

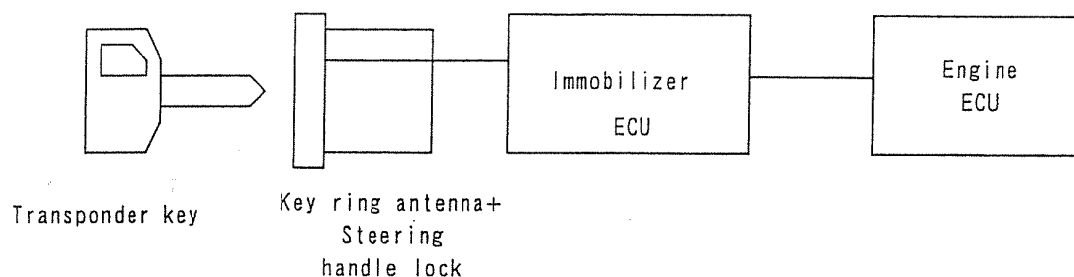
<GENERAL SPECIFICATIONS>

Type : IMB122-01, IMB122-02

Application	:	Anti-theft device for vehicle
Communication method	:	Electromagnetic compatibility
Installation Place	:	Inside the vehicle
Operating Voltage	:	12V (DC)
Operating Temperature range	:	-40 ~ +85
Frequency(transmitting)	:	125 kHz
Frequency(receiving)	:	125 kHz
Modulation (transmitting)	:	ASK (Amplitude Shift Keying)
Modulation (receiving)	:	ASK (Amplitude Shift Keying)
Output power	:	0.197 pW (max)
Transmission time per 1 cycle	:	210 ms (max)
Intermission time per 1 cycle	:	0 ms
Continuous time including intermissions	:	630 ms (max)
Communication distance	:	20 mm (max)

1. General

The immobilizer system is an electronic anti-theft system. This system prevents the engine from unauthorized starting such as hot-wiring, etc. The engine would not start until the ID code registered in the ignition key coincides with the code registered in the immobilizer ECU on the vehicle.



Major components and functions

Name	Function
Transponder	• Sends ID code to the immobilizer ECU via key ring antenna.
Key ring antenna	• Supplies power and sends / receives data to and from the transponder by means of electromagnetic coupling.
Immobilizer ECU	<ul style="list-style-type: none"> • Receives the ID code from the transponder and compares it with the code registered in the immobilizer ECU. • Sends the condition code to the engine ECU. • The indicator which is turned ON, turns OFF once at starting.
Engine ECU	[Functions related to the immobilizer system] <ul style="list-style-type: none"> • Receives the condition code from the immobilizer ECU and operates to prepare / prohibit the start of the engine.

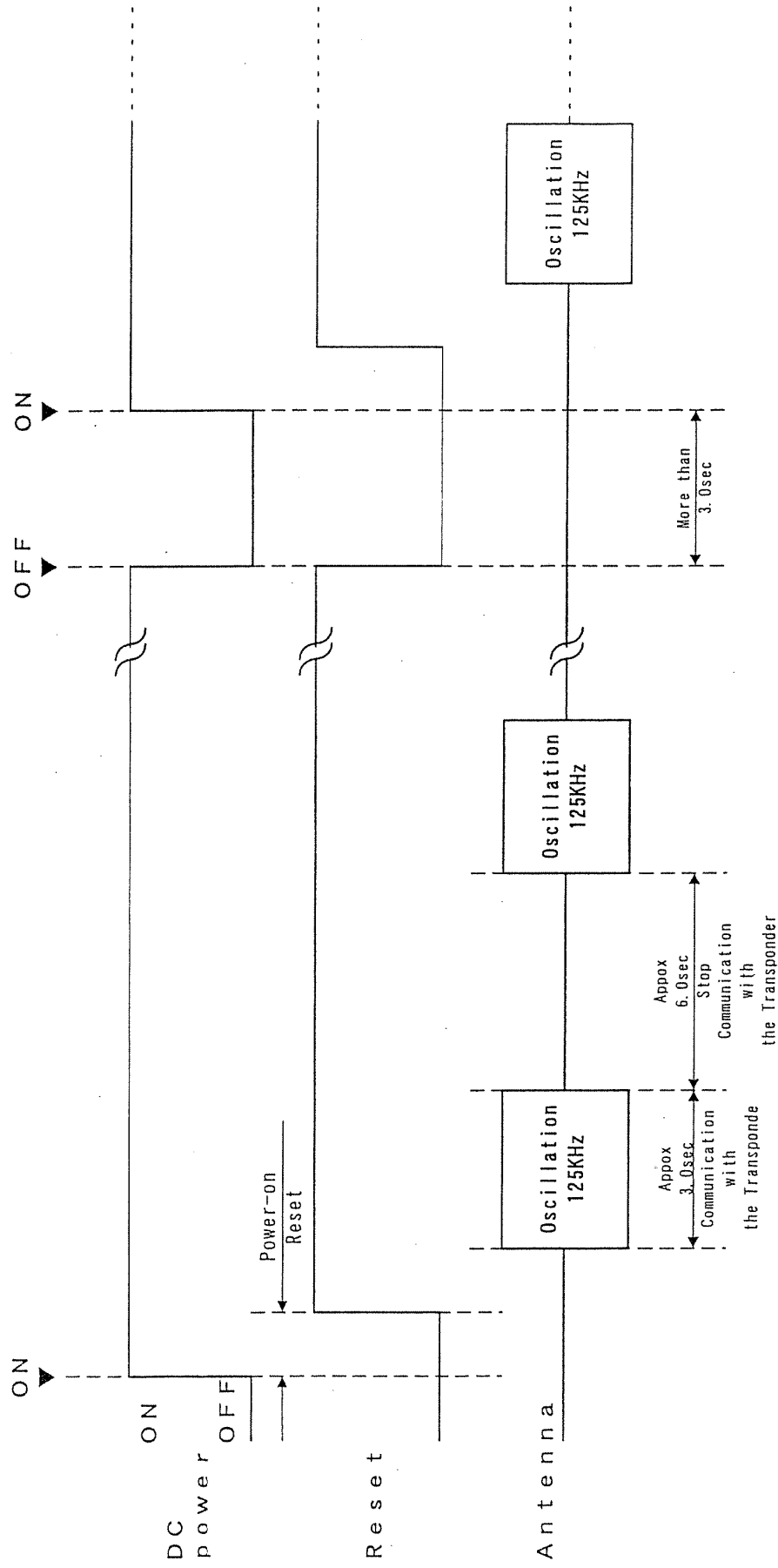
Handling precaution

- (1) When starting the engine, keep metal objects (iron, etc.), electric equipment (cellular phone, electric razor, etc.) and other immobilizer transponder keys away from the steering handle lock.
- (2) Never damage the plastic key bow with a knife or fill transponder or similar articles inside.

1. Operation outline

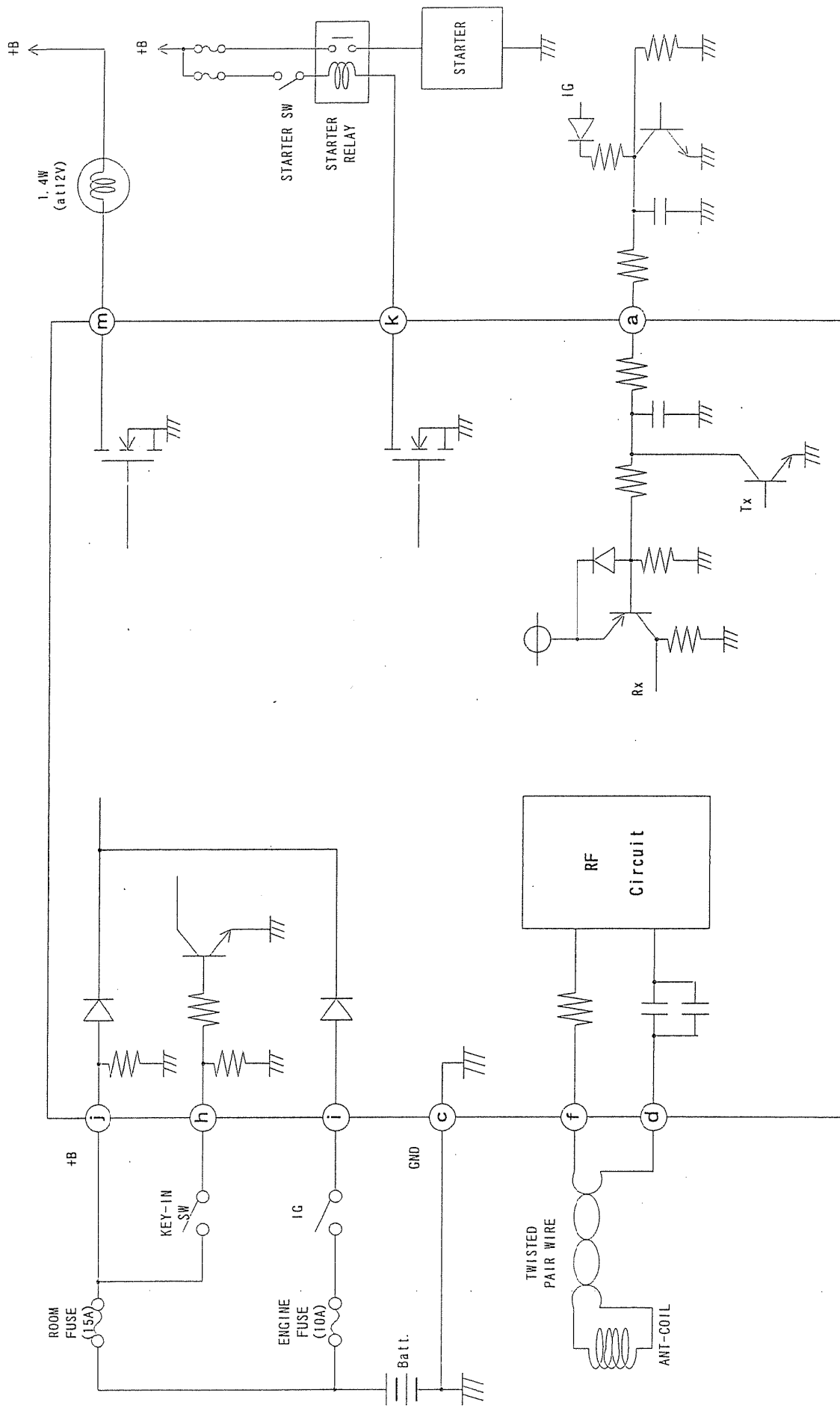
- When the DC power supply is turned ON, the transponder ID comparison (communication) takes place.
Transponder comparison (communication) time : approx. 3.0sec
Transponder comparison (communication) stop time : approx. 6.0sec
- When the DC power supply is turned OFF and turned ON again after more than 3 sec., the operation indicated in 1 retakes place.

2. Operation timing chart



CONNECTION

TYPE NAME : IMP -02



TYPE LIST

TYPE NAME : IMB122-02

<LIST>

No.	PART No.	PART NAME	NOTE	
1	X1T14373M	IMMOBILIZER ECU	SEPARATE	TC91 67 5G2
2	X1T25271	IMMOBILIZER ANTENNA	—	BJ3D 66 938
3	X1T25671	IMMOBILIZER ANTENNA	—	TC91 66 938
4	X1T20271	TRANSPONDER	—	BJ3D 67 5G1

<COMBINATION>

No.	IMMOBILIZER ECU	IMMOBILIZER ANTENNA	TRANSPONDER
1	X1T14373M	X1T25271	X1T20271
2		X1T25671	

NOTE

- Key shape is two type, but electric characteristic is same.
Because the transponder in key is same type.