

ENGINE IMMOBILISER SYSTEM

REGISTRATION

7301Y-01

1. DESCRIPTION OF CODE REGISTRATION

(a) When adding master keys and sub-keys (Additional registration).

(1) Register the key code (immobiliser code) to the transponder key ECU.

Target ECU	See step
Transponder key ECU	3.

(b) When replacing the transponder key ECU (New registration).

(1) Register the key code (immobiliser code) in the transponder key ECU.

Target ECU	See step
Transponder key ECU	2.

(2) Register the ECU COMMUNICATION ID between the ECM and the transponder key ECU.

Target ECU	See step
ECM	5.

(c) When replacing the ECM.

(1) Register the ECU COMMUNICATION ID between the ECM and the transponder key ECU.

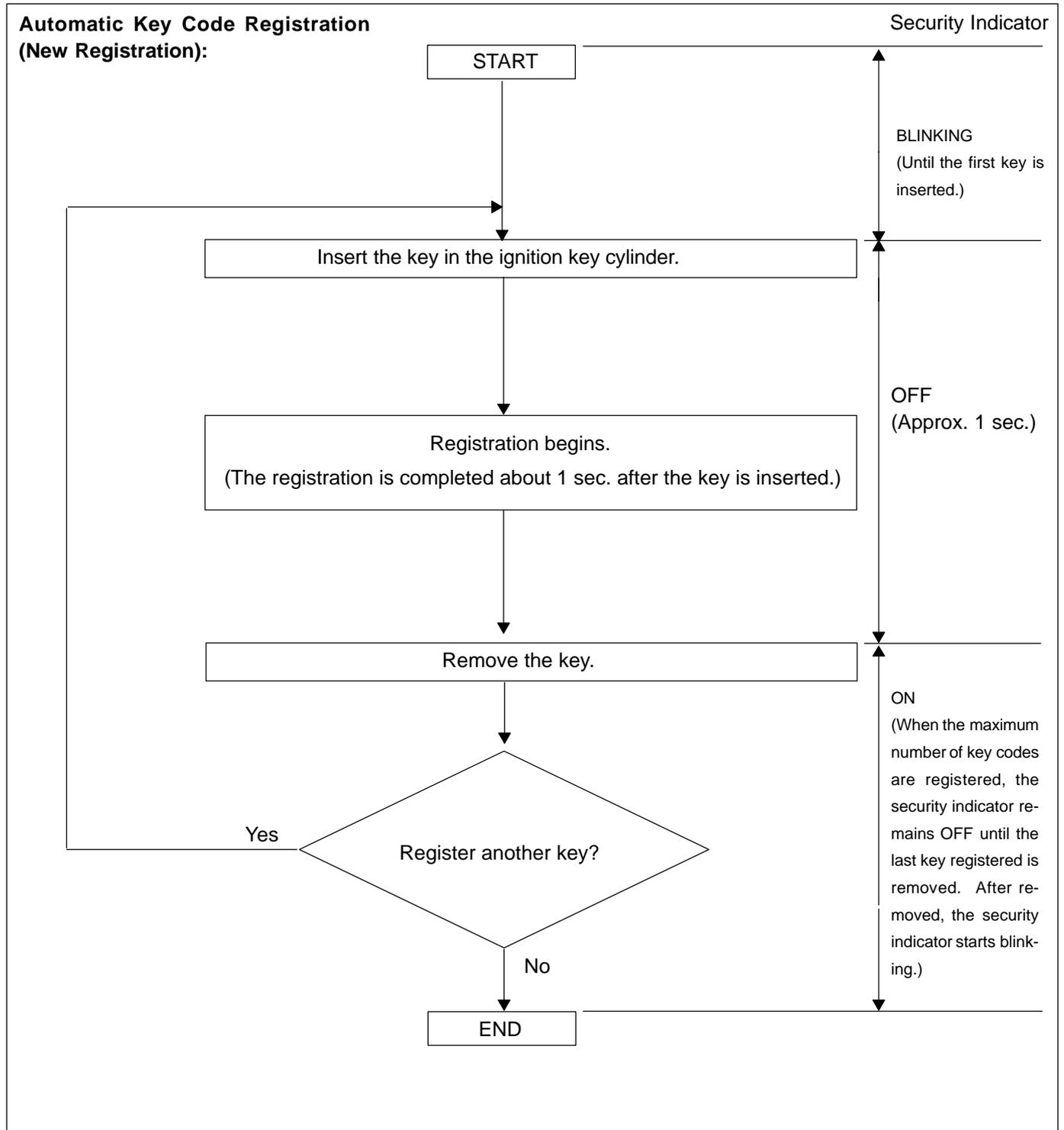
Target ECU	See step
Transponder key ECU	5.

2. KEY REGISTRATION IN AUTOMATIC REGISTRATION (New Registration)

(a) The new registration of the key codes (immobiliser codes) is made automatically.

HINT:

- When you install a new transponder key ECU, the key codes (immobiliser codes) must be registered.
- A new transponder key ECU starts in the automatic key code registration mode. In this mode, a maximum of 4 key codes for 3 master keys and 1 sub-key can be registered. Since the transponder key ECU can distinguish types of keys, the registration order is not specified.

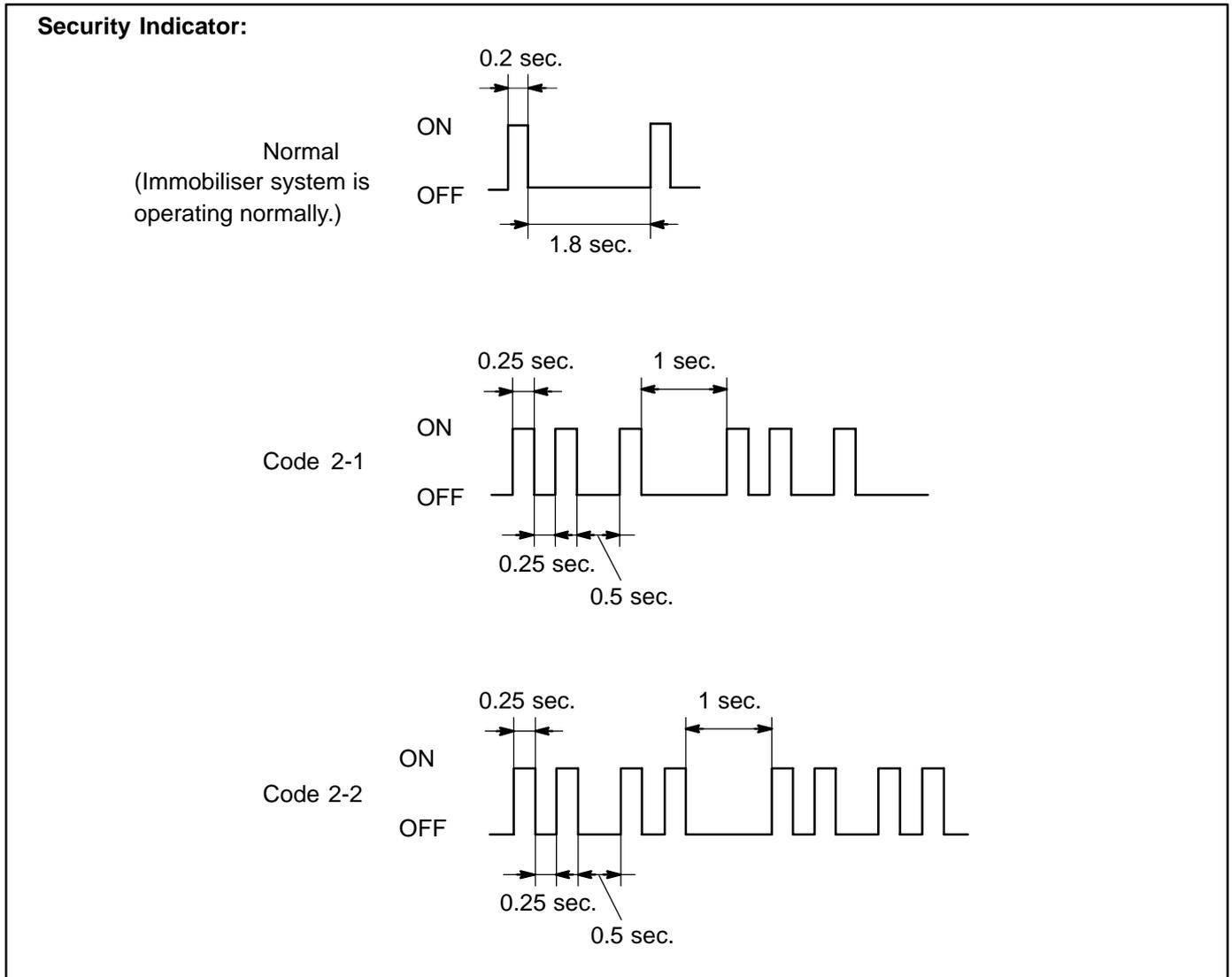


HINT:

- When no key is inserted in the ignition key cylinder in the automatic key code registration mode, the security indicator remains on.
- When the immobiliser system operates normally and the key is pulled out, the security indicator blinks.

NOTICE:

If the key code registration has failed in the automatic key code registration mode, code 2-1 will be output from the security indicator. Trying to re-register an already registered key will cause code 2-2 to be output when the key is inserted. The output details are shown below.



(b) Finish the automatic key code registration mode.

The automatic key code registration mode can be forced to end when at least 1 key code (immobiliser code) for the master key has been registered.

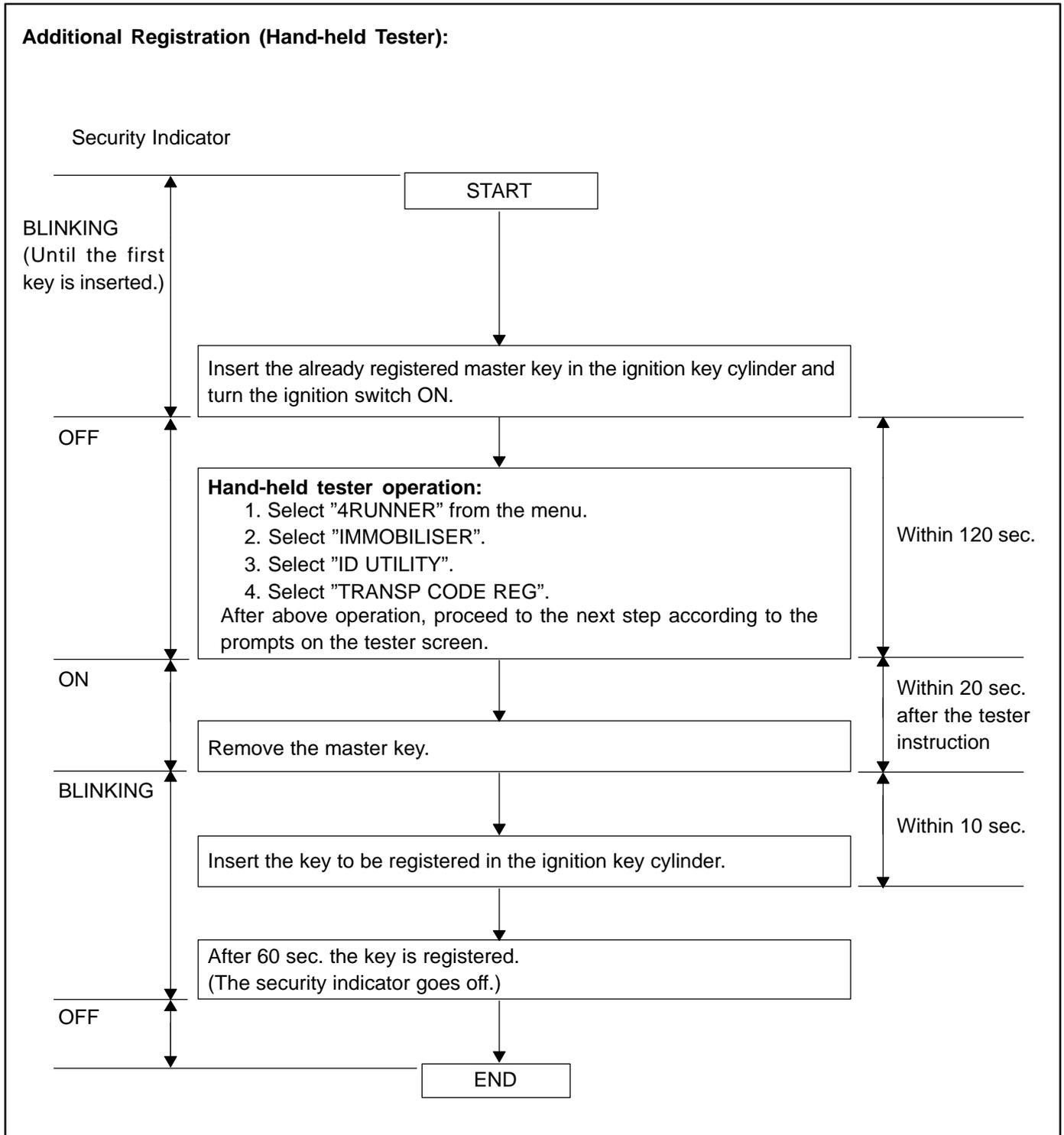
- (1) Turn the ignition switch ON/OFF alternately 5 times within 10 seconds using the already registered master key.

3. REGISTRATION OF ADDITIONAL KEY (Additional Registration)

HINT:

- A maximum of 5 master key codes and 3 sub-key codes can be registered.
- Registration mode will end if each step is not completed within the specified time.
- When the ignition cylinder or the key cylinder set is replaced, remove the transmitter module from the original master key in which a transmitter built. Then install this transmitter module to a new key and use it as a master key. If necessary, use this master key to register other keys.

By using the hand-held tester:



HINT:

- A brief outline of procedures for key code registration is shown on this page. For detailed information, please refer to the prompts on the screen of the hand-held tester.
- When the immobiliser system operates normally and the key is pulled out, the security indicator blinks.

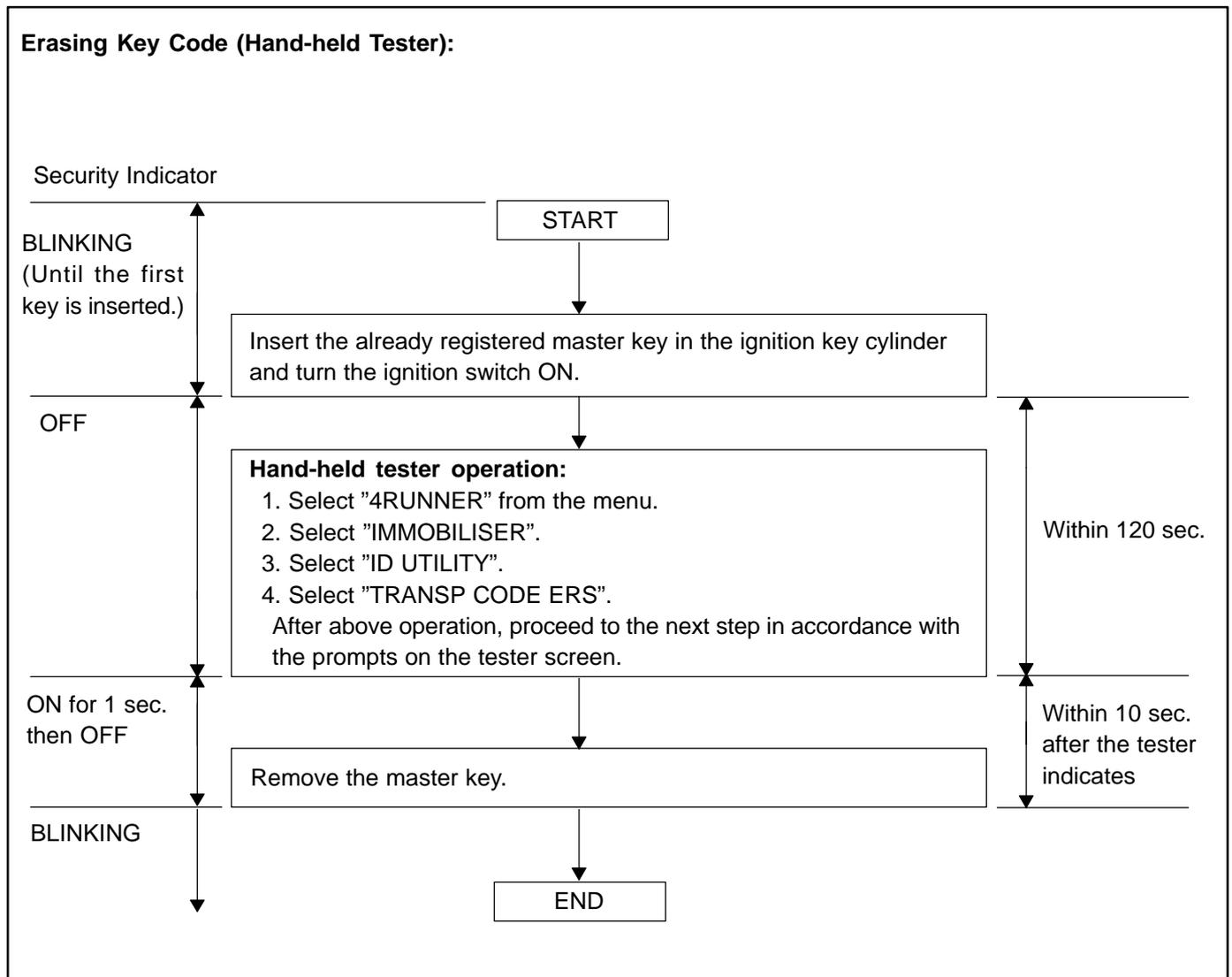
NOTICE:

If the key code registration has failed in the automatic key code registration mode, code 2-1 will be output from the security indicator. Trying to re-register an already registered key will cause code 2-2 to be output when the key is inserted. The output details are shown in step 2 (New Registration).

4. ERASURE OF KEY CODE

HINT:

- All key codes are erased except for the master key which is used for erasure operation. In order to use a key for which the code has been erased, it is necessary to register the key code again.
- Registration operation will be cancelled if each step is not completed within the specified time. By using the hand-held tester:



HINT:

- A brief outline of procedures for key code registration is shown on this page. For detailed information, please refer to the prompts on the screen of the hand-held tester.
- When the immobiliser system operates normally and the key is pulled out, the security indicator blinks.

5. ECU COMMUNICATION ID REGISTRATION

NOTICE:

- **The ECU communication ID should be registered when the transponder key ECU and/or the ECM is replaced, in order to match these ECM COMMUNICATION ID.**
 - **The engine cannot be started unless the ECM COMMUNICATION ID matches.**
- (a) Register the ECU communication ID.
- (1) After the transponder key ECU and/or the ECM is replaced, turn the ignition switch ON (the engine is not running).
 - (2) Short the Tc and CG terminals of the DLC3 and leave it as is for 30 minutes.
 - (3) Check that the engine starts.