## CALIBRATION SELECTIONS AND SPECIAL FUNCTIONS

❖ Calibration Switching is done Via Drive Mode:



Normal - Cal 1
Sport/Race - Cal2
Drift - Cal 3

❖ Lim Button on Steering wheel is for Cal Override - Rolling Anti-Lag or Pit Limiter



™ Launch mode

- o Launch is activated when Vehicle speed is below 3kph and Pedal is depressed above 10%
- o Additional settings are configured under "Launch Control" menu.
- o Launch can be selectively adjusted per calibration under "Calibration Switches/Launch Control"
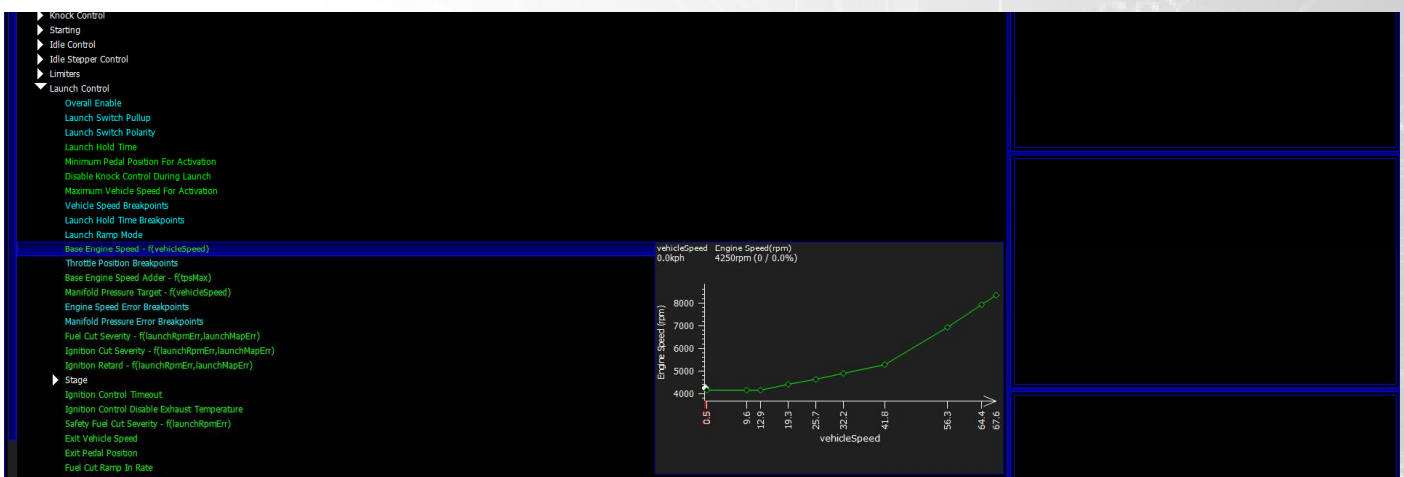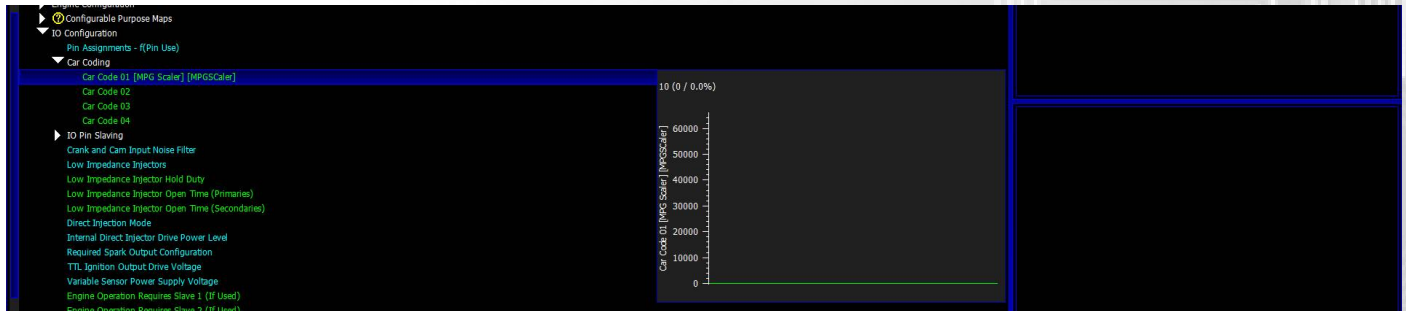


Example: The RPM Target can be adjusted based on Vehicle Speed or Launch Timer. Same can be done with Manifold Pressure Target

❖ Flat Foot Shifting is setup via clutch switch and active when the throttle is above 60% and Rpm is above 3000rpm

❖ Exhaust Valve opens in Sport, Race and Drift Mode

❖ Injector Scaling for MPG Counter is done via Car Code 1 under Pin Assignments

# WIRING ADDITIONAL ITEMS

❖ Secondary Injection

The Syvecs kit has the ability to control four additional port Injectors.

The Following pins can be reconfigured as secondary injector drivers:

- Pin23 (Fuel#05) High Speed Fan from Syvecs S8.

   o Additionally, to retain the High Speed Fan T-splice the removed wire to Pin6 (Fuel#10) Low Speed Fan.

- Pin34 (Fuel#09) Blow-Off Valve Control Solenoid
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   o Additionally, Connect the Blow-Off Valve vacuum port directly to engine vacuum.

- Pin50 (Fuel#06) Exhaust Recirculation.

- Pin20 (Fuel#15) Canister Purge Solenoid.

The injectors can be connected with the supplied spare pins from the kit.

S8 Connector (Looking from the back of connector or ECU Header)

| 88 | 87 | 86 | 85 | 84 | 83 | 82 | 81 | 80 | 79 | 78 | 77 | 76 | 75 | 74 | 73 | 72 | 71 | 70 | 69 | 68 | 67 | 66 | 65 | 64 | 63 | 62 | 61 | 60 | 59 | 58 | 57 | 56 |
| 55 | 54 | 53 | 52 | 51 | 50 | 49 | | 48 | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | | 34 | 33 | 32 | 31 | 30 | 29 |
| 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | | 6 | 5 | 4 | 3 | 2 | 1 |

**<span style="color:red">DO NOT PLUG IN THE INJECTORS UNTIL THE CALIBRATION ON THE ECU HAS BEEN UPDATED FOR 8 INJECTORS</span>**

Port Injector 1 - Pin23
Port Injector 2 - Pin34
Port Injector 3 - Pin50
Port Injector 4 - Pin2

❖ Flex Fuel Sensor

   o The sensor requires 12v switched power (Pin 56,57) and good ground (Pin 1,28,29,55) at the ecu preferably.

   o Signal can be wired to Pin08 AN#16

   o Assign to Fuel Composition Sensor ( fuelComp )

   o Enable the FlexFuel strategy and calibrate accordingly.

# WIRING PINOUTS:

## S8 Connector (Looking from the back of connector or ECU Header)
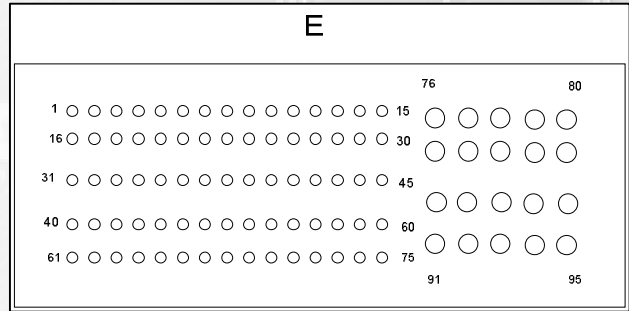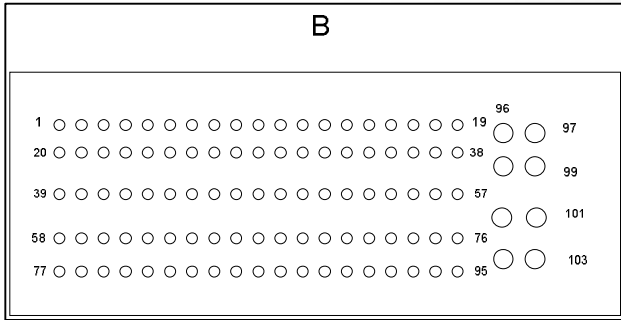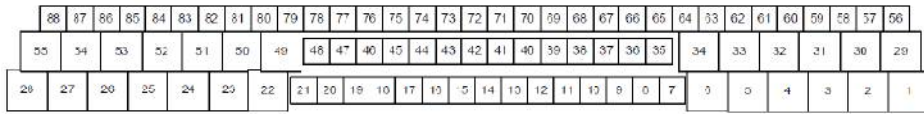


| Syvecs Pin Number | Function | FocusRS Pin | Focus Function |
|---|---|---|---|
| 1 | POWER GROUND | B98 | Power Ground |
| 2 | IGNITION #08 | E43 | Ign 4 |
| 3 | IGNITION #07 | E72 | Ign 3 |
| 4 | IGNITION #06 | E57 | Ign 2 |
| 5 | IGNITION #05 | E42 | Ign 1 |
| 6 | FUEL #10 | B23 | Cooling Fan |
| 7 | KNOCK #02 | E50 | Knock 2 |
| 8 | INPUT #16 (5V/TH/BI/FREQ) | Customer to Wire in | Flex Fuel |
| 9 | INPUT #14 (5V/TH/BI/FREQ) | E36 | ECT |
| 10 | INPUT #12 (5V/TH/BI/FREQ) | B6 | Clutch Top |
| 11 | INPUT #10 (5V/TH/BI/FREQ) | E28 | intake CAM |
| 12 | THERMO - #02 | | Spare EGT- |
| 13 | THERMO + #02 | | Spare EGT+ |
| 14 | INPUT #07 (5V/TH/BI/FREQ) | B30 | Clutch Bottom |
| 15 | INPUT #05 (5V/TH/BI/FREQ) | B31 | Reverse Sw |
| 16 | INPUT #03 (5V/TH/BI/FREQ) | E46 | Cylinder Head temp2 |
| 17 | INPUT #01 (5V/TH/BI/FREQ) | B52 | AC Pressure |
| 18 | LAMBDA V #01 | E64 | Lambda V |
| 19 | INPUT #21 (TH) | B72 | Crank case pressure |
| 20 | FUEL #15 | B20 | Canister Purge |
| 21 | RS232#1TX | | |
| 22 | FUEL #07 | B39 | fuel pump relay |
| 23 | FUEL #05 | B4 | Cooling Fan high speed |
| 24 | IGN4 | E85 | GDI 4+ (spare) |
| 25 | IGN3 | E82 | GDI 3+ |
| 26 | IGN2 | E83 | GDI 2+ |
| 27 | IGN1 | E84 | GDI 1+ |
| 28 | POWER GROUND | Custom | Can Bridge Ground |
| 29 | POWER GROUND | B97 | Power Ground |
| 30 | FUEL #14 | E29 | VVT exhaust |
| 31 | FUEL #13 | E1 | VVT intake 1 |
| 32 | FUEL #12 / GDI PUMP - | E77 | Fuel Vol contrl -ve |
| 33 | FUEL #11 | E14 | Lambda Heater |
| 34 | FUEL #09 | E3 | Wastegate Recirc |
| 35 | KNOCK #01 | E65 | Knock 1 |

| 36 | INPUT #15 (5V/TH/BI/FREQ) | B55 | PPS1 |
|---|---|---|---|
| 37 | INPUT #13 (5V/TH/BI/FREQ) | B54 | PPS2 |
| 38 | INPUT #11 (5V/TH/BI/FREQ) | E54 | exhaust CAM |
| 39 | INPUT #09 (5V/TH/BI/FREQ) | E11 | Crank |
| 40 | THERMO - #01 | | Spare EGT- |
| 41 | INPUT #08 (5V/TH/BI/FREQ) | E33 | Map |
| 42 | INPUT #06 (5V/TH/BI/FREQ) | B66 | Brake |
| 43 | INPUT #04 (5V/TH/BI/FREQ) | Spare | Spare Input |
| 44 | INPUT #02 (5V/TH/BI/FREQ) | E37 | Direct Injection pressure |
| 45 | CAN LO #03 | | |
| 46 | INPUT #22 (TH) | Spare | Spare Input |
| 47 | FUEL #16 | B43 | Starter Ground |
| 48 | RS232 RX | | |
| 49 | FUEL #08 | B2 | A/C Clutch |
| 50 | FUEL #06 | B80 | Exhaust Solenoid PWM |
| 51 | FUEL #04 | E92 | GDI 4- |
| 52 | FUEL #03 | E93 | GDI 3- |
| 53 | FUEL #02 | E88 | GDI 2- |
| 54 | FUEL #01 | E87 | GDI 1- |
| 55 | POWER GROUND | B96 | Power Ground |
| 56 | BATTERY SUPPLY | | VBATT + Can Bridge 12V |
| 57 | BATTERY SUPPLY | B102 | VBATT |
| 58 | H-BRIDGE #01 | E86 | DBW+ |
| 59 | H-BRIDGE #02 | E91 | DBW- |
| 60 | H-BRIDGE #03 | E16 | Boost solenoid |
| 61 | H-BRIDGE #04 | E78 | Fuel Vol Cntrl +ve |
| 62 | 10V OUT | | |
| 63 | 5V OUT #02 | E6, E7, E8 | 5V Out |
| 64 | 5V OUT #01 | B10, B11, B12, B13 | 5V Out |
| 65 | KNOCK GROUND | E66, E51 | |
| 66 | INPUT #20 (5V/KNOCK #04) | B71 | Fuel Supply pressure |
| 67 | SENSOR GROUND #02 | B7, B16 B18 | AN Ground |
| 68 | INPUT #19 (5V/KNOCK #03) | Spare | Spare Input |
| 69 | SENSOR GROUND #01 | E53 | AN Ground |
| 70 | THERMO + #01 | | Spare EGT+ |
| 71 | INPUT #18 (5V) | E52 | TPS2 |
| 72 | SENSOR GROUND #02 | B35, B36 | AN Ground |
| 73 | INPUT #17 (5V) | E68 | TPS1 |
| 74 | SENSOR GROUND #01 | E31, E20 | AN Ground |
| 75 | CAN HI #03 | | |
| 76 | LAMBDA I #01 | E63 | |
| 77 | LAMBDA GROUND | E49 | |
| 78 | COMMS GROUND | | |
| 79 | CAN LO #02 | | |
| 80 | CAN HI #02 | | |
| 81 | CAN LO #01 | GT150-C | |
| 82 | CAN HI #01 | GT150-D | |
| 83 | INPUT #24 (TH) | Spare | Spare Input |
| 84 | INPUT #23 (TH) | E34 | ACT |
| 85 | LANRX+ | White/orange | Ethernet Socket, 0.3m |
| 86 | LANRX- | ORANGE/white | |
| 87 | LANTX+ | White/Green | |
| 88 | LANTX- | GREEN/white | |