

# FTC1-121C Fuel/Timing Calibrator for JTEC

## Use and Installation Instructions (ECU pinout for 1998 Jeep 4.0 Wrangler):

- 1) The best place to install the unit is underneath the dash. If located in the engine bay put it in a place that is as cool and dry as possible.
- 2) Use with R4 software
- 3) Select Vac/Pressure and Additional Injector Controller under system settings. Refer to the AIC1 and FTC1 data sheets for more information.
- 4) Select 3-cylinder, 2-stroke under Engine Settings
- 5) Program timing retard in Map table A
- 6) The cell values can range from 0 to 20. A value of 20 will result in 20 degrees of retard.
- 7) Cell values can have one decimal place. For example 10.1. There are a total of 200 levels available for cell value.
- 8) Program the fuel in Map table B
- 9) The cell value represents the additional injector on-time in milliseconds. The minimum practical cell value is 1.0 the maximum cell value will have a corresponding duty cycle of 40%
- 10) The highest cell value is 25.5, but you should never get anywhere near that number.
- 11) Cell values can have one decimal place. For example 10.1. There are a total of 200 levels available for cell value
- 12) Disconnect the battery before making connections to the factory wiring harness.
- 13) Use solder and heat shrink for the best possible electrical connections
- 14) All connections are made to the wire harness leading to ECU connector A (black)
- 15) Connect the **RED** wire (B+) to the RD/LG wire on A2
- 16) Connect the **BLACK** wire (B-) to the BK/TN wire on A32
- 17) Cut the GY/BK crank sensor wire leading to A8
- 18) Connect the **GRAY** wire to the wire leading to the crank sensor
- 19) Connect the **GRAY/BLACK** wire to the wire leading to the ECU crank sensor input
- 20) Cut the TN/YL cam sensor wire leading to A18
- 21) Connect the **TAN** wire to the wire leading to the cam sensor
- 22) Connect the **TAN/YELLOW** wire to the wire leading to the ECU cam sensor input
- 23) Connect the **BLUE** wire (+5V) to the OR wire on A17
- 24) Cut the DG/RD MAP sensor wire leading to the ECU on A27
- 25) Connect the **GREEN** wire (MAP IN) to the wire leading to the MAP sensor
- 26) Connect the **VIOLET** wire (MAP OUT) to the wire leading to the ECU
- 27) Plug the injector connector into the additional injector
- 28) Connect the vacuum line to a source of manifold vacuum
- 29) Reconnect the battery