

GENERIC · POWERTRAIN

P0593

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0593

Cruise Control Multi-Function Input 'B' Circuit High

The powertrain control module (PCM) monitors the cruise control multi-function input 'B' circuit and has detected a voltage higher than the expected range for the current switch state. This typically means the circuit is shorted to voltage, open, or the switch internal resistance is out of specification, preventing the PCM from reliably interpreting the driver's cruise control command.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Cruise control does not engage or disengage when the driver presses the buttons
- The cruise control indicator light may flash or fail to illuminate
- The horn, audio controls, or other steering-wheel-mounted functions may stop working if they share the same clock spring circuit
- The engine may hesitate or surge if the fault interferes with throttle control strategies
- Often no symptoms besides the warning light, with cruise control appearing to function normally in some cases
- Intermittent cruise control operation that worsens over bumps or when turning the steering wheel

Common causes, most likely first

- 1 A short to voltage in the multi-function switch wiring or connector
- 2 An open or high-resistance connection in the switch ground circuit
- 3 A faulty cruise control multi-function switch assembly with worn or contaminated contacts
- 4 A damaged clock spring (spiral cable) inside the steering wheel that carries the switch signals
- 5 Corrosion or water intrusion in the switch connector or inline harness connectors
- 6 A PCM internal fault on the input circuit, though this is less common
- 7 Aftermarket accessories or poor previous repairs splicing into the circuit



How to diagnose and fix it

- 1 Connect a scan tool and read live data for the cruise control switch inputs to confirm the fault and see what voltage the PCM reports for each button press
- 2 Visually inspect the multi-function switch, its connector, and the wiring harness for damage, corrosion, or loose pins, especially around the steering column
- 3 Measure resistance across the switch terminals while pressing each button and compare to the manufacturer's specification to identify an out-of-range switch
- 4 Check the clock spring continuity and resistance for the affected circuits, looking for opens or intermittent connections while turning the wheel
- 5 Back-probe the PCM connector and measure voltage on the signal circuit with the switch disconnected to check for a short to voltage or an open circuit
- 6 Repair or replace the faulty switch, clock spring, or damaged wiring as needed, then clear the code and verify cruise control operation with a road test
- 7 If all external circuits and components test good, follow the manufacturer's diagnostic flow for PCM pin checks and internal circuit testing before condemning the PCM

Before replacing the cruise control switch

- A clock spring that is beginning to fail often causes this code intermittently before any airbag warning appears, so continuity should be checked while turning the steering wheel.
- The multi-function switch is a resistor ladder on many vehicles, and a single dirty contact can produce a high voltage reading that sets this code without any button feeling faulty to the driver.
- Aftermarket steering wheel covers or phone mounts that pinch the harness near the column can short the signal circuit to voltage and trigger this code.
- This code can be stored by a low battery or a voltage spike during jump-starting, so clearing it and test-driving before parts replacement is a valid first step.
- On some platforms, the same switch input is shared with the horn or audio controls, so a horn that works only intermittently can be the first clue to a failing clock spring.

Can I keep driving with P0593?

The vehicle remains safe to drive because cruise control is a convenience system, but avoid using cruise control until the fault is repaired, especially in traffic or on slippery roads where unexpected disengagement could be hazardous.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Trim removal tools
- Steering wheel puller (if clock spring replacement is required)
- Wiring diagram for the specific vehicle

Reading P0593

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Vehicle speed, idle control and auxiliary inputs.
93	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0571** Brake Switch 'A' Circuit · **P0592** Cruise Control Multi-Function Input 'B' Circuit Low · **P0594** Cruise Control Servo Control Circuit/Open

See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0593/>

