# SyvecsLTD

<u>V1.2</u>

# Mclaren 720 Kit

Designed to work with 720 Coupe and Spyder

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

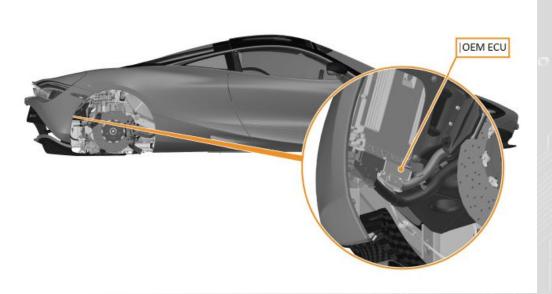


## **Contents**

- 1 x S7Plus
- 1 x 720 Mclaren Adaptor
- 1 x Loom
- 1 x Fitting Plate
- 3 x M6 x 40mm Bolts, Nuts and 4mm Spacers

## Installation

- 1.) Remove the Negative Terminal from the battery on the Vehicle to be extra safe with electrical components
- 2.) In order to gain access to the OEM Ecu, the RH Rear Wheel needs to be removed as well as the Arch liner



#### 3.) Remove the RR wheel and Arch Liner



4.) Remove the Factory Ecu



5.) Connect the Syvecs 720 adaptor and wiring loom between the ECU and Adaptor box. (Pay attention to the engravings on the connectors and boards to show which way round it is connected)

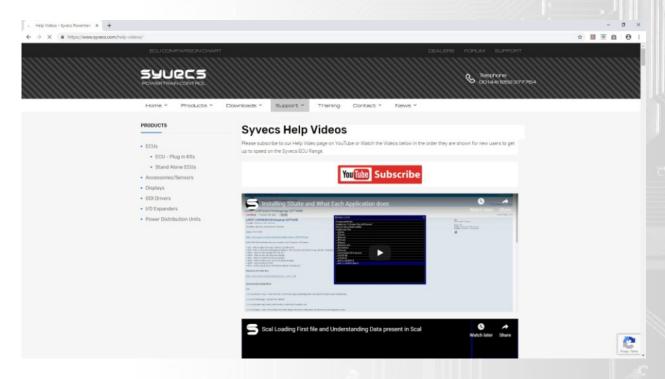


6.) Mount the Ecu with bracket provided and secure using the M6 Bolts. The washers should be fitted behind the bracket to space it out towards the wheel 4mm, this allows the adaptor to fit correctly behind the Syvecs ecu.



- 7.) Run the Ethernet cable into the Cabin to allow communications with the S7
- 8.) Refit the Arch liner, Wheel and Battery terminals.
- 9.) Email Support@Syvecs.com for Base Calibration as ECU Comes blank for Safety Reasons
- 10.) Proceed to Syvecs Help videos and Syvecs Software Manual on Website or YouTube -

Syvecshelp





#### **Calibration Switching**

Calibration Select and Map Switching is done via the Active Mode Buttons, Normal = Cal1, Sport = Cal2, Track = Cal3

The OEM Cruise Lever can also be used for calibration Switching or used for Traction Control adjustments in the software. Slave1 An26 Reflect the Cruise Lever so cal updates are required to enable this function.

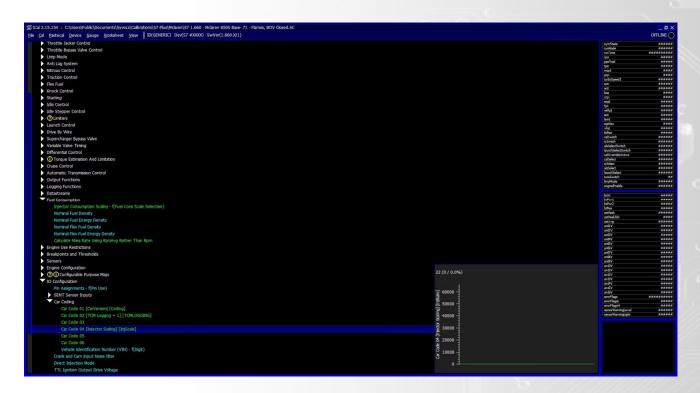
Cal Overide is used for Rolling Antilag/Rolling Launch and is done by Pushing the Cruise Control lever forward when in Sport or Track mode, Normal Mode pushing the lever forward actives cruise control





#### MPG Scaling with larger Injector

Injector Scaling for MPG Counter is done via Car Code 4 under Pin Assignments
 Default value is 16



# **Custom Features**

#### **DYNO Mode and TCM DTC Clear**

To put the car into Dyno mode set CarCode1 = 1, Exiting Dyno Mode by putting CarCode 1 = 0

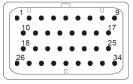
Please Note: The Active mode Switches must be in Normal Position and Engine Running to engage Dyno Mode

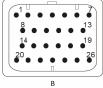
To Clear DTC in TCM set CarCode1 = 2, then back to 0 after 5 seconds

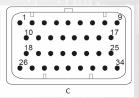
TCM Logging for Clutch Pressure 1 and 2 monitoring is done with CarCode1 = 3.... Make sure this is off when using Factory Scan Tools

#### ESP Off

Full ESP Off on OEM Car is done by putting Both Knobs in Track Mode, Then hold down Active Button from Off position for 5 Seconds, When the Knobs flash press both knob buttons for 5 seconds also. Please note the car needs to be stationary for this to happen.







A	DESCRIPTION	CONNECTOR A	
	PART NUMBER	4-1437290-0	
	NOTES:	34 Way - Key1	
Syvecs Description	Syvecs Pinout	Function	
PWR CTR OUT	A1	MAIN RELAY OUTPUT	Main Relay
H-Bridge1 / SlaveOut1	A2	H-Bridge1	DBW1
H-Bridge2 / SlaveOut2	A3	H-Bridge2	DBW1
H-Bridge3 / SlaveOut3	A4	H-Bridge3	DBW2
H-Bridge4 / SlaveOut4	A5	H-Bridge4	DBW2
H-Bridge5 / SlaveOut5	A6	H-Bridge5	VVT1 In
H-Bridge6 / SlaveOut6	A7	H-Bridge6	VVT2 In
H-Bridge7 / SlaveOut7	A8	H-Bridge7	VVT1 Ex
H-Bridge8 / SlaveOut8	A9	H-Bridge8	VVT2 Ex
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	Primary Injector 4
FUEL5	A14	INJECTOR or PWM OUTPUT	Primary Injector 5
FUEL6	A15	INJECTOR or PWM OUTPUT	Primary Injector 6
FUEL7	A16	INJECTOR or PWM OUTPUT	Primary Injector 7
FUEL8	A17	INJECTOR or PWM OUTPUT	Primary Injector 8
FUEL9	A18	PWM OUTPUT	Secondary Injector 1
FUEL10	A19	PWM OUTPUT	Secondary Injector 2
FUEL11	A20	PWM OUTPUT	Secondary Injector 3
FUEL12	A21	PWM OUTPUT	Secondary Injector 4
FUEL13	A22	PWM OUTPUT	Secondary Injector 5
FUEL14	A23	PWM OUTPUT	Secondary Injector 6
FUEL15	A24	PWM OUTPUT	Secondary Injector 7
FUEL16	A25	PWM OUTPUT	Secondary Injector 8
IGN1	A26	CYL 1 IGNITION OUTPUT	IGN1&4
IGN2	A27	CYL 2 IGNITION OUTPUT	IGN5&8
IGN3	A28	CYL 3 IGNITION OUTPUT	IGN2&3
IGN4	A29	CYL 4 IGNITION OUTPUT	IGN6&7
IGN5	A30	CYL 5 IGNITION OUTPUT	ThermoStat x 2
IGN6	A31	CYL 6 IGNITION OUTPUT	Starter LS
PWRGND	A32	POWER GROUND	•
PWRGND	A33	POWER GROUND	Ground
PWRGND	A34	POWER GROUND	Ground

	DESCRIPTION	CONNECTOR B	
	PART NUMBER	3-1437290-7	
	NOTES:	26 Way - Key1	3 11 11 11 11
PWRGND	B1	POWER GROUND	
CAN 2L	B2	Can 2	Can Link to Expander
CAN 2H	B3	Can 2	Can Link to Exander
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	Starter Relay HS
KLINE	B20	Kline	Alternator LIN
RS232RX	B21	RS232RX	
RS232TX	B22	RS232TX	5
LANRX-	B23	Cat5 Pin2	
LANRX+	B24	Cat5 Pin1	
LANTX-	B25	Cat5 Pin6	
LANTX+	B26	Cat5 Pin3	007 .

KNOCKGND SENSOR GND	B Sensor Grounds
KNOCKGND SENSOR GND SENSOR GND SENSOR GND 5V OUT	B Sensor Grounds
SENSOR GND SENSOR GND SENSOR GND 5V OUT	B Sensor Grounds
SENSOR GND SENSOR GND SENSOR GND 5V OUT	B Sensor Grounds
SENSOR GND SENSOR GND 5V OUT	B Sensor Grounds
SENSOR GND 5V OUT	
5V OUT	
	B 5V
5V OUT	A 5v
5V OUT	
Can Low	
Can High	
BI-POLAR INPUTS	Crank Sensor
BI-POLAR INPUTS	VVT1IN
BI-POLAR INPUTS	VVT2IN
BI-POLAR INPUTS	VVT1Ex
UNI-POLAR INPUTS	VVT2Ex
UNI-POLAR INPUTS	MAP Manifold
UNI-POLAR INPUTS	TPS2A
UNI-POLAR INPUTS	TPS2B
VOLT-INPUTS	PPS1
VOLT-INPUTS	PPS2
VOLT-INPUTS	TPS1A
VOLT-INPUTS	TPS1B
RESISTIVE INPUTS	ACT1
RESISTIVE INPUTS	Park Neutral Sw
RESISTIVE INPUTS	Coolant temp
RESISTIVE INPUTS	Coolant temp 2
Can3 L	TCM CAN
Can3 H	TCM CAN
MAIN RELAY INPUT SW	12v Ignition
UNI-POLAR INPUTS	Fuel Pressure
UNI-POLAR INPUTS	Fuel Temp
	ISG
	Oil Pres Sw
UNI-POLAR INPUTS	
TIME DOLAD IMPUMO	Map1
	UNI-POLAR INPUTS  UNI-POLAR INPUTS  UNI-POLAR INPUTS  UNI-POLAR INPUTS