Cruise Control Inoperative / Malfunctioning

Diagnostic Aids

Important

Perform the following in order to avoid misdiagnosis:

- Inspect for proper operation of the brake lamps.
- Inspect the throttle linkage for mechanical binding which could cause the system to malfunction.
- Inspect the cruise control adjustment for minimum slack.
- Inspect for stored Diagnostic Trouble Codes DTC's in the PCM. Refer to Powertrain On Board Diagnostic (OBD) System Check -- 3.8L or Powertrain On Board Diagnostic (OBD) System Check -- 5.7L in Engine Controls.
- EMI on the speed sensor signal circuit may cause erratic cruise control operation.

Conditions for Enabling Cruise Control

- The vehicle speed is more than 40 km/h (25 mph)
- PARK, REVERSE, NEUTRAL, or 1st gear IS NOT indicated by the Park / Neutral Position Switch.
- An over / undercharged battery condition DOES NOT exist.
- Normal engine RPM is present.
- High engine RPM (fuel cut-off) is not present. Refer to Fuel Metering Modes of Operation -- 3.8L or Fuel Metering Modes of Operation -- 5.7L in Engine Controls.

Step	Action	Value(s)	Yes	No
1	Did you review the system operation and perform the necessary inspections?	--	Go to Step 2	Go to Symptoms - Cruise Control
2	1. Turn OFF the ignition. 2. Disconnect the cruise control module. 3. Turn ON the ignition with the engine OFF. 4. Probe the ignition positive voltage circuit of the cruise control module with a test lamp that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. Does the test lamp illuminate?	--	Go to Step 3	Go to Step 36
3	Probe the ignition positive voltage circuit of the cruise control module with a test lamp that is connected to the ground circuit of the cruise control module. Refer to Circuit Testing in Wiring Systems. Does the test lamp illuminate?	--	Go to Step 4	Go to Step 37
4	1. Turn ON the ignition with the engine OFF. 2. Turn OFF the cruise control. 3. Probe the on/off, the set/coast, and the resume/accelerate circuits with a test lamp that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. Does the test lamp illuminate on any of the circuits?	--	Go to Step 16	Go to Step 5

5	1. Turn ON the ignition with the engine OFF. 2. Turn ON the cruise control. 3. Probe the on/off circuit with a test lamp that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. Does the test lamp illuminate?	--	Go to Step 6	Go to Step 17
6	1. Probe the set/coast circuit with a test lamp that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. 2. Press and hold the SET/COAST switch. Does the test lamp illuminate?	--	Go to Step 7	Go to Step 19
7	1. Probe the resume/accelerate circuit with a test lamp that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. 2. Press and hold the RESUME/ ACCEL switch. Does the test lamp illuminate?	--	Go to Step 8	Go to Step 20
8	Probe the cruise cancel circuit with a test lamp that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. Does the test lamp illuminate?	--	Go to Step 9	Go to Step 21
9	Depress the brake pedal while monitoring the test lamp. Does the test lamp illuminate?	--	Go to Step 22	Go to Step 10

10	Probe the brake input circuit with a test lamp that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. Does the test lamp illuminate?	--	Go to Step 23	Go to Step 11
11	Depress the brake pedal while monitoring the test lamp. Does the test lamp illuminate?	--	Go to Step 12	Go to Step 24
12	Probe the cruise disable/enable circuit with a test lamp that is connected to battery voltage. Refer to Circuit Testing in Wiring Systems. Does the test lamp illuminate?	--	Go to Step 25	Go to Step 13
13	Use a scan tool in order to command the cruise inhibit/enable OFF. Does the test lamp illuminate?	--	Go to Step 14	Go to Step 26
14	Probe the cruise engaged output circuit with a DMM that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. Does the voltage measure near the specified value?	B+	Go to Step 15	Go to Step 27
15	1. Raise and suitably support the vehicle. 2. Block one of the drive wheels. 3. Place the Transaxle/Transmission Selector in drive. 4. Set the DMM to the AC scale. 5. Probe the VSS signal circuit with a DMM that is connected to a good ground. Refer to Circuit Testing in Wiring Systems. 6. Rotate one of the drive wheels. 7. Observe the DMM.	--		

	Does the voltage displayed on the scan tool vary?		Go to Step 35	Go to Step 28
16	Test the circuit that illuminated the test lamp for a short to voltage. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 34
17	Test the on/off circuit for an open or a high resistance. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 18
18	Test the ignition positive voltage circuit for an open or high resistance between the cruise control module and the cruise control switch. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 34
19	Test the set/coast circuit for an open or a high resistance. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 34
20	Test the resume/accelerate circuit for an open or a high resistance. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 34
21	Test the cruise cancel circuit for an open or a high resistance. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 29

22	Test the cruise cancel circuit for a short to voltage. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 29
23	Test the brake input circuit for a short to voltage. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 30
24	Test the brake input circuit for an open or a high resistance. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 30
25	Test the cruise disable/enable circuit for a short to ground. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 33
26	Test the cruise disable/enable circuit for an open, a high resistance, or a short to voltage. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 33
27	Test the cruise engaged output circuit for an open, a high resistance, or a short to voltage. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 33

28	Test the speed sensor circuit for an open or a high resistance. Refer to Circuit Testing and Wiring Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 33
29	Inspect the cruise control release (brake) switch and cruise control clutch switch for proper adjustment. Did you find and correct the condition?	--	Go to Step 43	Go to Step 31
30	Inspect the stoplamp switch for proper adjustment. Refer to Stop Lamp Switch Adjustment in Hydraulic Brakes. Did you find and correct the condition?	--	Go to Step 43	Go to Step 32
31	Inspect for poor connections at the harness connector of the cruise control release (brake) switch and the cruise control (clutch) switch. Refer to Testing for Intermittent and Poor Connections and Connector Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 38
32	Inspect for poor connections at the harness connector of the stoplamp switch. Refer to Testing for Intermittent and Poor Connections and Connector Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 39
33	Inspect for poor connections at the harness connector of the PCM. Refer to Testing for Intermittent and Poor Connections and Connector Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 40

34	Inspect for poor connections at the harness connector of the cruise control switch. Refer to Testing for Intermittent and Poor Connections and Connector Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 41
35	Inspect for poor connections at the harness connector of the cruise control module. Refer to Testing for Intermittent and Poor Connections and Connector Repairs in Wiring Systems. Did you find and correct the condition?	--	Go to Step 43	Go to Step 42
36	Repair the ignition positive voltage circuit of the cruise control module. Refer to Wiring Repairs in Wiring Systems. Did you complete the repair?	--	Go to Step 43	--
37	Repair the ground circuit of the cruise control module. Refer to Wiring Repairs in Wiring Systems. Did you complete the repair?	--	Go to Step 43	--
38	Replace the cruise control release (brake) switch or the cruise control (clutch) switch. Refer to Cruise Release Switch Replacement . Did you complete the replacement?	--	Go to Step 43	--
39	Replace the stoplamp switch. Refer to Stop Lamp Switch Replacement in Hydraulic Brakes. Did you complete the replacement?	--	Go to Step 43	--

40	Replace the PCM. Refer to PCM Replacement/Programming - 3.8L or PCM Replacement/Programming - 5.7L in Engine Controls. Did you complete the replacement?	--	Go to Step 43	--
41	Replace the cruise control switch. Refer to Multifunction Turn Signal Lever Replacement - On Vehicle in Steering Wheel and Column - Tilt. Did you complete the replacement?	--	Go to Step 43	--
42	Replace the cruise control module. Refer to Cruise Control Module Replacement . Did you complete the replacement?	--	Go to Step 43	--
43	Operate the vehicle within the conditions for cruise control operation. Does the cruise control system operate correctly?	--	System OK	Go to Step 2

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