



5200 Auto Club Dr.
Dearborn, Michigan 48126-9982
(313) 593-9000

Re: Certification for Lear Corporation
Transmitter, Model RLC-X, RLC-C+
FCC ID: KOBLEAR1XT
CANADA:

DESCRIPTION OF OPERATION

GENERAL DESCRIPTION

The product for which certification is pursued will be manufactured for GM Motor Company by Lear Corporation (formerly United Technologies Automotive) for automotive applications. This 315 MHz transmitter works in conjunction with a receiver that is mounted in the vehicle. The transmitter is a 3 volt, single cell battery operated fob type that is carried by the user. It is part of a keyless entry system and can be used to perform certain functions such as lock and unlock the driver and passenger doors, open the trunk, etc... depending on how the receiver module in the vehicle is programmed. There are seven versions of this transmitter. The only difference between these seven units are the number of buttons used, the printing on the buttons, and the GM/UTA part number stamped on the back. Electrically, all seven units are identical.

The transmitter fob contains one 3 volt battery and a printed circuit board assembly. The two piece exterior housing is injection molded plastic, with the GM/UTA #, FCC ID #, and CANADA # stamped into the plastic.

TECHNICAL DESCRIPTION

When the buttons are depressed, the encoder IC will power up and generate the proper data code which can only be recognized by a matched receiver. The code is carried by 315 MHz carrier with AM OOK (on-off keying) modulation and radiated by a printed circuit board antenna. The data code is of a pulse width modulation format to express bits "0" and "1". The data code period is controlled by the encoder clock, which is an RC oscillator type that is integrated into the encoder. The antenna is a PCB trace and is a mono-pole type. The 315 MHz transmit frequency is generated by a SAWR (Surface Acoustic Wave Resonator) stabilized, Colpits oscillator. Frequency tolerance is better than 315 MHz, +/- 150 kHz.

NAME AND ADDRESS OF MANUFACTURER

Lear Corporation (Formerly United Technologies Automotive)

5200 Auto Club Drive
Dearborn, Michigan 48126

And

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