



Syvecs LTD

V1.2

Canam X3

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.

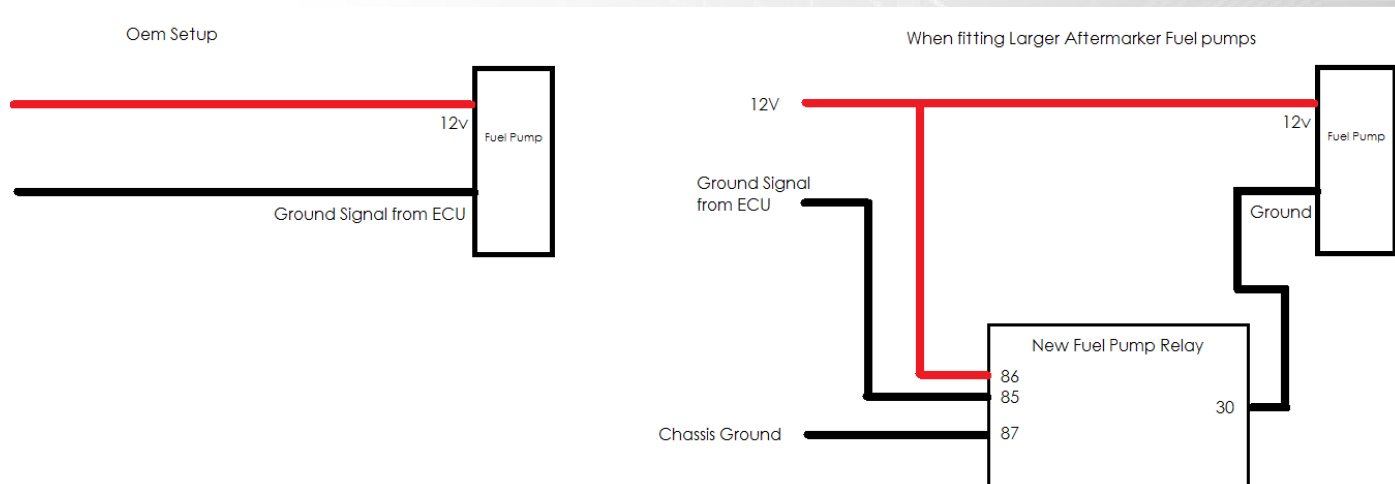
Support@Syvecs.com



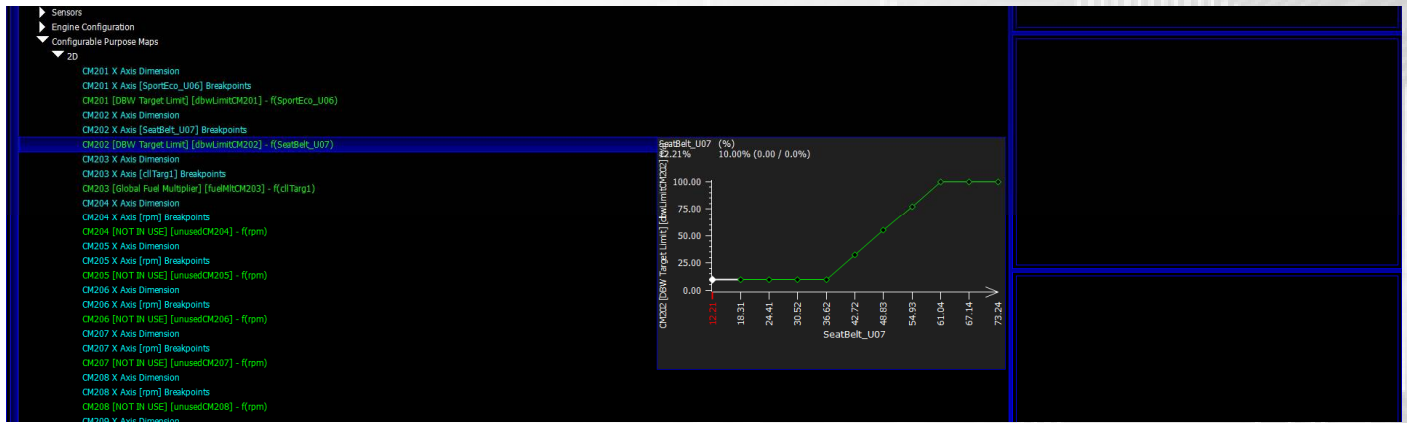
Installation

- 1.) Remove the Negative Terminal from the battery on the Vehicle
- 2.) Pull forward the drivers Seat to allow access to behind where the Factory ECU is located
- 3.) Remove the OEM ECU and Plug in the Syvecs Loom adaptor, Mount the S&Plus Ecu in the same location as the OEM Ecu
- 4.) The Syvecs kit comes with the option of an NTK Wideband, this needs to be mounted in the Exhaust by removing the Factory Narrow Band Lambda sensor with a 22mm Spanner. Then fitting the NTK Sensor and plugging into the Syvecs PNP Loom with the flying cable. These wires can then be run through the firewall.
- 4.) The Syvecs kit has the ability to also control three additional Port Injectors for big HP conversion, these can be wired as followed
 - Secondary Injector 1 = Pin A14
 - Secondary Injector 2 = Pin A15
 - Secondary Injector 3 = Pin A16

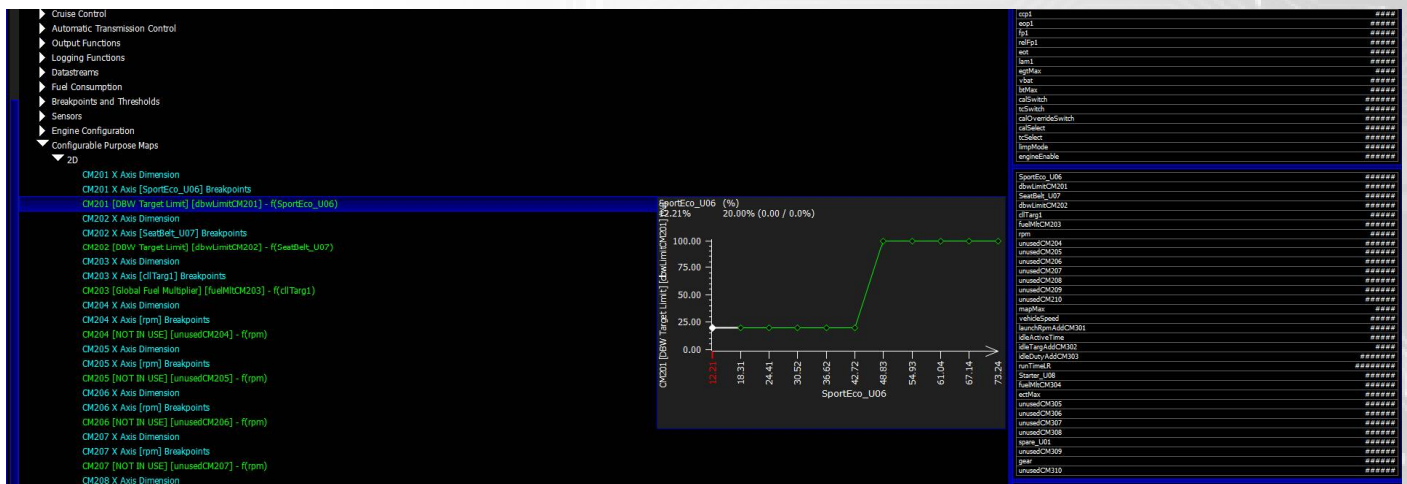
IMPORTANT: If you have a after-market fuel pump fitted which draws more current than the OEM Pump then a fuel pump relay will need to be fitted and wired as below.



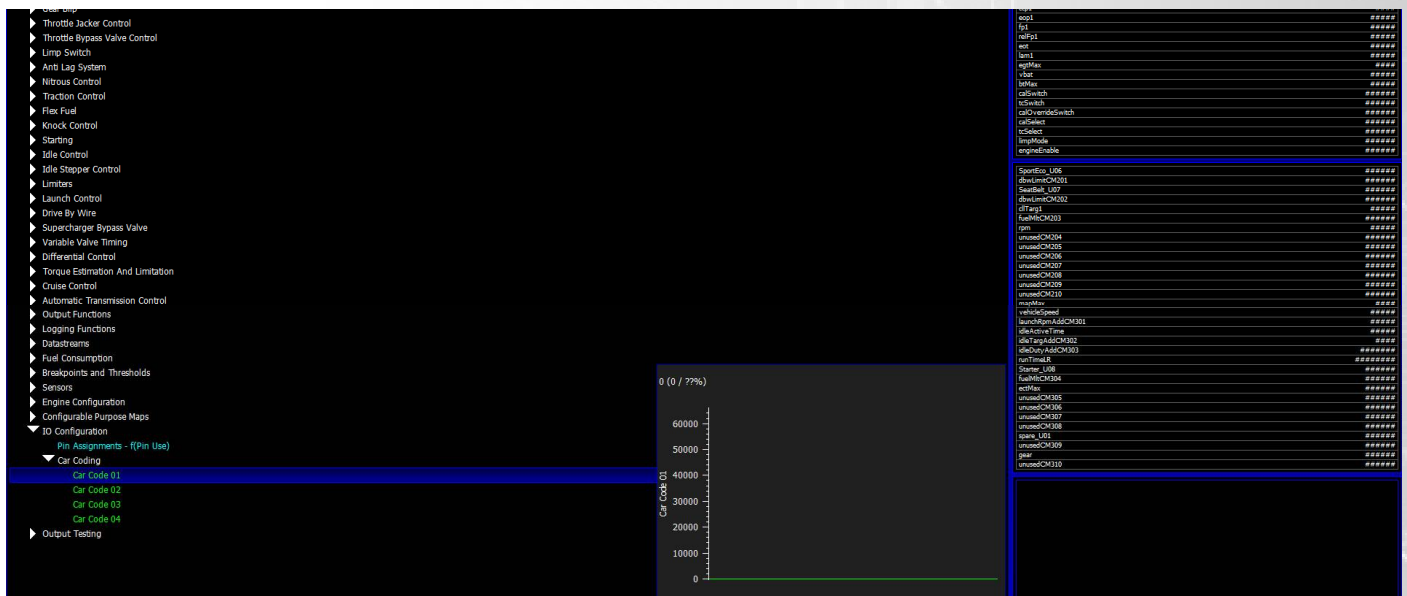
The Seat belt torque limiter is still used with the Syvecs PNP Kit. This can be adjusted if harnesses are fitted or owners want it remove in the below section.
0% on Seatbelt_U07 is Belt unplugged,
100% is it plugged in.
The DBW Throttle opening is limited based on this

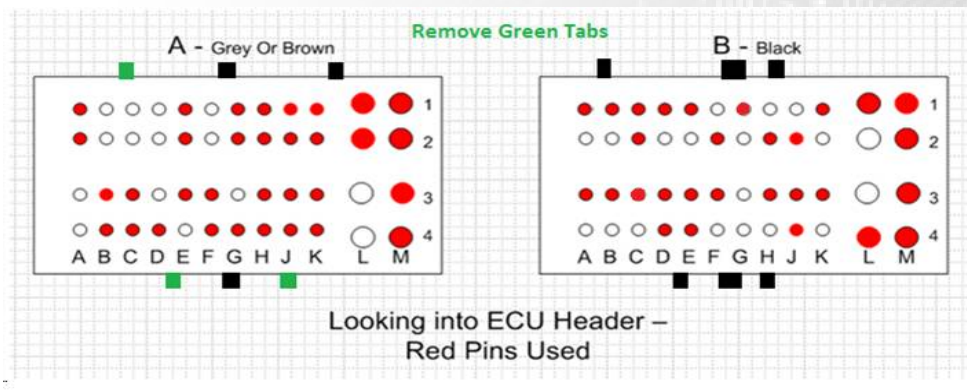


The OEM Sport/Eco button still works like the factory, you can use this to limit the DBW Throttle or Change Manifold Pressure target in the configurable map section. Eco is limited in the base map to 20% throttle and Sport is 100%



CarCode1 found in the pin assignments section of Scal is for the DPS Coding. Most models are set to 0 but we have found some models in the middle east to use Code 8. In which case put the Value 8 in this Cal if your DPS has an Error and not working





A	DESCRIPTION	CONNECTOR A	
	PART NUMBER	4-1437290-0	
	NOTES:	34 Way - Key1	
<i>Syvecs Description</i>	<i>Syvecs Pinout</i>	<i>Function</i>	<i>Notes</i>
PWR CTR OUT	A1	MAIN RELAY OUTPUT	Main Relay
H-Bridge1 / SlaveOut1	A2	H-Bridge1	DBW
H-Bridge2 / SlaveOut2	A3	H-Bridge2	DBW
H-Bridge3 / SlaveOut3	A4	H-Bridge3	
H-Bridge4 / SlaveOut4	A5	H-Bridge4	Start Signal or Solenoid
H-Bridge5 / SlaveOut5	A6	H-Bridge5	
H-Bridge6 / SlaveOut6	A7	H-Bridge6	
H-Bridge7 / SlaveOut7	A8	H-Bridge7	
H-Bridge8 / SlaveOut8	A9	H-Bridge8	
FUEL1	A10	INJECTOR or PWM OUTPUT	Primary Injector 1
FUEL2	A11	INJECTOR or PWM OUTPUT	Primary Injector 2
FUEL3	A12	INJECTOR or PWM OUTPUT	Primary Injector 3
FUEL4	A13	INJECTOR or PWM OUTPUT	Acc Relay
FUEL5	A14	INJECTOR or PWM OUTPUT	
FUEL6	A15	INJECTOR or PWM OUTPUT	
FUEL7	A16	INJECTOR or PWM OUTPUT	
FUEL8	A17	INJECTOR or PWM OUTPUT	
PWM1 / *FUEL9	A18	PWM OUTPUT	Boost Solenoid
PWM2 / *FUEL10	A19	PWM OUTPUT	Fuel Pump
PWM3 / *FUEL11	A20	PWM OUTPUT	Rad Fan Relay - CanAm
PWM4 / *FUEL12	A21	PWM OUTPUT	Turbo Intercooler Fan Relay - CanAm
PWM5	A22	PWM OUTPUT	
PWM6	A23	PWM OUTPUT	
PWM7	A24	PWM OUTPUT	
PWM8	A25	PWM OUTPUT	
IGN1	A26	CYL 1 IGNITION OUTPUT	Ignition 1
IGN2	A27	CYL 2 IGNITION OUTPUT	Ignition 2
IGN3	A28	CYL 3 IGNITION OUTPUT	Ignition 3
IGN4	A29	CYL 4 IGNITION OUTPUT	
IGN5	A30	CYL 5 IGNITION OUTPUT	
IGN6	A31	CYL 6 IGNITION OUTPUT	

PWRGND	A32	POWER GROUND	Lanyard Sw Ground
PWRGND	A33	POWER GROUND	
PWRGND	A34	POWER GROUND	

B	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	Grey NTK
LAM1B	B9	Lami / LamD1- / LamIP1	White NTK
LAM1C	B10	LamLIA1	
LAM1D	B11	LamGND / LamLVM1	Black NTK
LAM1HEATER	B12	LAMBDA HEATER	Blue NTK
IVBAT	B13	12V	Yellow NTK
LAM2A	B14	Lamv / LamD1+ / LamLun1	2.2v
LAM2B	B15	Lami / LamD1- / LamIP1	1.8v
LAM2C	B16	LamLIA1	
LAM2D	B17	LamGND / LamLVM1	
LAM2HEATER	B18	LAMBDA HEATER	
IVBAT	B19	12V	
KLINE	B20	Kline	
RS232RX	B21	RS232RX	
RS232TX	B22	RS232TX	
LANRX-	B23	Cat5 Pin2	
LANRX+	B24	Cat5 Pin1	
LANTX-	B25	Cat5 Pin6	
LANTX+	B26	Cat5 Pin3	

C	DESCRIPTION	CONNECTOR C	
	PART NUMBER	4-1437290-1	
	NOTES:	34 Way - Key2	

KNOCKGND	C1	KNOCKGND	
ANGND	C2	SENSOR GND	
ANGND	C3	SENSOR GND	Steering Lock,
ANGND	C4	SENSOR GND	
5V OUT	C5	5V OUT	TPS, Map
5V OUT	C6	5V OUT	Sport/ Eco Switch on CanAm
5V OUT	C7	5V OUT	Gear Pot 5v - CanAm
CAN L	C8	Can Low	Can Low
CAN H	C9	Can High	Can High
AN01	C10	BI-POLAR INPUTS	TPS 1A

AN02	C11	BI-POLAR INPUTS	TPS 1B
AN03	C12	BI-POLAR INPUTS	Crank Position Sensor
AN04	C13	BI-POLAR INPUTS	Gear Sensor / Oil Pressure
AN05	C14	UNI-POLAR INPUTS	Cam Position Sensor
AN06	C15	UNI-POLAR INPUTS	Gear Speed - CanAm
AN07	C16	UNI-POLAR INPUTS	Start Signal
AN08	C17	UNI-POLAR INPUTS	Override Switch - Purple/Orange Wire - CanAm
AN09	C18	VOLT-INPUTS	MAP Absolute Sensor
AN10	C19	VOLT-INPUTS	PPS1
AN11	C20	VOLT-INPUTS	PPS2
AN12	C21	VOLT-INPUTS	Gear Lever
AN13	C22	RESISTIVE INPUTS	
AN14	C23	RESISTIVE INPUTS	Intake Temp
AN15	C24	RESISTIVE INPUTS	Exhaust Manifold Temp
AN16	C25	RESISTIVE INPUTS	Charge Temp
EGT1-	C26	EGT1 -	
EGT1+	C27	EGT1 +	
PWR CTR IN	C28	MAIN RELAY INPUT SW	
AN S1 / Slave An01	C29	UNI-POLAR INPUTS	
AN S2 / Slave An02	C30	UNI-POLAR INPUTS	Sport/ Eco Switch on CanAm
AN S3 / Slave An03	C31	UNI-POLAR INPUTS	Brake Sw
AN S4 / Slave An04	C32	UNI-POLAR INPUTS	Seat Belt Switch - CanAm
AN S5 / Slave An05	C33	UNI-POLAR INPUTS	
AN S6 / Slave An06	C34	UNI-POLAR INPUTS	

Email Support@syvecs.co.uk for a base map to suit your setup.