

CORTEX EBC

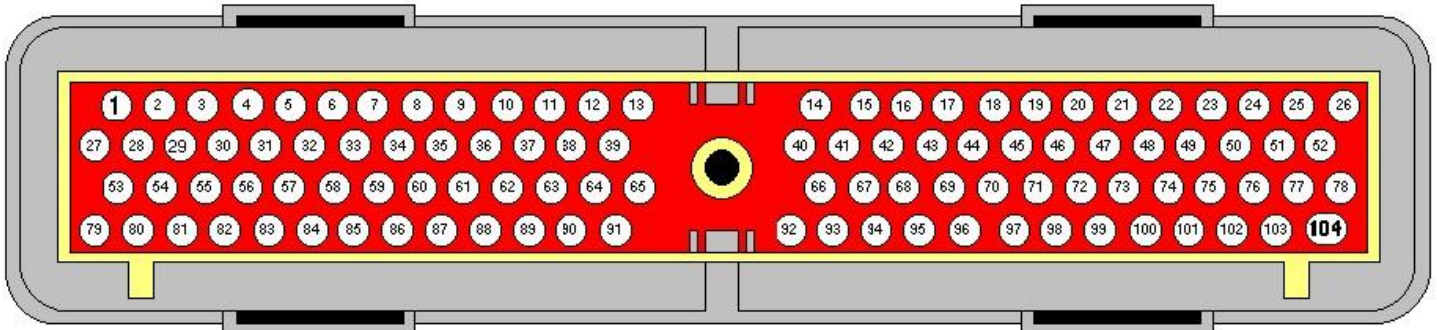
1999-2004 Mustang GT 4.6L Specific Instructions

Rev 3.0.0

WIRING

The 1999-2004 Mustang PCM is inside the vehicle behind the kick panel in the passenger side foot well near the door. The PCM has a single 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 can be connected to the 104-pin PCM connector as outlined in the following table. RPM and vehicle speed signals are required for boost by gear applications.

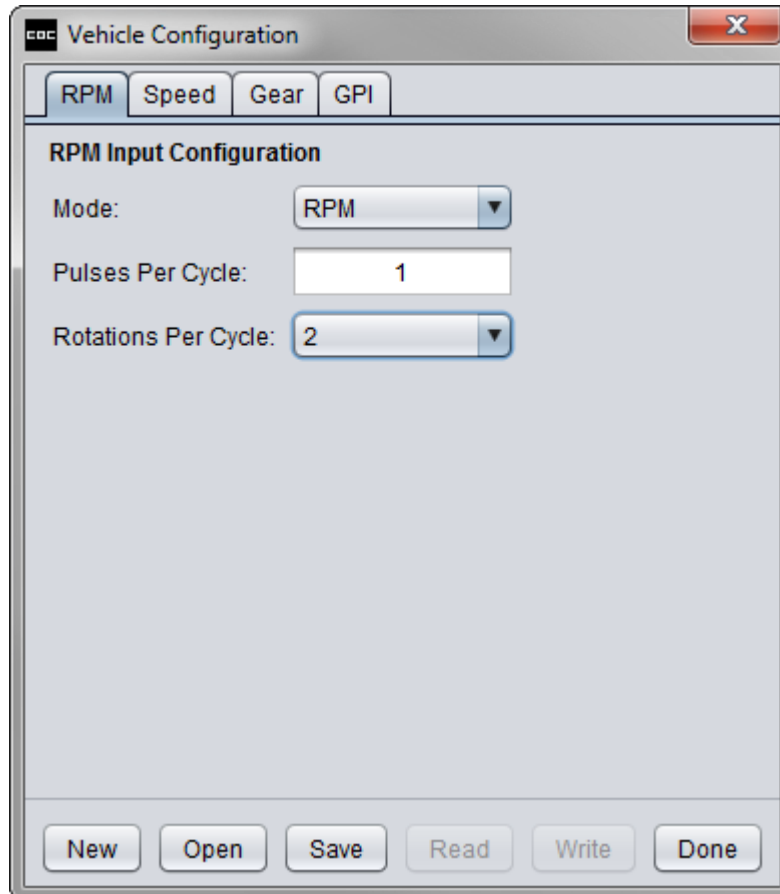
CORTEX EBC TO PCM CONNECTIONS

| CORTEX SIGNAL | CORTEX WIRE COLOR | PCM SIGNAL | PCM PIN | PCM WIRE COLOR |
|-----------------|-------------------|-----------------------------|---------|--------------------|
| +12V Power | Red | Switched PCM Power | 71 | Red |
| Ground | Black (x2) | Connect to Chassis Near EBC | N/A | N/A |
| Engine Speed | Pink | Camshaft Position Sensor | 85 | Dark Blue / Orange |
| Vehicle Speed | Green | Vehicle Speed Output | 68 | White / Orange |
| General-Purpose | Orange | Throttle Position | 89 | Gray / White |

VEHICLE CONFIGURATION SETTINGS

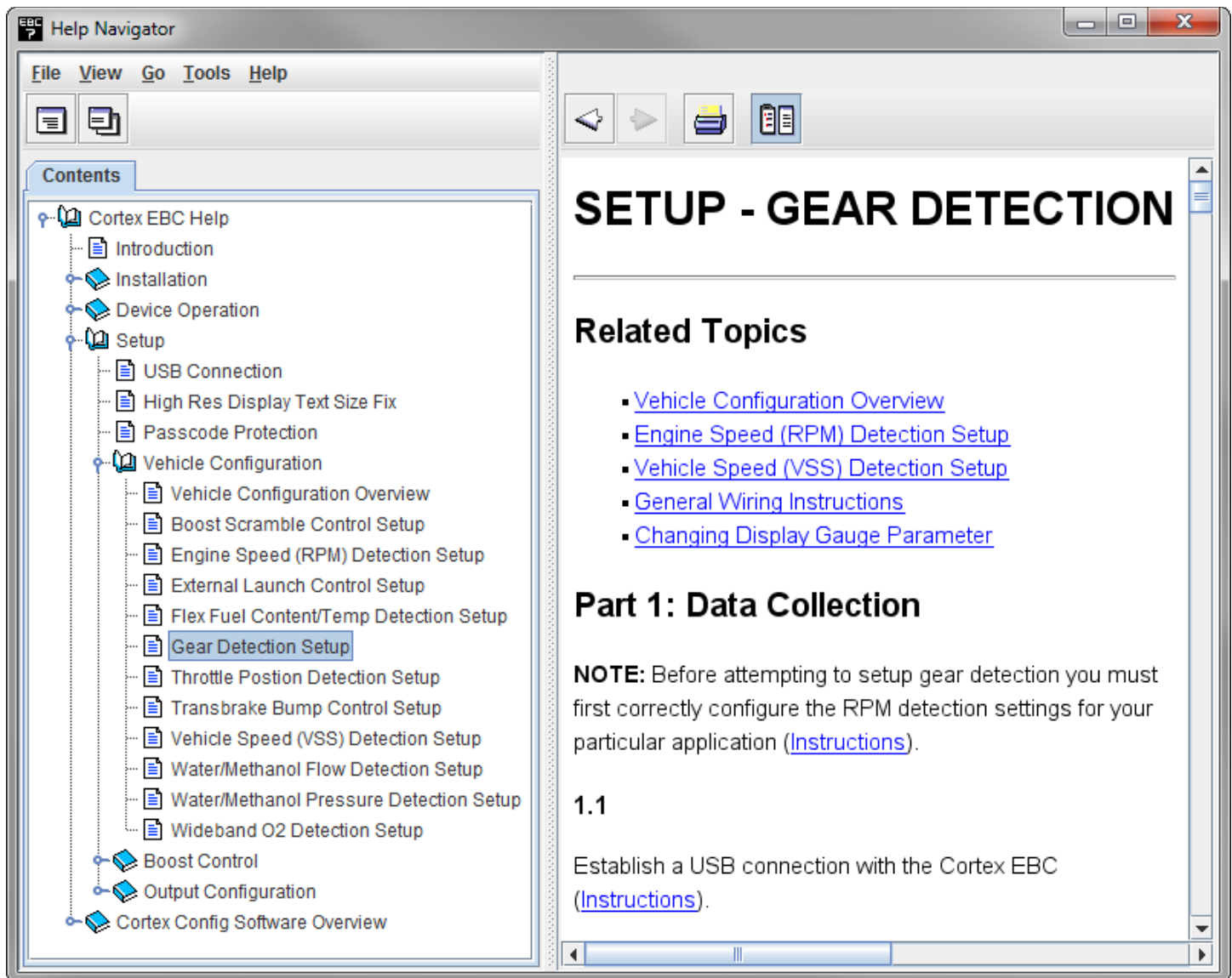
RPM DETECTION:

- Mode: RPM
- Pulses Per Cycle: 1
- 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 items:

- 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 following text:

SETUP - GEAR DETECTION

Related Topics

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

Part 1: Data Collection

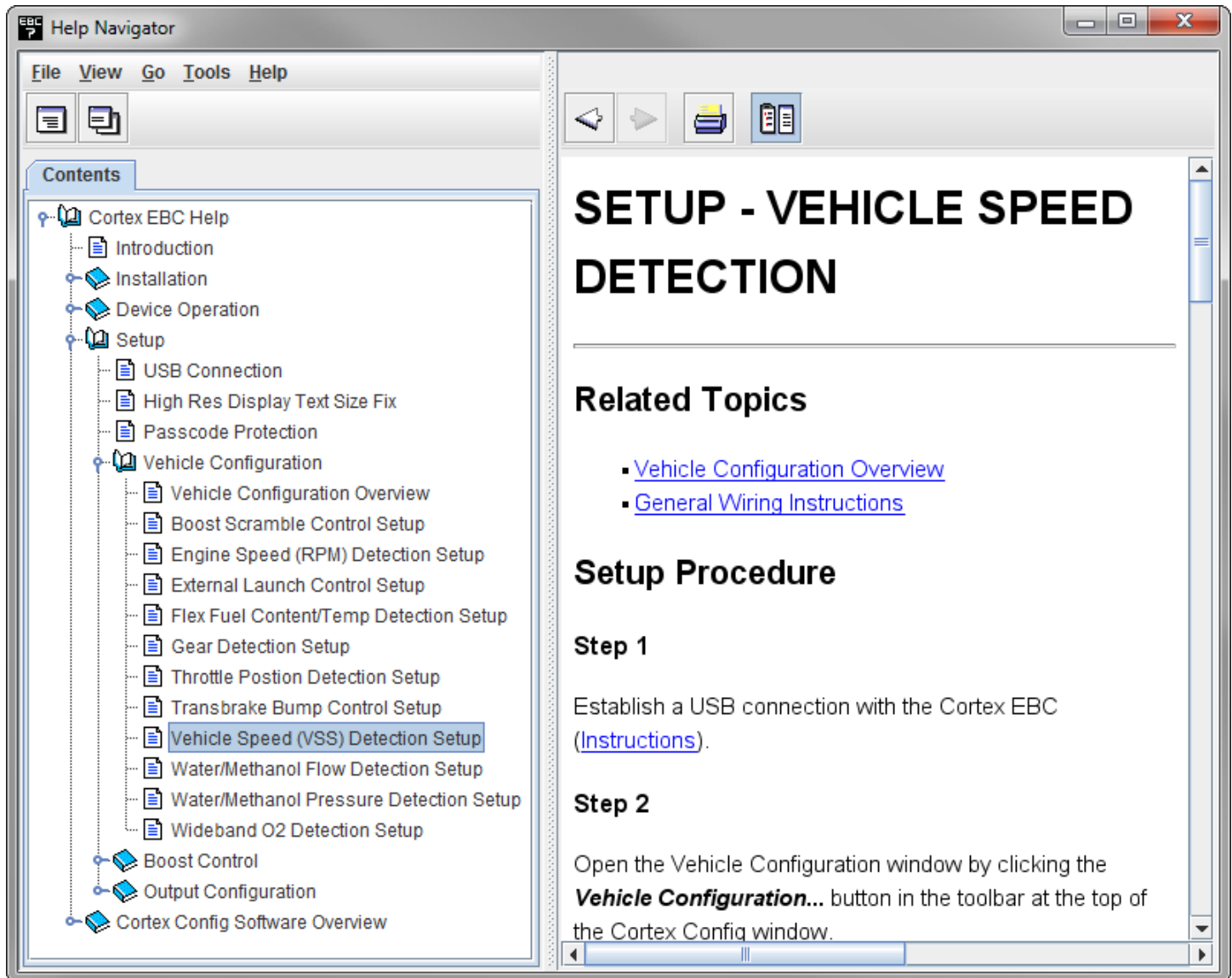
NOTE: Before attempting to setup gear detection you must first correctly configure the RPM detection settings for your particular application ([Instructions](#)).

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.



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.

