

1 - Ignition coils with output stages, cylinder bank 1

- ◆ Cylinder 1 - N70-
- ◆ Cylinder 2 - N127-
- ◆ Cylinder 3 - N291
- ◆ Cylinder 4 - N292-

2 - Mechanical combination valve for secondary air system

- ◆ Cylinder bank 1

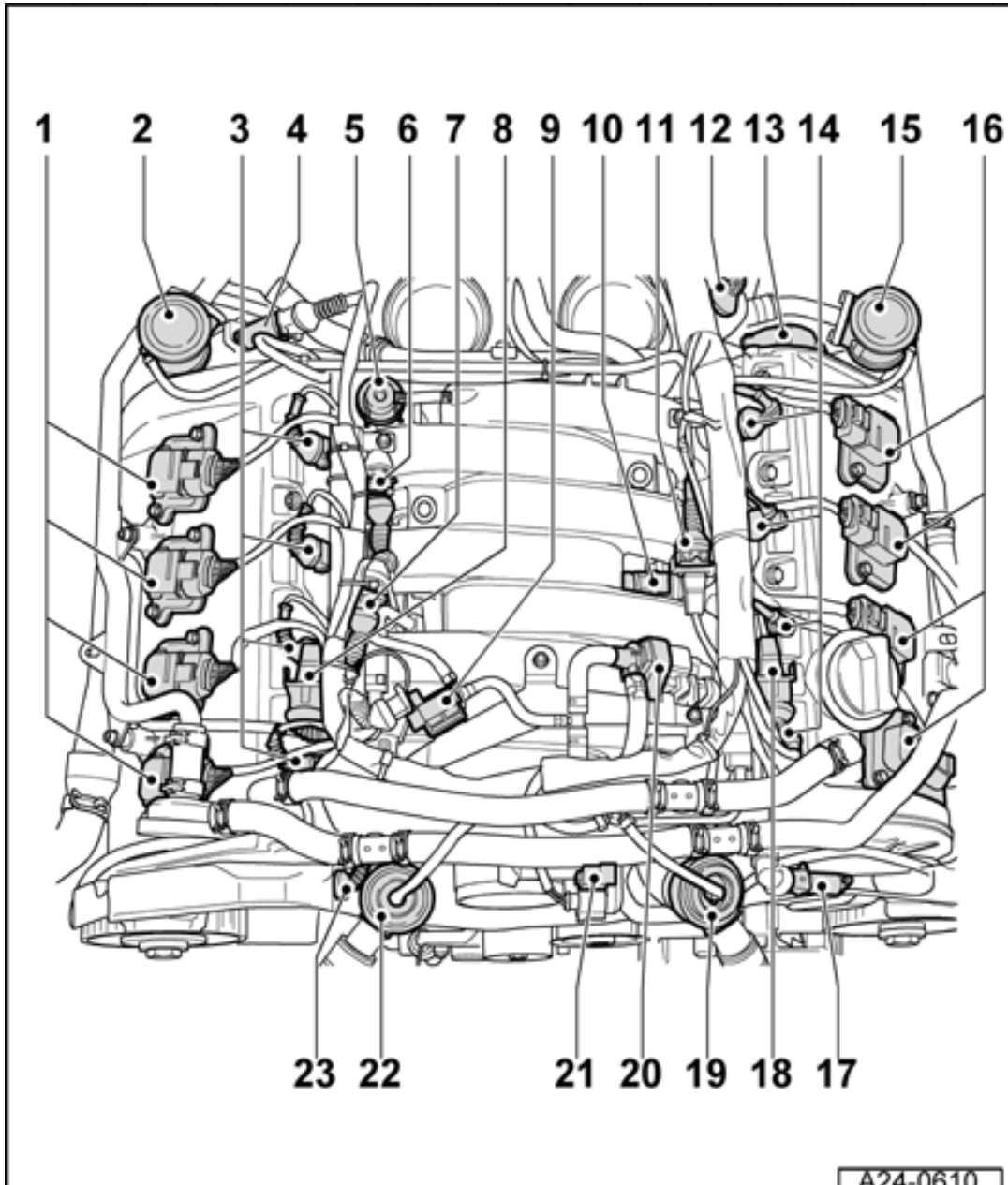
3 - Injectors, cylinder bank 1

- ◆ Cylinder 1 - N30-
- ◆ Cylinder 2 - N31-

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- ◆ Cylinder 3 -
N32-
- ◆ Cylinder 4 -
N33-

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4 - Valve 1 for camshaft adjustment -N205-

5 - Fuel pressure regulator

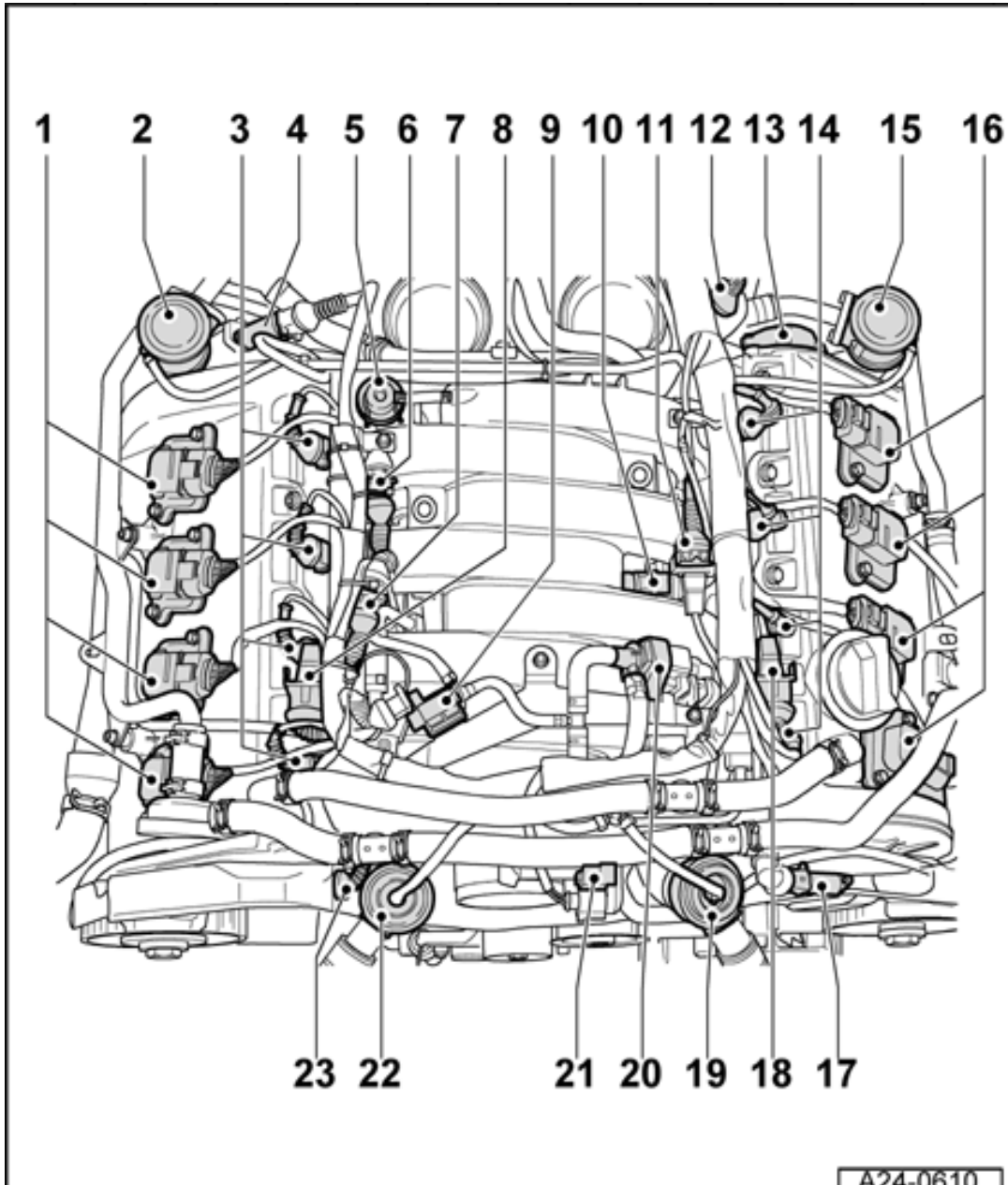
6 - Connector for After-run coolant pump - V51-

7 - Connector (extension) for Recirculating valve for turbocharger - N249-

8 - 3-pin connector

◆ For Knock sensor 1 -G61

24-10



9 - Secondary air injection solenoid valve -N112-

10 - Intake Air Temperature (IAT) sensor -G42-

11 - 3-pin connector

◆ For Knock sensor 3 -G198-

12 - Engine Coolant Temperature (ECT) sensor -G62-

13 - Camshaft Position (CMP) sensor 2 - G163-

◆ Cylinder bank 2

14 - Injectors, cylinder bank 2

◆ Cylinder 5 - N83-

◆ Cylinder 6 - N84-

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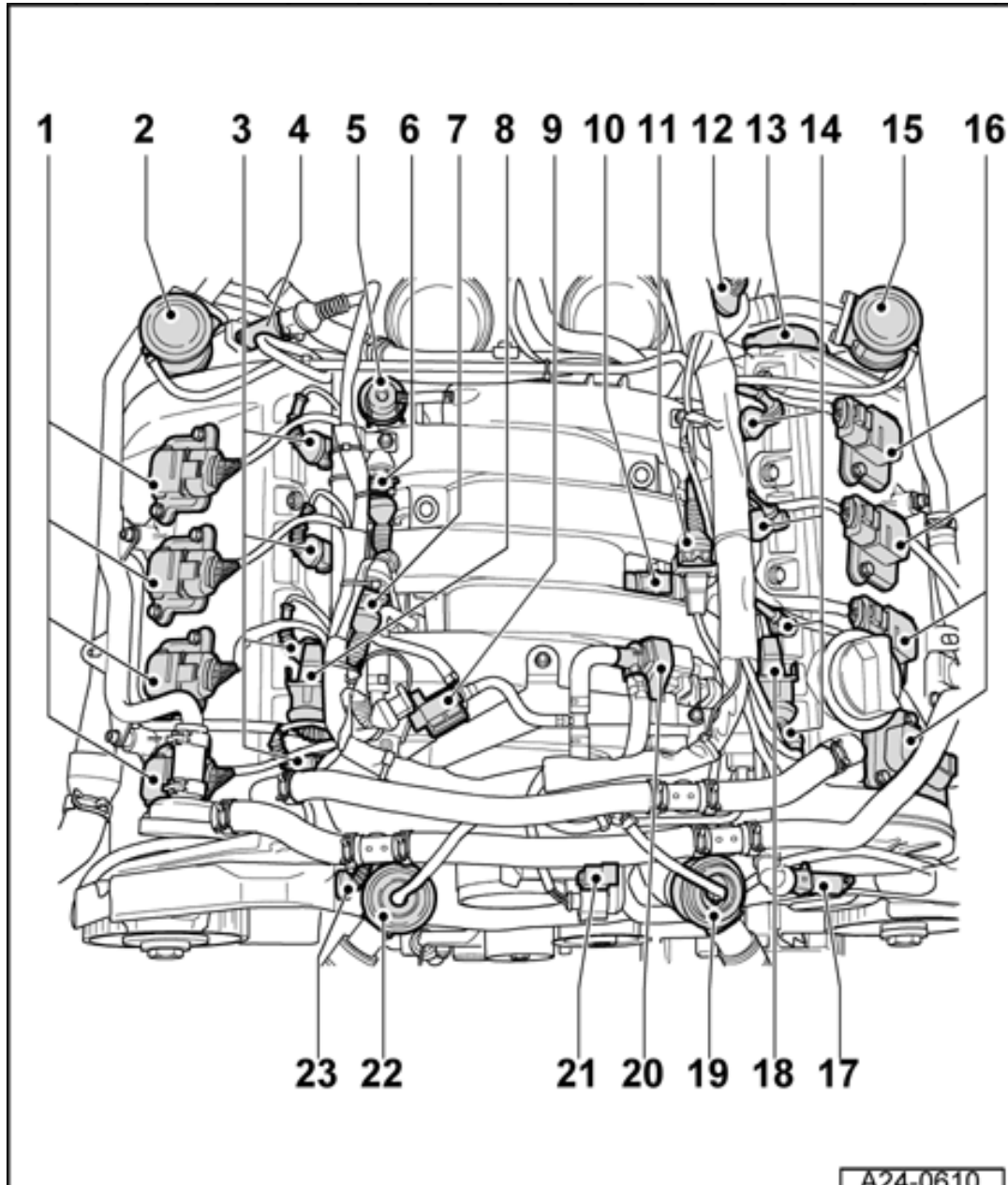
◆ Cylinder 7 -
N85-

◆ Cylinder 8 -
N86-

**15 - Mechanical
combination valve
for secondary air
system**

◆ Cylinder bank
2

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16 - Ignition coils with output stages, cylinder bank 2

- ◆ Cylinder 5 - N323-
- ◆ Cylinder 6 - N324-
- ◆ Cylinder 7 - N325-
- ◆ Cylinder 8 - N326-

17 - Valve -2- for camshaft adjustment -N208-

18 - 3-pin connector

- ◆ For Knock sensor 2 -G66-

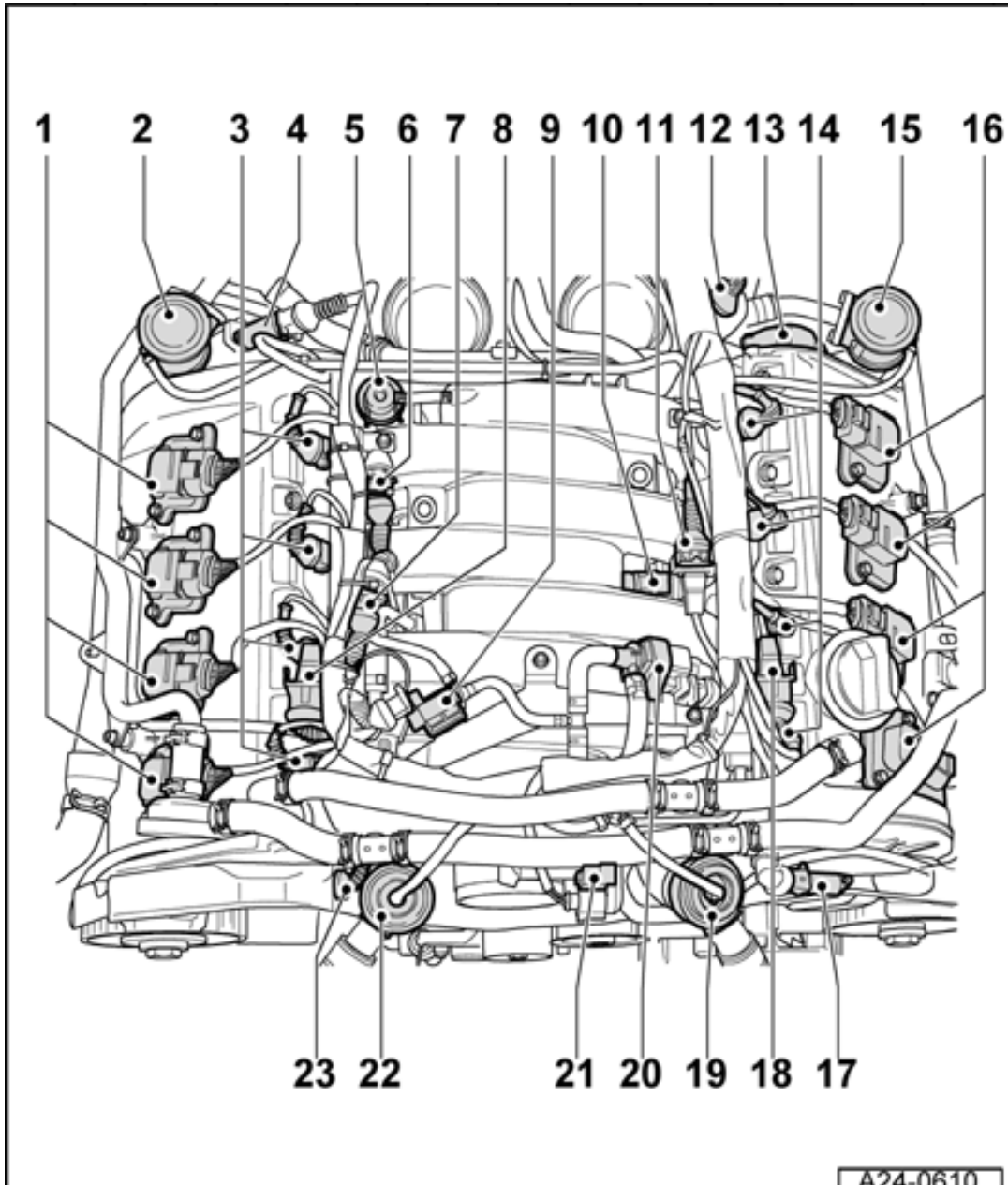
19 - Mechanical air recirculation valve for turbocharger

- ◆ Cylinder bank 2

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**20 - Recirculating valve
for turbocharger -
N249-**

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21 - Throttle valve control module - J338-

- ◆ With Throttle drive - G186-, Angle sensor -1- for throttle drive -G187- and Angle sensor 2 for throttle drive - G188-

22 - Mechanical air recirculation valve for turbocharger

- ◆ Cylinder bank 1

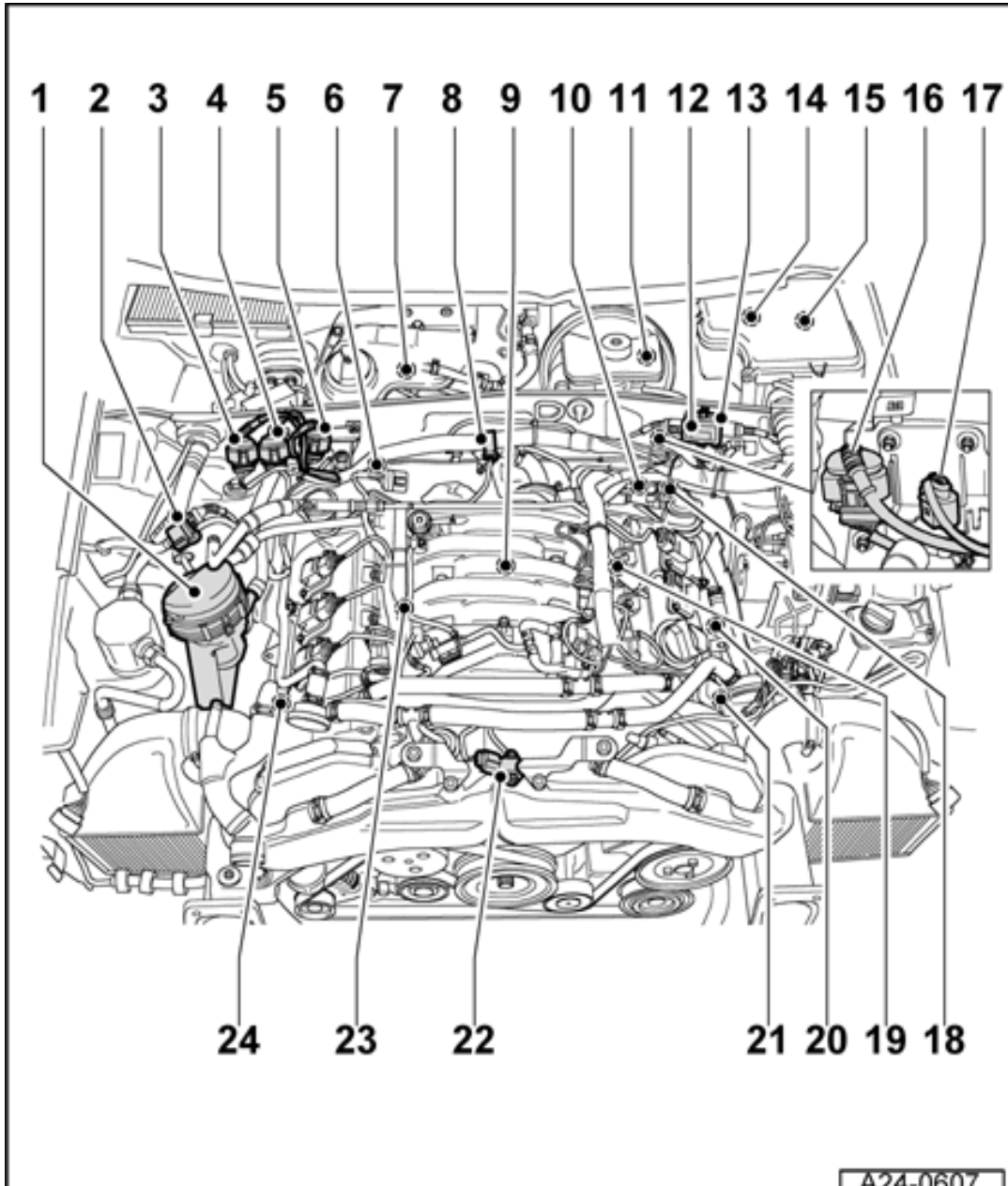
23 - Camshaft Position (CMP sensor -G40-

- ◆ Cylinder bank 1

24-13



Part 2



1 - Secondary air injection (AIR) pump motor -V101-

2 - Evaporative Emissions (EVAP) canister purge regulator valve -N80-

3 - 4-pin connector

- ◆ For Oxygen Sensor (O2S) behind Three Way Catalytic Converter (TWC) - G130- and Oxygen Sensor (O2S) Heater 1 behind TWC -Z29-

- ◆ Bank 1 sensor 2 (green)

4 - 4-pin connector

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- ◆ For Oxygen Sensor (O2S) 2 behind Three Way Catalytic Converter - G131- and Oxygen Sensor (O2S) Heater 2 behind TWC -Z30-

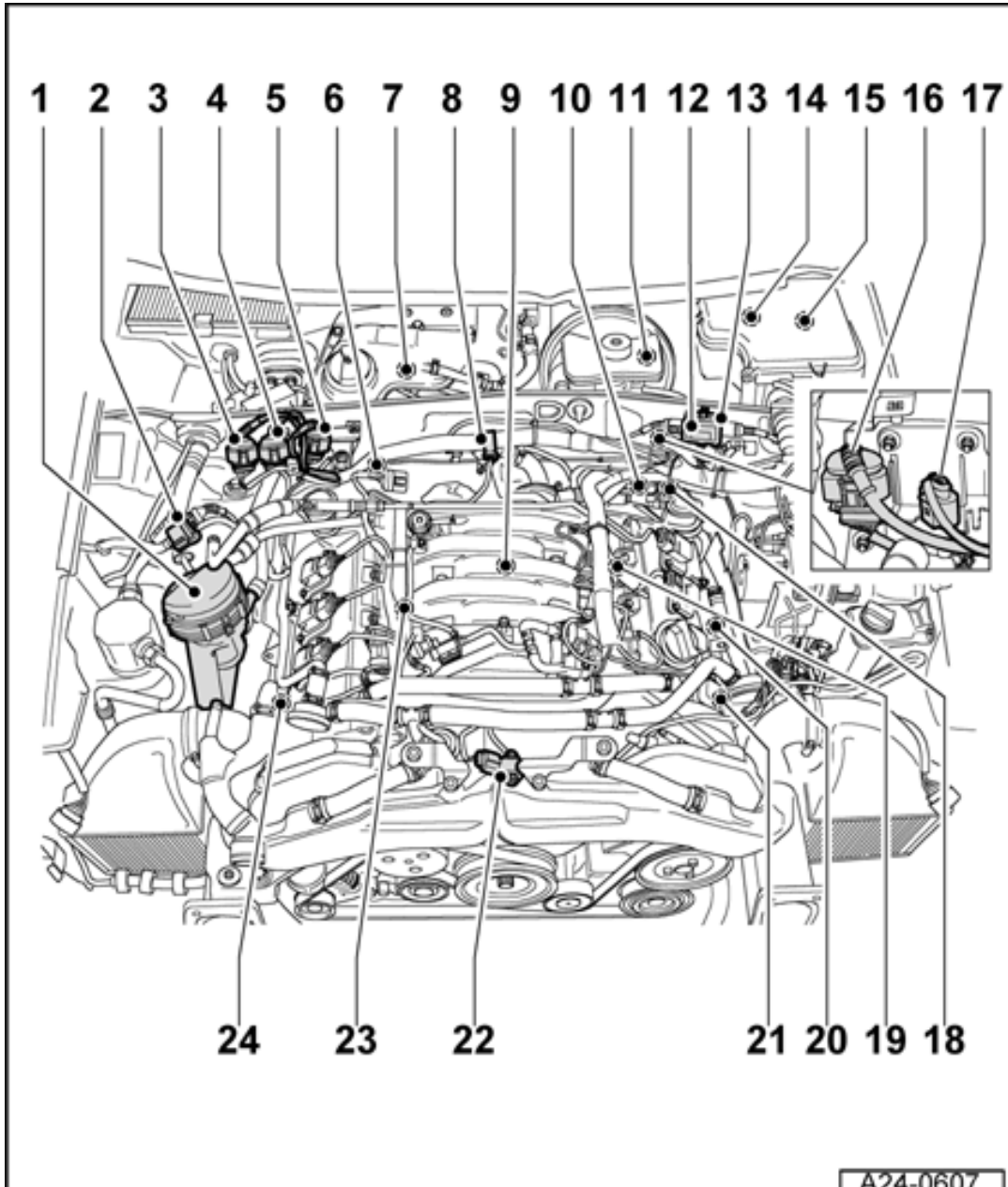
- ◆ Bank 2 sensor 2 (brown)

5 - 4-pin connector

- ◆ For Heated Oxygen Sensor (HO2S) - G39- and Oxygen Sensor (O2S) Heater -Z19-

- ◆ Bank 1 sensor 1 (black)

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6 - Heated Oxygen Sensor (HO2S) -G39- with Oxygen Sensor (O2S) Heater -Z19-

◆ Bank 1 sensor 1
(refer to ⇒ [Page 24-18](#))

7 - Oxygen Sensor (O2S) behind Three Way Catalytic Converter (TWC) - G130- with Oxygen Sensor (O2S) Heater 1 behind TWC -Z29-

◆ Bank 1 sensor 2
(refer to ⇒ [Page 24-18](#))

8 - Wastegate bypass regulator valve -N75-

9 - After-run coolant pump -V51-

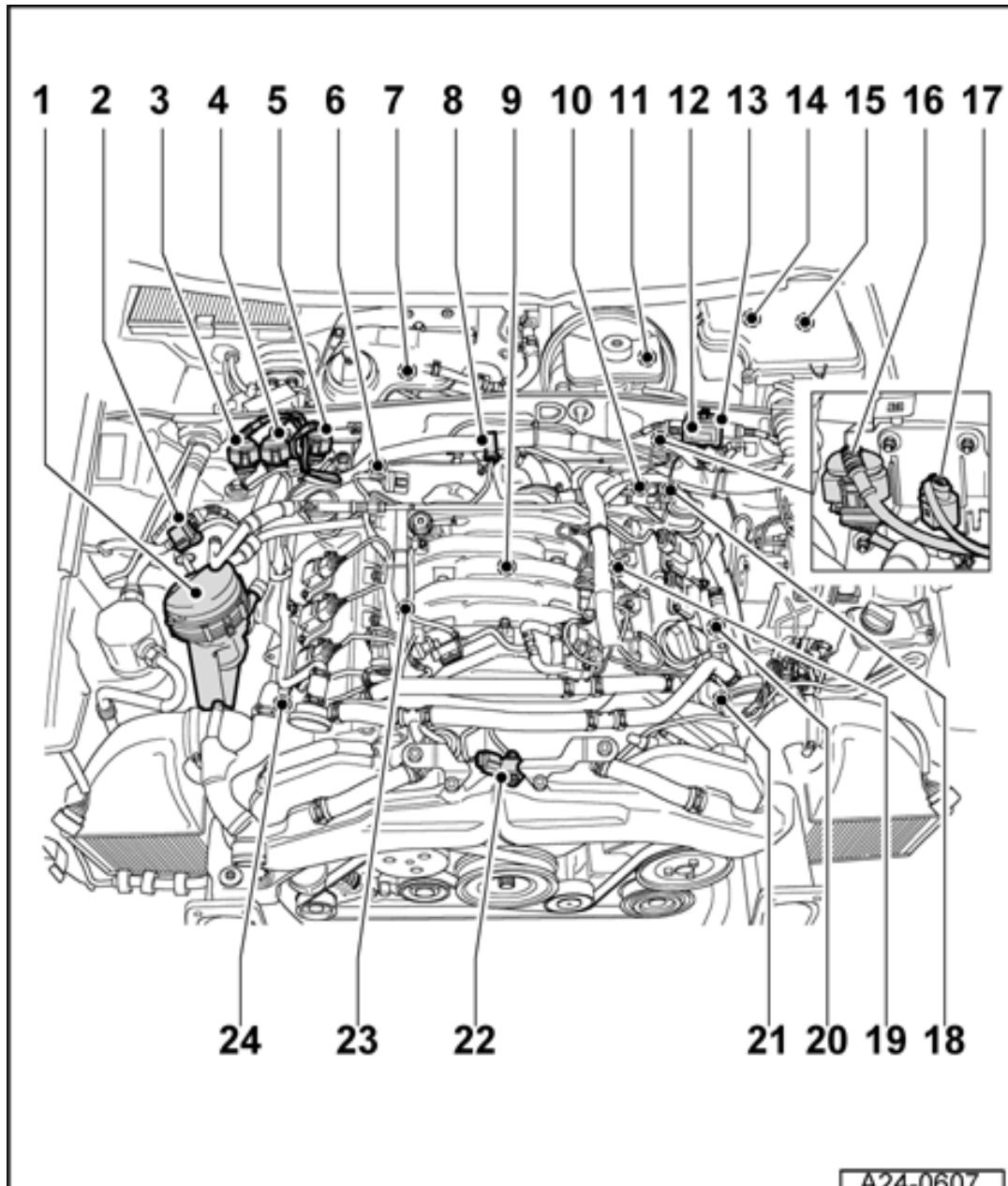
A24-0607

**10 - Heated Oxygen
Sensor (HO2S) 2 -
G108- with Oxygen
Sensor (O2S) Heater
2 -Z28- bank 2
sensor 1 (refer to ⇒
[Page 24-19](#))**

**11 - Oxygen Sensor
(O2S) 2 behind
Three Way Catalytic
Converter (TWC) -
G131- with Oxygen
Sensor (O2S) Heater
2 behind TWC -Z30-**

◆ Bank 2 sensor 2
(refer to ⇒ [Page 24-
19](#))

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12 - Sensor -1- for exhaust temperature -G235-

◆ Brown

13 - Bank 2 Exhaust Gas Temperature (EGT) sensor 1 -G236-

◆ Black

14 - Details of component locations for the following components are given in wiring diagram

◆ Motronic ECM power supply relay - J271-

◆ Coolant circulation pump relay -J151-

◆ Secondary Air Injection (AIR) pump relay -J299-

15 - Engine control module

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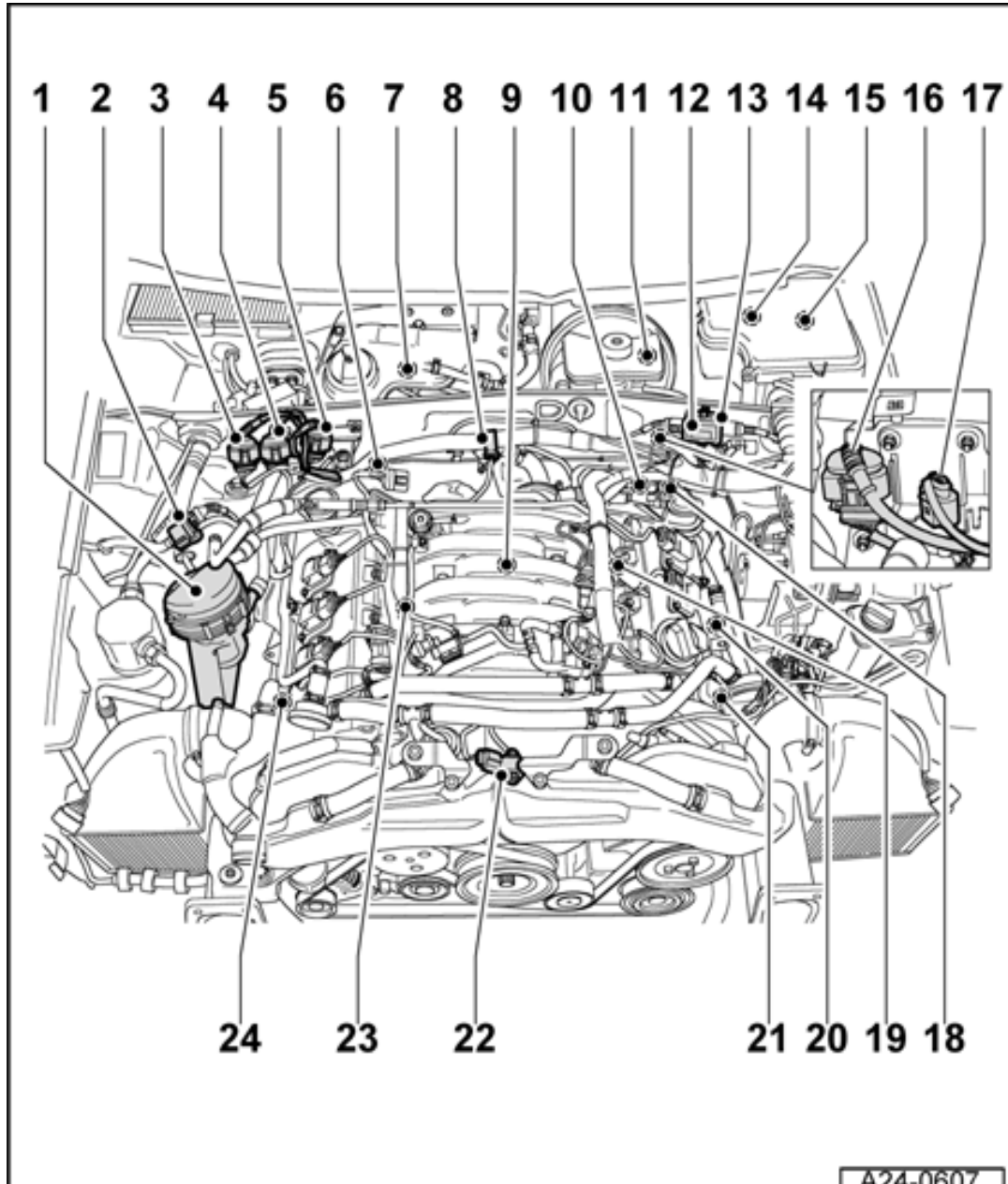
16 - 4-pin connector

- ◆ For Heated Oxygen Sensor (HO2S) 2 - G108- and Oxygen Sensor (O2S) Heater 2 -Z28-
- ◆ Bank 2 sensor 1

17 - 3-pin connector

- ◆ For Engine speed (RPM) sensor - G28-
- ◆ Gray

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18 - Engine speed (RPM) sensor -G28-

- ◆ Installed location ⇒ [Fig. 6](#) , ⇒ [Page 24-19](#)

19 - Knock sensor 3 - G198-

- ◆ On left in direction of travel beneath intake manifold in internal V at cylinder 7 water jacket

20 - Knock sensor 2 - G66-

- ◆ On left in direction of travel beneath exhaust manifold at cylinder 6 water jacket

21 - Right Electro-Hydraulic engine mount solenoid valve -N145-