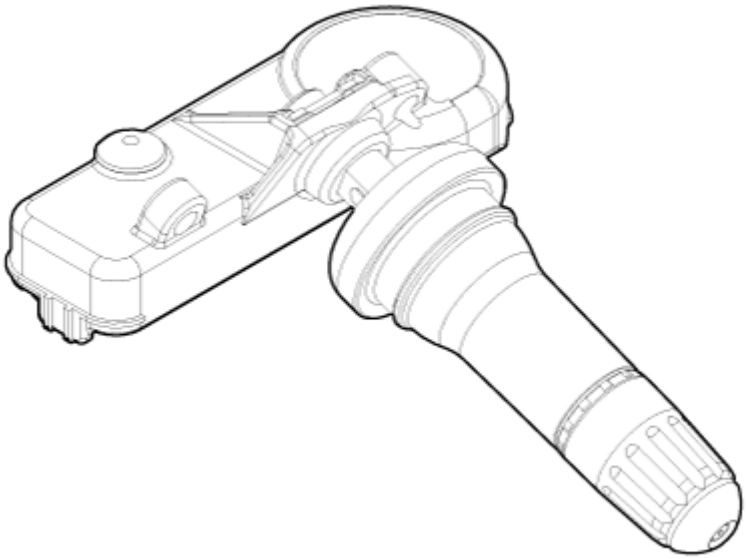
DESCRIPTION



1. Function
   - By detecting the pressure, temperature, acceleration, and battery condition, transmit information to ECU by a wireless RF.
   - Wheel location is recognized by comparing the Wheel Pulse of ECS (ABS) and acceleration values of the sensor (High Line).
2. Structure and features
   - There are four (4) sensors mounted in each wheel of the vehicle.
   - Frequency conversion type is FSK, and High Line is used in common.

TPMS Automatic Location Learning

- Wheel angular velocity of wheels are different from each other in the following cases:

1) Slip for each axis occurs differently.
2) Rotation radius (the radius of curve) for each wheel is different.
3) Tire wear, internal pressure, tire specifications, etc. for each tire are different.

- TPMS sensor is transmitted to RF signal at only specific phase (the angle of the tire) in the learning mode.
- TPMS receiver checks each tire phase (tire angle) information on receiving RF signals from the sensor.
- Every time RF signals from sensor IDs 1, 2, 3, and 4 are received, the ID with the highest correlation among the phase of each collected wheel is transmitted. (In other words, each time RF signal is received, the phase of the tire is transmitted to the most constant wheel.)
- TPMS sensor transmits the RF signal at intervals of 16 seconds in the learning mode.
- After stopping or parking for more than 19 minutes, automatic learning function in every driving position is performed.
- The sensor is converted to Parking Mode when stopped or parked for more than 15 minutes. When acceleration of over 4g (15-20km/h) is detected in Parking Mode, it is converted to First Block Mode.