

Forklift Throttle Body

Throttle Body for Forklift - Where fuel injected engines are concerned, the throttle body is the component of the air intake system which controls the amount of air that flows into the engine. This particular mechanism functions in response to driver accelerator pedal input in the main. Normally, the throttle body is located between the intake manifold and the air filter box. It is normally attached to or situated near the mass airflow sensor. The biggest 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 regulate air flow.

On numerous styles of automobiles, the accelerator pedal motion is communicated via the throttle cable. This activates the throttle linkages that in turn move the throttle plate. In automobiles consisting of electronic throttle control, otherwise known 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 likewise known as Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position together 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 situated near this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve inside the throttle body every time pressure is applied on the accelerator. The throttle passage is then opened to be able to permit much more air to flow into the intake manifold. Usually, 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 in order to generate the desired air-fuel ratio. Frequently a throttle position sensor or TPS is connected 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.

To be able to control the minimum air flow while idling, some throttle bodies could include adjustments and valves. Even in units which are not "drive-by-wire" there would normally be a small electric motor driven valve, the Idle Air Control Valve or IACV which the ECU utilizes so as to control the amount of air which can bypass the main throttle opening.

It is common that various cars contain a single throttle body, though, more than one could be used and connected together by linkages so as to improve throttle response. High performance vehicles such as the BMW M1, together with high performance motorcycles such as 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."

A throttle body is similar to the carburetor in a non-injected engine. Carburetors combine the functionality of the throttle body and the fuel injectors into one. They work by combining the fuel and air together and by controlling the amount of air flow. Automobiles that include throttle body injection, which is referred to as CFI by Ford and TBI by GM, locate the fuel injectors inside the throttle body. This permits an older engine the opportunity to be converted from carburetor to fuel injection without really altering the engine design.