Throttle Body for Forklift

Forklift Throttle Body - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that regulates the amount of air which flows into the engine. This particular mechanism operates in response to operator accelerator pedal input in the main. Generally, the throttle body is located between the intake manifold and the air filter box. It is normally attached to or situated next to the mass airflow sensor. The biggest piece in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is so as to control air flow.

On several 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 vehicles consisting of electronic throttle control, also known as "drive-by-wire" an electric motor controls 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 on accelerator pedal position together with inputs from different engine sensors. The throttle body has 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 located close to this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates rotate within the throttle body each time pressure is applied on the accelerator. The throttle passage is then opened so as to permit a lot more air to flow into the intake manifold. Typically, an airflow sensor measures this adjustment and communicates with the ECU. In response, the Engine Control Unit then increases the amount of fluid being sent to the fuel injectors to be able to generate the desired air-fuel ratio. Generally 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 "WOT" position, the idle position or somewhere in between these two extremes.

In order to regulate the lowest amount of air flow while idling, several throttle bodies can include valves and adjustments. Even in units that are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or likewise called IACV that the ECU uses so as to regulate the amount of air which could bypass the main throttle opening.

In a lot of vehicles it is common for them to contain a single throttle body. In order to improve throttle response, more than one could be used and attached together by linkages. High performance automobiles like the BMW M1, along with high performance motorcycles like for example the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are referred to as 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 fuel injectors and the throttle body together. They function by blending the air and fuel together and by controlling the amount of air flow. Automobiles which include throttle body injection, that is called TBI by GM and CFI by Ford, put the fuel injectors in the throttle body. This allows an older engine the chance to be transformed from carburetor to fuel injection without really changing the engine design.