Forklift Throttle Body

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that controls the amount of air which flows into the motor. This mechanism functions in response to driver accelerator pedal input in the main. Usually, the throttle body is placed between the intake manifold and the air filter box. It is often attached to or located near the mass airflow sensor. The biggest part within the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main task is so as to control air flow.

On various 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 automobiles with electronic throttle control, likewise 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 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 on accelerator pedal position along with inputs from various engine sensors. The throttle body consists of a throttle position sensor. The throttle cable connects to the black part on the left hand side that is curved in design. The copper coil situated 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 applied on the accelerator. The throttle passage is then opened to permit a lot more air to flow into the intake manifold. Normally, 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. Often a throttle position sensor or likewise called TPS is connected to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the wide-open throttle or also called "WOT" position, the idle position or somewhere in between these two extremes.

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

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

The carburator and the throttle body in a non-injected engine are rather the same. The carburator combines the functionality of both the throttle body and the fuel injectors into one. They can modulate the amount of air flow and blend the air and fuel together. Vehicles which have throttle body injection, that is called TBI by GM and CFI by Ford, situate the fuel injectors within the throttle body. This permits an old engine the opportunity to be transformed from carburetor to fuel injection without significantly altering the design of the engine.