

TIRE PRESSURE MONITORING SYSTEM DEFINITION

The Tire Pressure Monitor System (TPMS) monitors tire air pressure in all tires and displays the information to the driver. The Tire Pressure Sensors (TPS) shall monitor the pressures and transmit the data to the receiver. The information is then sent to the driver on a display device mounted on or near the instrument panel.

The tire air pressure is monitored in each of the wheels by a wheel-mounted tire pressure sensor unit. This data is then relayed via an RF data link* to a receiver module located in the vehicle. The wheel-mounted sensor unit is an assembly consisting of the pressure sensor, related electronics, and power source. The tire valve stem may be integrated into the assembly.

DRIVE MODE

Transmitter in normal operation - wheel is rotating and roll switch is closed

Learn Mode

Transmits 40 words after LF transponder activation or when sensor exits Off mode due to Roll switch closure

FACTORY MODE

Transmitter is in Factory mode for the next 16 or fewer Roll Switch closures after a Learn activation. The Wheel has to be rotating (roll switch closed).

Stationary Mode

Transmitter enters mode after Factory Mode or Drive Mode - Wheel is not rotating - Vehicle is stopped.

Wake Mode

Transmit 8 words when sensor transitions from Stationary mode to Drive mode due to Roll switch closure

OFF STATE

Transmit 8 words when sensor transitions to Off mode. The TPS shall provide an Off State where no transmission occurs and pressure sampling occurs once every 30 seconds. Sensors shall leave the supplier's factory in the Off State and should remain in that condition until activated into another valid state.

Pressure Change Mode

If a rapid change is detected, the Transmitter will immediately transmit this change. This is Pursuant to Section 15.231(a)(4), alarm conditions apply