WIRELESS RF KEYPAD

PRINCIPLES OF OPERATION

The wireless RF keypad performs most functions associated with the standard Ford entry keypad using the wireless remote keyless entry receiver. The wireless RF keypad supports two unique communication protocols to program to the vehicle. Each protocol has different programming procedures. The keypad is not compatible with vehicles using the Passive Entry Passive Start (PEPS) system (vehicles that require IDS for programming the wireless RF keypad can have PEPS if it does not also have factory remote start). The wireless RF keypad can control the following:

- Lock all the doors.
- Unlock the driver door using 5 digit entry code or 5 digit user selected code.
- Open the trunk or rear hatch.
- Open the passenger sliding door.
- Open the driver sliding door.

FAILURE DESCRIPTIONS COVERED

1. KEYPAD DOES NOT ILLUMINATE – PINPOINT TEST A
2. NO RESPONSE FROM VEHICLE – PINPOINT TEST B
3. KEYPAD WILL NOT UNLOCK VEHICLE – PINPOINT TEST C

Warranty Claim

- If a warranty claim is submitted, include the pinpoint test step that failed in the technician comments section.

PINPOINT TEST A – KEYPAD DOES NOT ILLUMINATE

Possible Causes

- Keypad logic failure
- Depleted battery

A1 – VERIFY ILLUMINATION

Test the keypad illumination of all 5 buttons by pressing each button and waiting 5 seconds for the illumination to turn off. Does the keypad illuminate for 5 seconds when each button is pressed (may require darkened area to see illumination)?

- YES - Battery is not depleted, logic is operating, GO TO PINPOINT TEST B.
- NO - Depleted battery or logic failure.

PINPOINT TEST B – NO RESPONSE FROM VEHICLE

Possible Causes

- Remote Keyless Entry (RKE) failure
- Keypad not programmed to vehicle
- Keypad transmitter failure
- Battery low

B1 – VERIFY RKE RECEIVER OPERATION

Does the vehicle unlock and lock using the production fob?

- YES – Vehicle receiver functioning, GO TO B2.
- NO – Vehicle receiver malfunctioning, GO TO RKE Receiver Pinpoint Tests (refer to Workshop Manual).
B2 – VERIFY WIRELESS RF KEYPAD COMMUNICATION

Does the vehicle lock when the 7/8 and 9/0 buttons are pressed at the same time?

- YES – Wireless RF keypad transmitter functioning and programmed to vehicle, GO TO C1.
- NO – Keypad transmitter failure or keypad not programmed, GO TO B3.

B3 – CHECK FOR KEYPAD OUT OF SYNC–1

Does vehicle lock when the 7/8 and 9/0 buttons are pressed at the same time 3 times within 5 seconds?

- YES – Passive re-sync done, GO TO C1.
- NO – Passive re-sync failed, GO TO B4.

B4 – CHECK FOR KEYPAD OUT OF SYNC–2

Using a programmed fob, lock the vehicle and then press the 7/8 and 9/0 buttons at the same time within 5 seconds. Does the vehicle lock?

- YES – Active re-sync done, GO TO C1.
- NO – Active re-sync failed, GO TO B5.

B5 – CHECK FOR KEYPAD NOT PROGRAMMED

Follow the installation instructions for the vehicle the wireless RF keypad is being installed.

Does the vehicle lock when pressing the 7/8 and 9/0 buttons at the same time?

- YES – Wireless RF keypad transmitter functioning and programmed to vehicle, GO TO C1.
- NO – Keypad programming failed, GO TO B6.

B6 – CHECK FOR KEYPAD ATTACHED TO DOOR EXTERIOR

The process of programming the keypad to the vehicle requires additional transmissions from the keypad to make sure the process completes successfully. Do not attach the keypad to the door's exterior until after it has been programmed to the vehicle. If the keypad is attached to the door, remove it and follow installation instructions for the vehicle the wireless RF keypad is being installed.

Does the vehicle lock when pressing the 7/8 and 9/0 button at the same time?

- YES – Wireless RF keypad transmitter functioning properly and programmed to the vehicle, GO TO C1.
- NO – Transmitter failure, replace keypad.

PINPOINT TEST C – KEYPAD WILL NOT UNLOCK VEHICLE

Possible Causes

- Wrong master code
- Keypad button failure
- Logic failure
- Depleted battery

C1 – UNLOCK USING MASTER CODE FROM CODE CARD.

Enter the master code printed on the master code card.

Does the vehicle unlock?

- YES – Complete.
- NO – Possible master code card mismatch, GO TO C2.
C2 – LOOK UP MASTER CODE THROUGH ONLINE APPLICATION

The accessory wireless RF keypad can only be used with vehicles that are factory built with RKE and without PEPS (vehicles that require IDS for programming the wireless RF keypad can have PEPS if it does not also have factory remote start). The master code for the wireless RF keypad can be retrieved from FMCDealer- Parts and Service- Parts Product Line Information- Keys/Entry Devices- Aftermarket Keyless Entry Keypad Code Access. Access to this site is granted to DPES authorized users. Once accessed, the master code retrieval process is given. The master code for the wireless RF keypad cannot be retrieved from the body module with a diagnostic tool.

General Information

- You will only see the key code link if your user ID has been granted access.
- The wireless RF keypads are a dealer accessory.
- Key codes are available for both wireless RF keypad versions:
  - 7LZ-14A626–BA
  - ES7Z-14A626–A
- The system will provide the master key code once the flash code has been entered.
- To get the flash code from the wireless RF keypad (read all steps prior to performing code retrieval):
  - Press and hold the 1/2 and 3/4 buttons on the keypad.
  - While pressing the 1/2 and 3/4 buttons, press and hold the 7/8 button until the 9/0 button flashes, then release the buttons.
  - Count and record each flash (including the first one). The 9/0 button will flash each digit with a series of flashes at a one flash per second rate. There will be a 3 second pause between each digit. The flash code has 5 digits, each digit can be 1-5 (that is, a 1 will flash once followed by a 3 second pause, a 4 will flash four times followed by a 3 second pause, then the next digit will flash, followed by a 3 second pause until all 5 digits have been sent). These five digits are the flash code.
  - When the Aftermarket Keyless Entry Keypad Code Access site is reached:
    - Enter the five digit flash code and press submit to get the master code.

Does the master code you obtained unlock the vehicle?

- YES – Complete.
- NO – Include keypad flash code and retrieved master code in warranty claim.