

Audi 8N0906018AL

Audi 8N0906018AL Engine Control Module (ECM) User Manual for 2002 TT

Model: 8N0906018AL

1. PRODUCT OVERVIEW

This manual provides essential information for the proper handling, installation, and maintenance of the Audi 8N0906018AL Engine Control Module (ECM). This genuine Audi part is designed to fit specific 2002 Audi TT vehicles, ensuring optimal engine performance and compliance with vehicle specifications. The ECM, also known as an Engine Control Unit (ECU) or computer module, is a critical component responsible for managing various engine functions.



Figure 1: Audi 8N0906018AL Engine Control Module. Key markings visible include the Audi rings logo, the part number

2. SAFETY INFORMATION

Always observe the following safety precautions when working with automotive electronic components:

- **Disconnect the vehicle's battery:** Before beginning any installation or removal procedure, always disconnect the negative terminal of the vehicle's battery to prevent electrical shock or damage to electronic systems.
- **Professional installation recommended:** Installation of an ECM requires specialized knowledge and tools. It is highly recommended that installation be performed by a qualified automotive technician.
- **Electrostatic Discharge (ESD) precautions:** Electronic components are sensitive to static electricity. Handle the ECM by its casing, avoiding contact with electrical pins. Use appropriate ESD protection if available.
- **Avoid physical damage:** Do not drop, strike, or expose the ECM to excessive force or moisture.
- **Verify compatibility:** Ensure the part number matches your vehicle's requirements before installation.

3. SETUP AND INSTALLATION

The installation of an Engine Control Module typically involves several steps and may require vehicle-specific programming. It is strongly advised that this procedure be carried out by a certified Audi technician or a professional automotive service center.

3.1 Pre-Installation Checks

- **Verify Part Number:** Confirm that the part number 8N0906018AL matches the original ECM being replaced and is compatible with your 2002 Audi TT.
- **Inspect for Damage:** Visually inspect the new ECM for any signs of shipping damage.

3.2 Installation Procedure (Professional Installation Recommended)

1. **Disconnect Battery:** Disconnect the negative terminal of the vehicle's battery.
2. **Locate Old ECM:** Identify the location of the existing ECM in your vehicle (typically under the hood or dashboard).
3. **Disconnect Wiring:** Carefully disconnect all electrical connectors from the old ECM. Note their positions if necessary.
4. **Remove Old ECM:** Unmount and remove the old ECM from its bracket.
5. **Install New ECM:** Mount the new 8N0906018AL ECM into the bracket.
6. **Connect Wiring:** Reconnect all electrical connectors to the new ECM, ensuring they are securely latched.
7. **Reconnect Battery:** Reconnect the negative terminal of the vehicle's battery.
8. **Programming (Crucial Step):** The new ECM will likely require programming or coding to match your vehicle's immobilizer system and other specific configurations. This step requires specialized diagnostic equipment and software, typically performed by an Audi dealership or a qualified independent specialist. Failure to program the ECM correctly will prevent the vehicle from starting or operating properly.

4. OPERATING INSTRUCTIONS

Once properly installed and programmed, the Audi 8N0906018AL ECM operates automatically as an integral part of your vehicle's engine management system. It continuously monitors various sensors and actuators to optimize fuel injection, ignition timing, emissions control, and other critical engine parameters. No direct user interaction is required for its operation.

If the vehicle exhibits unusual behavior after ECM replacement, refer to the Troubleshooting section or consult a professional technician.

5. MAINTENANCE

The Audi 8N0906018AL ECM is a sealed electronic unit and contains no user-serviceable parts. Regular maintenance is not required for the unit itself. To ensure its longevity and proper function:

- Keep the surrounding area clean and free from excessive dust or debris.
- Ensure the ECM remains dry and protected from moisture or water ingress.
- Avoid exposing the unit to extreme temperatures beyond the vehicle's normal operating range.
- Periodically check the electrical connectors for corrosion or looseness.

6. TROUBLESHOOTING

If you experience issues after installing the new ECM, consider the following common troubleshooting steps. Due to the complexity of engine control systems, professional diagnosis is often necessary.

- **Engine Warning Light (Check Engine Light):** If the check engine light illuminates, it indicates a fault detected by the ECM. A diagnostic scan tool is required to retrieve Diagnostic Trouble Codes (DTCs) to identify the specific issue.
- **No Start / Cranks but No Start:**
 - Verify battery connections are secure and the battery is charged.
 - Confirm all ECM electrical connectors are fully seated.
 - Ensure the ECM has been correctly programmed to the vehicle's immobilizer system. This is a common cause for a no-start condition after ECM replacement.
- **Poor Engine Performance (Rough Idling, Misfires, Loss of Power):** These symptoms can indicate various issues, including incorrect ECM programming, faulty sensors, or other engine component failures. A professional diagnostic scan is essential.
- **Communication Issues:** If a scan tool cannot communicate with the ECM, check power and ground connections to the ECM, as well as the vehicle's data bus (CAN bus) wiring.

Recommendation: For any persistent issues, consult a qualified Audi service technician. They possess the necessary diagnostic tools and expertise to accurately diagnose and resolve complex ECM-related problems.

7. SPECIFICATIONS

Part Number:	8N0906018AL
Manufacturer:	Audi
Compatible Model:	2002 Audi TT
Bosch Part Number:	0 261 207 419
Manufacturing Origin:	Germany
Fuel Type:	Benzin (Gasoline)
Motronic Version:	ME7.5 (MOTRONIC 01-07-10)
ASIN:	B00LLDLRA2

UPC:

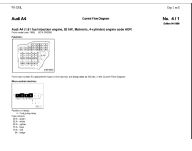


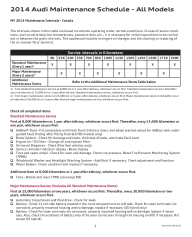
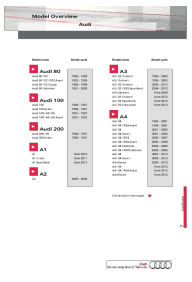
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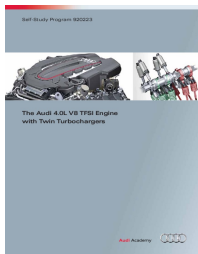
8. WARRANTY AND SUPPORT

For information regarding the warranty of your Audi 8N0906018AL Engine Control Module, please refer to the terms and conditions provided by your original point of purchase or contact an authorized Audi dealership directly. Warranty coverage typically applies to manufacturing defects and does not cover damage resulting from improper installation, misuse, or external factors.

For technical support, service, or professional installation assistance, it is recommended to contact a certified Audi service center or a qualified automotive technician specializing in Audi vehicles.

Related Documents - 8N0906018AL

	Audi A4 (1.8L ADR Engine) Current Flow Diagrams Detailed current flow diagrams and electrical component descriptions for the Audi A4 1.8L ADR engine (92 kW, Motronic), covering fuse boxes, control units, sensors, and wiring harness connections from model year 1998.
	Audi A6 CAJA Engine Current Flow Diagram Technical current flow diagrams for the Audi A6 3.0 I (engine code CAJA, 213 kW Motronic) from September 2008, detailing electrical circuits, components, and fault-finding information.
	Audi A3 1997 Workshop Manual: Motronic Injection & Ignition System Comprehensive workshop manual for the Audi A3 1997 model, focusing on the Motronic injection and ignition system for 4-cylinder turbo engines (engine codes ARY, AUM, AUQ, ARX). Includes detailed diagnostics and repair procedures.
	2014 Audi Maintenance Schedule Canada: Intervals and Service Items Detailed maintenance schedule for all 2014 Audi models in Canada, outlining standard and major service intervals, required maintenance tasks, and specific model applications. Includes information on engine oil changes, filter replacements, brake system checks, and more.
	Audi Model Overview: A Comprehensive Guide Explore the Audi model overview, detailing various Audi models and their production cycles. This guide provides essential information for understanding Audi vehicle history and specifications.



[Audi 4.0L V8 TFSI Engine with Twin Turbochargers: Technical Overview](#)

Explore the advanced technology of the Audi 4.0L V8 TFSI engine with twin turbochargers. This document provides an in-depth look at its design, operation, and key features, including cylinder deactivation and the HSI arrangement.