

Throttle Body for Forklift

Forklift Throttle Body - 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 mechanism functions in response to driver accelerator pedal input in the main. Generally, the throttle body is situated between the air filter box and the intake manifold. It is usually fixed to or situated close to the mass airflow sensor. The largest part inside the throttle body is a butterfly valve known as the throttle plate. The throttle plate's main task is to control air flow.

On nearly all vehicles, the accelerator pedal motion is transferred through the throttle cable, thus activating the throttle linkages works to be able to move the throttle plate. In automobiles with electronic throttle control, otherwise referred to 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 Engine Control Unit. The ECU is responsible for determining the throttle opening based on accelerator pedal position along with inputs from different engine sensors. The throttle body consists of a throttle position sensor. The throttle cable is attached to the black part on the left hand side which is curved in design. The copper coil placed next to this is what returns the throttle body to its idle position when the pedal is released.

Throttle plates revolve inside the throttle body every time pressure is placed on the accelerator. The throttle passage is then opened to enable 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. Generally a throttle position sensor or likewise called TPS is connected 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 likewise called "WOT" position or somewhere in between these two extremes.

Various throttle bodies can have adjustments and valves so as to regulate the minimum airflow all through the idle period. Even in units which are not "drive-by-wire" there would often be a small electric motor driven valve, the Idle Air Control Valve or likewise called IACV that the ECU uses to control the amount of air which can bypass the main throttle opening.

It is common that a lot of automobiles contain one throttle body, even though, more than one can be used and attached together by linkages so as to improve throttle response. High performance vehicles like the BMW M1, together with high performance motorcycles like for example the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are referred to as ITBs or otherwise known as "individual throttle bodies."

The throttle body and the carburetor in a non-injected engine are somewhat 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 fuel and air together. Vehicles which include throttle body injection, which is called CFI by Ford and TBI by GM, situate the fuel injectors in the throttle body. This allows an older engine the chance to be transformed from carburetor to fuel injection without significantly changing the design of the engine.