

Forklift Throttle Body

Throttle Body for Forklift - Where fuel injected engines are concerned, the throttle body is the part of the air intake system that regulates the amount of air which flows into the motor. This mechanism operates 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 often connected to or positioned close to the mass airflow sensor. The largest piece in 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 cars with 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 also known as 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 has 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 close to this is what returns the throttle body to its idle position when the pedal is released.

The throttle plate turns within the throttle body each and every time the driver applies pressure on the accelerator pedal. This opens the throttle passage and enables more air to be able 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 in order to generate the desired air-fuel ratio. Frequently a throttle position sensor or TPS is fixed to the shaft of the throttle plate so as to provide the ECU with information on whether the throttle is in the wide-open throttle or also called "WOT" position, the idle position or somewhere in between these two extremes.

Various throttle bodies may include adjustments and valves to be able to regulate the minimum airflow all through the idle period. Even in units that are not "drive-by-wire" there will usually be a small electric motor driven valve, the Idle Air Control Valve or otherwise called IACV which the ECU uses in order to regulate the amount of air which can bypass the main throttle opening.

It is common that numerous vehicles have one throttle body, even though, more than one can be utilized and connected together by linkages so as to improve throttle response. High performance cars like for example the BMW M1, along with high performance motorcycles such as the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are called ITBs or otherwise known as "individual throttle bodies."

The throttle body and the carburetor in a non-injected engine are rather the same. The carburetor combines the functionality of both the throttle body and the fuel injectors together. They are able to control the amount of air flow and blend the fuel and air together. Vehicles that include throttle body injection, that is known as TBI by GM and CFI by Ford, locate the fuel injectors in the throttle body. This permits an old engine the chance to be transformed from carburetor to fuel injection without considerably changing the design of the engine.