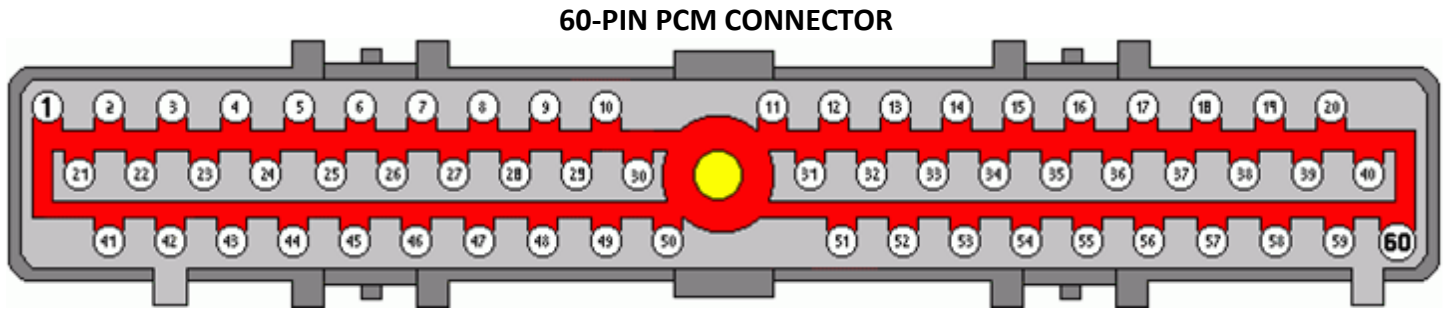# CORTEX EBC
1986-1987 Mustang GT 5.0L Specific Instructions
Rev 3.0.0

WIRING

The 1986-1987 Mustang PCM is inside the vehicle, behind the kick panel in the passenger side foot well near the door. The PCM has a single large 60-pin connector. Power, ground, RPM, and throttle position signals can be accessed at the PCM connector. On 1986-1987 Mustangs vehicle speed must be accessed at a different location.

60-PIN PCM CONNECTOR

The Cortex EBC wiring harness can be connected to the 60-pin PCM connector as outlined in the following table. RPM and vehicle speed are required for boost by gear applications.

CORTEX EBC TO PCM CONNECTIONS

CORTEX SIGNAL	CORTEX WIRE COLOR	PCM SIGNAL	PCM PIN	PCM WIRE COLOR
+12V Power	Red	Switched PCM Power	37	Red
Ground	Black (x2)	Connect to Chassis Near EBC	N/A	N/A
Engine Speed	Pink	Cam Position Signal (PIP)	56	Dark Blue
General-Purpose	Orange	Throttle Position	47	Dark Green / Light Green

The 1986-1987 Mustangs were equipped with an electronic VR speed sensor for the cruise control system. However, the sensor is not connected to the PCM and the signal is instead accessed from a wiring harness connector behind the kick panel in the driver side foot well near the door. There are several connectors behind the kick panel. The required connector will be black and has 8 pins. On one edge of the connector there will be an orange / yellow wire and a dark green / white wire that will be connected to the Speed Sensor Adapter V2 module. The Speed Sensor Adapter V2 can be connected to the same power and ground source as the Cortex EBC if desired.

SPEED SENSOR ADAPTER V2 CONNECTIONS

SPEED SENSOR ADAPTER V2 SIGNAL	SPEED SENSOR ADAPTER V2 WIRE COLOR	CRUISE CONTROL SIGNAL	CRUISE CONTROL WIRE COLOR
Sensor IN+	Green	Vehicle Speed Signal +	Dark Green / White
Sensor IN-	Blue	Vehicle Speed Signal -	Orange / Yellow
-	-	CORTEX SIGNAL	CORTEX WIRE COLOR
Output	White	Vehicle Speed	Green

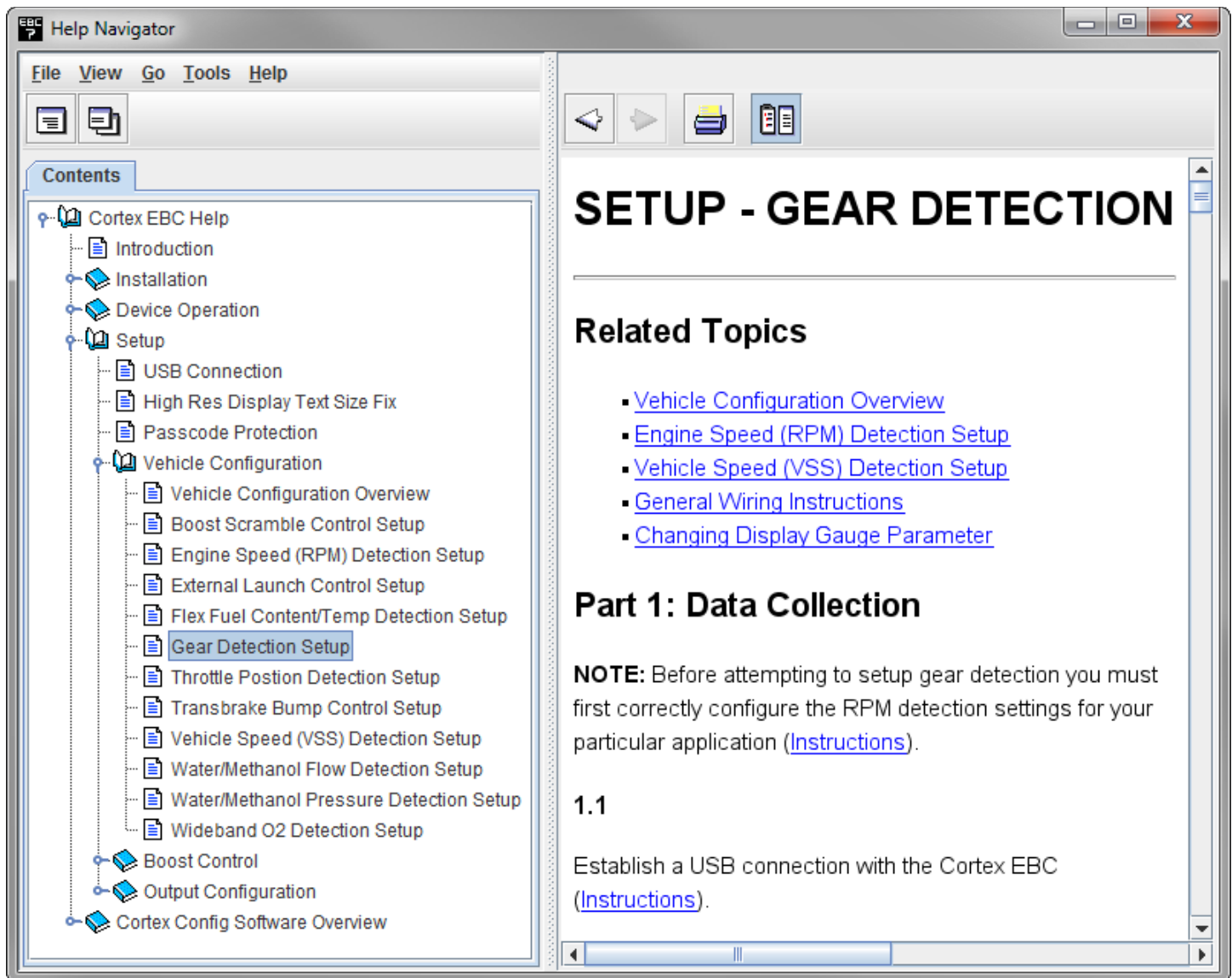# VEHICLE CONFIGURATION SETTINGS

RPM DETECTION:
- Pulses Per Cycle: 8
- Rotations Per Cycle: 2
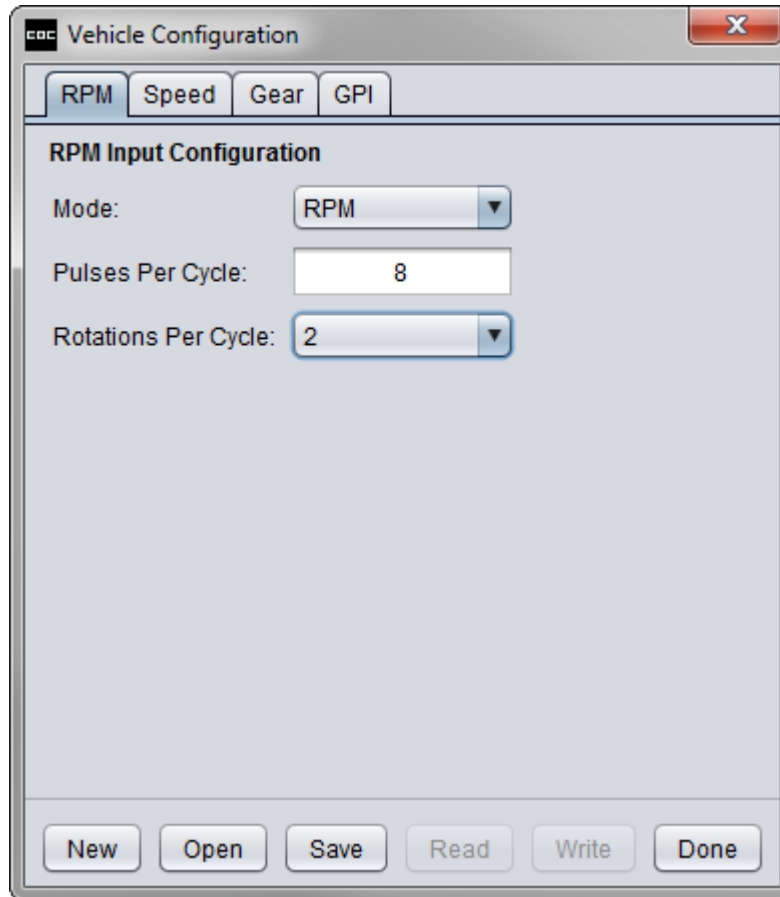
GEAR DETECTION:

- Follow the steps in the **Setup – Gear Detection** section of the Help utility to determine the correct EVS ratio settings for gear detection.

SPEED DETECTION:

- Follow the steps in the **Setup – Vehicle Speed Detection** section of the Help utility to determine the correct Pulses Per Mile setting.
- **NOTE:** Gear detection setup should be performed before calibrating the Pulses Per Mile setting.
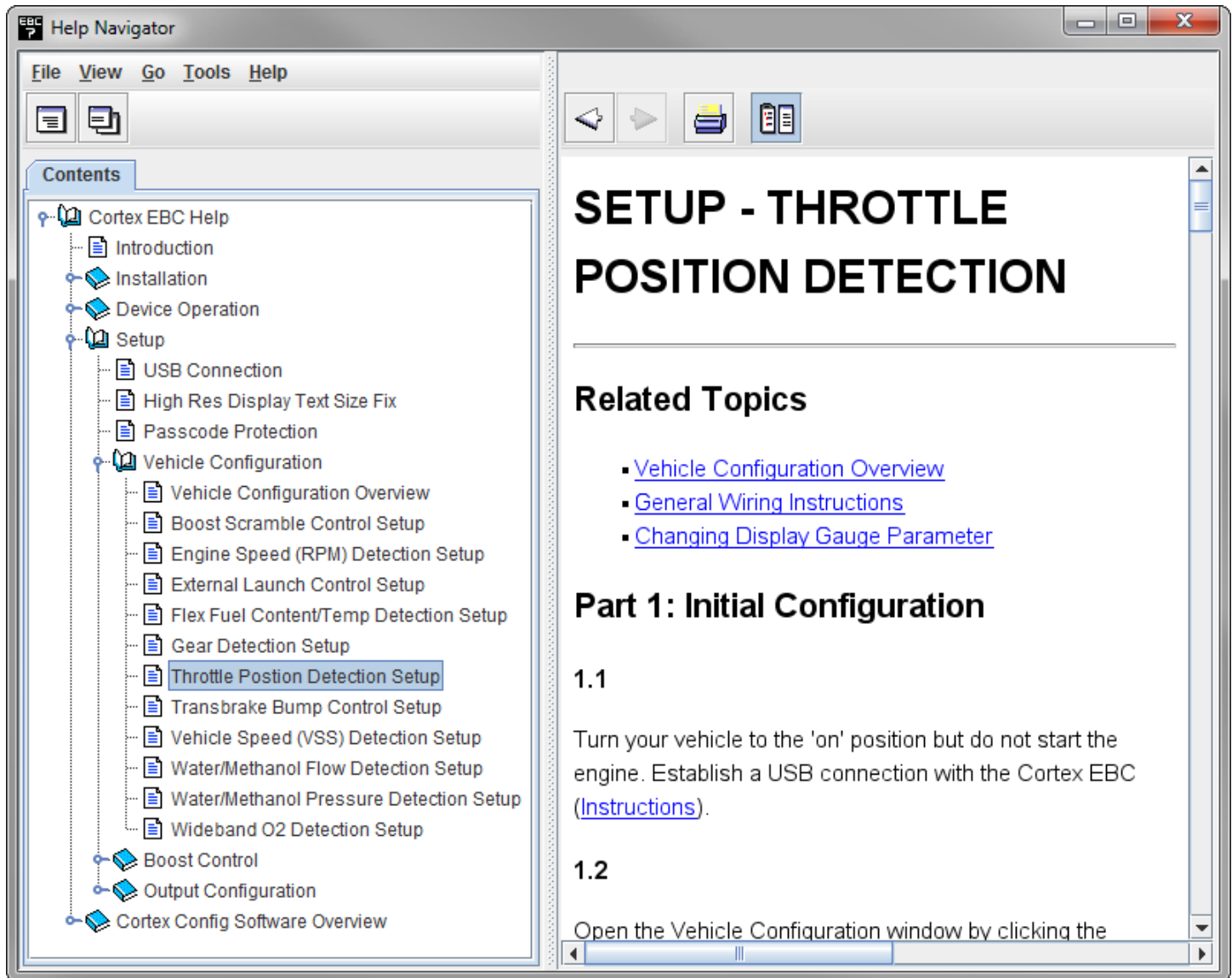
THROTTLE POSITION DETECTION:

- Follow the steps in the **Setup – Throttle Position Detection** section of the Help utility to determine the correct Closed TPS Voltage and Open TPS Voltage settings.