

Forklift Throttle Body

Throttle Body for Forklifts - Where fuel injected engines are concerned, the throttle body is the part of the air intake system that controls the amount of air which flows into the engine. This mechanism functions in response to driver accelerator pedal input in the main. Usually, the throttle body is positioned between the intake manifold and the air filter box. It is often connected to or positioned close to the mass airflow sensor. The largest component inside the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is in order to control air flow.

On numerous styles of automobiles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In cars with electronic throttle control, likewise called "drive-by-wire" an electric motor regulates the throttle linkages. The accelerator pedal is attached to a sensor and not to the throttle body. This sensor sends the pedal position to the ECU or otherwise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position together with inputs from different engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black part on the left hand side which is curved in design. The copper coil situated close to this is what returns the throttle body to its idle position after the pedal is released.

The throttle plate turns in the throttle body each time the driver applies pressure on the accelerator pedal. This opens the throttle passage and permits a lot more air to flow into the intake manifold. Usually, an airflow sensor measures this alteration and communicates with the ECU. In response, the Engine Control Unit then increases the amount of fluid being sent to the fuel injectors in order to generate the desired air-fuel ratio. Frequently a throttle position sensor or TPS is fixed to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or likewise called "WOT" position or anywhere in between these two extremes.

Several throttle bodies may have valves and adjustments so as to control the lowest amount of airflow through the idle period. Even in units that are not "drive-by-wire" there will usually be a small electric motor driven valve, the Idle Air Control Valve or also called IACV that the ECU uses so as to control the amount of air that can bypass the main throttle opening.

In several vehicles it is common for them to have a single throttle body. To be able to improve throttle response, more than one can be used and attached together by linkages. High performance vehicles such as the BMW M1, together with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or likewise known as "individual throttle bodies."

The carburetor and the throttle body in a non-injected engine are somewhat the same. The carburetor combines the functionality of both the fuel injectors and the throttle body together. They could regulate the amount of air flow and combine the air and fuel together. Automobiles that include throttle body injection, that is referred to as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This permits an old engine the possibility to be converted from carburetor to fuel injection without significantly altering the engine design.