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 functions in response to driver accelerator pedal input in the main. Usually, the throttle body is placed between the air filter box and the intake manifold. It is normally attached to or located near the mass airflow sensor. The biggest part in the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is in order to regulate air flow.

On nearly all vehicles, the accelerator pedal motion is transferred via the throttle cable, therefore activating the throttle linkages works to be able to move the throttle plate. In cars consisting of electronic throttle control, likewise referred to 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 particular sensor sends the pedal position to the ECU or otherwise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon 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 which is curved in design. The copper coil located close to this is what returns the throttle body to its idle position once the pedal is released.

The throttle plate rotates in the throttle body each time the driver applies pressure on the accelerator pedal. This opens the throttle passage and allows much more air to flow into the intake manifold. Normally, 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 so as to generate 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 idle position, the wide-open position or "WOT" position or anywhere in between these two extremes.

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

It is common that a lot of cars contain one throttle body, even if, more than one can be utilized and attached together by linkages to be able to improve throttle response. High performance automobiles like for example the BMW M1, together 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."

The throttle body and the carburator in a non-injected engine are rather similar. The carburator combines the functionality of both the throttle body and the fuel injectors into one. They are able to modulate the amount of air flow and blend the air and fuel together. Automobiles that have throttle body injection, that is called TBI by GM and CFI by Ford, locate the fuel injectors within the throttle body. This allows an old engine the possibility to be transformed from carburetor to fuel injection without really changing the design of the engine.