

The background of the entire page is a grayscale image of a complex electronic circuit board, showing various traces, pads, and components. The text is overlaid on this background.

Syvecs LTD

V1.2

McLaren M838T Kit

Designed to work with Mp4-12C, 570, 650S

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

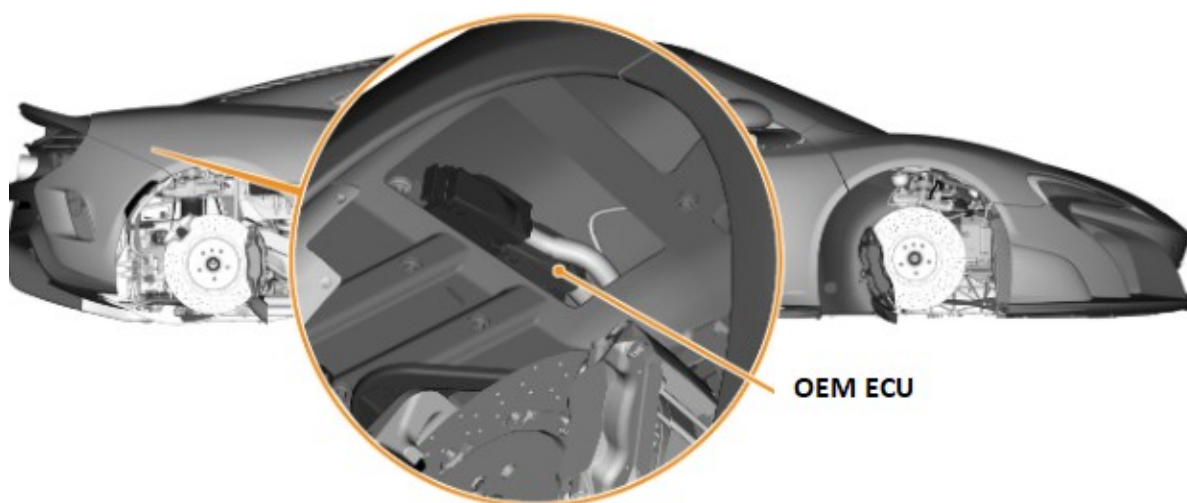


Contents

1x S7Plus
1 x Mounting bracket and bolts
1x McLaren Loom Adapter

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.) Unplug the Ecu Connectors and remove the OEM Ecu hanger complete with the factory unit



4.) Mount the S7Plus ECU in the Factory Hanger using the adapter plate and then refit it back inside the wheel arch



5.) Connect the Syvecs McLaren Plug in Harness to the S7 and the Oem Connectors

6.) Run the Ethernet cable into the Engine bay to allow communications with the S7

8.) Refit all the Arch liner, Wheel and Battery. Proceed to Syvecs Help videos and Syvecs Manual on Website

Email Support@Syvecs.com for a Base Calibration as ECU Comes blank for Safety Reasons

Help Videos - Syvecs Powertrain

ECU COMPARISON CHART

DEALERS FORUM SUPPORT

Telephone: 00441282977764

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PRODUCTS

- ECUs
 - ECU - Plug in Kits
 - Stand Alone ECUs
- Accessories/Sensors
- Displays
- GDI Drivers
- I/O Expanders
- Power Distribution Units

Syvecs Help Videos

Please subscribe to our Help Video page on YouTube or Watch the Videos below in the order they are shown for new users to get up to speed on the Syvecs ECU Range.

YouTube Subscribe

Installing SSuite and What Each Application does

Watch later

Scal Loading First file and Understanding Data present in Scal

Watch later Share

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.

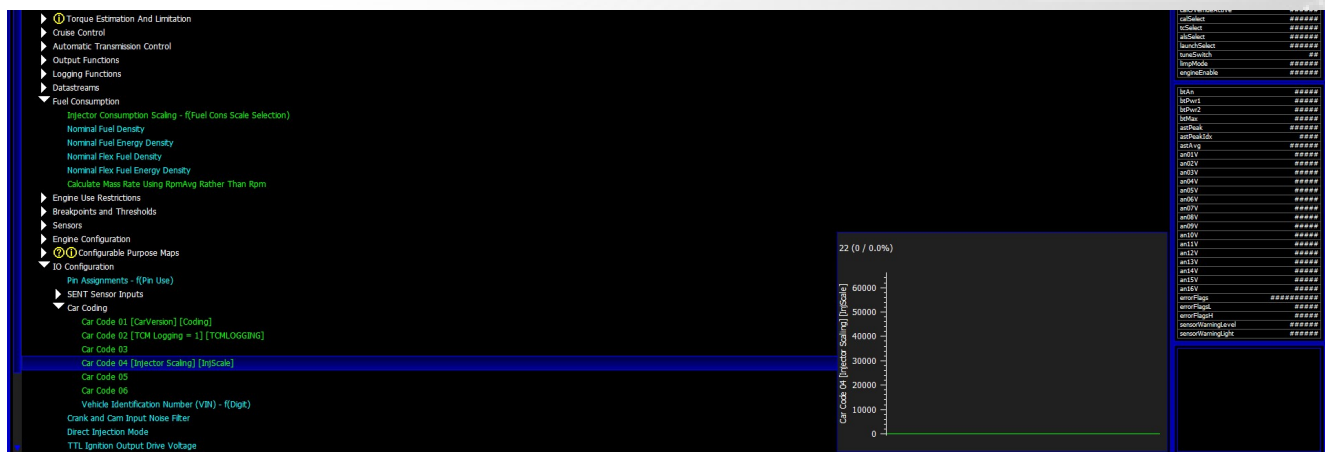
Cal Override is used for Rolling Antilag/Rolling Launch is done by pulling the Cruise Lever back towards the driver

Cruise Control is Activated by pushing the Cruise Lever Forward



MPG Scaling for Larger Injectors

Injector Scaling for MPG Counter is done via Car Code 4 under Pin Assignments
Default valve is 22



Custom Features

DYNO Mode and TCM DTC Clear

To put the car into Dyno mode set CarCode1 = 1, To Exit Dyno Mode set CarCode1 = 0

Please Note that the Active Switches Must be in the NORMAL Position and Engine running to engage Dyno Mode

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

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.

This will Turn off TC on the Syvecs Fully also

Clutch Pressure Logging

Clutch1 and Clutch Actual Pressure can be displayed and logged in the Syvecs. This comes in on S1AN27 and S1AN28 and will be already setup in the Base Calibration. To Enable pressure logging set CarCode1 = 3. If trying to communicate with the TCM with OEM Tools, Set CarCode1 = 0

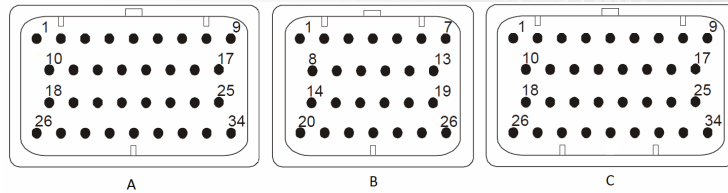
Ethanol Content Display

Flex Fuel sensors are supported and If Car Code 2 = 1 then when changing drive modes the coolant temp display on the dashboard will show the percentage from the Flex fuel Sensor for 4 seconds, then return back to coolant temp

Tacho / RPM Counter to show Calibration Switch Position

The Tacho can be used to show the current calibration position when calibration switch position is changed, Car Code 2 = 2 will display the Calibration Switch Position when changing Cal Switch (this could potentially upset the Trans ECU so its not turned on via Default in base maps)7

Car Code 2 = 3 - Turns on Both Ethanol display and Tacho Cal Switch display



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

<i>Syvecs Description</i>	<i>Syvecs Pinout</i>	<i>Function</i>	
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	ThermoStat x 2
H-Bridge6 / SlaveOut6	A7	H-Bridge6	Starter LS
H-Bridge7 / SlaveOut7	A8	H-Bridge7	WG1
H-Bridge8 / SlaveOut8	A9	H-Bridge8	WG2
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	
FUEL10	A19	PWM OUTPUT	Fuel Pump X2
FUEL11	A20	PWM OUTPUT	Evap
FUEL12	A21	PWM OUTPUT	Dump Valve X 2
FUEL13	A22	PWM OUTPUT	VVT1 In
FUEL14	A23	PWM OUTPUT	VVT2 In
FUEL15	A24	PWM OUTPUT	VVT1 Ex
FUEL16	A25	PWM OUTPUT	VVT2 Ex
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	Rad Fan1
IGN6	A31	CYL 6 IGNITION OUTPUT	Rad Fan 2
PWRGND	A32	POWER GROUND	Intake Sounds Generator Ground
PWRGND	A33	POWER GROUND	Ground
PWRGND	A34	POWER GROUND	Ground

B	DESCRIPTION	CONNECTOR B	
	PART NUMBER	3-1437290-7	
	NOTES:	26 Way - Key1	
PWRGND	B1	POWER GROUND	
CAN 2L	B2	Can 2	
Can 2H	B3	Can 2	
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	SET AS CAN L FOR TB with CAN BRIDGE
RS232TX	B22	RS232TX	SET AS CAN H FOR TB with CAN BRIDGE
LANRX-	B23	Cat5 Pin2	
LANRX+	B24	Cat5 Pin1	
LANTX-	B25	Cat5 Pin6	pcpc
LANTX+	B26	Cat5 Pin3	

C	DESCRIPTION	CONNECTOR C	
	PART NUMBER	4-1437290-1	
	NOTES:	34 Way - Key2	
KNOCKGND	C1	KNOCKGND	
ANGND	C2	SENSOR GND	B Sensor Grounds
ANGND	C3	SENSOR GND	
ANGND	C4	SENSOR GND	
5V OUT	C5	5V OUT	B 5V
5V OUT	C6	5V OUT	A 5v
5V OUT	C7	5V OUT	
CAN L	C8	Can Low	
CAN H	C9	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	VVT1Ex
AN05	C14	UNI-POLAR INPUTS	VVT2Ex
AN06	C15	UNI-POLAR INPUTS	MAP Manifold
AN07	C16	UNI-POLAR INPUTS	TPS2A
AN08	C17	UNI-POLAR INPUTS	TPS2B
AN09	C18	VOLT-INPUTS	PPS1
AN10	C19	VOLT-INPUTS	PPS2
AN11	C20	VOLT-INPUTS	TPS1A
AN12	C21	VOLT-INPUTS	TPS1B
AN13	C22	RESISTIVE INPUTS	ACT1
AN14	C23	RESISTIVE INPUTS	Park Neutral Sw
AN15	C24	RESISTIVE INPUTS	Coolant temp
AN16	C25	RESISTIVE INPUTS	Intake sound Signal
EGT1-	C26	EGT1 -	
EGT1+	C27	EGT1 +	
PWR CTR IN	C28	MAIN RELAY INPUT SW	12v Ignition
AN S1 / Slave An01	C29	UNI-POLAR INPUTS	Fuel Pressure
AN S2 / Slave An02	C30	UNI-POLAR INPUTS	Fuel Temp
AN S3 / Slave An03	C31	UNI-POLAR INPUTS	
AN S4 / Slave An04	C32	UNI-POLAR INPUTS	Oil Pres Sw
AN S5 / Slave An05	C33	UNI-POLAR INPUTS	Map1
AN S6 / Slave An06	C34	UNI-POLAR INPUTS	Map2

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