

Forklift Throttle Body

Throttle Body for Forklift - The throttle body is a component of the intake control system in fuel injected engines to be able to control the amount of air flow to the engine. This mechanism functions by placing pressure on the operator accelerator pedal input. Usually, the throttle body is situated between the intake manifold and the air filter box. It is usually attached to or placed close to the mass airflow sensor. The biggest component in the throttle body is a butterfly valve called the throttle plate. The throttle plate's main task is so as to regulate air flow.

On the majority of cars, the accelerator pedal motion is transferred through the throttle cable, hence activating the throttle linkages works so as to move the throttle plate. In cars consisting of electronic throttle control, likewise known as "drive-by-wire" an electric motor regulates the throttle linkages. The accelerator pedal connects to a sensor and not to the throttle body. This particular 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 together with inputs from different engine sensors. The throttle body consists of a throttle position sensor. The throttle cable connects to the black portion on the left hand side which is curved in design. The copper coil positioned close to this is what returns the throttle body to its idle position when 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 permit more air to flow into the intake manifold. Typically, 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 so as to generate the desired air-fuel ratio. Generally a throttle position sensor or also called TPS is connected to the shaft of the throttle plate to provide the ECU with information on whether the throttle is in the idle position, the wide-open position or also called "WOT" position or somewhere in between these two extremes.

In order to regulate the lowest amount of air flow while idling, some throttle bodies may have valves and adjustments. 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 otherwise called IACV which the ECU uses to regulate the amount of air which can bypass the main throttle opening.

It is common that lots of automobiles have a single throttle body, although, more than one can be used and attached together by linkages in order to improve throttle response. High performance vehicles like the BMW M1, along 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 likewise known as "individual throttle bodies."

The carburetor and the throttle body 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 modulate the amount of air flow and mix the air and fuel together. Automobiles that include throttle body injection, that is referred to as TBI by GM and CFI by Ford, situate the fuel injectors in the throttle body. This permits an old engine the opportunity to be transformed from carburetor to fuel injection without considerably altering the design of the engine.