Conventional tools

Double open end wrench 1/2" x 9/16"	
Assembly tester with 3 filling hoses and vacuum pump or evacuating and filling unit (service unit) for air-conditioning systems	e.g. made by Christof Fischer Augsburger Straße 289 D-7000 Stuttgart 60

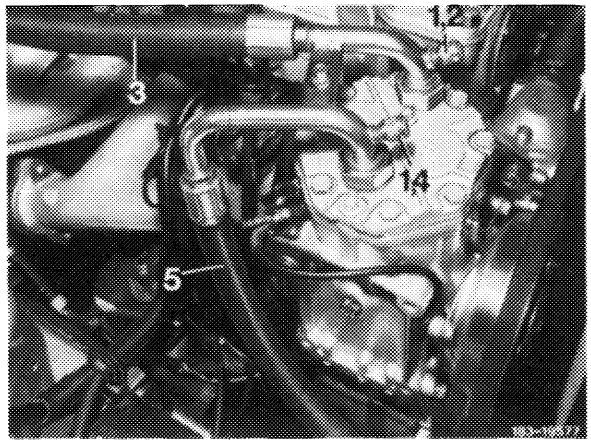
Note

In the event of repairs on air-conditioning system, drain entire system.

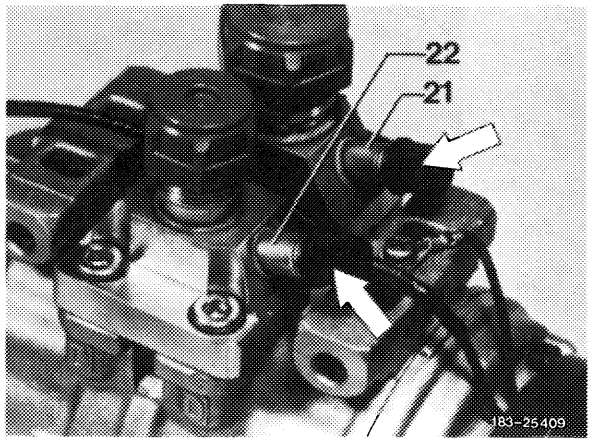
Attention!
Pay attention to safety rules (83–504).

Draining the system

1 Unscrew closing caps (1) of both service valves (1, 2 and 1, 4).



York refrigerant compressor
Engine 110

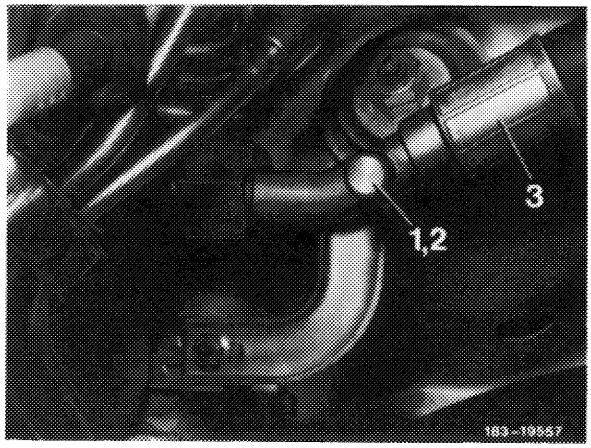


Nippondenso
refrigerant compressor
Engine 110

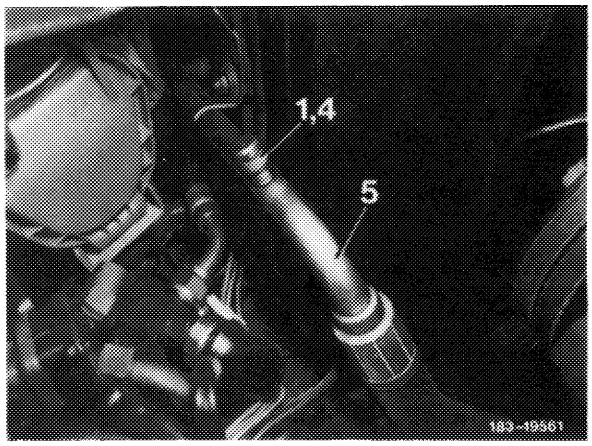
21 Service valve (suction end)
22 Service valve (pressure end)

2 Connect assembly tester, evacuating and filling unit or two filling hoses to service valves. Make sure that the pressure pin in **offset** end of filling hose opens the Schrader valve elements in service valves.

3 **Slowly** drain refrigerant either into a glass bottle or into the open air. If quickly drained, the refrigerant will carry the oil from system and refrigerant compressor along.



Delco refrigerant compressor
Engines 116 and 117
2 Service valve (suction end)



Delco refrigerant compressor
Engines 116 and 117
4 Service valve (pressure end)

Attention!
Do not drain refrigerant into assembly pits to avoid risk of suffocation.

4 The system is completely drained as soon as the pressure gauges indicate 0 bar or only a slight overpressure, or when no more refrigerant comes out of connecting filling hoses.

5 Unscrew hose lines and close service valves with closing caps. The required repairs can then be made.