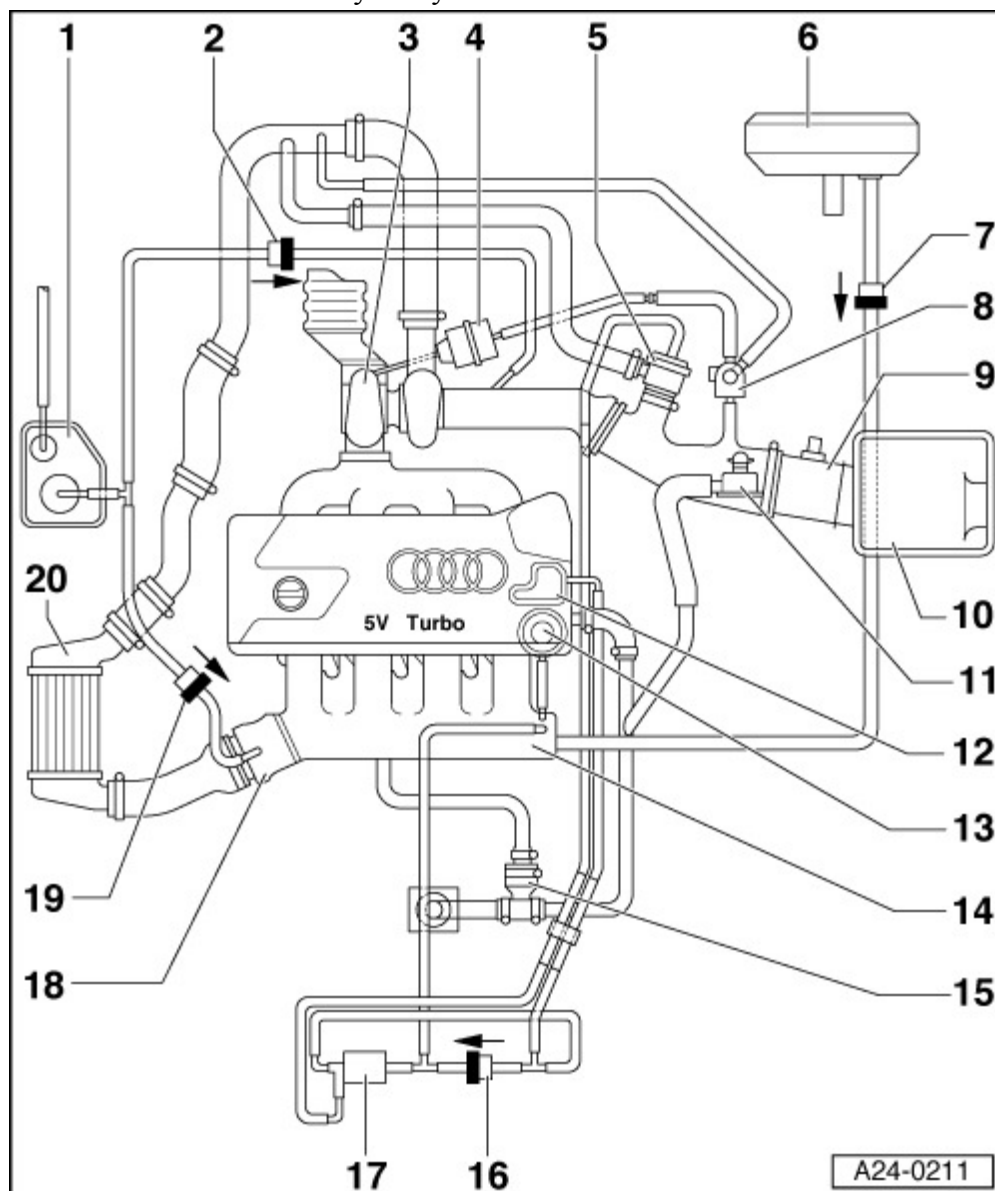


Diagram of connections for charge pressure control system and vacuum system
Vehicles without secondary air system



1 - Activated charcoal filter

q With activated charcoal filter system solenoid valve 1 -N80-

2 - Non-return valve

q Between activated charcoal filter and intake pipe upstream of turbocharger

q Installation position: arrow points direction of flow

3 - Turbocharger

q Checking charge pressure → [Chapter](#)

4 - Vacuum unit for charge pressure control

5 - Mechanical air recirculation valve

q Checking → [Chapter](#)

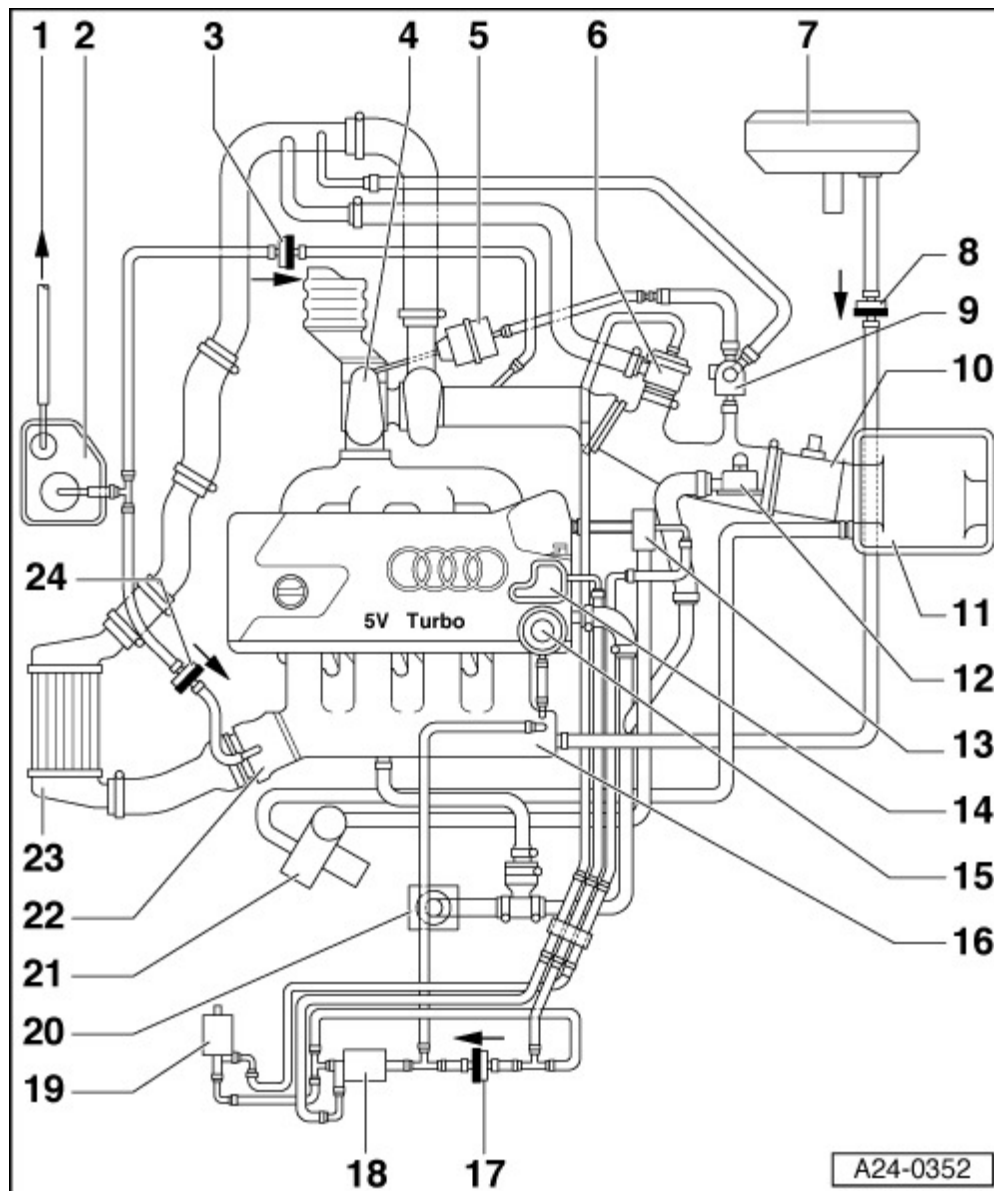
6 - Brake servo

7 - Non-return valve

q Between brake servo and intake manifold

- q Installation position: arrow points direction of flow
- 8 - Solenoid valve for charge pressure control -N75-
- q Checking → [Chapter](#)
- 9 - Air mass meter -G70-
- 10 - Air cleaner
- 11 - Pressure control valve for crankcase breather system
- 12 - Vacuum reservoir
- q Bolted to cylinder head cover
- 13 - Fuel pressure regulator
- 14 - Intake manifold
- q With intake air temperature sender -G42-
- 15 - Crankcase breather
- 16 - Non-return valve
- q Installation position: arrow points direction of flow
- 17 - Turbocharger air recirculation valve -N249-
- q Checking → [Chapter](#)
- 18 - Throttle valve module -J338-
- 19 - Non-return valve
- q Between activated charcoal filter and intake manifold
- q Installation position: arrow points direction of flow
- 20 - Charge air cooler
- q With charge pressure sender -G31-
- q Checking charge pressure sender -G31- → [Chapter](#)

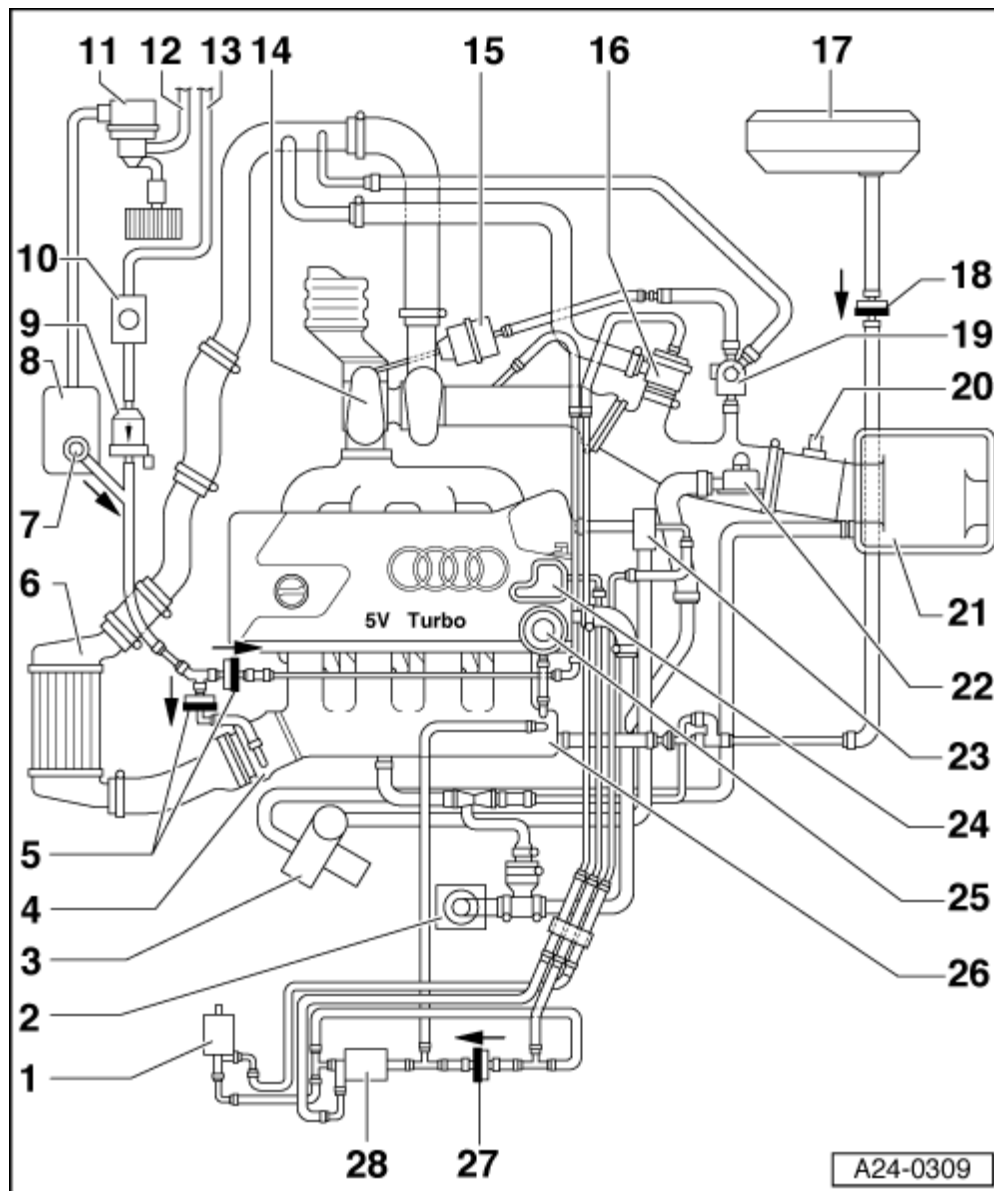
Rest-of-world vehicles with secondary air system:



- 1 - From fuel tank
- 2 - Activated charcoal filter
 - q With activated charcoal filter system solenoid valve 1 -N80-
- 3 - Non-return valve
 - q Between activated charcoal filter and intake pipe upstream of turbocharger
 - q Installation position: arrow points direction of flow
- 4 - Turbocharger
 - q Checking charge pressure → [Chapter](#)
- 5 - Vacuum unit for charge pressure control
- 6 - Mechanical air recirculation valve
 - q Checking → [Chapter](#)
- 7 - Brake servo
- 8 - Non-return valve
 - q Between brake servo and intake manifold
 - q Installation position: arrow points direction of flow

- 9 - Solenoid valve for charge pressure control -N75-
 - q Checking → [Chapter](#)
- 10 - Air mass meter -G70-
- 11 - Air cleaner
- 12 - Pressure control valve for crankcase breather system
- 13 - Combination valve for secondary air system
- 14 - Vacuum reservoir
 - q Bolted to cylinder head cover
- 15 - Fuel pressure regulator
- 16 - Intake manifold
 - q With intake air temperature sender -G42-
- 17 - Non-return valve
 - q Installation position: arrow points direction of flow
- 18 - Turbocharger air recirculation valve -N249-
 - q Checking → [Chapter](#)
- 19 - Secondary air inlet valve -N112-
 - q Checking → [Chapter](#)
- 20 - Crankcase breather
- 21 - Secondary air pump motor -V101-
- 22 - Throttle valve module -J338-
- 23 - Charge air cooler
 - q With charge pressure sender -G31-
 - q Checking charge pressure sender -G31- → [Chapter](#)
- 24 - Non-return valve
 - q Between activated charcoal filter and intake manifold
 - q Installation position: arrow points direction of flow

USA models



1 - Secondary air inlet valve -N112-

q Checking → [Chapter](#)

2 - Crankcase breather

3 - Secondary air pump motor -V101-

4 - Throttle valve module -J338-

5 - Non-return valves

q Between activated charcoal filter and intake pipe upstream of turbocharger

q Installation position: arrow points direction of flow

6 - Charge air cooler

q With charge pressure sender -G31-

q Checking charge pressure sender -G31- → [Chapter](#)

7 - Non-return valve

q Fitted into vacuum reservoir

8 - Vacuum reservoir

q For fuel system diagnostic pump -V144-

- 9 - Activated charcoal filter solenoid valve 1 -N80-
- 10 - Test connection
- 11 - Fuel system diagnostic pump -V144-
- q Checking → [Rep. Gr.20](#)
- 12 - To activated charcoal filter
- 13 - To activated charcoal filter
- 14 - Turbocharger
- q Checking charge pressure → [Chapter](#)
- 15 - Vacuum unit for charge pressure control
- 16 - Mechanical air recirculation valve
- q Checking → [Chapter](#)
- 17 - Brake servo
- 18 - Non-return valve
- q Between brake servo and intake manifold
- q Installation position: arrow points direction of flow
- 19 - Solenoid valve for charge pressure control -N75-
- q Checking → [Chapter](#)
- 20 - Air mass meter -G70-
- 21 - Air cleaner
- 22 - Pressure control valve for crankcase breather system
- 23 - Combination valve for secondary air system
- 24 - Vacuum reservoir
- q Bolted to cylinder head cover
- 25 - Fuel pressure regulator
- 26 - Intake manifold
- q With intake air temperature sender -G42-
- 27 - Non-return valve
- q Installation position: arrow points direction of flow
- 28 - Turbocharger air recirculation valve -N249-
- q Checking → [Chapter](#)