Throttle Body for Forklift

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines in order to control the amount of air flow to the engine. This particular mechanism works by applying pressure on the driver accelerator pedal input. Generally, the throttle body is positioned between the intake manifold and the air filter box. It is usually attached to or placed next to the mass airflow sensor. The biggest 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 nearly all automobiles, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works to be able to move the throttle plate. In vehicles with electronic throttle control, otherwise known as "drive-by-wire" an electric motor regulates the throttle linkages. The accelerator pedal connects to a sensor and not to the throttle body. This 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 on accelerator pedal position along with inputs from various engine sensors. The throttle body has 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 situated near this is what returns the throttle body to its idle position once the pedal is released.

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

In order to control the least amount of air flow while idling, various throttle bodies could have valves and adjustments. Even in units which are not "drive-by-wire" there will normally be a small electric motor driven valve, the Idle Air Control Valve or also called IACV which the ECU uses to regulate the amount of air which can bypass the main throttle opening.

In a lot of cars it is common for them to contain a single throttle body. To be able to improve throttle response, more than one could be utilized and attached together by linkages. High performance vehicles like for instance the BMW M1, together with high performance motorcycles like for instance 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."

The throttle body and the carburator in a non-injected engine are somewhat the same. The carburator combines the functionality of both the throttle body and the fuel injectors together. They are able to control the amount of air flow and combine the fuel and air together. Vehicles which have throttle body injection, which is called CFI by Ford and TBI by GM, situate the fuel injectors in the throttle body. This enables an older engine the opportunity to be transformed from carburetor to fuel injection without considerably changing the design of the engine.