

TIRE PRESSURE MONITOR SYSTEMS

BMW - 5-Series (F07 & F10) - 2010-13

DESCRIPTION & OPERATION

MODEL COVERAGE

NOTE: Models in this article belong to the F07 and F10 groups.

Models Covered

Model	Year(s)
528i	2011-13
528xi	2012-13
535i	2011-13
535i GT	2010-13
535xi	2011-13
535xi GT	2011-13
550i	2011-13
550i GT	2010-13
550xi	2011-13
550xi GT	2010-13

TIRE PRESSURE MONITOR (TPM) SYSTEM

NOTE: If a tire pressure has been adjusted, or a wheel or tire has been replaced, the TPM system must be reinitialized. See **RESET PROCEDURES**.

NOTE: The current status of the TPMS can be displayed on the Control Display anytime, whether or not the system is active.

CAUTION: When a low inflation pressure is indicated, DSC (Dynamic Stability Control) is switched on, if necessary.

Vehicles are equipped with one of either of two types of tire pressure monitor system:

- **The Flat Tire Monitor (FTM) system**, which uses the ABS system to measure each tire's rolling radius changes and with it, the rotational speed of the wheels. Changes are detected and signaled as a flat tire. The Flat Tire Monitor (FTM) system does not use tire pressure sensors in the tires.

In the following situations, the system could be delayed or malfunction:

- When the system has not been initialized.

- When driving on snow-covered or slippery road surfaces.
- Sporty driving style: slip in the drive wheels, high lateral acceleration.
- When driving with snow chains.
- **The Tire Pressure Monitor (TPM) system**, uses tire pressure sensors installed in the tires to check the tire inflation pressure in the four mounted tires. The system indicates if the tire inflation pressure has dropped considerably in one or several tires.

The system is inactive and cannot indicate a flat tire:

- For a mounted wheel without TPM electronics.
- When the TPM is disturbed by other systems or devices with the same radio frequency.

TIRE PRESSURE MONITOR WARNING INDICATORS

The Flat Tire Monitor (FTM)

If a significant drop in tire pressure is detected, the system will turn on a yellow TPMS warning light, display a warning message on the iDrive Control Display, and sound an acoustic warning signal.

NOTE: **The current status of the Flat Tire Monitor can be displayed on the Control Display anytime, whether or not FTM is active.**

Tire Pressure Monitor (TPM)

CAUTION: The system is inactive and cannot display a flat tire if a wheel has been mounted without TPM electronics or if TPM experiences temporary interference from other systems or devices that use the same radio frequency.

When a flat tire is detected, the yellow TPMS warning lamp lights up, a message appears on the iDrive Control Display, and signal sounds. If a system malfunction occurs, the yellow warning light flashes and then lights up continuously. The tires are shown in gray on the Control Display and a message is displayed.

Status display on iDrive Control Display: The tire and system status is indicated by the color of the tires. TPM takes the fact that the tire pressure changes during driving into account. A correction is only required if the color of the TPM display indicates that it is necessary.

- **Wheels are Green:** The tire pressure matches the learned set state. "Status: TPM active" is displayed on the Control Display.
- **One Wheel is Yellow:** There is a flat tire or a major drop in inflation pressure in the indicated tire. A message appears on the Control Display.
- **All Wheels are Yellow:** There is a flat tire or a major drop in inflation pressure in several tires, system was not reset after a wheel change, or a flat tire in one or more tires while the system is being reset. A message appears on the Control Display.

- **Wheels are Gray:** The system cannot detect a flat tire. Reasons for this can include:
 - TPM is being reset.
 - Temporary interference due to systems or devices that use the same radio frequency.
 - System malfunction.

RESET PROCEDURES

NOTE: If a tire pressure has been adjusted, or a wheel or tire has been replaced, the TPM system must be reinitialized.

TIRE PRESSURE MONITOR SYSTEM REINITIALIZATION

CAUTION: When driving with snow chains, DO NOT reset the system.

The Flat Tire Monitor (FTM)

NOTE: The resetting process finishes during driving, which can be interrupted at any time. When driving resumes, resetting is continued automatically.

1. Set the tire pressure of all wheels to specification.
2. On iDrive Control Center, select "VEHICLE INFO", then "VEHICLE STATUS".
3. Select "RESET". The initialization menu appears.
4. Start the engine, but do not begin to drive.
5. Start the Initialization with "RESET".
6. Drive vehicle. The initialization is completed during driving. "Status: active" is displayed.

Tire Pressure Monitor (TPM)

CAUTION: The system is inactive and cannot display a flat tire if a wheel has been mounted without TPM electronics or if TPM experiences temporary interference from other systems or devices that use the same radio frequency.

NOTE: The reset process finishes during driving, which can be interrupted at any time. When driving resumes, resetting is continued automatically.

1. Set the tire pressure of all wheels to specification.
2. On iDrive Control Center, select "SETTINGS", then "TPM".
3. Select "Reset TPM".
4. Start the engine, but do not begin to drive.

5. Select "RESET".
6. Drive vehicle. The tires are shown in gray and "Resetting TPM..." is displayed.
7. After a few minutes of driving, the set tire inflation pressures in the tires are applied as the set values to be monitored. Resetting process is completed automatically while driving. When resetting is completed, the tires in the display turn to green and "TPM Active" is displayed.

NOTE: If there is a problem resetting and applying the tire inflation pressures, all tires are shown in yellow on the Control Display, and a message is displayed.

DISMOUNTING/MOUNTING PROCEDURES

CAUTION: The tire should be dismounted from the wheel using the tire changer manufacturer's instructions. Use the following information to avoid damage during the dismounting/mounting procedures.

NOTE: If a tire pressure has been adjusted, or a wheel or tire has been replaced, the TPM system must be reinitialized. See TIRE PRESSURE MONITOR SYSTEM REINITIALIZATION under RESET PROCEDURES.

TORQUE SPECIFICATIONS

SPECIFICATIONS TABLE

Component	Ft. Lbs. (N.m)
Wheel Nut	89 (120)
	INCH Lbs. (N.m)
Tire Pressure Sensor Nut	35 (4)