# Cruise Control: Testing and Inspection

## Test B

**PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE - NO DTCs**

**PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs**

| Test Step | | Result / Action to Take |
|---|---|---|
| B1 | CHECK THE PCM POWER CIRCUITS | |
| | • Key in OFF position.<br>• Disconnect: PCM C175b.<br>• Key in ON position.<br>• Measure the voltage between the PCM C175b and ground as follows: | **Yes**<br>GO to **B2**.<br>**No**<br>REPAIR the circuit. REPEAT the self-test. |

(Continued)

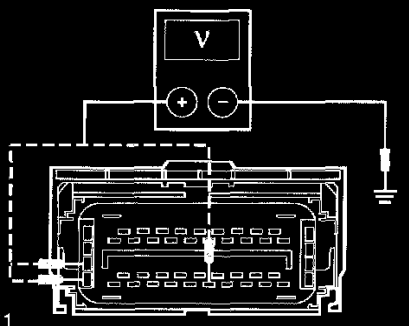
**Test B1**

**DIAGNOSIS AND TESTING (Continued)**

**PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs (Continued)**

| Test Step | | Result / Action to Take |
|---|---|---|
| B1 | CHECK THE PCM POWER CIRCUITS (Continued) | |

| Pin | Circuit |
|---|---|
| 34 | 361 (RD) |
| 40 | 729 (RD/WH) |
| 46 | 361 (RD) |

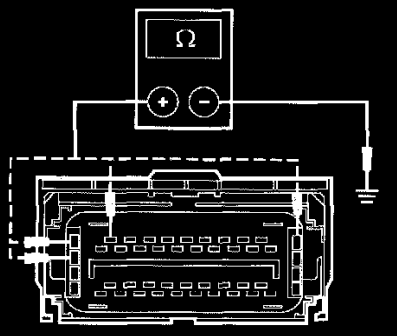



A0049911

• **Are the voltages greater than 10 volts?**

| | | |
|---|---|---|
| B2 | CHECK THE PCM GROUND CIRCUITS | |
| | • Key in OFF position.<br>• Measure the resistance between the PCM C175b and ground as follows: | **Yes**<br>GO to **B3**.<br>**No**<br>REPAIR the circuit. REPEAT the self-test. |

| Pin | Circuit |
|---|---|
| 1 | 570 (BK/WH) |
| 10 | 567 (BK) |
| 11 | 570 (BK/WH) |
| 23 | 570 (BK/WH) |




A0049912

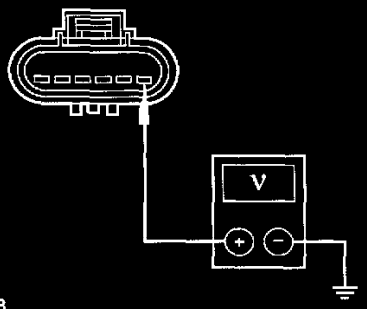
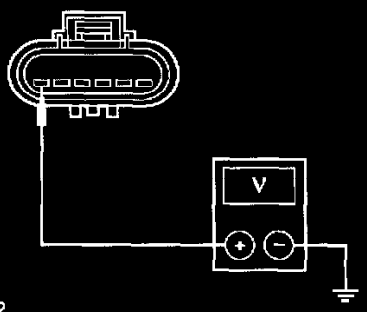
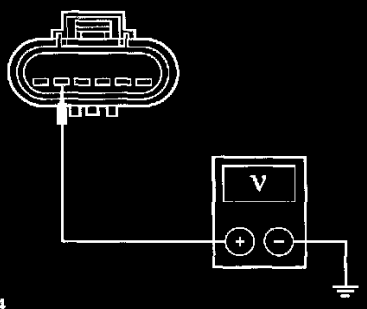
• **Are the resistances less than 5 ohms?**

(Continued)

**Test B1-B2**

## DIAGNOSIS AND TESTING (Continued)

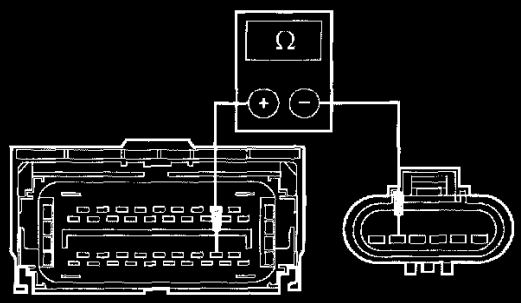
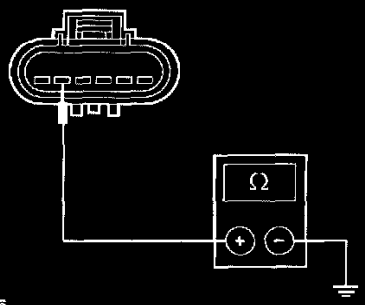
### PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE--NO DTCs (Continued)

| Test Step | | Result / Action to Take |
|---|---|---|
| B3 | CHECK CIRCUIT 1928 (RD/WH) FOR AN OPEN | |
| | • Key in OFF position.<br>• Disconnect: Speed Control Actuator C122.<br>• Key in ON position.<br>• Measure the voltage between the speed control actuator C122 pin 1, circuit 1928 (RD/WH), harness side and ground.<br>  <br><br>A0005468<br>• **Is the voltage greater than 10 volts?** | **Yes**<br>GO to **B4**.<br>**No**<br>REPAIR the circuit. REPEAT the self-test. |
| B4 | CHECK THE DEACTIVATOR SWITCH CIRCUITRY FOR AN OPEN | |
| | • Measure the voltage between the speed control actuator C122 pin 6, circuit 307 (BK/YE), harness side and ground.<br>  <br><br>A0005472<br>• **Is the voltage greater than 10 volts?** | **Yes**<br>GO to **B5**.<br>**No**<br>REPAIR the circuit. REPEAT the self-test. |
| B5 | CHECK CIRCUIT 1927 (TN) FOR SHORT TO POWER | |
| | • Key in ON position.<br>• Measure the voltage between the speed control actuator C122 pin 5, circuit 1927 (TN), harness side and ground.<br>  <br><br>A0005474<br>• **Is any voltage present?** | **Yes**<br>REPAIR the circuit. REPEAT the self-test.<br>**No**<br>GO to **B6**. |

(Continued)

## DIAGNOSIS AND TESTING (Continued)

### PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs (Continued)

| Test Step | | Result / Action to Take |
|---|---|---|
| B6 | CHECK CIRCUIT 1927 (TN) FOR AN OPEN | |
| | • Key in OFF position.<br>• Measure the resistance between the speed control actuator C122 pin 5, circuit 1927 (TN), harness side and the PCM C175b pin 26, circuit 1927 (TN), harness side.<br>  <br>A0049919<br>• **Is the resistance less than 5 ohms?** | **Yes**<br>GO to **B7**.<br>**No**<br>REPAIR the circuit. REPEAT the self-test. |
| B7 | CHECK CIRCUIT 1927 (TN) FOR SHORT TO GROUND | |
| | • Measure the resistance between the speed control actuator C122 pin 5, circuit 1927 (TN), harness side and ground.<br>  <br>A0005476<br>• **Is the resistance greater than 10,000 ohms?** | **Yes**<br>GO to **B8**.<br>**No**<br>REPAIR the circuit. REPEAT the self-test. |

(Continued)

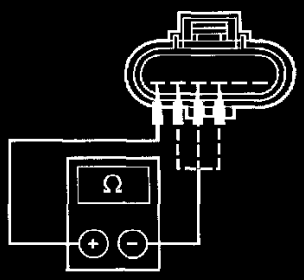
**Test B6-B7**

## DIAGNOSIS AND TESTING (Continued)

### PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs (Continued)

| Test Step | | Result / Action to Take |
|---|---|---|
| B8 | CHECK THE SPEED CONTROL ACTUATOR | |
| • Key in OFF position.<br>• Measure the resistance between the speed control actuator pins (component side) as follows: | | **Yes**<br>GO to **B9**.<br>**No**<br>INSTALL a new speed control actuator. REPEAT the self-test. |

| Speed Control Actuator | |
|---|---|
| Pin 1 | Pin 2 |
| Pin 1 | Pin 3 |
| Pin 1 | Pin 4 |

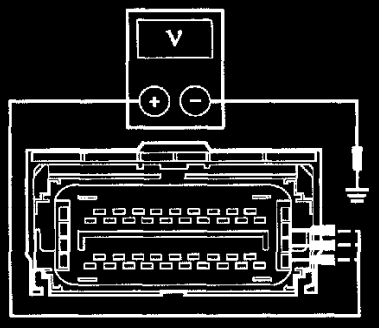



A0006460

• **Are the resistances between 2 and 3 ohms?**

| | | |
|---|---|---|
| B9 | CHECK THE SPEED CONTROL ACTUATOR CIRCUITRY FOR SHORT TO POWER | |
| • Disconnect: PCM C175b.<br>• Key in ON position.<br>• Measure the voltage between the PCM C175b, harness side and ground as follows: | | **Yes**<br>REPAIR the circuit(s). REPEAT the self-test.<br>**No**<br>GO to **B10**. |

| PCM C175b | Circuit |
|---|---|
| Pin 35 | 1924 (DG/WH) |
| Pin 24 | 1925 (PK/BK) |
| Pin 12 | 1926 (VT/YE) |




A0049917

• **Is any voltage present?**

(Continued)

## DIAGNOSIS AND TESTING (Continued)

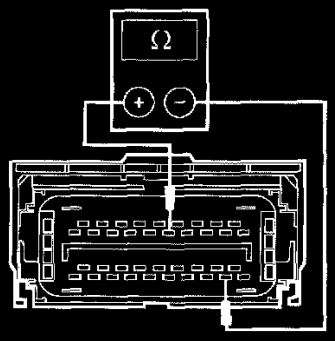
### PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs (Continued)

| Test Step | | Result / Action to Take |
|---|---|---|
| B10 | CHECK THE SPEED CONTROL ACTUATOR CIRCUITRY FOR AN OPEN | |
| • Key in OFF position.<br>• Measure the resistance between the PCM C175b, harness side and the speed control actuator C122, harness side as follows: | | **Yes**<br>GO to **B11**.<br>**No**<br>REPAIR the circuit(s). REPEAT the self-test. |

| PCM C175b | Speed Control Actuator C122 | Circuit |
|---|---|---|
| Pin 35 | Pin 4 | 1924 (DG/WH) |
| Pin 24 | Pin 3 | 1925 (PK/BK) |
| Pin 12 | Pin 2 | 1926 (VT/YE) |

• **Are the resistances less than 5 ohms?**

| | | |
|---|---|---|
| B11 | CHECK FOR CONTINUITY | |
| • Key in OFF position.<br>• Disconnect: PCM C175b.<br>• Measure the resistance between the PCM C175b pin 37, circuit 151 (LB/BK), harness side and the PCM C175b pin 17, circuit 848, (DG/OG), harness side. | | **Yes**<br>GO to **B12**.<br>**No**<br>GO to **B13**. |




A0049914

• **Is the resistance between 4,085 and 4,515 ohms?**

(Continued)

**Test B10-B11**

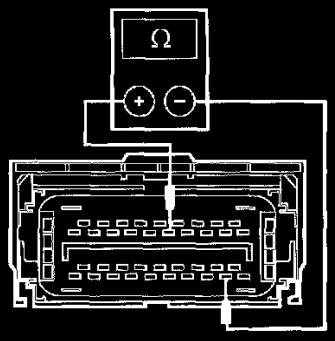
## DIAGNOSIS AND TESTING (Continued)

### PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs (Continued)

| Test Step | Result / Action to Take |
|---|---|
| **B12** CHECK THE SPEED CONTROL SWITCHES | |
| • Measure the resistance between the PCM C175b pin 37, circuit 151 (LB/BK), harness side and the PCM C175b pin 17, circuit 848, (DG/OG), harness side while pressing the switches. | **Yes**<br>GO to **B16**.<br>**No**<br>INSTALL a new speed control switch. TEST the system for normal operation. |

**Speed Control Switch with remote audio/climate control**

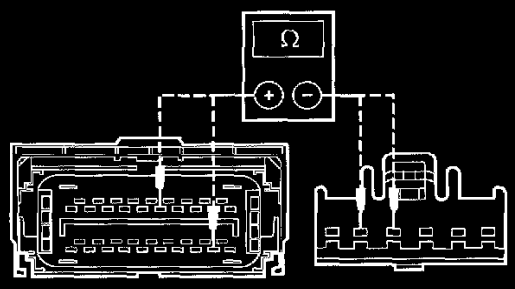
| Speed Control Actuator Switch | Resistance Value |
|---|---|
| Cancel | Between 114 and 126 ohms |
| Coast | Between 285 and 315 ohms |
| SET/ACCEL | Between 570 and 630 ohms |
| Resume | Between 1,055 and 1,165 ohms |
| On | Between 1,995 and 2,205 ohms |
| Off | Less than 5 ohms |




A0049914

- **Are the speed control actuator switch resistances values OK?**

| | |
|---|---|
| **B13** CHECK CIRCUIT 151 (LB/BK) AND 848 (DG/OG) FOR OPEN | |
| • Disconnect: Clockspring C218b.<br>• Measure the resistance between the PCM C175b pin 37, circuit 151 (LB/BK), harness side and the clockspring C218b pin 4, circuit 151 (LB/BK), harness side; and measure the resistance between the PCM C175b pin 17, circuit 848 (DG/OG), harness side and the clockspring C218b pin 5, circuit 848 (DG/OG), harness side. | **Yes**<br>GO to **B14**.<br>**No**<br>REPAIR the circuit. REPEAT the self-test. |



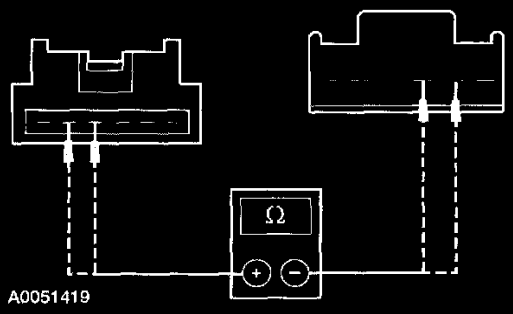
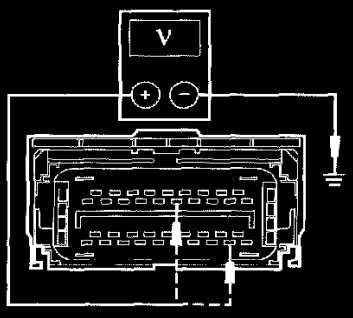

A0051418

- **Are the resistances less than 5 ohms?**

(Continued)

## DIAGNOSIS AND TESTING (Continued)

### PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs (Continued)

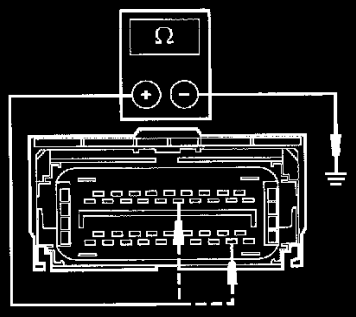
| Test Step | Result / Action to Take |
|---|---|
| **B14 CHECK THE CLOCKSPRING**<br>• Remove the driver side air bag.<br>• Disconnect: Horn Switch Wiring Harness Connector.<br>• Measure the resistance between the clockspring C218b pin 4, circuit 151, (component side) and the upper clockspring pin 3, circuit 151, (component side); and measure the resistance between the clockspring C218b pin 5, circuit 848, (component side) and the upper clockspring pin 2, circuit 848, (component side).<br>  <br><br>A0051419<br>• **Are the resistances less than 5 ohms?** | **Yes**<br>GO to **B15**.<br>**No**<br>INSTALL a new clockspring.<br>TEST the system for normal operation. |
| **B15 CHECK THE HORN SWITCH WIRING HARNESS**<br>• Disconnect: Speed Control Switches.<br>• Inspect the horn switch wiring harness for shorts, opens or any damage.<br>• **Is the horn switch wiring harness OK?** | **Yes**<br>INSTALL a new speed control switch.<br>TEST the system for normal operation.<br>**No**<br>REPAIR or INSTALL a new horn switch wiring harness. TEST the system for normal operation. |
| **B16 CHECK CIRCUIT 151 (LB/BK) AND 848 (DG/OG) FOR SHORT TO POWER**<br>• Key in OFF position.<br>• Disconnect: Clockspring C218b.<br>• Key in ON position.<br>• Measure the voltage between the PCM C175b pin 37, circuit 151 (LB/BK), harness side and ground; and between the PCM C175b pin 17, circuit 848 (DG/OG), harness side and ground.<br>  <br><br>A0051420<br>• **Is any voltage present?** | **Yes**<br>REPAIR the circuit in questions. TEST the system for normal operation.<br>**No**<br>GO to **B17**. |

(Continued)

**Test B14-B16**

## DIAGNOSIS AND TESTING (Continued)

### PINPOINT TEST B: THE SPEED CONTROL IS INOPERATIVE—NO DTCs (Continued)

| Test Step | | Result / Action to Take |
|---|---|---|
| B17 | CHECK CIRCUIT 151 (LB/BK) AND 848 (DG/OG) FOR SHORT TO GROUND | |
| | • Key in OFF position.<br>• Disconnect: Clockspring C218b.<br>• Key in ON position.<br>• Measure the resistance between the PCM C175b pin 37, circuit 151 (LB/BK), harness side and ground; and between the PCM C175b pin 17, circuit 848 (DG/OG), harness side and ground.<br>  <br><br>A0051421<br>• **Is the resistance less than 5 ohms?** | **Yes**<br>REPAIR the circuit. REPEAT the self-test.<br>**No**<br>GO to **B18**. |
| B18 | CHECK FOR CORRECT PCM OPERATION | |
| | • Disconnect all the PCM connectors.<br>• Check for:<br>  • corrosion<br>  • pushed-out pins<br>• Connect all PCM connectors and make sure they are seated correctly.<br>• Operate the system and verify the concern is still present.<br>• **Is the concern still present?** | **Yes**<br>INSTALL a new PCM.<br>REPEAT the self-test.<br>**No**<br>The system is operating correctly at this time. Concern may have been caused by a loose or corroded connector. REPEAT the self-test. |

**Test B17-B18**