

Exploded view of components

- ♦ On the following pages, refrigerant circuit servicing work is split up into two categories.
- All parts/operations marked ¹⁾ can be serviced and replaced/performed in any workshop (work not involving the refrigerant circuit).
- All parts of the refrigerant circuit not marked ¹⁾ as well as all refrigerant hoses and refrigerant pipes can only be serviced or replaced at workshops equipped with the necessary tools where the work can be performed by appropriately qualified personnel → **Chapter** and → **Air conditioner with refrigerant R134a**.

HD = High-pressure end

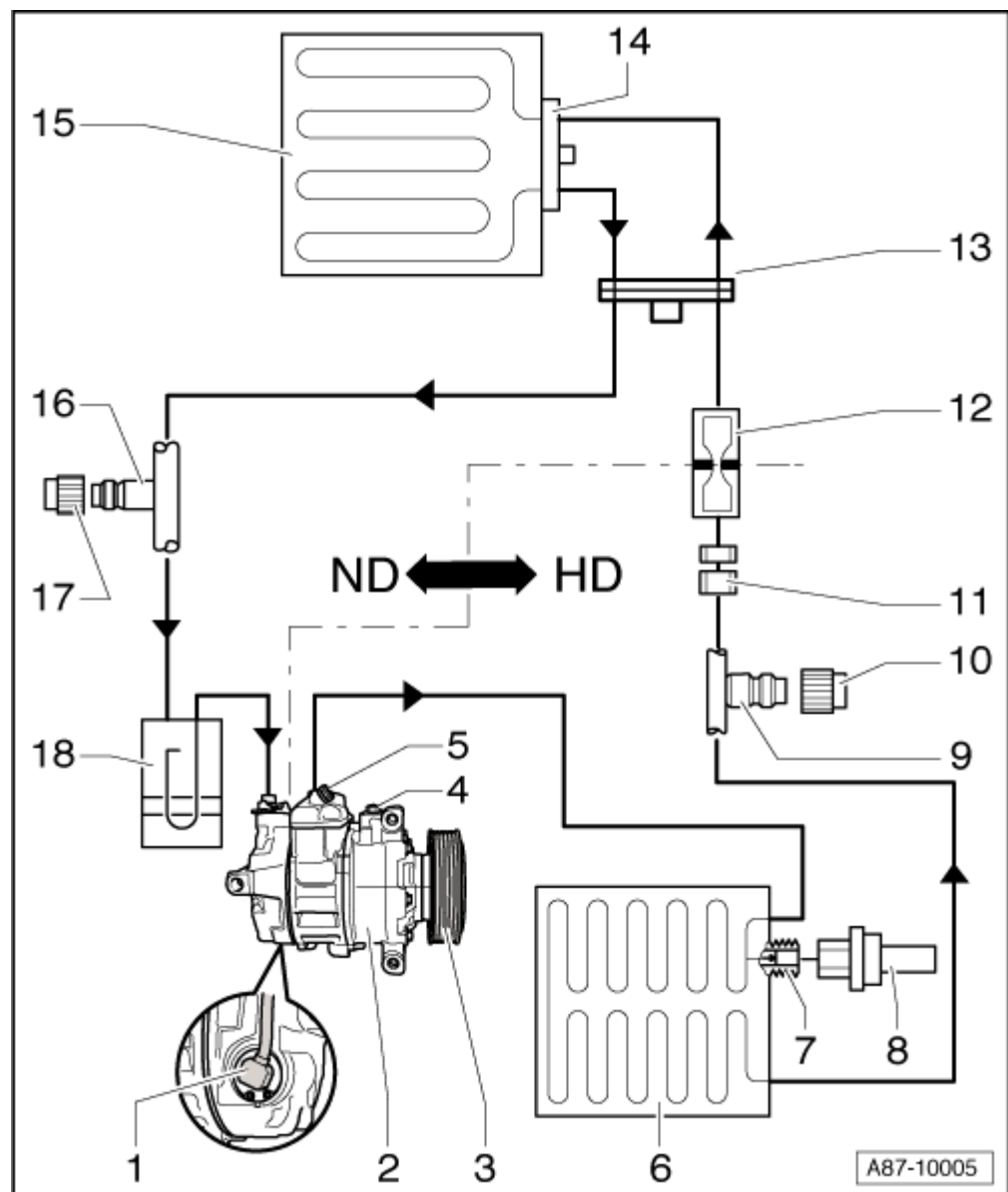
ND = Low-pressure end

1 - Air conditioning system compressor regulating valve -N280-

- Checking actuation and operation
→ **Chapter**¹⁾

2 - Compressor

- Different versions depending on the engine
→ **Electronic parts catalogue**
- Detaching compressor with pulley from holder/re-attaching (vehicles with 4 or 6-cyl. engine)
→ **Chapter**¹⁾
- Detaching compressor with drive unit (shaft) from holder/re-attaching (vehicles with 8-cyl. engine)
→ **Chapter**
- Detaching refrigerant pipe at compressor/attaching → **Chapter**



- ❑ When installing refrigerant pipes and corresponding holder, make sure there is sufficient distance between belt, holder and pulley
- ❑ Removing and installing compressor (vehicles with 4 or 6-cyl. engine) → [Chapter](#)
- ❑ Removing and installing compressor (vehicles with 8-cyl. engine) → [Chapter](#)
- ❑ Removing and installing compressor (vehicles with 10-cyl. engine) → [Chapter](#)

3 - Pulley/drive unit for compressor

- ❑ Different versions depending on the engine → [Electronic parts catalogue](#)
- ❑ Replacing compressor pulley (vehicles with 4 or 6-cyl. engine) ¹⁾ → [Chapter](#)
- ❑ Removing and installing poly V-belt ¹⁾ → [Engine, mechanics; Rep. Gr.19](#)
- ❑ Poly V-belt assignment: → [Electronic parts catalogue](#)
- ❑ Replacing compressor drive unit (vehicles with 8 or 10-cyl. engine) → [Chapter](#)



Note

- ◆ *An overload safeguard is fitted between pulley and drive shaft of compressor to protect belt if compressor becomes jammed or stiff.*
- ◆ *An overload safeguard is fitted between drive unit and drive shaft of compressor to protect chain drive of engine if compressor becomes jammed or stiff.*
- ◆ *If compressor is not operating smoothly, overload safeguard interrupts power transmission to compressor.*
- ◆ *Rubber elements are fitted between pulley/drive unit and compressor drive shaft to cushion any vibration occurring during compressor operation (damper function in the event of torque fluctuations).*

4 - Oil drain plug

5 - Pressure relief valve

6 - Condenser

7 - Connection with valve

8 - Refrigerant pressure/temperature sender -G395-

- ❑ Removing and installing → [Chapter](#)
- ❑ Housing colour "Grey"
- ❑ Checking signal → ["Guided fault-finding" function of vehicle diagnostic, testing and information system VAS 5051](#)



Note

- ◆ *The measured values of the refrigerant pressure/temperature sender -G395- can be read out by way of the function "Reading measured value block" in two different display groups → ["Guided fault-finding" function of vehicle diagnostic, testing and information system VAS 5051](#).*
- ◆ *Refrigerant pressure/temperature sender -G395- exchanges information by way of air conditioner data bus system "Lin bus" with operating and display unit, Climatronic control unit -J255-. The Audi A6 is therefore not to be fitted with a high-pressure sender -G65- (only emits square-wave signals) → [Electronic parts catalogue](#).*
- ◆ *On account of the design of the refrigerant pressure/temperature sender -G395- and its fitting location, temperature measured by refrigerant pressure/temperature sender -G395- differs from actual temperature of refrigerant in refrigerant circuit. At present this is therefore not evaluated and used for air conditioner regulation.*

9 - Service connection

- ❑ High-pressure end
- ❑ Different versions (with primary sealing valve or Schrader valve) depending on refrigerant pipe; distinguishing features → [Air conditioner with refrigerant R134a](#)
- ❑ For measurement, drainage and filling in workshops equipped with the necessary tools where the work can be performed by appropriately qualified personnel → [Air conditioner with refrigerant](#)

R134a

**WARNING**

Refrigerant circuit must be drained before removing service connections (connection has no valve).

10 - Cap

- ☐ With seal
- ☐ Always to be screwed on

11 - Screw connection in refrigerant pipe (with restrictor)

- ☐ The screw connection is only to be unfastened after draining the refrigerant circuit; the vehicle is to be taken to a workshop equipped with the necessary tools where the work can be performed by appropriately qualified personnel → [Air conditioner with refrigerant R134a](#).

12 - Restrictor**13 - Screw connection in refrigerant pipe (to evaporator)**

- ☐ The screw connection is only to be unfastened after draining the refrigerant circuit; the vehicle is to be taken to a workshop equipped with the necessary tools where the work can be performed by appropriately qualified personnel → [Air conditioner with refrigerant R134a](#).

14 - Refrigerant pipe screw connection (at evaporator)

- ☐ The screw connection is only to be unfastened after draining the refrigerant circuit; the vehicle is to be taken to a workshop equipped with the necessary tools where the work can be performed by appropriately qualified personnel → [Air conditioner with refrigerant R134a](#).

15 - Evaporator**16 - Service connection**

- ☐ Low-pressure end
- ☐ Different versions (with primary sealing valve or Schrader valve) depending on refrigerant pipe; distinguishing features → [Air conditioner with refrigerant R134a](#)

17 - Cap

- ☐ With seal
- ☐ Always to be screwed on

18 - Reservoir