

00 - GENERAL, TECHNICAL DATA

ENGINE NUMBER

Engine Number

NOTE:

- A sticker with "engine code" and "serial number" is affixed to cylinder head cover at right.
- The engine code is also located on the vehicle data plate.
- The engine number is only visible after a work step.

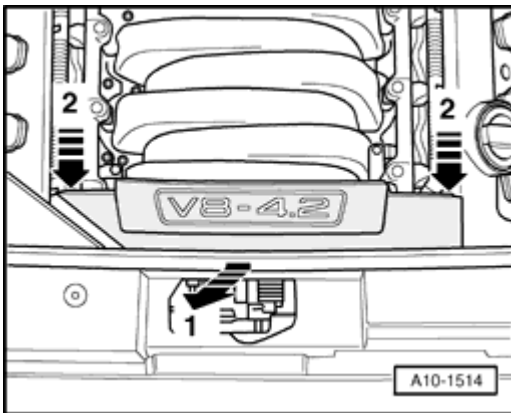


Fig. 1: Removing Front Engine Cover

Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Remove front engine cover - **arrow 1** - and - **arrows 2** -.

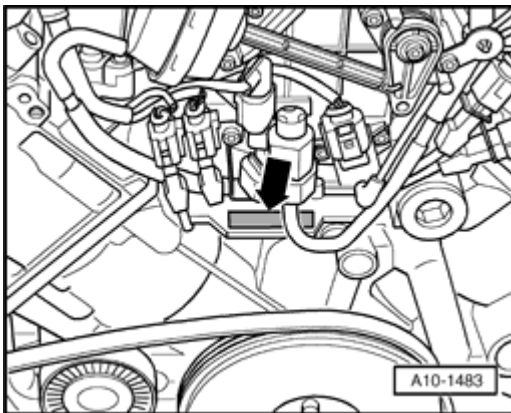


Fig. 2: Locating "Engine Code" And "Serial Number" At Front On Cylinder Block At Top

Courtesy of VOLKSWAGEN UNITED STATES, INC.

Engine number ("engine code" and "serial number") is located at front on cylinder block at top - **arrow** -.

Engine data

2006 Audi A6 Quattro

ENGINE 4.2 Liter V8 4V Engine Mechanical, Engine Code(s): BAT, BNK

Code letters		BNK
Displacement	ltr.	4.163
Output	kW at 1/rpm	246/6500
Torque	Nm at RPM	410/3500
Bore	dia. mm	84.5
Stroke	mm	92.8
Compression ratio		11.5
RON		98 * See note
Fuel injection and ignition system		MPI Bosch Motronic
Ignition sequence		1-5-4-8-6-3-7-2
Knock control		Yes
Exhaust gas recirculation		No
Variable intake manifold		Yes
Variable valve timing		Yes
Secondary air injection (AIR)		Yes

* Super unleaded RON 95 is permissible, but with reduced power.

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Fuel supply system, checking for leaks

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- Let engine run a few minutes at average RPM.
- Switch off ignition.
- Check entire fuel supply system for leaks.
- If there are leaks in spite of correct tightening torque, the corresponding component must be replaced.
- Afterwards, perform test drive, fully depressing accelerator pedal at least once.
- Then, check high pressure areas for leaks again.

SAFETY PRECAUTIONS

Safety Precautions

Note the following when working on the fuel system:

CAUTION: There is a risk of injury because the fuel is under high pressure.

- To reduce pressure in fuel system, lay a clean cloth around the connector and carefully loosen connector.

To prevent personal injury and damage to the injection and ignition system, observe the following:

- The ignition must be switched off before connecting or disconnecting injection and ignition system wiring or tester cables.
- Only clean engine with ignition switched off.
- If electrical connectors were disconnected, faults are saved in ECM:
- Connect Vehicle Diagnosis, Testing and Information System VAS 5051B.
- Start "Guided Functions" operating mode.
- Generate readiness code in ECM.

CAUTION: Risk of destroying electrical components when battery is disconnected.

- Observe measures when disconnecting battery.
- Only disconnect battery with ignition switched off.

- Disconnect battery --> 27 - STARTER, GENERATOR, CRUISE CONTROL .

Note the following when working on the cooling system:

CAUTION: Risk of scalding due to hot steam and hot coolant.

- When the engine is warm the cooling system is under pressure.
- To reduce pressure, cover coolant reservoir cap with cloth and

carefully open.

If it is necessary to use testing and measuring devices on road tests, observe the following:

CAUTION: Risk of accident due to distraction and testing and measuring instruments not be sufficiently secured.

Risk of passenger airbag deploying in an accident.

- **Operating testing and measuring equipment while driving creates a distraction.**
- **There is an increased risk of injury due to unsecured testing and measuring equipment.**
- **Always secure testers on the rear seat with a strap and have a second person on the rear seat operate them.**

GENERAL REPAIR NOTES

Rules of cleanliness for performing work on fuel injection system

Even minor contaminations can lead to malfunctions in the fuel injection system. Therefore when working on the fuel supply/injection system, pay careful attention to the following rules of cleanliness:

- Before loosening, connections and surrounding areas must be cleaned thoroughly with engine or brake cleaner, and then cleaned area must be dried completely.
- Plug open lines and connections immediately with appropriate protective caps.
- Place parts that have been removed on a clean surface and cover them. Use lint-free cloths.
- Only install clean components: Only unpack replacement parts immediately prior to installation. Do not use parts that have been stored unpackaged (e.g. in tool boxes etc.).
- Carefully cover over opened components or seal, if repairs are not performed immediately.
- When system is open: Do not work with compressed air. Do not move vehicle unless absolutely necessary.

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Contact corrosion!

Contact corrosion can occur if appropriate connecting elements (bolts, nuts, washers, etc.) are not used.

For this reason, only install connecting elements that are treated with a special coating.

Also, rubber or plastic parts and adhesive consist of non-conductive materials.

If there are doubts about the suitability of parts, generally use new parts .

NOTE:

- **Only original replacement parts are recommended, they are checked and compatible with aluminum.**
- **Audi accessories are recommended.**
- **Damage due to contact corrosion is not covered by warranty.**