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# TECHINCAL REPORT

Valve cover gasket set 56033200 for BMW with Valvetronic system



#### **TECHNICAL REPORT**



#### PURPOSE

To inform customers about valve cover gasket set reference 56033200 for BMW engines equipped with valvetronic system.

#### DESCRIPTION

BMW valvetronic system allows **controlling the air volume in the combustion** avoiding the use of the traditional throttle valve, which is actuated with the **accelerator pedal** and so eliminating the obstacle that this represents for the air flow to the cylinder.

This system allows to control the mixture by changing the height of the intake valve compared to the engine demand, that is, the air flow that goes into the cylinder is determined by the open space of the valve. For this, it has a systems where the rocker that pushes the valve is not directly actuated by the main camshaft, but by an intermediate lever, that at the same time, changes positioning, according to and additional axis actuated by an electric engine.



All **intake valves** are linked to an axis actuated by an electric engine electronically controlled, which changes position depending on the engine requirements. Depending on the axis position, **the actuating lever will rest in different positions** on the valve rockers, which will open when the lever receives the camshaft movement at a certain height to allow the mixture.

This height will be at a maximum level when the engine is required maximum load allowing the air flow is as much as possible; in the same way, the opening will be smaller when the engine load requirements are smaller.

### **TECHNICAL REPORT**



In vehicles with valvetronic, the **electric engine** that commands the camshaft of the system is on **the top part of the cylinder head**. Ajusa offers the gasket to assure sealing, together with the valve cover gasket, **making the set reference 56033200**. It is a must to replace both gaskets when the cylinder head is opened, in order to make a correct repair, not only avoiding oil leaks but also isolating, and protecting, the electric components of the system.



