How to Enable Cruise Control for a Retrofitted M-Sport Steering Wheel

(Enabling DCC and LIM Functionality)

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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. Perform the actions at your own risk and ensure you have the proper technical knowledge and equipment.

Introduction

This guide outlines the steps required to enable **cruise control (DCC)** after retrofitting an **M-Sport steering wheel** into a BMW. We will walk through the process of adding **VO coding** and making necessary manual adjustments to the **KOMBI** and **ICMQ** modules. The process also includes enabling the LIM function, which limits the speed when required.

Requirements and Tools

- **OBD ENET Cable**: To connect your vehicle to your laptop.
- **E-Sys Software**: For performing the necessary coding operations.
- **ISTA+ Software**: Optional, for clearing any errors after coding.
- **Basic Hand Tools**: If you need to physically retrofit the steering wheel.
- **Laptop** with the necessary coding software installed.

Step-by-Step Procedure

Step 1: VO Coding to Add Cruise Control (DCC)

The first step is to use **VO coding** to add the **544 option** for Dynamic Cruise Control (DCC). This tells the vehicle that it now supports cruise control, which is essential for the functionality of the retrofitted steering wheel.

1. **Connect your laptop** to the vehicle using the ENET cable and launch **E-Sys**.
2. **Load the FA (Vehicle Order)** from the vehicle.
3. **Add the "544" option** to the FA:
   - **544** is the code for Dynamic Cruise Control (DCC). This code tells the car that cruise control is now available.
4. **Save the modified FA**.
5. **Code the following modules**:
   - **DSC** (Dynamic Stability Control)
   - **KOMBI** (Instrument Cluster)
   - **ICMQ** (Integrated Control Module)
   - **HU_NBT** (Head Unit for navigation, audio, etc.)

Note: If your vehicle supports **VO coding**, this method should work flawlessly and enable DCC functionality without any additional manual adjustments.

Step 2: Enable LIM Function (Speed Limiting)

Once the VO coding is complete, you may want to activate the **LIM** function (speed limiter), which allows you to set a maximum speed limit for your vehicle. This requires making manual changes to the **KOMBI** and **ICMQ** modules.

1. **In E-Sys, read and activate the KOMBI module**:
   - Go to **KOMBI** (Instrument Cluster).
   - Locate the following parameter and set it to active:
     - `3003 SLD_ENABLE` → Change from `nicht_aktiv` to `aktiv`
2. **Activate LIM in the ICMQ Module**:
   - In E-Sys, read and activate the **ICMQ** module:
     - `3000 C_SLD_FUNKTION` → Change from `nicht_aktiv` to `aktiv`
     - `3000 C_Umschaltung_ACC_DCC` → Change from `unterdruecken` to `zugelassen`
3. **Code the ICMQ and KOMBI modules** after making these changes.

Final Steps and Checks

After you've completed the coding for both the **DCC** and **LIM** functions, it's important to run a few final checks:

1. **Test the Cruise Control**:
   - Go for a short test drive to ensure that the cruise control system is functioning properly.
   - Engage the cruise control by pressing the appropriate button on the retrofitted M-Sport steering wheel.
2. **Test the LIM Function**:
   - Engage the speed limiter and verify that the car does not exceed the set speed.
3. **Clear Any Errors**:
   - After coding, you may encounter some fault codes due to the new configuration. Use

ISTA+ to clear any error codes that may have appeared during the coding process.

Conclusion

By following this guide, you have successfully enabled **cruise control** and the **LIM function** on your BMW after retrofitting an M-Sport steering wheel. This process ensures that your vehicle now fully supports cruise control, allowing for a safer and more convenient driving experience.