

## TECHNICAL DESCRIPTION

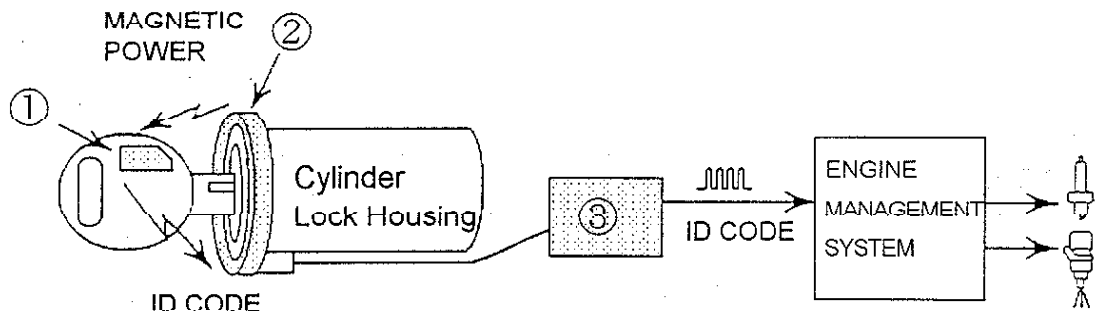
### 1. Name: immobilizer

MDL : RI-4ETY

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:

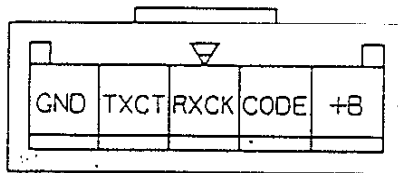
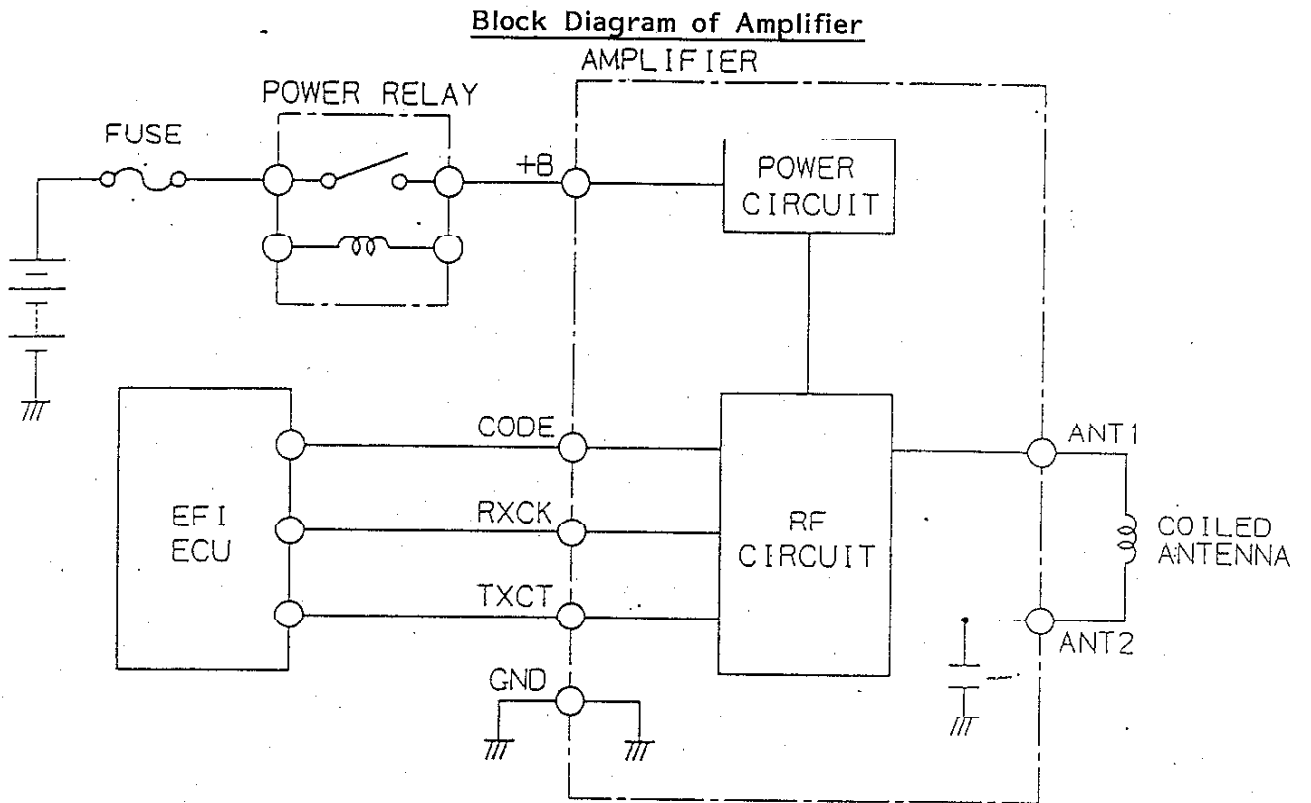
① transponder      ② coiled antenna      ③ amplifier



### 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

3. Specification (continued)

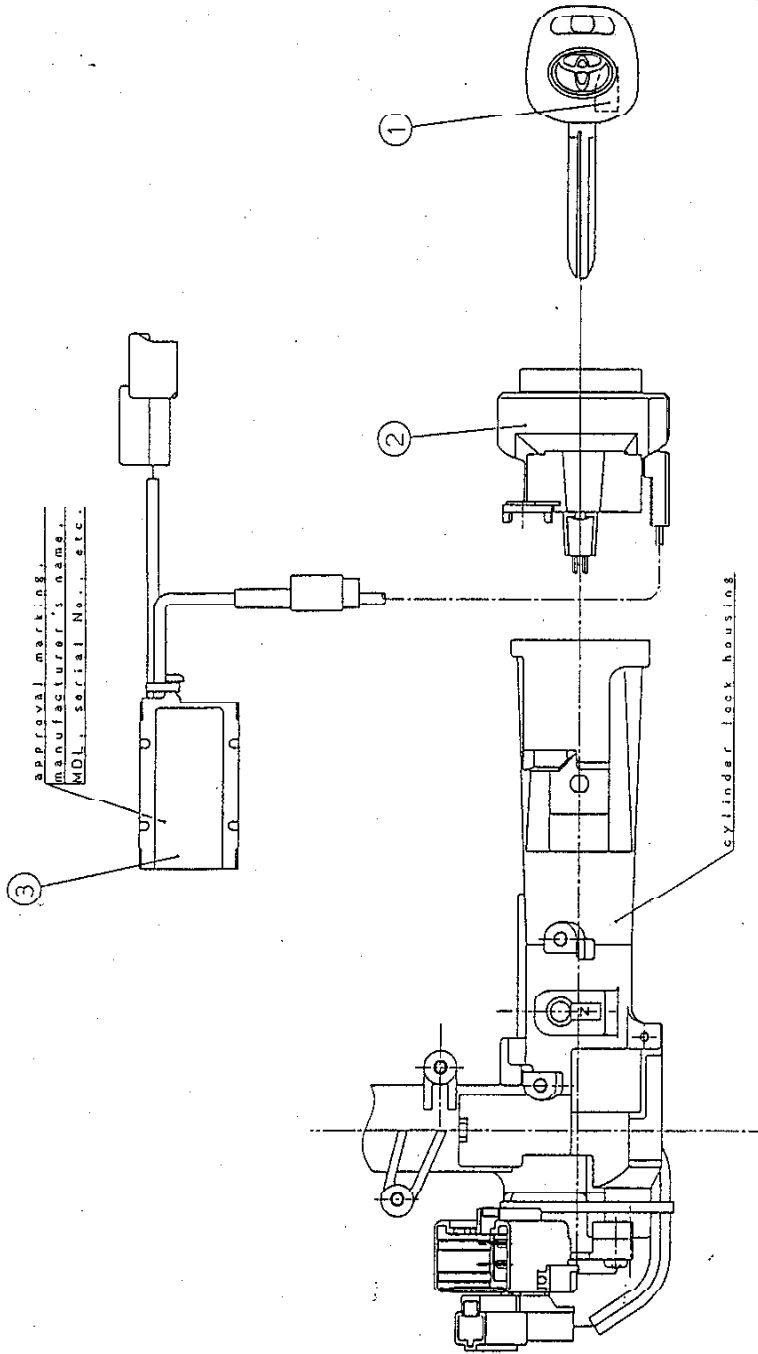


amplifier

#### 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 the 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.

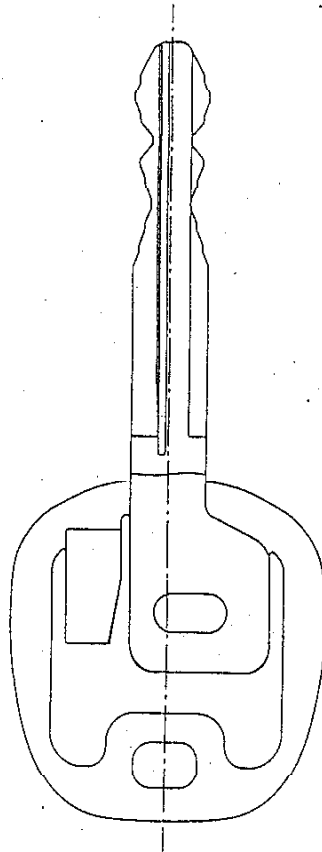
SYM. NO.	PART NO.	PART NAME	QTY.
1	271210-003	TRANSPONDER	1
2	637811-000	COILED ANTENNA	1
3	637565-000	AMPLIFIER	1



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

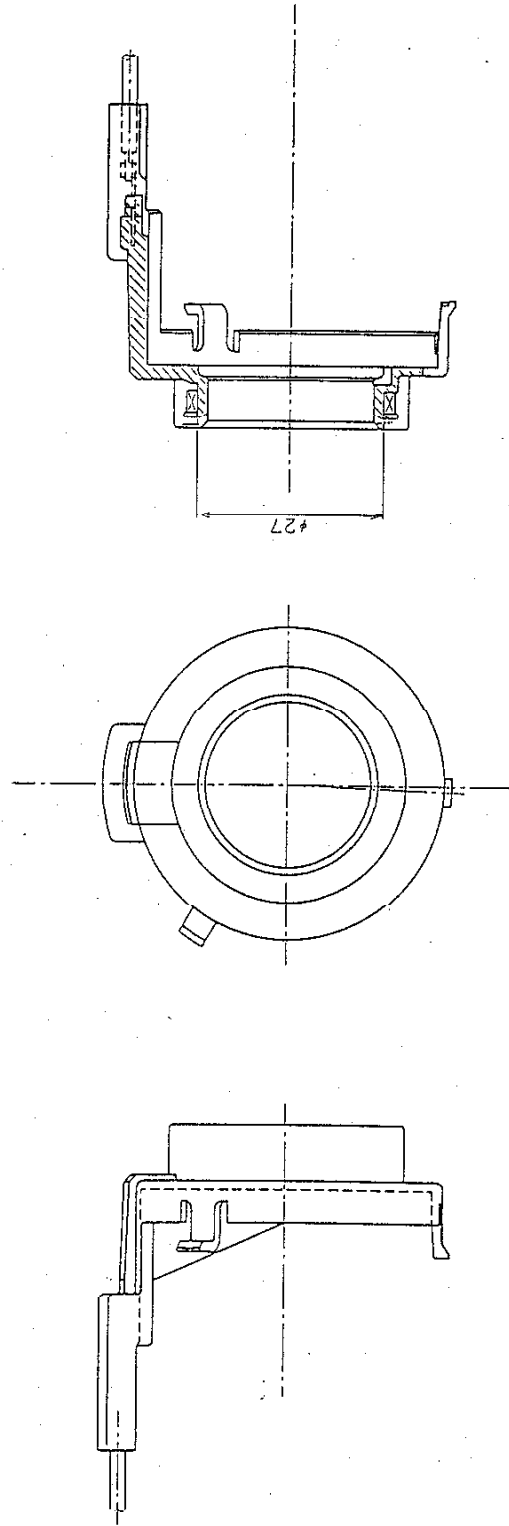
NAME	IMMOBILIZER
MDL	RI-4ETY
SCALE	FREE

FCC ID: MOZRI-4ETY



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

NAME	TRANSPONDER
PART NO	271210-003
SCALE	FREE



SIDE VIEW

FRONT VIEW

A-A

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

**SPECIFICATIONS**

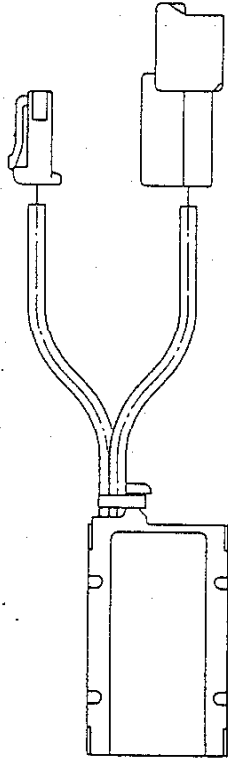
(when installed on cylinder type housing)

Inductance:  $30\mu\text{H}$  ( $f=134.2\text{kHz}$ )

Q: Min. 10.5 ( $f=134.2\text{kHz}$ )

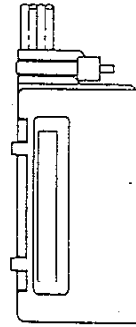
Resistance: 0.7 $\Omega$

NAME	COILED ANTENNA
PART NO.	627811-000
SCALE	FREE



TOP VIEW

\*Mounting bracket of amplifier is designed for each vehicle type.



SIDE VIEW

NAME	AMPLIFIER
PART NO	627565-000
SCALE	FREE