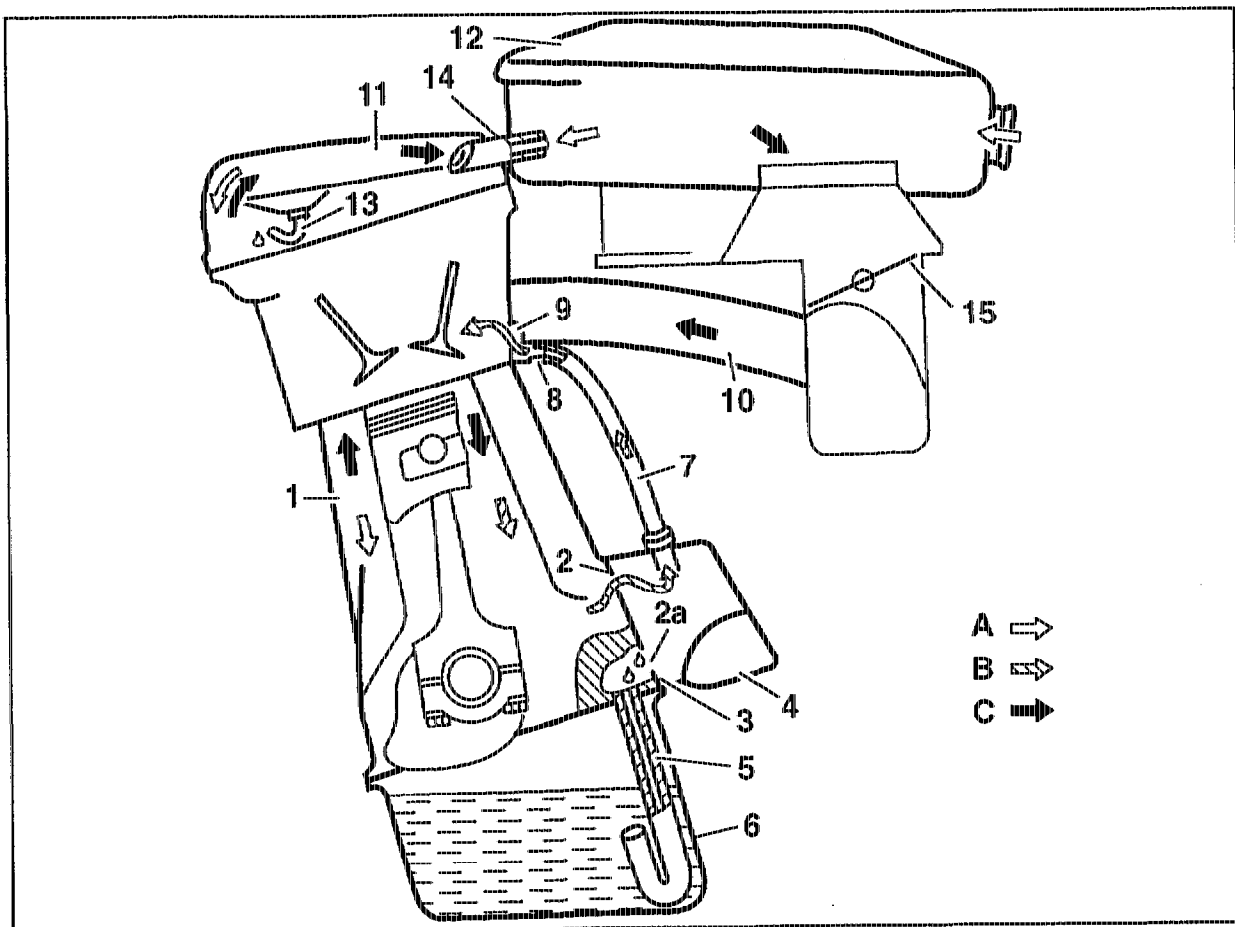


## 01-0400 Function description of crankcase ventilation

### Engine 104.98 CFI-Jetronic



P01-5843-57

1	Crankcase	10	Intake manifold
2	Air admission opening in crankcase	11	Cylinder head cover
2a	Opening for oil outlet	12	Air cleaner
3	Gasket	13	Oil separator
4	Combination support (air admission housing)	14	Air admission or vent hose
5	Oil outlet pipe	15	Throttle valve
6	Oil sump	A	Fresh air
7	Air admission pipe	B	Part load blow-by gases
8	Restriction drilling, 2 mm dia.	C	Full load blow-by gases
9	Idle speed air port		

#### Function at idle speed position and mid-load

(Throttle valve (15) closed or only slightly open, high intake manifold vacuum)

The crankcase (1) is vented in part load via the combination support (4) through a 2 mm dia. restriction drilling (8) in the intake manifold (10) to the idle speed air port (9).

Entrained engine oil is separated out in the combination support (4) and passed along an oil outlet pipe (5) to the oil sump (6).

The vacuum which is thus produced in the crankcase draws in fresh air from the air cleaner (12) through the air admission or vent hose (14).

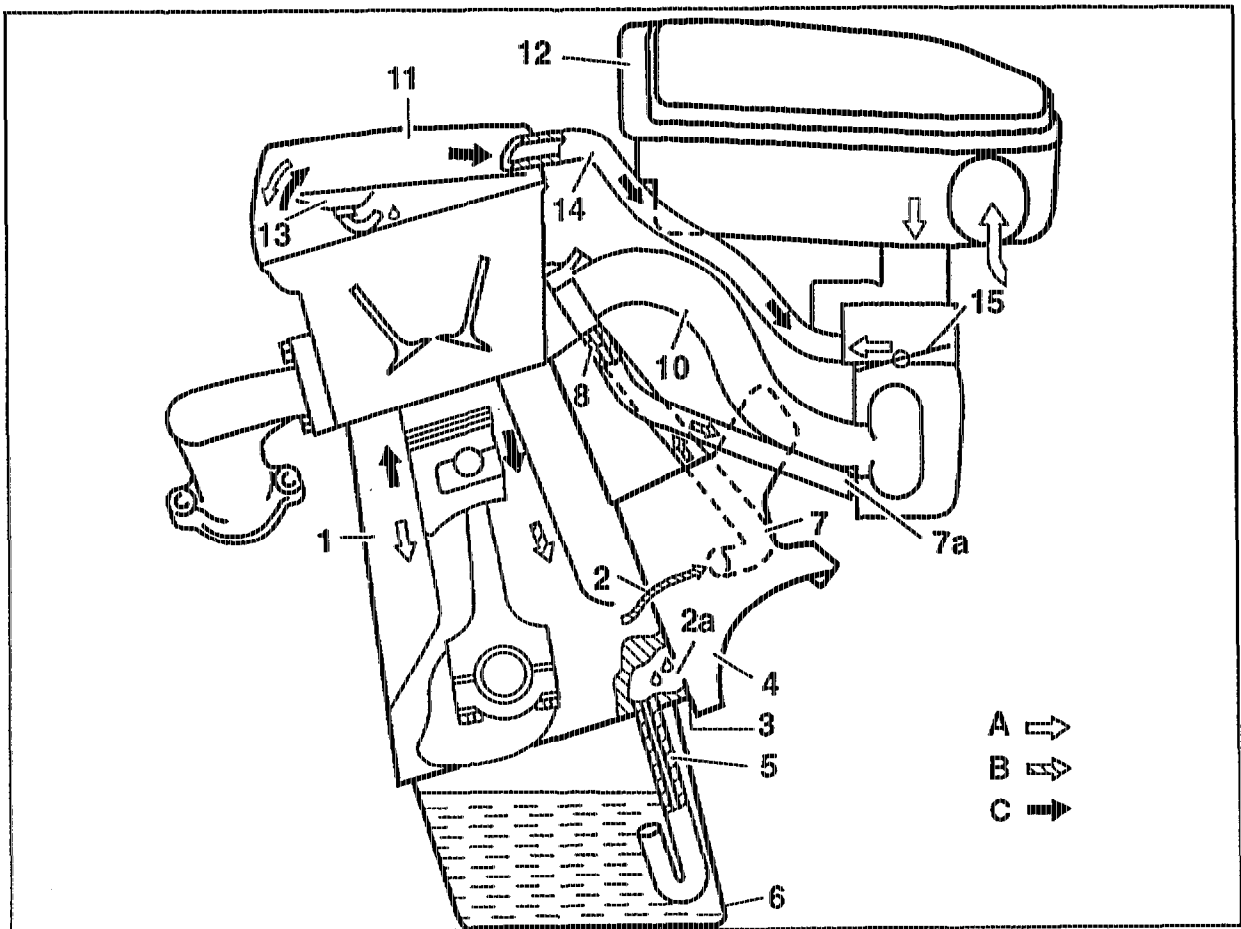
The addition of fresh air is an additional measure to prevent the formation of sludge in the engine oil.

**Function at upper part load to full load**

Throttle valve (15) open:

At full load the entire ventilation quantity is passed through the oil separator (13) in the cylinder head cover (11), the air admission and vent hose (14), the air cleaner (12) the intake manifold (10) to the combustion chambers.

**Engine 104.990 LH-SFI-Jetronic**



P01-5844-57

- |    |   |    |                             |
|----|---|----|-----------------------------|
| 1  | Crankcase                                   | 10 | Intake manifold             |
| 2  | Air admission opening in crankcase          | 11 | Cylinder head cover         |
| 2a | Opening for oil outlet                      | 12 | Air cleaner                 |
| 3  | Gasket                                      | 13 | Oil separator               |
| 4  | Combination support (air admission housing) | 14 | Air admission and vent hose |
| 5  | Oil outlet pipe                             | 15 | Throttle valve              |
| 6  | Oil sump                                    | A  | Fresh air                   |
| 7  | Air admission pipe                          | B  | Part load blow-by gases     |
| 7a | Air admission pipe                          | C  | Full load blow-by gases     |
| 8  | Restriction drilling 2 mm dia.              |    |                             |
| 9  | Idle speed air port                         |    |                             |

**Function at idle speed position and mid-load**

(Throttle valve (15) closed or only slightly open, high intake manifold vacuum)

The crankcase (1) is vented in part load via the combination support (4) of the vent pipe (7) through a 2 mm dia. restriction drilling (8) in the intake manifold of the vent pipe (7a) to the intake manifold (10).

Entrained engine oil is separated out in the combination support (4) and passed along an oil outlet pipe (5) into the oil sump (6).

**Function at top part load up to full load**

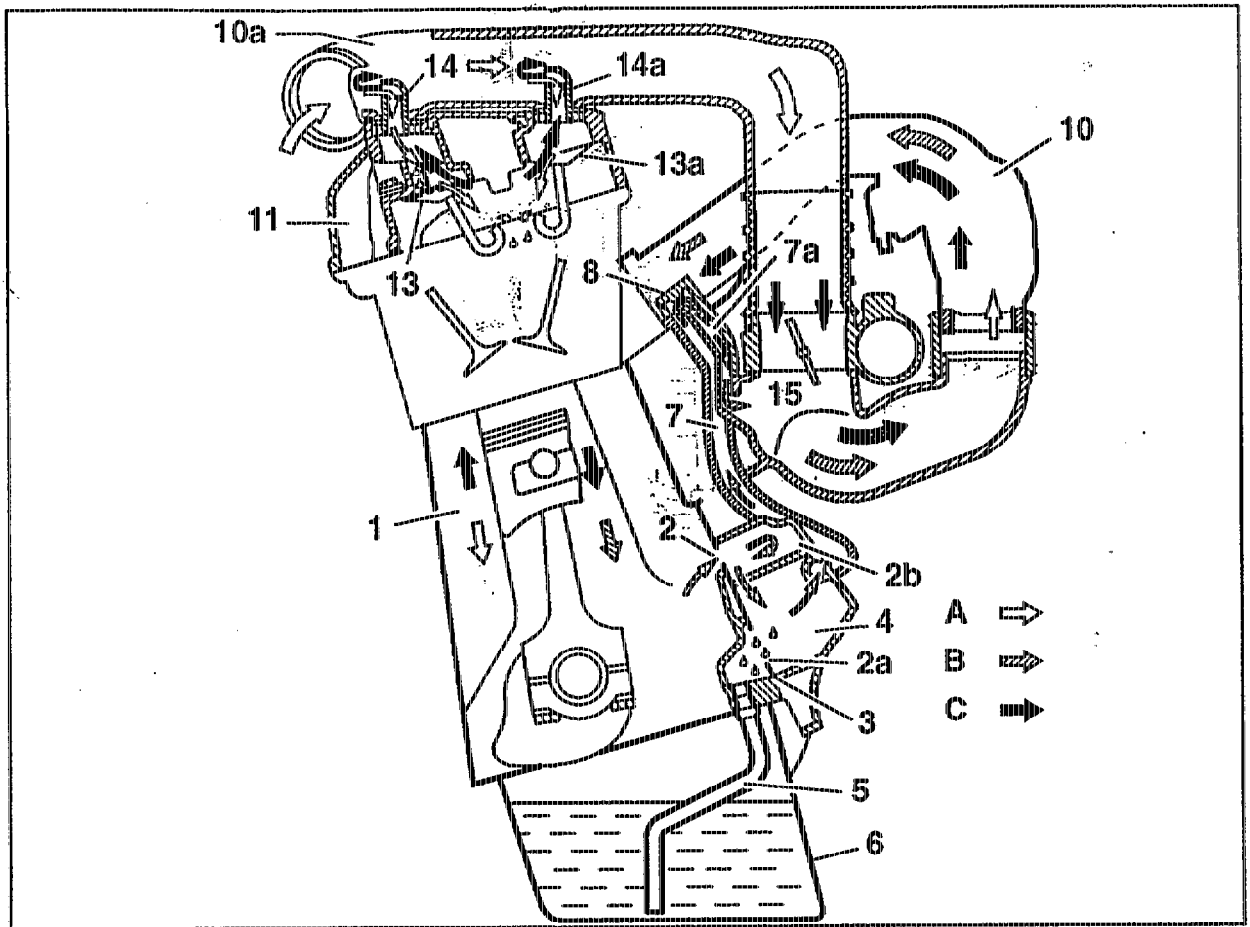
Throttle valve (15) open:

At full load the entire ventilation quantity is passed through the oil separator (13) in the cylinder head cover (11), the air admission and vent hose (14), the air cleaner (12), the intake manifold (10) to the combustion chambers.

The vacuum thus produced in the crankcase draws in fresh air from the air cleaner (12) along the air admission and vent hose (14).

The addition of fresh air is an additional measure to prevent the formation of sludge in the engine oil.

Engine 104.941/942/943/944/945/991/992/994/995/996 with HFM sequential multiport fuel injection/ignition system (HFM-SFI)



P01-5845-57

1	Crankcase	10	Intake manifold
2	Air admission opening in crankcase	10a	Intake air pipe
2a	Opening for oil outlet	11	Cylinder head cover
2b	Filter	13	Oil separator with syphon
3	Gasket	13a	Oil separator with syphon
4	Combination support (air admission housing)	14	Air admission and vent hose $\varnothing$ 9 mm
5	Oil outlet pipe	14a	Air admission and vent hose $\varnothing$ 7 mm
6	Oil sump	15	Throttle valve
7	Air admission pipe	A	Fresh air
7a	Vent pipe	B	Part load blow-by gases
8	Restriction drilling 2 mm dia.	C	Full load blow-by gases

**Function at idle speed position and mid-load**

(Throttle valve (15) closed or only slightly open, high intake manifold vacuum)

The crankcase (1) is vented in part load through the combination support (4) with filter (2b) of the vent pipe (7) through a 2 mm dia. restriction drilling (8) in the manifold of the vent pipe (7a) to the intake manifold (10).

Entrained engine oil is separated out in the combination support (4) and passed along the oil outlet pipe (5) into the oil sump (6).

The vacuum which is thus produced in the crankcase draws in fresh air from the intake air line (10a) through the air admission and vent connections (14) and (14a).

The addition of fresh air is an additional measure to prevent the formation of sludge in the engine oil. The vent connections (14) and (14a) have a scoop adapted to the pressure fluctuations in the intake air line (10a).

**Function at top part load up to full load**

Throttle valve (15) open:

At full load the entire ventilation quantity is passed through the oil separators (13) and (13a) in the cylinder head cover (11) to the air admission and vent connections (14) with  $\varnothing$  9 mm reduction and (14a) with  $\varnothing$  7 mm reduction of the intake air line (10a), to the intake manifold (10) to the combustion chambers.

