Autronic
FUEL INJECTION — ADVANCED CONTROLS

SMC ECU Configuration Mode Flag Selection v1.07

(Only applicable to ECU firmware I.D.:- _AUTRONIC_c001v1.07) 01-Jly-2015

Mode Flag No.	Function	Value
0	Select 'Manifold Absolute Pressure' mapped calibration	0
	Select 'Throttle Position' mapped calibration	1
	Select for 4 cycle engine	Add 0
	Select for 2 cycle engine (and rotary engine)	Add 4
	Enable Open Loop A/F Ratio Table	Add 16
	Enable Open Loop Highway Mode	Add 32
	Enable Closed Loop A/F Ratio Control	Add 64
	Enable 2X Ignition O/P Pulse duration	Add 128
1	1 coil Ignition system	1
	2 coil Ignition system	2
	3 coil Ignition system	3
	4 coil ignition system	4
	Enable "1 coil Ignition system" O/P Inhibit during SYNC loss. ("2,3&4 coil systems" always inhibit during SYNC loss)	Add 8
	Negative triggered Ignition amplifier (module) e.g. Smart HEI	Add 0
	Positive triggered Ignition amplifier (module) e.g. MSD	Add 32
	Cylinder Reference pulse input positive triggered	Add 0
	Cylinder Reference pulse input negative triggered	Add 16
	Cylinder pulse input positive triggered	Add 0
	Cylinder pulse input negative triggered	Add 64
	Cylinder pulse input positive & negative triggered	Add 128
2	No Air/fuel ratio sensor	0
	Proportional Air/fuel ratio I/P (0.0 - 1.0volt => 10:1 to 30:1 air/fuel ratio)	1
	'Bosch' or 'Autronic' 4 wire O_2 Sensor (for Narrow band 'Emissions control')	2
	Select NTC Air intake Temperature sensor (Requires Internal PCB link U9 pins 1 to 2 (link Jumper JP 7))	Add 16
3	Enable Auxiliary Cooling Fan (Fan 2) control function to Inj 7 O/P (Only available if Inj 7 not used for Fuel Inj)	64
	Modify Auxiliary Cooling Fan (Fan 2) control function for Charge Cooling	Add 1
4	No functions assigned	
5	Idle Speed Control function (for PWM proportional type valve) to Auxiliary O/P	1
	Boost Control function (for PWM proportional type valve) to Auxiliary O/P	2
	Main Cooling Fan function (Fan 1) to Auxiliary O/P	3
	User Defined PWM O/P Table or Anti-Lag function to Auxiliary O/P	4
	Fuel Used O/P Pulse function to Auxiliary O/P	5
	Redirect User Defined ON/OFF O/P function from Inj 5 to Auxiliary O/P	6
	Select "Throttle Position" as Axis variable for User Defined PWM or Anti-Lag function	Add 0
	Select "Load" as Axis variable for User Defined PWM or Anti-Lag function	Add 8
	Select "Throttle Position" as Axis variable for User Defined ON/OFF O/P	Add 0
	Select "Load" as Axis variable for User Defined ON/OFF O/P	Add 16
	Enable ON/OFF O/P function to Auxiliary O/P or Inj 5 O/P	Add 32
	Enable Main Cooling Fan (Fan 1) function to Auxiliary O/P or Inj 6 O/P	Add 64
	Enable Anti-Lag function to Auxiliary O/P or Inj 8 O/P	Add 128
6	PWM O/P frequency = 10Hz	0
	PWM O/P frequency = 20Hz	4
	PWM O/P frequency = 30Hz	8
	PWM O/P frequency = 40Hz	12
7	Select Standard trigger option (Crank pulses per Engine cycle = Cylinder number, Cam pulses per Engine cycle = 1)	0
	Subaru Impreza trigger option (2 x 3 Crank & 3,1,2,1 Cam Pulse Wheels that require a Dual Channel Reluctor Interface)	1
	Mitsubishi Lancer trigger option (4 / rev & 1 x wide, 1 x narrow / rev in Camshaft driven module only)	2
	Select Anti-Lag Throttle Closed Inhibit function	Add 32
	Select Automatic Anti-Lag Operation (Anti-Lag On for 25.4 SEC after RPM exceeds 4500)	Add 64
	Select Anti-Lag Control by Switch I/P (Gnd I/P to Activate)	Add 128
8	Ignition triggering of all Cylinders 1 to 8 allowed	0
	Inhibit cylinder 1 Ignition	Add 1
	Inhibit cylinder 2 Ignition	Add 2
	Inhibit cylinder 3 Ignition	Add 4

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Mode Flag No.	Function	Value
	Inhibit cylinder 4 Ignition	Add 8
	Inhibit cylinder 5 ignition	Add 16
	Inhibit cylinder 6 Ignition	Add 32
	Inhibit cylinder 7 Ignition	Add 64
	Inhibit cylinder 8 Ignition	Add 128
9	Ignition triggering of all Cylinders 9 to 16 allowed	0
	Inhibit cylinder 9 Ignition	Add 1
	Inhibit cylinder 10 Ignition	Add 2
	Inhibit cylinder 11lignition	Add 4
	Inhibit cylinder 12 Ignition	Add 8
	Inhibit cylinder 13 Ignition	Add 16
	Inhibit cylinder 14 Ignition	Add 32
	Inhibit cylinder 15 Ignition	Add 64
	Inhibit cylinder 16 Ignition	Add 128
10	Use Idle Ignition Timing Table @ Idle	0
	Use Main Ignition Timing Table @ Idle	1
	Ignition Timing Modifier 1 is Charge temperature dependent	Add 0
	Ignition Timing Modifier 1 is Coolant temperature dependent	Add 2
11	Wiring Loom has Power Supply and Fuel Pump / Injector Supply Relays (i.e.: ECU Power Feed is to Pin 25 or 26 from a Relay that de-energizes during Battery Reversal	0
	Wiring Loom has only Fuel Pump / Injector Supply Relay (i.e.: Direct Power Feed from Ignition Switch / Relay to ECU Pin 29 Only)	1
12	Disable Soft Rev Limit Fuel Cut	0
	Enable Soft Rev Limit Fuel Cut	1
	Disable Soft Rev Limit Spark Cut	Add 0
	Enable Soft Rev Limit Spark Cut	Add 2
13	No functions assigned	
14	Closed Loop A/F Ratio Control "Gain Setting"	0 to 255
	or	
	No Anti-Lag Extra Fuel	0
	Enable Anti-Lag Extra Fuel to Inj 1 O/P	Add 1
	Enable Anti-Lag Extra Fuel to Inj 2 O/P	Add 2
	Enable Anti-Lag Extra Fuel to Inj 3 O/P	Add 4
	Enable Anti-Lag Extra Fuel to Inj 4 O/P	Add 8
	Enable Anti-Lag Extra Fuel to Inj 5 O/P	Add 16
	Enable Anti-Lag Extra Fuel to Inj 6 O/P	Add 32
	Enable Anti-Lag Extra Fuel to Inj 7 O/P	Add 64
	Enable Anti-Lag Extra Fuel to Inj 8 O/P	Add 128
15	Closed Loop A/F Ratio Control "Adaption Setting" or Set Anti-Lag Extra Fuel Amount 2.6 counts / %	0 to 255
	or	
	Anti-Lag Extra Fuel Amount (2.6 counts / %)	2.6 counts / %
Notes	Idle Speed Control Reset Engine Speed = Charge Cooling minimum RPM Fan 2 ON Vehicle Speed Threshold = Charge Cooling maximum 'MAP' Use EBP Limp home Table for Digital I/P Airflow Calibration	
Warnings	1. Do not simultaneously activate Closed Loop A/F Ratio Control or Anti-Lag Functions 2. Activation of alternate Inj O/P functions to operational injectors will cause corruption of normal Fuel Delivery and possibly result in Engine DAMAGE	