

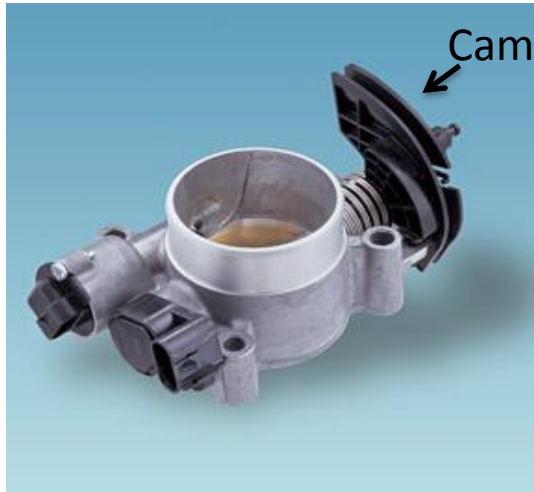
Electronic Throttle Control

Dr. Qi van Eikema Hommes

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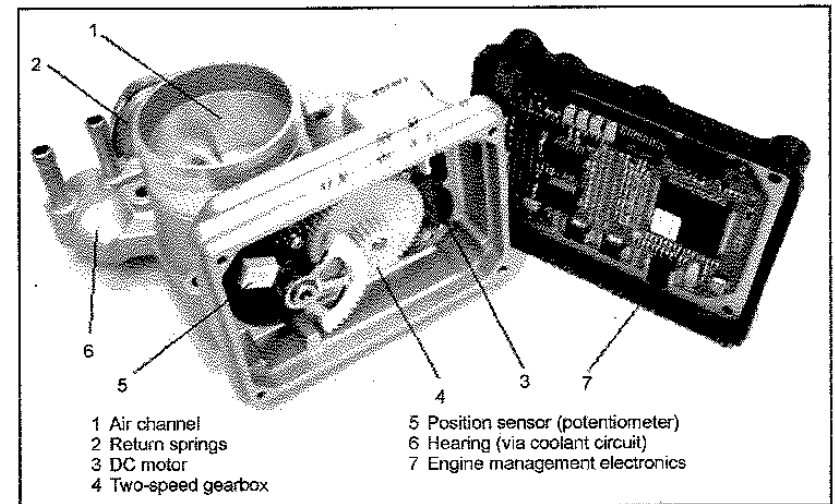
Throttle Body Evolution

Mechanical Throttle Body



- Cam hardware design is on critical path to deliver drive characteristics.
- Cable from gas pedal to throttle body affects under hood packaging.

Electronic Throttle Body



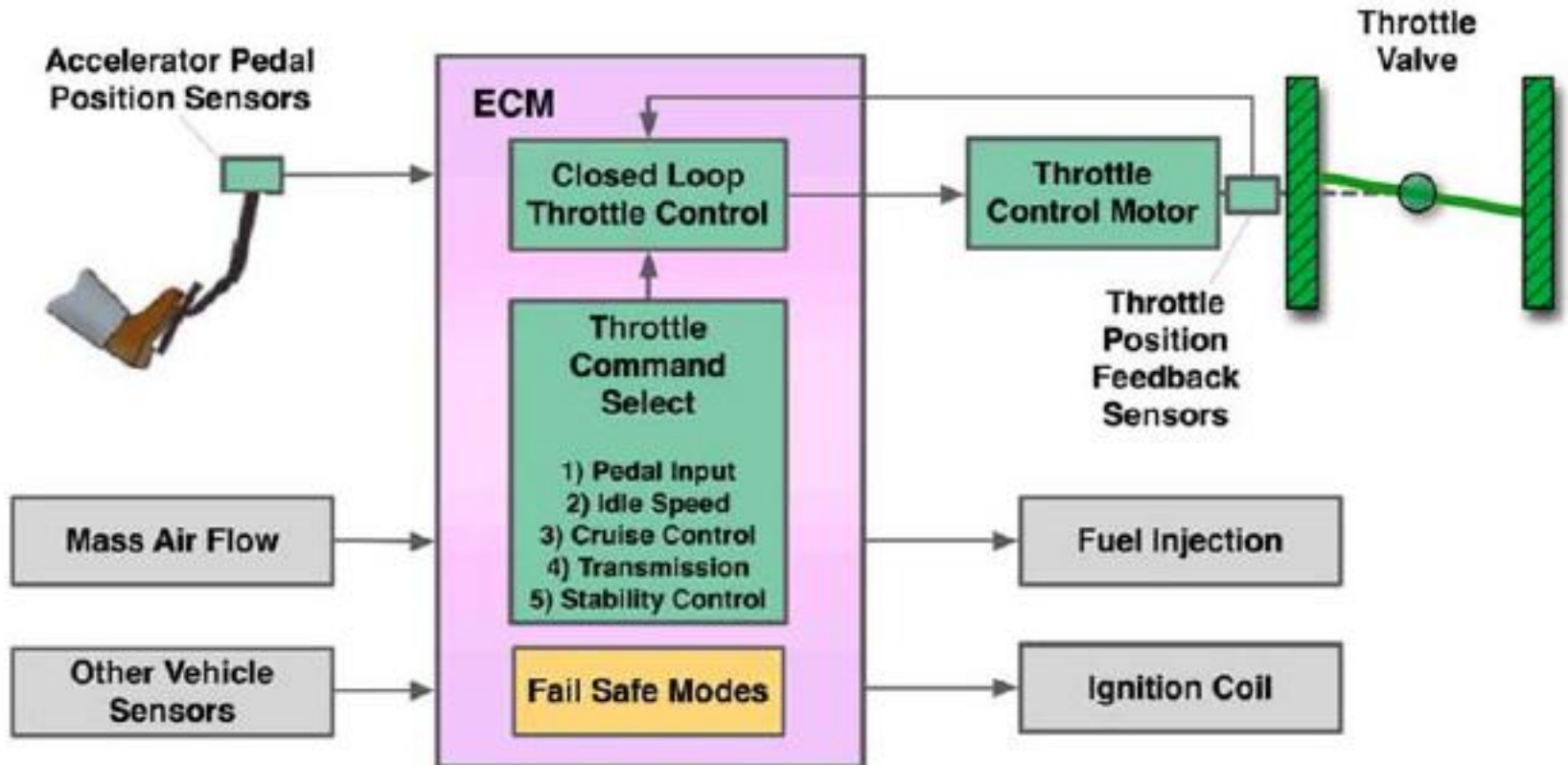
- Easy to change software calibration to deliver any drive characteristics desired.
- Eliminates cable packaging issue and mechanical degradation.
- Drive by Wire.

Mechanical Throttle Body



How Does ETC Work





Source: NASA Technical Report for NHTSA Toyota UA Investigation

