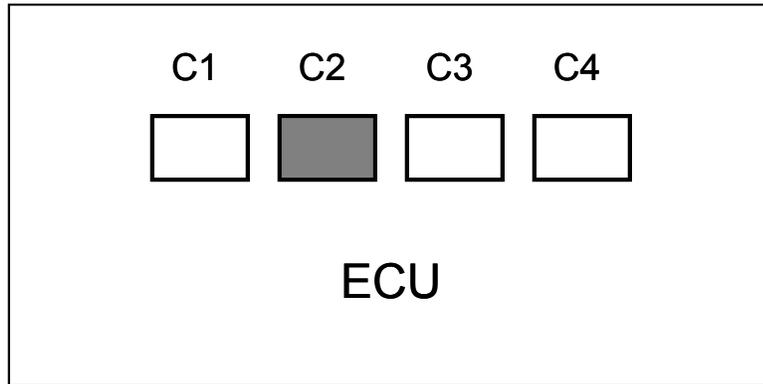


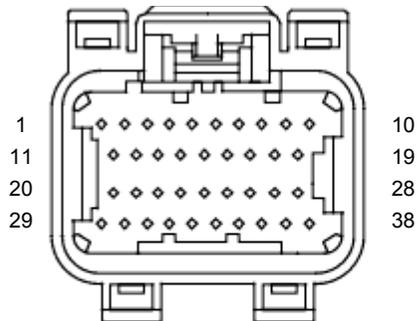
# FTC1-124 Fuel/Timing Calibrator for Jeep 4.0

## Use and Installation Instructions (ECU pinout for 2005 and 2006 models):

All connections are made to either the battery or to the ECU on connector C2. C2 is the orange connector that is second to the left as you look at the ECU.



The pin numbers shown on connector C2 below are as viewed from the wire side of the connector. Remove the tape so you can separate the wire for several inches from the connector. Remove the black plastic cover so you can see where the wires are located on the connector. Verify the wires by both color and location on the connector. Make the wire connections to the harness approximately four inches from the connector. Use solder and heat shrink for the best electrical connections.



**Connector C2 Wire Side View**

## FTC1-124 Fuel/Timing Calibrator for Jeep 4.0

- 1) Disconnect the battery before making connections to the factory wiring harness.
- 2) Wire colors in bold refer to the wires on the FTC1
- 3) Connect the **RED** wire (B+) to Battery positive
- 4) Connect the **BLACK** wire (B-) to Battery negative
- 5) Connect the **BLUE** wire (+5V) to the pink/yellow wire on C2 pin 29
- 6) Cut the violet/brown map sensor wire leading to C2 pin 23
- 7) Connect the **GREEN** wire (MAP in) to the sensor side of the cut wire
- 8) Connect the **VIOLET** wire (MAP out) to the ECU side of the cut wire
- 9) Connect the **YELLOW/BLACK** wire (tach) to the brown/violet wire on C2 pin 4
- 10) Cut the brown/blue crank sensor wire leading to C2 pin 35
- 11) Connect the **GRAY** wire (crank in) to the sensor side of the cut wire
- 12) Connect the **GRAY/BLACK** wire (crank out) to the ECU side of the cut wire
- 13) Cut the blue/grey cam sensor wire leading to C2 pin 34
- 14) Connect the **TAN** wire (cam in) to the sensor side of the cut wire
- 15) Connect the **TAN/YELLOW** wire (cam out) to the ECU side of the cut wire
- 16) Connect the **TAN/BLACK** wire (O2 ref) to the brown/green wire on C2 pin 32
- 17) Cut the dark blue/light blue O2 1/1 sensor wire leading to C2 pin 31
- 18) Connect the **PINK** wire (O21 in) to the wire to the sensor side of the cut wire
- 19) Connect the **PINK/BLUE** wire (O21 out) to the ECU side of the cut wire
- 20) Cut the blue/green O2 2/1 sensor wire leading to C2 pin 33
- 21) Connect the **WHITE** wire (O22 in) to the sensor side of the cut wire
- 22) Connect the **WHITE/GREEN** wire (O22 out) to the ECU side of the cut wire
- 23) Connect the injector plug into the injector
- 24) Connect the vacuum line to the intake manifold. Use one of the ports on the intake manifold. Use a T to split that vacuum line connection to both the stock map sensor and the FTC1.
- 25) Reconnect the battery
- 26) The FTC1-124 comes preprogrammed and should work fine on a stock engine
- 27) If you need to reprogram the unit, use the R4 software
- 28) Select Vac/Pressure and Additional Injector Controller under system settings. Refer to the AIC1 and FTC1 data sheets for more information.
- 29) Select 3-cylinder, 2-stroke under Engine Settings
- 30) This unit has a built-in timing retard of 0.75 degrees per lb of boost
- 31) Program the MAP sensor compensation in Map table A
- 32) The cell values can range from 0 to 20. A value of 10 is the neutral value
- 33) Cell values can have one decimal place. For example 10.1. There are a total of 200 levels available for cell value.
- 34) Program the additional injector pulse width in Map table B
- 35) The cell value represents the additional injector on-time in milliseconds. The minimum practical cell value is 1.0. The maximum call value will have an indicated duty cycle of 40%
- 36) The highest cell value is 25.5, but you should never get anywhere near that number.
- 37) Cell values can have one decimal place. For example 10.1. There are a total of 200 levels available for cell value

*Thank you for choosing Split Second*