

# Smart Key Specifications

Service Category Vehicle Interior

Section Theft Deterrent/Keyless Entry

Market USA

Scion Supports ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2013	iQ EV	
2011 – 2013	tC	

## Introduction

Some customers may inquire about the frequency and power output of the Smart Key/Smart Entry systems used on various models. The Smart Key/Smart Entry systems conform to all applicable FCC rules. This bulletin details the applicable specifications for these systems.

### CAUTION

Implanted pacemakers, cardiac defibrillators, or other electrical medical devices may be affected by radio waves emitted by the Smart Key/Smart Entry Antenna (in detection area). Customers with concerns about these systems and their effects on implanted electronic medical devices should consult their physician or the device manufacturer. This information is also included in the Owner's Manual for each applicable model.

If necessary, details on disabling the Smart Key/Smart Entry functions can be found in the appropriate vehicle Repair Manual. Refer to the Technical Information System (TIS) for additional details.

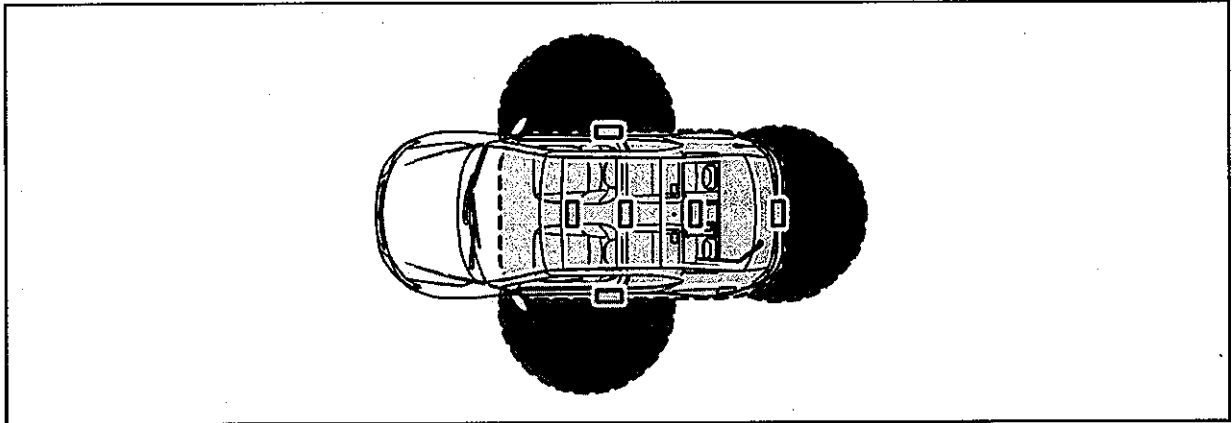
## Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
N/A	Not Applicable to Warranty	–	–	–	–

# Smart Key Specifications

## Smart Key Detection Area

Figure 1.



### Specifications: Smart Key Antenna (Communication from Vehicle to Key)

- Frequency: 134.2 kHz
- Power Output: 95dB  $\mu\text{V}/\text{m}$  (3 meters away from the Smart Key Antenna)
- Smart Antenna RF Output Power:

SPECIFICATION				
LOCATION	FREQUENCY	OUTPUT POWER/ ELECTRIC FIELD INTENSITY	MODULATION METHOD	MOUNTING POINT
Inside Passenger Compartment	134.2 kHz	95dB $\mu\text{V}/\text{m}$ @3 m	AM	Differs in each vehicle; consult the relevant Repair Manual for each vehicle
Inside Trunk				Inside Trunk
Outside Vehicle				Inside Door Handle or Inside Rear Bumper

## Smart Key Specifications

### Specifications: Smart Key Antenna (Communication from Vehicle to Key) (Continued)

TRANSMIT TIMING			
LOCATION	VEHICLE PARKED	ENTERING OR EXITING VEHICLE	VEHICLE IS BEING DRIVEN
Inside Passenger Compartment	Does NOT Transmit	<ul style="list-style-type: none"> <li>Operating door locks</li> <li>Operating engine switch/ depressing brake pedal</li> <li>Opening or closing doors</li> <li>With "IG-ON" or "ACC-ON", and in the P-range, closing door when the key cannot be detected inside the vehicle (continues for 3 seconds until the key is detected or the power switch is turned OFF), A/T vehicles ONLY</li> <li>"IG-OFF" after driving more than 20 minutes</li> <li>(Not in P-range) when shutting door, if the key cannot be detected inside the vehicle (transmits for 3 seconds until the key is located), A/T vehicles ONLY</li> </ul>	When key is NOT detected inside passenger compartment while car is being driven (transmits for 3 seconds)
Inside Trunk (ONLY in Vehicles w/Trunk)		During the following operations: <ul style="list-style-type: none"> <li>Door lock is operated/trunk switch is depressed</li> <li>Closing the trunk</li> <li>Opening or closing doors</li> </ul>	
Outside Vehicle	<ul style="list-style-type: none"> <li>When door is locked, transmits at 250 ms intervals (stops when door is unlocked)</li> <li>Does NOT transmit</li> </ul>	<ul style="list-style-type: none"> <li>Operating door locks</li> <li>Trunk or back door open switch is depressed</li> </ul>	Does NOT Transmit

## Smart Key Specifications

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### Specifications: Smart Key Transmitter/Wireless Remote (Communication from Key to Vehicle)

1. Frequency: 312.15 MHz – 314.35 MHz
2. Power Output: 75dB  $\mu$ V/m (3 meters away from the Smart Key Antenna)
3. Modulation Type: FM