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Important steps when replacing a filter-drier or accumulator

When working on an air conditioning system, special attention should be paid to replacing the filter-drier or accumulator.

Purpose and function

Filter-driers and accumulators protect the air conditioning system against damage by removing foreign objects and moisture from the refrigerant. Although not classic vehicle wear parts, they can only absorb a limited amount of moisture and dirt. Accordingly, symptoms such as a frozen expansion valve, fluctuations in pressure, or poor cooling performance may indicate a problem with the filter-drier/accumulator.

The right repair approach

In the event of leaks and every time the air conditioning circuit is opened, you should always replace the filter-drier/accumulator as well. Flush the air conditioning system first if there are foreign

objects, abrasion particles, or other residues in the compressor oil or if the oil quantity is not known. Since filter-driers and accumulators can't be flushed, they must be removed and bypassed before flushing.

When installing a new filter-drier/accumulator, it's especially important that you don't remove the blanking plugs until immediately before installation. Otherwise, the hygroscopic (water-absorbing) granules on the inside may quickly reach their saturation limit on account of the moisture in the ambient air. Don't install a new filter-drier/accumulator if the blanking plugs are missing.

Precautionary replacement of the filter-drier/accumulator may protect against malfunctions and damage in vehicles with higher mileage in particular. Regular air conditioning services also ensure a longer service life and keep filter-driers/accumulators and air conditioning systems working properly.



Figure 1: A selection of filter-driers



Figure 2: Accumulators compared

Important!

Saturated granules in filter-driers/accumulators cannot be regenerated with an air conditioning service unit. Neither the duration nor the negative pressure are sufficient to remove the absorbed moisture. If an air conditioning circuit has been opened, an evacuation of at least 20 minutes is needed after the work has been completed in order to remove the remaining air humidity from the system and lines.