73 Pin Black	E38 ecm	Yellow= un-needed, Blue = standalone , Red = auto	
Pin	**Wire**	**Function**	
1	--	--	
2	--	--	
3	--	--	
4	--	--	
5	--	--	
6	--	--	
7	--	--	
8	--	--	
9	brn/wht	Brake Switch Signal	to brake switch at brake pedal, 12v+ hot with brakes applied. Open when NOT on the brake:
10	--	--	
11	--	--	
12	blu/red	AC pressure signal (spare)	
13	grn/wht	AC pressure 0V (spare)	
14	--	--	
15	--	--	
16	grn/blu	Fuel Level (spare)	
17	grn/red	High Speed Cooling Fan Relay Control	
18	--	--	
19	yel/blk	Ignition 1 Voltage ECM 12v+ KEY Power	
20	wht/grn	Battery Constant Voltage ECM 12v+	
21	--	--	
22	--	--	
23	wht/grn	Low Reference - APP Sensor Pin A	
24	--	--	
25	--	--	
26	--	--	
27	wht	High Speed GMLAN Serial Data Bus (-)	obd2
28	wht/blu	High Speed GMLAN Serial Data Bus (+)	obd2
29	wht	APP Sensor 1 Signal - APP Sensor Pin E	
30	wht	Low Reference - APP Sensor Pin F	
31	wht/blk	shield drain for pedal	
32	wht/blu	APP Sensor 2 Signal - APP Sensor Pin B	
33	--	--	
34	yel/blu	AC pressure 5V+ (spare)	
35	--	--	
36	wht/orng	5-Volt Reference 1 - APP Sensor Pin C	

37	red/yel	IAT Sensor Signal - MAF Pin D
38	grn/wht	Low Reference - MAF Pin E (for IAT)
39	--	--
40	--	--
41	grn/blk	MAF Sensor Signal - MAF Pin A
42	--	--
43	--	--
44	--	--
45	--	--
46	--	--
47	yel/blk	Ignition 1 Voltage ECM 12v+ KEY Power
48	blu	TACH SIGNAL OUTPUT
49	--	--
50	grn/yel	Fuel Pump Relay Control
51	--	--
52	--	--
53	--	--
54	--	--
55	--	--
56	wht/red	5-Volt Reference 2 - APP Sensor Pin D
57	blu/wht	VSS Out
58	grn	Low Speed Cooling Fan Relay Control
59	--	--
60	--	--
61	--	--
62	--	--
63	--	--
64	blk/red	AC Control
65	--	--
66	--	--
67	--	--
68	grn/orng	MIL Control - "Service Engine Soon" Computer supplies GROUND to turn on light
69	--	--
70	--	--
	--	--
71	blu/red	VSS High Signal - TO SPEED SENSOR ON MANUAL TRANS
72	blu/blk	VSS Low Signal - TO SPEED SENSOR ON MANUAL TRANS
73	blk	Ground

80 Pin Grey		
Pin	**Wire**	**Function**
1	--	--
2	wht/orng	Crankshaft 5V Pin C
3	yel/blu	5-Volt Reference 2 - Throttle Body Pin E
4	--	--
5	wht	TAC Motor Control - 2 - Throttle Body Pin A
6	wht/blu	TAC Motor Control - 1 - Throttle Body Pin B
7	--	--
8	--	--
9	--	--
10	--	--
11	grn/yel	Reverse Lockout solenoid
12	red/blu	HO2S Heater Low Control - Bank 1 Sensor 1
13	red/blu	HO2S Heater Low Control - Bank 2 Sensor 1
14	--	--
15	--	--
16	--	--
17	yel	Fuel Injector 8 Control
18	brn	Fuel Injector 5 Control
19	red	Fuel Injector 6 Control
20	brn	Fuel Injector 1 Control
21	red/wht	ECT SSignal - ECT Pin B
22	grn/wht	ECT 0V Pin A
23	--	--
24	--	--
25	--	--
26	wht	KS 1 Signal - KS1 Pin A
27	wht/blu	KS 1 Signal - KS1 Pin B
28	--	--
29	wht	KS 2 Signal - KS2 Pin A
30	wht/blu	KS 2 Signal - KS2 Pin B
31	--	--
32	wht/blu	Generator Field Duty Cycle Signal
33	--	--
34	grn/wht	Oil Pressure 0V Pin 1

35	grn/wht	Low Reference - Throttle Body Pin C	
36	--	--	
37	red	Fuel Injector 2 Control	
38	blu	Fuel Injector 3 Control	
39	yel	Fuel Injector 4 Control	
40	blu	Fuel Injector 7 Control	
41	yel/blu	Oil Pressure 5V Pin 2	
42	--	--	
43	yel/blu	MAP 5V Pin A	.
44	wht/orng	Camshaft 5V Pin A	
45	--	--	
46	--	--	
47	--	--	
48	--	--	
49	--	--	
50	yel/red	Oil Pressure Signal Pin 3	
51	--	--	
52	wht/blk	Shield drain	
53	grn/wht	MAP 0V Pin B	.
54	--		
55	--	--	
56	wht/yel	HO2S Low Signal - Bank 1 Sensor 1	
57	wht/red	HO2S High Signal - Bank 1 Sensor 1	
58	grn/red	MAP Sensor Signal Pin C	.
59	wht/red	HO2S High Signal - Bank 2 Sensor 1	
60	wht/yel	H02S Low Signal - Bank 2 Sensor 1	
61	blk/yel	Alt Charge Indicator Signal 12V turn on	
62	--	--	
63	wht	TP Sensor 2 Signal - Throttle Body Pin F	.
64	wht	Camshaft Signal Pin C	
65	wht/blu	TP Sensor 1 Signal - Throttle Body Pin D	.
66	wht/blu	Camshaft 0V Pin B	
67	--	--	
68	wht	Crankshaft Signal Pin A	
69	wht/blu	Crankshaft 0V Pin B	
70	brn	IC 1 Control	
71	yel	IC 8 Control	
72	blu	IC 7 Control	

73	red	IC 2 Control
74	red	IC 6 Control
75	brn	IC 5 Control
76	yel	IC 4 Control
77	blu	IC 3 Control
78	grn/wht	Low Reference - Coil Connector Pin E Odd Bank
79	grn/wht	Low Reference - Coil Connector Pin E Even Bank
80	--	--

Chassis DT		Chassis DTM	
1	Rev lights	1	12v constant +
2	Coil 2	2	Speed sensor out
3	12v constant +	3	tachometer
4	-	4	MIL light
5	Starter solenoid	5	ACC
6	Coil 1	6	AC
7	Inj power +	7	AC 0V
8	Ecu/sensor +	8	AC 5v
9	GND	9	fuel level
10	Fan 1 Control	10	brake Light sw
11	Fan 2 Control	11	
12	Fuel Control	12	