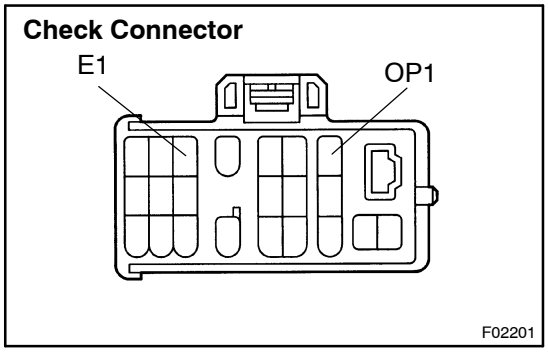
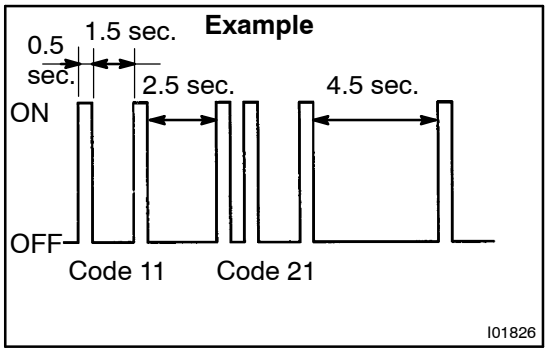
BE0YL–02

PRE–CHECK

1. TRANSPONDER KEY ECU INPUT CONDITION DISPLAY READ CODE

(a) Connect the positive (+) lead from the volt meter (Analog Type) to OP1 of the check connector and the negative (–) lead to E1 of the check connector.





(b) Insert the ignition key in the key cylinder.

(c) Read the code from the movement of the tester needle.

If no code is output, turn the ignition switch ON.

If a code is now output, check if the DOME fuse is blown.

HINT:

- The code can be read using a luminous diode (Recommend activation current 10 – 20 mA) instead of a tester.
- A digital tester can also be used.

Display condition:

- When there are multiple codes, they are output in order staring from the lowest code.
- After all the codes are output, Lo is displayed for 4.5 secs., then all the code are output again starting from the lowest code.
- If the situation changes during code output, Lo is output for 4.5 secs. after output of the current code ceases, then the codes are output again starting from the lowest code. E.g. while 11 (out of 11 and 21) is being output, conditions change and 12 is added. So after 11 is output, Lo is output for 4.5 secs., then 11, 12 and 21 are output.

2. TRANSPONDER KEY ECU INPUT CONDITION DISPLAY CODE LIST

Gasoline engine:

Code	Output condition
11	Key unlock warning switch ON (Ignition key inserted)
12	Any door is open. (Door courtesy switch ON)
13	Ignition switch at ON position
21	Master key is inserted in key cylinder and the immobiliser system is OFF.
22	Sub key is inserted in key cylinder and immobiliser system is OFF.
31	Key code recorded in transponder key ECU differs from code of key inserted in key cylinder.
32	Transponder key code cannot be read.
33	Key code cannot be read because format of chip inside key is wrong.
34	Transponder key ECU has no memory space to register key code.
41	Recognition code is normal and the immobiliser system is OFF.

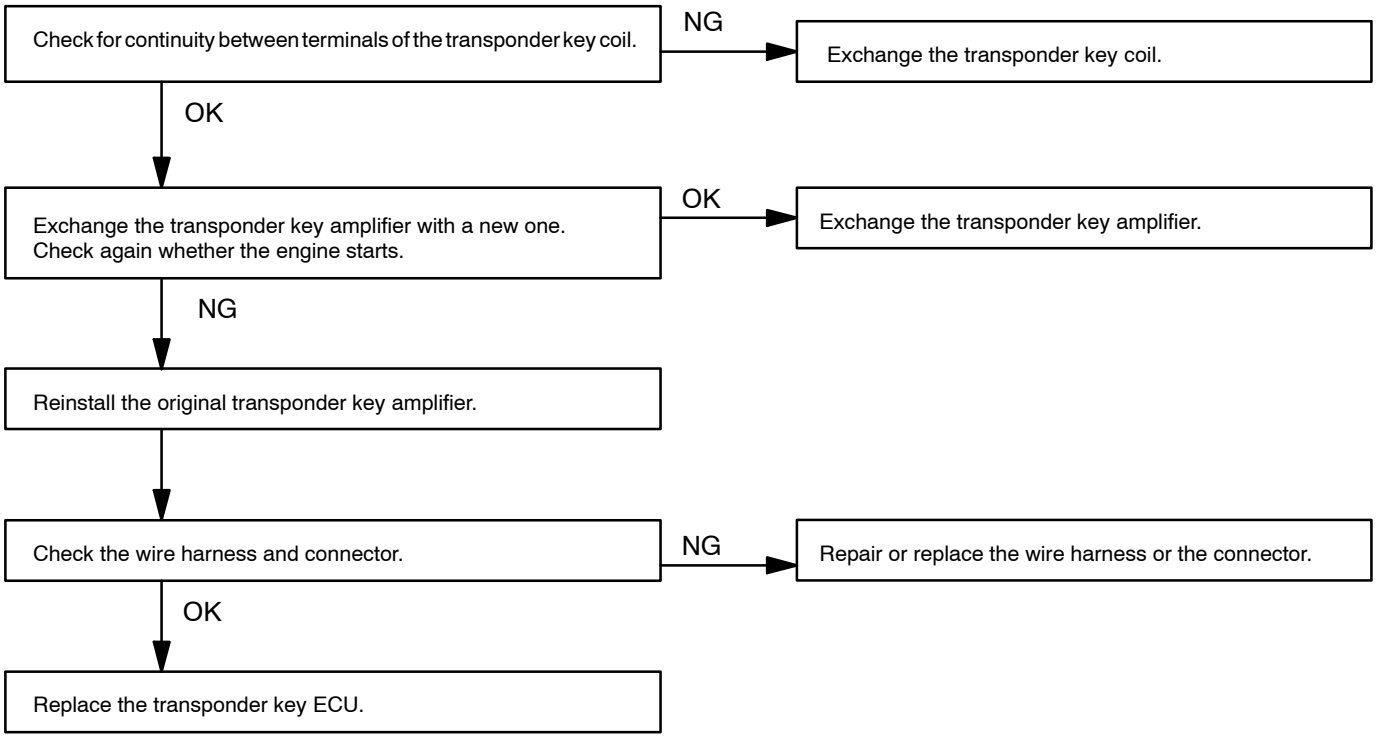
Diesel engine:

Code	Output condition
11	Key unlock warning switch ON (Ignition key inserted)
12	Any door is open. (Door courtesy switch ON)
13	Ignition switch at ON position
21	Master key is inserted in key cylinder and the immobiliser system is OFF.
22	Sub key is inserted in key cylinder and immobiliser system is OFF.
31	Key code recorded in transponder key ECU differs from code of key inserted in key cylinder.
32	Transponder key code cannot be read.
33	Key code cannot be read because format of chip inside key is wrong.
34	Transponder key ECU has no memory space to register key code.
51	FCVC code is learned.
52	FCVC is unlocked.
53	FCVC code is error.
54	FCVC is check–sum error.
55	FCVC is factory code initialling
56	FCVC code line trouble
57	FCVC trouble
58	While ignition switch ON, no response from FCVC for 5 consecutive sec,

3. TRANSPONDER KEY ECU INPUT CONDITION DISPLAY MALFUNCTION LIST

Symptom	Cause
No code is output.	1. DOME Fuse 2. Wire harness or connector 3. Transponder key ECU
Even when key is inserted in key cylinder, Code 11 is not output.	1. Key unlock warning switch 2. Wire harness or connector 3. Transponder key ECU
Code 12 is not output when the door is open.	1. Door courtesy switch 2. Wire harness or connector 3. Transponder key ECU
Code 13 is not output when ignition switch ON.	1. IGN Fuse 2. Wire harness or connector 3. Transponder key ECU
Code 31 is output when key is inserted in key cylinder.	Key code is not registered.
Code 32 is output.	1. Transponder key coil 2. Transponder key ECU 3. Transponder key amplifier 4. Wire harness or connector
Code 33 is output.	1. Transponder key ECU 2. Transponder key amplifier
Code 34 is output.	Transponder key ECU has no memory space to register key code.

- If code 32 is output, troubleshoot according to this flow chart.



- If code 33 is output, troubleshoot according to this flow chart.

