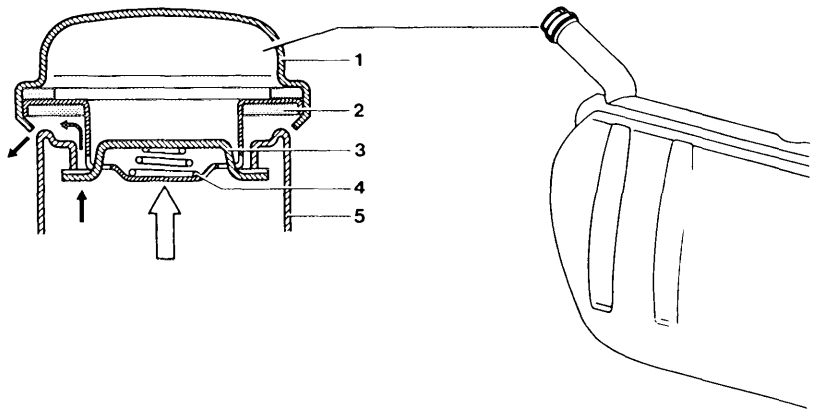
47-030 Function of fuel tank ventilation - Turbodiesel

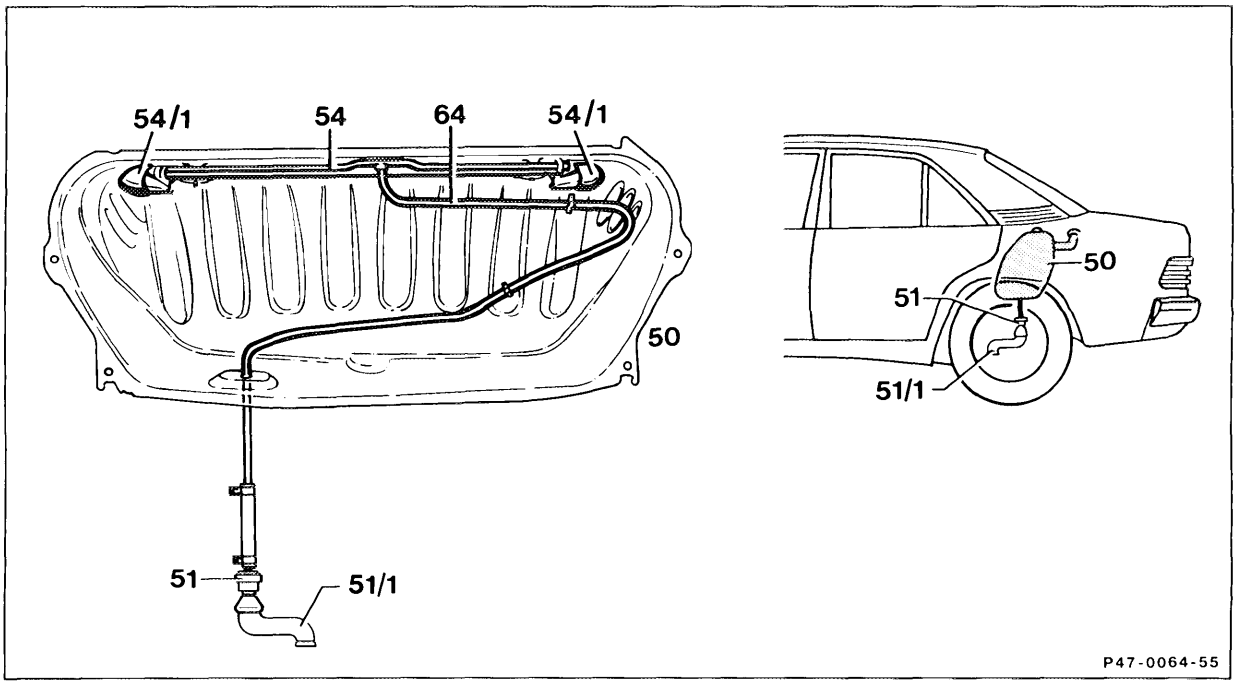


P47-0041-53

All Turbodiesel models

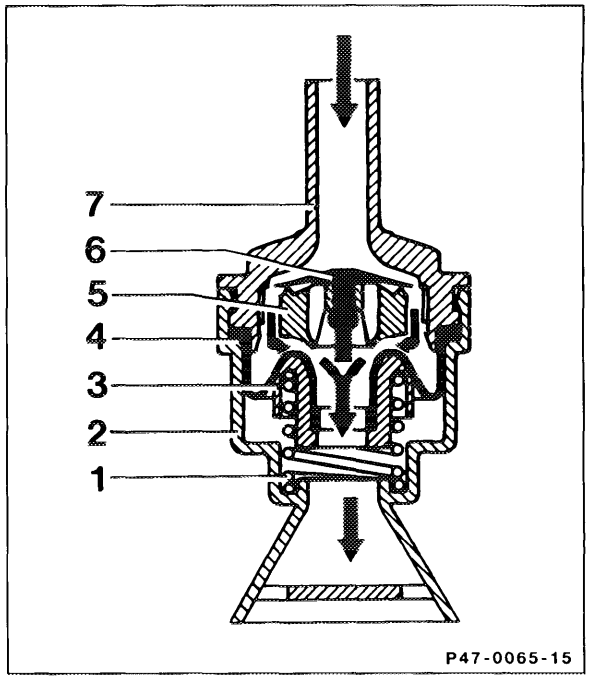
1	Cap	4	Compression spring
2	Sealing ring	5	Filler neck
3	Closing bar		

At a gauge pressure of 100-300 mbar, vaporized fuel can escape through the fuel cap. This is only the case if the vent line from the fuel tank is not clear. If the system is operating properly, a gauge pressure of up to 50 mbar may be present in the fuel tank.



The vent system in the fuel tank (50) consists of a central pipe (54) each with a siphon breaker (54/1) at the ends. The siphon breakers prevent fuel escaping through the vent line.
The vent line (64) runs from the central pipe to the vent valve (51). The protective seal (51/1) at the end of the vent valve prevents dirt and splash water from getting into the vent valve.

If a gauge pressure of 30-50 mbar is present in the fuel tank, the vent valve (4) opens and allows the fuel vapors to escape.

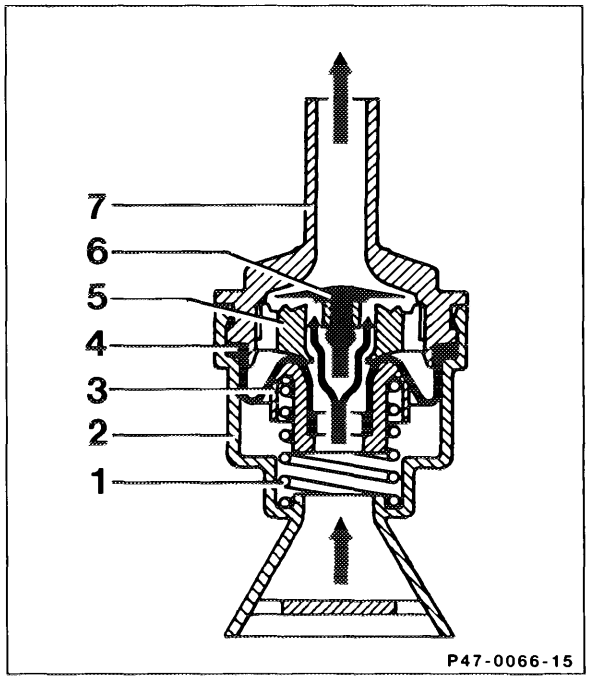


1 Compression ring
2 Valve housing
3 Spring plate
4 Vent valve
5 Valve plate
6 Air admission valve
7 Connection fitting

If a vacuum of 1-16 mbar is produced in the fuel tank, the air admission valve (6) opens.

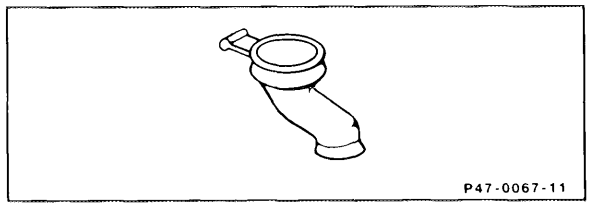
Station wagons

These models are fitted with a modified vent valve with a bright base section. The performance is the same as for other vent valves.



1 Compression spring
2 Valve housing
3 Spring plate
4 Vent valve
5 Valve plate
6 Air admission valve
7 Connection fitting

The dirt seal at the end of the vent valve prevents dirt and splash water from getting into the vent valve.



Modified vent system

The vent system has been modified by additional lines and siphon breakers (arrows) with the result that no fuel can escape through the vent system, even under extreme conditions (rollover).

Production breakpoint: phased in (approx. 10/88).