The engine has a closed maintenance-free engine breathing system. The engine blow-by gases and cylinder crankcase vapors flow through the connection pipe (1) in the left cylinder head cover (in direction of driving) to the idle air distributor (3). A breather orifice of 2 mm dia. is installed in the idle air distributor.

From the breather orifice, the blow-by gases and crankcase vapors mixed with the idle air flow through a distribution pipe to the two idle air ducts (one duct per bank of cylinders), which are integrated in the intake manifold casting. From here the vapors and gases are directed straight into the intake pipes and further into the combustion chambers.

From the breather connection (2) of the right cylinder head cover the breather pipe leads directly to the clean air side in the air cleaner.

In the lower and medium performance range, the engine is supplied with fresh air via the right-hand cylinder bank by means of the intake manifold vacuum which is transmitted via the left-hand breather pipe into the cylinder crankcase. In other words, clean air is drawn in from the air cleaner via the breather pipe.

This changes to a breathing action in the upper performance range. The blow-by gases and crankcase vapors flow into the air cleaner, and further into the intake pipes and combustion chambers via the air cleaner flap.

In order to prevent freezing of the condensate in the breather orifice at low ambient temperatures, the idle air distributor is coolant-heated.

