Forklift Throttle Body

Throttle Body for Forklifts - Where fuel injected engines are concerned, the throttle body is the part of the air intake system which regulates the amount of air which flows into the engine. This mechanism operates in response to operator accelerator pedal input in the main. Normally, the throttle body is placed between the air filter box and the intake manifold. It is normally attached to or situated close to the mass airflow sensor. The largest part within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main task is in order to regulate air flow.

On numerous kinds of vehicles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In automobiles with electronic throttle control, also called "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 upon accelerator pedal position together with inputs from different engine sensors. The throttle body has 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 placed close to this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate turns inside the throttle body each and every time the driver presses on the accelerator pedal. This opens the throttle passage and permits more air 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 to be able 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 idle position, the wide-open position or otherwise called "WOT" position or somewhere in between these two extremes.

Several throttle bodies may include valves and adjustments to be able to regulate the least amount of airflow throughout the idle period. Even in units which are not "drive-by-wire" there will often be a small electric motor driven valve, the Idle Air Control Valve or IACV that the ECU utilizes to control the amount of air which could bypass the main throttle opening.

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

The carburator and the throttle body in a non-injected engine are quite the same. The carburator combines the functionality of both the throttle body and the fuel injectors together. They could control the amount of air flow and mix the fuel and air together. Automobiles which include throttle body injection, which is referred to as TBI by GM and CFI by Ford, put the fuel injectors within the throttle body. This enables an old engine the possibility to be transformed from carburetor to fuel injection without significantly altering the design of the engine.