

Forklift Throttle Body

Throttle Body for Forklift - The throttle body is a component of the intake control system in fuel injected engines so as to control the amount of air flow to the engine. This mechanism functions by placing pressure upon the operator accelerator pedal input. Usually, the throttle body is located between the air filter box and the intake manifold. It is often attached to or placed close to the mass airflow sensor. The largest piece inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is in order to control air flow.

On the majority of automobiles, the accelerator pedal motion is transferred via the throttle cable, hence activating the throttle linkages works so as to move the throttle plate. In automobiles consisting of electronic throttle control, otherwise known as "drive-by-wire" an electric motor controls the throttle linkages. The accelerator pedal connects to a sensor and not to the throttle body. This sensor sends the pedal position to the ECU or likewise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along 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 that is curved in design. The copper coil located close to this is what returns the throttle body to its idle position after the pedal is released.

The throttle plate turns within the throttle body each and every time the operator applies pressure on the accelerator pedal. This opens the throttle passage and allows much more air to be able to flow into the intake manifold. Typically, an airflow sensor measures this change 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 produce the desired air-fuel ratio. Frequently a throttle position sensor or also called TPS is connected to the shaft of the throttle plate to be able to provide the ECU with information on whether the throttle is in the wide-open throttle or likewise called "WOT" position, the idle position or anywhere in between these two extremes.

Various throttle bodies may include adjustments and valves so as to regulate the minimum airflow during the idle period. Even in units which are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or also called IACV that the ECU uses to regulate the amount of air that can bypass the main throttle opening.

It is common that a lot of cars have a single throttle body, though, more than one could be used and attached together by linkages to be able to improve throttle response. High performance vehicles like the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are referred to as ITBs or also known as "individual throttle bodies."

The throttle body and the carburetor 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 mix the fuel and air together. Cars that include throttle body injection, which is referred to as TBI by GM and CFI by Ford, locate the fuel injectors inside the throttle body. This permits an older engine the chance to be transformed from carburetor to fuel injection without really changing the engine design.