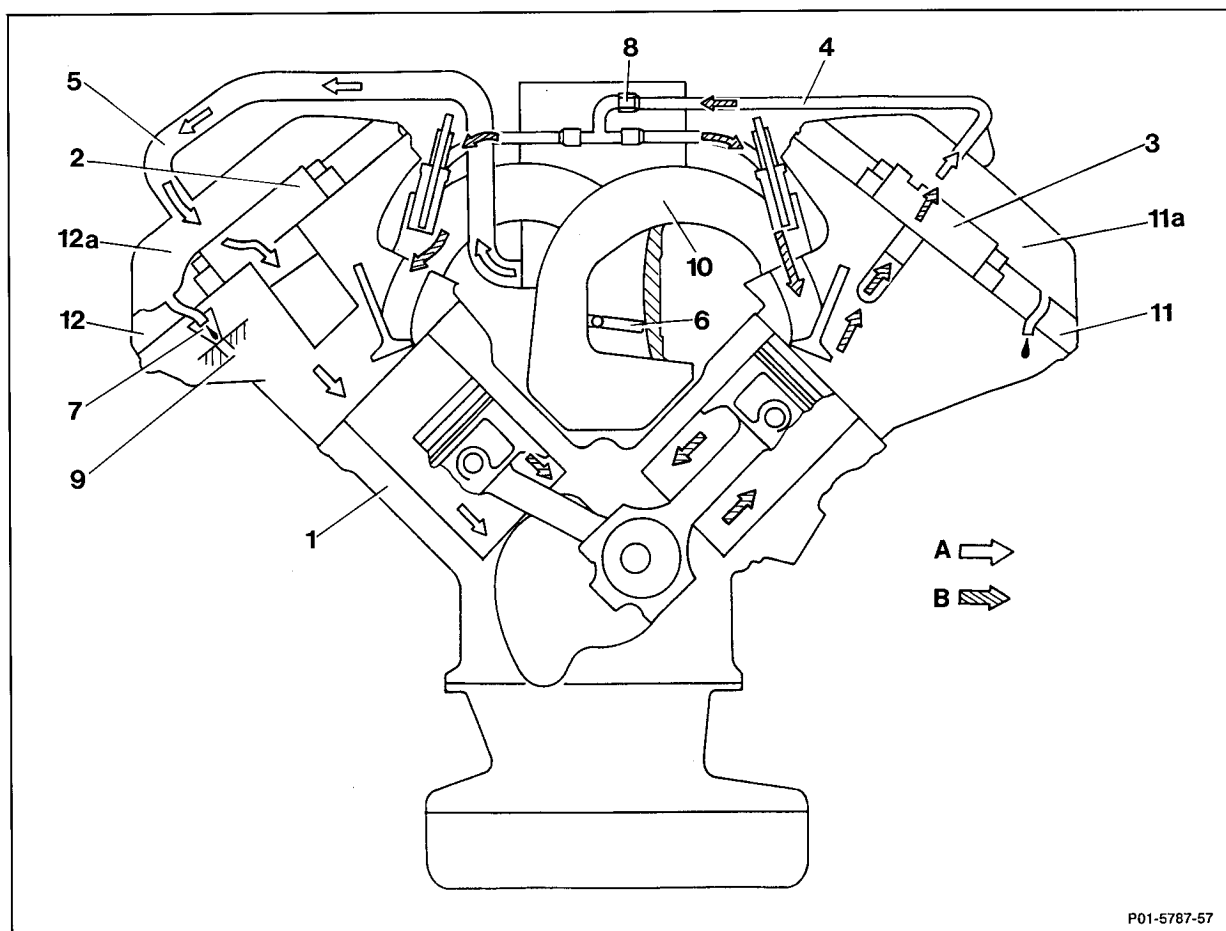


Crankcase ventilation at idle speed and midpart load



Engine 119.97/98

- | | | | |
|---|---|-----|---|
| 1 | Crankcase | 10 | Intake manifold |
| 2 | Right intake duct | 11 | Left cylinder head cover |
| 3 | Left intake duct | 11a | Oil separation chamber in left cylinder head cover |
| 4 | Ventilation line (idle speed/lower part load) | 12 | Right cylinder head cover |
| 5 | Ventilation line (upper part load/full load) | 12a | Oil separation chamber in right cylinder head cover |
| 6 | Throttle valve | 13 | Syphon |
| 7 | Rubber funnel | A | Fresh air |
| 8 | Restriction orifice, 1.5 mm dia. | B | Blowby gases |
| 9 | Oil separator in left cylinder head at rear | | |

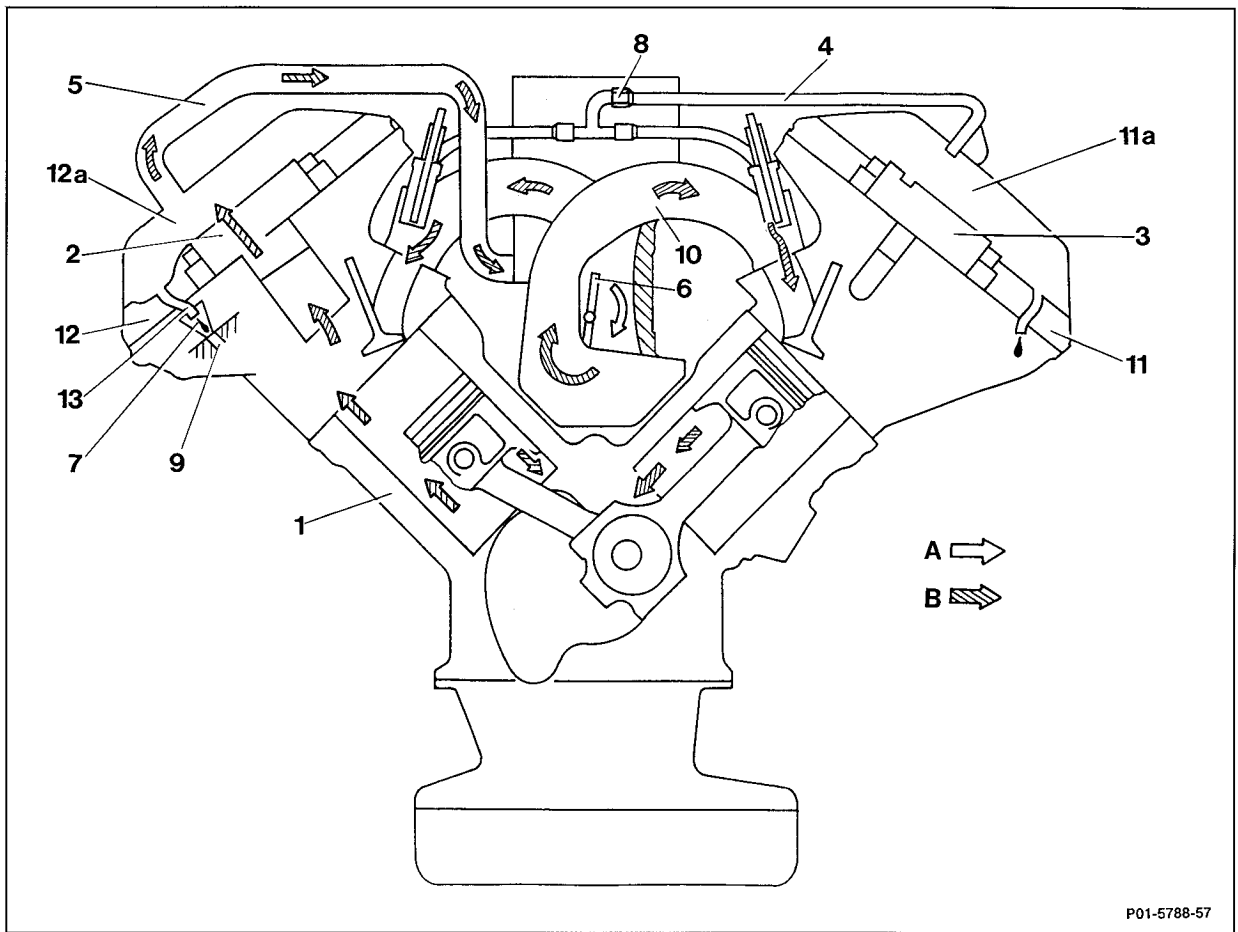
The blowby gases flow at idle speed and at lower part load out of the front of the crankcase (1) along the left intake duct (3) into the oil separation chamber (11a) in the left cylinder head cover (11).

The blowby gases then flow along the connection line (4) with the 1.5 mm dia. restriction orifice (8) to the combustion chambers.

At the same time, fresh air flows into the crankcase (1) through the vent pipe (5), right cylinder head cover (12), oil separation chamber (12a) and intake shaft (2).

When performing repairs, check the flow through the vent pipes 4 and 5 and also the restrictor trimming (8).

Ventilation at upper part load and full load



P01-5788-57

Engine 119.97/98

1	Crankcase	9	Oil separator in left cylinder head at rear
2	Right intake duct	10	Intake manifold
3	Left intake duct	11	Left cylinder head cover
4	Ventilation line (idle speed/lower part load)	11a	Oil separation chamber in left cylinder head cover
5	Ventilation line (upper part load/full load)	12	Right cylinder head cover
6	Throttle valve	12a	Oil separation chamber in right cylinder head cover
7	Rubber funnel		
8	Restriction orifice, 1.5 mm dia.	A	Fresh air
		B	Blowby gases

The blowby gases flow at upper part load and at full load out of the front of the crankcase (1) along the right intake duct (2) into the oil separation chamber (12a) of the right cylinder head cover (12), along the ventilation line (5) into the intake manifold (10) and from there to the combustion chambers.

Entrained engine oil flows through the oil separation chamber (12a) and the downstream syphon (13) into the oil separator (9) in the right cylinder head.

The oil separator (9) with rubber funnel (7) defoams the entrained engine oil.