



Ford Focus RS Mk3



INSTALLATION

INSTALLATION IS TO BE CARRIED OUT BY QUALIFIED PERSONEL ONLY.
THE VEHICLE WILL NEED TO BE RECALIBRATED TO SOME EXTENT BY QUALIFIED PERSONEL ONLY.
BE ADVISED WHILE SYVECS IS INSTALLED THE VEHICLE WILL NOT COMPLY WITH OEM EMISSION STANDARDS.

- 1.) Remove the Negative Terminal from the battery on the Vehicle.
- 2.) Remove the Left Front wheel and plastic wheel arch to gain access to the OEM ECU control box.
- 3.) Remove the Factory Ecu and Plug in the Syvecs PNP Kit, mount inside the Factory control box.

CALIBRATION SELECTIONS AND SPECIAL FUNCTIONS

- ❖ Calibration Switching is done Via Drive Mode:



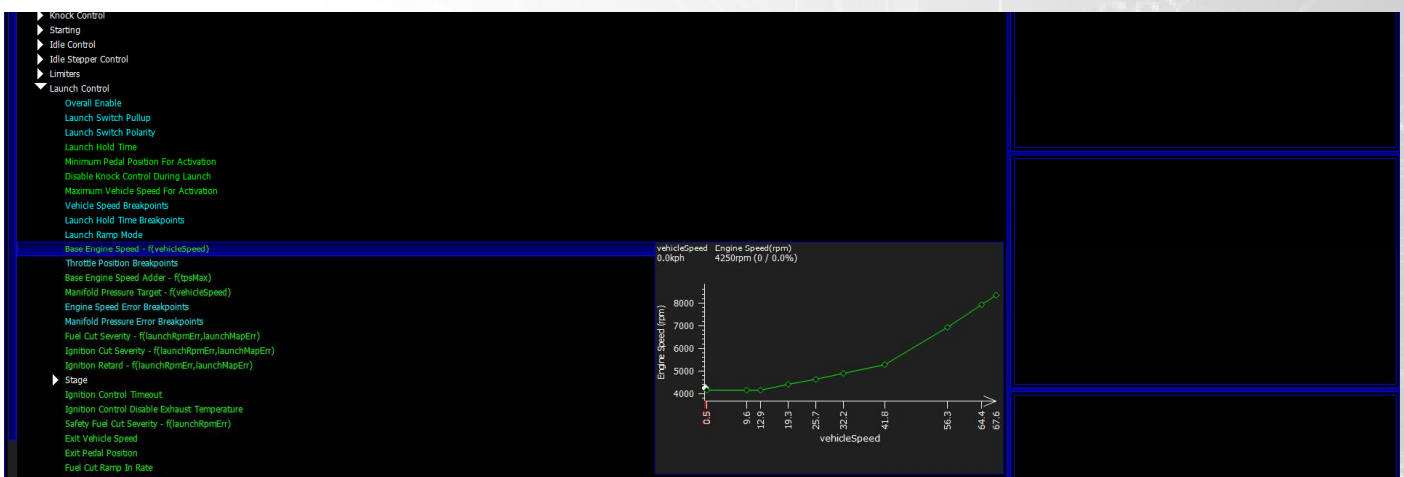
Normal - Cal 1
Sport/Race - Cal2
Drift - Cal 3

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



- ❖ Launch mode

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

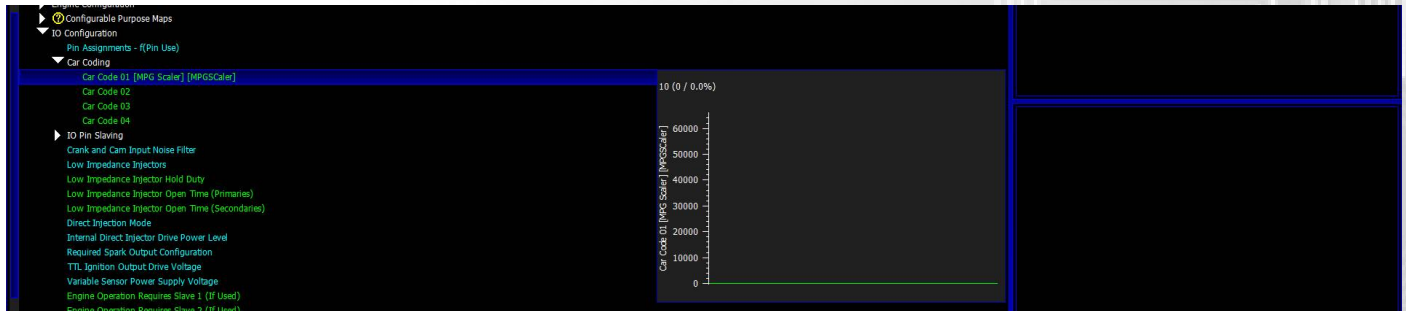


Example: The RPM Target can be adjusted based on Vehicle Speed or Launch Timer. Same can be done with Manifold Pressure Target

❖ 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.
 - 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
 - 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						

DO NOT PLUG IN THE INJECTORS UNTIL THE CALIBRATION ON THE ECU HAS BEEN UPDATED FOR 8 INJECTORS

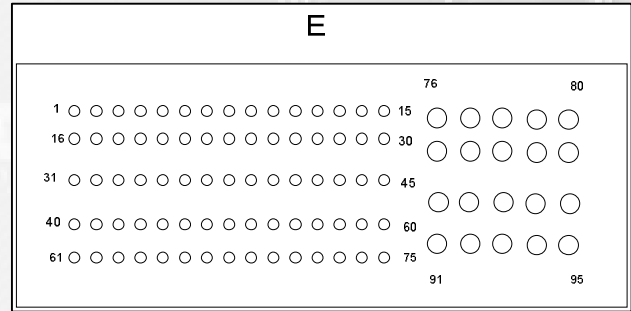
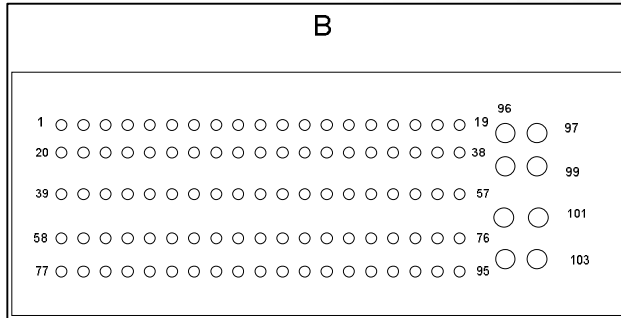
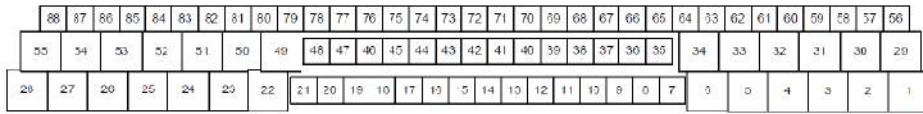
Port Injector 1 - Pin23
Port Injector 2 - Pin34
Port Injector 3 - Pin50
Port Injector 4 - Pin2

❖ Flex Fuel Sensor

- The sensor requires 12v switched power (Pin 56,57) and good ground (Pin 1,28,29,55) at the ecu preferably.
- Signal can be wired to Pin08 AN#16
- Assign to Fuel Composition Sensor (fuelComp)
- 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	