

CHRYSLER · POWERTRAIN

P1685

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1685 · Chrysler

Skim Invalid Key

P1685 on Chrysler vehicles means the Sentry Key Immobilizer Module (SKIM) has detected an invalid key and is refusing to allow the engine to start. The SKIM compares the transponder chip inside the key against its stored secret codes, and when the response does not match, it sets this code and blocks the fuel and ignition systems.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Computer and output circuits

Symptoms you may notice

- Engine cranks but will not start, often with no spark or fuel delivery
- Theft-deterrent or security light on the dashboard stays on or flashes rapidly
- Engine may start for two seconds and then stall immediately
- Intermittent no-start condition that may temporarily resolve after several attempts
- Remote keyless entry functions may stop working on the affected key
- Often no symptoms besides the warning light if the fault is stored but the key still validates

Common causes, most likely first

- 1 Damaged or unprogrammed transponder chip inside the ignition key
- 2 Failed Sentry Key Immobilizer Module (SKIM) or poor electrical connection at its connector
- 3 Corrosion or loose pins in the ignition switch halo ring antenna connector
- 4 Aftermarket remote starter or alarm system interfering with the immobilizer circuit
- 5 Low or unstable battery voltage causing the SKIM to lose its key validation memory
- 6 Faulty ignition switch not powering the halo ring antenna consistently
- 7 Wrong key or a key from another Chrysler vehicle being used

How to diagnose and fix it

- 1 Verify battery voltage and charge or replace the battery if it is below 12.4 volts at rest
- 2 Inspect the halo ring antenna connector at the ignition switch for corrosion or loose pins
- 3 Try a second known-good programmed key to see if the fault follows the key
- 4 Use a scan tool to read SKIM codes and perform a key validation or relearn procedure
- 5 Check for aftermarket wiring spliced into the immobilizer circuit and remove it if present
- 6 Test the SKIM module power, ground, and communication bus with a multimeter or oscilloscope
- 7 Replace and program the SKIM module only after all wiring and key checks have passed



What most technicians miss on P1685

- A weak battery is one of the most common triggers for P1685 because the SKIM can drop its key validation memory during a low-voltage crank, so always load-test the battery before condemning the module.
- Aftermarket remote starters and alarm systems frequently splice into the halo ring antenna wiring and cause an invalid key reading that looks exactly like a failed SKIM module.
- P1685 does not always mean the key itself is bad; a corroded connector at the SKIM or a failing ignition switch can interrupt the antenna signal and set the same code.
- Some Chrysler vehicles will store P1685 intermittently when a second key with a weak transponder chip is left on the same key ring, so ask the customer about all keys present.
- Clearing P1685 without performing a proper key relearn will usually result in the code returning immediately because the SKIM still has no valid key stored.

Can I keep driving with P1685?

Do not drive the vehicle with an active P1685 because the engine can stall without warning or refuse to restart after you shut it off. If the engine is running, move it to a safe location and arrange diagnosis before attempting further trips.

Tools that help

- Professional scan tool with Chrysler SKIM key programming capability
- Digital multimeter
- Battery load tester
- Oscilloscope for bus and antenna signal testing
- Trim removal tools for ignition switch access

Reading P1685

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Chrysler): its meaning depends on the make.
6	Computer and output circuits.
85	The exact fault within that area.

Often seen with

P1686 Control Unit Error Programming · **P1686** A/T FI Signal B Low Input · **P1686** Metering Oil Pump Stepping Motor Cont Circuit · **P1686** A/T FI Signal B Low Input · **P1686** Driver 5 Line 6 · **P1686** No SKIM Bus Message Received · **P0513** Incorrect Immobilizer Key · **P0601** Internal Control Module Memory Checksum Error · **P0633** Immobilizer Key Not Programmed - ECM/PCM · **U0164** Lost Communication With HVAC Control Module



See it working

Watch the animated explainer [How Push-Button Start Works: Keyless Ignition](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1685/>

