REGISTRATION

1. DESCRIPTION OF CODE REGISTRATION

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

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

Target ECU	See step
Transponder key ECU assembly	Procedure "A"

(b) When replacing the transponder key ECU assembly (new registration):

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

Target ECU	See step
Transponder key ECU assembly	Procedure "B"

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

Target ECU	See step
ECM	Procedure "C"

(c) When replacing the ECM:

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

Target ECU	See step
Transponder key ECU assembly	Procedure "C"

(d) Erasure of key code:

(1) Erasure the key code.

Target ECU	See step
Transponder key ECU assembly	Procedure "D"

2. KEY REGISTRATION IN AUTOMATIC REGISTRATION (PROCEDURE "B")

(a) When an ignition key is inserted into the ignition cylinder, the key code (immobiliser code) registration is automatic. In this mode, a maximum of 4 key codes for 3 master keys and 1 sub-key can be registered. Any order of registration for the master keys and sub-keys is fine because the transponder key ECU assembly can distinguish the types of keys.

HINT:
- When a new transponder key ECU assembly is installed, key codes (immobiliser codes) must be registered with ignition keys.
- New transponder key ECU assemblies are automatically set to automatic key code registration mode.

Automatic Key Code Registration (New Registration)

Procedure	Security Indicator Condition
1. Start (Procedure "E")	Blinking occurs until the first key is inserted.

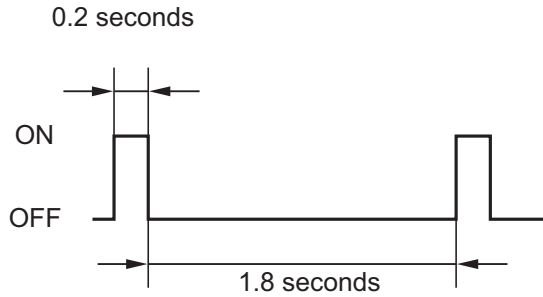| Procedure	Security Indicator Condition
2. Insert the key into the ignition key cylinder.	ON
3. Registration begins. HINT: The registration will be completed approx. 1 second after the key is inserted.	OFF HINT: Approx. 1 second
4. Remove the key.	ON HINT: When the maximum number of the key codes is registered, the security indicator remains off until the last key registered is removed. After it is removed, the security indicator starts blinking.
5. Register another key? Yes: Go to procedure "E". No: Go to procedure "F".	
6. End (Procedure "F")	

HINT:
- When no key is inserted in the ignition key cylinder in automatic key code registration mode, the security indicator remains ON.
- When the immobiliser system is operating normally and the key is pulled out, the security indicator blinks continuously.
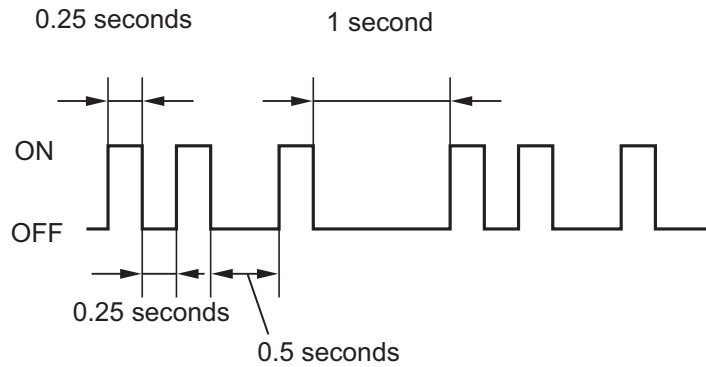
EI

- If the key code registration has failed in 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. If the number of registered key codes exceeds the limit, code 2-3 will be output from the security indicator. The output details are shown below.
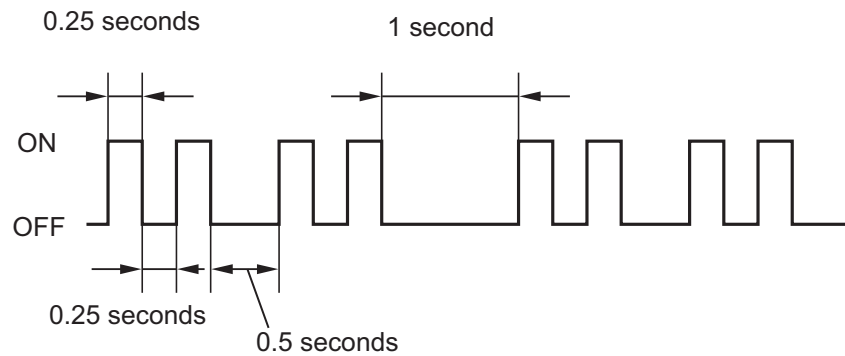
EI

Security Indicator:
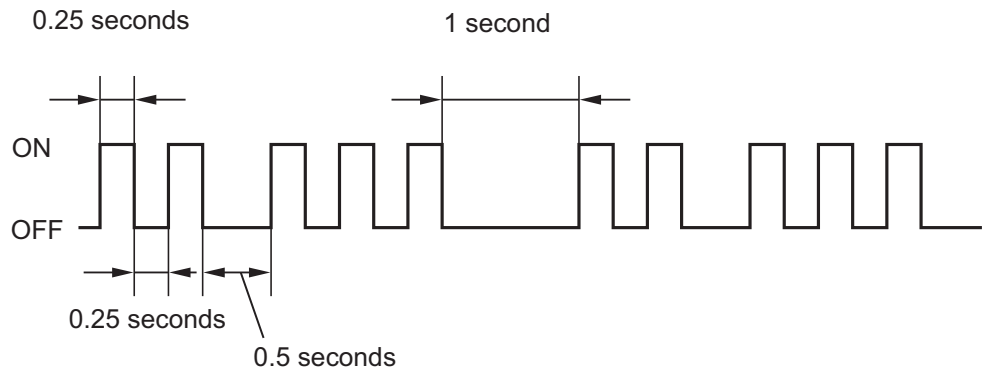
Normal (Immobiliser system is operating normally)

0.2 seconds

ON
OFF

1.8 seconds

Code 2 - 1

0.25 seconds

1 second

ON
OFF

0.25 seconds

0.5 seconds

Code 2 - 2

0.25 seconds

1 second

ON
OFF

0.25 seconds

0.5 seconds

Code 2 - 3

0.25 seconds

1 second

ON
OFF

0.25 seconds

0.5 seconds

N

B111593E03

HINT:
The automatic key code registration mode can be forced to end when 1 or more key codes (immobiliser code) for the master key has been registered.

EI

(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 for the master key has been registered.

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

3. PERFORM REGISTRATION OF ADDITIONAL KEY (PROCEDURE "A")

(a) Register an additional key by using the intelligent tester.

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. Then install this transmitter module to a new key and use the new key as the master key. If necessary, use this master key to register other keys.

NOTICE:
When the ignition key cylinder has been replaced, locking and unlocking doors is possible with the new master key's transmitter module (taken from the original master key). However, the new master key will not be able to lock and unlock doors through the door key cylinder. Keep the original master key. If the new master key's transmitter module's battery fails, the original master key can be used to lock and unlock doors through the door key cylinder.

Additional Registration

Procedure	Time (Completion of operation)	Security indicator Condition
1. Start	-	The indicator will blink until the first key is inserted.
2. Insert the already registered master key in the ignition key cylinder and turn the ignition switch on.		
3. Intelligent tester operation: (1) Select IMMOBILISER. (2) Select ID UTILITY. (3) Select TRANS CODE REG. HINT: After completing the above operation, proceed to the next step in accordance with the prompts on the tester screen.	Within 120 seconds	OFF
4. Remove the master key.	Within 20 seconds of the instruction on the tester.	ON
5. Insert the key to be registered in the ignition key cylinder.	Within 10 seconds	
6. After 60 sec. the key is registered. HINT: Security indicator goes off.	-	Blinking
7. Next		OFF
8. End		

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HINT:
- A brief outline of the procedures for key code registration is shown on this page. For more detailed information, please refer to the intelligent tester screen's instructions.
- When the immobiliser system is operating normally and the key is pulled out, the security indicator blinks continuously.
- If the key code registration has failed in 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. If the number of registered key codes exceeds the limit, code 2-3 will be output from the security indicator. The output details are shown in step 2 (new registration).

4. ERASURE OF KEY CODE (PROCEDURE "D")
(a) Erase key codes using the intelligent tester.
HINT:
- All key codes are erased except for the master key, which is used for erasing the key codes. In order to use a key whose code has been erased, a new key code must be registered.
- Registration will be cancelled if each step is not completed within the specified time.
- Conduct this operation with the driver door closed.

Erasing Key Code

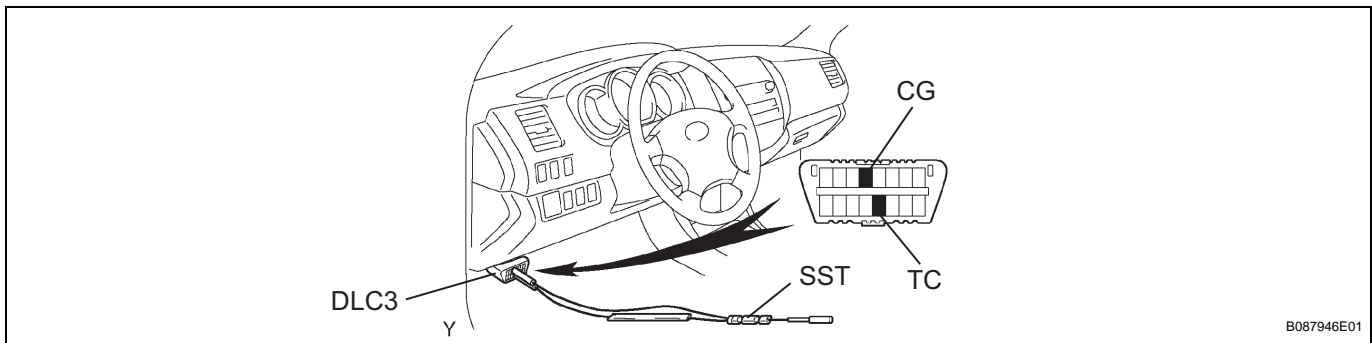| Procedure	Time (Completion of operation)	Security Indicator Condition
1. Start	-	The indicator will blink until the first key is inserted.
2. Insert the already registered master key in the ignition key cylinder and turn the ignition switch on.		
3. Intelligent tester operation: (1) Select IMMOBILISER. (2) Select ID UTILITY. Select TRANS CODE REG. HINT: After completing the above operation, proceed to the next step in accordance with the prompts on the tester screen.	Within 120 seconds	OFF
4. Remove the master key.	Within 10 seconds of the instruction on the tester.	ON for 1 sec. then OFF
5. Next	-	Blinking
6. End		

EI

HINT:
- A brief outline of procedures for key code erasure is shown on this page. For more detailed information, please refer to the intelligent tester screen's instructions.
- When the immobiliser system is operating normally and the key is pulled out, the security indicator blinks continuously.

5. **REGISTRATION OF ECU COMMUNICATION ID (PROCEDURE "C")**
   NOTICE:
   - **The ECU COMMUNICATION ID should be registered when the transponder key ECU assembly 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) Before operation, make sure that no key is in the ignition key cylinder.
   (2) Using SST, connect terminals TC and CG of the DLC3. SST 09843-18040
   (3) Insert a key, of which the key code has already been registered, into the ignition key cylinder.
   (4) Turn the ignition switch ON (do not start the engine) and leave it as is for 30 minutes.
   (5) Turn the ignition switch OFF and disconnect terminals TC and CG.
   (6) Check that the engine starts.
       HINT:
       After the engine has been started, delete DTC 2799 (indicating immobiliser communication failures in the ECM) by following either one of the operations below with the ignition switch OFF:
       - Delete the DTC using intelligent tester.
       - Disconnect the negative battery cable from the battery terminal for at least 30 seconds.

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