Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that regulates the amount of air which flows into the motor. This particular mechanism operates in response to operator accelerator pedal input in the main. Usually, the throttle body is located between the intake manifold and the air filter box. It is often fixed to or located close to the mass airflow sensor. The biggest part in the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is in order to regulate air flow.

On many kinds of automobiles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In cars with 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 also 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 has 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 located next to this is what returns the throttle body to its idle position when the pedal is released.

The throttle plate turns within the throttle body each 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. Typically, 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 in order to generate the desired air-fuel ratio. Frequently 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 also called "WOT" position or anywhere in between these two extremes.

To be able to regulate the least amount of air flow while idling, some throttle bodies may have adjustments and valves. 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 otherwise called IACV that the ECU utilizes to regulate the amount of air which could bypass the main throttle opening.

It is common that several vehicles have a single throttle body, although, more than one could be used and attached together by linkages in order to improve throttle response. High performance cars 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 otherwise known as "individual throttle bodies."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the fuel injectors and the throttle body into one. They function by blending the air and fuel together and by controlling the amount of air flow. Automobiles which include throttle body injection, which is known as CFI by Ford and TBI by GM, situate the fuel injectors inside the throttle body. This allows an old engine the possibility to be converted from carburetor to fuel injection without considerably changing the engine design.