

FTC1-103 Fuel/Timing Calibrator for 2010 Nissan Altima VQ35DE

ECU Pinout

| | | | | | | | |
|---|---|----|----|----|----|----|----|
| 1 | 5 | 9 | 13 | 17 | 21 | 25 | 29 |
| 2 | 6 | 10 | 14 | 18 | 22 | 26 | 30 |
| 3 | 7 | 11 | 15 | 19 | 23 | 27 | 31 |
| 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 |

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 33 | 37 | 41 | 45 | 49 | 53 | 57 | 61 | 65 | 69 | 73 | 77 |
| 34 | 38 | 42 | 46 | 50 | 54 | 58 | 62 | 66 | 70 | 74 | 78 |
| 35 | 39 | 43 | 47 | 51 | 55 | 59 | 63 | 67 | 71 | 75 | 79 |
| 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 | 68 | 72 | 76 | 80 |

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|----|----|----|----|-----|-----|-----|-----|
| 81 | 85 | 89 | 93 | 97 | 101 | 105 | 109 |
| 82 | 86 | 90 | 94 | 98 | 102 | 106 | 110 |
| 83 | 87 | 91 | 95 | 99 | 103 | 107 | 111 |
| 84 | 88 | 92 | 96 | 100 | 104 | 108 | 112 |

Use and Installation Instructions for 2010 Model:

- 1) Use with R4 software version 1.5.
- 2) Select Vac/Pressure and Programmable Signal Calibrator under system settings. Refer to the FTC1 data sheet for more information.
- 3) Select 1-cylinder, 4-stroke under engine settings.
- 4) Program fuel in Map table A.
- 5) The cell values can range from 0 to 20. A value of 10 will result in no change from stock calibration.
- 6) Values greater than 10 make the mixture richer. Values less than 10 make the mixture leaner.
- 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 timing retard in Map table B.
- 9) The cell values can range from 0 to 20. A value of 20 will result in 20 degrees of retard.
- 10) Disconnect the battery before making connections to the factory wiring harness.
- 11) Use solder and heat shrink for the most reliable connections.
- 12) Connect the **RED** wire (B+) to the violet wire leading to ECU pin 105.
- 13) Connect the **BLACK** wire (B-) to the black wire leading to pin 12.
- 14) Connect the **BLACK/YELLOW** (tach) wire to the yellow wire leading to ECU pin 11.
- 15) Locate the brown MAF sensor signal wire leading to ECU pin 58 and cut it.
- 16) Connect the **GREEN** wire to the MAF sensor side of the cut wire.
- 17) Connect the **VIOLET** wire to the ECU side of the cut wire.
- 18) Locate the red crank sensor signal wire leading to ECU pin 65 and cut it.
- 19) Connect the **BLUE** wire to the wire leading to the crank sensor.
- 20) Connect the **BLUE/WHITE** wire to the wire leading to the ECU crank sensor input.
- 21) Locate the yellow bank 1 cam sensor signal wire leading to ECU pin 70 and cut it.
- 22) Connect the **YELLOW** wire to the wire leading to the cam sensor.
- 23) Connect the **YELLOW/BLACK** wire to the wire leading to the ECU cam sensor input.
- 24) Locate the pink bank 2 cam sensor signal wire leading to ECU pin 69 and cut it.
- 25) Connect the **TAN** wire to the wire leading to the cam sensor.
- 26) Connect the **TAN/BLACK** wire to the wire leading to the ECU cam sensor input.
- 27) Connect the vacuum line to the intake manifold.
- 28) Reconnect the battery.