

1570 Cylinder head

The introduction of VarioCam Plus necessitated a new design of the cylinder head and the camshaft control.

As in the previous model the cylinder head is in three parts, consisting of basic cylinder head, bucket tappet guide housing and cylinder head cover. The oil protection tubes are now part of the bucket tappet guide housing and are sealed at the cylinder head cover side with fitted sealing rings.

The valve springs of the exhaust valves are single valve springs and of tapered design, the intake valves are designed as a double valve spring set due to the increased forces. For immediate lubrication of tappets when starting engine, the bucket tappet housing is provided with oil chambers on the intake side.

1571 Cylinder head gasket

The multi-layer steel gasket is covered with high-temperature-resistant plastic in order to enhance the sealing quality of its surface.

The advantage of this steel gasket is that heat can be dissipated from the cylinder head very efficiently.

15 Chain drive

A separate intake and exhaust camshaft is used for each cylinder bank. These camshafts are driven directly by a double roller chain. The chains are guided by plastic guide rails and hydraulic chain tensioners located at the untensioned end of the chain.

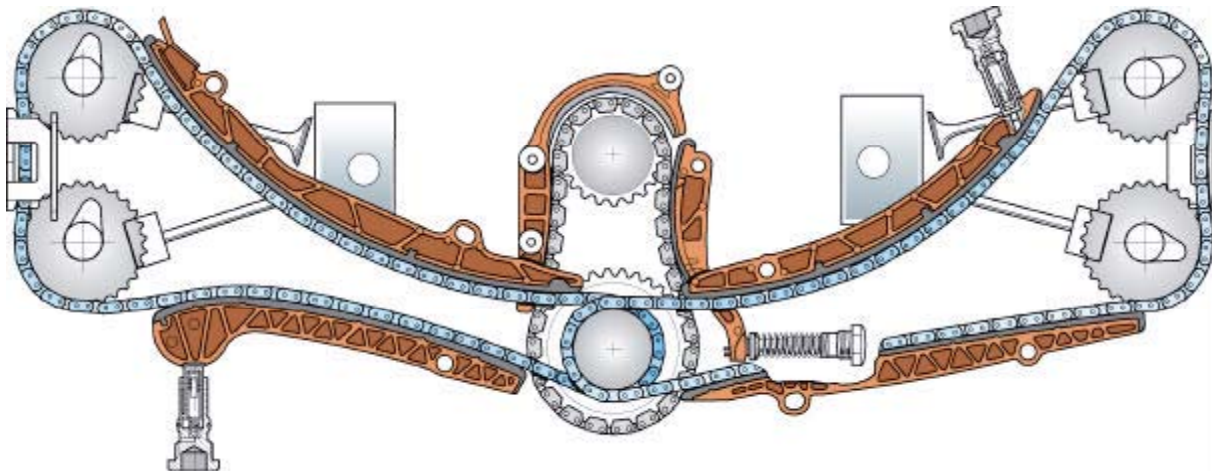
The intake camshafts in the new 911 Carrera also have a valve stroke control on the intake side in addition to the VarioCam Plus system (the system is described in a separate section). The respective solenoid valves are fitted in the cylinder head.

This optimises the compromise between maximum power output and maximum torque while simultaneously reducing fuel consumption and improving running smoothness of the engine.

A driving flange for the oil suction pump is attached on the input side of each exhaust camshaft.

1505 Camshafts

The camshafts are hard-chilled components and hollow-cast to reduce weight. The shank diameter of all camshafts is 26 mm. The intake valve stroke is variable (3.0 mm or 10.0 mm).



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