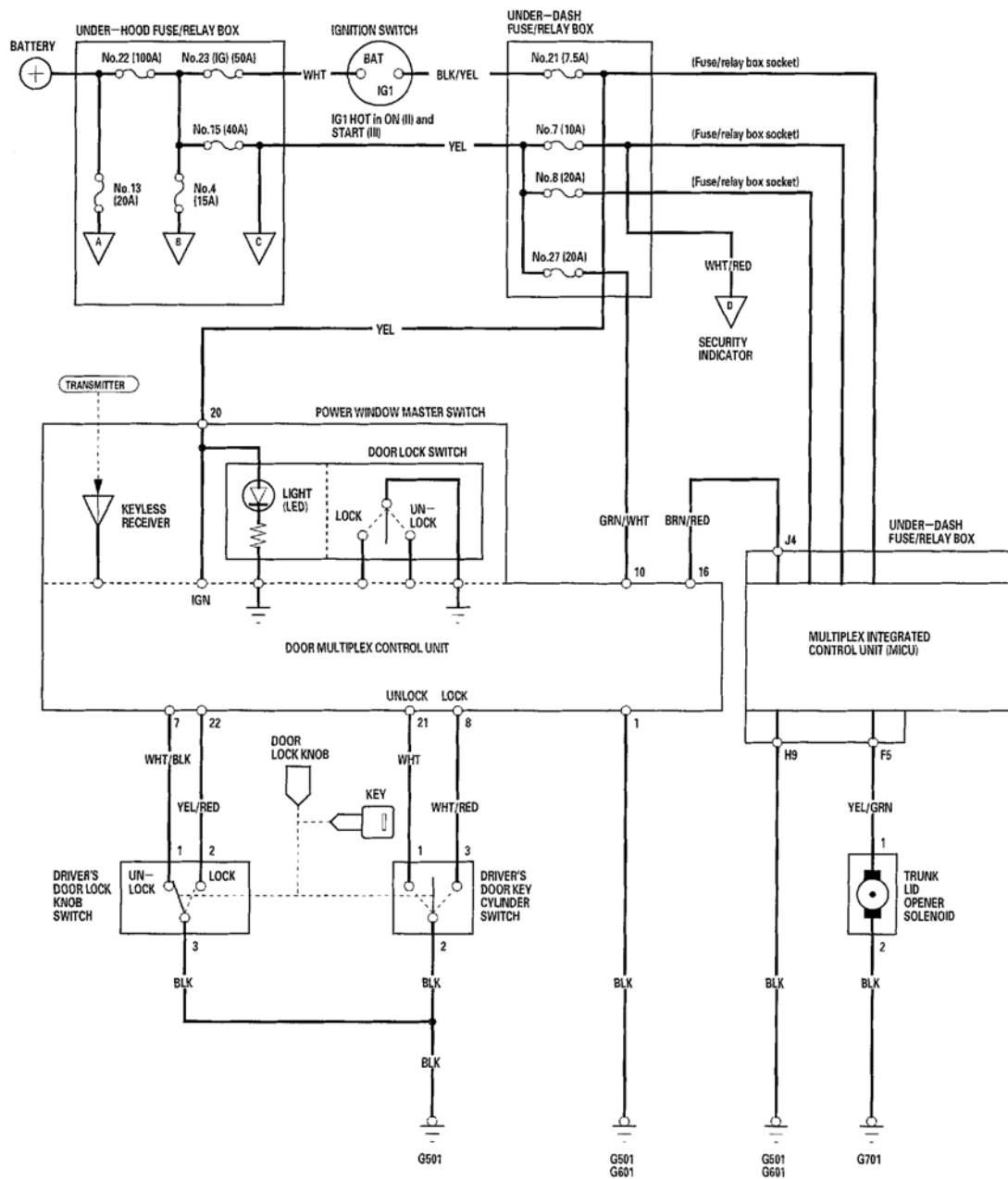
The keyless entry system allows you to lock and unlock the vehicle with the remote transmitter. When you press the LOCK button, all doors lock. When you press the UNLOCK button once, only the driver's door

unlocks. The other doors will unlock when you press the button a second time. The doors will not lock with the remote transmitter if a door is not fully closed, or if the key is in the ignition switch.

If the UNLOCK button is pressed, released, then pressed and held, the windows will begin to open. The windows stop if the button is released. See power windows for more information and troubleshooting.

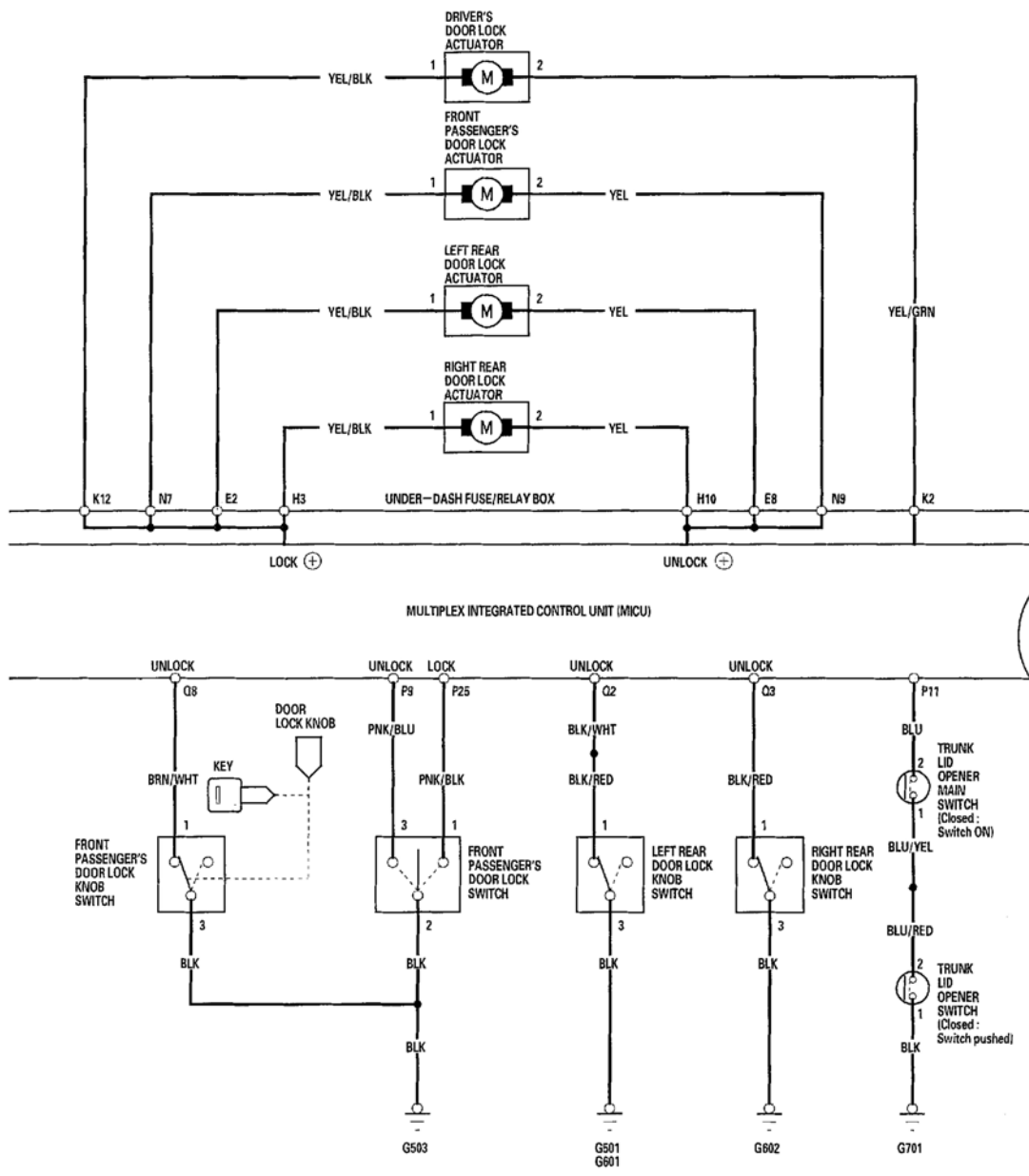
When the switch for the ceiling light is in the center position, it will come on when the UNLOCK button is pressed. If a door is not opened, the light will go off in about 30 seconds, and the doors will relock. If the doors are locked with the remote transmitter within 30 seconds, the light will go off immediately.

## **CIRCUIT DIAGRAM**



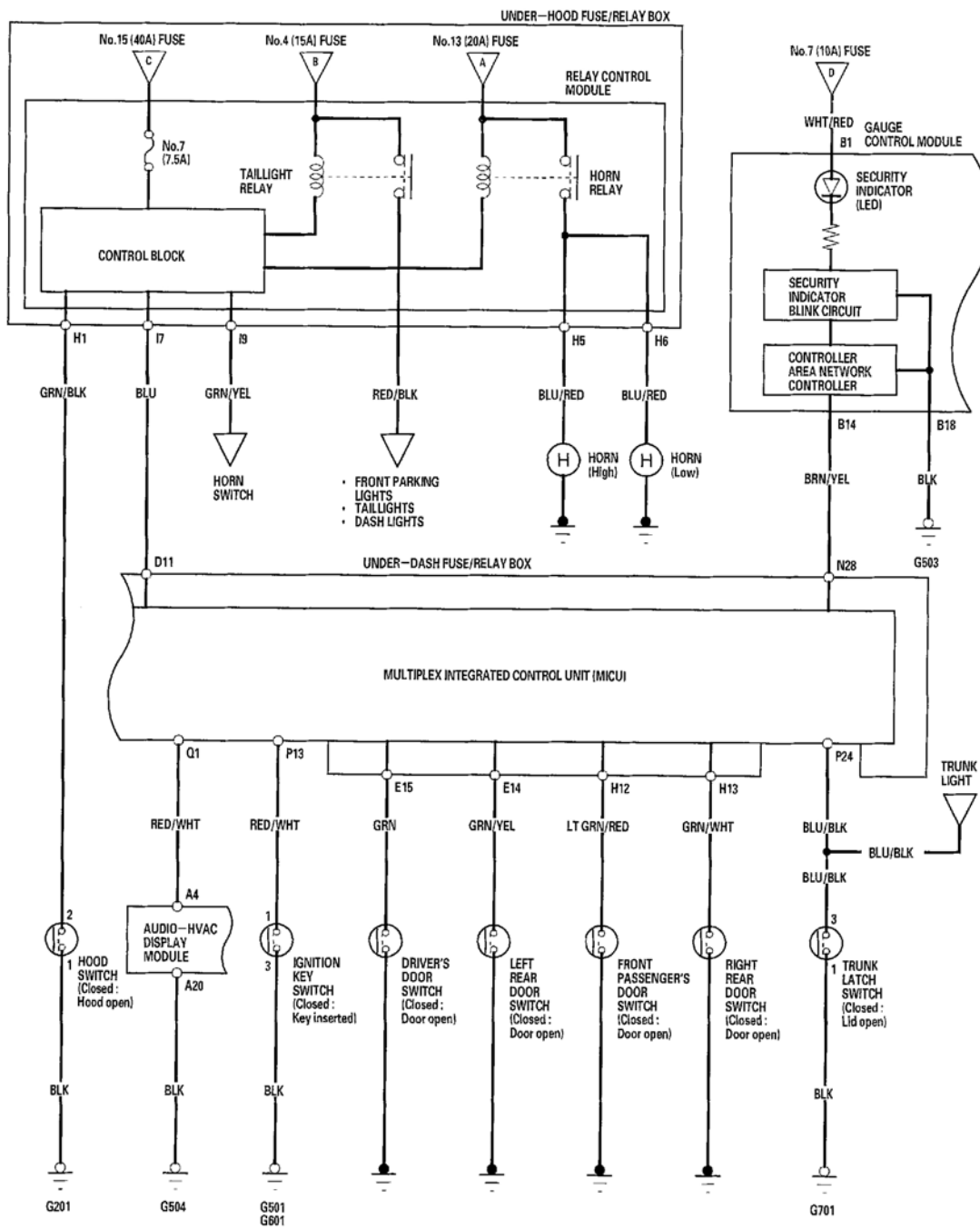
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**Fig. 3: Keyless Entry/Security Alarm System Wiring Diagram (1 Of 3)**



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Fig. 4: Keyless Entry/Security Alarm System Wiring Diagram (2 Of 3)



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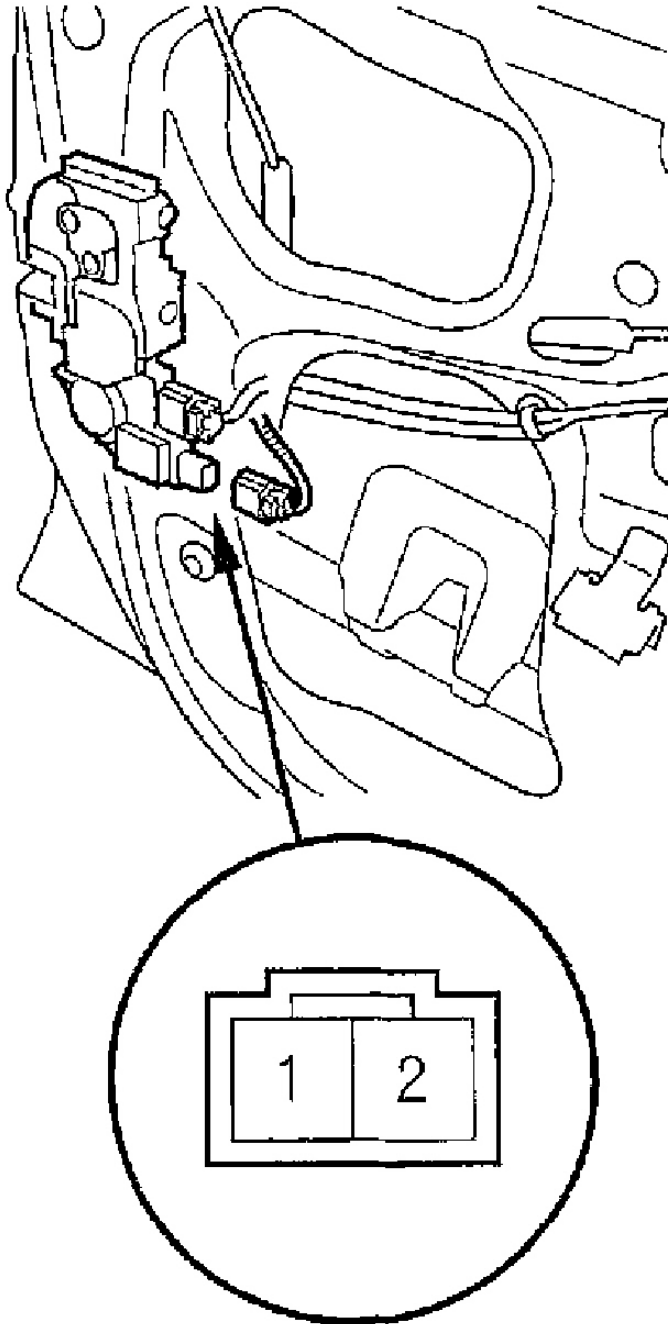
Fig. 5: Keyless Entry/Security Alarm System Wiring Diagram (3 Of 3)

## 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 from the actuator.



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**Fig. 6: Disconnecting The 2P Connector From The Actuator**



3. Check actuator operation by connecting power and ground according to the table. See **Fig. 7** . To prevent damage to the actuator, apply battery voltage only momentarily.

Terminal Position	1	2
LOCK	+	-
UNLOCK	-	+

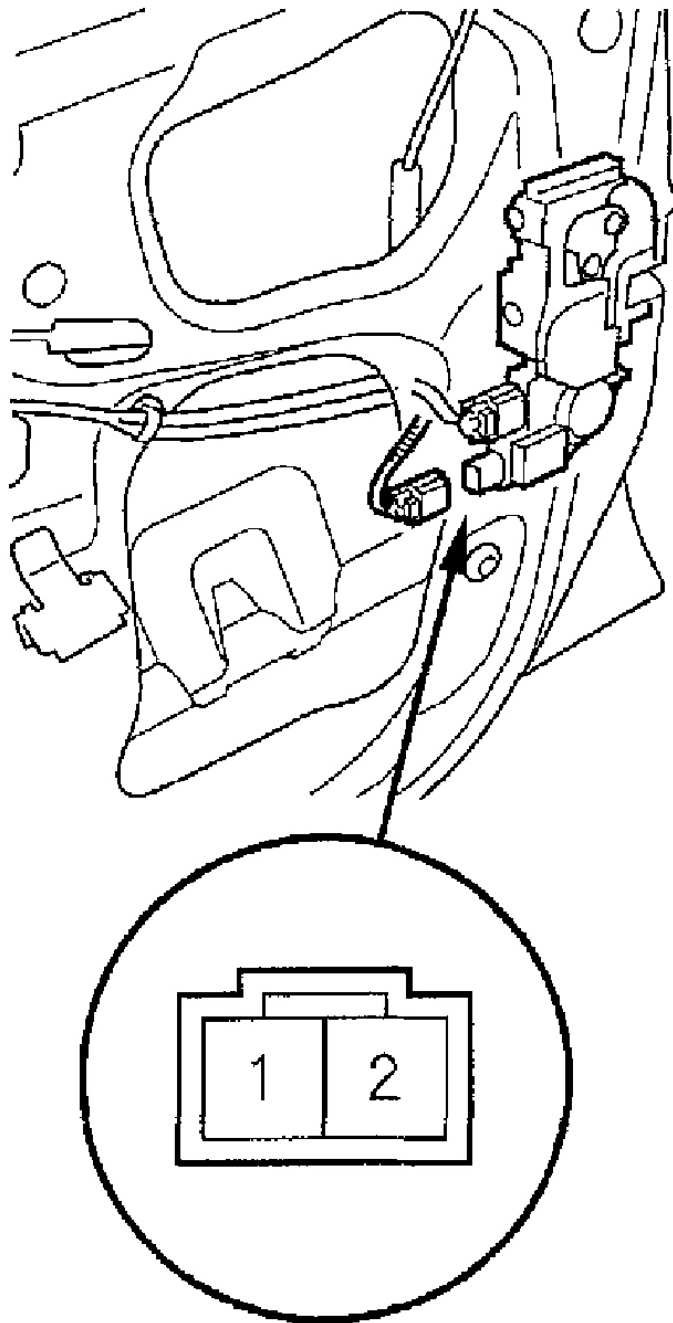
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**Fig. 7: Driver's Door Lock Actuator Test Table**

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

**PASSENGER'S DOOR**

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



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**Fig. 8: Disconnecting The 2P Connector From The Actuator**

3. Check actuator operation by connecting power and ground according to the table. See **Fig. 9** . To prevent damage to the actuator, apply battery voltage only momentarily.

Terminal Position	1	2
LOCK	⊕	⊖
UNLOCK	⊖	⊕

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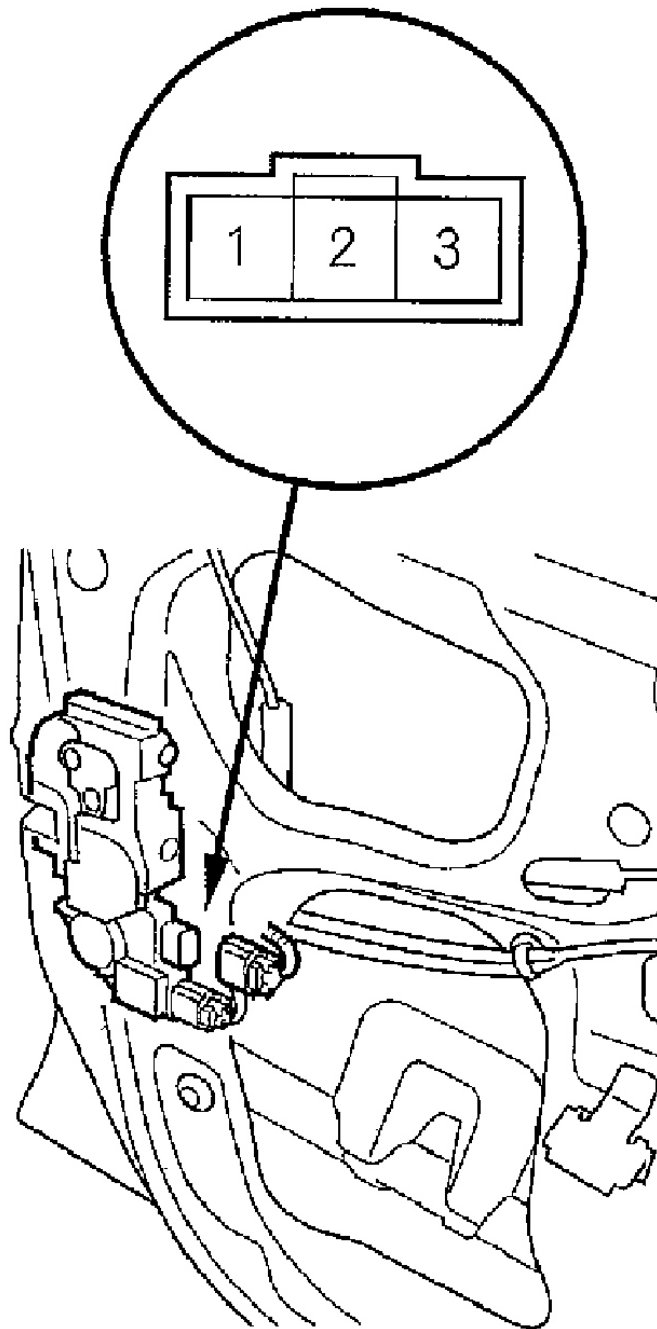
**Fig. 9: Passenger's Door Lock Actuator Test Table**

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

## DOOR LOCK KNOB SWITCH TEST

### DRIVER'S DOOR

- Remove the driver's door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION** ).
- Disconnect the 3P connector from the actuator.



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**Fig. 10: Disconnecting The 3P Connector From The Actuator**

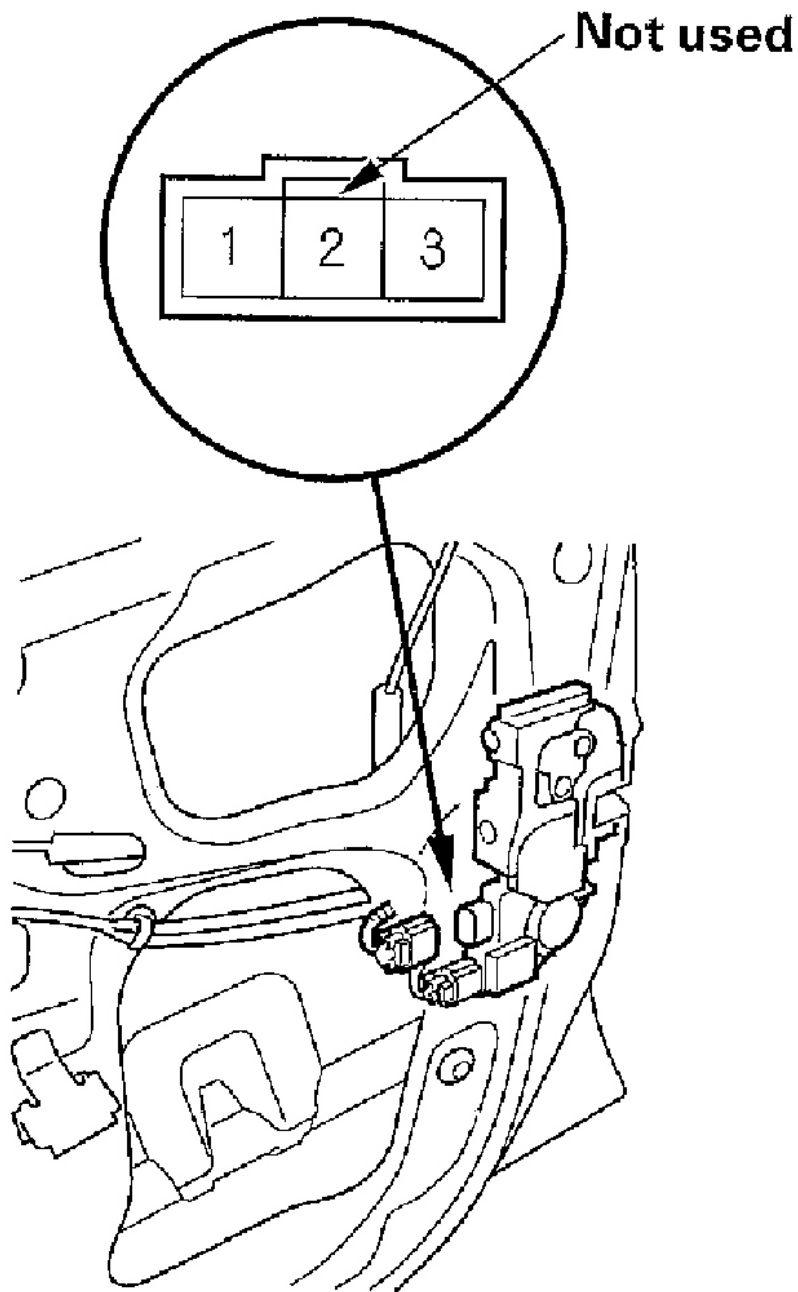
3. Check for continuity between the terminals.
  - There should be continuity between the No. 2 and No. 3 terminals when the door lock knob switch

is in the LOCK position and no continuity when the switch is in the UNLOCK position.

- There should be continuity between the No. 1 and No. 3 terminals when the door lock knob switch is in the UNLOCK position and no continuity when the switch is in the LOCK position.
4. If the continuity is not as specified, replace the door lock actuator.

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

1. Remove the front passenger's door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION** ).
2. Disconnect the 3P connector from the actuator.



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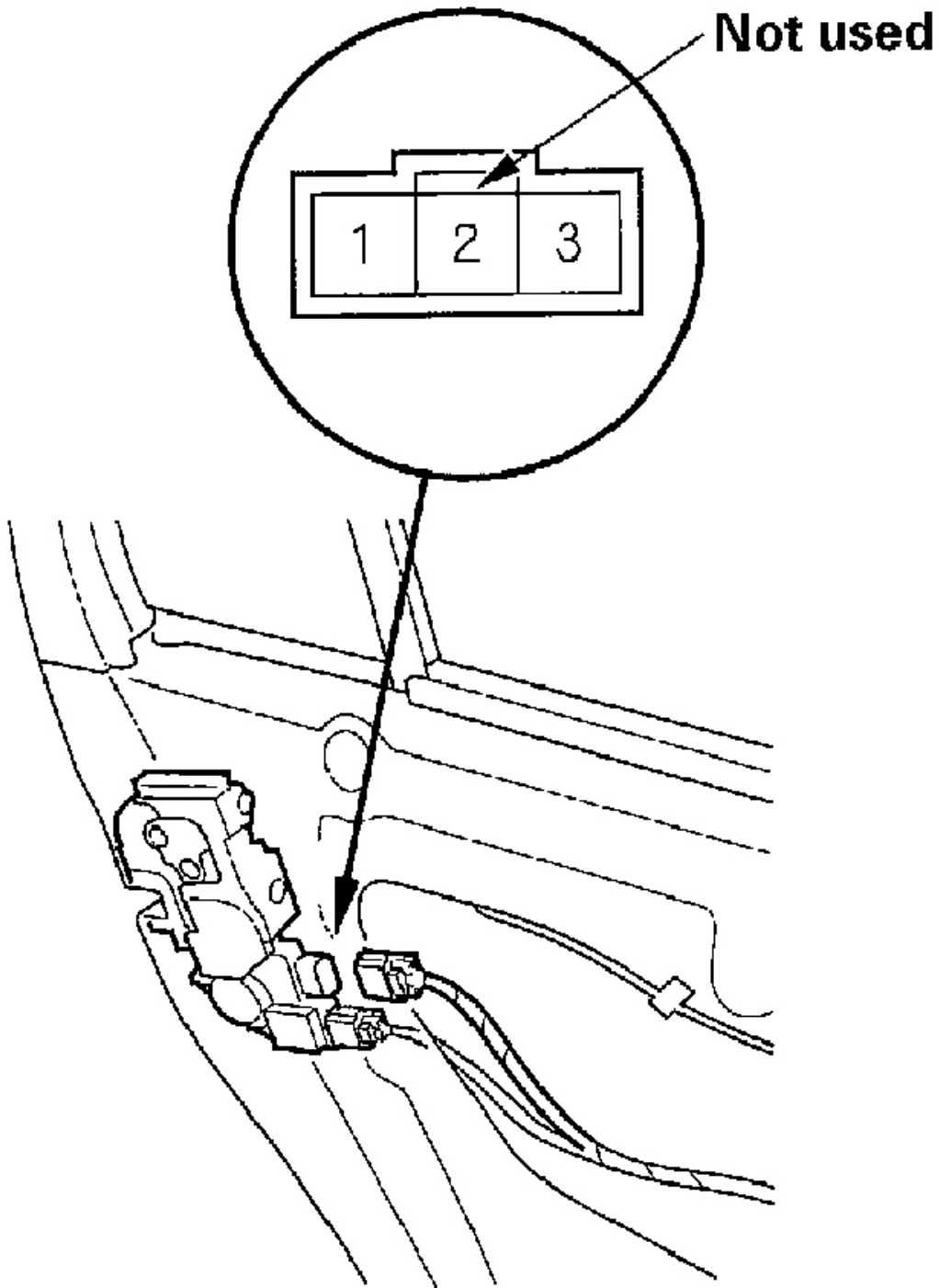
**Fig. 11: Disconnecting The 3P Connector From The Actuator**

3. Check for continuity between the terminals.
  - There should be continuity between the No. 1 and No. 3 terminals when the door lock knob switch in the UNLOCK position and no continuity when the switch is in the LOCK position.

4. If the continuity is not specified, replace the door lock actuator.

### **REAR DOOR**

1. Remove the left or right rear door panel (see **REAR DOOR PANEL REMOVAL/INSTALLATION** ).
2. Disconnect the 3P connector from the actuator.



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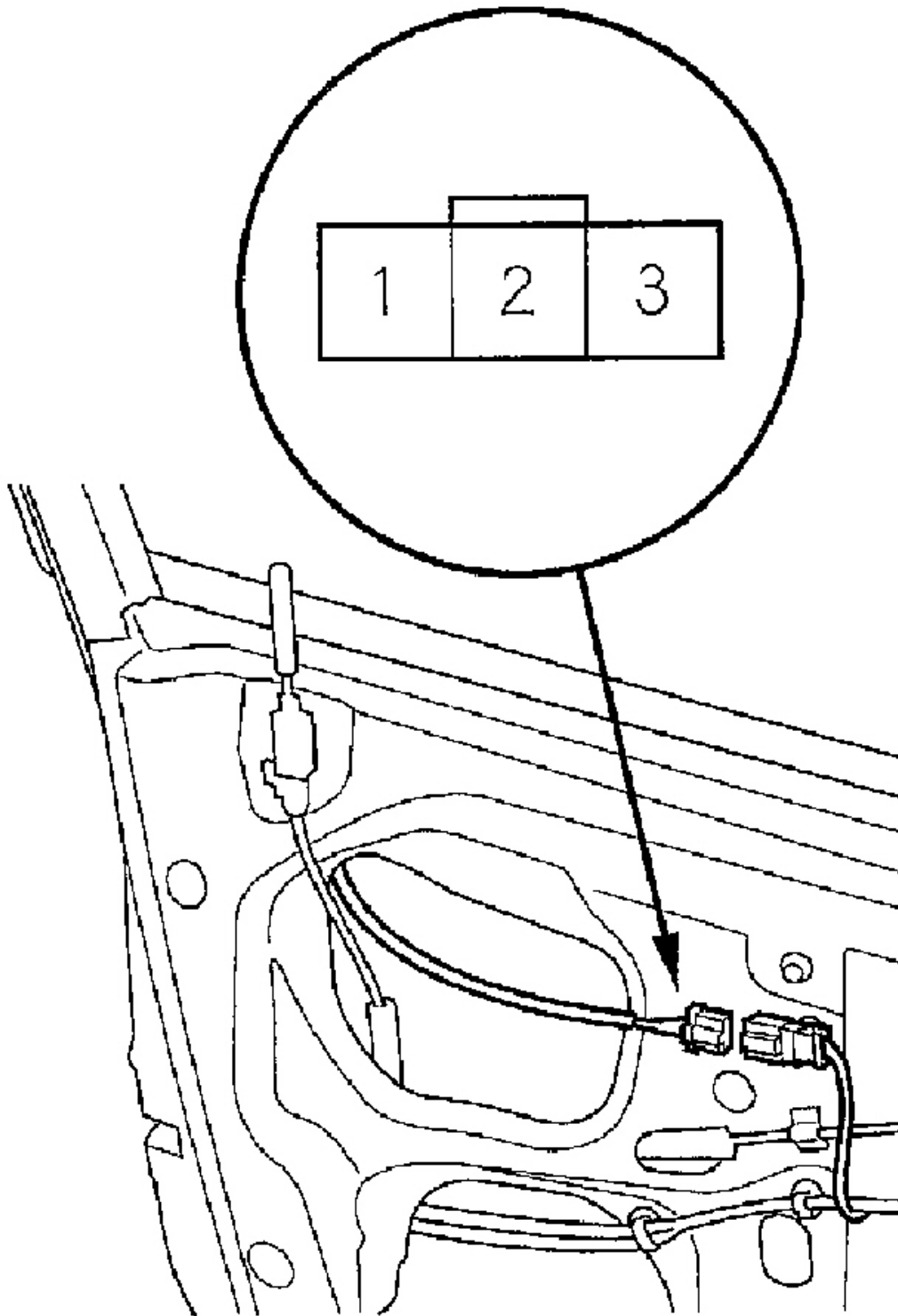


**Fig. 12: Disconnecting The 3P Connector From The Actuator**

3. Check for continuity between the terminals.
  - There should be continuity between the No. 1 and No. 3 terminals when the door lock knob switch is UNLOCK position and no continuity when the switch is in the LOCK position.
4. If the continuity is not as specified, replace the door lock actuator.

**DOOR KEY CYLINDER SWITCH TEST**

1. Remove the driver's door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION** ).
2. Disconnect the 3P connector from the key cylinder switch.



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**Fig. 13: Disconnecting The 3P Connector From The Key Cylinder Switch**

3. Check for continuity between the terminals.
  - There should be continuity between the No. 2 and No. 3 terminals when the door key cylinder switch is in LOCK position.
  - There should be no continuity between the No. 2 and No. 3 terminals when the door key cylinder switch is in the neutral or UNLOCK position.
  - There should be continuity between the No. 1 and No. 2 terminals when the door key cylinder switch is in UNLOCK position.
  - There should be no continuity between the No. 1 and No. 2 terminals when the door key cylinder switch is in the neutral or LOCK position.
4. If the continuity is not as specified, replace the door key cylinder assembly (see **FRONT DOOR OUTER HANDLE REPLACEMENT** ).

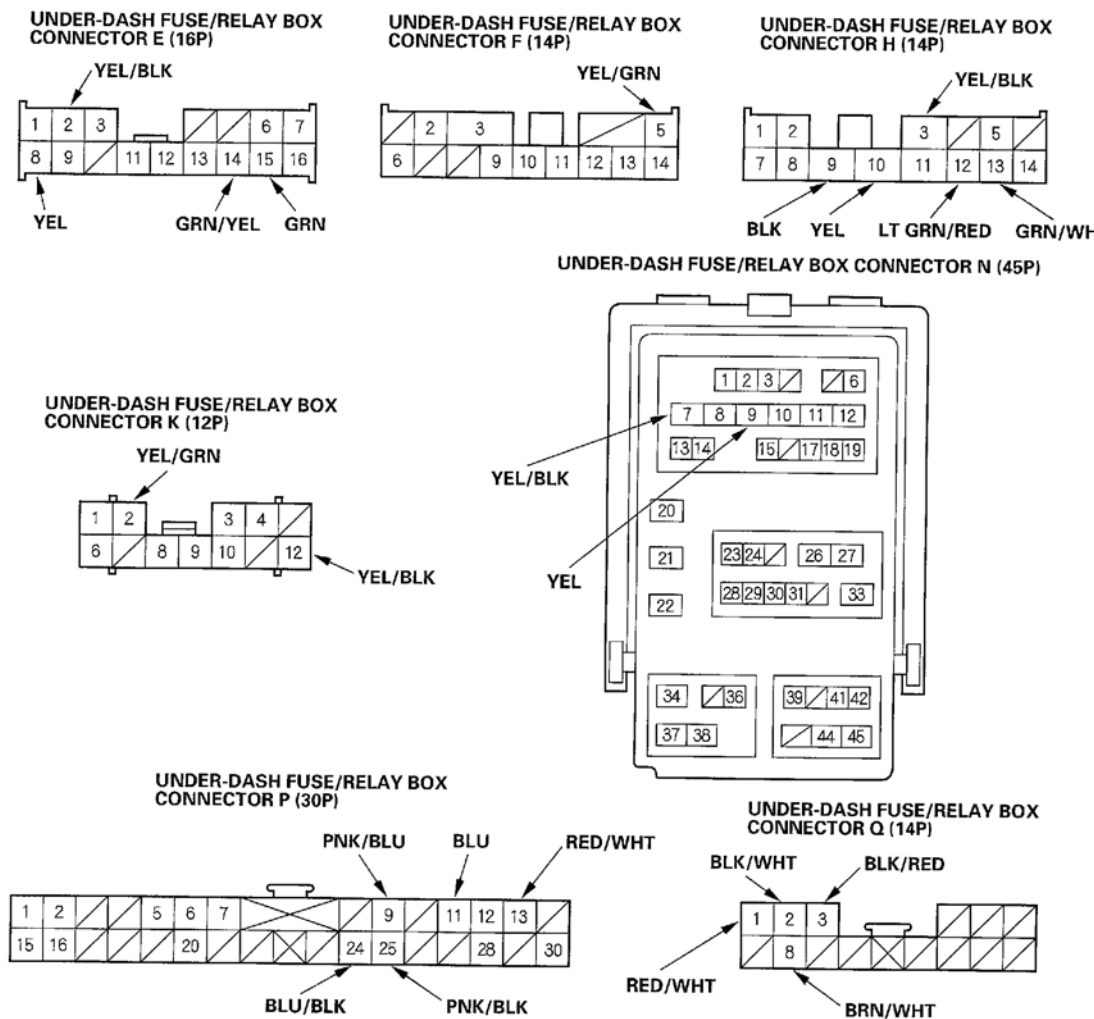
**CONTROL UNIT INPUT TEST**

1. Before testing the keyless entry/security control functions, troubleshoot the multiplex integrated control system. (see **MULTIPLEX INTEGRATED CONTROL UNIT INPUT TEST** ).

**Multiplex Integrated Control Unit:**

2. Remove the left kick panel (see **TRIM REMOVAL/INSTALLATION - DOOR AREA** ).
3. Disconnect the under-dash fuse/relay box connectors.

**NOTE:** All connectors are wire side of female terminals.



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**Fig. 14: Identifying Connector Terminals**

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 connectors still disconnected, make these input tests at the connectors. See **Fig. 15** .
  - If any test indicates a problem, find and correct the cause, then recheck the system.
  - If the input tests prove OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
H9	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> <li>• Poor ground (G501, G601)</li> <li>• An open in the wire</li> </ul>
F5	YEL/GRN	Connect the F5 terminal to the battery positive terminal momentarily.	Check trunk opener operation: Trunk lid should open.	<ul style="list-style-type: none"> <li>• Poor ground (G701)</li> <li>• Faulty trunk opener solenoid</li> <li>• An open in the wire</li> </ul>
K2	YEL/GRN	Connect the battery positive terminal to K12 (K2) terminal, and K2 (K12) terminal to H9 terminal.	Check actuator operation: The driver's door lock actuator should lock (unlock).	<ul style="list-style-type: none"> <li>• Faulty driver's door lock actuator</li> <li>• An open in the wire</li> </ul>
K12	YEL/BLK			
N7	YEL/BLK	Connect the battery positive terminal to N7 (N9) terminal, and N9 (N7) terminal to H9 terminal.	Check actuator operation: The front passenger's door lock actuator should lock (unlock).	<ul style="list-style-type: none"> <li>• Faulty front passenger's door lock actuator</li> <li>• An open in the wire</li> </ul>
N9	YEL			
E2	YEL/BLK	Connect the battery positive terminal to E2 (E8) terminal, and E8 (E2) terminal to H9 terminal.	Check actuator operation: The left rear door lock actuator should lock (unlock).	<ul style="list-style-type: none"> <li>• Faulty left rear door lock actuator</li> <li>• An open in the wire</li> </ul>
E8	YEL			
H3	YEL/BLK	Connect the battery positive terminal to H3 (H10) terminal, and H10 (H3) terminal to H9 terminal.	Check actuator operation: The right rear door lock actuator should lock (unlock).	<ul style="list-style-type: none"> <li>• Faulty right rear door lock actuator</li> <li>• An open in the wire</li> </ul>
H10	YEL			

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**Fig. 15: Multiplex Integrated Control Unit Input Test (Disconnected)**

6. Reconnect all connectors to the under-dash fuse/relay box, and make these input tests at the appropriate connectors on the under-dash fuse/relay box. See **Fig. 16** and **Fig. 17** .
  - 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 7.

## 2004 Acura TSX

### 2004 ACCESSORIES & EQUIPMENT Keyless Entry/Security Alarm System - TSX

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
Q8	BRN/WHT	Front passenger's door lock knob switch unlocked	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G503)</li> <li>• Faulty front passenger's door lock knob switch</li> <li>• An open in the wire</li> </ul>
		Front passenger's door lock knob switch locked	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty front passenger's door lock knob switch</li> <li>• Short to ground</li> </ul>
P9	PNK/BLU	Front passenger's door lock switch unlocked	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G503)</li> <li>• Faulty front passenger's door lock switch</li> <li>• An open in the wire</li> </ul>
		Front passenger's door lock switch in neutral	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty front passenger's door lock switch</li> <li>• Short to ground</li> </ul>
P25	PNK/BLK	Front passenger's door lock switch locked	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G503)</li> <li>• Faulty front passenger's door lock switch</li> <li>• An open in the wire</li> </ul>
		Front passenger's door lock switch in neutral	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty front passenger's door lock switch</li> <li>• Short to ground</li> </ul>
Q2	BLK/WHT	Left rear door lock knob switch unlocked	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G501, G601)</li> <li>• Faulty left rear door lock knob switch</li> <li>• An open in the wire</li> </ul>
		Left rear door lock knob switch locked	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty left rear door lock knob switch</li> <li>• Short to ground</li> </ul>
Q3	BLK/RED	Right rear door lock knob switch unlocked	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G602)</li> <li>• Faulty right rear door lock knob switch</li> <li>• An open in the wire</li> </ul>
		Right rear door lock knob switch locked	Check for voltage to ground: There should be 5V or more.	<ul style="list-style-type: none"> <li>• Faulty right rear door lock knob switch</li> <li>• Short to ground</li> </ul>
P11	BLU	Trunk lid opener main switch ON and trunk opener switch pushed	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G701)</li> <li>• Faulty trunk lid opener main switch</li> <li>• Faulty trunk lid opener switch</li> <li>• An open in the wire</li> </ul>
		Trunk lid opener main switch OFF and trunk opener switch released	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty trunk lid opener main switch</li> <li>• Faulty trunk lid opener switch</li> <li>• Short to ground</li> </ul>

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**Fig. 16: Multiplex Integrated Control Unit Input Test (1 Of 2 - Connected)**

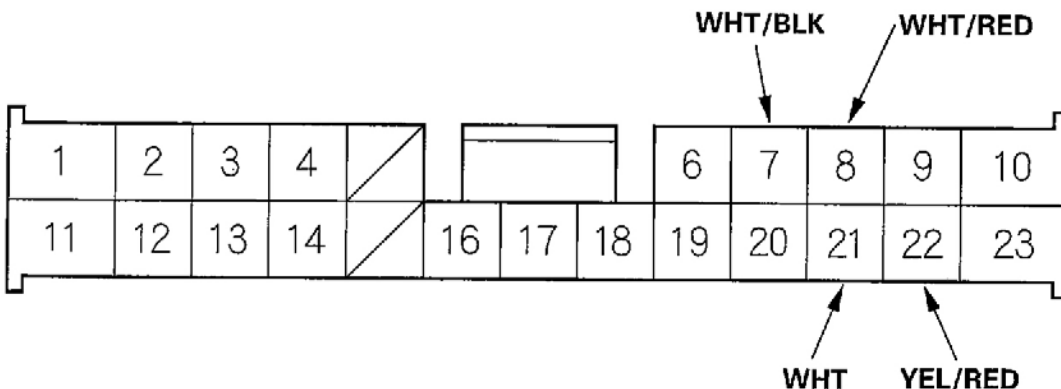
Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
Q1	RED/WHT	Under all conditions	Check for continuity to ground: There should be continuity.	<ul style="list-style-type: none"> <li>• Poor ground (G504)</li> <li>• Faulty connections at the audio unit</li> <li>• Faulty audio unit</li> <li>• An open in the wire</li> </ul>
P13	RED/WHT	Ignition key inserted into the ignition switch.	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G501, G601)</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 style="list-style-type: none"> <li>• Faulty ignition key switch</li> <li>• Short to ground</li> </ul>
E15	GRN	Driver's door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Faulty driver's door switch</li> <li>• Short to ground</li> </ul>
H12	LT GRN/ RED	Front passenger's door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Faulty front passenger's door switch</li> <li>• An open in the wire</li> </ul>
		Front passenger's door closed	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty front passenger's door switch</li> <li>• Short to ground</li> </ul>
E14	GRN/YEL	Left rear door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Faulty left rear door switch</li> <li>• An open in the wire</li> </ul>
		Left rear door closed	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty left rear door switch</li> <li>• Short to ground</li> </ul>
H13	GRN/WHT	Right rear door open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Faulty right rear door switch</li> <li>• An open in the wire</li> </ul>
		Right rear door closed	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty right rear door switch</li> <li>• Short to ground</li> </ul>
P24	BLU/BLK	Trunk lid open	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>• Poor ground (G701)</li> <li>• Faulty trunk latch switch</li> <li>• An open in the wire</li> </ul>
		Trunk lid closed	Check for voltage to ground: There should be 5 V or more.	<ul style="list-style-type: none"> <li>• Faulty trunk latch switch</li> <li>• Short to ground</li> </ul>

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**Fig. 17: Multiplex Integrated Control Unit Input Test (2 Of 2 - Connected)**

**Door Multiplex Control Unit:**

7. Remove the driver's power window switch panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION** ).
8. Disconnect the 23P connector from the power window master switch.



Wire side of female terminals

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**Fig. 18: Identifying Door Multiplex Control Unit Connector Terminals**

9. 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 10.
10. Reconnect the connector to the door multiplex control unit, and make these input tests at the connectors. See **Fig. 19** .
  - 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 11.



Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
7	WHT/BLK	Driver's door lock knob switch unlocked	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <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 locked	Check for voltage to ground: There should be 5 V or more.	
22	YEL/RED	Driver's door lock knob switch locked	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <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.	
21	WHT	Driver's door key cylinder switch in UNLOCK	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>Faulty driver's door key cylinder switch</li> <li>Poor ground (G501)</li> <li>An open in the wire</li> <li>Short to ground</li> </ul>
		Driver's door key cylinder switch in neutral	Check for voltage to ground: There should be 5 V or more.	
		Driver's door key cylinder switch in LOCK	Check for voltage to ground: There should be 5 V or more.	
8	WHT/RED	Driver's door key cylinder switch in LOCK	Check for voltage to ground: There should be 1 V or less.	<ul style="list-style-type: none"> <li>Faulty driver's door key cylinder switch</li> <li>Poor ground (G501)</li> <li>An open in the wire</li> <li>Short to ground</li> </ul>
		Driver's door key cylinder switch in neutral	Check for voltage to ground: There should be 5 V or more.	
		Driver's door key cylinder switch in UNLOCK	Check for voltage to ground: There should be 5 V or more.	

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**Fig. 19: Door Multiplex Control Unit Input Test**

- If all the input tests prove OK, and no DTCs were found during MICS troubleshooting (B-CAN System Diagnosis Test Mode A), go to the B-CAN system input and output index. If multiple failures are found on more than one control unit, replace the under-dash fuse/relay box (includes the MICU). If input failures are related to a particular control unit, replace that control unit.

## DTC TROUBLESHOOTING

### DTC B1026: PASSENGER'S DOOR LOCK SWITCH SIGNAL ERROR

- Clear the DTCs using the HDS.
- Cycle the ignition switch to OFF and then back ON.
- Operate the passenger's door lock switch.
- Check for DTCs using the HDS.

**Is DTC B1026 Indicated?**

**YES:** Go to step 5.

**NO:** Intermittent failure. The passenger's door lock system is OK at this time. Check pin fits

and connections.

5. With the door lock in UNLOCK position, select SECURITY from the HDS and enter the DATA LIST.
6. Check the ON/OFF information of the Front Psnger's Door Lock Sw. (LOCK) and Front Psnger's Door Lock Sw. (UNLOCK) in the DATA LIST.

**Are both information indicators OFF?**

**YES:** Go to step 7.

**NO:** Go to step 9 .

7. Make sure the ON/OFF information of the Front Psnger's Door Lock Sw. (LOCK) and Front Psnger's Door Lock Sw. (UNLOCK) are changed when the passenger's door lock switch is in the LOCK and UNLOCK positions.

**Does the information show the correct ON and OFF indications when the door lock switch in the LOCK and UNLOCK positions?**

**YES:** Intermittent failure, the switch, harness and MICU input circuits are OK at this time. Check pin fits and connections.

**NO:** Go to step 8.

8. Check for an open in the wire between the MICU and passenger's door lock switch at the security alarm/keyless door lock system control unit input test (see **CONTROL UNIT INPUT TEST** ).

**Are the wire harnesses OK?**

**YES:** Faulty passenger's door lock switch; replace it.

**NO:** An open in the wire, repair and recheck.

9. Remove the passenger's inner handle (see **DOORS** ).
10. Disconnect the 3P connector from the passenger's door lock switch.
11. Check the ON/OFF information of the Front Psnger's Door Lock Sw. (LOCK) and Front Psnger's Door Lock Sw. (UNLOCK) in the DATA LIST.

**Are both information indicators OFF?**

**YES:** Faulty passenger's door lock switch; replace it.

**NO:** Go to step 12.

12. Check for a short in the wire between the MICU and passenger's door lock switch at the security alarm/keyless door lock system control unit input test (see **CONTROL UNIT INPUT TEST** ).

**Are the wire harnesses OK?**

**YES:** Faulty MICU; replace it.

**NO:** A short in the wire, repair and recheck.

### **DTC B1127: DRIVER'S DOOR KEY CYLINDER SWITCH SIGNAL ERROR**

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the driver's door key cylinder.
4. Check for DTCs using the HDS.

**Is DTC B1127 indicated?**

**YES:** Go to step 5.

**NO:** Intermittent failure. The driver's door key cylinder system is OK at this time. Check pin fits and connections.

5. With no driver's door key cylinder operation, select SECURITY from the HDS, and enter the DATA LIST.
6. Check the ON/OFF information of the Driver's Door Key Cylinder Switch (LOCK) and Driver's Door Key Cylinder Switch (UNLOCK) in the DATA LIST.

**Are both information indicators OFF?**

**YES:** Go to step 7.

**NO:** Go to step 10.

7. Turn the driver's door key cylinder to the LOCK and UNLOCK positions with the ignition key and check the ON/OFF information of the Driver's Door Key Cylinder Switch (LOCK) and Driver's Door Key Cylinder Switch (UNLOCK) in the DATA LIST.

**Is the driver's door key cylinder switch (LOCK) (driver's door key cylinder switch (UNLOCK)) information indicator on when the key cylinder is in the LOCK (UNLOCK) position, and off when the key is returned to the neutral position?**

**YES:** Intermittent failure, the door multiplex control unit (power window master switch) is OK at this time. Check pin fits and connections.

**NO:** Go to step 8.

8. Disconnect the driver's door key cylinder switch 3P connector.
9. Check for continuity between the No. 3 (LOCK) and No. 1 (UNLOCK) terminals of the driver's door key cylinder switch 3P connector and the No. 8 (LOCK) and No. 21 (UNLOCK) terminals of the power window master switch 23P connector.

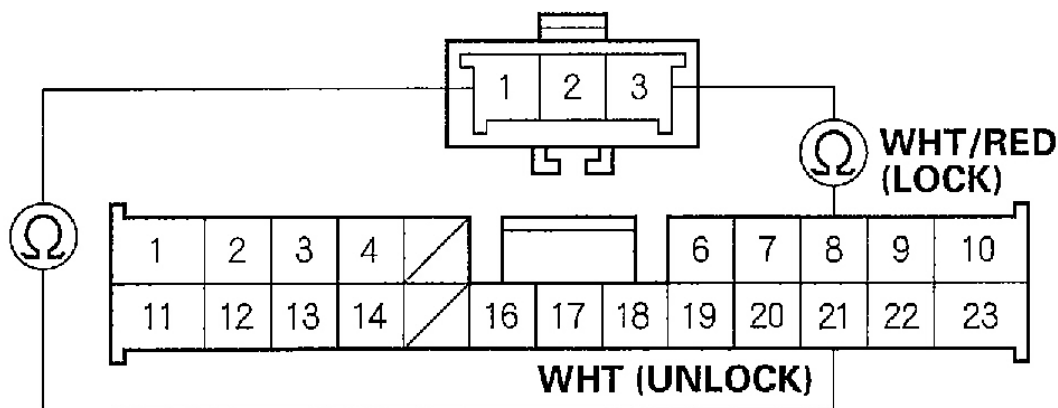
**Is there continuity?**

**YES:** Faulty driver's door key cylinder switch.

**NO:** Repair an open in the WHT/RED (LOCK) or WHT (UNLOCK) wire.

### DRIVER'S DOOR KEY CYLINDER SWITCH 3P CONNECTOR

Terminal side of male terminals



### POWER WINDOW MASTER SWITCH 23P CONNECTOR

Wire side of female terminals

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**Fig. 20: Checking For Continuity**

10. Disconnect the driver's door key cylinder switch 3P connector.
11. Check the ON/OFF information of the Driver's Door Key Cylinder Switch (LOCK) and Driver's Door Key Cylinder Switch (UNLOCK) in the DATA LIST.

**Are both information indicators OFF?**

**YES:** Faulty driver's door key cylinder switch.

**NO:** Go to step 12.

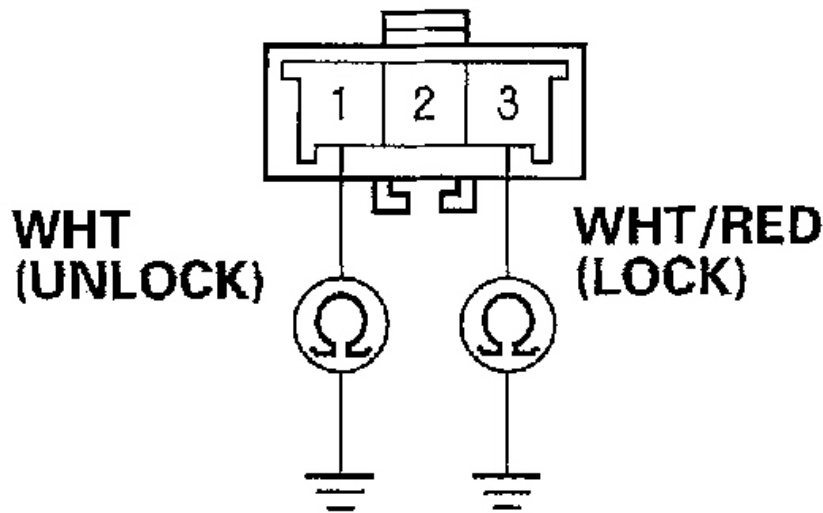
12. Check for continuity between the No. 3 (LOCK) and No. 1 (UNLOCK) terminals of the driver's door key cylinder switch 3P connector and body ground.

**Is there continuity?**

**YES:** Repair a short in the WHT/RED (LOCK) or WHT (UNLOCK) wire.

**NO:** Faulty door multiplex control unit; replace the power window master switch.

## DRIVER'S DOOR KEY CYLINDER SWITCH 3P CONNECTOR



Terminal side of male terminals

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**Fig. 21: Checking For Continuity Between The Driver's Door Key Cylinder Switch 3P Connector & Body Ground**

### DTC B1128: DRIVER'S DOOR LOCK SWITCH SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the driver's door lock switch.
4. Check for DTCs using the HDS.

#### **Is DTC B1128 indicated?**

**YES:** Go to step 5.

**NO:** Intermittent failure. The driver's door lock switch system is OK at this time. Check pin fits and connections.

5. With no driver's door lock switch operation, select SECURITY from the HDS, and enter the DATA

LIST.

6. Check the ON/OFF information of the Driver's Door Lock Switch (LOCK) and Driver's Door Lock Switch (UNLOCK) in the DATA LIST.

**Are both information indicators OFF?**

**YES:** Go to step 7.

**NO:** Check the door lock switch. If the driver's door lock switch is OK, faulty door multiplex control unit; replace the power window master switch.

7. Push the driver's door lock switch in LOCK and UNLOCK positions, and check the ON/OFF information of the Driver's Door Lock Switch (LOCK) and Driver's Door Lock Switch (UNLOCK) in the DATA LIST.

**Is the driver's door lock switch (LOCK) (driver's door lock switch (UNLOCK)) information indicator on when the door lock switch is pushed in each switch position, and off when the door lock switch is released?**

**YES:** Intermittent failure, the door multiplex control unit (power window master switch) is OK at this time. Check pin fits and connections.

**NO:** Faulty door multiplex control unit; replace the power window master switch.

#### **DTC B1129: DRIVER'S DOOR LOCK KNOB SWITCH SIGNAL ERROR**

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the driver's door lock knob switch.
4. Check for DTCs using the HDS.

**Is DTC B1129 indicated?**

**YES:** Go to step 5.

**NO:** Intermittent failure. The driver's door lock knob switch system is OK at this time. Check pin fits and connections.

5. Select SECURITY from the HDS, and enter the DATA LIST.

Check the ON/OFF information of the Driver's Door Lock knob Switch (LOCK) and Driver's Door Lock knob Switch (UNLOCK) in the DATA LIST.

**Is the driver's door lock knob switch (LOCK) information indicator on and driver's door lock knob switch (UNLOCK) information indicator off with the door lock knob switch in lock position, and is the driver's door lock knob switch (LOCK) information indicator off and driver's door lock knob switch (UNLOCK) information indicator on with the door lock knob switch in unlock position?**

**YES:** Intermittent failure, the door multiplex control unit (power window master switch) is OK at this time. Check pin fits and connections.

**NO:** Go to step 6.

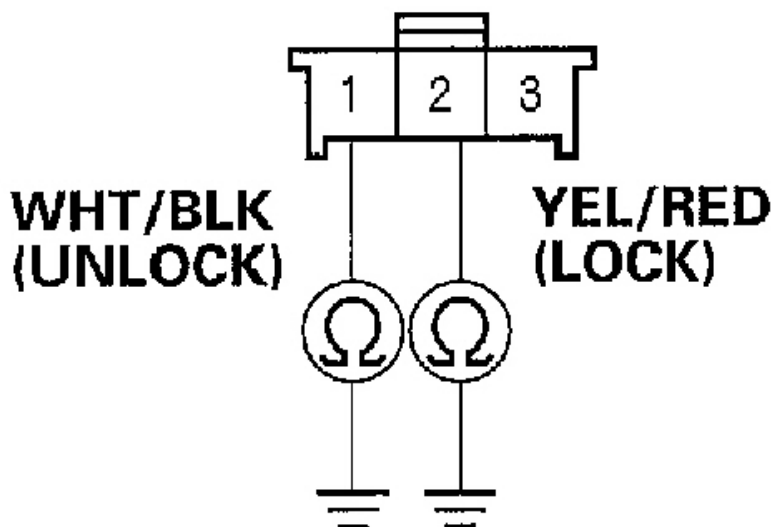
6. Disconnect the driver's door lock knob switch 3P connector.
7. Check the ON/OFF information of the Driver's Door Lock knob Switch (LOCK) and Driver's Door Lock knob Switch (UNLOCK) in the DATA LIST.

**Are both information indicators OFF?****YES:** Faulty driver's door lock knob switch.**NO:** Go to step 8.

8. Check for continuity between the No. 2 (LOCK) and No. 1 (UNLOCK) terminals of the driver's door lock knob switch 3P connector and body ground.

**Is there continuity?****YES:** Repair a short in the YEL/RED (LOCK) or WHT/BLK (UNLOCK) wire.**NO:** Go to driver's door lock knob switch test (see **DOOR LOCK KNOB SWITCH TEST**). If the driver's door lock knob switch is OK, the door multiplex control unit is faulty; replace the power window master switch.

## DRIVER'S DOOR LOCK KNOB SWITCH 3P CONNECTOR



Wire side of female terminals

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**Fig. 22: Checking For Continuity Between The Driver's Door Lock Knob Switch 3P**

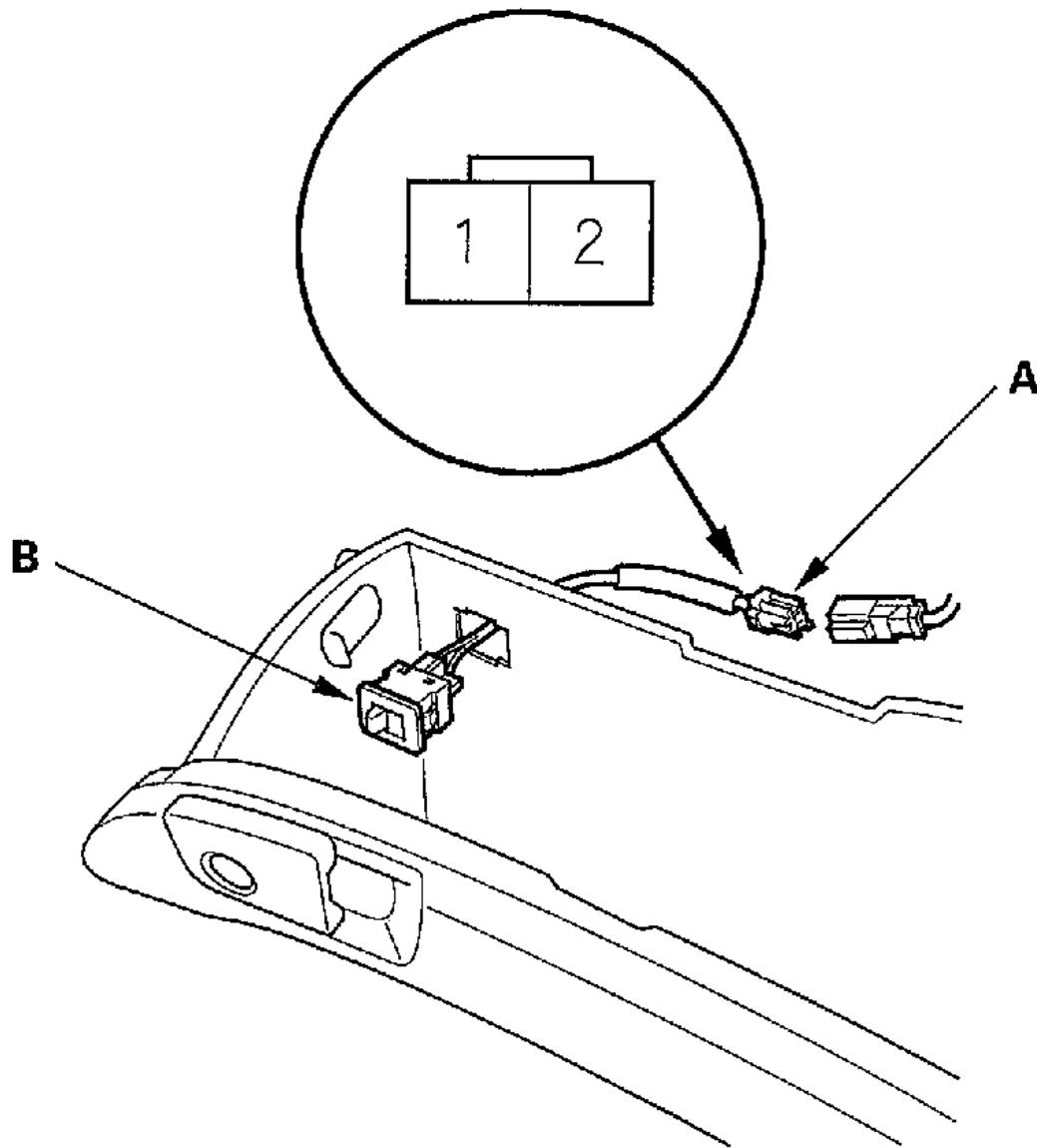
**Connector & Body Ground**

**TRUNK LID OPENER MAIN SWITCH TEST**

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION** ).
2. Disconnect the 2P connector (A) from the trunk lid opener main switch (B).



### Wire side of female terminals



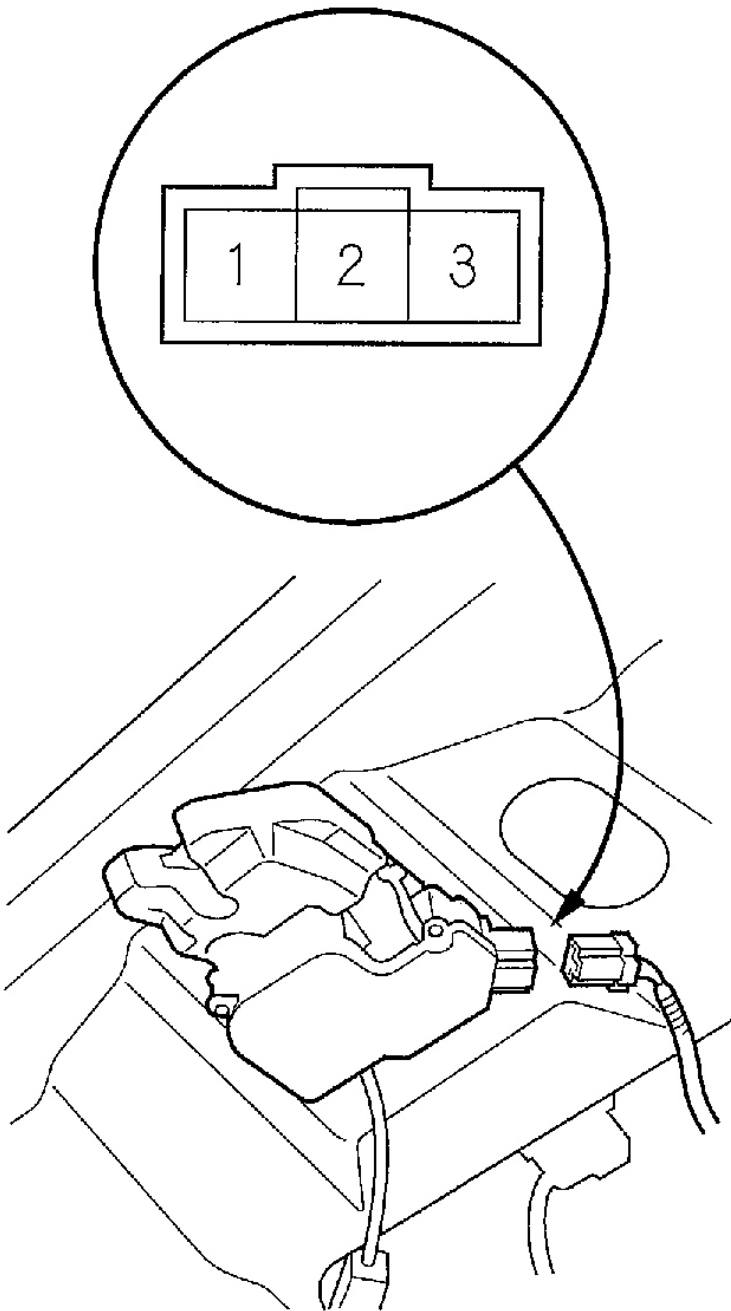
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**Fig. 23: Disconnecting The 2P Connector From The Trunk Lid Opener Main Switch**

3. Check for continuity between the No. 1 and No. 2 terminals.
  - There should be continuity with the switch ON.
  - There should be no continuity with the switch OFF.

## TRUNK LOCK ACTUATOR TEST

1. Disconnect the 3P connector from the trunk latch switch/trunk lock actuator.



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**Fig. 24: Disconnecting The 3P Connector From The Trunk Latch Switch/Trunk Lock Actuator**

2. 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
UNLOCK	⊕	⊖

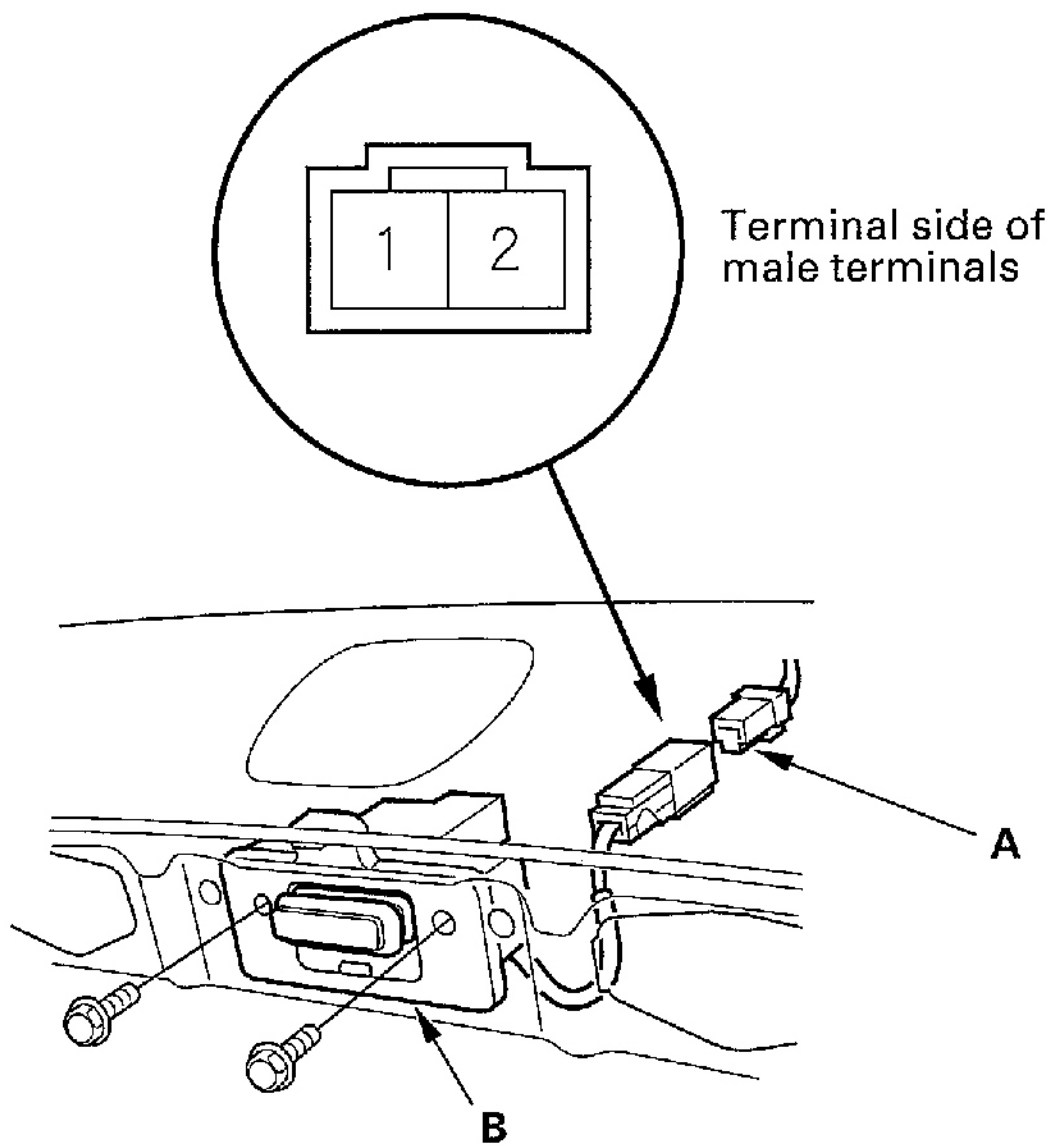
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**Fig. 25: Trunk Lock Actuator Test Table**

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

**TRUNK LID OPENER SWITCH TEST/REPLACEMENT**

1. Open the trunk lid.
2. Disconnect the 2P connector (A) from the trunk lid opener switch (B).



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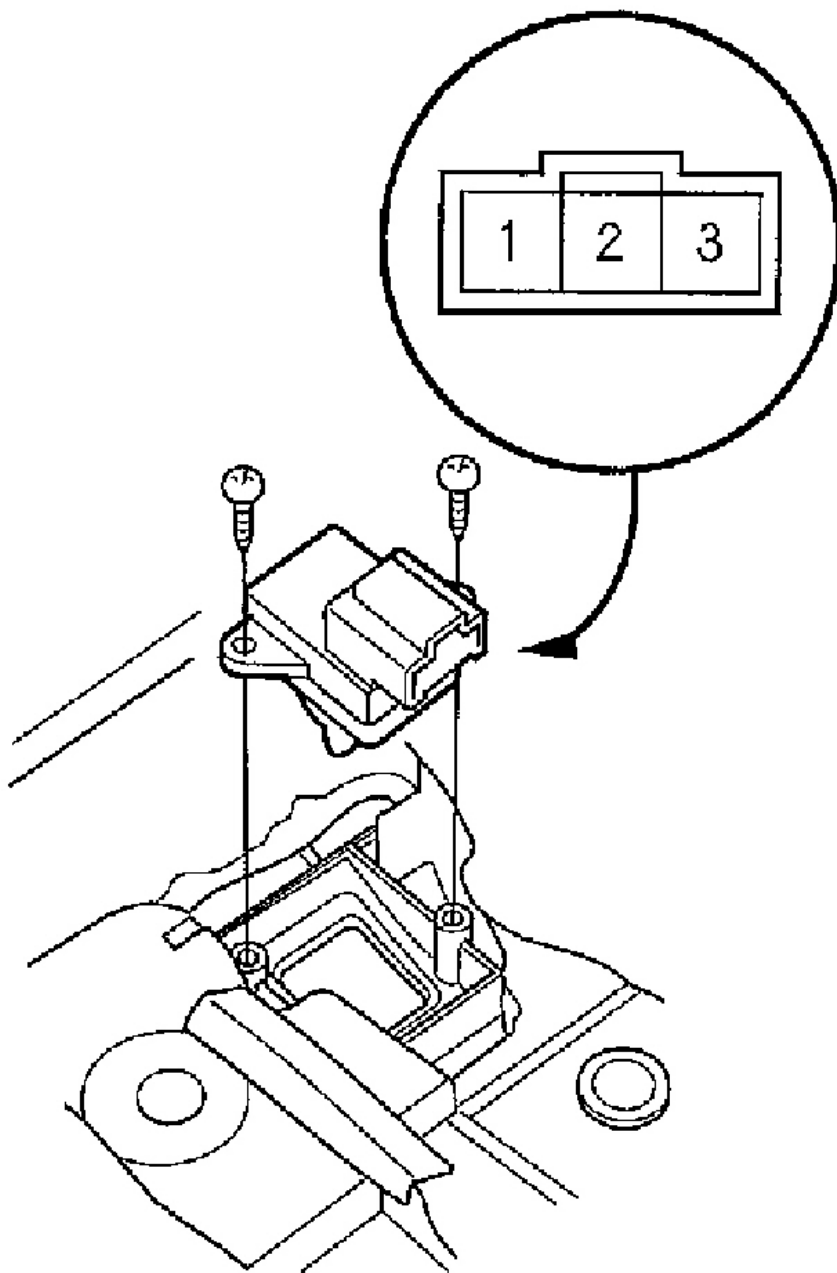
**Fig. 26: Disconnecting The 2P Connector From The Trunk Lid Opener Switch**

3. Check for continuity between the No. 1 and No. 2 terminal.
  - With the switch pushed, there should be continuity.
  - With the switch released, there should be no continuity.

## DOOR LOCK SWITCH TEST

### PASSENGER'S DOOR LOCK SWITCH

1. Remove the front passenger's inner handle (see **DOORS** ).
2. Remove the two screws, then remove the door lock switch.



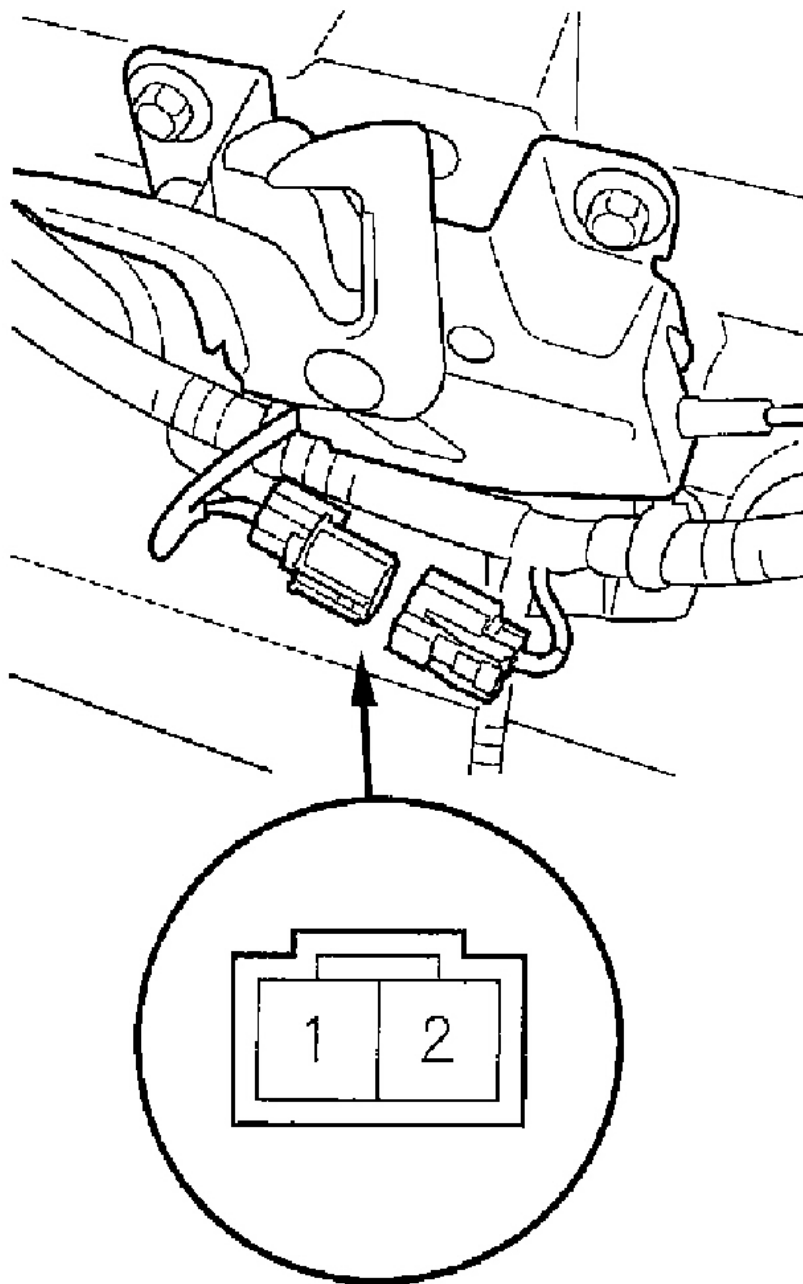
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**Fig. 27: Removing The Door Lock Switch**

3. Check for continuity between the terminals.
  - There should be continuity between the No. 1 and No. 2 terminals when the door lock switch is in the LOCK position.
  - There should be no continuity between the No. 1 and No. 2 terminals when the door lock switch is in the neutral position or UNLOCK position.
  - There should be continuity between the No. 2 and No. 3 terminals when the door lock switch is in the UNLOCK position.
  - There should be continuity between the No. 2 and No. 3 terminals when the door lock switch is in the neutral position or LOCK position.
4. If the continuity is not as specified, replace the switch.

**HOOD SWITCH TEST**

1. Open the hood.
2. Disconnect the 2P connector from the hood switch.



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**Fig. 28: Disconnecting The 2P Connector From The Hood Switch**

3. Check for continuity between the terminals.
  - There should be continuity between the No. 1 and No. 2 terminals when the hood is opened (lever released).

- There should be no continuity between the No. 1 and No. 2 terminals when the hood is closed (lever pushed down).
4. If the continuity is not as specified, replace the hood switch.

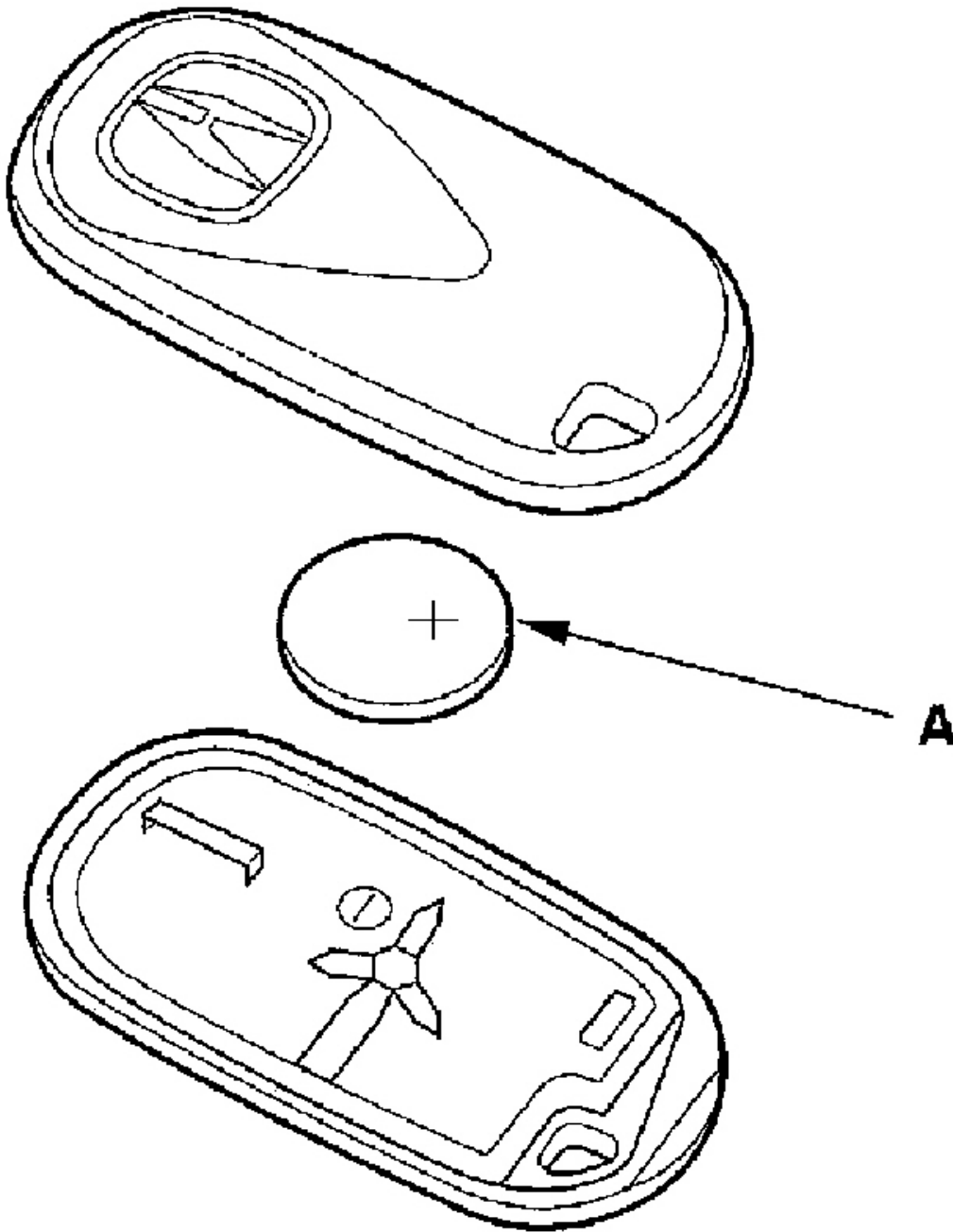
## **TRANSMITTER TEST**

### **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 doors with the transmitter.
- If the UNLOCK button is pressed on the transmitter and a door is not opened within 30 seconds, the doors relock automatically.
- The doors do not lock or unlock with the transmitter if the key is in the ignition switch.

1. Do a transmitter test using the HDS by selecting the KEYLESS INSPECTION MENU.
2. 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 3.
3. 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 4.
4. 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 5.





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**Fig. 29: Replacing The Transmitter Battery**

5. Reprogram and register the transmitter, then try to lock and unlock the doors.
  - If the doors lock and unlock, the transmitter is OK.
  - If the doors don't lock and unlock, try and program to another vehicle. If still not operating, replace the transmitter.

## **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 which was input first will be erased.)

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

1. Turn the ignition switch ON (II).
2. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
3. Within 1 to 4 sec, turn the ignition switch OFF.
4. Within 1 to 4 sec, turn the ignition switch ON (II).
5. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
6. Within 1 to 4 sec, turn the ignition switch OFF.
7. Within 1 to 4 sec, turn the ignition switch ON (II).
8. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
9. Within 1 to 4 sec, turn the ignition switch OFF.
10. Within 4 sec, turn the ignition switch ON (II).
11. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
12. Confirm you can hear the sound of the door lock actuators within 1 to 4 sec, then push the transmitter lock or unlock button again, or the code will not be stored.
13. Within 10 sec, aim the transmitters (up to two additional ones) whose codes you want to store in the keyless receiver, and press the transmitter lock or unlock buttons.

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 with the transmitters.