



P1622 · Mazda

Immobilizer System Fault

P1622 on a Mazda means the engine control module (ECM) has lost valid communication with the immobilizer system, so it cannot confirm that the key presented is authorized to start the car. The computer stores this code when the encrypted handshake between the immobilizer control unit and the ECM fails or times out during a start attempt.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Mazda specific	High	Professional	Computer and output circuits

Symptoms you may notice

- Engine cranks but will not start, or starts and stalls immediately
- Security or key-shaped warning light flashing or staying on
- Intermittent no-start that may resolve after several attempts
- Remote keyless entry or push-button start functions behaving erratically
- Often no symptoms besides the warning light if the fault is stored but not active

Common causes, most likely first

- 1 Weak or dead battery in the key fob, preventing the transponder from responding
- 2 Faulty immobilizer coil antenna around the ignition lock cylinder or push-button receiver
- 3 Damaged or corroded wiring between the immobilizer control unit and the ECM
- 4 Failed immobilizer control unit or a corrupted key pairing in its memory
- 5 ECM internal fault or lost immobilizer data after a battery replacement or module swap
- 6 Aftermarket remote starter or alarm system interfering with the immobilizer circuit
- 7 Poor ground connection at the immobilizer module or ECM mounting point

How to diagnose and fix it

- 1 Scan all modules for stored codes and record freeze-frame data before clearing anything
- 2 Test the key fob battery and try a second known-good key to rule out a single bad transponder
- 3 Inspect the immobilizer antenna coil and its connector for corrosion, looseness, or physical damage
- 4 Check wiring continuity and grounds between the immobilizer module and the ECM
- 5 Verify the immobilizer module is receiving power and ground and communicating on the data bus
- 6 Reprogram or re-pair the keys to the immobilizer using a Mazda-compatible scan tool
- 7 If pairing fails, replace the immobilizer module or ECM as indicated and perform the required programming



What Mazda owners miss about P1622

- A weak key fob battery is the most common trigger, and the car may still crank normally because the transponder circuit draws more current than the remote buttons do.
- Aftermarket remote starters and alarms are frequently spliced into the immobilizer wiring and can cause intermittent P1622 even when the factory system tests fine.
- Disconnecting or replacing the battery or ECM on some Mazdas can wipe immobilizer pairing data, so the code may appear immediately after unrelated electrical work.
- P1622 does not always mean the immobilizer module is dead; a poor ground or a chafed wire in the steering column harness produces the same stored fault.
- Clearing the code without repairing the underlying communication fault will usually result in a no-start condition returning within a few drive cycles.

Can I keep driving with P1622?

Do not drive the vehicle if it will not start or stalls immediately, because the immobilizer has disabled the engine. If the car runs normally and only the warning light is on, drive directly to a repair shop and avoid shutting the engine off in an unsafe location until the fault is diagnosed.

Tools that help

- Mazda-compatible scan tool with immobilizer and key programming capability
- Digital multimeter for voltage, continuity, and ground testing
- Battery tester for the key fob and vehicle battery
- Wiring diagram for the immobilizer and ECM circuits
- Trim removal tools for accessing the immobilizer antenna and module

Reading P1622

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

Often seen with

P1621 Engine Coolant Temperature Signal Short To Ground · **P1623** Data Bus Powertrain No Communication · **P1624** MIL Request Signal Active · **P1621** Immobilizer System Fault · **P1623** Immobilizer System Fault · **P1624** Immobilizer System Fault · **P1624** TCM To PCM MIL Request Signal Circuit Fault · **P1621** PCM Memory Error · **P1623** Transmission Temp Pull-Up Resistor · **P1624** Customer Snapshot Data Available · **P1623** Pedal Position Sensor Potentiometer Supply · **P1624** Pedal Position Sensor Potentiometer Supply Channel 1 Electri · **P0513** Incorrect Immobilizer Key



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/mazda-p1622/>

