



Preliminary Information

PIC5650K Diagnostic Tip - Security Light on Intermittently / No Crank/No Start or Start Stall / Keyless Access Vehicles May Display No Remote/Fob Detected / Poor or No RKE Range / Service TPM

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
All	All	2007 - 2023	All	All	All	All

Supersession Statement

This PI was superseded to update the Models and Recommendations / Instructions section . Please discard PIC5650J.

Condition / Concern

A customer may comment on any of the following complaints:

- Intermittent no crank
- Intermittent no start, or start and stall
- Security / Theft light / Message
- Poor or no RKE range
- Keyless or passive entry/start inoperative
- No Fob Detected message
- Service Tire Pressure Monitor message
- Any of the following DTC's: B3055, B3060, B3935, C0750, C0755, C0760, C0765, and/or C0775.

Note: On vehicles equipped with keyless/passive start, the vehicle will start if the fob is placed in the fob pocket.

In most cases, these concerns cannot be duplicated.

The above systems use Radio Frequency (RF) to transmit information. Some aftermarket devices cause Radio Frequency Interference (RFI), which can "jam" the radio frequency being transmitted.

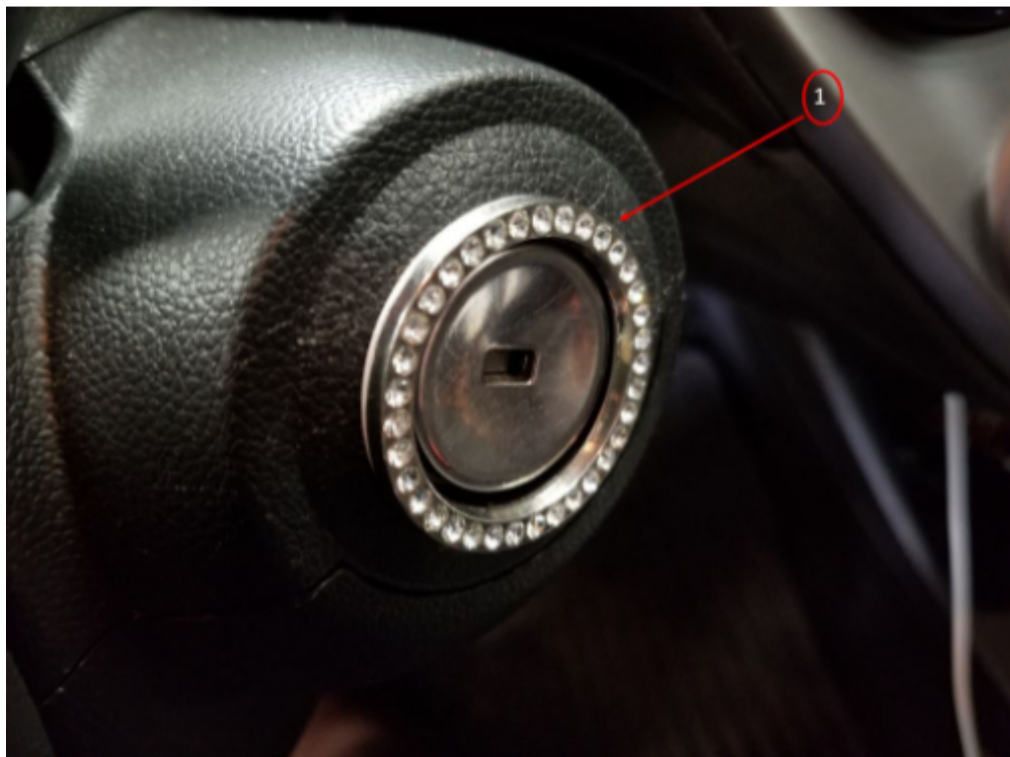
Listed below are a number of aftermarket devices that can cause RFI. In many cases, these types of devices will be attached to the customer's key ring and could be removed from the key ring or from inside the vehicle when the customer drops the vehicle off for service.

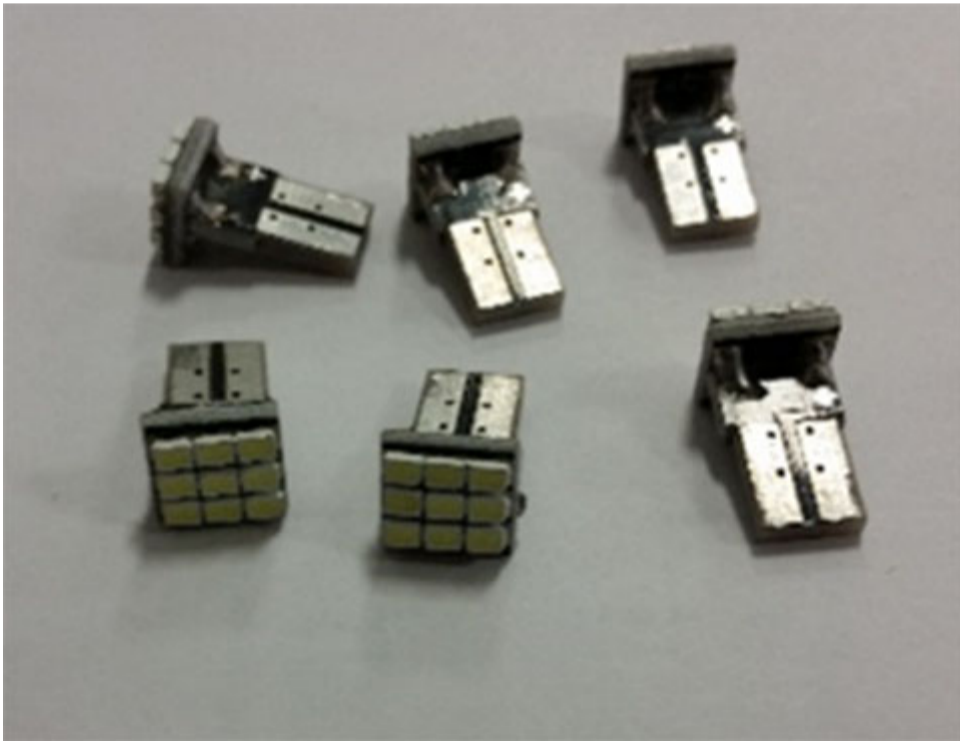
- Vehicle immobilizer keys from other vehicles
- Keyless access transmitters from other vehicles
- Interstate/bridge toll passes
- Gate/door passes to allow access to pools, driveways, entry doors, etc.
- Community/parking access cards
- Fuel station speed passes
- Building access swipe cards/ transponder devices



Additional items to be aware of:

- Aftermarket LED dome, tail, turn, stop, strip, floor, door, Logo, head lights
- In many cases, when the LED lighting is turned on it can interfere with a RF signal. Example, RKE inoperative after the first fob button press. When the RKE fob button is pressed the dome lights may turn on, which if equipped with an aftermarket LED dome light, it can interfere with any additional fob button presses.
- Certain cell phone chargers
 - USB power banks
 - USB flash lights
 - Fans (12 volt or 110 volt)
 - Any type of USB, 12 volt or 110 volt chargers
 - "Bedazzle Trim Ring" surrounding ignition lock cylinder, shown below (1)























Recommendations / Instructions

Important: Do not replace any parts for this concern prior to duplicating the concern and reviewing the following information:

Before any in depth diagnosis is performed, question the customer or inspect the vehicle for any types of aftermarket equipment, like shown above, which could cause RFI. These items need to be removed and/or disconnected from the vehicle.

It is possible to get RFI from transponders or other frequency emitting devices in the area. Aftermarket RFI meters/sniffers are available that can be utilized as an aid to locate stray RFI signals. It is important to know what the complaint is and what frequency you are checking. When testing a vehicle for stray RFI signals there are three common frequencies that are used; 315 MHz, 433 MHz, and 125 kHz. Make sure the meter you use checks for frequencies at and around these 3 commonly used frequencies.

315 MHz (RKE and TPM frequency)

433 MHz (RKE and TPM frequency)

125 kHz (Passive entry antennas used on vehicles with passive start/entry)

In some cases, the use of the J 43241 Keyless Entry Tester or EL-52545 Tire Pressure Monitor Sensor and RF Diagnostic Tools to scan the vehicle for stray RFI signals have been useful. Remember while scanning the vehicle you may need to turn on and off electrical devices to see if they are causing the RF interference. An example of this is if a vehicle is equipped with aftermarket LED dome lights. If the dome lights are not on when you scan the vehicle, no interference will be found.

Important: Dealer should also direct their customers to the appropriate section in the Owner manuals that references that the device complies with Part 15 of the FCC Rules. Examples, of where this info may be found depend on the model and/or year. This may be found under Immobilizer Operation, Keyless Entry, Keyless Access, or Radio Frequency Statement sections.



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