

Forklift Throttle Body

Throttle Body for Forklift - Where fuel injected engines are concerned, the throttle body is the part of the air intake system which regulates the amount of air that flows into the engine. This particular mechanism works in response to driver accelerator pedal input in the main. Generally, the throttle body is positioned between the air filter box and the intake manifold. It is often fixed to or positioned next to the mass airflow sensor. The largest component within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main task is to be able to regulate air flow.

On the majority of vehicles, the accelerator pedal motion is transferred via the throttle cable, hence activating the throttle linkages works to move the throttle plate. In vehicles consisting of electronic throttle control, otherwise referred to as "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 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 other 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 positioned near this is what returns the throttle body to its idle position after the pedal is released.

The throttle plate revolves in the throttle body each and every time the operator applies pressure on the accelerator pedal. This opens the throttle passage and allows much more air to flow into the intake manifold. Normally, 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 produce the desired air-fuel ratio. Frequently a throttle position sensor or likewise called TPS is attached to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or otherwise called "WOT" position or anywhere in between these two extremes.

Various throttle bodies could include adjustments and valves to be able to regulate the lowest 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 IACV that the ECU uses to regulate the amount of air which can bypass the main throttle opening.

It is common that lots of cars contain one throttle body, although, more than one could be utilized and attached together by linkages to be able to improve throttle response. High performance automobiles 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 also known as "individual throttle bodies."

The throttle body and the carburetor in a non-injected engine are quite the same. The carburetor combines the functionality of both the throttle body and the fuel injectors together. They could control the amount of air flow and combine the air and fuel together. Automobiles which include throttle body injection, that is known as TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This permits an old engine the chance to be converted from carburetor to fuel injection without considerably altering the engine design.