

TECHNICAL DESCRIPTION

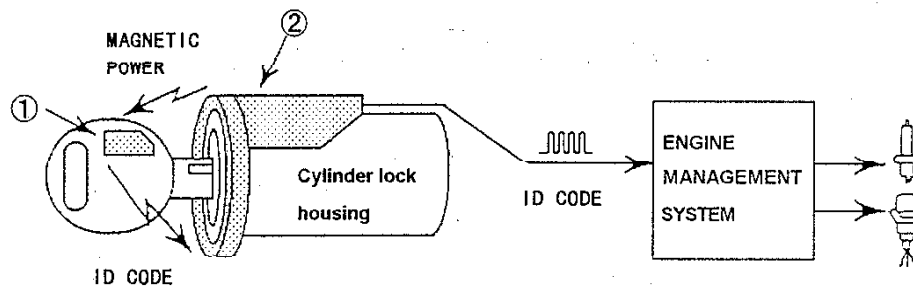
1. Name: immobilizer

MDL: RI-8FTY

This immobilizer system is to be installed on motor vehicles as OE (= original equipment) item. It is intended to prevent unauthorized use of the vehicles.

2. System Construction:

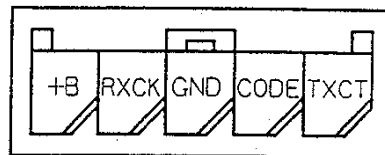
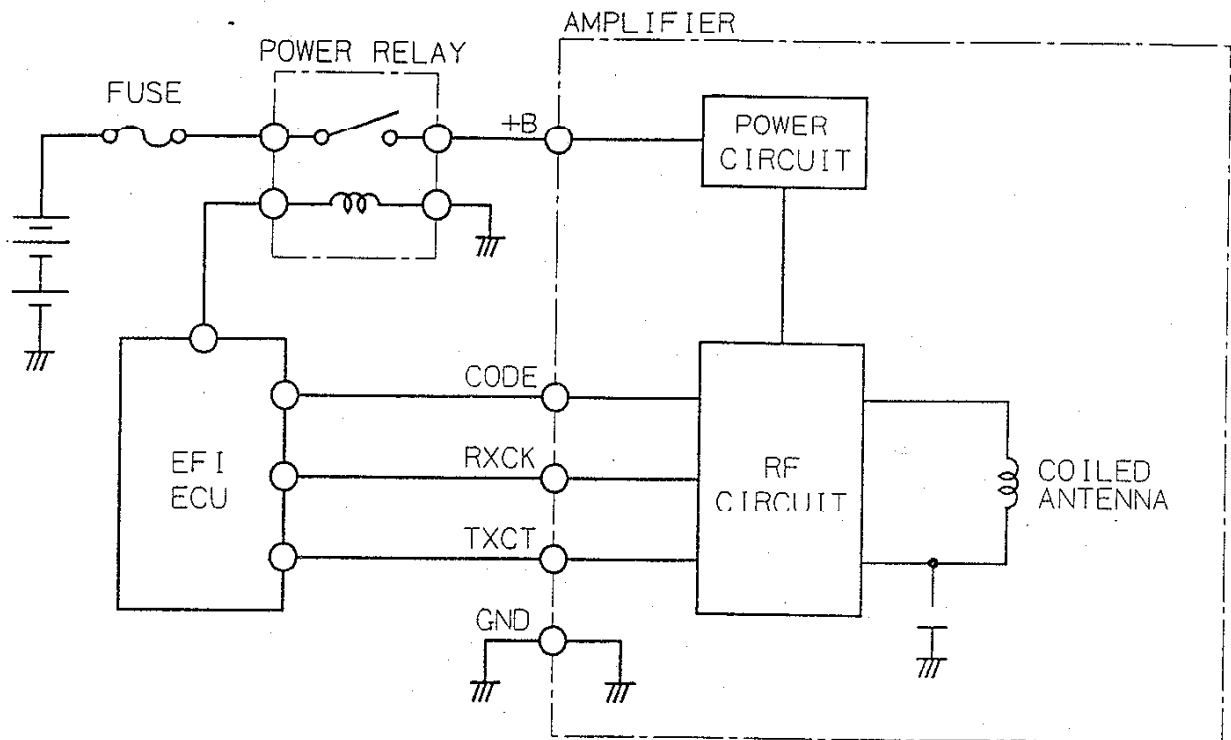
- ① transponder ② coiled antenna with amplifier



3. Specifications

Items	Specifications
rated voltage	12 V
operating voltage range	8 to 16 V
operating temperature range	-40 to 85°C -40 to 60°C (key)
frequency (transmitting)	134.2 kHz
frequency (receiving)	128.7 kHz
modulation	unmodulated carrier
antenna output (max)	60 dBμV/m at 10 m (10 mW)

3. Specifications (continued)

Block Diagram of AmplifierAmplifier

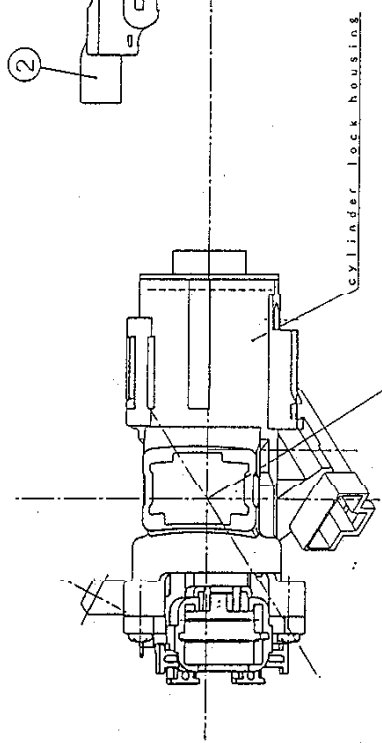
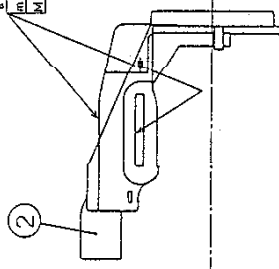
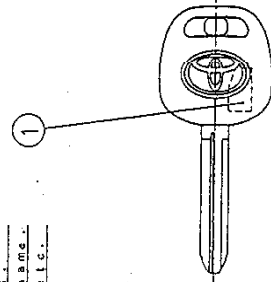
for Model RI-8FTY

4. Operating Summary

- ① By the driver of the vehicle, the key (a transponder incorporated in the key grip has a certain ID code already registered to the engine management system) is inserted into the key cylinder.
- ② When the key is inserted into the key cylinder, the amplifier supplies high frequency electric power to coiled antenna.
- ③ Then the electromagnetic wave generated in the coiled antenna supplies the electric power by means of electromagnetic induction to the transponder incorporated in the key grip.
- ④ After receiving the electric power from the coiled antenna, the transponder transmits the ID code using the received electric power.
- ⑤ The ID code is received by the coiled antenna. Then it is amplified and shaped to 0-5 V digital signal at the amplifier.
- ⑥ The digital signal is transmitted to the vehicle engine management system, which judges whether the received ID code corresponds with the registered one. When correspondence is recognized, it starts the engine.

S/N	PART NO.	PART NAME	QTY
1	271210-003	TRANSPONDER	1
2	527727-000	COILED ANTENNA W/AMPLIFIER	1

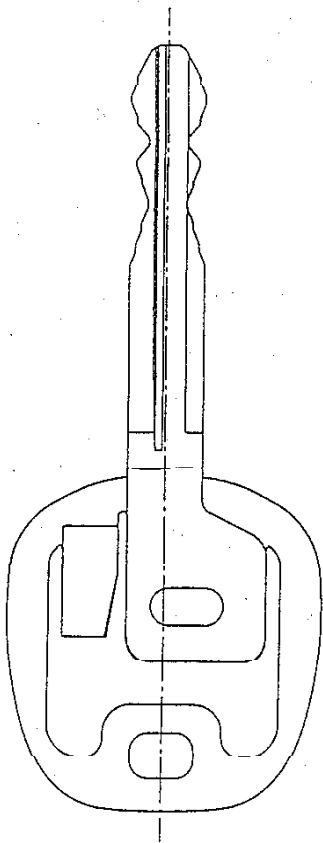
Approval marking
Manufacturer's name
Model serial no., etc.



* For the purpose of radio-technical test,
cylinder lock housing is a support for
fixing the coiled antenna.
The shapes is designed for each
vehicle type.

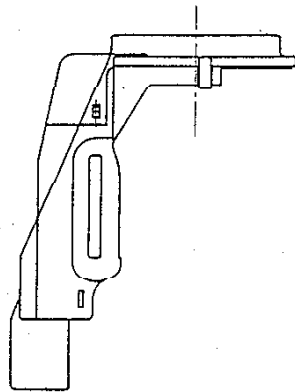
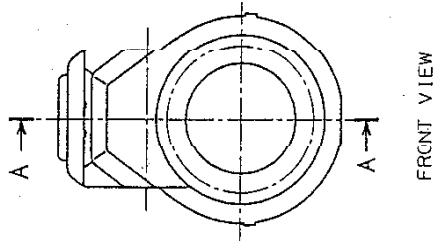
NAME	IMMOBILIZER
NDL	RI-8FTY
SCALE	FREE

NAME	TRANSPONDER
PART NO	271210-003
SCALE	FREE



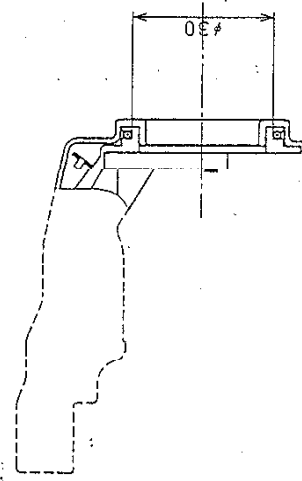
*Key plate and plastic
mold part are designed
for each vehicle type.

* Plastic mold part of coiled antenna is designed for each vehicle type..



SPECIFICATIONS

(when installed on cylinder lock housing)
 Inductance: $30\mu\text{H}$ ($f=134.2\text{kHz}$)
 Q: Min 12 ($f=134.2\text{kHz}$)
 Resistance: 0.66Ω



NAME	COILED ANTENNA W/ AMPLIFIER
PART NO	627727-000
SCALE	FREE