

Throttle Body for Forklift

Forklift Throttle Body - The throttle body is a component of the intake control system in fuel injected engines so as to regulate the amount of air flow to the engine. This particular mechanism operates by applying pressure upon the operator accelerator pedal input. Usually, the throttle body is located between the intake manifold and the air filter box. It is normally connected to or positioned close to the mass airflow sensor. The biggest piece within the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is so as to regulate air flow.

On most vehicles, the accelerator pedal motion is transferred through the throttle cable, therefore activating the throttle linkages works to be able to move the throttle plate. In automobiles with electronic throttle control, otherwise known 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 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 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 near this is what returns the throttle body to its idle position when the pedal is released.

Throttle plates turn within the throttle body each time pressure is placed on the accelerator. The throttle passage is then opened to be able to allow a lot 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 generate the desired air-fuel ratio. Frequently a throttle position sensor or also called 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 anywhere in between these two extremes.

Various throttle bodies may include valves and adjustments in order to regulate the least amount of airflow throughout the idle period. Even in units that are not "drive-by-wire" there will normally be a small electric motor driven valve, the Idle Air Control Valve or likewise called IACV which the ECU utilizes to regulate the amount of air that could bypass the main throttle opening.

In many automobiles it is common for them to have a single throttle body. So as to improve throttle response, more than one could be utilized and connected together by linkages. High performance vehicles like the BMW M1, along with high performance motorcycles like for example the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are referred to as ITBs or "individual throttle bodies."

The carburetor and the throttle body in a non-injected engine are rather similar. The carburetor combines the functionality of both the throttle body and the fuel injectors together. They could control the amount of air flow and blend the air and fuel together. Cars that have throttle body injection, which is called TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This enables an old engine the possibility to be transformed from carburetor to fuel injection without significantly changing the design of the engine.