How to Disable TPMS (RDC) and Enable FTM on BMW F-Series

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Disclaimer

This guide is for informational purposes only. The author takes no responsibility for any damage, loss, or issues arising from following the procedure described here. Proceed at your own risk and ensure you have the proper technical knowledge and equipment before performing any coding or hardware modifications.

Introduction

This guide will walk you through the steps required to disable the Tire Pressure Monitoring System (TPMS/RDC) on BMW E/F-series vehicles and enable the Flat Tire Monitor (FTM) system instead. This is particularly useful if you want to run wheels without TPMS sensors, avoid the cost of replacement sensors, or prefer the FTM system used in earlier BMW platforms.

Goal

Disable TPMS and enable FTM by disconnecting the RDC module, removing the VO option 2VB, and performing the necessary coding steps to activate the alternative tire monitoring system.

Prerequisites

You will need the following:

- Laptop with Windows or Windows VM (Mac/Linux with virtualization).

- OBDII ENET or KDCAN cable (for E-series and some early F-series).

- BMW Standard Tools or E-Sys installed.

- DATEN or PSdZData files for your vehicle model.

- Basic knowledge of vehicle coding (this guide is not a full NCSexpert or E-Sys tutorial).

TPMS vs FTM – Background

TPMS (RDC) uses pressure sensors inside each wheel that wirelessly communicate with a central module. FTM, in contrast, relies on wheel speed sensors and compares rotational speeds to detect tire pressure differences. FTM will not detect a universal pressure drop across all four tires but is generally sufficient for most users, especially in motorsport or multi-rim setups.
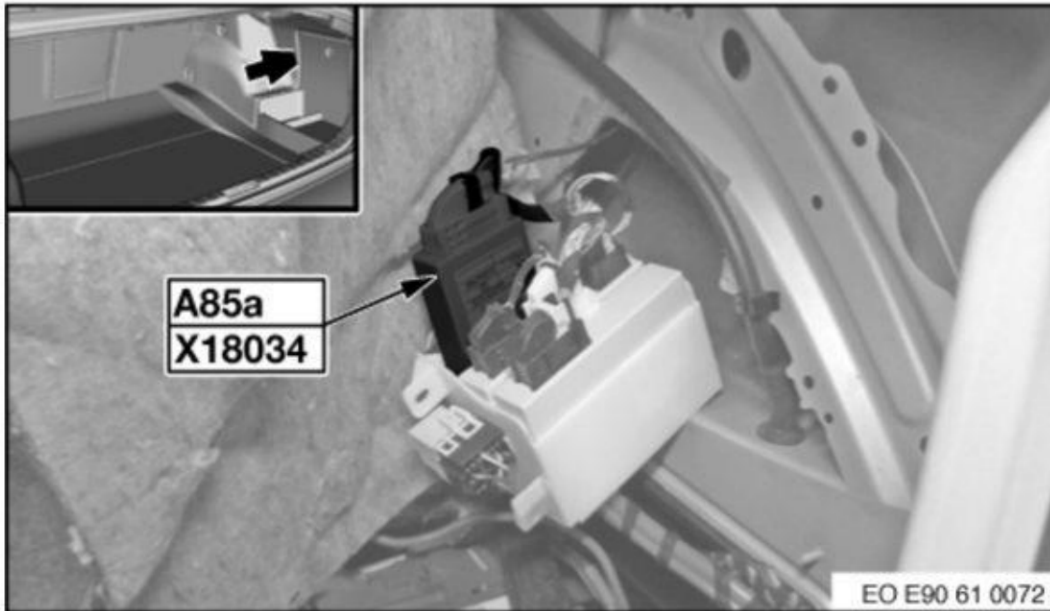
Step 1: Disconnect the RDC/TPMS Module

There are two ways to disable the TPMS hardware:

- Simply unplug the RDC module (recommended).

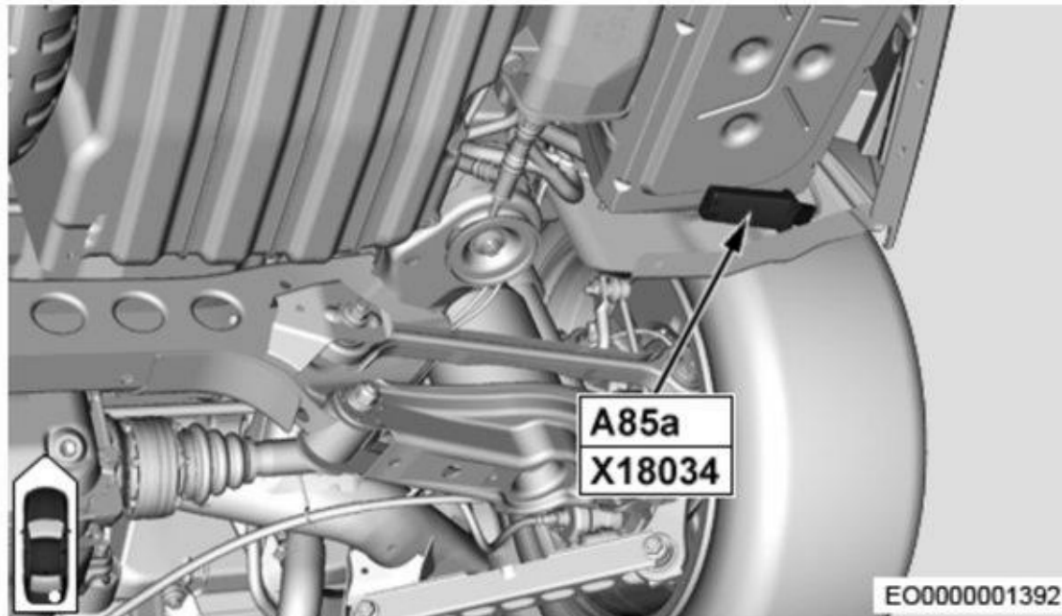- Alternatively, remove the fuse responsible for RDC (consult your fuse chart).

Up to 2009 (in the trunk):

A85a, X18034

EO E90 61 0072

After 2009:

A85a, X18034

EO0000001392

Step 2: Vehicle Order (VO) Coding

1. Remove option 2VB (TPMS) from the Vehicle Order.

2. Optionally, add option 265 to enable FTM (Flat Tire Monitoring).

3. Perform FA Write:

- On E-Series: write to CAS and FRM.

- On F-Series: perform standard FA Write (using E-Sys).

Step 3: Code Required Modules

VO code the following modules to apply the changes and activate the FTM system:

- KOMBI (instrument cluster)

- HU_CIC or HU_NBT (head unit)

- DSC (stability control)

- RDC (optional if still connected, to clear residual errors)

Result

Once complete, your F-series BMW will switch from TPMS to the FTM system. The iDrive will now show the FTM screen and prompt you to initialize the system after tire changes, instead of monitoring actual pressure values.

Conclusion

This modification is ideal for users with multiple sets of wheels or track setups where TPMS is unnecessary or undesirable. It simplifies the system by reverting to a proven technology used in earlier BMWs. Ensure all steps are completed carefully to avoid warning messages or improper operation.