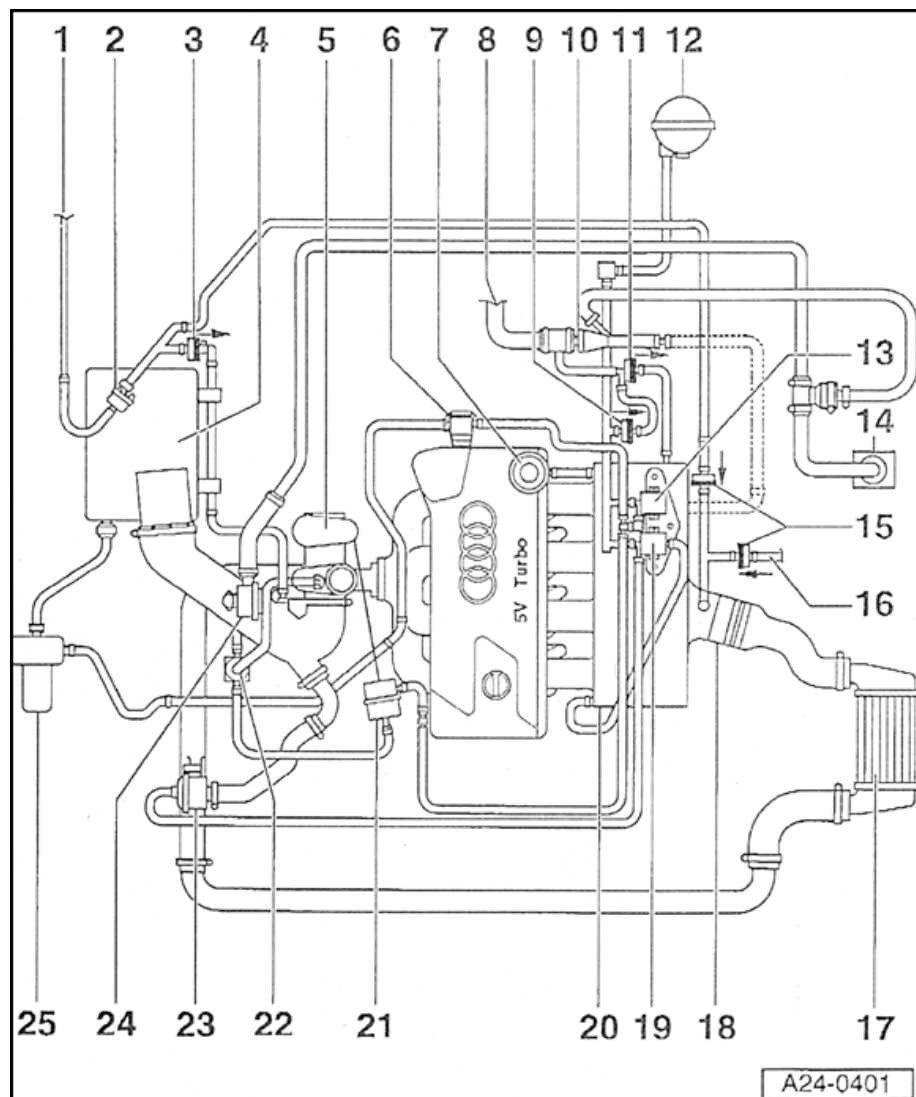


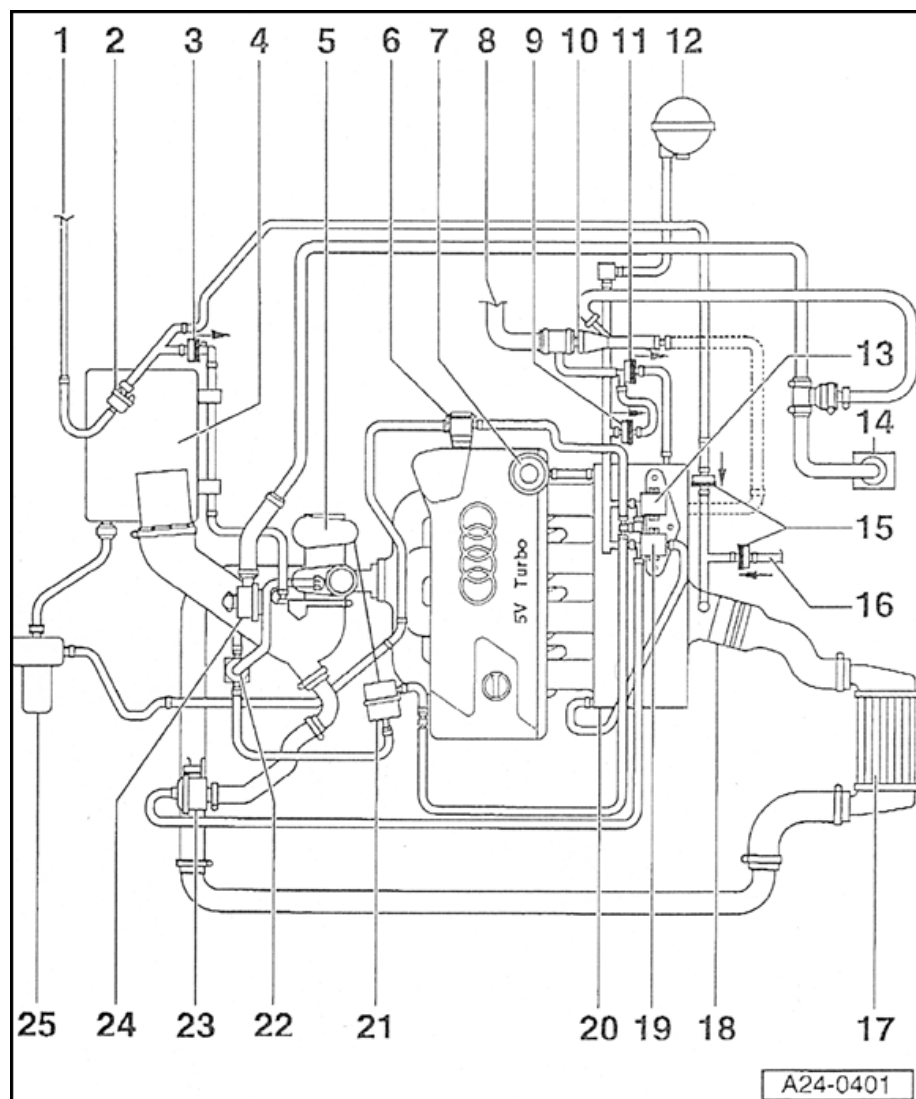
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## Vacuum diagram

- 1 - To EVAP canister**
- 2 - Evaporative Emission (EVAP) canister purge regulator valve -N80-**
- 3 - Check-valve for EVAP canister**
  - ◆ between EVAP canister and intake manifold before turbocharger
  - ◆ Installation position (light/dark side): Arrow points in direction of flow, as shown in figure.
- 4 - Air cleaner housing**
  - ◆ with Mass Air Flow (MAF) sensor -G70-
- 5 - Turbocharger**
- 6 - Combination valve for secondary air injection (AIR)**

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**7 - Fuel pressure regulator**

**8 - To brake booster**

**9 - Check-valve**

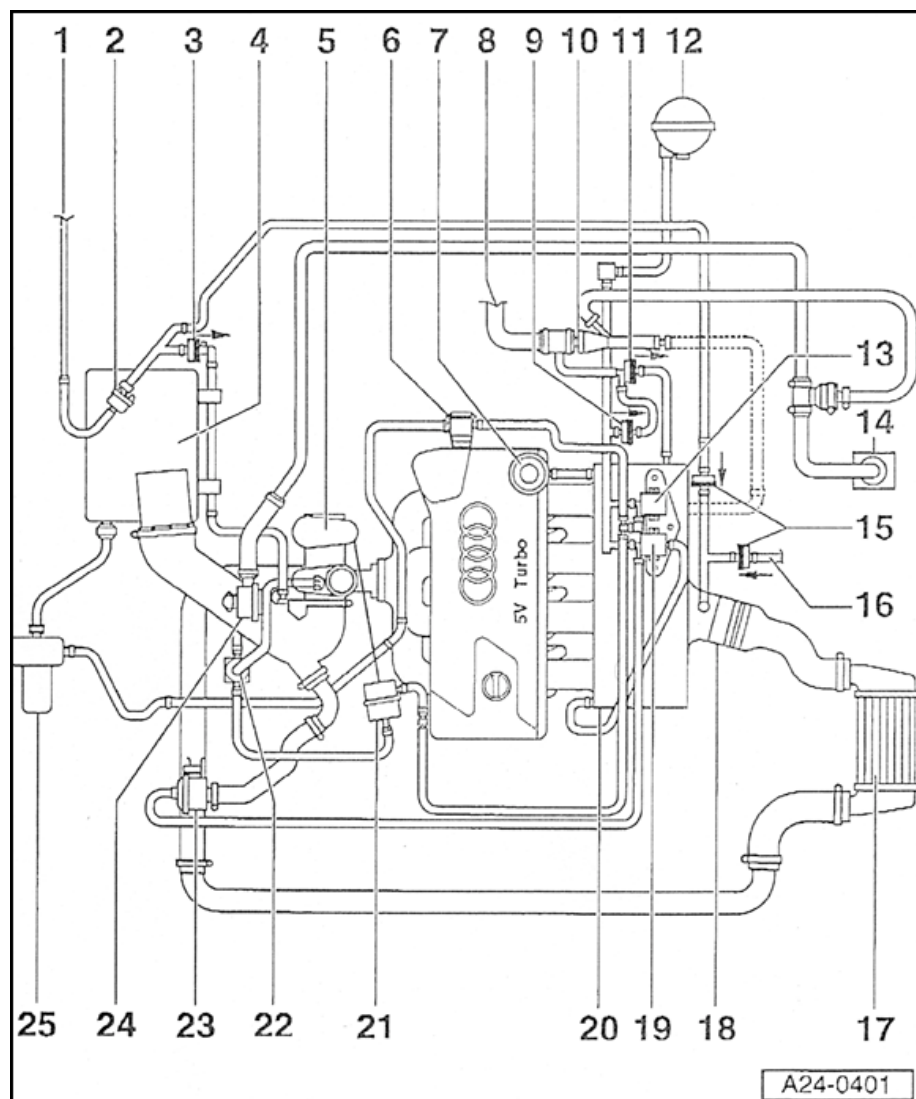
- ◆ Between brake booster and intake manifold
- ◆ Installation position (light/dark side): Arrow points in direction of flow, as shown in figure.

**10 - Vacuum booster**

**11 - Check-valve**

- ◆ Between brake booster and intake manifold
- ◆ Installation position (light/dark side): Arrow points in direction of flow, as shown in figure.

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**12 - Vacuum reservoir**

- ◆ Installation location: Under wheel housing liner in front left wheel housing

**13 - Secondary Air Injection (AIR) solenoid valve-N112-**

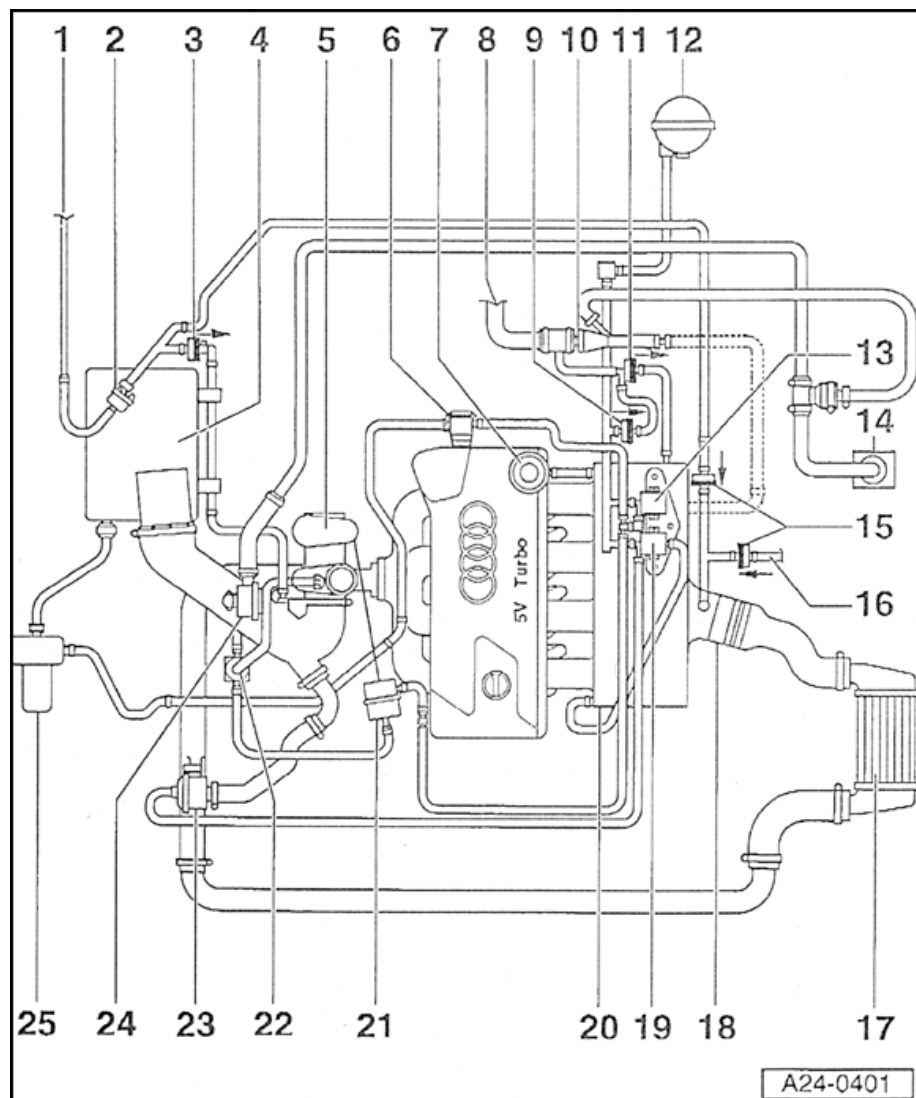
- ◆ Installation location: Below intake manifold

**14 - Crankcase ventilation****15 - Check-valve**

- ◆ between EVAP canister and intake manifold
- ◆ between Leak Detection Pump (LDP) and intake manifold
- ◆ Installation position (light/dark side): Arrow points in direction of flow, as shown in figure.

**16 - to Leak Detection Pump (LDP) -V144-**

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**17 - Charge air cooler**

- ◆ with charge air pressure sensor -G31-

**18 - Throttle valve control module -J338-****19 - Recirculating valve for turbocharger- N249-**

- ◆ Installation location: Below intake manifold

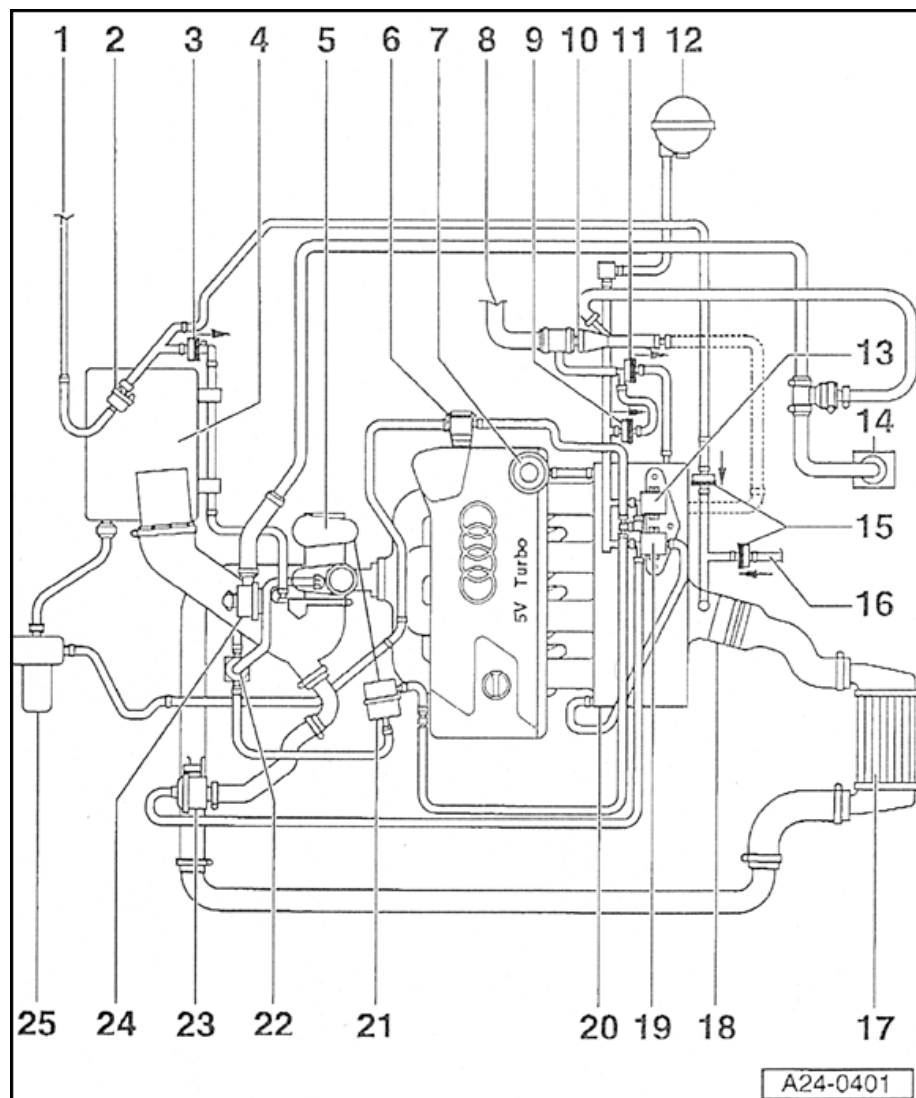
**20 - Intake manifold**

- ◆ with Intake Air Temperature (IAT) sensor - G42-

**21 - Vacuum diaphragm for boost pressure regulation**

- ◆ When the combination valve is opened, the mechanical boost pressure regulation valve in the turbocharger is opened and secondary air is thereby channeled past the turbocharger directly to the catalytic converter

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- 22 - Wastegate bypass regulator valve -N75-
- 23 - Mechanical recirculation valve
- 24 - Pressure control valve for crankshaft housing ventilation
- 25 - Secondary Air Injection (AIR) pump motor-V101-