SyvecsLTD

V1.2

Ford Focus Rs Mk2

This document is intended for use by a technical audience and describes a number of procedures that are potentially hazardous. Installations should be carried out by competent persons only.

Syvecs and the author accept no liability for any damage caused by the incorrect installation or configuration of the equipment.

Please Note that due to frequent firmware changes certain windows might not be the same as the manual illustrates. If so please contact the Syvecs Tech Team for Assistance.

Support@Syvecs.com



Focus RS Mk2

Thank you for choosing the Syvecs FocusRS Mk2 Plug in kit designed for the Ford Focus MK2 RS and ST

The kit should come with the following:

1 x Syvecs S7-I ECU

1 x RS Loom adaptor

Installation

- 1.) Remove the Negative Terminal from the battery on the Vehicle
- 2.) Unplug the OEM Engine control module which is found at the front of the engine bay in the ECU Holder shown below

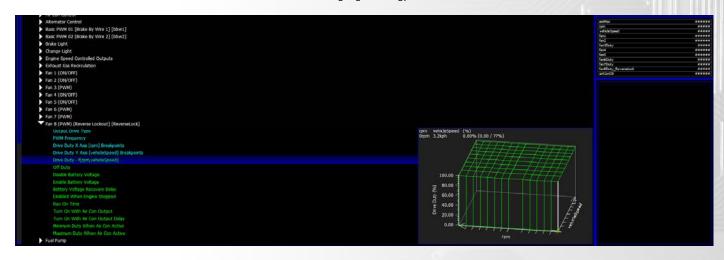


- 3.) Remove the OEM Ecu from the holder by removing the 2 x M6 Bolts found at top and bottom
 - 4.) Carefully Fit the S6-I ECU in the same orientation as the OEM Ecu was fitted and secure
 - 5.) Next plug the PNP adaptor into the OEM connectors and into the S6-I
- 6.) Contact <u>Support@Syvecs.com</u> for a Base Calibration. Mention the Spec of the Car... Injectors, Map Sensor Etc

Focus MK2 RS Software Options

Reverse Lockout

The Reverse Lock out switch stops users from allowing Reverse to be selected when moving, this is adjusted in the Fan8 PWM Map or on Older Software via the Change light Strategy



MPG Scaling on Dash -Injector Size is set in Fuel Consumption Scaling



Map Switching

Adjusting the Calibration Switch position via the steering wheel controls is possible, In the Menu option you can change the Steering wheel Feel

Standard = Cal1 Sport = Cal2 Comfort = Cal3

TC Switch

Rev Matching and Flat Shift on Manual Transmission

Flat Shifting - When the Clutch is pressed on it will send a GearCut Request into the ECU for Flat Shifting. This is Setup in Gearcut - Open Loop



Focus RS Mk2 FAQ and Help

Q) Do you control the OEM VVT

A) Yes, this is adjustable via Variable Valve timing calibrations, Can Change Intake and Exhaust Cam Targets

Q) Can we Flat Foot Shift

A) Yes, The gearcut strategy takes full care of the Torque Reductions on shifts and allows you to change gear while fully on throttle

Q) Can you Adjust the Launch

A) Yes, its fully adjustable in stage and after also where a Limiter can be set based on Time or Speed

Q) Do you Supply a Base map for the Kit

A) Yes as with all our kits we supply a very good base calibration to get everything working for you

Q) What of the original features will now not work?

A) None, even cruise control works but it doesn't allow you to adjust speed on the stalk, only clamp a speed

Email <u>Support@syvecs.co.uk</u> for a base map to suit your setup.

A	DESCRIPTION	
	PART NUMBER	
	NOTES:	
Syvecs Description	Syvecs Pinout	FocusRS Notes
PWR CTR OUT	A1	Main Relay
H-Bridge1 / SlaveOut1	A2	DBW
H-Bridge2 / SlaveOut2	A3	DBW
H-Bridge3 / SlaveOut3	A4	
H-Bridge4 / SlaveOut4	A5	
H-Bridge5 / SlaveOut5	A6	
H-Bridge6 / SlaveOut6	A7	
H-Bridge7 / SlaveOut7	A8	
H-Bridge8 / SlaveOut8	A9	
FUEL1	A10	Primary Injector 1

FUEL2	A11	Primary Injector 2
FUEL3	A11 A12	Primary Injector 2 Primary Injector 3
FUEL4	A13	Primary Injector 4
FUEL5	A14	Primary Injector 5
FUEL6	A15	
FUEL7	A16	Reverse Gear Switch Secondary Injector 1 Or Spare
7 0227	1120	Ouput
FUEL8	A17	Secondary Injector 2 Or Spare Ouput
PWM1 /*FUEL9	A18	FUEL PUMP
PWM2 / *FUEL10	A19	Fan
PWM3 / *FUEL11	A20	Boost Solenoid 1&2
PWM4 / *FUEL12	A21	A/C Clutch
PWM5 PWM6	A22	Start Rly
	A23	
PWM7	A24	VVT In
PWM8	A25	VVT ex
IGN1	A26	CYL 1 IGNITION OUTPUT
IGN2	A27	CYL 2 IGNITION OUTPUT
IGN3	A28	CYL 3 IGNITION OUTPUT
IGN4	A29	CYL 4 IGNITION OUTPUT
IGN5	A30	CYL 5 IGNITION OUTPUT
IGN6	A31	
PWRGND	A32	PwrGnd
PWRGND PWRGND	A33 A34	PwrGNd See End of Pinouts
В	DESCRIPTION	3 3
В		· · · · · · · · · · · · · · · · · · ·
В	PART NUMBER	
В		· · · · · · · · · · · · · · · · · · ·
В	PART NUMBER	30 2
PWRGND	PART NUMBER	
	PART NUMBER NOTES:	
	PART NUMBER NOTES: B1	
	PART NUMBER NOTES: B1 B2	
PWRGND	PART NUMBER NOTES: B1 B2 B3	
PWRGND KNOCK	PART NUMBER NOTES: B1 B2 B3 B4	
PWRGND KNOCK KNOCK 2	PART NUMBER NOTES: B1 B2 B3 B4 B5	
PWRGND KNOCK KNOCK 2 PVBAT	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A LAM1B	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8 B9	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A LAM1B LAM1C	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8 B9 B10	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A LAM1B LAM1C LAM1D	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A LAM1B LAM1B LAM1C LAM1D LAM1D	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A LAM1B LAM1B LAM1C LAM1D LAM1D LAM1HEATER IVBAT	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A LAM1B LAM1C LAM1C LAM1D LAM1HEATER IVBAT IVBAT	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14	
PWRGND KNOCK KNOCK 2 PVBAT IVBAT LAM1A LAM1B LAM1C LAM1D LAM1D LAM1HEATER IVBAT LAM2A LAM2B	PART NUMBER NOTES: B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15	

LAM2HEATER	B18	
IVBAT	B19	
KLINE	B20	Alternator Lin
RS232RX	B21	
RS232TX	B22	
LANRX-	B23	
LANRX+	B24	
LANTX-	B25	*
LANTX+	B26	
LIMITA		
C	DECCRIPTION	
С	DESCRIPTION	
	PART NUMBER	
	NOTES:	
KNOCK GROUND	C1	
ANGND	C2	
ANGND	C3	
ANGND	C4	
5V OUT	C5	
5V OUT	C6	
5V OUT	C7	
CAN L	C8	
CAN H	C9	
AN01	C10	Crank
AN02	C11	Oil presure Switch
AN03	C12	Map Sensor
AN04	C13	Map sensor
AN05	C14	PPSa
AN06	C15	rrsa
AN07	C16	inlet cam sensor
AN08	C17	Ex Cam
AN09	C18	TPS INPUT
AN10	C19	TI S IN C C
AN11	C20	TPS 2 INPUT
AN12	C21	1102111101
AN13	C22	COOLANT TEMP INPUT
AN14	C23	
AN15	C24	Air Temp
AN16	C25	Fuel Pressure
EGT1-	C26	6
EGT1+	C27	
PWR CTR IN	C28	Ignition Switch
AN S1 / Slave An01	C29	
AN S2 / Slave An02	C30	
AN S3 / Slave An03	C31	
AN S4 / Slave An04	C32	
AN S5 / Slave An05	C33	
AN S6 / Slave An06	C34	