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 regulates the amount of air which flows into the motor. This particular mechanism operates in response to driver accelerator pedal input in the main. Generally, the throttle body is placed between the intake manifold and the air filter box. It is usually attached to or positioned next to the mass airflow sensor. The biggest piece inside the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is in order to regulate air flow.

On nearly all automobiles, the accelerator pedal motion is transferred through the throttle cable, hence activating the throttle linkages works to move the throttle plate. In cars with electronic throttle control, also 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 particular 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 various engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black portion on the left hand side that is curved in design. The copper coil positioned close to this is what returns the throttle body to its idle position after the pedal is released.

Throttle plates revolve inside the throttle body each and every time pressure is applied on the accelerator. The throttle passage is then opened in order to permit 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 to be able to generate the desired air-fuel ratio. Frequently a throttle position sensor or likewise called TPS is fixed to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the wide-open throttle or "WOT" position, the idle position or anywhere in between these two extremes.

In order to regulate the minimum air flow while idling, several throttle bodies may include adjustments and valves. Even in units that are not "drive-by-wire" there would usually be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU utilizes to control the amount of air which can bypass the main throttle opening.

It is common that numerous cars contain a single throttle body, although, more than one can be used and connected together by linkages to be able to improve throttle response. High performance cars like for instance the BMW M1, together with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are called ITBs or otherwise known as "individual throttle bodies."

A throttle body is similar to the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body together. They operate by blending the fuel and air together and by modulating the amount of air flow. Cars which have throttle body injection, that is called CFI by Ford and TBI by GM, situate the fuel injectors within the throttle body. This permits an old engine the chance to be converted from carburetor to fuel injection without significantly altering the engine design.