



Audi

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Important! Technical Bulletin

Subject: **Engine, Oil Pressure Low**

Group: **17**

Model(s): **A4 (Eng. Codes AEB, AMB,
ATW & AWM)
Cabriolet (Eng. Code AMB)**

**1997 ▶ 2004
2003 ▶ 2004**

Number: **04-03**

Date: **Aug. 05, 2004**

Condition

- ◆ Low engine oil pressure light is ON

Service

- ◆ Preliminary diagnosis reveals actual low engine oil pressure condition (engine oil level is OK and oil pressure switch, instrument cluster, wiring harness, etc. are OK).

- Remove valve cover.
- Inspect camshafts bearings (Remove only one cap at a time) for damage.

If ALL camshaft bearings are OK (NOT damaged):

- Engine must be repaired as described in “**Engine repair guidelines**” section.

If one or more camshaft bearings are damaged:

- Complete engine must be replaced as described in “**Engine replacement guidelines**” section.

Note:

Requires FOM authorization for engine replacement.

Engine repair guidelines:

If no camshaft bearings are damaged:

- Inspect camshaft chain tensioner for visible damage on the pads in contact with the chain. Replace tensioner as necessary.
- Remove oil pan.
- Inspect for oil sludge or solid deposits in oil pan, valve cover and around camshafts.



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If oil sludge or heavy oil deposits are NOT present:

- Inspect engine oil pump suction line strainer for obstruction (use background lighting if necessary).

If engine oil pump suction line strainer is NOT obstructed:

- ◆ Further diagnosis is required to find the cause of low engine oil pressure.
- Repair as necessary (please see AESIS for more information).

If oil sludge or substantial oil deposits are found:

- Remove as much of these deposits from the engine as possible using mechanical methods such as scraping (DO NOT leave loose oil deposits “clumps” in engine)

Note:

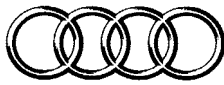
ONLY the valve cover and oil pan may be cleaned with chemical products.

DO NOT attempt to clean the engine with chemical flushes or similar products.

Ensure that crankcase vent system port on the valve cover is open and free of restrictions. Methods for cleaning such as hot tank, caustic bath and ultrasonic may be necessary to ensure complete cleaning of this recessed port. If port is restricted and cleaning methods are not available, it may be necessary to replace the valve cover.

If engine oil pump suction line strainer is blocked by solid particles, or oil sludge or heavy oil deposits are found inside the engine:

- Replace Oil Pump suction line (or oil pump for AEB and ATW engines).
- Replace oil feed and oil return lines to turbocharger.



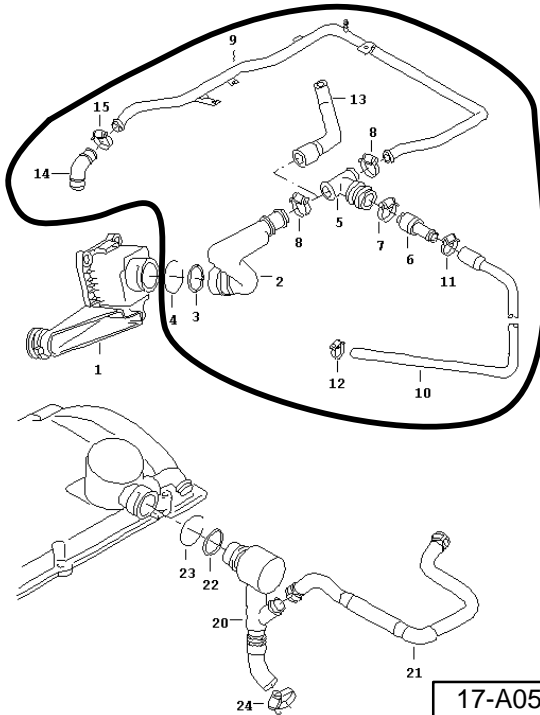
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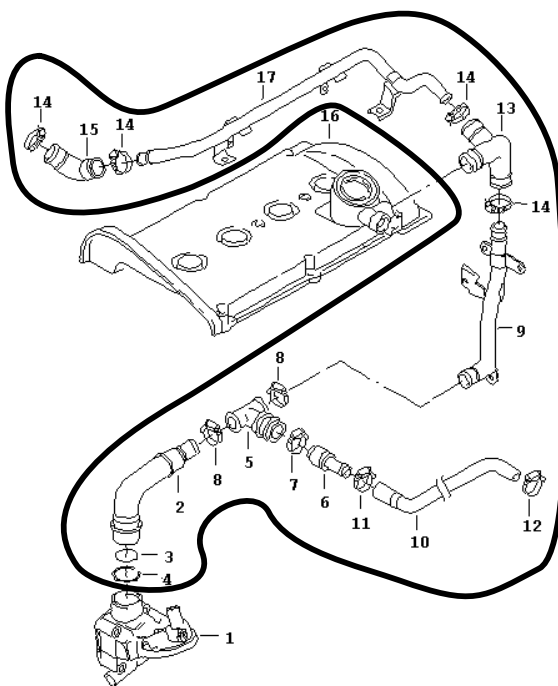
AEB, ATW



Engine code AEB, ATW

- Replace crankcase ventilation system hoses and pressure regulating valve depending on engine code (see circled items and compare to latest illustration on ETKA).
- ◆ Replace O-rings, clamps and miscellaneous fasteners only as necessary.

AMB ► VIN:8E 3 040000, AWM



Engine code AMB ► VIN:8E 3 040000, AWM

- Replace crankcase ventilation system hoses and pressure regulating valve depending on engine code (see circled items and compare to latest illustration on ETKA).
- ◆ Replace O-rings, clamps and miscellaneous fasteners only as necessary.



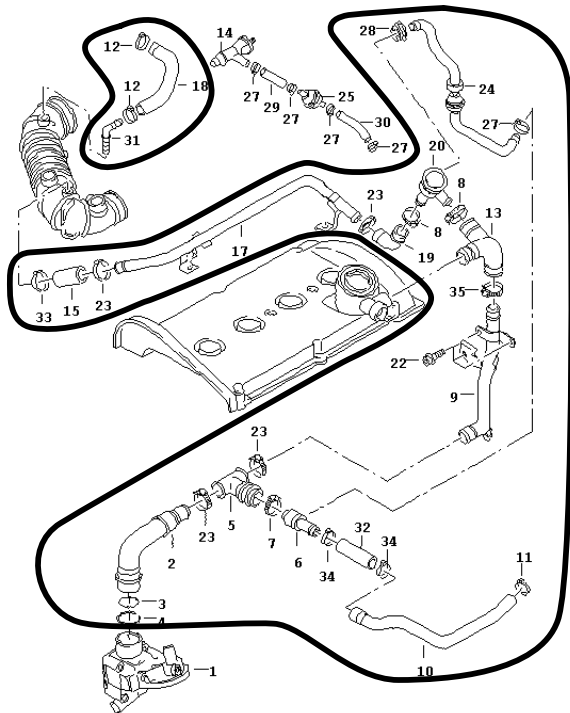
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AMB VIN:8E 3 040001 ➤

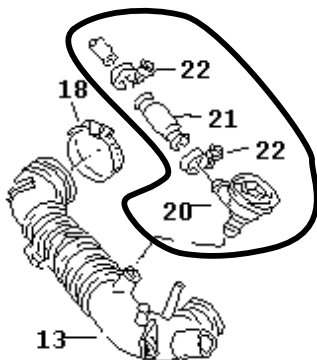


17-A056

Engine code AMB VIN:8E 3 040001 ➤

- Replace crankcase ventilation system hoses and pressure regulating valve depending on engine code (see circled items and compare to latest illustration on ETKA).
- ◆ Replace O-rings, clamps and miscellaneous fasteners only as necessary.

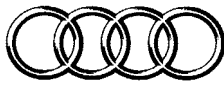
**AEB, ATW, AWM,
(AMB ➤ VIN: 8E 3 040000)**



17-A057

Engine code AEB, ATW, AWM, (AMB ➤ VIN: 8E 3 040000)

- Replace crankcase ventilation valve and hoses.
- ◆ Replace O-rings, clamps and miscellaneous fasteners only as necessary.

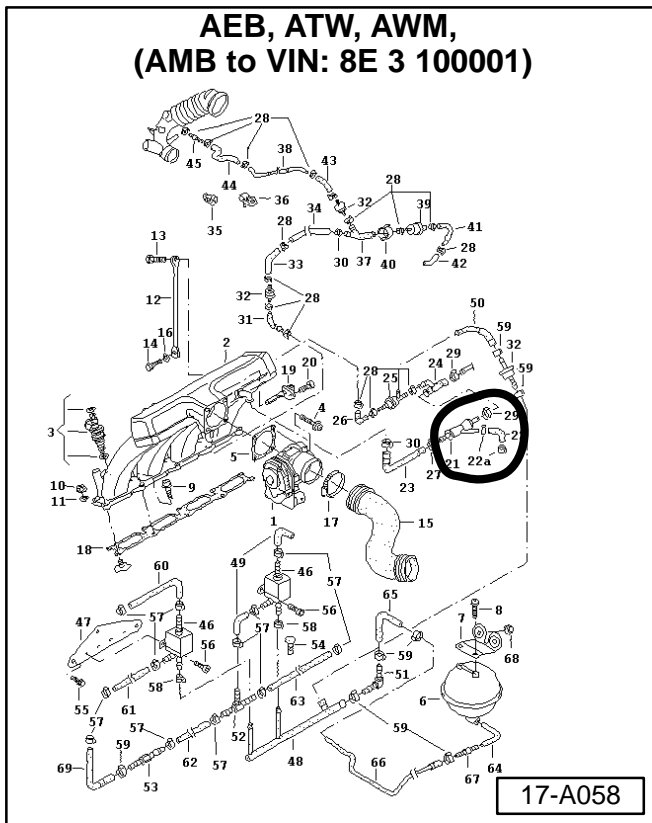


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**AEB, ATW, AWM,
(AMB to VIN: 8E 3 100001)**



◆ For vehicles to MY03 VIN: 8E3100000:

- ◀ – Inspect and replace brake booster suction jet pump (circled) if clogged.
- ◆ Replace O-rings, clamps and miscellaneous fasteners only as necessary.

- Visually inspect interior of oil filter holder through crankcase ventilation system line opening (at top of holder), if excessive oil deposits are found, clean as necessary.
- Replace oil filter.
- Install oil pan, but leave engine in “service position”.
- Fill engine with fresh engine oil.

CAUTION!

For following repair steps:

The engine must be able to run for an extended period of time, but it is not yet necessary to restore the vehicle in full driving conditions.

Ensure Engine and transmission are adequately supported!



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- ◆ With vehicle on a hoist, transmission in neutral and wheels raised off the ground.
- Start engine and verify that appropriate engine oil pressure is obtained (see AESIS for specifications).

CAUTION!

Ensure adequate ventilation to engine and unrestricted airflow to coolant radiator.

- Run engine at approx. 3000 RPM for 30 minutes (Tool VAG 1788/10 can be used for this purpose).

CAUTION!

DO NOT leave engine running unattended!

Monitor engine oil pressure throughout procedure.

- ◆ During this time the engine oil must reach a minimum temperature of 90°C (194°F).
- Switch Ignition OFF.
- ◆ With engine still hot.
- Immediately drain engine oil.
- ◆ Allow engine to cool to safely continue.
- Remove oil pan and remove/clean any solid oil residues as necessary.
- Inspect engine oil pump suction line strainer for obstruction.

If engine oil pump suction line strainer is blocked or partially blocked by solid particles:

- Clean or replace suction line as necessary.
- Replace oil filter again.
- Install oil pan, fill engine with fresh oil.
- Restore engine / vehicle to driving conditions.



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Engine replacement guidelines:

If at least ONE camshaft bearing is damaged:

- Please contact your area FOM for engine replacement authorization.

With authorization obtained:

- Replace complete engine (head and cylinder block) using factory remanufactured parts in accordance to warranty policy.
- Replace turbocharger.
- Replace oil feed and oil return lines of turbocharger.
- Replace crankcase ventilation system hoses and pressure regulating valve as described beginning page 3 (depending on engine type).
- For vehicles up to MY03 VIN: 8E 3 100 000
Also replace the brake booster suction jet pump if clogged (see page 5).
- Install new oil filter holder.
- Install new oil cooler.
- Install new oil filter, fill engine with fresh oil and restore engine / vehicle to driving conditions.



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WARRANTY:

When **ENGINE REPAIR** procedure applies to vehicles within the applicable Warranty, use the following:

Claim Type:	W2
Damage Code:	S617 10 AUN 1
Labor Operation:	S617 8888 900 TU

Includes all operations necessary to complete described repairs

Input "As per Technical Bulletin A170403" in comment section of warranty claim.

When **ENGINE REPLACEMENT** procedure applies to vehicles within the applicable Warranty, use the following:

Claim Type:	W2
Damage Code:	S617 10 AUN 2
Labor Operation:	S617 8889 1200 TU

Includes all operations necessary to complete described repairs

Input "As per Technical Bulletin A170403" in comment section of warranty claim.