SIRHC LABS CORTEX EBC Affordable Gear Based Boost Control Instructions

Contents

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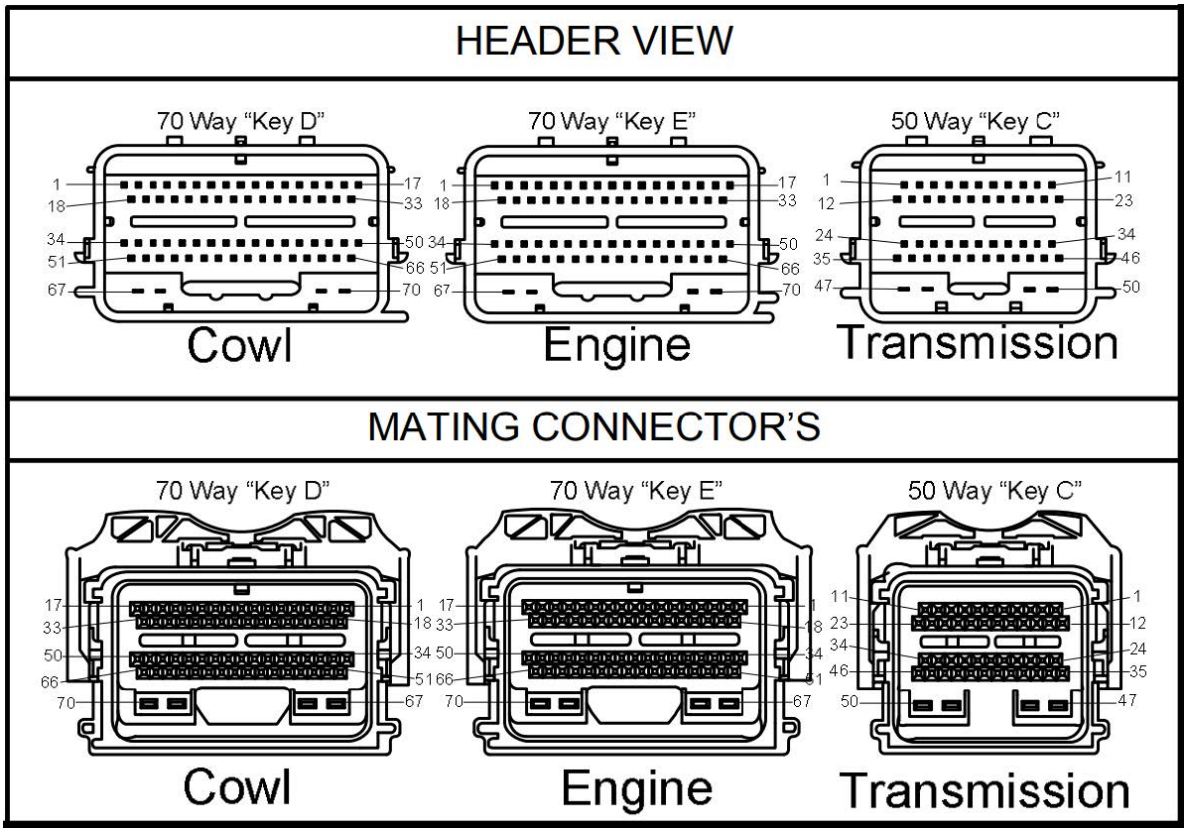
WIRING

The 2011-2014 F-150 PCM is in the passenger side of the engine bay on the firewall. The PCM has three connectors. Power, RPM, vehicle speed, and throttle position signals can be accessed at these connectors. When the PCM is installed in the vehicle the Transmission connector will be on the right, the Engine connector will be in the middle, and the Cowl connector will be on the left.

Overview



The Cortex EBC wiring harness can be connected to the PCM connectors as outlined in the following table (C = Cowl Connector, E= Engine Connector, T = Transmission Connector). RPM and vehicle speed signals are required for boost-by-gear applications.

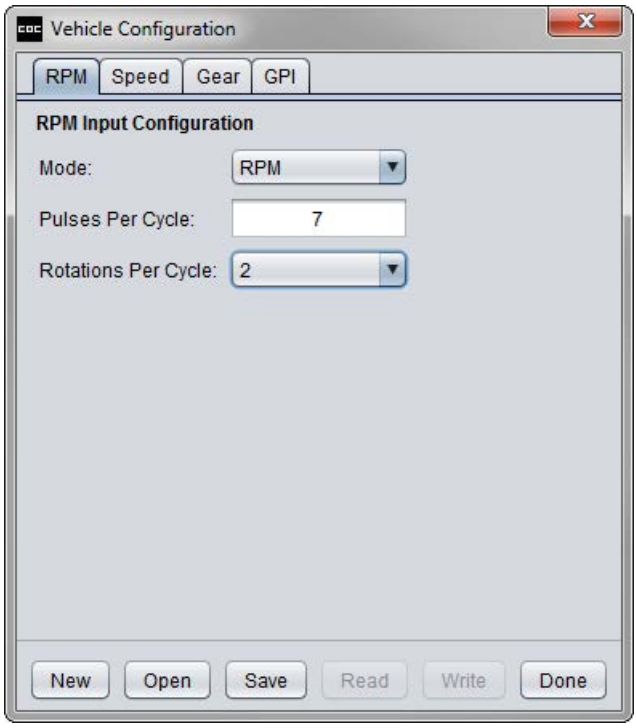
CORTEX EBC TO PCM CONNECTIONS

CORTEX SIGNAL	CORTEX WIRE COLOR	PCM SIGNAL	PCM PIN	PCM WIRE COLOR
+12V Power	Red	Switched PCM Power	C-67	Green / Blue
Ground	Black (x2)	Connect to Chassis Near EBC	N/A	N/A
Engine Speed	Pink	Intake Cam Position Sensor (CMP21)	E-42	Yellow / Blue
Vehicle Speed	Green	Output Shaft Speed	T-14	Brown / Green
General-Purpose	Orange	Throttle Position 1	E-39	Brown

VEHICLE CONFIGURATION SETTINGS

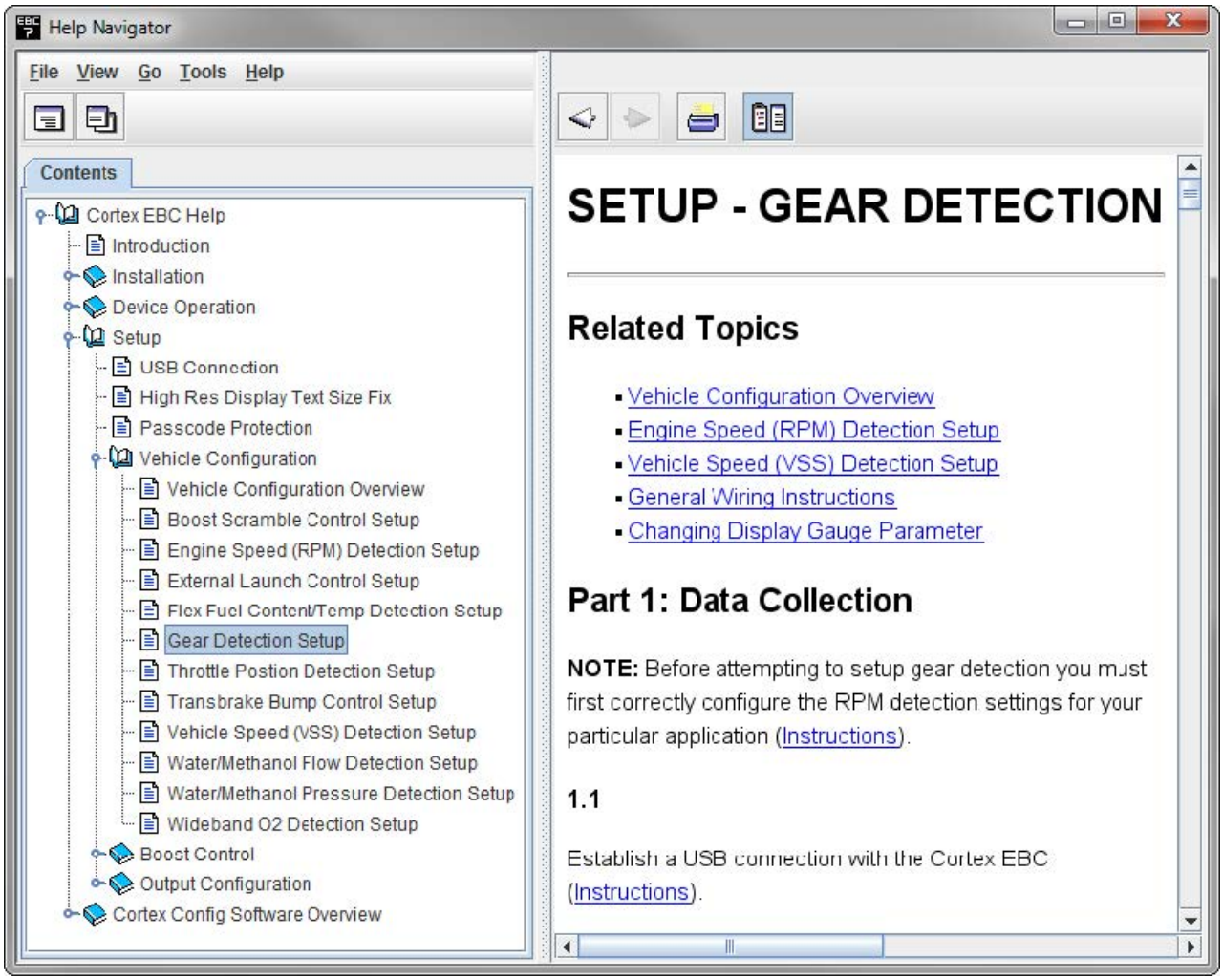
RPM DETECTION

- **Mode:** RPM
- **Pulses Per Cycle:** 7
- **Rotations Per Cycle:** 2



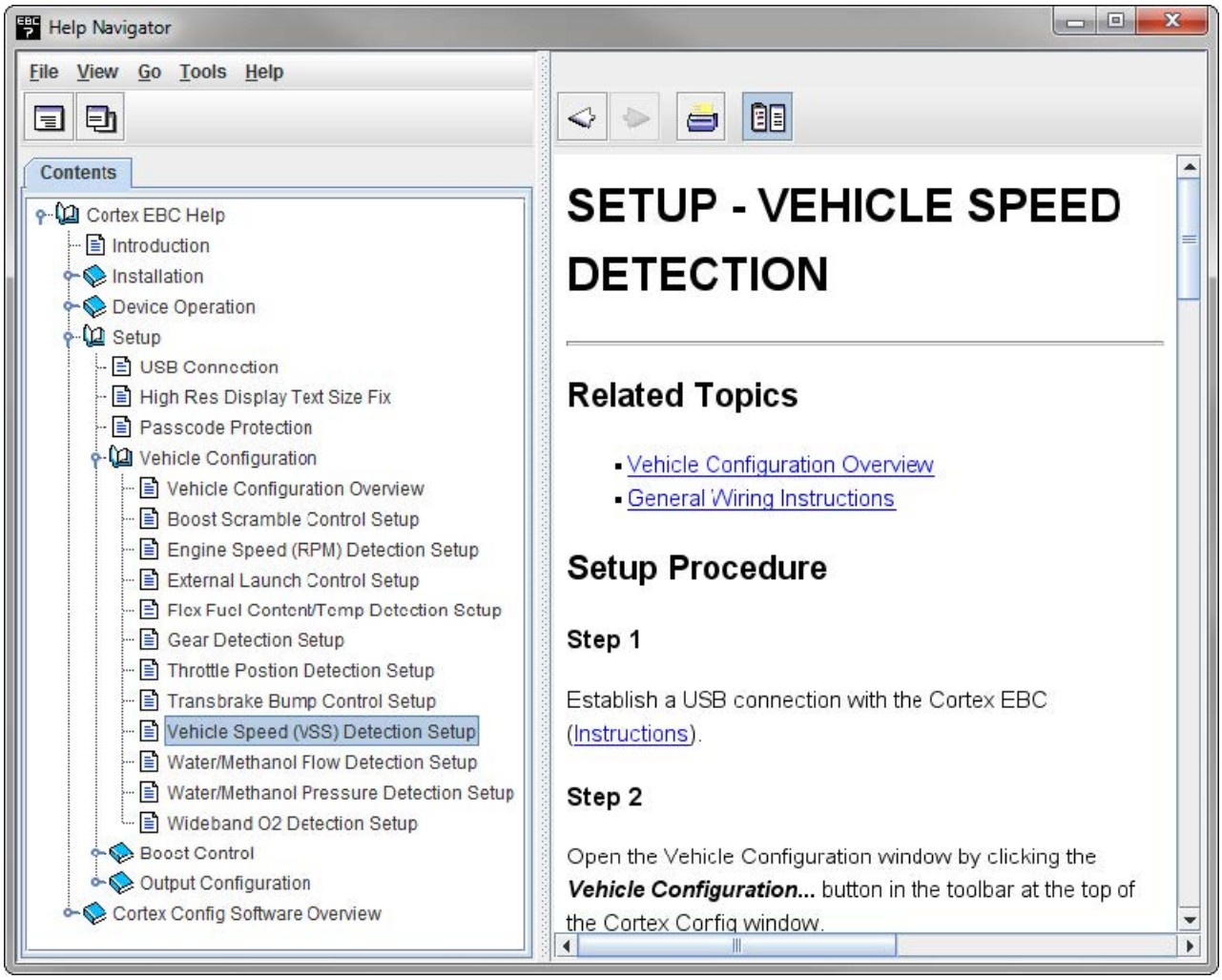
GEAR DETECTION

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



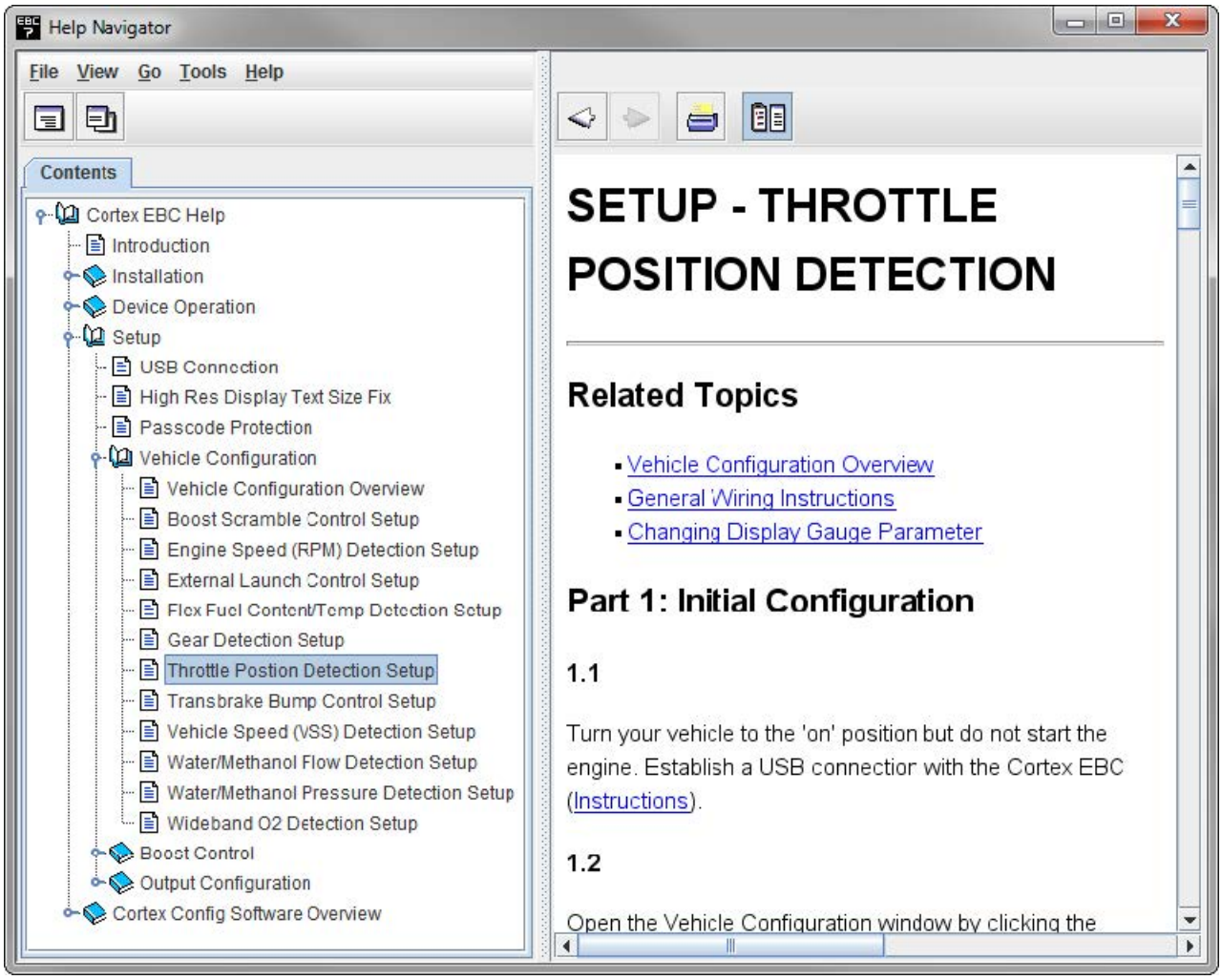
SPEED DETECTION

- 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.

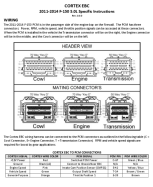


THROTTLE POSITION DETECTION

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.



Documents / Resources

	SIRHC LABS CORTEX EBC Affordable Gear Based Boost Control [pdf] Instructions CORTEX EBC Affordable Gear Based Boost Control, CORTEX EBC, Affordable Gear Based Boost Control, Gear Based Boost Control, Based Boost Control