

Broadcast Message	Originating Module	Message Purpose
TPMS data	RTM	Communicates tire pressure information to the BCM

TPMS Function

NOTE: *When directed to train any TPMS sensors, use **only** the sensor training procedure outlined in this manual. Do not use the TPMS reset procedure outlined in the Owner's Literature as this procedure **does not** program new sensors to the module.*

The TPMS uses 4 valve stem mounted sensors to monitor tire pressure. These sensors wirelessly transmit tire pressure data to the RTM . The RTM is a radio signal receiver which collects the tire pressure data and sends the information to the BCM along a LIN . All TPMS functions are controlled by the BCM . The BCM compares the tire pressure data sent by the RTM with a programmed tire pressure. This programmed pressure is specified on the VC label and cannot be changed. If the actual tire pressure is less than the programmed tire pressure, the BCM sends a low tire pressure message to the IPC along the HS-CAN3 . The IPC responds by illuminating the TPMS warning indicator and displaying a low tire pressure message in the message center. The TPMS sensors are trained (calibrated) to the BCM which records the unique identifier for each TPMS sensor and records the location of each sensor based on the training (calibration) order. The BCM sends messages to the IPC by first sending the information along the HS-CAN1 to the GWM which then sends the information to the IPC along the HS-CAN3 .

The diagnostic scan tool is useful in diagnosing TPMS concerns and may be used to verify the accuracy of the tire pressure data transmitted by the TPMS sensors. This is accomplished by comparing the BCM tire pressure PID data to the actual tire pressure using a digital tire pressure gauge.

It is necessary to train (calibrate) the TPMS sensors after a tire rotation on vehicles with different front and rear tire pressures. The BCM does not automatically recognize the sensor identifiers have been moved to different positions and retains the original position information for each sensor.

Refer to: [Tire Pressure Monitoring System \(TPMS\) Sensor Location Calibration](#) (204-04B Tire Pressure Monitoring System (TPMS), General Procedures) .

Wheel Rotation and Sensor Training Techniques

Training known good sensors from another vehicle can help determine whether the concern is with a sensor or the RTM . This technique cannot help determine whether the concern is due to RFI as some RFI source could be preventing the RTM from receiving the tire pressure status from the known good sensors as well as the original sensors.

If the RTM in the suspect vehicle cannot train any of the original sensors and, likewise, cannot train known good sensors from another vehicle, then the concern is with the module or RFI and not with the