

Syvecs Porsche 991.2 Kit



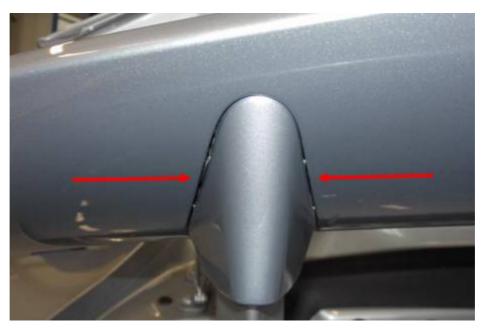
Installation

1.) Remove the Negative Terminal from the battery on the Vehicle which is found in the Front under hood compartment.

2.) In order to gain access to the OEM Ecu the Rear Spoiler needs to be removed from the car, open the rear engine bay and start by removing the OEM Air Intake Grate and Small Fans as shown below



3.) Next remove the Spoiler leg covers to access the Torque fitting which hold the top spoiler on





4.) Lift the top Spoiler of the legs and then slide the bottom part of the spoiler up and over the legs also



5.) Unbolt the items marked in Red and unplug the 2 electrical connectors for the spoiler assembly. Then lift the frame out and the OEM Ecu can be accessed easily under the area marked below with a red circle.



3.) Remove the Factory Ecu by removing the 2x 10mm nuts holding it in place



4.) Remove the 6 x Hex bolts to remove the Oem ECU from its cradle

5.) Fit the Syvecs ecu in its place with 2 x M6 bolts



6.) Mount the cradle then back where the OEM Ecu came from



7.) Plug in the Loom and secure carefully

8.) Connect the Battery back, connect the ethernet cable to your laptop and load the supplied base calibration.

You may find you have Diff errors on the dash after the installation where the OEM Ecu might have been removed while it was still awake (Stays awake for around 5-10Minutes after Key Off) If you have these errors you can clear them in Scal but going down to i/o Configuration - Car Coding

Set Car Code1 = 0

After Set CarCode 2 = 1, Wait 2 seconds then set at 5, then back to 1 and Finally 0

After Set Car Code = 1 to get TCM Logging working

SCal 2.15.60 : F:\Syvecs\Calibrations\S6Plus Base Files\991\56Plus 991 - Base 2016 - VTG 650WHP 1.74 Final.SC		5 a x
File Cal Pastecal Device Gauge Worksheet View DGGENERIC) Dev(S6 #XXXX) SwVer(1.74.X/1)		OFFLINE 🕥
MENU Auto Selector Auto Trans Custom DBW pos DBW SETUP Fan Control Injector Pulse Lambda Lin RelFPR DI test TPS/APP# Tuning		
Calibration		
Calibration Switches		
Run-Mode Fuelling		
Run-Mode Ignition		
Wastegate Control		
Gear Shift		
Gear Cut		
Gear Blip		
Throttle Jacker Control		
Throttle Bypass Valve Control		
Limp Switch		
Anti Lag System		
Nitrous Control		
Traction Control		
Flex Fuel		
Knock Control		
► Starting		
Idle Control		
Idle Stepper Control		
▶ Limiters		
Launch Control		
Drive By Wire		
Supercharger Bypass Valve		
Variable Valve Timing		
Differential Control		
Torque Estimation And Limitation		
Cruise Control Automatic Transmission Control		
Automatic Transmission Control Output Functions		
Logging Functions		
Datastreams		
Fuel Consumption		
Breakpoints and Thresholds		
Sensors	0 (0 / ??%)	
Engine Configuration		
Configurable Purpose Maps	[2] 60000	
TIO Configuration	岩 60000 H	
Pin Assignments - f(Pin Use)	50000 -	
Car Coding	+	
Car Code 01 [Tcm Logging Enable = 1] [TCMLogging]	<u>"</u> 40000 -	
Car Code 02 [Car DTC Clean = 1 + 5] [CarDTC]	8	
Car Code 03 [Mpg Scaler] [MPGScale]	2 30000 -	
Car Code 04	0 8 20000	
Output Testing	<u>경</u> 20000 -	
	8 8 1000 -	
	8 10000	
	3 0 1	

- Calibration Switch changing is done via the OEM Cruise Lever, Push up to enable Cal Up Request and Down to enable Cal Down Request.. Users need to turn on the Cruise Stalk by pressing the end button to active these mode changes.

The Oil pressure Gauge will show the Active Cal Position number when changing Cals

- Pushing the Cruise Lever forward activates Cruise Control

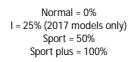
- Pulling the Cruise Lever Back towards the Driver activates the Cal Overide which is assigned to Rolling Antilag on the Kit currently

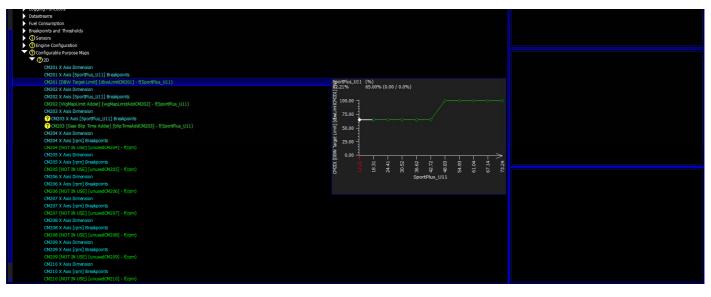


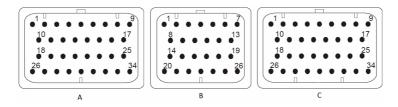
- Injector Scaling for MPG Counter is done via Car Code 3 under Pin Assignments - Car Code1 Activates the Clutch A and B Pressure Logging

Breakpoints and Thresholds ① Sensors	75 (0 / 0.0%)
O Engine Configuration O Configuration O Configuration O IO Configuration O In Assignments - f(Pin Use) Car Coding	
Car Code 01 [Tcm Logging Enable = 1] [TCMLogging] Car Code 02 [Car DTC Clean = 1 + 5] [CarDTC] Car Code 03 [Mpg Scaler] [MPGScale]	5 40000 - 8 8 30000 -
Car Code 04	を 8 20000 - ぎ 8 10000 -
	•

The Sport mode settings from the TCM also come into the Syvecs which can be used for altering DBW Limit, Wastegate Targets etc. The Base map already has a DBW Limit of 60% when in Normal Mode but uses can set up other Comp maps for the Input SportPlus_U11







Α	DESCRIPTION	CONNECTOR A	
	PART NUMBER	4-1437290-0	
	NOTES:	34 Way - Key1	

Syvecs	Syvecs	Function	
Description	Pinout		
PWR CTR OUT	A1	MAIN RELAY OUTPUT	Main Relay
H-Bridge1 /	A2	H-Bridge1	
SlaveOut1			DBW
H-Bridge2 /	A3	H-Bridge2	
SlaveOut2			DBW
H-Bridge3 /	A4	H-Bridge3	
SlaveOut3			ThermoStat
H-Bridge4 /	A5	H-Bridge4	
SlaveOut4			Oil Pump LS
H-Bridge5 /	A6	H-Bridge5	Di Pump
SlaveOut5			
H-Bridge6 /	A7	H-Bridge6	Rad Fans
SlaveOut6			
H-Bridge7 /	A8	H-Bridge7	Valve Lift
SlaveOut7			
H-Bridge8 /	A9	H-Bridge8	Starter Motor Relay
SlaveOut8			
FUEL1	A10	INJECTOR or PWM OUTPUT	Primary Injector 1
FUEL2	A11	INJECTOR or PWM	Primary Injector 2
		OUTPUT	
FUEL3	A12	INJECTOR or PWM	Primary Injector 3
		OUTPUT	
FUEL4	A13	INJECTOR or PWM	Primary Injector 4
		OUTPUT	
FUEL5	A14	INJECTOR or PWM	Primary Injector 5
		OUTPUT	
FUEL6	A15	INJECTOR or PWM	Primary Injector 6
		OUTPUT	
FUEL7	A16	INJECTOR or PWM	Secondary Injector 1 / Boost Pressure
		OUTPUT	Adjuster 1
FUEL8	A17	INJECTOR or PWM	Secondary Injector 2 / Boost Pressure
		OUTPUT	Adjuster 2
PWM1 /*FUEL9	A18	PWM OUTPUT	Secondary Injector 3 / Fuel Pump2 on 997.2
PWM2 / *FUEL10	A19	PWM OUTPUT	Secondary Injector 4 / exhaust flap on 991.2
PWM3 / *FUEL11	A20	PWM OUTPUT	Secondary Injector 5 / Tank Vent
PWM4 / *FUEL12	A21	PWM OUTPUT	Secondary Injector 6 / Engine Bay Fan

PWM5	A22	PWM OUTPUT	Divertor Valve
PWM6	A23	PWM OUTPUT	Fuel Pump Low pressure on 991
PWM7	A24	PWM OUTPUT	VVT1
PWM8	A25	PWM OUTPUT	VVT2
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	CYL 6 IGNITION OUTPUT	
PWRGND	A32	POWER GROUND	
PWRGND	A33	POWER GROUND	Ground
PWRGND	A34	POWER GROUND	Throttle Valve Ground
3	DESCRIPTION	CONNECTOR B	
	PART NUMBER	3-1437290-7	
	NOTES:	26 Way - Key1	
PWRGND	B1	POWER GROUND	
CAN2L	B2		
CAN2H	B3		
KNOCK	B4	KNOCK	
KNOCK 2	B5	KNOCK 2	
PVBAT	B6	CONSTANT 12V	
IVBAT	B7	12v	
LAM1A	B8	Lamv / LamD1+/ LamLun1	Pin6 on LSU4.9 Connector
LAM1B	B9	Lami / LamD1- /LamIP1	Pin1 on LSU4.9 Connector
LAM1C	B10	LamLIA1	Pin5 on LSU4.9 Connector
LAM1D	B11	LamGND / LamLVM1	Pin2 on LSU4.9 Connector
LAM1HEATER	B12	LAMBDA HEATER	Pin3 on LSU4.9 Connector
IVBAT	B13	12V	
LAM2A	B14	Lamv / LamD1+/ LamLun1	Pin6 on LSU4.9 Connector
LAM2B	B15	Lami / LamD1- /LamIP1	Pin1 on LSU4.9 Connector
LAM2C	B16	LamLIA1	Pin5 on LSU4.9 Connector
LAM2D	B17	LamGND / LamLVM1	Pin2 on LSU4.9 Connector
LAM2HEATER	B18	LAMBDA HEATER	Pin3 on LSU4.9 Connector
IVBAT	B19	12V	Oil Pump 12v
KLINE	B20	Kline	
DOCCOR			
RS232RX	B21	RS232RX	
RS232RX RS232TX	B21 B22	RS232TX	SET AS CAN L FOR TB with CAN BRIDG SET AS CAN H FOR TB with CAN BRIDGE
	B21 B22 B23	RS232TX Cat5 Pin2	SET AS CAN H FOR TB with CAN
RS232TX	B21 B22 B23 B24	RS232TX Cat5 Pin2 Cat5 Pin1	SET AS CAN H FOR TB with CAN
RS232TX LANRX-	B21 B22 B23	RS232TX Cat5 Pin2	

C	DESCRIPTION	CONNECTOR C	
	PART NUMBER	4-1437290-1	
	NOTES:	34 Way - Key2	
KNOCKGND	C1	KNOCKGND	
ANGND	C2	SENSOR GND	
ANGND	C3	SENSOR GND	
ANGND	C4	SENSOR GND	Maybe Sensor Ground as Labelled
5V OUT	C5	5V OUT	-
5V OUT	C6	5V OUT	
5V OUT	C7	5V OUT	
CAN L	C8	Can Low	
CAN H	С9	Can High	
AN01	C10	BI-POLAR INPUTS	Crank Sensor
AN02	C11	BI-POLAR INPUTS	VVt1IN
AN03	C12	BI-POLAR INPUTS	VVT2IN
AN04	C13	BI-POLAR INPUTS	
AN05	C14	UNI-POLAR INPUTS	Pre Throttle Pressure
AN06	C15	UNI-POLAR INPUTS	
AN07	C16	UNI-POLAR INPUTS	PPS2
AN08	C17	UNI-POLAR INPUTS	PPS1
AN09	C18	VOLT-INPUTS	DI Pressure
AN10	C19	VOLT-INPUTS	Engine Oil Pressure
AN11	C20	VOLT-INPUTS	TPS1A
AN12	C21	VOLT-INPUTS	TPS18
AN13	C22	RESISTIVE INPUTS	
AN14	C23	RESISTIVE INPUTS	Coolant temp
AN15	C24	RESISTIVE INPUTS	Brake
AN16	C25	RESISTIVE INPUTS	Clutch
EGT1-	C26	EGT1 -	
EGT1+	C27	EGT1 +	
PWR CTR IN	C28	MAIN RELAY INPUT SW	12v Ignition
AN S1 / Slave An01	C29	UNI-POLAR INPUTS	
AN S2 / Slave An02	C30	UNI-POLAR INPUTS	BSD Air Temp
AN S3 / Slave An03	C31	UNI-POLAR INPUTS	BSD Map Sensor
AN S4 / Slave An04	C32	UNI-POLAR INPUTS	Engine Comp Temp
AN S5 / Slave An05	C33	UNI-POLAR INPUTS	Oil Temp
AN S6 / Slave An06	C34	UNI-POLAR INPUTS	Oil Level