

FORD: 1993-1997 PROBE, THUNDERBIRD
1993-2004 CROWN VICTORIA, TAURUS
1994-2004 MUSTANG
1995-2000 CONTOUR
1997-2002 ESCORT
2000-2004 ESCORT ZX2, FOCUS
2002-2004 THUNDERBIRD
1992-2004 E SERIES
1993-2004 EXPLORER
1994-1996 BRONCO
1994-2003 WINDSTAR
1995-2004 RANGER
1997-2004 EXPEDITION, F SUPER DUTY
2000-2003 EXPLORER SPORT
2000-2004 ESCAPE, EXCURSION
2001-2004 EXPLORER SPORT TRAC
2004 FREESTAR
1994-2004 F SERIES

LINCOLN: 1992-2002 CONTINENTAL
1993-1998 MARK VIII
1993-2004 TOWN CAR
2000-2004 LS
1998-2004 NAVIGATOR
2002-2003 BLACKWOOD
2003-2004 AVIATOR

MERCURY: 1993-1997 COUGAR
1993-2004 GRAND MARQUIS, SABLE
1995-2000 MYSTIQUE
1997-1999 TRACER
1999-2002 COUGAR
1997-2004 MOUNTAINEER

ISSUE

This article offers clarification on the most common Remote Keyless Entry (RKE) conditions encountered during service.

ACTION

Refer to the following Service Tips to aid in diagnosing common RKE conditions.

SERVICE TIPS

Remote Entry System Diagnosis

1. Electronically unlock the vehicle (i.e., using the transmitter, keypad or power lock switch on the door) prior to attempting to diagnose the vehicle via Service Tools or entering Remote Entry System Programming Mode. Most newer model year systems (2002 and beyond) require this action before function is operational.

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford, Lincoln, or Mercury dealership to determine whether the Bulletin applies to your vehicle.

Article No. 03-18-1 Cont'd.

2. If extreme poor range performance is experienced:
 - a. DO NOT change batteries on Remote Entry transmitters (Range does not change as battery ages).
 - b. DO NOT replace or reprogram Remote Entry transmitters (Range is determined primarily by the receiver) If only one of the transmitters experience poor range, but not all, then it is OK to replace the bad transmitter and reprogram ALL transmitters back to vehicle.
 - c. Verify external antenna is connected (if applicable).
 - d. Ensure the poor performance is not only in certain locations. Examples; by radio stations or TV transmitting towers, power generators, etc.
 - e. Ensure no other aftermarket/dealer installed devices are mounted on vehicle (especially systems operating at same frequency, 315MHz). If aftermarket/dealer installed systems are present, disconnect them and check FMC OEM system for proper operation.
 - f. Ensure poor performance is consistent in nature and not just from one approaching angle from or to the vehicle.
 - g. Poor performance is most likely the cause of a remote entry receiver, not a remote entry transmitter issue.
3. If there are other functional issues with the Remote Entry system:
 - a. First determine if the Remote Entry system is OEM or aftermarket (dealer installed systems with Ford Logo are still considered aftermarket). Please note this fact in repair claim.
 - b. Ensure correct Remote Entry devices (transmitters, keypad) are used with vehicle. This can be verified via part number or RKE Job Aid which can be viewed from the PTS or QCdealer websites. Even if the part has a Ford Logo, ensure it is one pictured on the on Job Aid. If not listed on RKE Job Aid then it is an aftermarket or dealer installed device and should be diagnosed and binned accordingly.
 - c. Ensure there are no aftermarket systems on the vehicle. Examples: Remote Start, Perimeter Alarm, Charging Cell Phones, Charging Coolers, etc) If so, please note this fact on repair claim for easy identification. Disconnect aftermarket system and check OEM system for normal operation.
 - d. Continue with normal repair procedures.
4. If the RF device (transmitter or wireless keypad) requires a battery replacement, there is NO need to reprogram the device back to the vehicle.
5. If any one button, yet not all buttons on the Remote Entry device operates, there is NO need to reprogram the device back to vehicle. Follow normal repair procedures for inoperative function.
6. Be aware that before entering Remote Entry program mode:
 - a. First electronically Unlock the vehicle.
 - b. Have ALL RF devices (transmitters / wireless keypads) present at the time of entering procedure. Most Remote Entry systems only allow up to 4 devices. Thus, if these other RF devices (wireless keypads) are added, it should be noted that the number of locations to store extra transmitters will be reduced. Inform the customer of this.
 - c. Ensure no other vehicles within 50 meters of a vehicle entering program mode are attempting to enter program mode also or are activating any RF functions (transmitters / wireless keypad). This could cause cross programming, mis-programming or loss of programmed transmitters/wireless keypads from memory.
 - d. Recall that once the first RF device is programmed to the vehicle, ALL other devices stored in memory get erased using the manual key cycling method to enter program mode. If service tools are used to enter program mode (on vehicles equipped with feature), the technician has the opportunity to add just one transmitter/wireless keypad to memory without erasing all others.

- e. Verify how many devices are actually stored in memory before entering this procedure. This can be accomplished via diagnostic tools. If you do not receive ALL devices that are currently programmed to vehicle from customer at time of repair, inform the customer that when the devices provided are reprogrammed to vehicle none of the other devices left at home will operate the vehicle any longer. They should be referred back to their Owner's Guides for the manual programming procedure to reprogram ALL their devices to the vehicle again on their own. This should eliminate repeat repairs in the future.
- f. If all Remote Entry devices are not provided at time of repair, entrance into program mode via service tools is preferred over the manual programming procedure (if equipped on vehicle). Diagnostic programming allows individual RF devices to be added or it can be used to replace specific devices currently in memory and does NOT have to erase ALL devices currently stored in memory which would render those left at home inoperative.
- g. Be aware of difficulty of cycling the ignition between OFF and RUN on some manual transmission vehicles due to the ignition lock feature. It may be easier (if applicable) to cycle the ignition from OFF to ACC, rather than RUN (example, older Crown Vic/Grand Marquis)
7. Be aware on older Model Year Town Car and Crown Vic/Grand Marquis Vehicles, there is a higher chance of inadvertently entering program mode by only cycling the ignition from OFF to RUN two times by accidentally bypassing OFF and going all the way to ACC. If the customers complain their door locks cycled intermittently or their transmitters no longer work, it could mean they entered program mode inadvertently at some time. Transmitters that no longer work with vehicle can be easily determined if they are still programmed to the vehicle via diagnostic tools (Function Mode).
8. Refer to the Remote Entry Job Aid located on PTS and QCDealer websites or the 2 laminated versions sent to each dealership for appropriate programming procedures and transmitters to be used for every Model Year vehicle.
9. If the vehicle is experiencing issues with the Keys or Passive Anti-Theft System (aka SecuriLock™), these issues should be binned to:
 - a. L23 for keys
 - b. -15607- or L14 for PATS transceiver
 - c. L14 for PATS control
10. If customers complain of inadvertent activations, determine if the following is the cause:
 - a. Ask customer if they programmed their transmitters to other family vehicles. If so, inform them if a transmitter is activated within 50 meters of both vehicles, it will perform the function on both vehicles. (Also, note that a trunk release button on one vehicle may be a liftgate glass release function on another vehicle).
 - b. For Liftgate Glass release activations, check OASIS to determine if there are any applicable SSM or TSBs. Some 2002-2003 Explorer 4DR, Mountaineer and Aviator vehicles built prior to 04/04/2003, may exhibit backglass rattle/noise or high effort when closing. Due to this issue, one may find that while driving down the road or when parked, their liftgate glass is ajar. For these vehicles, first make sure the glass is closed with enough force to fully latch. NOTE: Allowing the glass to fall on its own is not sufficient force for proper closure. The condition may also be due to tolerance stack-up between the backglass to body dimensions and latch position. To service Explorer 4DR and Mountaineer, first remove the backglass latch assembly. Second, drill the body side latch mounting bolt hole 2mm larger (from 7mm to 9mm diameter, or 23/64"). Additionally, for Aviator, replace the backglass overslam bumpers with revised part number W708031-S300. NOTE: Replacement of the latch is not necessary.
11. CrownVic/Grand Marquis vehicles do not have feedback implemented to mark the ending of transmitter programming, the ignition key must be turned to OFF and there must be a 10-20 second wait to get out of programming mode. If the recently programmed transmitter(s) is tested before this time out expires, it may not work and technician may think it did not program at all

Article No. 03-18-1 Cont'd.

Keyless Entry System (Wired or Wireless)

1. If issues are experienced with Keyless Entry keypad operation (located on driver door):
 - a. Look for any signs of water intrusion.
 - b. Look for proper wiring connections/connector seating.
 - c. Check for proper keypad backlighting by pressing a button to verify the light turns on.
 - d. Most vehicles equipped with a keypad incorporate a security feature called Anti-scan mode. Inform customer they have 7 attempts at inputting a valid keycode before the keypad will be locked out for one minute. (Only the lock function operates while in this mode). This one minute anti-scan mode is indicated by the keypad light flashing rapidly.
 2. On 2004 Heavy Duty F-Series repairs, note that the vehicle is released with a new wireless keypad (RF). If the wireless keypad or any remote transmitter requires programming, ALL devices must be present and programmed during the same programming procedure. Wireless keypad repairs must not be binned to the remote transmitter part number (15K601).
 3. If the RF device (transmitter or wireless keypad) requires a battery replacement, there is NO need to reprogram the device back to vehicle.
- a. When transmitters are initially programmed to vehicle, the first transmitter will automatically recall memory position #1. The second transmitter programmed will automatically recall memory position #2. Remember, transmitters no longer have #1 and #2 labels on them and the customer should be told which transmitter was the first and second to be programmed. Or at least inform the customer how their system operates so there is no confusion. The transmitters cannot be disassociated with this implementation. (Example Windstar).
 - b. When the transmitters are programmed to vehicle, no automatic association to the memory seat/mirror/pedal/steering column positions will occur until set by the dealer or customer. The association of transmitters to the vehicle can be accomplished by pressing the Set button, followed by a button activation from the transmitter, followed by the memory position (1 or 2) the customer wishes to have it set to. The transmitters in this scenario can be disassociated if the customer wishes by pressing the Set memory switch, any button on the keyfob/transmitter and the Set memory switch again. (Example Town Car and LS).
 - c. The third personality implementation is just like "b" except the transmitters are associated to the vehicle when initially programmed. However, the customer or dealer may change those settings following the steps laid out in "b". Again, with this implementation, the transmitters may be disassociated from the vehicle.

Remote Entry or Other feature operation

1. Many questions have been raised about the RKE system and the Memory Seat feature association. The following information is here to explain the 3 different versions of "personality". Refer to these methods used to associate transmitters to memory seat/mirrors/pedal/steering column positions:
 2. Most (2001 & newer) vehicles equipped with Remote Entry, now allow Lock and Unlock functions to operate with the ignition on. However, flashing of exterior lights or sounding (chirps) of horn will not operate with the key turned to RUN or START.

3. On some 2001 and beyond vehicles, there is a feature called Power Door Lock Disable which becomes active 20 seconds after the vehicle is electronically locked. The feature disables the interior power door lock switches. This feature is used to prevent access into the vehicle if a moonroof or window is open and someone attempts to place a stick through the window to unlock the vehicle via the interior trim switch. The interior power door lock switches become operational again once the vehicle is electronically unlocked or a door becomes ajar. If the customer complains of intermittent interior power door lock functionality check to see if this feature is configured ON. If so, inform the customer of this feature and that it can be disabled if the customer wishes to change the configuration (refer to Owner's Guide). If not, pursue normal diagnosis.

OTHER APPLICABLE ARTICLES: NONE

WARRANTY STATUS: INFORMATION ONLY

OASIS CODES: 112000