Throttle Body for Forklift

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. Normally, the throttle body is situated between the air filter box and the intake manifold. It is normally fixed to or placed near the mass airflow sensor. The largest piece inside the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main function is in order to control air flow.

On numerous kinds of cars, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In cars consisting of electronic throttle control, otherwise 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 Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from different engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black portion on the left hand side which is curved in design. The copper coil placed close to this is what returns the throttle body to its idle position after the pedal is released.

The throttle plate rotates within the throttle body every time the driver presses on the accelerator pedal. This opens the throttle passage and enables more air to flow into the intake manifold. Usually, 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. Generally a throttle position sensor or likewise 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 likewise called "WOT" position, the idle position or anywhere in between these two extremes.

Various throttle bodies could include adjustments and valves in order to regulate the lowest amount of airflow during 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 uses so as to control the amount of air that could bypass the main throttle opening.

It is common that many cars have one throttle body, although, more than one could be used and attached together by linkages so as to improve throttle response. High performance vehicles such as the BMW M1, together with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are called ITBs or likewise 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 blending the air and fuel together and by regulating the amount of air flow. Vehicles that have throttle body injection, that is called CFI by Ford and TBI by GM, put the fuel injectors in the throttle body. This permits an older engine the possibility to be converted from carburetor to fuel injection without significantly altering the engine design.