

## PRE-CHECK

### 1. OUT LINE OF THEFT DETERRENT SYSTEM

When the theft deterrent system detects any theft, it informs people around with flashing lights and sound.

HINT:

There are 4 conditions in this system which are disarmed state, arming preparation, armed state and alarm sounding.

- (1) Disarmed state
  - When the alarming function does not operate.
  - Theft deterrent function is not performed.
- (2) Arming preparation
  - Time until transferring to armed state.
  - Theft deterrent function is not performed.

- (3) Armed state
 

When theft deterrent function is possible.

- (4) Alarm sounding:
 

In the armed state condition, once theft is detected, it is informed using light and sound to people around the vehicle.

Refer to the table for alarming method or time.

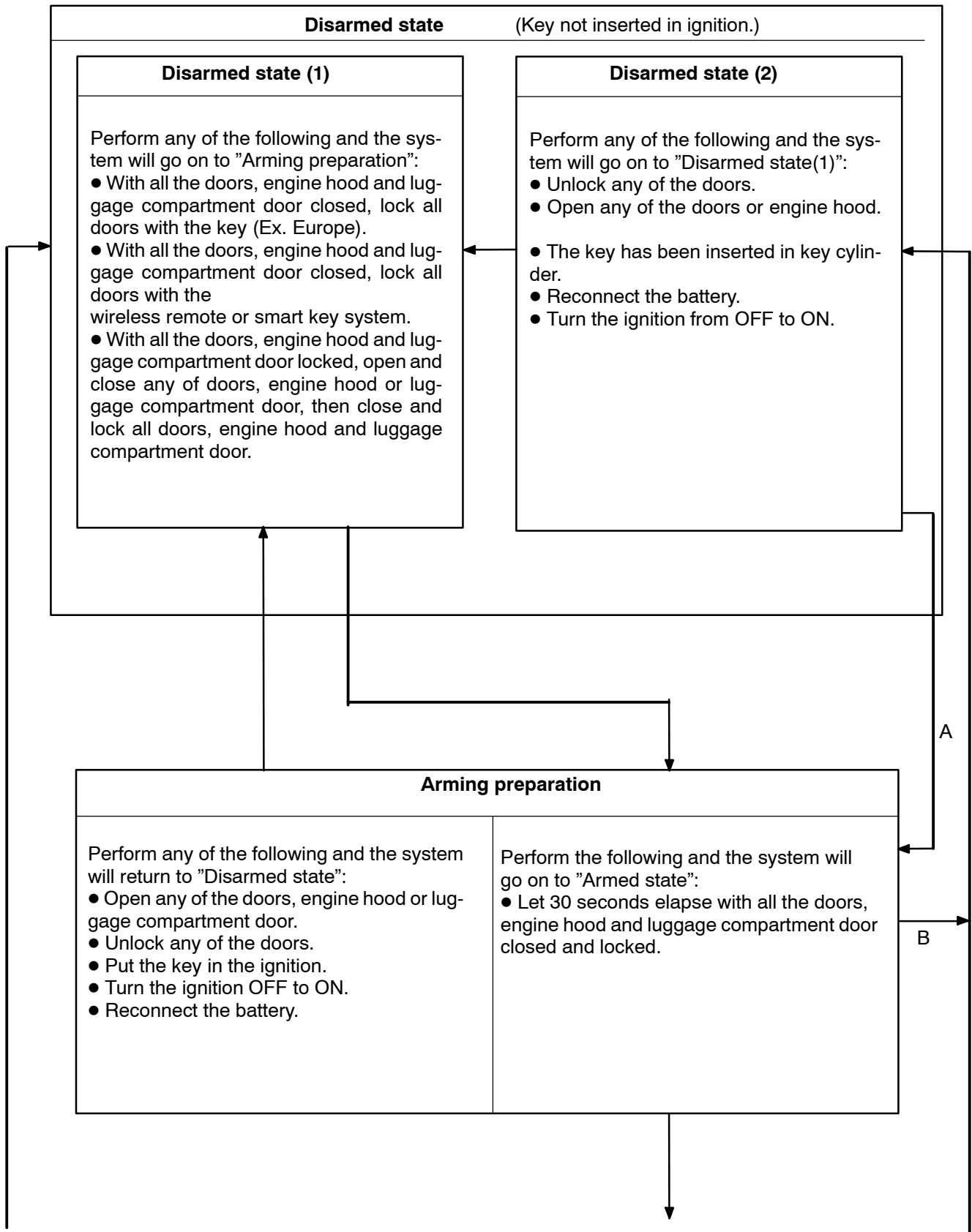
		Europe	Ex. Europe
Alarming method	Horn	○	○
	Security horn	-	○
	Headlight	-	○
	Taillight	-	○
	Hazard	○	○
	Interior light	○	○
	Siren	○	-
Alarming time		27.5 s	60 s
Alarming output	Continuous	0.25 S (ON)/ 0.25 S (OFF)	0.4 S (ON)/ 0.4 S (OFF)

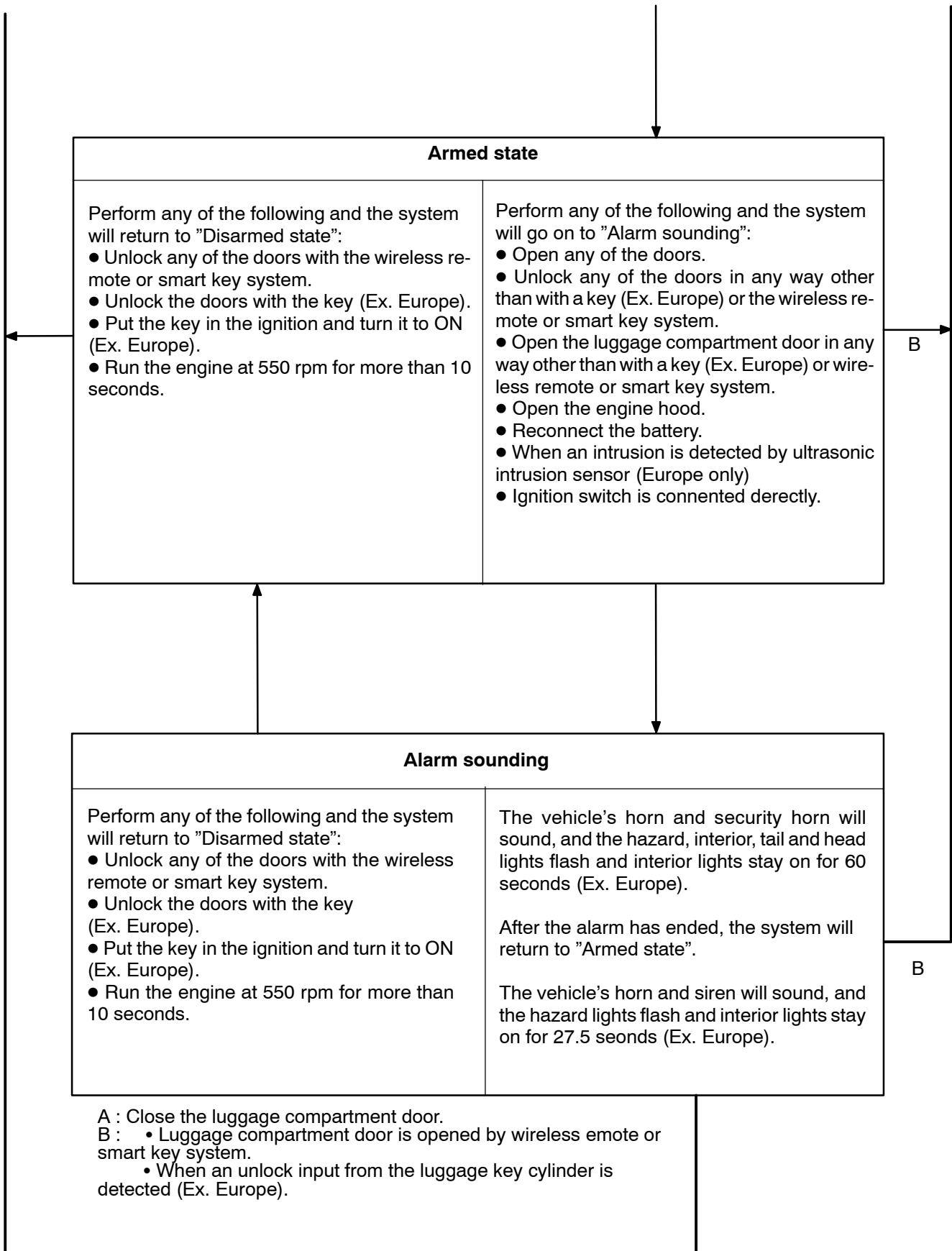
HINT:

Alarming output for hazard is same as the one for the hazard on the vehicle.

In the arming condition when either of doors is unlocked with key not in the key cylinder, force lock signal is output.

2. ACTIVE ARMING MODE





**3. INDICATOR LIGHT OUTPUT**

Condition	Indicator light
Disarmed state	OFF
Arming preparation	ON
Armed state	OFF
Alarm sounding	ON

**HINT:**

Even in disarmed state, the indicator light flash. (Due to the signal output from immobilizer system). The indicator always flashes receiving the signal from the immobilizer system at any time in the armed state.

Flashing frequency:

0.2 seconds (ON)

1.8 seconds (OFF)

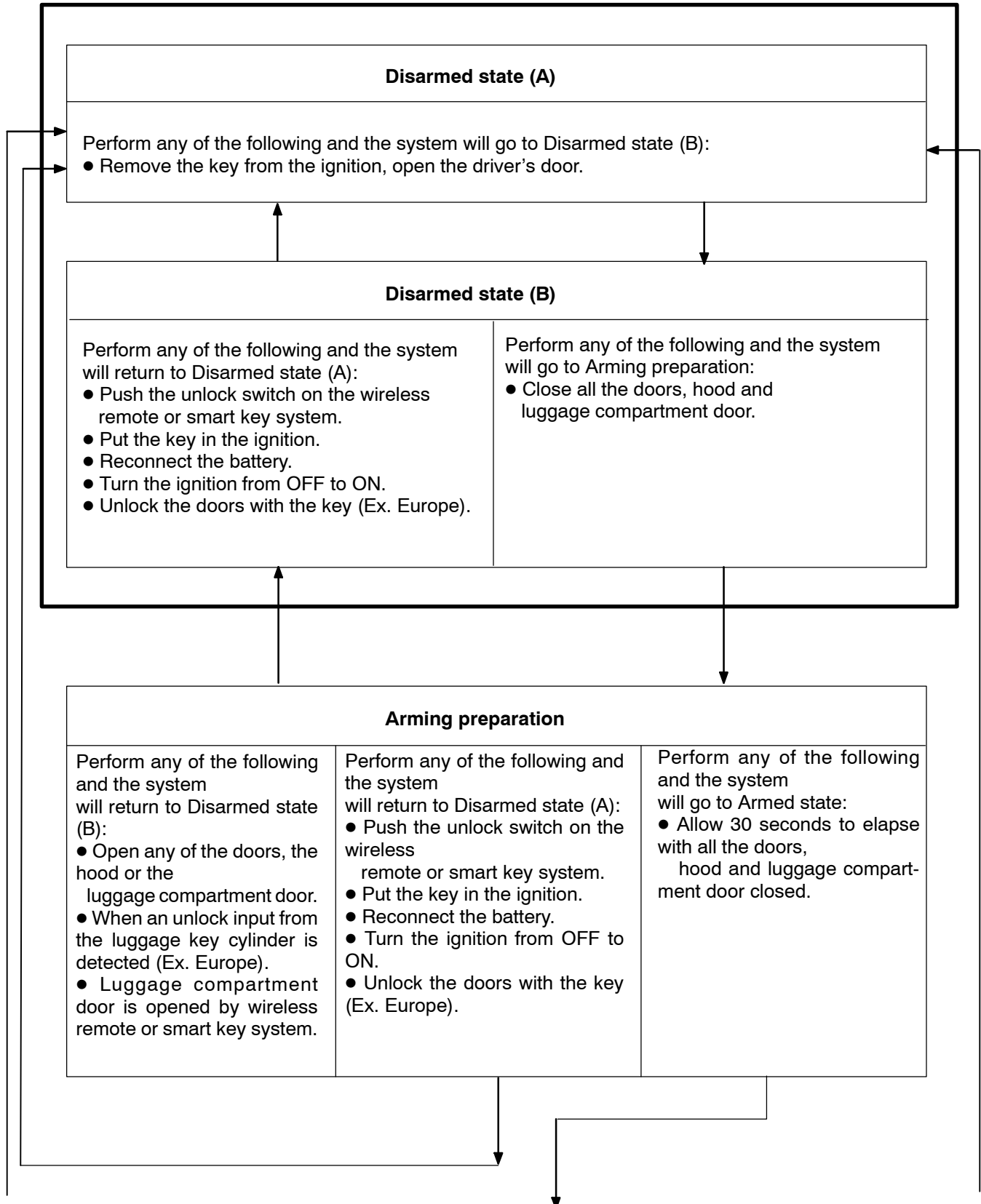
Answer back:

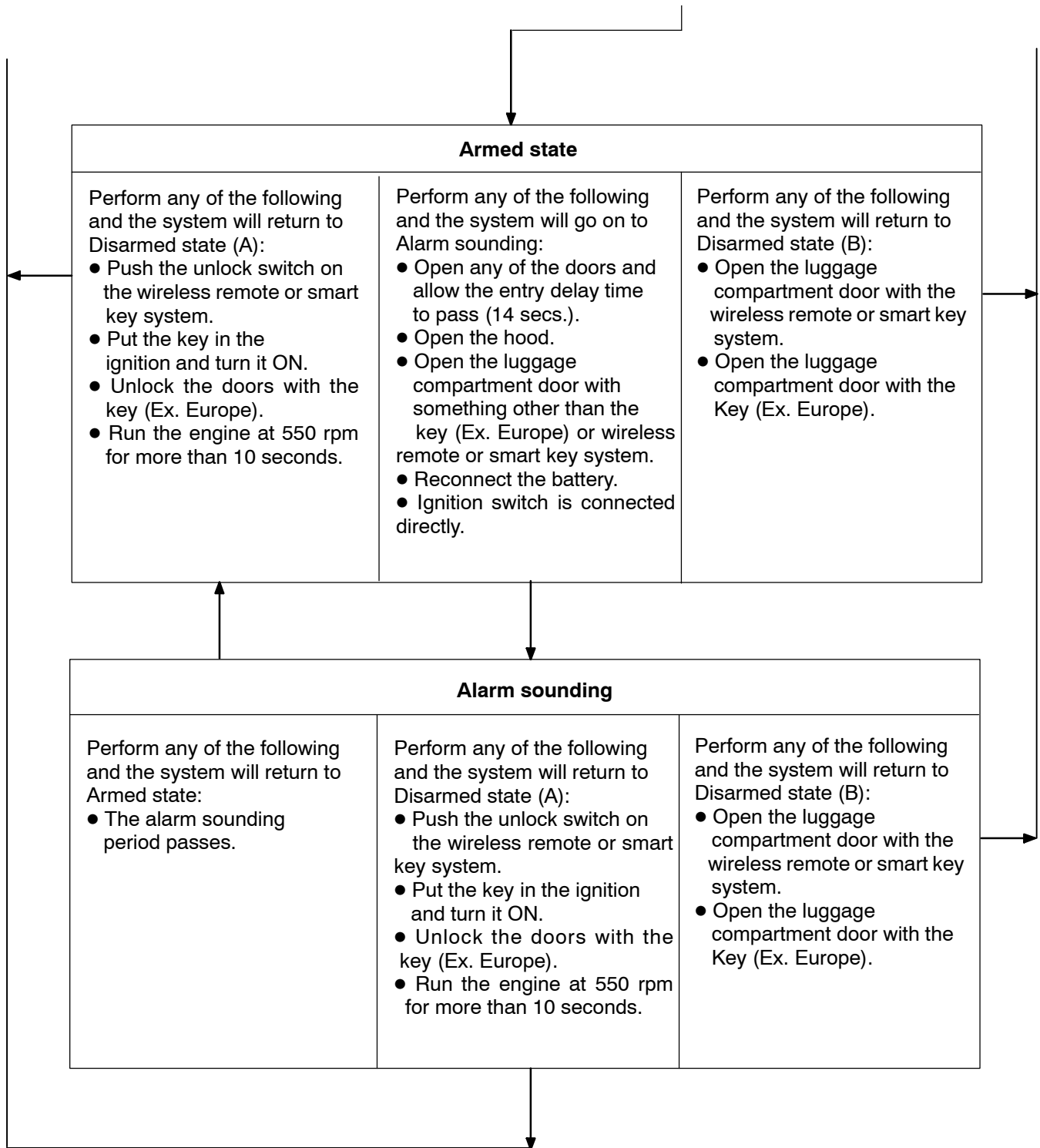
The hazard lights flush as answer back under the following conditions.

- (1) When the system is set.  
When arming preparation is set from disarmed state using the wireless door lock or smart lock, the hazard lights flush once.
- (2) When the system is released.  
When disarmed state is set from either arming preparation, armed state or alarm sounding using the wireless door lock or smart lock, the hazard lights flush twice.

#### 4. PASSIVE ARMING MODE

- This mode can be switched according to the specified operation.
- All initially set modes (when shipped from factory) are active mode. (No passive mode)



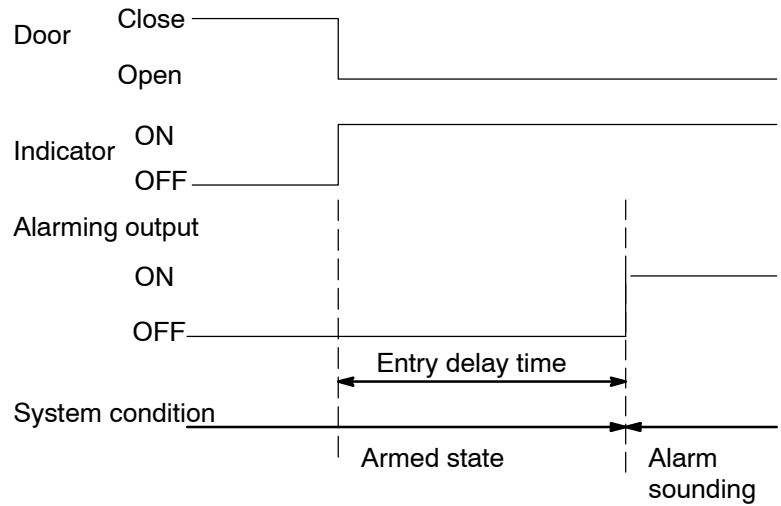


## HINT:

In armed state either closed door is opened, entry delay occurs. (14 secs.)

During this time, the mode transfers to disarmed state when the condition described above \* is met.

When the condition is not met, the system judges theft occurs, the mode transfers to alarm sounding.



**5. INDICATOR LIGHT OUTPUT**

Condition	Indicator light
Disarmed state	OFF
Arming preparation	ON
Armed state (Entry delay time)	OFF (ON)
Alarm sounding	ON

**HINT:**

Even in disarmed state, the indicator light flash. (Due to the signal output from immobilizer system). The indicator always flashes receiving the signal from the immobilizer system at any time in the arming condition.

Flashing frequency:

0.2 seconds (ON)

1.8 seconds (OFF)

**6. TRANSFER TO ACTIVE MODE**

In each passive mode, when "disarmed state of active mode → arming preparation transfer condition" is met, the active mode transfers to each condition. In this case, active mode continues till disarmed state.

Passive mode when transfer condition is met.	Active mode transfer condition
Disarmed state	Arming preparation condition
Arming preparation condition	Arming preparation condition
Armed state (During entry delay time)	Arming condition (After alarming time has elapsed, arming condition if all the doors, engine hood and luggage compartment door is closed, all the doors are locked.)
Alarm sounding	After alarming time has elapsed, arming condition if all the doors, engine hood and luggage compartment door is closed, all the doors are locked.



## 7. FORCED DOOR LOCK CONTROL

Forced door lock is a control that prevents intrusion into vehicles. When a door is unlocked (when an alarm is started), instantaneously forced door lock will be executed.

### (1) Condition for Starting Forced Door Lock

Detecting any of the following conditions activates the forced door lock.

- Alarm system is in alarm status in active mode.
- Except for the case that the key unlock/luggage unlock switch is turned on.
- No key is in the ignition key cylinder.
- Some of the doors are unlocked.
- Since the start of the last forced lock, 0.38 sec. or more has been elapsed.
- All of double lock position switches are in OFF (double lock unset) status.

### (2) Conditions for Stopping Forced Door Lock

Detecting any of the following conditions stops the forced door lock.

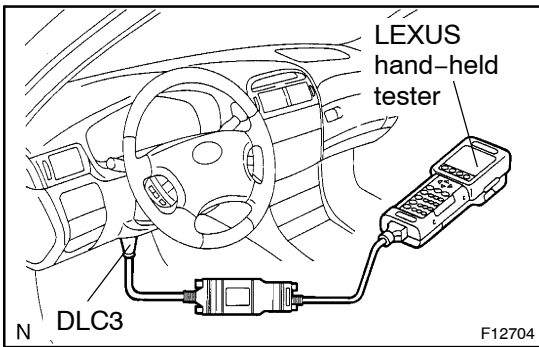
- All doors are locked.
- An alarm is finished.
- A key is inserted into the key cylinder.

## 8. ALARM MEMORY CONTROL

If an alarm is activated while a user leaves the vehicle, when the user comes back to the vehicle and reset the security system, the tail lights will light up for 2 sec. to show the alarm occurrence.

## 9. INTRUSION SENSOR OFF CONTROL (EX Europe)

Only intrusion sensor can be temporarily turned OFF with the sensor OFF switch on the sunglasses holder while an alarm is set.

**10. DTC CHECK (Using LEXUS hand-held tester)**

- (a) Prepare the LEXUS hand-held tester.
- (b) Connect the LEXUS hand-held to DLC3.
- (c) Turn the ignition switch ON and the LEXUS hand-held tester main switch ON.
- (d) Use the LEXUS hand-held tester to check the DTCs, note them down. (For opening instructions, see the LEXUS hand-held tester's instruction book).
- (e) See [page DI-805](#) to confirm the details of the DLC3.

**11. DTC CLEARANCE**

DTC will be cleared when the trouble output to DTC is recovered normally.

## 12. THEFT DETERRENT SYSTEM CIRCUIT LIST

The following list is for the circuits connected to the Theft Deterrent ECU.

Please use this list for trouble shooting.

Please refer to the Circuit Inspection mentioned Later for the details of the circuits.

Control system	Circuit name	Terminal
Power source	Power source circuit	+B, +B2, ACC, IG, E
Wireless door lock control system	Keyless buzzer circuit	BZR, BZR2
	Keyless buzzer ON/OFF switch volume circuit	BZR3, BZRG
	Inner mirror wireless tuner circuit	RSSI, RDA, RCO
Theft deterrent system	Security indicator circuit	IND
	Theft deterrent horn circuit	SH-
	Self power siren circuit (only Europe)	CTLS, DIAG
	Radar sensor circuit (only Europe)	S+B, IOUT, SSW1
Smart key system (with Smart key system)	Smart indicator circuit	IND2
	Door oscillator front LH (w/ Sensor) circuit	CLG1(*1) CLG2(*2)
	Door oscillator front RH (w/ Sensor) circuit	CLG2(*1) CLG1(*2)
	Door oscillator rear LH (w/ Sensor) circuit	CLG3(*1) CLG4(*2)
	Door oscillator rear RH (w/ Sensor) circuit	CLG4(*1) CLG3(*2)
	Room oscillator (Front) circuit	CLG5
	Room oscillator (Rear) circuit	CLG7
	Luggage oscillator (Inner) circuit	CLG6
	Luggage oscillator (Outer) circuit	CLG8
	Luggage room wireless tuner circuit	RSS2, RDA2, RCO2
	Smart key system cancel switch circuit	CNSL
Multiplex communication (Gateway) system	Multiplex communication system circuit	MPX1, MPX2

### HINT:

The wireless tuner is used in the wireless door lock system and the smart key system.

(\*1): LHD Models

(\*2): RHD Models