Forklift Throttle Body

Throttle Body for Forklifts - The throttle body is part of the intake control system in fuel injected forklift parts engines in order to control the amount of air flow to the engine. This particular mechanism operates by putting pressure upon the operator accelerator pedal input. Usually, the throttle body is placed between the intake manifold and the air filter box. It is often connected to or located close to the mass airflow sensor. The biggest piece within the throttle body is a butterfly valve called the throttle plate. The throttle plate's main function is to control air flow.

On most cars, the accelerator pedal motion is transferred via the throttle cable, thus activating the throttle linkages works to move the throttle plate. In cars with electronic throttle control, likewise called "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 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 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 positioned near this is what returns the throttle body to its idle position once the pedal is released.

Throttle plates revolve inside the throttle body each and every time pressure is applied on the accelerator. The throttle passage is then opened to allow much 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 to be able to generate the desired air-fuel ratio. Often a throttle position sensor or likewise called TPS is attached to the shaft of the throttle plate in order to provide the ECU with information on whether the throttle is in the wide-open throttle or likewise called "WOT" position, the idle position or somewhere in between these two extremes.

Some throttle bodies may include valves and adjustments so as to control the minimum airflow throughout the idle period. Even in units that 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 regulate the amount of air which can bypass the main throttle opening.

It is common that lots of vehicles have a single throttle body, even though, more than one could be utilized 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 instance the Suzuki Hayabusa have a separate throttle body for each and every cylinder. These models are called ITBs or "individual throttle bodies."

The carburator and the throttle body in a non-injected engine are quite the same. The carburator combines the functionality of both the fuel injectors and the throttle body into one. They could regulate the amount of air flow and combine the air and fuel together. Vehicles that have throttle body injection, which is called CFI by Ford and TBI by GM, locate the fuel injectors inside the throttle body. This allows an old engine the opportunity to be converted from carburetor to fuel injection without considerably changing the design of the engine.