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 mechanism operates in response to driver accelerator pedal input in the main. Usually, the throttle body is located between the intake manifold and the air filter box. It is normally connected to or positioned next to the mass airflow sensor. The biggest piece in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is in order to regulate air flow.

On most cars, the accelerator pedal motion is transferred through the throttle cable, hence activating the throttle linkages works so as to move the throttle plate. In vehicles consisting of electronic throttle control, otherwise known as "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 particular 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 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 placed next to this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates rotate in the throttle body each and every time pressure is placed on the accelerator. The throttle passage is then opened to be able to enable a lot more air to flow into the intake manifold. Normally, 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 in order to produce the desired air-fuel ratio. Generally a throttle position sensor or otherwise called TPS is attached to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the wide-open throttle or otherwise called "WOT" position, the idle position or somewhere in between these two extremes.

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

In various automobiles it is common for them to have one throttle body. So as to improve throttle response, more than one can be utilized and attached together by linkages. High performance cars like for instance the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or also known as "individual throttle bodies."

A throttle body is similar to the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They work by combining the air and fuel together and by regulating the amount of air flow. Automobiles that include throttle body injection, that is referred to as TBI by GM and CFI by Ford, situate the fuel injectors inside the throttle body. This allows an old engine the chance to be converted from carburetor to fuel injection without significantly altering the design of the engine.