ENGINE IMMOBILISER SYSTEM

REGISTRATION PROCEDURE

1. DESCRIPTION OF CODE REGISTRATION

HINT:
The key has 2 codes: the immobiliser code and the wireless code, which need to be registered.

(a) NEW REGISTRATION OF KEY: (Example: New "Key 1" registration)

<table>
<thead>
<tr>
<th>Step</th>
<th>Operation</th>
<th>Target ECU</th>
<th>Refer to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Register the immobiliser code of key 1 to transponder key ECU.</td>
<td>Transponder key ECU</td>
<td>3.</td>
</tr>
<tr>
<td>2</td>
<td>Register the smart code of key 1 to theft deterrent ECU.</td>
<td>Theft deterrent ECU</td>
<td>BE-99</td>
</tr>
</tbody>
</table>

(b) IN CASE OF REPLACING TRANSPONDER KEY ECU

<table>
<thead>
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<tbody>
<tr>
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<td>Transponder key ECU</td>
<td>2.</td>
</tr>
<tr>
<td>2</td>
<td>Register the ECU COMMUNICATION ID. (to transponder key ECU)</td>
<td>ECM</td>
<td>6.</td>
</tr>
<tr>
<td>3</td>
<td>New registration of key number</td>
<td>Transponder key ECU</td>
<td>5.</td>
</tr>
</tbody>
</table>

(c) IN CASE OF REPLACING ECM

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<td>ECM</td>
<td>6.</td>
</tr>
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</table>
2. KEY REGISTRATION IN AUTOMATIC REGISTRATION MODE

HINT:
In case of having lost all the already registered master keys, you are not able to do additional registration or deletion.

(a) Registration of a new 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 number of key codes for this Transponder key ECU can be registered.
- On this type of vehicle, up to 3 key codes can be registered.
- In the automatic registration mode, 3 master keys and 1 sub-key can be registered, however, the registration order is not specially determined.

START

Insert the key in the key cylinder.

Under registration.
The registration is completed in about 1 sec. after the key is inserted.)

Registration completion.

Remove the key.

Yes

Will you register the next key?

No

END
**HINT:**

- When a key is not inserted in the key cylinder on the automatic registration mode, the security indicator always lights on.
- When the immobiliser system operates normally and the key is pull out, the security indicator blinks.
- When key code registration could not be performed, code 2−1 is output from the security indicator and when inserted the already key, code 2−2 is output.

![Blinks Diagram](image)

(b) **Automatic registration mode completion**

If completing the mode forcibly when more than 1 master key code have been registered on the automatic registration mode, perform the following operation using the already registered key.

Turn the ignition switch ON/OFF alternately more than 5 times in 10 sec.
3. REGISTRATION OF ADDITIONAL KEY

There is 2 ways for registration of additional key; one is by switch operation and the other is by LEXUS hand–held tester.

HINT:
- It is possible to register up to 5 master key codes and 3 sub key codes.
- The registration operation will be cancelled if each operation is not completed with the specified time.
- When the "Ignition cylinder set" or the "Lock cylinder set" is replaced, remove the transmitter module from the original master key (with the transmitter built in), install this transmitter module to the newly bought key and use it as a master key. If necessary, use this master key to register other keys.

NOTICE:
When the ignition cylinder alone is replaced, the new key (with the transmitter built in) can perform the door lock/unlock operation by wireless operation, but not by inserting it in the door key cylinder. Therefore, take along the key (original key) for door lock/unlock to avoid the troubles caused by the battery shutoff of the new key's transmitter.

1. By LEXUS Hand–Held Tester:

   1. Select "LS430" from the menu.
   2. Select "Immobiliser".
   3. Select "KEY CODE UTILITY".
   4. Select "TRANSPONDER CODE REGISTRATION".

   After the above operations, proceed to the succeeding operation according to the prompts on the tester screen.

   Insert the already registered master key in the IG key cylinder and turn the IG switch ON.

   Hand–Held tester operation:
   1. Within 120 sec.
   2. Within 20 sec. after the tester instruction
   3. Within 10 sec.

   Remove the master key.

   Insert the key to be registered in the IG key cylinder.

   After 60 sec. key is registered.
   (The theft deterrent indicator is OFF.)

HINT:
- This page is to show briefly the registration procedure using the LEXUS hand–held tester.
- For detailed procedures, please refer to the prompts on the tester screen.
(2) By Switch Operation:

The vehicle should be in the following conditions:
- Driver door closed.
- The key is not inserted in IG key cylinder.

Security Indicator

Insert the already registered master key in the IG key cylinder.

OFF

Turn the IG switch ON/OFF 5 times alternately.

Within 35 sec.

ON

Open/close the driver door 6 times alternately.
Remove the master key.

Within 10 sec.

BLINK

Insert the key to be registered in the IG key cylinder.

OFF

After 60 sec. key is registered.
(The theft deterrent indicator is OFF.)

END
4. ERASURE OF KEY CODE
There are 2 ways for erasure of key code; one is by switch operation and the other is by LEXUS hand-held tester.

HINT:
- All key codes will be erased except the master key which is used for erase operation.
- When using the key which was used before erasure, it is necessary to register the code again.
- The registration operation will be cancelled if each operation is not completed within the specified time.

(1) By LEXUS Hand-Held Tester:

Insert the already registered master key in the IG key cylinder and turn the IG switch ON.

Hand-Held tester operation:
1. Select "LS430" from the menu.
2. Select "Immobiliser".
3. Select "KEY CODE UTILITY".
4. Select "TRANSPONDER CODE REGISTRATION".

After the above operations, proceed to the succeeding operations in accordance with the prompts on the tester screen.

Remove the master key.

END

HINT:
- This page is to show briefly the registration procedure using the LEXUS hand-held tester.
- For detailed procedures, please refer to the prompts on the tester screen.
(2) By Switch Operation:

The vehicle should be in the following conditions:
- Driver door closed.
- The key is not inserted in IG key cylinder.

Insert the already registered master key in the IG key cylinder.

Turn the IG switch ON/OFF 6 times alternately.

Open/close the driver door 7 times alternately.

Remove the master key.

END

HINT:
When the key cannot be removed in the step 5, key code erasure is canceled.
5. REGISTRATION OF KEY NUMBER

(a) Newly registration of key number:

HINT:
- Be sure to perform this operation when the Transponder key ECU is replaced by the new one (in order to register ID of each vehicle to the ECU.)
- The key number is typed on the key number plate.

Insert the already registered master key in the IG key cylinder.
Turn the IG switch ON.

Hand-held tester operation:
1. Select "LS430" from the menu.
2. Select "Immobiliser".
3. Select "KEY CODE UTILITY".
4. Select "Key No. REGISTRATION".

Input the key number of the key number plate according to the tester screen.
Make sure on the tester screen that the key number is registered to the ECU.

END
(b) Change the key number:

HINT:
- Be sure to perform this operation when the key number of the vehicle is changed such as the case when all the key cylinders are replaced.
- The key number is typed on the key number plate.

1. Select “LS430” from the menu.
2. Select “Immobiliser”.
3. Select “KEY CODE UTILITY”.
4. Select “Key No. CHANGE”.

6. ECU COMMUNICATION ID REGISTRATION (to Transponder key ECU):

HINT:
- This operation should be performed when either the Transponder key ECU or the ECM is replaced, in order to match the ECM COMMUNICATION ID of these two ECUs.
- The engine cannot be started without the ECM COMMUNICATION ID matching.

Registration Operation
After either the Transponder key ECU or the ECM is replaced, turn the ignition switch ON (Engine is not running.), short the Tc and CG terminals of DLC3 and leave it as it is for 30 min.