

Forklift Throttle Body

Throttle Body for Forklift - Where fuel injected engines are concerned, the throttle body is the component of the air intake system that controls the amount of air that flows into the engine. This particular mechanism works in response to driver accelerator pedal input in the main. Usually, the throttle body is positioned between the air filter box and the intake manifold. It is often attached to or positioned close to the mass airflow sensor. The largest part inside the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is in order to regulate air flow.

On several styles of vehicles, the accelerator pedal motion is communicated through the throttle cable. This activates the throttle linkages which in turn move the throttle plate. In automobiles consisting of electronic throttle control, otherwise called "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 Engine Control Unit. The ECU is responsible for determining the throttle opening based upon accelerator pedal position together with inputs from other engine sensors. The throttle body consists of 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 close to this is what returns the throttle body to its idle position as soon as the pedal is released.

Throttle plates turn inside the throttle body every time pressure is applied on the accelerator. The throttle passage is then opened to be able to enable much more air to flow into the intake manifold. Normally, an airflow sensor measures this change 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 produce the desired air-fuel ratio. Frequently a throttle position sensor or otherwise called TPS is connected 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 "WOT" position or anywhere in between these two extremes.

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

It is common that lots of vehicles have one throttle body, even if, more than one could be utilized and connected together by linkages so as to improve throttle response. High performance automobiles like for example the BMW M1, along with high performance motorcycles such as 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 fuel injectors and the throttle body into one. They function by blending the fuel and air together and by regulating the amount of air flow. Automobiles which have throttle body injection, that is called TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This enables an old engine the chance to be transformed from carburetor to fuel injection without really altering the engine design.