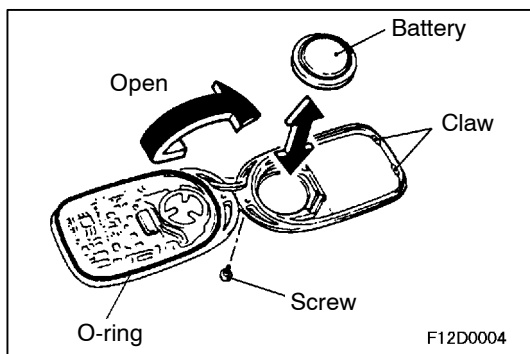# KEYLESS ENTRY SYSTEM

TROUBLESHOOTING

The keyless entry system is controlled by the Smart Wiring System (SWS). For troubleshooting, refer to GROUP 54B - Troubleshooting.

Battery
Open
Claw
Screw
O-ring
F12D0004

ON-VEHICLE SERVICE

HOW TO REPLACE A BATTERY OF THE TRANSMITTER

1. Remove the set screw to remove the battery from the transmitter.
2. Install a battery with its (+) side face-down.

   Battery required for replacement:
   Coin type battery CR2032
3. Insert the claw first, and with care not to displace the O-ring, assemble the transmitter.
4. Check to see if the keyless entry system operates.

   NOTE
   (1) Do not let water or dust stick to the inside of the transmitter when it is open. Also, do not touch the precision electronic device.
   (2) If the O-ring is displaced during the assembly of the transmitter, water or dust penetrates in it causing trouble.

ENCRYPTED CODE REGISTRATION METHOD

Each individual encrypted code is registered inside the transmitter, and so it is necessary to register these codes with the EEPROM inside the ETACS-ECU in the following cases.

- When either the transmitter or ETACS-ECU is replaced;
- If a second transmitter is to be used;
- If it appears that a problem is occurring because of faulty registration of a code.

A maximum of four different codes can be stored in the memory area of the EEPROM (four different transmitters can be used). When the code for the first transmitter is registered, the previously-registered codes for four transmitters are cleared. Therefore, if you are using more than two transmitters or are adding a second transmitter, the codes for all the transmitters must be registered at the same time.
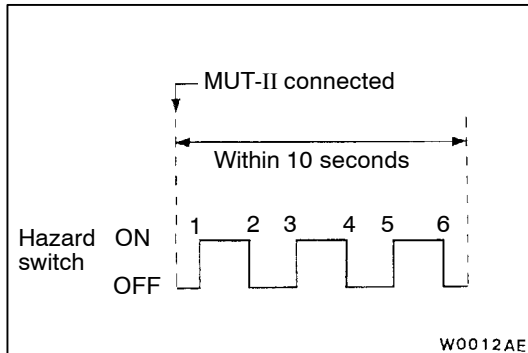
1. Check that the doors lock normally when the ignition key is inserted into the door key cylinder and turned.
2. Insert the ignition key in the ignition switch.
3. Connect the MUT-II to the diagnosis connector.

NOTE
This sets the system in encrypted code registration standby mode. If MUT-II is not used, connect terminal No.1 of the diagnosis connector to earth.

Caution
Always turn the ignition switch to LOCK (OFF) position before connecting and disconnecting the MUT-II or earth.

4. Within 10 seconds after connecting the MUT-II or earth, press the hazard switch six times.

   NOTE
   (1) The doors will lock and unlock once after pressing the hazard switch six times, and the system will switch to registration mode.
   (2) The hazard switch alternates between ON and OFF each time pressing the hazard switch (Refer to illustration).
5. Press the lock switch or unlock switch of the transmitter switch, and then press it two times within 10 seconds of the first press. This will register the code.
6. After registration is completed, the doors will be automatically locked and unlocked once.
7. If you are using more than two transmitters or have added a second transmitter, the same registration procedure should be carried out for the remaining transmitters, and it should be carried out within one minute after registration of the code for the first transmitter has been completed. The registration procedure are all the same for all transmitters.
8. Registration mode will be terminated under the following conditions.
   ● When the encrypted codes for four transmitters have been registered;
   ● When one minute has passed after registration mode started;
   ● When the MUT-II is disconnected (earth is released);
   ● When the ignition key is removed;
9. After registration mode has been completed, carry out the followings to make sure that the keyless entry system operates.
   ● Pull the ignition key out.
   ● Close all of the doors.

KEYLESS ENTRY SYSTEM

REMOVAL AND INSTALLATION

For the removal and installation of the ETACS-ECU, refer to GROUP 54A.