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 controls the amount of air that flows into the motor. This mechanism works in response to operator accelerator pedal input in the main. Normally, the throttle body is located between the air filter box and the intake manifold. It is normally attached to or placed near 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 task is so as to regulate air flow.

On various styles of vehicles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In vehicles with electronic throttle control, likewise known as "drive-by-wire" an electric motor regulates 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 also known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position along with inputs from different 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 situated next to this is what returns the throttle body to its idle position after the pedal is released.

Throttle plates turn within the throttle body each 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. 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. 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 likewise called "WOT" position or anywhere in between these two extremes.

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

In lots of cars it is normal for them to have a single throttle body. To be able to improve throttle response, more than one could be used and connected together by linkages. High performance automobiles like the BMW M1, together with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each 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 throttle body and the fuel injectors together. They function by mixing the fuel and air together and by controlling the amount of air flow. Vehicles which include throttle body injection, that is called TBI by GM and CFI by Ford, situate the fuel injectors inside the throttle body. This enables an older engine the chance to be converted from carburetor to fuel injection without considerably altering the design of the engine.