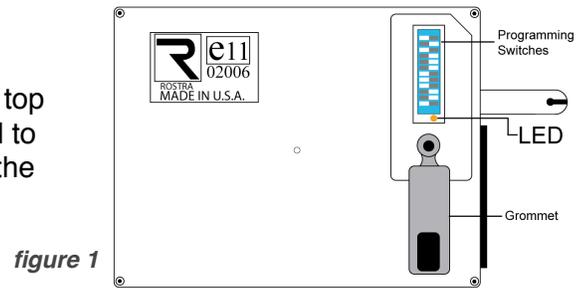


Condition: Cruise control inoperable.

Solution: With a helper, perform cruise control **Self-Diagnostic**

Procedure. Begin by removing the black rubber grommet on the top of the cruise control module (**figure 1**). It should lift up and swivel to reveal the diagnostic LED near the programming switches within the module. Your helper will need to be watching the reaction of this LED to the steps outlined in the guide below.



Carefully follow the procedures below to enter your cruise control into **Self-Diagnostic Mode**.

Step 1: Turn the cruise control switch **OFF**.

Step 2: Turn the vehicles ignition switch to the **OFF** position.

Step 3 (Closed Circuit Control Switch): Press and hold the cruise control switch's **RESUME/ACCEL** button while turning the vehicle's ignition switch to the **ON** position without starting the engine to illuminate the LED inside the cruise control module. Releasing the **RESUME/ACCEL** button should turn the LED **OFF**.

Step 3 (Open Circuit Control Switch): Turn vehicle's ignition switch to the **ON** position without starting the engine. Press and hold the cruise control switch's **RESUME/ACCEL** button and then press and release the switch's **ON/OFF** button. Continue pressing the **RESUME/ACCEL** button until the switch's LED illuminates. Releasing the **RESUME/ACCEL** button should turn the LED **OFF**.

Step 4: Verify the diagnostic LED inside the cruise control module (**figure 1 above**) is **OFF**. The cruise control unit is now in **Self-Diagnostic Mode**.

Step 5: Press and release the **SET/COAST** button. The LED inside the cruise control module should illuminate each time the button is pressed, and go out when it is released. If so, continue to **Step 6**. If not, continue to **Steps 5a-5d**.

a) Re-start your Self-Diagnostic testing at **Step 1**.

b) Verify the position of **Programming Switch #12** within the cruise control module (**figure 1 above**). It should be set to **ON** for a **Normally Closed Circuit Switch**, and **OFF** for a **Normally Open Circuit Switch**. If the programming switch is set incorrectly, reposition it and re-enter **Self-Diagnostic Mode**.

c) Check to make sure the **Cruise Control Module** is receiving power if no diagnostic commands are functioning.

d) Follow **Control Switch Testing Procedure** on page 23 of installation manual **Form #4565**.

Step 6: Press and release the **RESUME/ACCEL** button. The LED inside the cruise control module should illuminate each time the button is pressed, and go out when it is released. If so, continue to **Step 7**. If not, continue to **Steps 6a-6c**.

a) Re-start your Self-Diagnostic testing at **Step 1**.

b) Check to make sure the **Cruise Control Module** is receiving power if no diagnostic commands are functioning.

c) Follow **Control Switch Testing Procedure** on page 23 of installation manual **Form #4565**.

Step 7: Press and release the vehicle's **Brake Pedal**. The LED inside the cruise control module should illuminate each time the brake pedal is pressed, and go out when it is released. If not, make sure that the **Violet Wire** at the cruise control module is resting at ground **without** the brake pedal depressed, and then shows +12-volts **with** the brake pedal pressed down.

Step 8: Roll the vehicle at least 2 meters* forwards or backwards. If the LED flashes and continues to flash at the same rate, testing is complete. If not:

a) Re-start your Self-Diagnostic testing at **Step 1**.

b) Verify the position of **Programming Switch #10** within the cruise control module. It should be set to **ON** for Square Wave Signal Input, or set to **OFF** for Sine Wave Signal Input. If the programming switch is set incorrectly, reposition it and re-enter **Self-Diagnostic Mode**.

* Some vehicles will need to be rolled forwards or backwards more than the recommended 2 meters. In such a case, raise one of the vehicle's drive wheels (both drive wheels on a limited slip differential) and block the non drive wheels from moving. **Use support stands for safety**. Rotate the drive wheel(s) by hand as fast as possible. The LED inside the cruise control module should flash and continue to flash at the same rate. If not, re-check the connection to the Vehicle Speed Signal (VSS) if using a signal generator or acquiring from a vehicle's computer.

Condition: The LED inside the cruise control module remains illuminated during **Self-Diagnostic Procedure**.

Solution: If the The LED inside the cruise control module remains illuminated during **Self-Diagnostic Procedure**, one of three conditions could be present:

- a) Poor ground connection on the cruise control module's **Black Wire** (main ground of unit).
- b) The **Violet Wire** connected to the cold side of the vehicle's brake switch does not see a ground connection through the vehicle's brake light system.
- c) **Programming Switch #12** within the cruise control module is set to **ON** or **OFF** incorrectly.

Condition: The LED inside the cruise control module will not illuminate during **Self-Diagnostic Procedure**.

Solution: If the LED inside the cruise control module will not illuminate during **Self-Diagnostic Procedure**, the installer should suspect a power-related problem. Verify that the **Red Wire** connected to the positive (hot) side of the brake switch shows +12-volts constantly. Also verify that the **Brown Wire** shows +12-volts when the vehicle's ignition is set to the **ON** position. Also verify ground resistance is less than 5 Ohms.

Condition: Aftermarket LED taillights have been installed on the vehicle and the cruise control unit no longer works, or the **Violet Wire** of the cruise control module is showing a high resistance to ground causing the diagnostic LED to remain illuminated.

Solution: When using LED taillights on a vehicle, **the Violet Wire** of the cruise control will no longer read a ground signal through the vehicle's braking electrical system. A five-function automotive relay will be required to provide the necessary ground signal to the **Violet Wire** of cruise control module when the brake pedal is depressed. Connect the relay to the selected terminals as listed below:

- 85** to brake switch cold
- 86** to ground
- 87** not used
- 87A** to **Violet Wire**
- 30** to ground

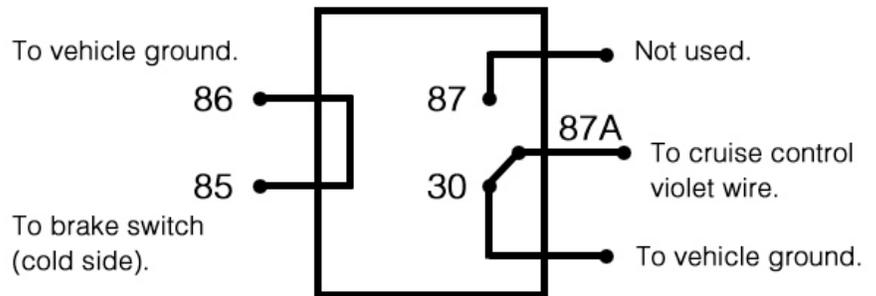


Figure 1

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