Throttle Body for Forklifts

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the part of the air intake system that regulates the amount of air that flows into the engine. This particular mechanism works in response to operator accelerator pedal input in the main. Generally, the throttle body is located between the air filter box and the intake manifold. It is usually attached to or placed close to the mass airflow sensor. The largest component in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is to control air flow.

On numerous kinds of cars, the accelerator pedal motion is communicated via 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 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 upon accelerator pedal position together with inputs from various engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black part on the left hand side which is curved in design. The copper coil situated next to this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates rotate in the throttle body each time pressure is placed on the accelerator. The throttle passage is then opened so as to allow much 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 in order to produce the desired air-fuel ratio. Often a throttle position sensor or TPS is fixed to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the wide-open throttle or otherwise called "WOT" position, the idle position or somewhere in between these two extremes.

Several throttle bodies can have valves and adjustments to be able to control the minimum airflow through the idle period. Even in units that are not "drive-by-wire" there will often be a small electric motor driven valve, the Idle Air Control Valve or IACV that the ECU utilizes to regulate the amount of air which could bypass the main throttle opening.

It is common that various cars have one throttle body, even though, more than one can be utilized and connected together by linkages in order to improve throttle response. High performance cars like for example the BMW M1, along with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are referred to as ITBs or "individual throttle bodies."

The throttle body and the carburator in a non-injected engine are quite the same. 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 fuel and air together. Automobiles which have throttle body injection, which is referred to as CFI by Ford and TBI by GM, situate the fuel injectors within the throttle body. This allows an old engine the chance to be converted from carburetor to fuel injection without considerably changing the design of the engine.