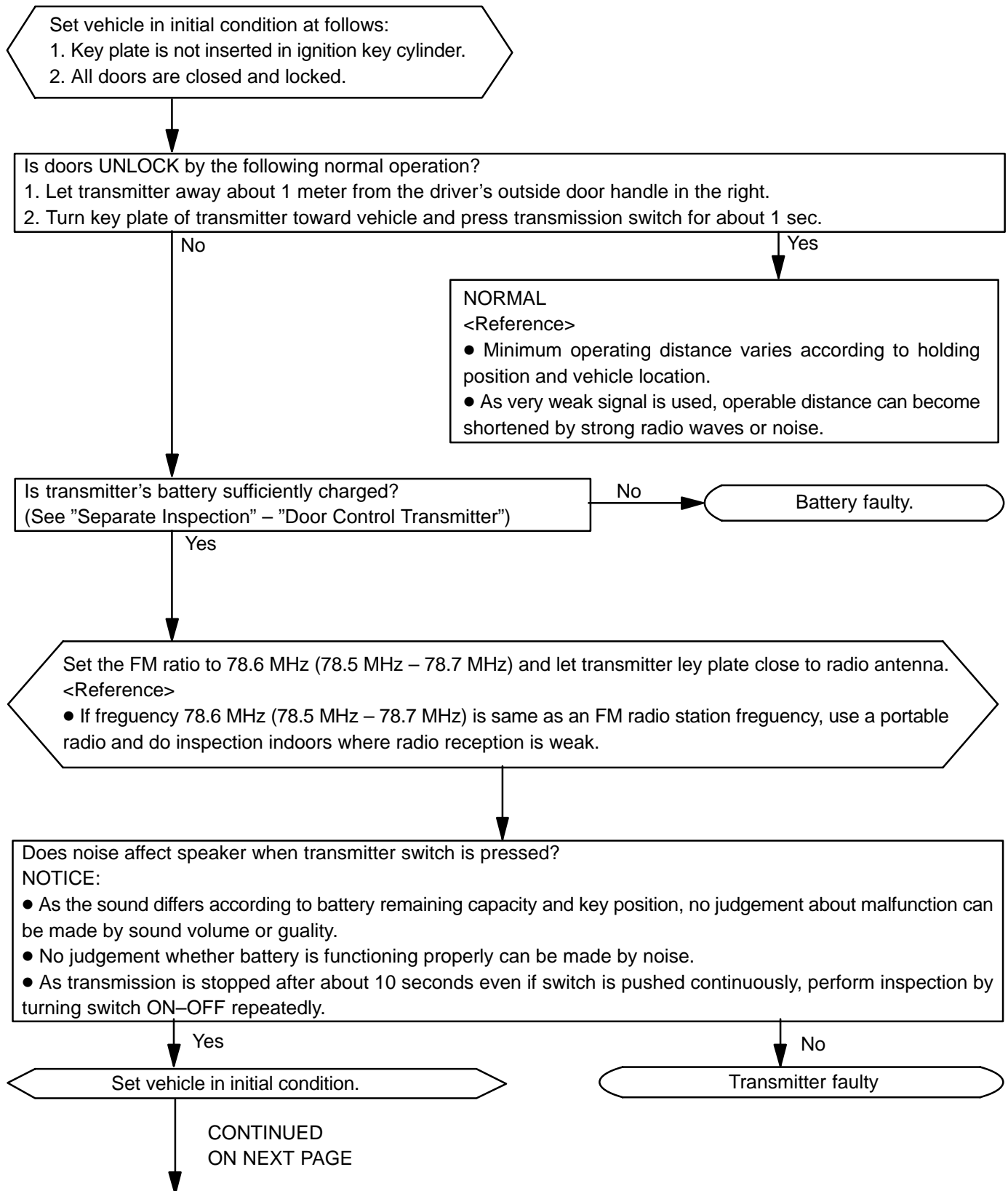


## PRE-CHECK

### 1. PRECHECK TYPE I

Only Wireless Function (Remote Control) Not Operating (Without Normal Transmitter)

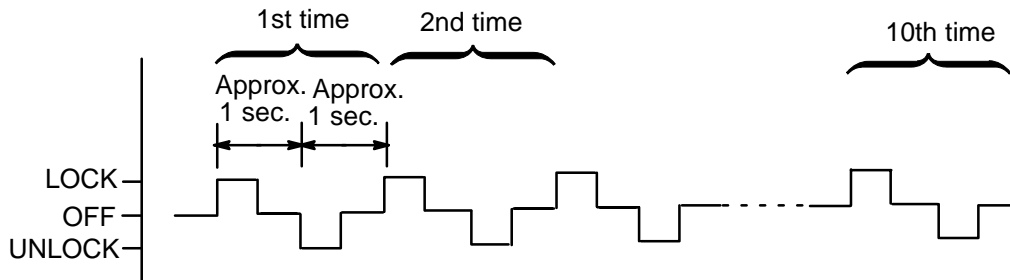


CONTINUED  
PREVIOUS PAGE

Enter diagnostic mode.

Put door control receiver in diagnostic mode as follows:

1. Open driver's door.
  2. Using door control switch (for manual operation), switch 10 times from LOCK to UNLOCK at intervals of approx. 1 sec. within 30 seconds.
- (If operation of door control switch is too slow or too fast, diagnostic mode is not entered).



Does UNLOCK – LOCK automatically occur 1 time within 3 seconds after diagnostic mode is switched on?

Yes  
(Diagnostic mode entered)

No  
(Not in diagnostic mode)

Is method for entering diagnostic mode correct?

No

Yes

Are continuity and voltage normal between each terminal of connector connected to receiver and body ground, and does electronic door lock operate normally?

Specifications

Terminal No.	Check Item	Inspection Condition	Specification
2	Voltage	Constant	10 – 14 V
3	Voltage	Ignition switch OFF → ON	0 V → 10 – 14 V
4	Operation	All doors locked → ground terminal 4	All doors UNLOCK
5	Voltage	Luggage compartment door switch OFF → ON	0 V → 10 – 14 V
6	Operation	All doors unlocked → ground terminal 6	All doors UNLOCK
8	Voltage	Insert key plate into ignition key cylinder → remove key	0 V → 10 – 14 V
9	Continuity	Constant	There is continuity
10	Voltage	Driver's door lock knob LOCK → UNLOCK	5 V more → 0 V
11	Voltage	Passenger's door lock knob LOCK → UNLOCK	5 V more → 0 V
12	Voltage	All doors closed → any door lock knob to unlock	10 – 14 V → 0 V

Yes

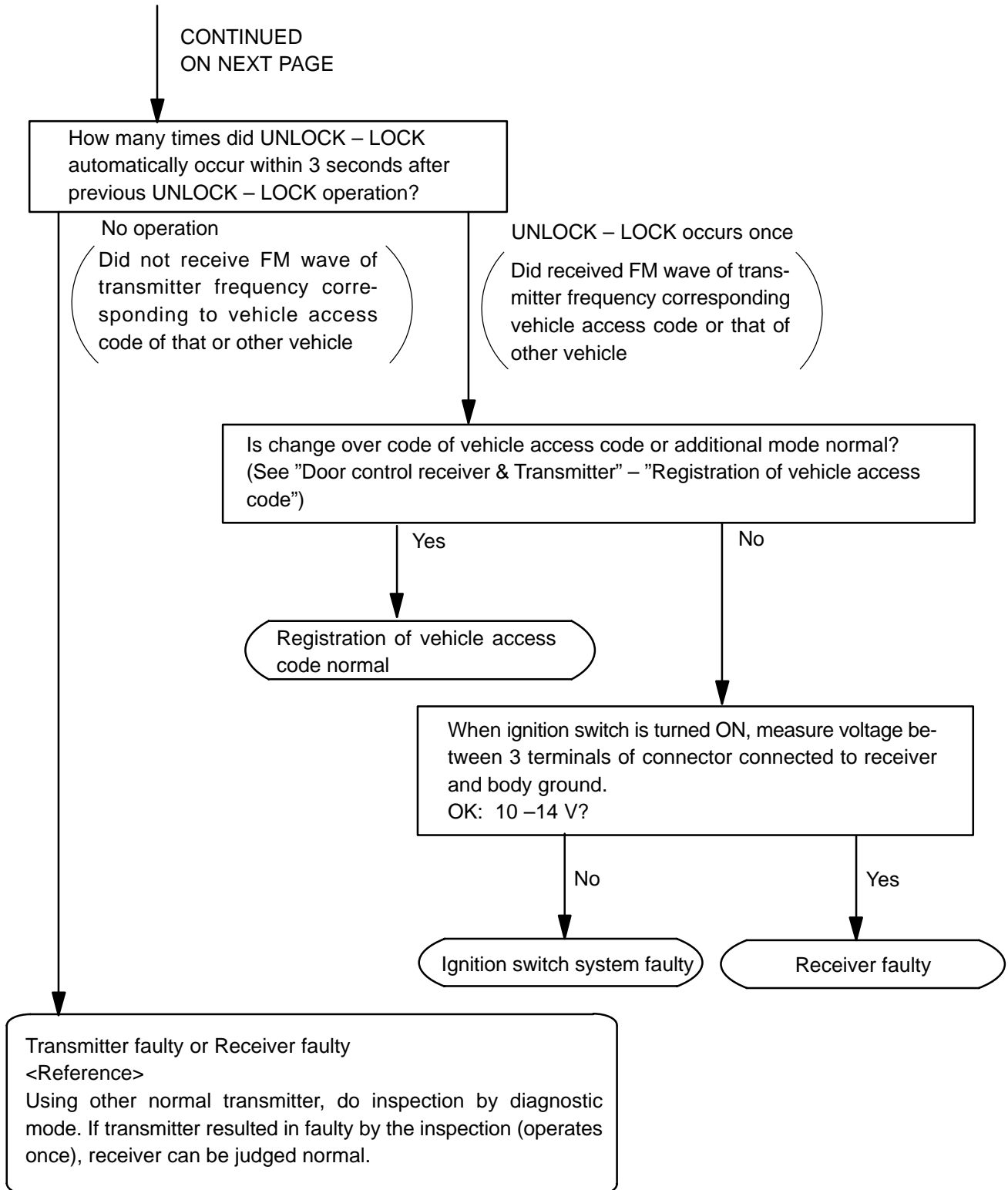
Receiver faulty

No

Vehicle wiring faulty.

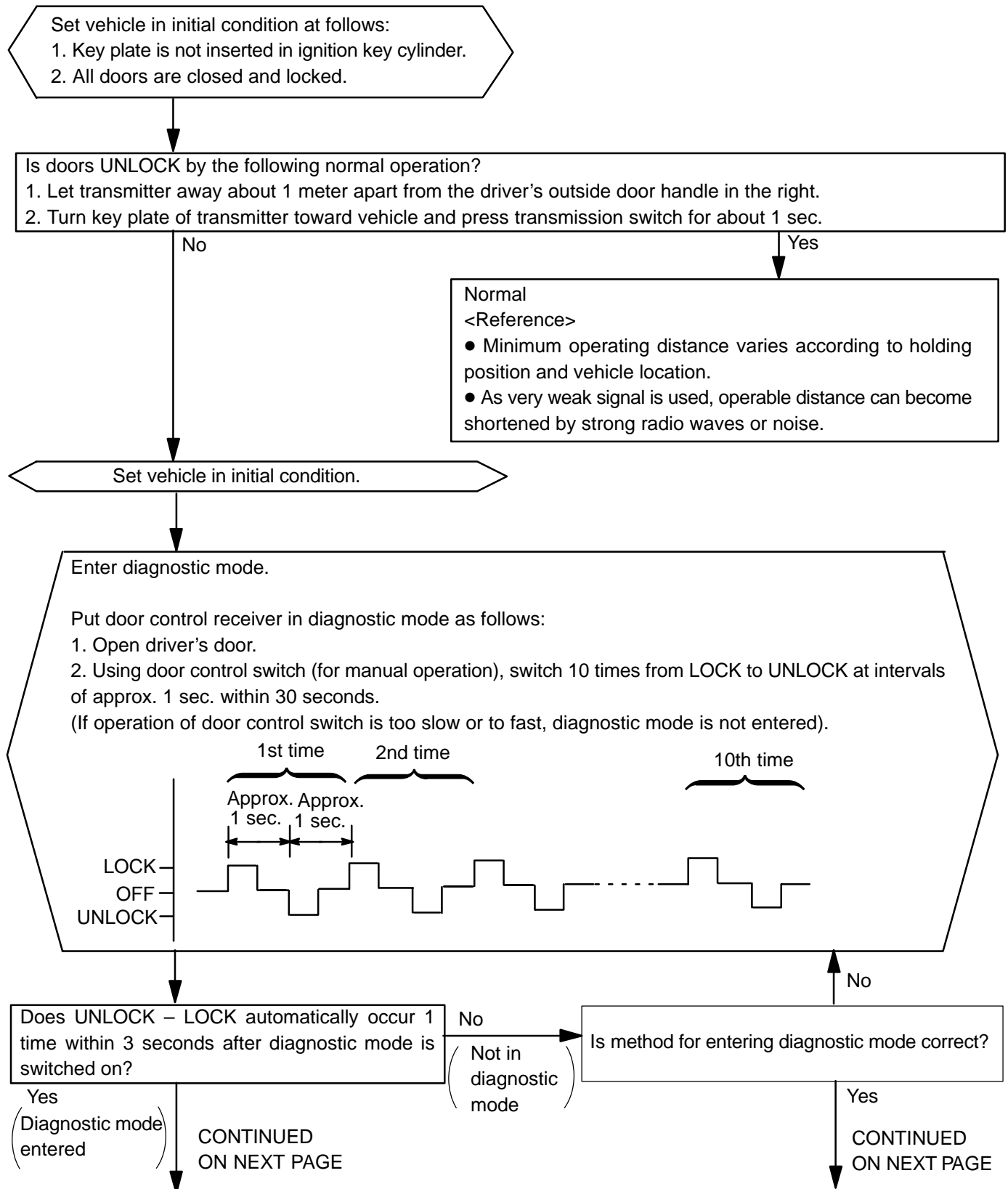
Within 10 seconds after entering diagnostic mode, push transmitter switch for least 1 seconds.

CONTINUED  
ON NEXT PAGE



**2. PRECHECK TYPE II**

Only Wireless Function (Remote Control) Not Operating (With Normal Transmitter)



CONTINUED FROM  
PREVIOUS PAGECONTINUED FROM  
PREVIOUS PAGE

Are continuity and voltage normal between each terminal of connector connected to receiver and body ground, and does electronic door lock operate normally?

Specifications

Terminal No.	Check Item	Inspection Condition	Specification
2	Voltage	Constant	10 – 14 V
3	Voltage	Ignition switch OFF → ON	0 V → 10 – 14 V
4	Operation	All doors locked → ground terminal 4	All doors UNLOCK
5	Voltage	Luggage compartment door switch OFF → ON	0 V → 10 – 14 V
6	Operation	All doors unlocked → ground terminal 6	All doors UNLOCK
8	Voltage	Insert key plate into ignition key cylinder → remove key	0 V → 10 – 14 V
9	Continuity	Constant	There is continuity
10	Voltage	Driver's door lock knob LOCK → UNLOCK	5 V more → 0 V
11	Voltage	Passenger's door lock knob LOCK → UNLOCK	5 V more → 0 V
12	Voltage	All doors closed → any door lock knob to unlock	10 – 14 V → 0 V

Yes

Receiver faulty

No

Vehicle wiring faulty.

Within 10 seconds of entering diagnostic mode, push switch of a new or normal transmitter for same type vehicle for at least 1 seconds.

Did UNLOCK – LOCK automatically occur once within 3 seconds after previous UNLOCK – LOCK operation?

No

Receiver faulty

Yes

Is transmitter's battery sufficient? (See "Separate Inspection" – "Control Transmitter")

No

Receiver faulty

Yes

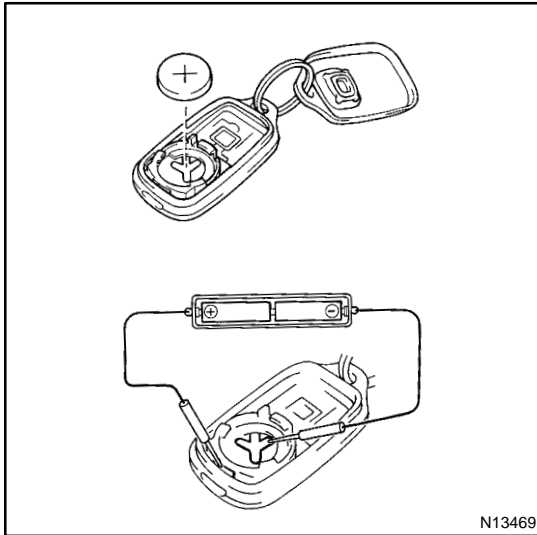
Transmitter faulty

### 3. TRANSMITTER INSPECTION

#### HINT:

Perform this inspection only when transmitter is judged to be the faulty in precheck type II.

#### 1 Transmitter battery capacity check.



#### HINT:

This inspection is not necessarily for the purpose of directly checking the capacity of the transmitter battery, but should be performed when remote control operation becomes difficult or impossible, in order to ascertain if this is caused by low battery capacity.

#### PREPARATION:

- (a) Using a screwdriver, pry out the cover.
- (b) Remove the battery.

#### CHECK:

- (a) Connect 2 new 1.5 V dry-cell batteries in series. Connect the battery  $\oplus$  terminal to the battery receptacle side terminal and the battery  $\ominus$  terminal to the bottom terminal to provide 3 V to the transmitter.
- (b) Push the wireless door lock remote control switch on the side of the transmitter body and operate the door lock by remote control.

#### OK:

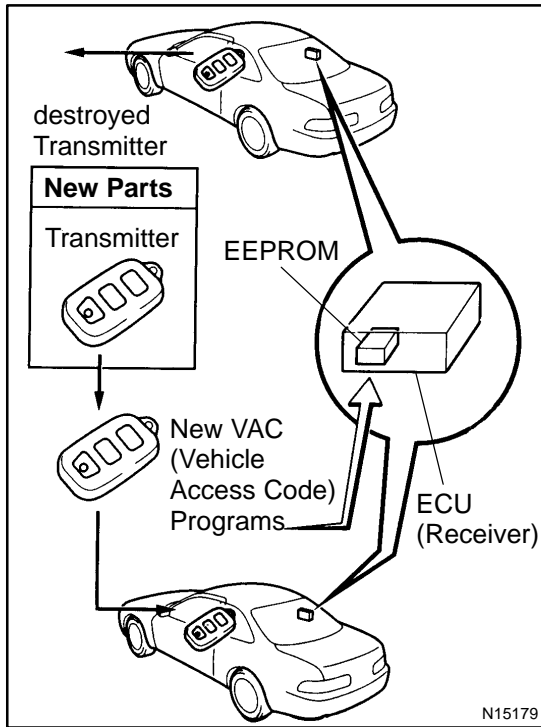
Remote control operation is possible.

OK

Replace the battery for transmitter (See page DI-692).

NG

Replace transmitter and programming (See page DI-692).



#### 4. WIRELESS DOOR LOCK CONTROL ECU AND TRANSMITTER REPLACEMENT

(a) Disassembly and assembly of the transmitter includes details of spare parts and replacement procedure for defective parts found through troubleshooting.

Each part is a precise electronic components so handle with care.

(1) For malfunctioning transmitter:

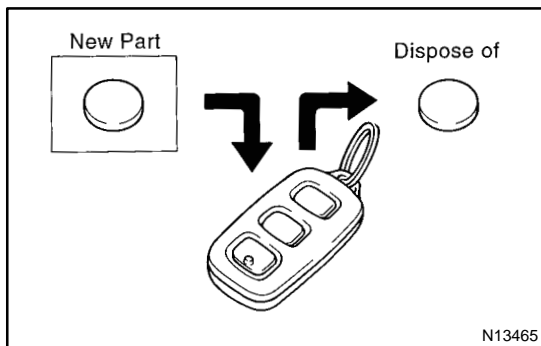
For malfunctioning transmitter: Spare parts and replacement procedure for malfunction parts:

- Prepare a new battery.
- Programs VAC (Vehicle Access Code).
- Check that the door lock remote control operation works.

(2) For malfunctioning battery:

For malfunctioning transmitter: Spare parts and replacement procedure for malfunction parts:

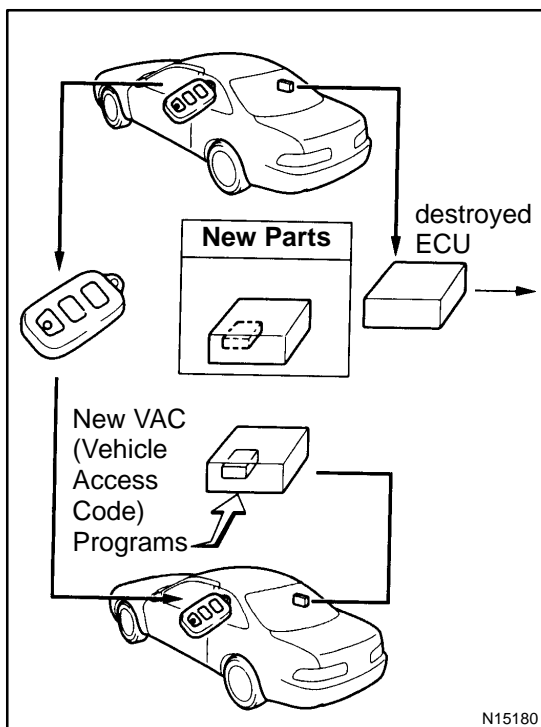
- Prepare a new battery.
- Remove the battery from transmitter.
- Install a new battery into transmitter.
- Check that the door lock remote control operation works.

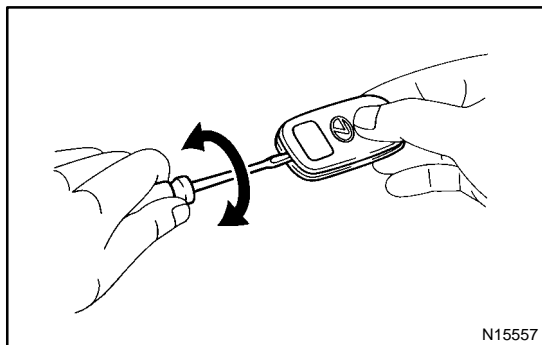


(3) For malfunctioning ECU:

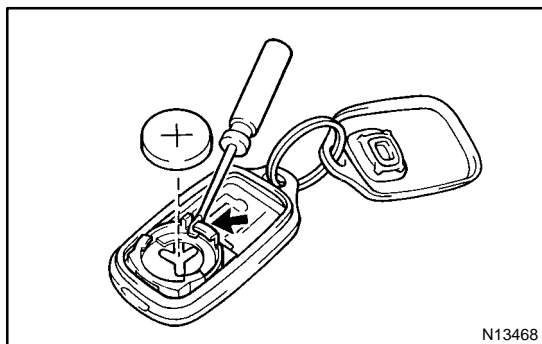
For malfunctioning transmitter: Spare parts and replacement procedure for malfunction parts:

- Prepare a new ECU.
- Remove the battery from transmitter.
- Install a new ECU in the vehicle.
- VAC (Vehicle Access Code) programs.
- Check that the door lock remote control operation works.





- (b) Replace battery for transmitter
- (1) Using a screwdriver, twist (turn) the screwdriver to remove the cover.



- (2) Remove the battery.
- (3) Set a new battery into the transmitter.
- (4) Install the cover to the transmitter.

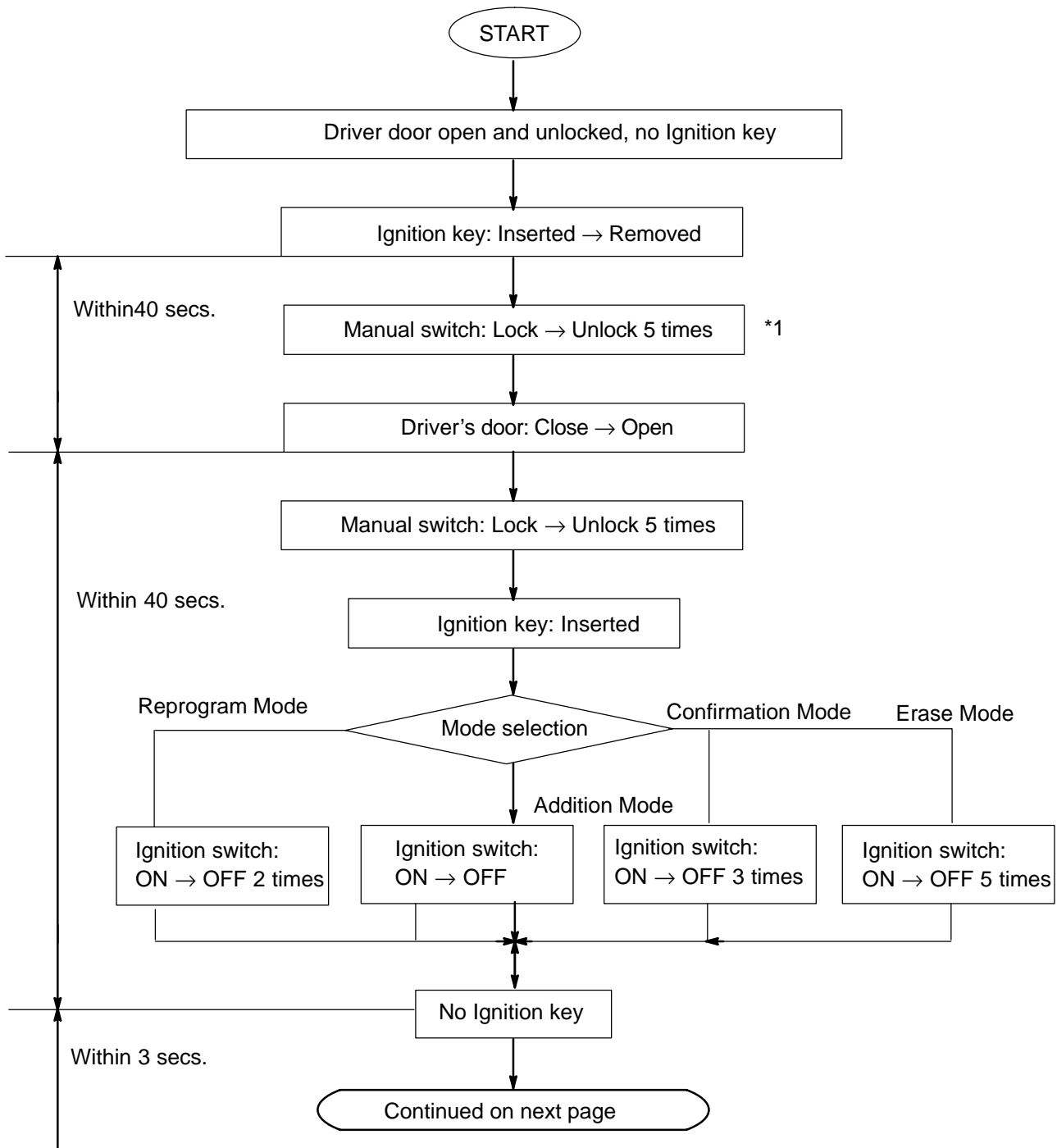
## 5. REGISTRATION OF RECOGNITION CODE

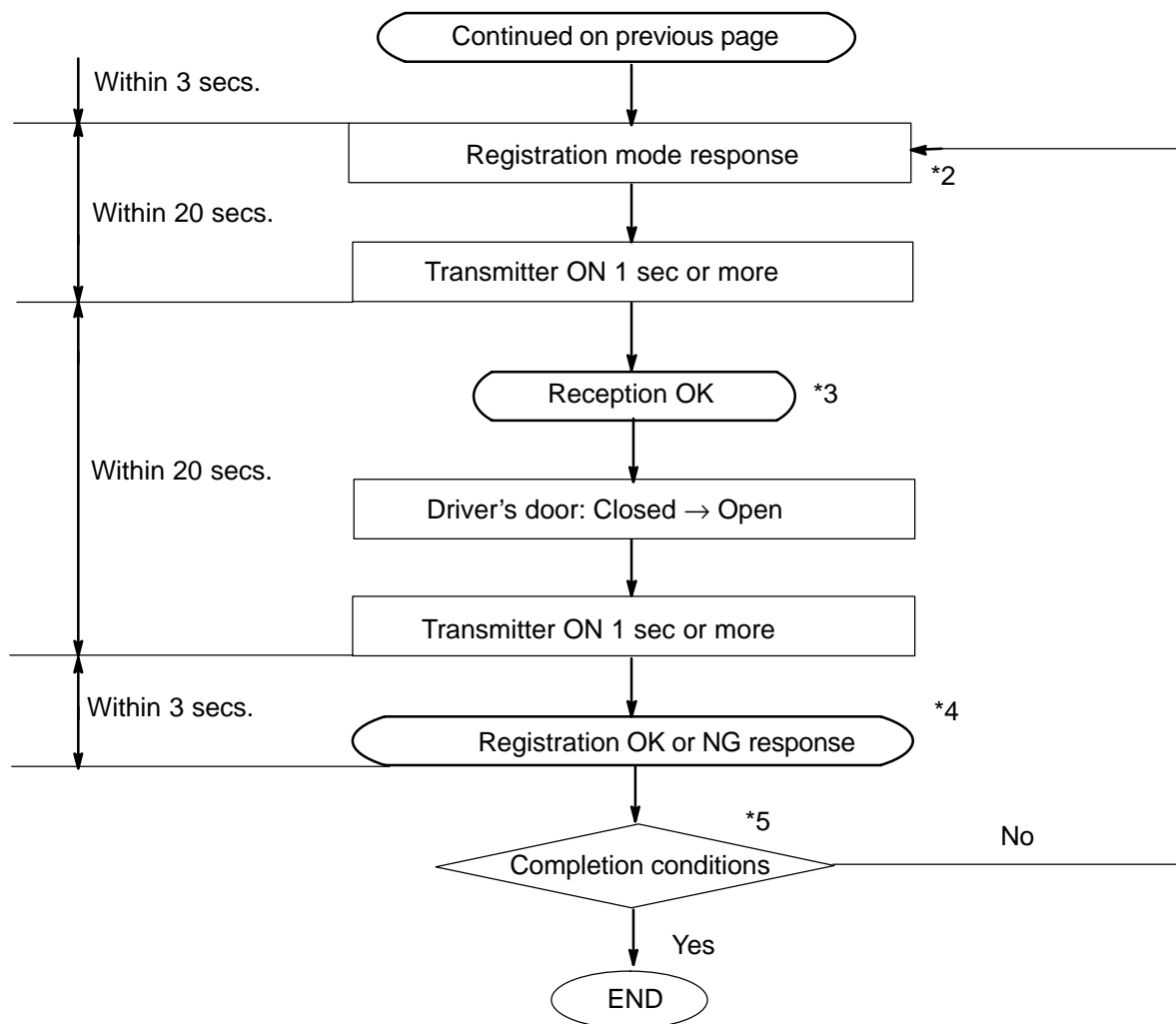
A maximum of 4 recognition codes can be registered using the following 4 modes.

- (1) Reprogram Mode: Currently registered codes are all erased and only the new recognition codes are registered.
- (2) Addition Mode: Currently registered codes are retained, and new recognition codes are also registered.

If the number of registered codes exceeds 4, previously registered codes are erased in order, starting from the oldest code.

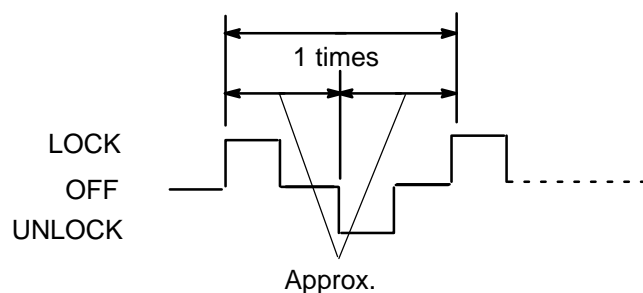
- (3) Confirmation Mode: The number of codes that are currently registered can be confirmed.
- (4) Erase Mode: All the registered codes are erased. (The wireless door lock function is annulled). Register the recognition code according to the following flow chart.



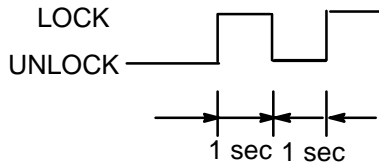


## HINT:

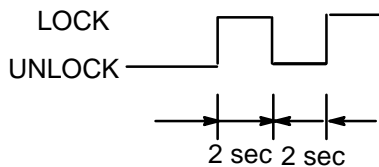
\*1. Lock → Unlock Timing for Manual Switch



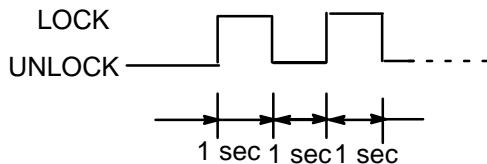
- \*2. Registration Mode: Lock → Unlock occurs once automatically
- Addition Mode: Lock → Unlock occurs twice automatically
  - Reprogram Mode: Lock → Unlock occurs twice automatically



- Confirmation Mode: Lock → Unlock occurs automatically the same number of times as the number of codes recorded. (If there are no registered codes, Lock → Unlock occurs 5 times.)



- Erase Mode: Lock → Unlock occurs 5 times automatically.



\*3. Reception OK Response

- When the transmission from the transmitter is received, lock → unlock automatically occurs once.
- When the transmission from the transmitter is not received, there is no response.

\*4. Registration OK or NG response

- Lock → Unlock automatically occurs once.
- Registration NG: Lock → Unlock automatically occurs once.  
Registration NG occurs when the code received the first and second time do not match, or when the transmitted code is already registered.

\*5. Completion Conditions

Normal Mode is restored when any of the following conditions is fulfilled.

- 20 seconds elapses since Registration OK or NG response.
- A door is closed.
- The ignition key is inserted in the key cylinder.
- During one period in Registration Mode, 4 different codes are registered.

- \*6. If the required conditions are not met during Registration Mode, Normal Mode is resumed.