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 which flows into the motor. This particular mechanism operates in response to driver accelerator pedal input in the main. Generally, the throttle body is positioned between the air filter box and the intake manifold. It is usually fixed to or situated next to the mass airflow sensor. The biggest component inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is so as to regulate air flow.

On several 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 cars with electronic throttle control, likewise referred to 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 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 different engine sensors. The throttle body has a throttle position sensor. The throttle cable connects to the black part on the left hand side which is curved in design. The copper coil positioned near this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate turns inside the throttle body every time the operator presses on the accelerator pedal. This opens the throttle passage and permits a lot more air to flow into the intake manifold. Typically, an airflow sensor measures this change 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. Frequently 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 "WOT" position, the idle position or somewhere in between these two extremes.

Several throttle bodies can have valves and adjustments in order to control the lowest amount of airflow 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 which the ECU utilizes to control the amount of air which can bypass the main throttle opening.

In numerous automobiles it is normal for them to have a single throttle body. To be able to improve throttle response, more than one can be utilized and attached together by linkages. High performance automobiles such as 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 "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 fuel injectors and the throttle body together. They could modulate the amount of air flow and blend the fuel and air together. Automobiles which include throttle body injection, that is known as CFI by Ford and TBI by GM, put the fuel injectors inside the throttle body. This permits an old engine the chance to be converted from carburetor to fuel injection without really altering the engine design.