

Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the part of the air intake system which controls the amount of air which flows into the motor. This mechanism works 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 usually connected to or located next to the mass airflow sensor. The biggest part within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is to be able to control air flow.

On numerous styles of cars, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In automobiles with electronic throttle control, likewise known as "drive-by-wire" an electric motor regulates 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 otherwise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position together with inputs from different engine sensors. The throttle body consists of a throttle position sensor. The throttle cable connects 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 once the pedal is released.

The throttle plate turns in the throttle body each and every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and enables more air to be able to flow into the intake manifold. Usually, an airflow sensor measures this adjustment and communicates with the ECU. In response, the Engine Control Unit then increases the amount of fluid being sent to the fuel injectors so as to generate the desired air-fuel ratio. Often a throttle position sensor or likewise called TPS is connected 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 "WOT" position or anywhere in between these two extremes.

To be able to control the least amount of air flow while idling, some throttle bodies can include valves and adjustments. Even in units which are not "drive-by-wire" there would often be a small electric motor driven valve, the Idle Air Control Valve or otherwise called IACV that the ECU utilizes to control the amount of air which could bypass the main throttle opening.

It is common that various cars have a single throttle body, even if, more than one can be utilized and attached together by linkages in order to improve throttle response. High performance vehicles such as the BMW M1, along with high performance motorcycles like for instance the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are referred to as ITBs or "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 throttle body and the fuel injectors together. They are able to modulate the amount of air flow and mix the fuel and air together. Automobiles which have throttle body injection, which is known as CFI by Ford and TBI by GM, put the fuel injectors in the throttle body. This permits an older engine the possibility to be transformed from carburetor to fuel injection without significantly altering the design of the engine.