# **Technical Bulletin**



# SERVICE BULLETIN

Classification: Reference: Date:

EL13-050 NTB13-107 December 11, 2013

# INTELLIGENT KEY NOT DETECTED / ENGINE WILL NOT START

**APPLIED VEHICLES:** 2013 - 2014 Altima Sedan (L33)

2013 - 2014 Pathfinder (R52)2014 Pathfinder Hybrid (HR52)

2014 Rogue (T32)

**NOTE:** This bulletin does not apply to 2014 Rogue Select (S35).

## **SERVICE INFORMATION**

Intelligent Key (I-Key) systems on the Applied Vehicles use two (2) different Radio Frequencies (RF) that are similar to other wireless devices; 315 MHz and 433 MHz.

In the event another wireless device (e.g. aftermarket alarm system) is transmitting at the same time as an I-Key, it can interfere with the I-Key signals being received by the BCM.

# If there is interference with I-Key signals, the following symptoms may occur:

- The I-key is not detected, causing:
  - The engine to **not** start (no response when the Stop/Start button is pressed)
  - "I-Key System Error" displayed in the instrument cluster
  - "No I-Key Detected" displayed in the instrument cluster
- Intermittent operation of the buttons on the remote (Key FOB).
- Intermittent operation of the door request switches.

The above symptoms are usually intermittent and can be difficult to diagnose.

If a vehicle has experienced the above symptoms, or a customer has reported the above symptoms, refer to **Supplemental Diagnosis / Information** on the next page.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

## NOTE:

- The diagnostic items listed below should be checked before replacing any parts or performing any repairs.
- Refer to the appropriate Service Manual for complete I-Key system diagnosis and repair information.

## **Supplemental Diagnosis / Information**

- I-Key fob battery check:
  - Refer to the appropriate Service Manual (DLK section) for proper battery voltage testing procedure.
  - Standard voltage range is 2.5 to 3.0 V.
  - ➤ It is recommended that a battery testing 2.8 volts or less be replaced.
- Location of I-Key: An I-Key should **not** be stored where the RF signal can be obstructed by nearby metal objects.
- Interference from other personal devices: Confirm the I-Key is not placed in close proximity to phones, other I-Keys, highway PASS Card, etc. that may be transmitting similar RF signals.
- If none of the above are causing symptoms, check the following:
  - Inspect the vehicle for the presence of an aftermarket alarm system or radar detector.

**NOTE:** RF signals coming from the vehicle surroundings can interfere with the I-Key signals (e.g. radar detectors or aftermarket alarm systems in other vehicles, or RF signals from surrounding buildings).

Use Signal Tech II to check for interfering signals. See Interference Check on the next page.





Signal Tech-II

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## Interference Check

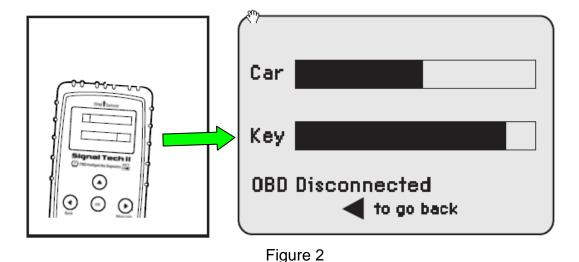
Signal Tech-II will detect the presence of RF signals that may be interfering with I-Key signals.

- 1. Place the Signal Tech-II inside the vehicle.
- 2. Set the ignition to "Key ON Engine OFF" (KOEO).
- 3. Get all of the vehicle's I-Keys out of range of the vehicle (place them at least 25 feet away from the vehicle).
- 4. With Signal Tech-II, select **Key Test**, and then select **OK**.



Figure 1

- 5. Observe the bar graph for **Key**.
  - Ignore the bar graph for Car.
  - If a signal is detected in the **Key** bar graph, this may indicate an interference issue. In this case, the source of the interference must be isolated / eliminated.



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