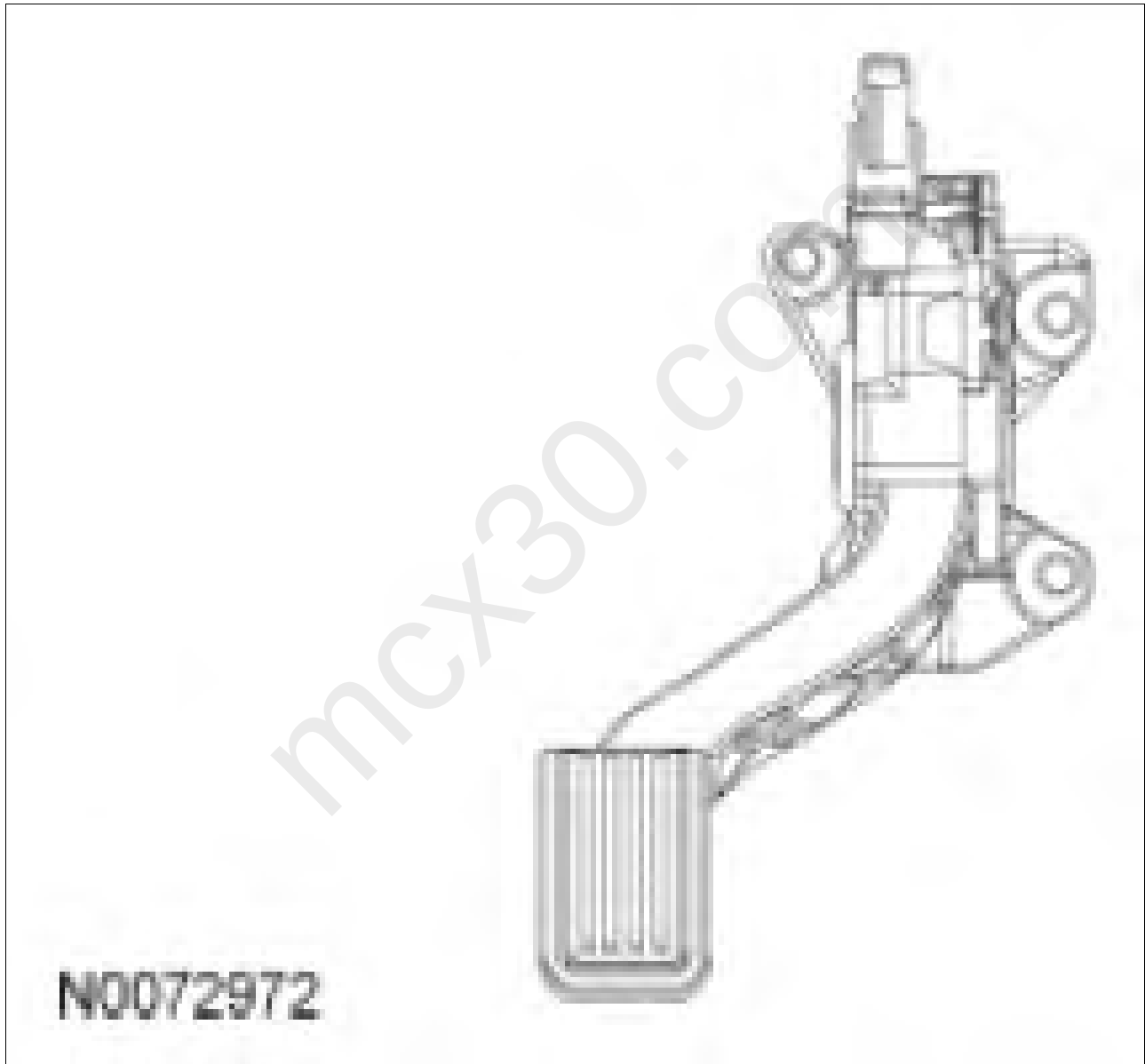


(increasing angle, increasing voltage), but are offset and increase at different rates. The 2 pedal position signals make sure the PCM receives a correct input even if one of the signals has a concern. The PCM determines if a signal is incorrect by calculating where it should be, inferred from the other signals. If a concern is present with one of the circuits the other input is used. There are 2 reference voltage circuits, 2 signal return circuits, and 2 signal circuits (a total of 6 circuits and pins) between the PCM and the APP sensor assembly. The pedal position signal is converted to pedal travel degrees (rotary angle) by the PCM. The software converts these degrees to counts, which is the input to the torque based strategy. For additional information, refer to TORQUE BASED ELECTRONIC THROTTLE CONTROL (ETC) in this service information.

Fig 1: Identifying APP Sensor



Courtesy of FORD MOTOR CO.

ENGINE CONTROL COMPONENTS > AMBIENT AIR TEMPERATURE (AAT) SENSOR

The AAT sensor is a thermistor device in which resistance changes with temperature. The resistance of