Syvecs LTD

V1.2

Honda Type R - FK2/FK8

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

Contents:

The kit comes with the following:

1 x Syvecs S7PlusEcu

1 x GDI12 Driver

1 x Wiring Loom

Installation

1.)   Remove the Negative Terminal from the battery on the Vehicle

2.)   Remove the airbox to access the OEM ECU

3.) Remove the OEM Engine Management Computer which is found on the right-hand side near the firewall as you're looking toward the engine bay as seen here

The ECU is quite easy to remove, if you are struggling to remove the ECU, make sure all the bolts have been removed and the clips holding the loom have been removed as well

4.) Plug the Syvecs Loom into the car and mount the S7Plus ECU in the location where the OEM ECU was fitted

How you mount the ECU is up to you, this pictures show one of the option which works quite well in the OEM position and make it neat and protected from the elements
If you want to do it this way, you'll need to drill the OEM plate and use spacers to fit the DI12 opposite the Syvecs ECU.

6.) Mount the GDI12 Drivers next to the S7Plus as shown here
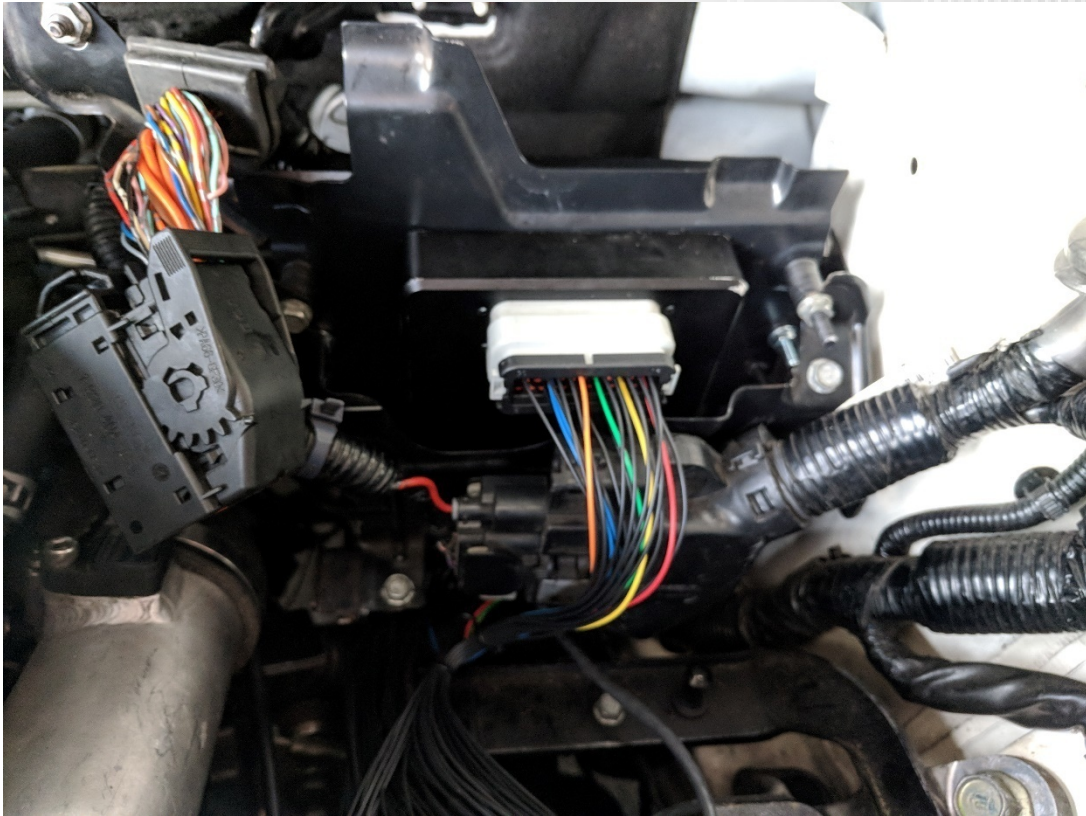
7.) Replace the battery terminal, make sure everything is secure and proceed to the Syvecs Manual

Email Support@Syvecs.com for a base map to suit your setup

After receiving the base map the first job is to enter the Vin Number into the calibration for the car

Pin Assignments – Car Coding – Vehicle Identification Number
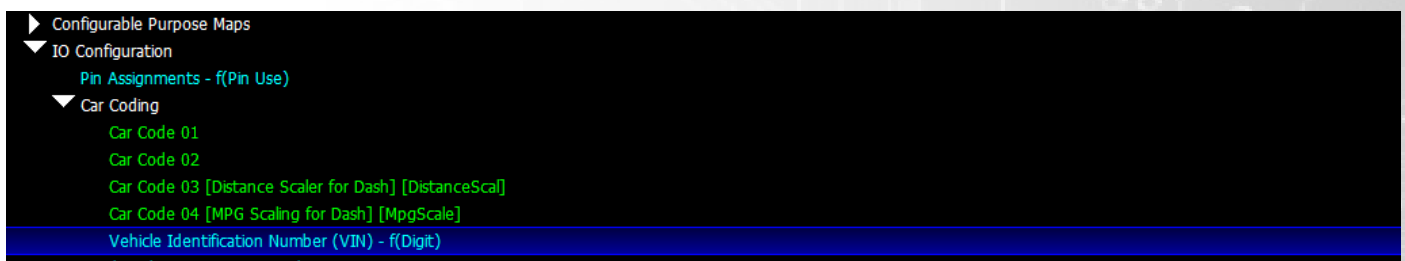
Type R Kit FAQ and Help

Q) Can I install different in tank pump?

A) Yes, the FK2 has a basic relay on and off control for the in-tank fuel pump and can be replace for a bigger one if needed

Q) How do I change calibration switches

A) You can have up to 8 calibration option which are controlled via the Up and Down button of the cruise control on the steering wheel

You will see which calibration you have selected with the tacho going to 2000rpm for position 2, 3000rpm for position 3 etc…

Q) Can you control the OEM Electric Wastegate

A) Yes this is done in the Supercharger Bypass Strategy – Closed Loop Boost Control

Q) How do you active Rolling antilag?

A) By pressing the Lim button on the steering wheel

Q) Can we use the OBD port still to Log, Read Codes and Clear them on other ECUs on the car like ABS?

A) All OBD functions will still work as standard.

Q) I have heard of the Autoblip, what is it and how does it work?

The Autoblip is used to replicate a heel and toe action without having to do it yourself

In certain conditions, the throttle body will open itself while pressing the clutch to allow rpm match on downshift

We are receiving the brake pressure and signal from a clutch switch and depending on the conditions you may have the blip of the throttle or not and you can have

more or less blip too if you are in R-mode or normal mode

The Autoblip is fully customizable depending on your driving style and preferences

Q) Does the Syvecs have flatshift?

Yes, Flatshift is enabled based on TPS position, RPM and clutch switch, when all the conditions are met, you will have a fuel and/or ignition cut to stop the engine to rev

itself even if you're still on full throttle

Q) Does the OEM Traction control still works?

No, the OEM Traction control is completely disabled and the Syvecs Traction Control takes over it

You can still disable the traction control completely if you wish to by using the OEM Traction control switch, the light will come onon the dashboard to let you know the

traction control is now disabled completely

The traction control light will also flash when the traction control is active on the Syvecs to let you know wheelspin is occurring.

Q) Does the cruise control still works?

Yes the cruise control still works but differently to the OEM ECU

You will need to hold the speed at which you want the cruise control to be and then press Main on the steering wheel

The Syvecs will then hold the speed at which you pressed the button at and hold it there, bear in mind the vehicle speed needs to be stable when you press or it won't

register it.

Q) Does the Syvecs have launch control

Yes, as you probably notice, the OEM Launch isn't the best, so Syvecs takes over to offer you a much better strategy

The launch is fully customizable (Boost, RPM etc...) and can be activated by pressing the Autostart button

When the light is on on the Autostart switch, the launch is activated, otherwise the launch is off

Q) Everything sounds very good but what do I lose by removing the OEM ECU?

We have worked very hard to integrate as much of the OEM function as we could

The only things that does not work with the Syvecs ECU are the hill-start assist and the possibility to increase and decrease speed of the cruise control as we are using

Up and Down to change the calibration.

You will also lose the engine oil temperature on the dash but the engine does not have an oil temperature sensor and it only shows an estimation of the oil

temperature.

Syvecs Description	Syvecs Pinout	Civic FK Notes
A	DESCRIPTION	
	PART NUMBER	
	NOTES:	
Syvecs Description	**Syvecs Pinout**	**Civic FK Notes**
PWR CTR OUT	A1	Main Relay
H-Bridge1 / SlaveOut1	A2	DBW
H-Bridge2 / SlaveOut2	A3	DBW
H-Bridge3 / SlaveOut3	A4	Wastegate Control
H-Bridge4 / SlaveOut4	A5	Wastegate Control
H-Bridge5 / SlaveOut5	A6	
H-Bridge6 / SlaveOut6	A7	VVT IN
H-Bridge7 / SlaveOut7	A8	VVT Ex
H-Bridge8 / SlaveOut8	A9	VTEC
FUEL1	A10	**Primary Injector 1**
FUEL2	A11	**Primary Injector 2**
FUEL3	A12	**Primary Injector 3**
FUEL4	A13	**Primary Injector 4**
FUEL5	A14	Evap Solenoid
FUEL6	A15	Reverse Gear Switch
FUEL7	A16	
FUEL8	A17	FUEL PUMP
PWM1 /*FUEL9	A18	
PWM2 / *FUEL10	A19	Fan High
PWM3 / *FUEL11	A20	Turbo by-pass
PWM4 / *FUEL12	A21	A/C Clutch relay
PWM5	A22	Starter cut relay 2
PWM6	A23	Starter cut relay 1
PWM7	A24	
PWM8	A25	Fan Low
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	High Pressure Fuel Pump
IGN6	A31	
PWRGND	A32	PwrGnd
PWRGND	A33	PwrGNd
PWRGND	A34	PwrGnd
B	DESCRIPTION	
	PART NUMBER	
	NOTES:	
PWRGND	B1	

CAN 2L	B2	
CAN 2H	B3	
KNOCK	B4	
KNOCK 2	B5	
PVBAT	B6	
IVBAT	B7	
LAM1A	B8	
LAM1B	B9	
LAM1C	B10	
LAM1D	B11	
LAM1HEATER	B12	
IVBAT	B13	
LAM2A	B14	
LAM2B	B15	
LAM2C	B16	
LAM2D	B17	
LAM2HEATER	B18	
IVBAT	B19	
KLINE	B20	
RS232RX	B21	
RS232TX	B22	
LANRX-	B23	
LANRX+	B24	
LANTX-	B25	
LANTX+	B26	
C		
	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 Low
CAN H	C9	Can High
AN01	C10	Crank (V3 Loom) / PPS2 (V4 Loom
AN02	C11	Pre throttle boost
AN03	C12	DI
AN04	C13	Starter Signal Switch
AN05	C14	PPS1
AN06	C15	PPS2(V3 Loom) / Crank (V4 Loom
AN07	C16	inlet cam sensor
AN08	C17	Ex Cam
AN09	C18	TPS 2 INPUT

AN10	C19	TPS INPUT
AN11	C20	Oil pressure
AN12	C21	Wastegate position
AN13	C22	COOLANT TEMP INPUT1
AN14	C23	ACT
AN15	C24	Map Sensor
AN16	C25	Fuel Pressure
EGT1-	C26	
EGT1+	C27	
PWR CTR IN	C28	Ignition Switch
AN S1 / Slave An01	C29	
AN S2 / Slave An02	C30	Intake cam sensor
AN S3 / Slave An03	C31	Air Intake Temp from Maf
AN S4 / Slave An04	C32	Clutch Switch Gear Blip
AN S5 / Slave An05	C33	Brake Switch
AN S6 / Slave An06	C34	Clutch Switch Gear Cut
Syvecs GDI12 Driver Pinout	**Name**	**Notes**
1	LS1	Injector 1
2	LS2	
3	LS3	Injector 3
4	LS4	
5	LS5	Injector 4
6	LS6	
7	LS12	Injector 2
8	LS11	
9	LS10	
10	LS9	DI Pump High Side
11	LS8	
12	LS7	
13	Input 1	**Injector 1 Signal**
14	Input 2	
15	Input 3	**Injector 3 Signal**
16	Input 4	
17	Input 5	**Injector 4 Signal**
18	KLINE	
19	Input 11	
20	Input 10	
21	Input 9	**Di Pump Signal**
22	Input 8	
23	Input 7	
24	VBAT1	12v
25	HS12	Injector 1 +
26	PWRGND	Gnd
27	HS34	Injector 3+
28	HS56	Injector 4+
29	Input 6	
30	Input 12	**Injector 2 Signal**
31	HS11,12	Injector 2+
32	HS9,10	DI Pump Low
33	PWRGND	Gnd
34	HS7,8	
35	VBAT2	12v