

# ENGINE IMMOBILISER SYSTEM

## REGISTRATION PROCEDURE

BE126-03

### HINT:

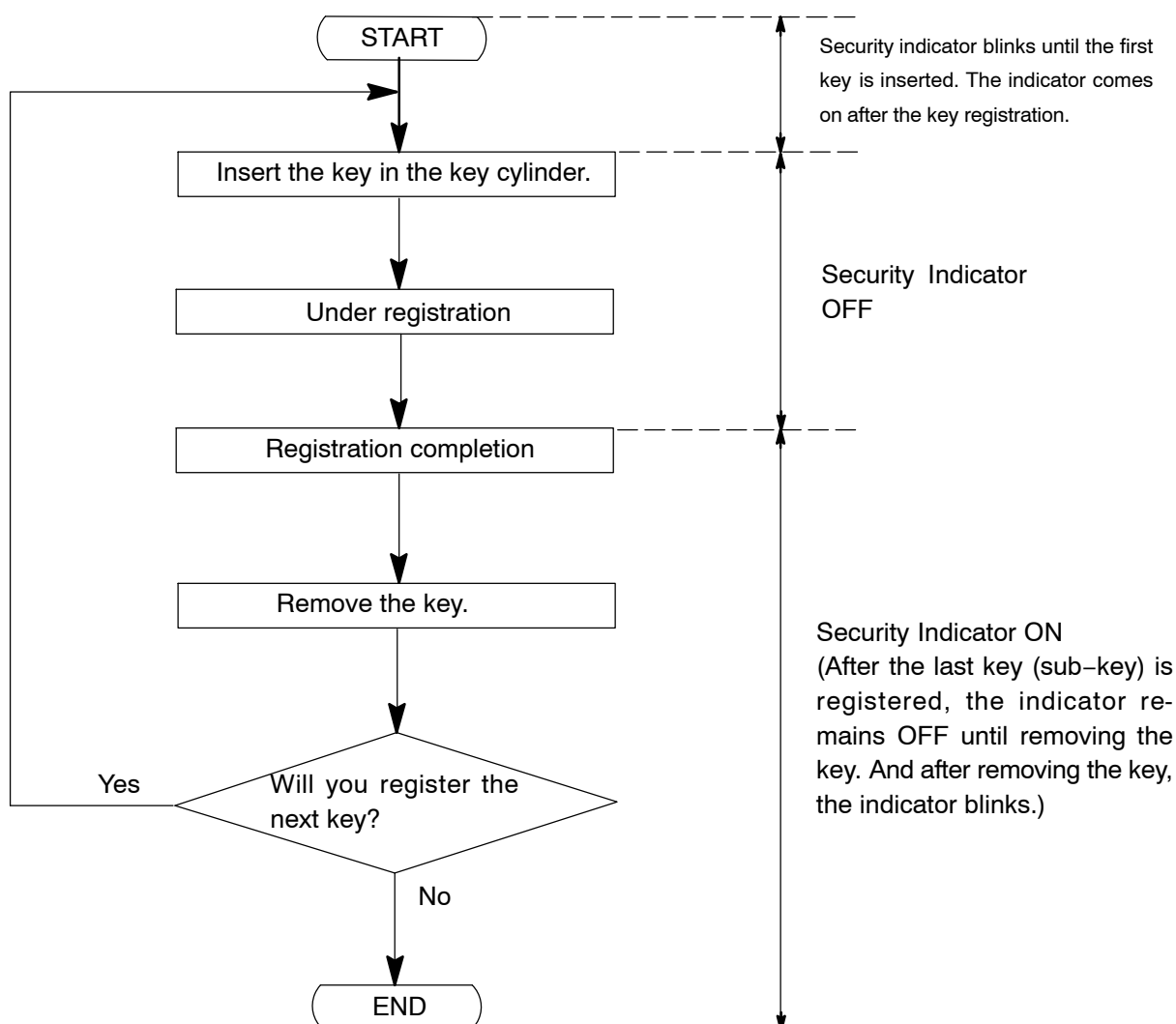
In the case of having lost all the already registered master keys, you are not able to do additional registration or deletion. Change the Transponder key ECU and then register the new key codes following the registration procedure of the automatic registration mode.

### 1. KEY REGISTRATION IN AUTOMATIC REGISTRATION MODE

#### (a) Registration of a new transponder key.

### HINT:

- This must be done when you install a new Transponder key ECU.
- The new Transponder key ECU is on the automatic key code registration mode. The already fixed of key codes for this Transponder key ECU can be registered.  
On this type of vehicle, up to 4 key codes can be registered.
- A master and sub key are registered automatically.



### HINT:

- When a key is not inserted in the key cylinder on the automatic registration mode, the security indicator always comes.
- When the immobiliser system operates normally and the key is pulled out, the security indicator blinks.

## (b) Automatic registration mode completion

If completing the mode forcibly when registering more than 1 key code on the automatic registration mode, perform the following procedures.

After registering 1 more key code with master key, perform step (1) or (2) without pulling the key out or inserting the already registered key.

- (1) Turn the ignition switch LOCK → ON 5 times within 10 sec.
- (2) With the hand-held tester, require automatic registration mode completion.

## 2. REGISTRATION OF ADDITIONAL MASTER KEY AND SUB KEY

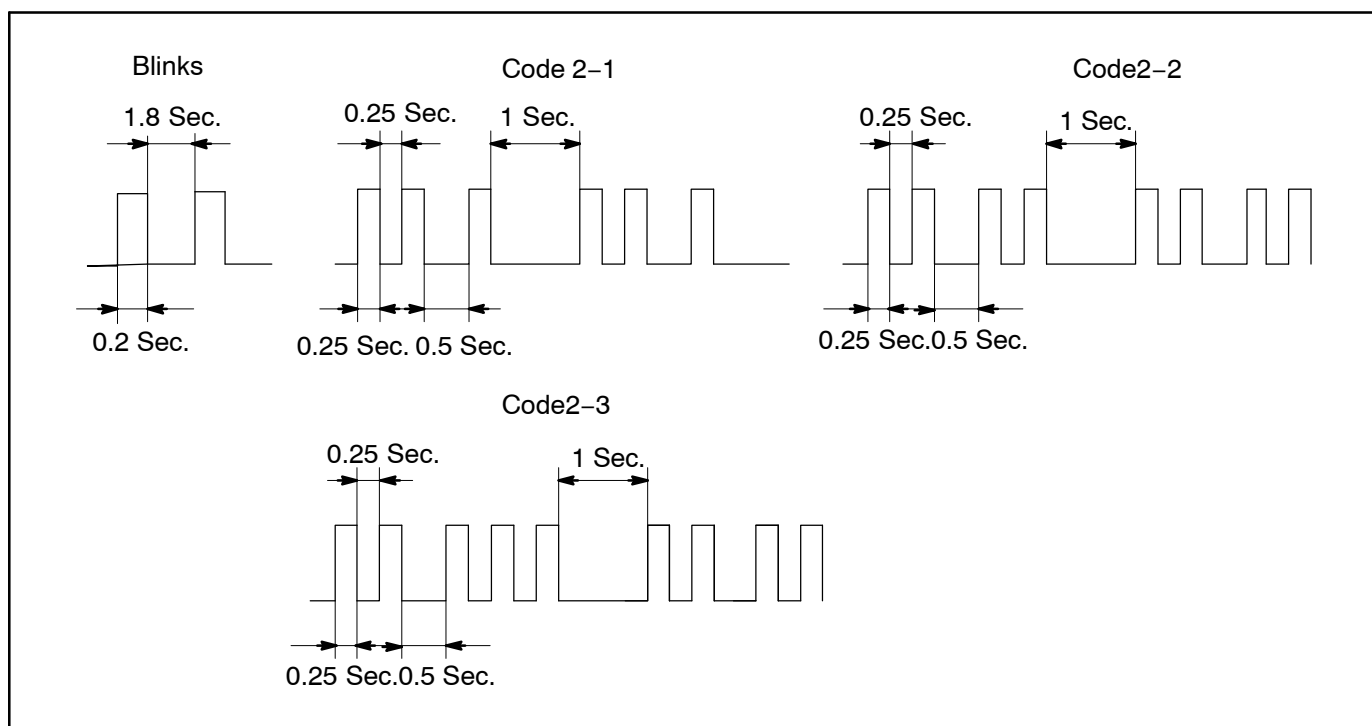
It is possible to carry out additional registration of the supply key.

### HINT:

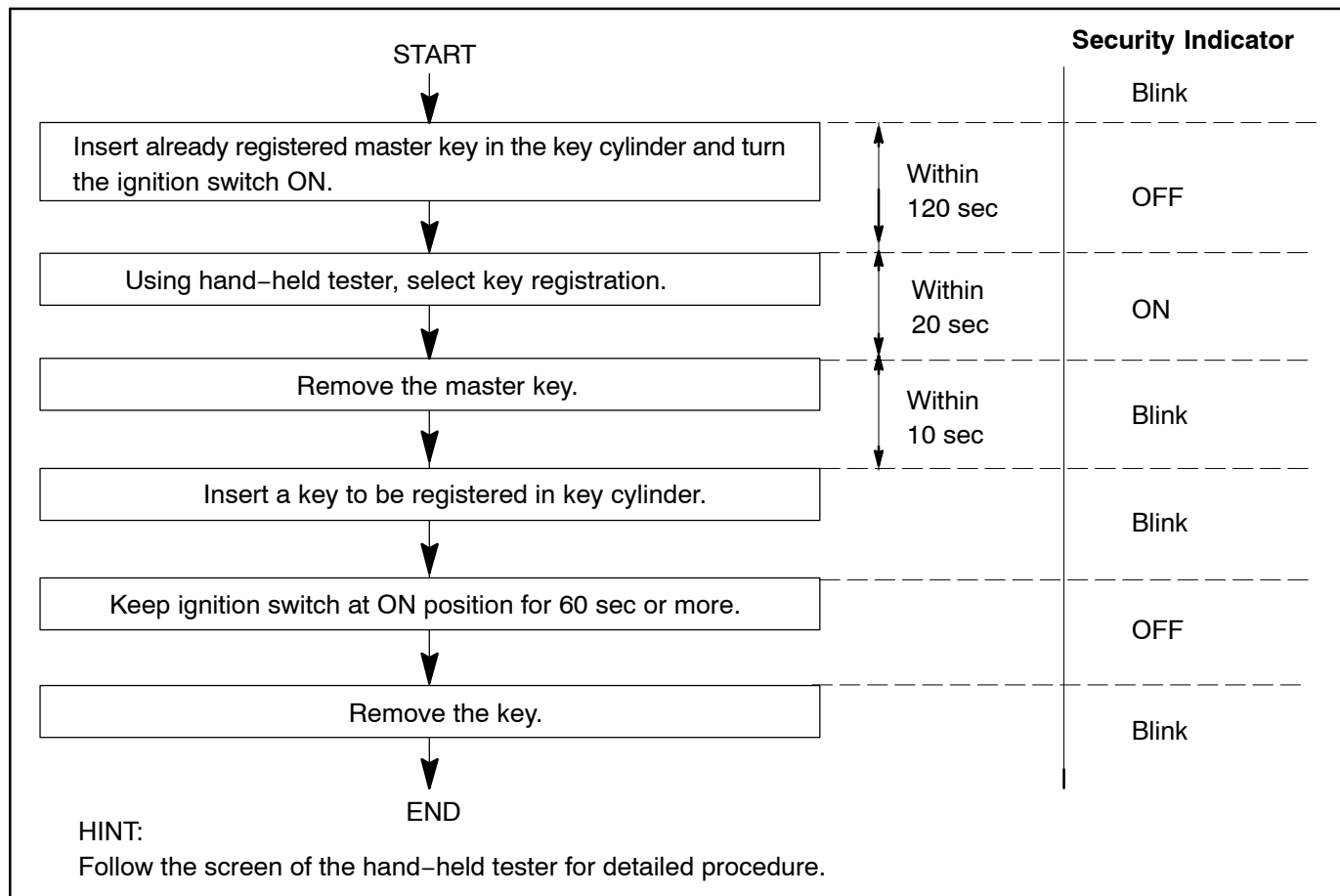
- It is possible to register up to 5 master key codes including the already registered key code.
- It is possible to register up to 3 sub key codes including the already registered key code.
- When any operation period described below is over, registration mode cannot be completed.
- When the next procedure is performed while the previous timer is working, the timer stops counting time, and then the next timer starts.
- When replacing "Ignition Cylinder Key Set" or "Lock Cylinder Set", perform registration following the procedure using the original master key. However, after the registration of the additional master key, as the original master key and the original sub-key is not necessary any more, erase registration of those key codes.
- For the registration order, it is not necessary to distinguish between Main and Sub.  
(Main key and Sub key are automatically identified)

When a registration error in the transponder key ECU is detected, the security indicator indicates the following codes.

|       |                                                                                       |
|-------|---------------------------------------------------------------------------------------|
| 2 - 1 | Communication error between the key to be registered and the transponder key ECU      |
| 2 - 2 | When trying to register the key that is already registered                            |
| 2 - 3 | When exceeding the number of keys which can be registered (Master key: 5, Sub key: 3) |

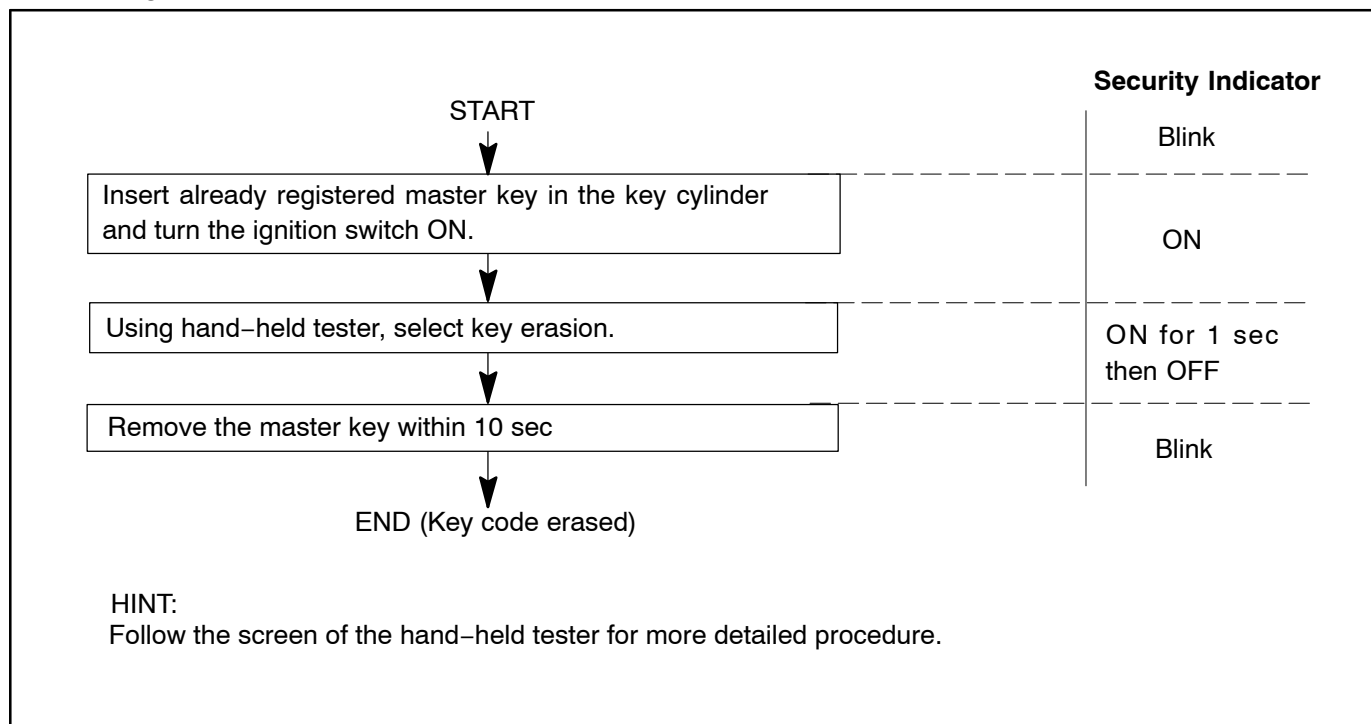


Using hand-held tester:



### 3. ERASURE OF TRANSPONDER KEY CODE

Using hand-held tester:



#### 4. ECU COMMUNICATION ID REGISTRATION MODE

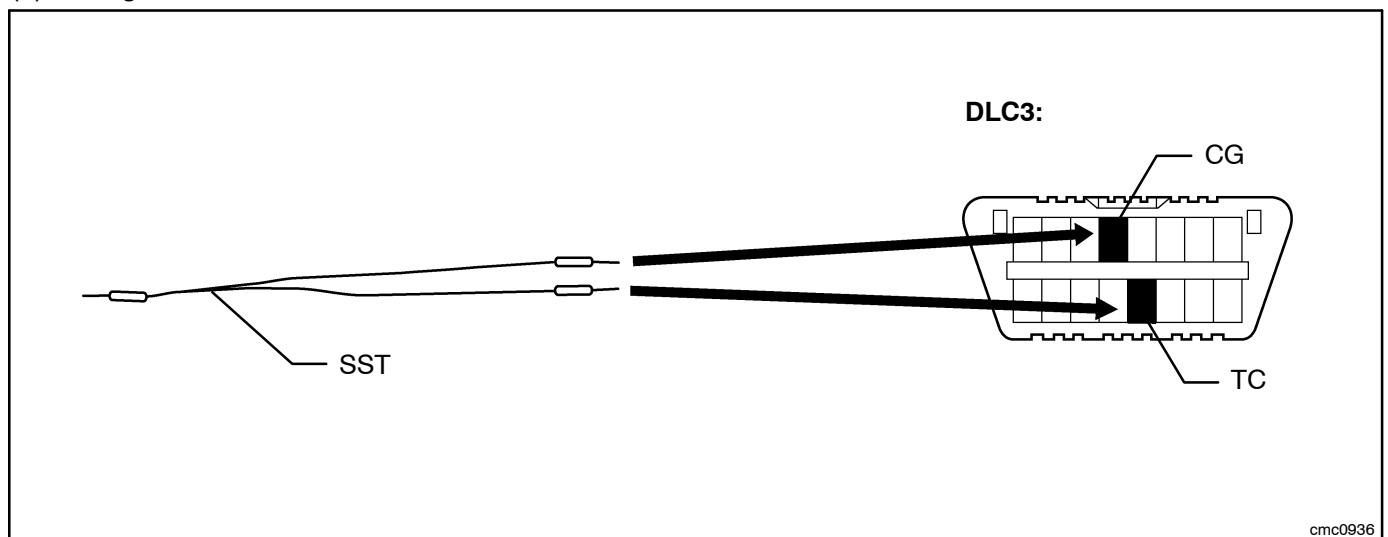
##### NOTICE:

- When the transponder key ECU is replaced, the ECU communication ID of the ECM must be registered into the transponder key ECU to match their ECU communication IDs.
- The engine cannot be started unless the ECU communication IDs match.
- Do not turn the ignition switch from on to off 20 times or more before registering the ECU communication ID.

Turning the ignition switch from on to off 20 times or more will result in the engine not starting unless the transponder key ECU is replaced with a new one.

- After the registration, turning the ignition switch may not start the engine on the first try. If this occurs, turn the ignition switch again.
- After the engine is started, erase DTC B2799 (code for ECM's immobiliser communication error) by either of the following:
  - Using the hand-held tester.
  - Disconnecting the battery for 30 seconds.

(a) Register the ECU communication ID



(1) Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3.

SST 09843-18040

- (2) Turn the ignition switch on (do not start the engine), and then leave it on for 30 minutes.
- (3) Turn the ignition switch off and disconnect terminals 13 (TC) and 4 (CG).
- (4) Check that the engine starts.