

Forklift Throttle Body

Throttle Body for Forklifts - Where fuel injected engines are concerned, the throttle body is the part of the air intake system that controls the amount of air that flows into the engine. This particular mechanism operates in response to operator accelerator pedal input in the main. Usually, the throttle body is situated between the intake manifold and the air filter box. It is normally attached to or situated close to the mass airflow sensor. The largest part within the throttle body is a butterfly valve referred to as the throttle plate. The throttle plate's main function is so as to control air flow.

On the majority of cars, the accelerator pedal motion is transferred via the throttle cable, thus activating the throttle linkages works so as to move the throttle plate. In vehicles with 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 also known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position along with inputs from various engine sensors. The throttle body has a throttle position sensor. The throttle cable is attached to the black portion on the left hand side that 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 inside the throttle body each time the operator presses on the accelerator pedal. This opens the throttle passage and enables 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 produce the desired air-fuel ratio. Frequently a throttle position sensor or otherwise called TPS is fixed to the shaft of the throttle plate to be able to provide the ECU with information on whether the throttle is in the wide-open throttle or "WOT" position, the idle position or anywhere in between these two extremes.

Several throttle bodies could have adjustments and valves so as to regulate the lowest amount of airflow during 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 otherwise called IACV which the ECU utilizes to control the amount of air which could bypass the main throttle opening.

It is common that several vehicles contain one throttle body, though, more than one can be used and connected together by linkages to be able to improve throttle response. High performance automobiles such as the BMW M1, along with high performance motorcycles like the Suzuki Hayabusa have a separate throttle body for every cylinder. These models are called ITBs or also known as "individual throttle bodies."

A throttle body is like the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They function by combining the air and fuel together and by regulating the amount of air flow. Cars which include throttle body injection, which is known as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This permits an older engine the opportunity to be transformed from carburetor to fuel injection without really changing the design of the engine.