

BMW 3-Series 320i & 320xi (12-14), 325i, 325xi, 330i & 330xi (06) & 328i & 328xi (07-14) Haynes Online Manual

10 Air conditioning system - general information and precautions

General information

- 1 The cooling side of the system works in the same way as a domestic refrigerator. Refrigerant gas is drawn into a belt-driven compressor and passes into a condenser mounted in front of the radiator, where it loses heat and becomes liquid. The liquid passes through an expansion valve to an evaporator, where it changes from liquid under high pressure to gas under low pressure. This change is accompanied by a drop in temperature, which cools the evaporator. The refrigerant returns to the compressor and the cycle begins again.
- 2 Air blown through the <u>evaporator</u> passes to the air distribution unit, where it is mixed with hot air blown through the <u>heater core</u> to achieve the desired temperature in the passenger compartment.
- 3 The operation of the system is controlled by the Powertrain Control Module, with a self-diagnosis system. Any problems with the system should be referred to a BMW dealer or air conditioning shop.
- 4 The air conditioning <u>refrigerant</u> circuit high-pressure and low-pressure service ports are located in the engine compartment (see illustrations) .

10.4a The refrigerant circuit service ports are located on the left-hand inner fender . .



10.4b . . . and behind the right-hand headlight



Precautions

Warning:

The air conditioning system is under high pressure. DO NOT loosen any fittings or remove any components until after the system has been discharged. Air conditioning refrigerant must be properly discharged into an EPA-approved container at a dealer service department or an automotive air conditioning repair facility. Always wear eye protection when disconnecting air conditioning system fittings.

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