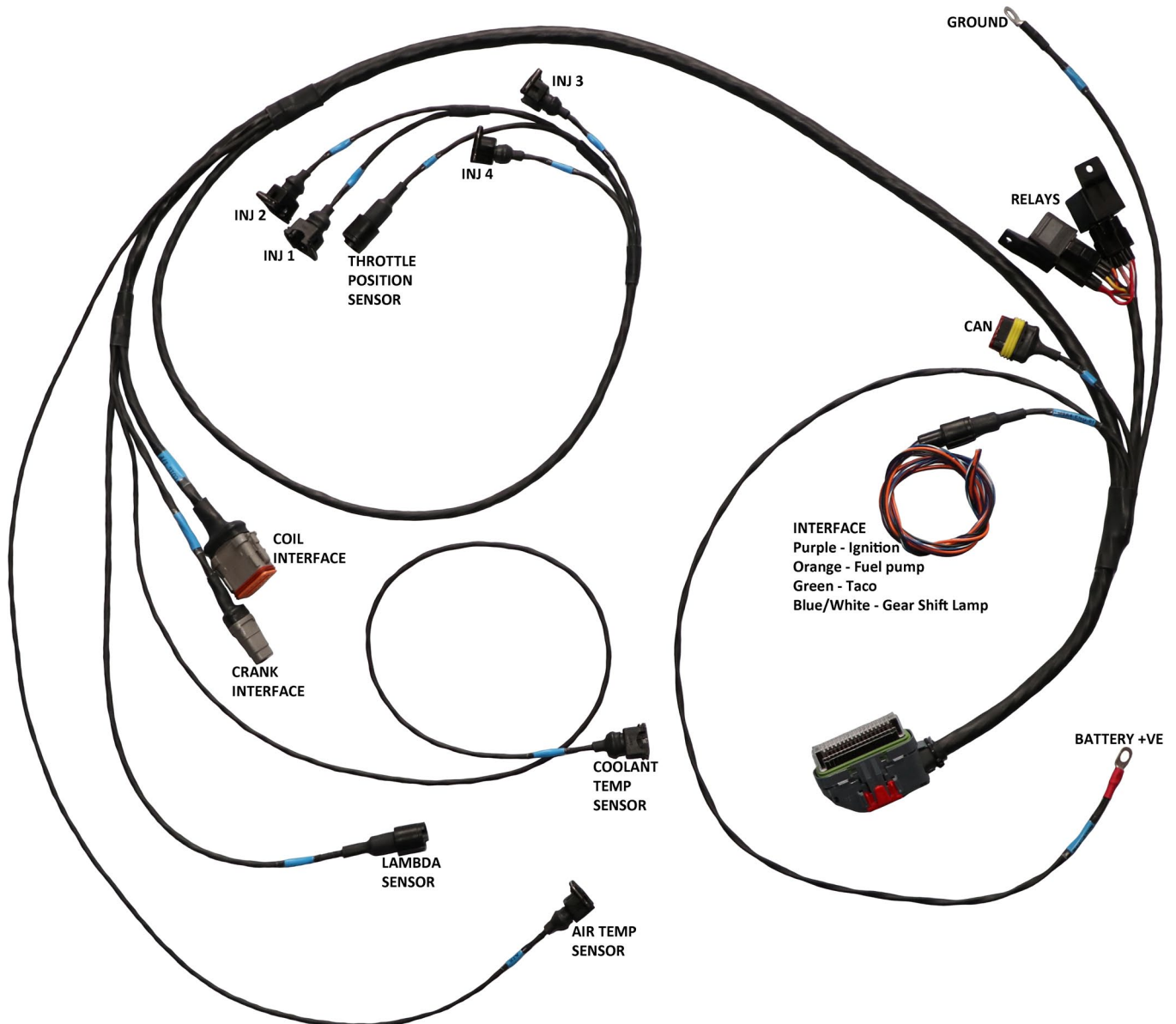


LM9A4-ENG-01 Basic Wiring and Relay Information

This is a generic wiring harness for use on Vauxhall & Duratec engines. There are add-on extensions for the coil and crank, which are sold separately depending the installation.



Vauxhall Options

LM9A4-A-COIL-01

2.0L XE for Sagem/Valeo 4-pin
wasted spark coil including SBD
part COIL-4L



LM9A4-A-CRK-01

Vauxhall 3-way mini timer crank



LM9A4-A-COIL-03

2.0L XE for Denso Coil on
plug with cam sensor

Duratec Options

LM9A4-A-COIL-05

2.0L Duratec for coil on plug
(2 pin) with cam sensor



LM9A4-A-COIL-07

2.5L Duratec for coil on plug
(2 pin) with cam sensor &
VVT



LM9A4-A-COIL-09

2.0L Duratec for wasted spark
coil pack, Bosch rectangular

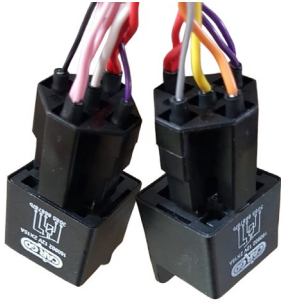


LM9A4-A-CRK-05

Duratec inductive (2 pin) crank
loom

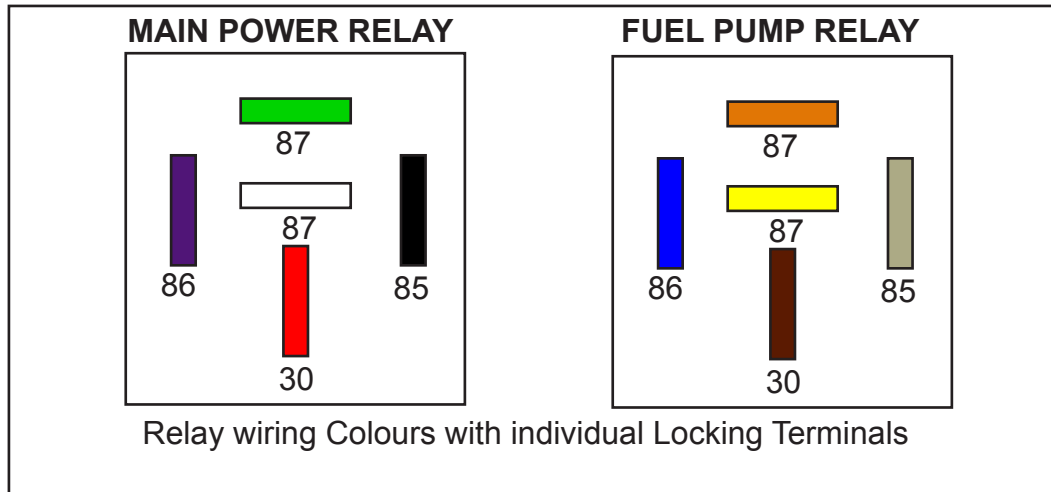


RELAYS



The relays have been designed to use a standard type relay available from any motor factor, in the picture shown you use a special base with locking terminals. These are designed to prevent issues that could occur with vibration when standard type relay bases were used. Each terminal locks itself to the pin of the relay and will only unlock when the base is pulled back, this makes a perfect vibration proof connection.

Note: Older designs had individual locking terminals, each wire is colour coded.



INTERFACE COLOURS

	(Pin 1)	Ignition (switched)
	(Pin 2)	Fuel Pump (+12v Out to pump)
	(Pin 3)	Taco
	(Pin 4)	Gear Shift Lamp (switch Neg 0.25amp max)

THROTTLE POT WIRING TP & MT KITS TO MBE9A4

9A4 & 9A8 ECU Pin out for Throttle sensor

Throttle Pot Pin	Signal	ECU Pin
Pin 1 – pin - on SBD-Sure seal	5v Reference	Pin 4 or 22 of ECU
Pin 2 – socket - on SBD-Sure seal	Electronic Ground	Pin 5, 23 or 24 of ECU
Pin 3 – socket - on SBD-Sure seal	Throttle Signal	Pin 20 of ECU

LAMBDA 4 PIN SURE SEAL WIRING

Lambda control is always disabled when we send our ECUs out, they would need to be configured to suit either a lambda 1 type sensor or a wide range lambda control system e.g. Bosch, ETAS, Motec, Innovate, etc. Contact us for more details.

<u>Lambda Connector</u>		<u>ECU Pin</u>
Pin 1	+12V	
Pin 2	GROUND	
Pin 3	LAMBDA RETURN	Pin 5
Pin 4	LAMBDA SIGNAL	Pin 29

CHASSIS GROUND

The chassis ground should be connected to either the battery negative or a good chassis ground as show. PLEASE ENSURE VERY CLEAN SURFACES.

BATTERY POSITIVE

Battery +ve is recommended to be connected directly to the battery positive, if you cannot reach the positive terminal of the battery itself, make an extension lead and connect as shown below. Do NOT connect to anywhere other than the battery terminal itself. It must not go to master switch otherwise voltage drop will almost certainly occur, creating starting issues. The switched ignition wire can be fed through the additional normally closed pins when master switch is on. This means the ECU will be switched off when the master switch is turned off. If the lead won't reach, use an extension lead and join as follows.

Join ends with nut & bolt and cover with heat shrink



Please be aware that Technical Support involving our Technicians is chargeable

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