ADAS Plug-and-Play Kit Installation Guide OEM: Tata

1. Introduction

This guide provides step-by-step installation instructions for the ADAS Plug-and-Play Kit in Tata vehicles. The ADAS system enhances vehicle safety with advanced driver assistance features such as lane departure warning, collision avoidance, and adaptive cruise control.

2. Tools & Equipment Needed

- Screwdrivers, wrenches, and wire cutters
- Torque wrench
- OBD-II adapter (if required)
- Diagnostic tool for calibration
- Insulation tape and zip ties for secure wiring

3. Step-by-Step Installation

- Step 1: Disconnect the battery for safety.
- Step 2: Mount the ECU under the dashboard near the central console.
- Step 3: Install front and rear sensors at the recommended locations.
- Step 4: Connect the ADAS ECU to the CAN/LIN bus and OBD-II port.
- Step 5: Power the ADAS system using the vehicle's 12V power source.
- Step 6: Perform calibration using the diagnostic tool.
- Step 7: Conduct a road test to verify the system's functionality.

4. Calibration Process

Calibration is necessary to ensure accurate sensor readings. Use the provided diagnostic tool and follow on-screen instructions to calibrate the system. Ensure the vehicle is on a flat surface during calibration.

5. Troubleshooting Guide

- If the ECU is not detected, check the OBD-II and CAN/LIN connections.
- If a sensor is not responding, inspect the wiring and perform a reset.
- If the calibration fails, ensure the sensors are properly aligned.

6. Compliance & Certification

This ADAS system is compliant with ISO 26262 and ASIL standards for automotive safety. Ensure all installation steps are followed as per OEM guidelines.

7. Maintenance & Updates

Regularly clean sensors and check for firmware updates to ensure optimal performance. Recalibrate sensors after any major repair or replacement.