Technical Description of the TPMS (Tire Pressure Monitoring System) TPM2 V

Part Numbers Covered:
ALM V ECU: A906 827 00 01
TPM2 V ECU: A906 540 00 01

Brief Description

A System block diagram for both ALM V ECU and TPM2 V ECU is shown in figure 1. The TPM2 V, ALM V ECU's (Electronic Control Unit) has the following sections:

	TPM2 V	ALM V
RF Section	x	x
CAN Tranceiver	x	
LIN Tranceiver	x	x
Microprocessor	x	x
Voltage Regulator	x	x

The system has been developed to monitor a vehicle's tyre pressures. An electronic unit inside each tyre, (referred to as the RTPMS transmitter) mounted to the valve stem, periodically measures actual tyre pressure. By means of RF communication, this pressure information is transmitted to ECU's (receivers) fitted in the car.

The ECU's filter this RF in the RF section and decodes the pressure information via the microprocessor.

The Voltage Regulator section is used to protect the ECU's against transients etc on the VBat ECU inputs. Wired communication is done throught the CAN / LIN bus of the automobile.

Mercedes V&LT ECU's - MODES OF OPERATION TABLE

ALM V ECU

Mode of Operation	Explanation
ON	The VLT_ALM will enter 'ON' mode once LIN comms have been established, LIN comms will be active when the VLT_ECU is in 'ON or 'COAST' mode
STOP	Cessation of LIN comms for more than 4 seconds will result in the VLT_ALM going into off or 'STOP mode