

## Self-Test Diagnostics

 **WARNING:** This test is a key on engine off (KOEO) test only that is conducted in PARK only with the emergency brake fully engaged.

**NOTE:** The transmission selector needs to be in the NEUTRAL (N) position.

**NOTE:** Review the following steps before carrying out the self-test diagnostic procedure.

**NOTE:** After entering the diagnostic mode, the module times out if the mandatory switch sequence is not completed within 5 seconds and each button is not pressed within one second of the previous button. If a module time-out occurs (speed control lamp stops flashing part way through the test), the procedure must be re-initiated.

The self-test is comprised of 2 parts. The first part is a static check of the speed control electronics module and system. The second part is a dynamic pull-test to check the actuator motor and gear mechanism. To perform the self-test:

- Connect the diagnostic tool to a power source that is not interrupted when the ignition switch changes positions. With the ignition switch in the RUN position, set the diagnostic tool to monitor the powertrain control module (PCM) throttle position PID while the speed control actuator carries out the self-test.
- Enter self-test diagnostics by firmly pressing and holding the speed control OFF switch while quickly cycling the ignition switch from RUN-to-OFF-to-RUN, making sure the engine does not start and is not running. The speed control indicator lamp on the instrument panel will flash once to indicate that the speed control module has entered the diagnostic mode. Release the OFF switch. If 5 additional flashes are displayed at this point, a speed control subsystem concern exists. GO to [Symptom Chart](#).
- **NOTE:** The lamp flash is too slow and must be ignored. The module times out if each button is not pressed within one second of the previous button. Ignore the cluster lamp flashes but observe the dynamic throttle pull which occurs at the end of the button sequence. Waiting for the cluster lamp to flash could result in a self-test time out condition. If a module time out occurs, the procedure must be re-initiated.

Firmly press and release the remaining switches within one second of each other in the following sequence:

- ON
- RSM (resume)
- CST (coast)
- CANCEL (if equipped)
- SET/ACCEL
- **NOTE:** Monitor the PCM throttle position PID after the last button is pressed.

**NOTE:** The dynamic test occurs automatically after the static test completes. If the static test fails, there will be no dynamic pull test.

**NOTE:** During the dynamic pull test, one sharp clicking sound should be heard (indicating the servo clutch engagement) followed by a gear sound (indicating the servo motor turning).

Within 0.25 second after the static test has passed, the speed control actuator carries out a dynamic pull test. The actuator automatically pulls the speed control cable 1 to 10 mm (0.04 to 0.39 inches) to move the throttle from the idle position and then releases the speed control cable returning the throttle to the idle position. If the PID value does not change during the dynamic throttle pull, GO to [Symptom Chart](#).

- Turn the key to OFF and GO to [Symptom Chart](#).