

Diagram of coolant hose connections

Vehicles without auxiliary heater



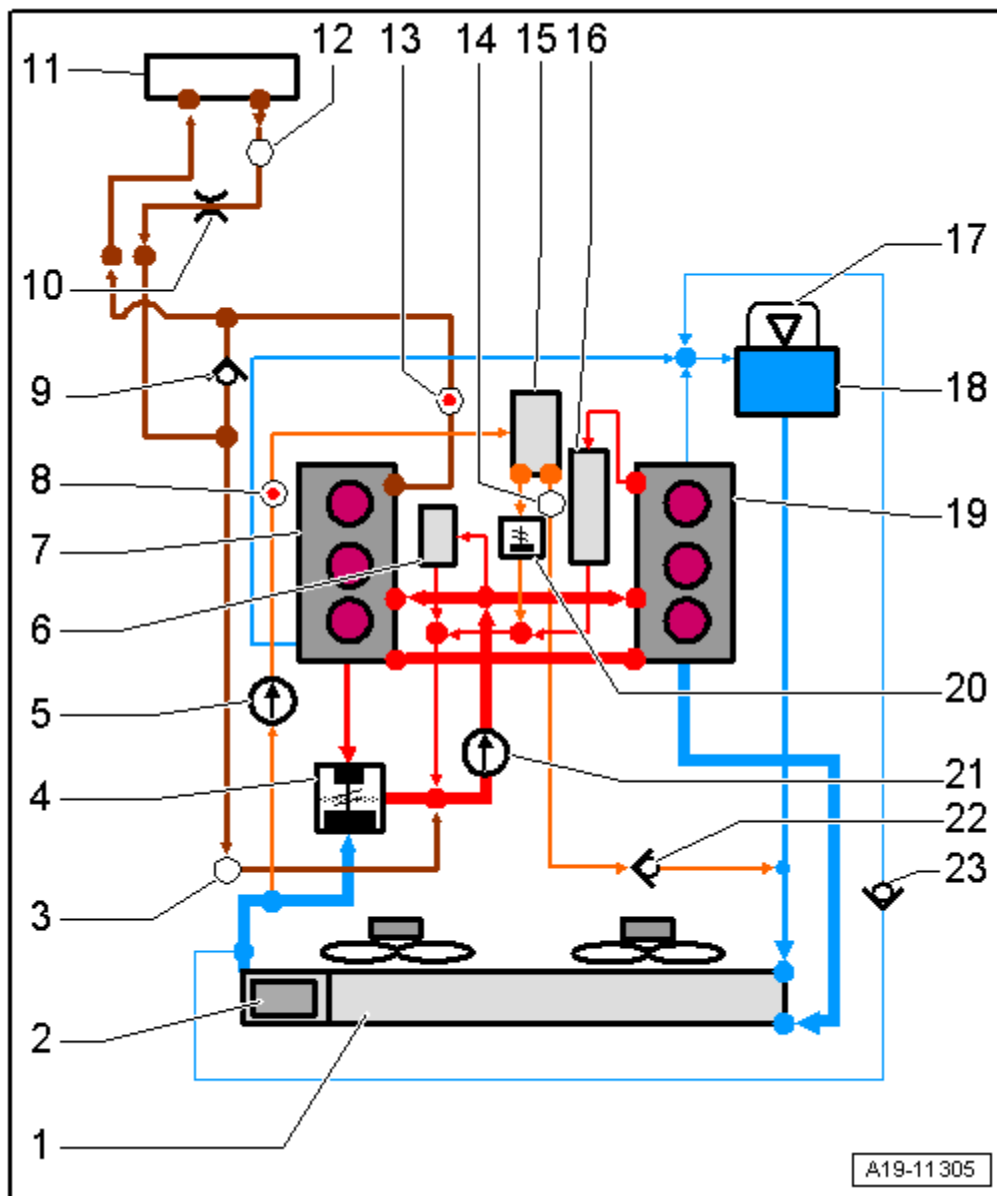
Note

t Blue = Large coolant circuit.

t Red = Small coolant circuit.

t Orange = Coolant circuit for exhaust gas recirculation.

t Brown = Heating circuit.



1 - Radiator

q If renewed, refill system with fresh coolant

2 - ATF cooler

q Integrated into radiator

q On vehicles with multitronic or automatic gearbox

3 - Bleeder screw

4 - Thermostat

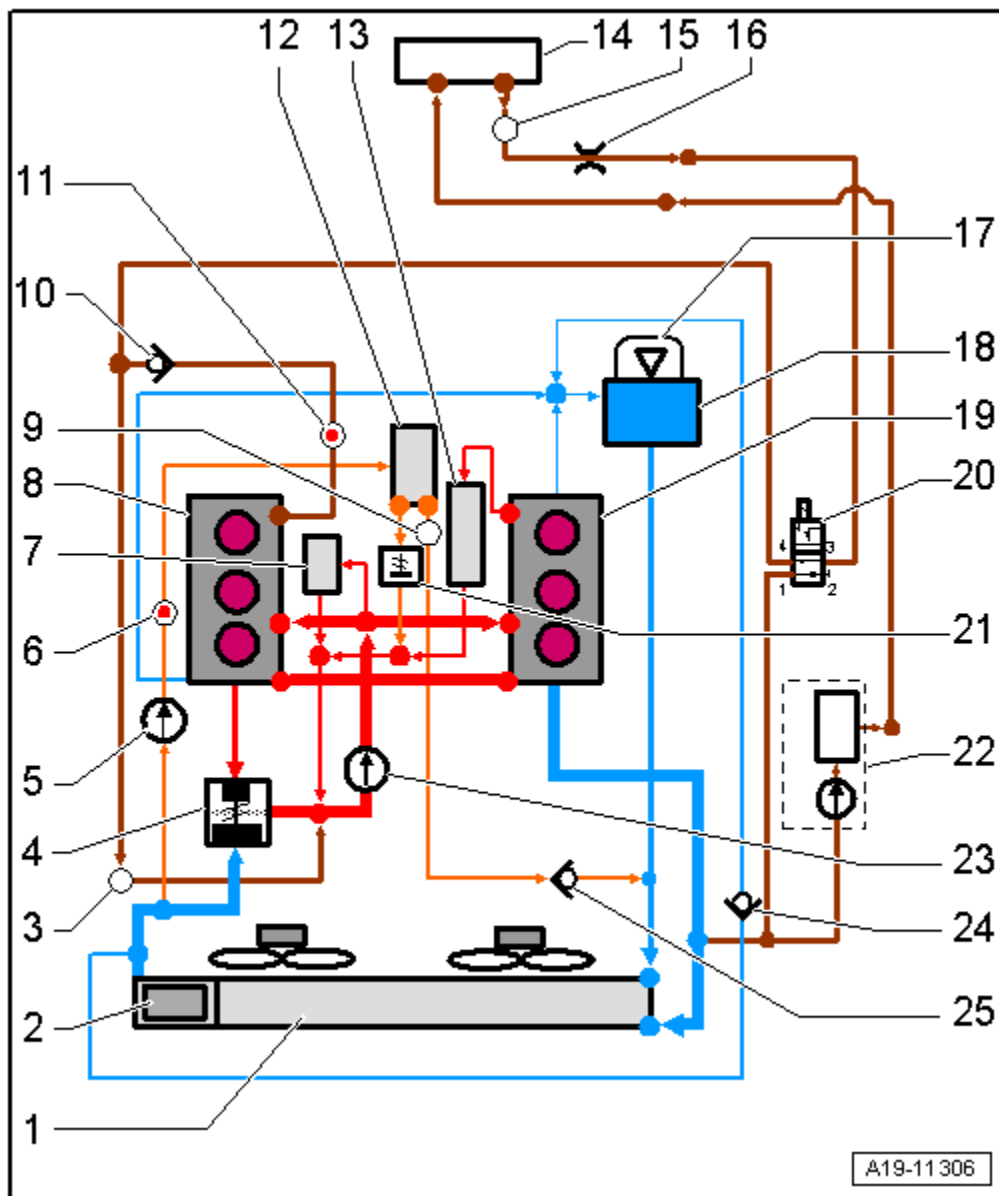
- 5 - Pump for exhaust gas recirculation cooler -V400-
- 6 - Engine oil cooler
- 7 - Cylinder head, bank 1 (right-side)
 - q If renewed, refill system with fresh coolant
- 8 - Radiator outlet coolant temperature sender -G83-
- 9 - Non-return valve
 - q Arrow indicates direction of flow
- 10 - Restrictor
- 11 - Heat exchanger for heater
 - q With pump-valve unit → [Rep. gr.87](#)
 - q Removing and installing → [Rep. gr.87](#)
 - q If renewed, refill system with fresh coolant
- 12 - Bleeder hole
- 13 - Coolant temperature sender -G62-
- 14 - Bleeder screw
- 15 - Exhaust gas recirculation cooler
 - q Removing and installing → [Chapter](#)
 - q If renewed, refill system with fresh coolant
- 16 - Changeover flap for exhaust gas recirculation
- 17 - Filler cap for expansion tank
 - q Checking pressure relief valve → [Anchor](#)
- 18 - Coolant expansion tank
- 19 - Cylinder head, bank 2 (left-side)
 - q If renewed, refill system with fresh coolant
- 20 - Thermostat housing for exhaust gas recirculation
 - q With control motor for exhaust gas recirculation
- 21 - Coolant pump
- 22 - Non-return valve
 - q Arrow indicates direction of flow
- 23 - Non-return valve
 - q Arrow indicates direction of flow

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- 1 - Radiator
- q If renewed, refill system with fresh coolant
- 2 - ATF cooler
- q Integrated into radiator
- q On vehicles with multitronic or automatic gearbox
- 3 - Bleeder screw
- 4 - Thermostat
- 5 - Pump for exhaust gas recirculation cooler -V400-
- 6 - Radiator outlet coolant temperature sender -G83-
- 7 - Engine oil cooler
- 8 - Cylinder head, bank 1 (right-side)
- q If renewed, refill system with fresh coolant
- 9 - Bleeder screw
- 10 - Non-return valve
- q Arrow indicates direction of flow

- 11 - Coolant temperature sender -G62-
- 12 - Exhaust gas recirculation cooler
 - q Removing and installing → [Chapter](#)
 - q If renewed, refill system with fresh coolant
- 13 - Changeover flap for exhaust gas recirculation
- 14 - Heat exchanger for heater
 - q With pump-valve unit → [Rep. gr.87](#)
 - q Removing and installing → [Rep. gr.87](#)
 - q If renewed, refill system with fresh coolant
- 15 - Bleeder hole
- 16 - Restrictor
- 17 - Filler cap for expansion tank
 - q Checking pressure relief valve in filler cap → [Anchor](#)
- 18 - Coolant expansion tank
- 19 - Cylinder head, bank 2 (left-side)
 - q If renewed, refill system with fresh coolant
- 20 - Heater coolant shut-off valve -N279-
 - q Removing and installing → [Rep. gr.87](#)
- 21 - Thermostat housing for exhaust gas recirculation
 - q With control motor for exhaust gas recirculation
- 22 - Auxiliary heater
- 23 - Coolant pump
- 24 - Non-return valve
 - q Arrow indicates direction of flow
- 25 - Non-return valve
 - q Arrow indicates direction of flow