Forklift Throttle Body

Throttle Body for Forklift - Where fuel injected engines are concerned, the throttle body is the part of the air intake system which controls the amount of air that flows into the motor. This mechanism works in response to operator accelerator pedal input in the main. Usually, the throttle body is situated between the intake manifold and the air filter box. It is normally connected to or placed close to the mass airflow sensor. The largest part inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is to control air flow.

On many 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 cars consisting of electronic throttle control, otherwise called "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 on accelerator pedal position together with inputs from various engine sensors. The throttle body has a throttle position sensor. The throttle cable connects to the black portion on the left hand side which is curved in design. The copper coil located close to this is what returns the throttle body to its idle position when the pedal is released.

Throttle plates revolve within the throttle body each and every time pressure is placed on the accelerator. The throttle passage is then opened to be able to permit a lot more air 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 to be able to produce the desired air-fuel ratio. Generally a throttle position sensor or 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 otherwise called "WOT" position or somewhere in between these two extremes.

Various throttle bodies may include valves and adjustments so as to control the minimum airflow all through the idle period. 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 that the ECU utilizes in order to regulate the amount of air that can bypass the main throttle opening.

It is common that lots of cars have one throttle body, even if, more than one can be used and connected together by linkages so as to improve throttle response. High performance automobiles such as the BMW M1, along 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 like the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They operate by mixing the fuel and air together and by controlling the amount of air flow. Cars that include throttle body injection, which is called CFI by Ford and TBI by GM, situate the fuel injectors inside the throttle body. This permits an old engine the chance to be converted from carburetor to fuel injection without significantly changing the engine design.