

Weber Marelli IAW ECU Electrical Connections

Pin	Description	8V	16V	Evo 1	Evo 2
1	Ground	Ground	Ground	Ground	Ground
2	Signal from Lambda sensor	X	X	X	Heated lambda sensor
3	Ground to crankshaft sensor	RPM & TDC sensor	RPM & TDC sensor	RPM & TDC sensor	RPM & TDC sensor
4	Signal from crankshaft sensor	RPM & TDC sensor	RPM & TDC sensor	RPM & TDC sensor	RPM & TDC sensor
5	Ground to timing sensor	Distributor sensor	Distributor sensor	Distributor sensor	Timing sensor
6	Knock sensor	Detonation sensor	Detonation sensor	Detonation sensor	Detonation sensor
7	Control signal to idle speed/rev. counter/trip computer	X	X	X	Instrument panel (D-6)
8	Diagnosis	Diagnostic	Diagnostic	Diagnostic	Diagnostic
9	Signal from CO potentiometer/MAP	X	Absolute pressure sensor - A (S)	Absolute pressure sensor - A (C)	X
10	Control signal to main relay	Fuel injection relay (85)	X	X	X
11	Ground to sensors	Diagnostic	Diagnostic	Diagnostic	Diagnostic
		Absolute pressure sensor (B)	Absolute pressure sensor - B (-)	Absolute pressure sensor - B (B)	Ground to Butterfly valve position sensor, Air temp sensor, Coolant temp sensor
12	Control signal to engine control lamp	X	Instrument panel (System failure warning)	Instrument panel (IAW system fail warning)	X
13	Ignition adjust	X	X	X	X
14	Ignition adjust/ABS	X	X	Anti-lock braking system control unit (3)	Anti-lock braking system control unit (3)
15	Signal from MAP sensor	Absolute pressure sensor (C)	Absolute pressure sensor - B (S)	Absolute pressure sensor - B (A)	Absolute pressure sensor
16	Control signal to waste gate control	Overboost valve	Overboost solenoid valve	Controlled supercharging solenoid valve	Overboost solenoid valve
		Instrument Panel (Overboost Warning Light)			
17	Signal from throttle potentiometer	Butterfly valve position sensor (B)	Butterfly valve position sensor (B)	Butterfly valve position sensor (B)	Butterfly valve position sensor
18	Control to injection valve #4	Injector #4	Injector #4	Injector #4	Injector #4
19	Ground	Ground	Ground	Ground	Ground

20	Power from main relay	Fuel injector relay (87)	Injector relay feed (87)	Instrument panel (IAW system fail warning)	Ignition coil unit 1
				Injector relay feed (87)	Ignition coil unit 2
					Multiple relay (10)
21	AC	Connector block to AC, if present	Connector block to AC, if present	Air conditioner cable join	Air conditioner coupling relay feed
				Air conditioner cable join	
22	Knock sensor	Detonation sensor	Detonation sensor	Detonation sensor	Detonation sensor
23	Signal from timing sensor	Distributor sensor	Distributor sensor	Distributor sensor	Timing sensor
24	Ground to ignition amplifier	Ignition amplifier (3)	Ignition amplifier (3)	Electronic ignition control module (3)	Ignition unit
					Ignition unit
25	Control signal to amplifier	Ignition amplifier (6)	Ignition amplifier (6)	Electronic ignition control module (6)	Ignition unit
26	Control signal to amplifier	X	X	X	Ignition unit
27	Diagnosis	Diagnostic	Diagnostic	Diagnostic	Diagnostic
					Instrument panel (C-3)
28	Control signal to pump relay	Fuel pump relay (85)	Fuel pump relay feed (85)	Fuel pump relay (85)	Multiple relay (?)
29	Signal from coolant temp sensor	Coolant temp sensor	Engine coolant temp sensor	Engine coolant temp sensor	Engine coolant temp sensor
30	Power to sensors	Absolute pressure sensor (A)	Absolute pressure sensor - B (+)	Absolute pressure sensor - B (A)	Timing Sensor
			Absolute pressure sensor - A (+)	Absolute pressure sensor - A (A)	Absolute pressure sensor
		Butterfly valve position sensor (A)	Butterfly valve position sensor (A)	Butterfly valve position sensor (A)	Butterfly valve position sensor
31	Signal from air temp sensor	Air temp sensor	Air temp sensor	Air temp sensor	Air temp sensor
32	Control to injection valve #2	Injector #2	Injector #2	Injector #2	Injector #2
33	Control to injection valve #3	Injector #3	Injector #3	Injector #3	Injector #3
34	Control signal to idle speed	Automatic idle adjustment solenoid air valve	Automatic idle adjustment solenoid air valve	Automatic idle adjustment solenoid air valve	Automatic idle adjustment solenoid air valve
35	Control to injection valve #1	Injector #1	Injector #1	Injector #1	Injector #1