2003-06 ACCESSORIES & EQUIPMENT Cruise Control - MDX

2003-06 ACCESSORIES & EQUIPMENT

Cruise Control - MDX

COMPONENT LOCATION INDEX

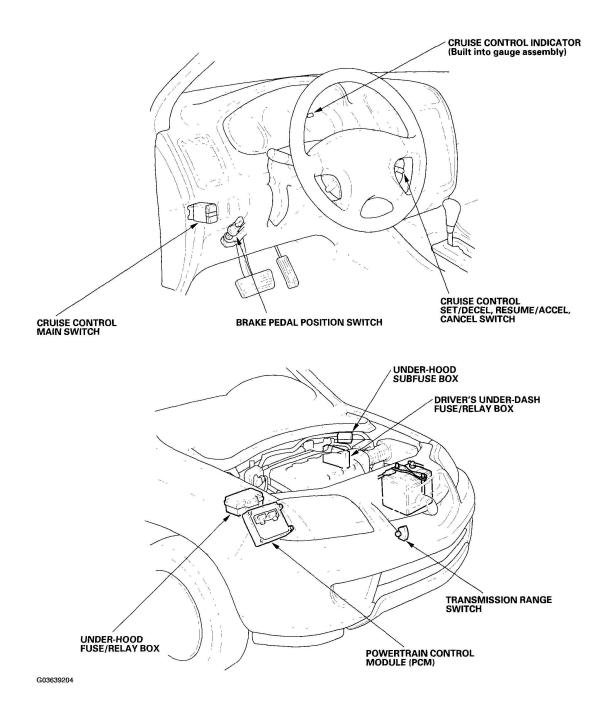


Fig. 1: Identifying Cruise Control Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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SYMPTOM TROUBLESHOOTING INDEX

CRUISE CONTROL SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for		
	Check for PGM-FI and body DTCs.			
	2. Check the No. 47 (20 A) fuse in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash fuse/relay box.			
Cruise control cannot be set	3. Do the cruise control input test (see <u>CRUISE CONTROL</u> <u>INPUT TEST</u>).			
	4. Do the cruise control main switch test (see <u>CRUISE</u> <u>CONTROL MAIN SWITCH</u> <u>TEST/ REPLACEMENT</u>).			
	5. Do the cruise control set/decel, resume/accel, cancel switch test (see <u>CRUISE</u> <u>CONTROL MAIN SWITCH</u> <u>TEST/ REPLACEMENT</u>).			
	Check for PGM-FI and body DTCs.			
Cruise control can be set, but the cruise control main switch indicator does not come on	2. Check the No. 47 (20 A) fuse in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash fuse/relay box.	 Faulty indicator bulb 		
	3. Do the cruise control input test (see <u>CRUISE CONTROL</u> <u>INPUT TEST</u>).	• Poor ground G401		
	4. Do the cruise control main switch test (see <u>CRUISE</u> <u>CONTROL MAIN SWITCH</u> <u>TEST/ REPLACEMENT</u>).			
Cruise control can be set, but the cruise control indicator does not come on	 Check for PGM-FI and body DTCs. Check the No. 47 (20 A) fuse 	Faulty gauge assemblyA burnt cruise control		
	in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash	indicator bulb		

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	fuse/relay box. 3. Do the cruise control input test (see CRUISE CONTROL INPUT TEST).	
Vehicle does not decelerate or accelerate accordingly when the set/ decel or resume/accel switch is pressed	 Check for PGM-FI and body DTCs. Check the No. 47 (20 A) fuse in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash fuse/relay box. Do the cruise control input test (see CRUISE CONTROL INPUT TEST). Do the cruise control set/decel, resume/accel, cancel switch test (see CRUISE CONTROL MAIN SWITCH TEST/ REPLACEMENT). 	wire
Set speed does not cancel when the brake pedal is pressed	 Check for PGM-FI and body DTCs. Check the brake pedal position switch adjustment (see BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT). Check the No. 47 (20 A) fuse in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash fuse/relay box. Do the cruise control input test (see CRUISE CONTROL INPUT TEST). 	Short to power in WHT/RED wire
Set speed does not cancel when the cruise control main switch is turned off	 Check for PGM-FI and body DTCs. Check the No. 47 (20 A) fuse in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash fuse/relay box. Do the cruise control input test (see CRUISE CONTROL 	Short to ground in LTGRN wire

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	INPUT TEST). 4. Do the cruise control main switch test (see CRUISE CONTROL MAIN SWITCH TEST/ REPLACEMENT).	
Set speed does not cancel when the cancel switch is pressed	 Check for PGM-FI and body DTCs. Check the No. 47 (20 A) fuse in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash fuse/relay box. Do the cruise control input test (see CRUISE CONTROL INPUT TEST). Do the cruise control set/decel, resume/accel, cancel switch test (see CRUISE CONTROL MAIN SWITCH TEST/ REPLACEMENT). 	wire
Set speed will not resume when the resume/accel switch is pressed (with the cruise control main switch turned on, and set speed temporarily canceled by pressing the brake pedal)	 Check for PGM-FI and body DTCs. Check the brake pedal position switch adjustment (see BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT). Check the No. 47 (20 A) fuse in the under-hood fuse/relay box, and the No. 9 (10 A) fuse in the driver's under-dash fuse/relay box. Do the cruise control input test (see CRUISE CONTROL INPUT TEST). Do the cruise control set/decel, resume/accel, cancel switch test (see CRUISE CONTROL MAIN SWITCH TEST/ REPLACEMENT). 	 Open circuit, loose or disconnected terminals: LTGRN/BLK or LTGRN/RED wire Faulty brake pedal position switch
With the ignition switch ON (II), and the lighting switch turned on, the cruise control main switch illumination does	Replace the cruise control main switch illumination bulb (see CRUISE CONTROL MAIN SWITCH TEST/	

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not come on	REPLACEMENT).	
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CIRCUIT DIAGRAM

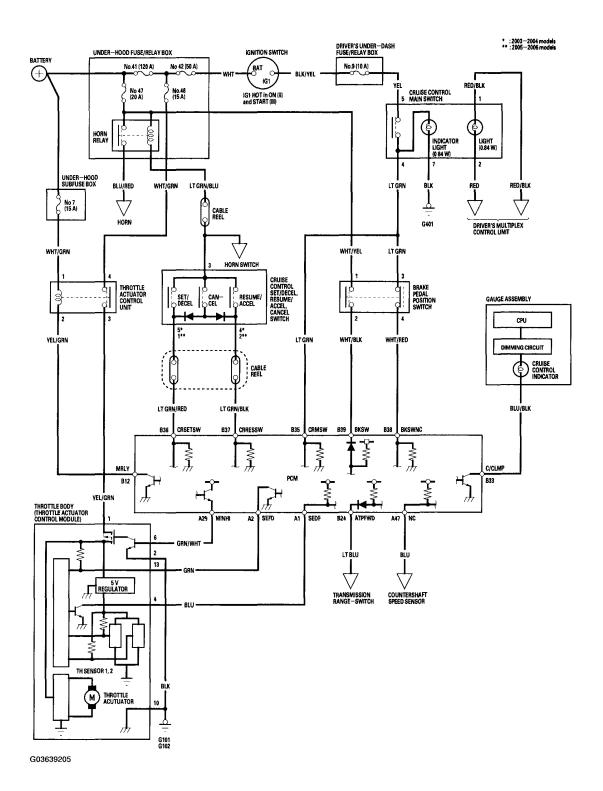


Fig. 2: Cruise Control Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CRUISE CONTROL INPUT TEST

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- 1. Connect the Honda Diagnostic System (HDS) to the Data Link Connector (DLC) (see step 2 on **GENERAL TROUBLESHOOTING INFORMATION**).
- 2. Turn the ignition switch ON (II).
- 3. Do the following tests while monitoring parameters in the PGM-FI DATA LIST with the HDS.

NOTE:

Intermittent failures are often caused by loose circuit connections. While monitoring cruise control inputs, flex their circuits, and note if any of the test results change.

CRUISE CONTROL INPUT TEST

Signal to be tested	Test condition	Parameter: Desired result	Possible cause if result is not obtained
Cruise control main switch signal	Cruise control main switch ON and OFF	CRUISE CONTROL MAIN SW should indicated ON when the cruise control main switch is turned on and OFF when the cruise control main switch is turned off.	 Faulty cruise control main switch An open in the wire between the gauge assembly and the cruise control main switch A wire shorted to ground between the gauge assembly and the cruise control main switch An open in the wire between the cruise control main switch and the ground
Brake switch signal	Cruise control main switch ON, brake pedal pressed, then released	CRUISE BRAKE SW should indicate OFF when the brake pedal is pressed and ON should be indicated when the brake pedal is released.	 Faulty brake pedal position switch Blown No. 9 (10 A) fuse in the driver's under-dash fuse/relay box An open in the wire between the PCM and the brake pedal position switch A wire shorted to ground between the PCM and the brake pedal position switch
			Faulty cruise control

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Set switch signal	Set/decel switch pressed and released	CRUISE CONTROL SET SW should indicate ON when the set /decel switch is pressed and OFF when the set/decel switch is released.	set/decel, resume/accel, cancel switch • An open in the wire between the PCM and the cruise control set/decel, resume/accel, cancel switch • A wire shorted to ground between the PCM and the cruise control set/decel, resume/accel, cancel switch
Resume switch signal	Resume/accel switch pressed and released	CRUISE CONTROL RESUME SW should indicate ON when the resume switch is pressed and OFF when the resume switch is released.	 Faulty cruise control set/decel, resume/accel, cancel switch An open in the wire between the PCM and the cruise control set/decel, resume/accel, cancel switch A wire shorted to ground between the PCM and the cruise control set/decel, resume/accel, cancel switch
Cancel switch signal	Cancel switch pressed and released	CRUISE CONTROL CANCEL SW should indicate ON when the cancel switch is pressed and OFF when the cancel switch is released.	• Faulty cruise control set/decel, resume/accel, cancel switch
Cruise control indicator signal	Start the engine, turn the cruise control main switch on, and drive the vehicle to speeds over 25 mph (40km/h). Set and cancel the cruise control	CRUISE INDICATOR should indicate ON when the cruise control is set and OFF when the cruise control is cancelled.	Faulty gauge assemblyA burnt cruise control indicator bulb

CRUISE CONTROL MAIN SWITCH TEST/ REPLACEMENT

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- 1. Remove the driver's dashboard lower cover (see <u>DASHBOARD LOWER COVER REMOVAL/INSTALLATION</u>).
- 2. Release the clips of the main switch, and push the main switch (A) out of the panel, then disconnect the 8P connector (B) from the main switch.

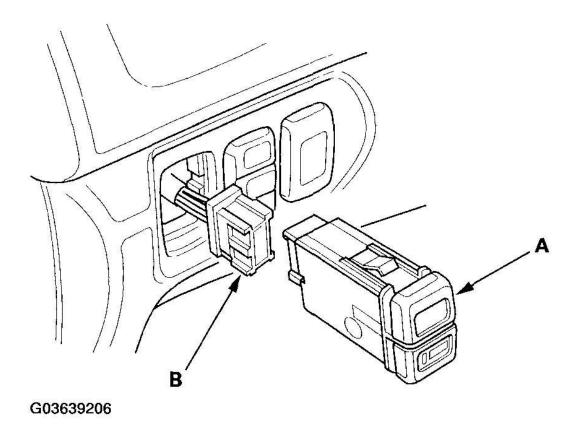
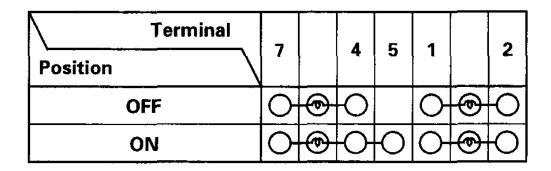


Fig. 3: Pushing Main Switch Out Of Panel Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals in each switch position according to <u>Fig. 4</u>. If there is no continuity, replace illumination bulbs (A) or the switch.



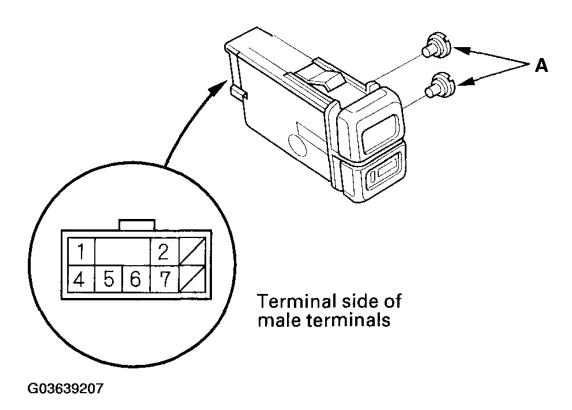


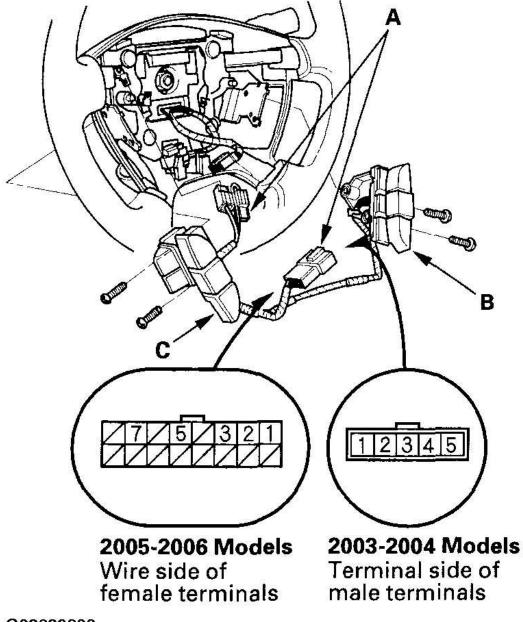
Fig. 4: Checking For Continuity Between Terminals In Each Switch Position Courtesy of AMERICAN HONDA MOTOR CO., INC.

CRUISE CONTROL SET/DECEL, RESUME/ ACCEL, CANCEL SWITCH TEST/ REPLACEMENT

SES components are located in this area. Review the SRS component locations (see $\underline{COMPONENT}$ $\underline{LOCATION\ INDEX}$) and the precautions and procedures (see $\underline{PRECAUTIONS\ AND\ PROCEDURES}$) in the SRS before doing repairs or service.

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- 1. Remove the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).
- 2. Disconnect the connectors (A), then remove the set/ decel, resume/accel, cancel switch (B) and radio remote switch (C).



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Fig. 5: Disconnecting Connectors

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Courtesy of AMERICAN HONDA MOTOR CO., INC.

- 3. Check for continuity between the terminals in each switch position according to **Fig. 6**.
 - If there is continuity, and it matches the table, but switch failure occurred on the cruise control input test, check and repair the wire harness on the switch circuit.
 - If there is no continuity in appropriate positions, replace the switch.

Terminal Position	3		4* 2**	5* 1**
Set/decel (ON)	0			9
Resume/accel(ON)	0		- 0	
Cancel (ON)	b	*	—O	P

*: 2003-2004 Models **: 2005-2006 Models

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Fig. 6: Checking Continuity Between Terminals In Each Switch Position Courtesy of AMERICAN HONDA MOTOR CO., INC.