

CORTEX EBC

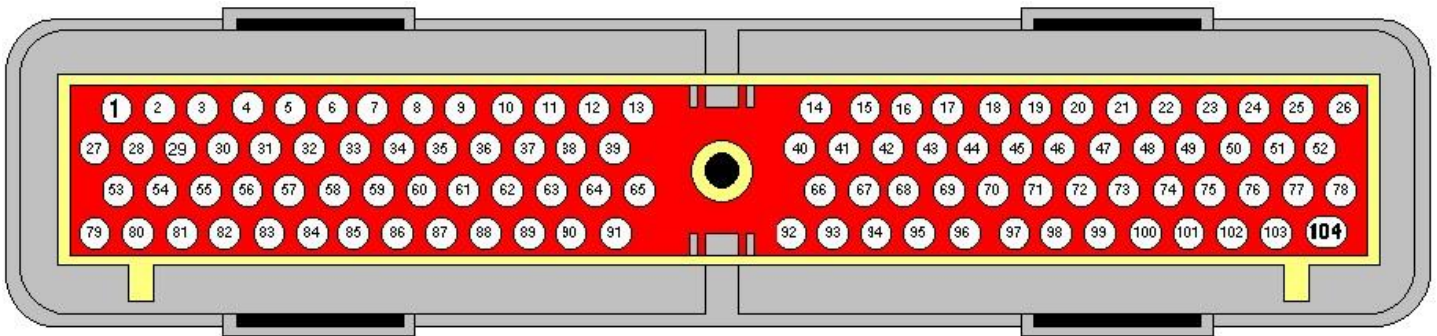
1996-1998 Mustang GT 4.6L Specific Instructions

Rev 2.0.0

WIRING

The 1996-1998 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 104-pin connector. Power, ground, RPM, vehicle speed, and throttle position signals can be accessed at the PCM connector.

104-PIN PCM CONNECTOR



The Cortex EBC wiring harness and Speed Sensor Adapter V2 can be connected to the 104-pin PCM connector as outlined in the following tables. RPM and vehicle speed signals are required for boost by gear applications. The Speed Sensor Adapter V2 can be connected to the same power and ground source as the Cortex EBC if desired.

CORTEX EBC TO PCM CONNECTIONS

CORTEX SIGNAL	CORTEX WIRE COLOR	PCM SIGNAL	PCM PIN	PCM WIRE COLOR
+12V Power	Red	Switched PCM Power	71	Red
Ground	Black (x2)	Connect to Chassis Near EBC	N/A	N/A
Engine Speed	Pink	Tachometer Signal	48	Orange / White
General-Purpose	Orange	Throttle Position	89	Gray / White

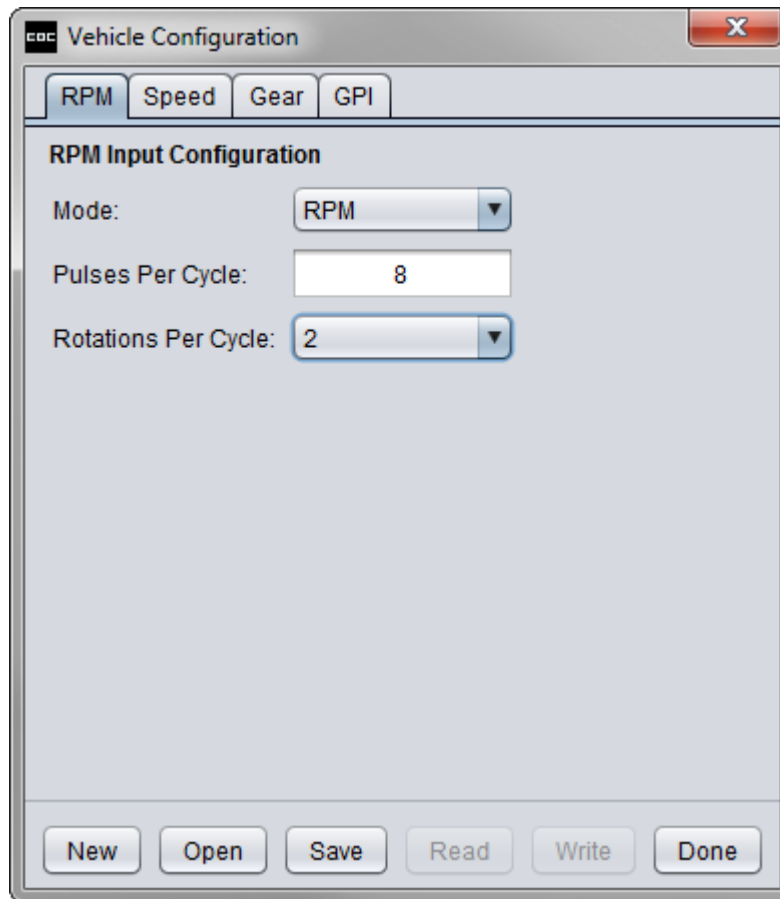
SPEED SENSOR ADAPTER V2 CONNECTIONS

SPEED SENSOR ADAPTER V2 SIGNAL	SPEED SENSOR ADAPTER V2 WIRE COLOR	PCM SIGNAL	PCM PIN	PCM WIRE COLOR
Sensor IN+	Green	VSS +	58	Gray / Black
Sensor IN-	Blue	VSS -	33	Pink / Orange
-	-	CORTEX SIGNAL	-	CORTEX WIRE COLOR
Output	White	Vehicle Speed	-	Green

VEHICLE CONFIGURATION SETTINGS

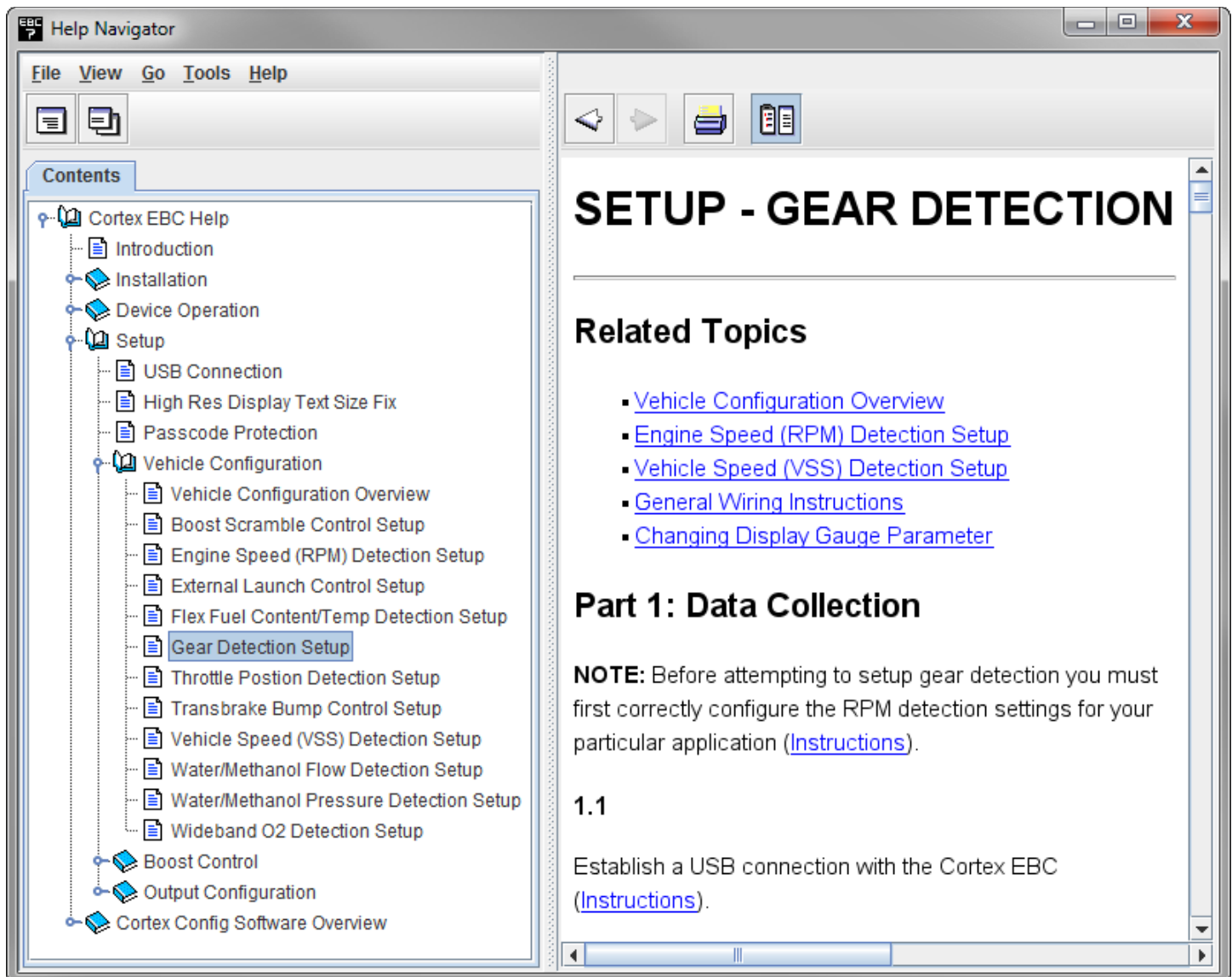
RPM DETECTION:

- 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.



The screenshot shows the Cortex EBC Help Navigator application window. The title bar reads "EBC 7 Help Navigator". The menu bar includes "File", "View", "Go", "Tools", and "Help". The "Contents" pane on the left lists the following topics:

- Cortex EBC Help
 - Introduction
 - Installation
 - Device Operation
 - Setup
 - USB Connection
 - High Res Display Text Size Fix
 - Passcode Protection
 - Vehicle Configuration
 - Vehicle Configuration Overview
 - Boost Scramble Control Setup
 - Engine Speed (RPM) Detection Setup
 - External Launch Control Setup
 - Flex Fuel Content/Temp Detection Setup
 - Gear Detection Setup**
 - Throttle Position Detection Setup
 - Transbrake Bump Control Setup
 - Vehicle Speed (VSS) Detection Setup
 - Water/Methanol Flow Detection Setup
 - Water/Methanol Pressure Detection Setup
 - Wideband O2 Detection Setup
 - Boost Control
 - Output Configuration
 - Cortex Config Software Overview

The main content area displays the title "SETUP - GEAR DETECTION" and a section for "Related Topics" with the following links:

- [Vehicle Configuration Overview](#)
- [Engine Speed \(RPM\) Detection Setup](#)
- [Vehicle Speed \(VSS\) Detection Setup](#)
- [General Wiring Instructions](#)
- [Changing Display Gauge Parameter](#)

Below this is the section "Part 1: Data Collection".

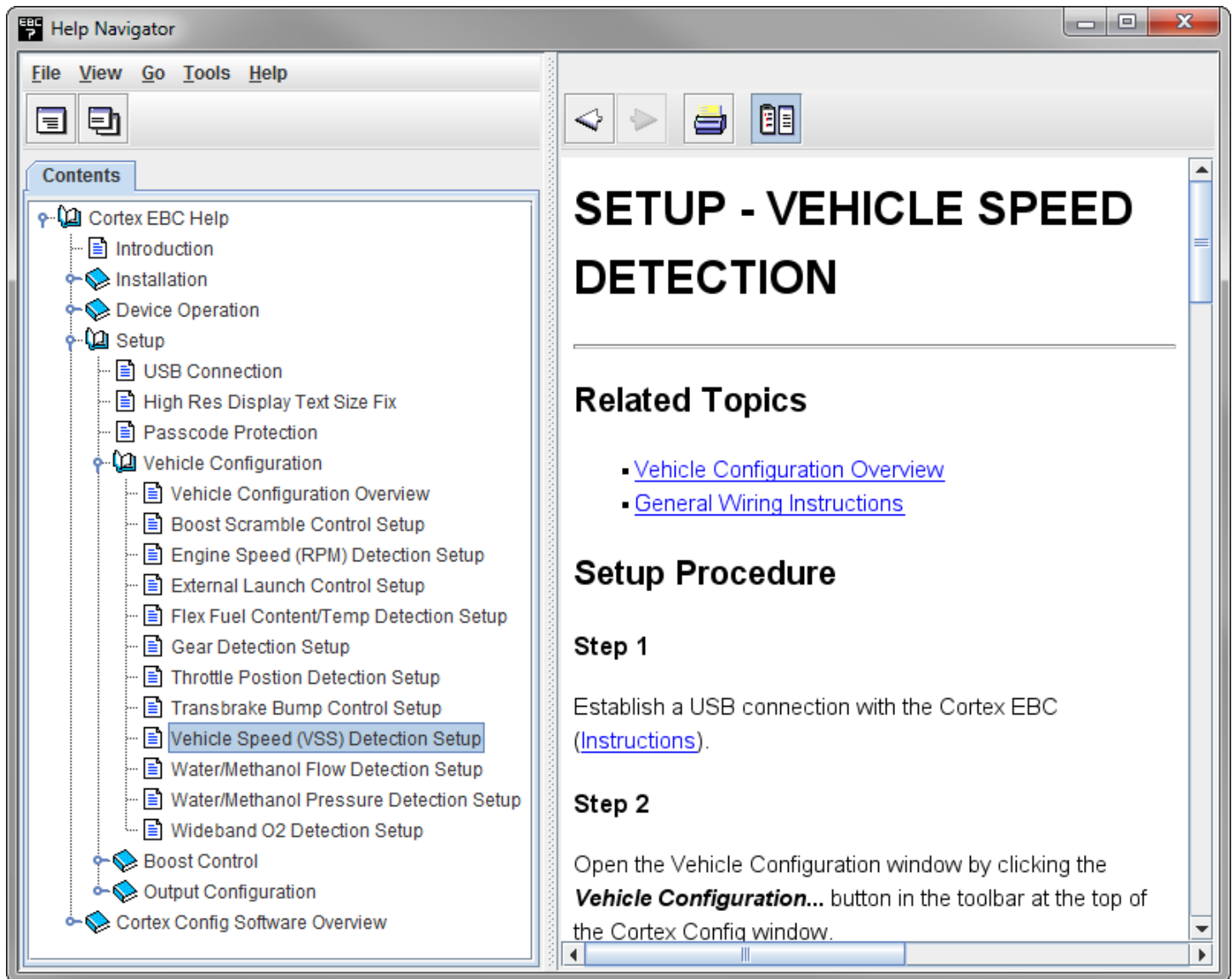
NOTE: Before attempting to setup gear detection you must first correctly configure the RPM detection settings for your particular application ([Instructions](#)).

1.1

Establish a USB connection with the Cortex EBC ([Instructions](#)).

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.



The screenshot shows a software window titled "Help Navigator" with a menu bar (File, View, Go, Tools, Help) and a toolbar with navigation icons. The left pane displays a "Contents" tree with "Vehicle Speed (VSS) Detection Setup" selected. The right pane shows the article content:

SETUP - VEHICLE SPEED DETECTION

Related Topics

- [Vehicle Configuration Overview](#)
- [General Wiring Instructions](#)

Setup Procedure

Step 1

Establish a USB connection with the Cortex EBC ([Instructions](#)).

Step 2

Open the Vehicle Configuration window by clicking the **Vehicle Configuration...** button in the toolbar at the top of the Cortex Config window.

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.

