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Certification for TRW TPM '07 Sensor
Model # 15825475
FCC ID: GQ428T
IC: 1470A-9T

General Description of Operation of TPMS:

The TPM SENSOR is an RF transmitting device that contains an integrated tire valve stem that is mounted in the valve hole of each of the wheel rims on the vehicle. The sensor transmits the pressure and temperature inside the tire, as well as the battery voltage status of the transmitter. With each transmission each sensor unique tire identification code (ID) is also sent. The sensor will transmit at 315MHZ periodically when the vehicle speed is ~20mph. The vehicle speed is determined from an accelerometer that is contained within the sensor. The sensor will also transmit data if a change in the air pressure occurs while the vehicle is stationary or in a rolling state. The transmissions from each sensor have a random delay to ensure that RF signals from each tire will not interference due to simultaneous transmissions. The transmitter device also has a Low Frequency (LF) receiver. The receiver supports Low Frequency magnetic field communications for placing the sensor in the Learn mode with a hand held tool. This permits the programming of the sensors to a receiver within the vehicle. The RF transmission format is ASK (Amplitude Shift Keying) Manchester encoded at 315 MHz.