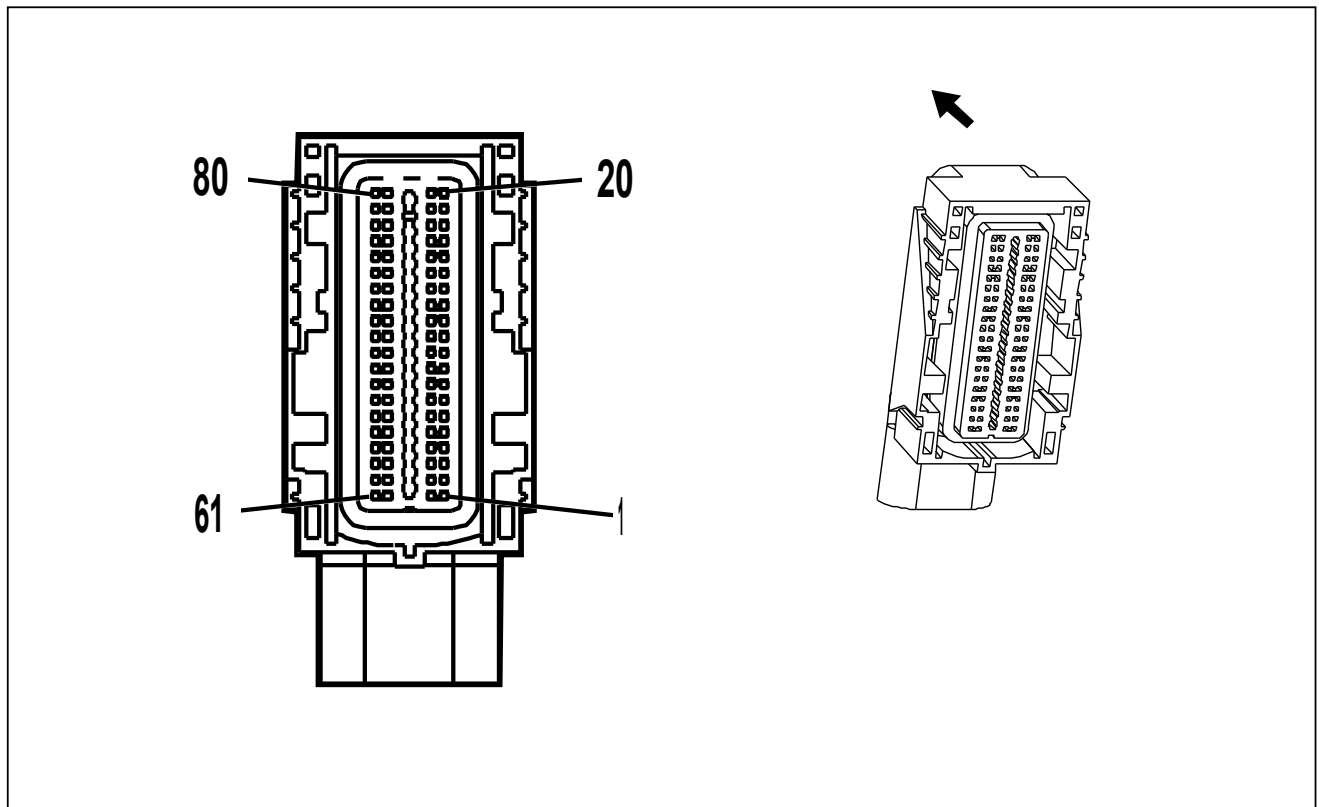


2012 VE Series 2 SS Ute E38 Pin Outs

Engine Control Module (ECM) X2 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 7287-3540-40
- Service Connector: 13579715
- Description: 80-Way F

Terminal Part Information

- Terminated Lead: 13575260
- Release Tool: J-38125-213
- Diagnostic Test Probe: J-35616-64B (L-BU)

Engine Control Module (ECM) X2 (L77/LS3)

Pin	Wire	Circuit	Function
1	—	—	Not Used
2	0.5 L-GN	1867	5-Volt Reference
3	0.5 GY	2701	5-Volt Reference
4	—	—	Not Used
5	0.75 BN	582	TAC Motor Control - 2
6	0.75 YE	581	TAC Motor Control - 1
7	—	—	Not Used

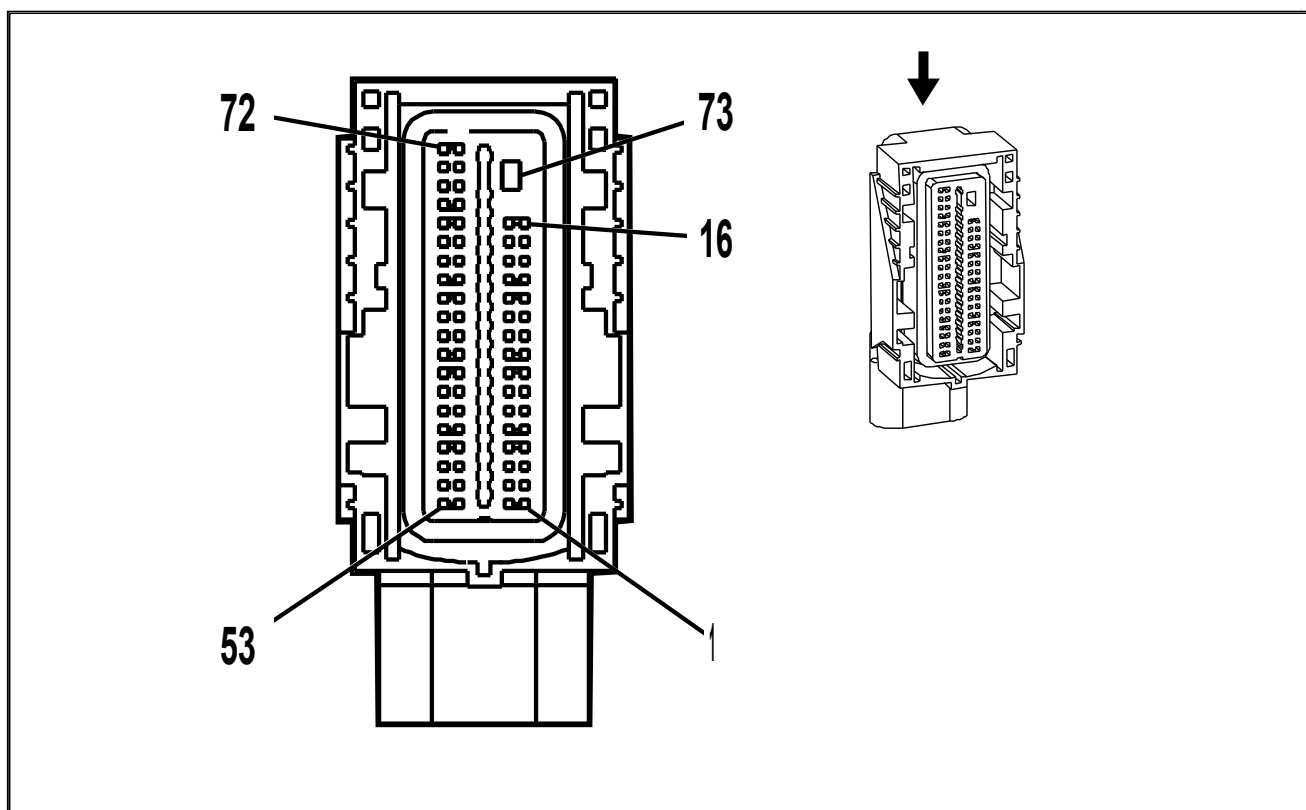
Pin	Wire	Circuit	Function
8	0.75 D-GN/WH	428	EVAP Canister Purge Solenoid Control
9	0.75 GY	5493	Cylinder Shutoff Solenoid Control 3 (L77)
10	0.75 D-BU	5491	Cylinder Shutoff Solenoid Control 1 (L77)
11	0.75 L-GN	1652	Reverse Lockout Solenoid Control (MER)
	0.75 OG	5494	Cylinder Shutoff Solenoid Control 4 (L77/MYC)
12	0.5 GY/WH	3113	HO2S Heater Low Control (Bank 1 Sensor 1)
13	0.5 L-GN	3212	HO2S Heater Low Control (Bank 2 Sensor 1)
14	0.75 L-GN	5492	Cylinder Shutoff Solenoid Control 2 (L77)
15-16	—	—	Not Used
17	0.75 D-BU/WH	878	Fuel Injector 8 Control
18	0.75 BN/WH	845	Fuel Injector 5 Control
19	0.75 YE/BK	846	Fuel Injector 6 Control
20	0.75 BN/BK	1744	Fuel Injector 1 Control
21	0.5 YE/D-GN	410	ECT Sensor Signal
22	0.5 BN/WH	2761	Low Reference
23	0.5 D-GN/WH	357	Oil Temperature Sensor Signal
24	0.5 TN	470	Low Reference
25	—	—	Not Used
26	0.5 D-BU	496	Knock Sensor 1 Signal
27	0.5 GY	1716	Low Reference Knock Sensor Signal Return
28	—	—	Not Used
29	0.5 L-BU	1876	Knock Sensor 2 Signal
30	0.5 BN	407	Low Reference
31	—	—	Not Used
32	0.5 PU/WH	23	Generator Field Duty Cycle Signal
33	0.5 BN	1174	Oil Level Switch Signal
34	0.5 BK	2755	Low Reference
35	0.5 BN/BK	2752	Low Reference

Pin	Wire	Circuit	Function
36	—	—	Not Used
37	0.75 L-GN/BK	1745	Fuel Injector 2 Control
38	0.75 PK/BK	1746	Fuel Injector 3 Control
39	0.75 L-BU/BK	844	Fuel Injector 4 Control
40	0.75 OG/BK	877	Fuel Injector 7 Control
41	0.5 GY	2705	5-Volt Reference
42	—	—	Not Used
43	0.5 GY	2704	5-Volt Reference
44	0.5 OG	631	5-Volt Reference
45–49	—	—	Not Used
50	0.5 BN/WH	331	Oil Pressure Sensor Signal
51–52	—	—	Not Used
53	0.5 OG/BK	469	Low Reference
54–55	—	—	Not Used
56	0.5 BN/YE	1664	HO2S Low Signal (Bank 1 Sensor 1)
57	0.5 PU/WH	1665	HO2S High Signal (Bank 1 Sensor 1)
58	0.5 L-GN	432	MAP Sensor Signal
59	0.5 PU	1666	HO2S High Signal (Bank 2 Sensor 1)
60	0.5 BN/RD	1667	HO2S Low Signal (Bank 2 Sensor 1)
61	0.5 OG/WH	225	Generator Turn On Signal
62	—	—	Not Used
63	0.5 PU	486	TP Sensor 2 Signal
64	0.5 BN/WH	633	CMP Sensor Signal
65	0.5 D-GN	485	TP Sensor 1 Signal
66	0.5 PK/BK	632	Low Reference
67	—	—	Not Used
68	0.5 D-BU/WH	1869	CKP Sensor Signal
69	0.5 YE/BK	1868	Low Reference

Pin	Wire	Circuit	Function
70	0.5 PU	2121	IC 1 Control
71	0.5 PU/WH	2128	IC 8 Control
72	0.5 OG	2127	IC 7 Control
73	0.5 OG/WH	2122	IC 2 Control
74	0.5 L-BU/WH	2126	IC 6 Control
75	0.5 D-GN/RD	2125	IC 5 Control
76	0.5 D-GN/WH	2124	IC 4 Control
77	0.5 L-BU	2123	IC 3 Control
78	0.5 BN	2129	Low Reference
79	0.5 BN/WH	2130	Low Reference
80	—	—	Not Used

2012 VE Series 2 SS Ute E38 Pin Outs

Engine Control Module (ECM) X1 (L77/LS3)



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 7283-9139-30
- Service Connector: 88988931
- Description: 73-Way F, 0.64, 2.8 Series, Sealed

Terminal Part Information

- Pins: 1-72
- Terminated Lead: 13575260
- Release Tool: J-38125-213
- Diagnostic Test Probe: J-35616-64B (L-BU)
- Pin: 73
- Terminated Lead: SEALED: 13576392 UNSEALED: 13575797
- Release Tool: 12094430
- Diagnostic Test Probe: J-35616-35 (VT)

Engine Control Module (ECM) X1 (L77/LS3)

Pin	Wire	Circuit	Function
1	0.5 OG/BK	1786	Park/Neutral Signal
2-7	—	—	Not Used
8	0.5 L-GN	5007	Backup Lamp Switch Signal (MER)
9	0.5 WH/BU	17	Stop Lamp Switch Signal
10	0.5 PU/WH	1668	HO2S High Signal (Bank 1 Sensor 2)

Pin	Wire	Circuit	Function
11	0.5 BN/WH	1669	HO2S Low Signal (Bank 1 Sensor 2)
12	0.5 OG/BK	380	A/C Refrigerant Pressure Sensor Signal
13	0.5 BN/GN	5514	Low Reference
14-15	—	—	Not Used
16	0.5 PU	1589	Fuel Level Sensor Signal (Primary)
17	0.5 D-BU/BK	473	High Speed Cooling Fan Relay Control
18	0.5 D-BU	5985	Accessory Wakeup Serial Data
19	0.5 PK	439	Ignition 1 Voltage
20	0.75 OG/BK	540	Battery Positive Voltage
21	0.5 D-BU	1809	Brake Booster Vacuum Sensor Signal (L77)
22	0.5 L-GN/BK	6258	Low reference (L77)
23	0.5 PU	1272	Low Reference
24-25	—	—	Not Used
26	0.5 YE	6111	Clutch Pedal Position Sensor Signal (MER)
27	0.5 BN	2501	High Speed GMLAN Serial Data Bus-
28	0.5 BN/BK	2500	High Speed GMLAN Serial Data Bus+
29	0.5 D-BU/WH	1161	APP Sensor 1 Signal
30	0.5 BN	1271	Low Reference
31	0.5 BN/YE	452	Low Reference
32	0.5 L-BU	1162	APP Sensor 2 Signal
33	—	—	Not Used
34	0.5 GY	1688	5-Volt Reference
35	—	—	Not Used
36	0.5 BN/YE	1274	5-Volt Reference
37	0.5 BN/RD	472	IAT Sensor Signal
38	0.5 BN/WH	2760	Low Reference
39	—	—	Not Used
40	0.5 WH	1579	Fuel Composition Sensor Signal (L77)

Pin	Wire	Circuit	Function
41	0.5 YE	492	MAF Sensor Signal
42	0.5 BN/YE	6110	Low Reference (MER)
43-46	—	—	Not Used
47	0.75 PK/BU	5290	Ignition 1 Voltage
48	—	—	Not Used
49	0.5 BN/WH	1671	HO2S Low Signal (Bank 2 Sensor 2)
50	0.5 D-GN/WH	465	Fuel Pump Relay Control (Primary)
51	—	—	Not Used
52	0.5 YE	447	Starter Relay Coil Control
53	0.5 L-GN	6257	5-Volt Reference (L77)
54	0.5 GY	6109	5-Volt Reference (MER)
55	—	—	Not Used
56	0.5 WH/BK	1164	5-Volt Reference
57	—	—	Not Used
58	0.5 D-GN	335	Low Speed Cooling Fan Relay Control
59	0.5 BN	5069	Main Relay Control
60-62	—	—	Not Used
63	0.5 D-GN/WH	459	A/C Compressor Clutch Relay Control
64	0.5 OG/WH	3223	HO2S Heater Low Control (Bank 2 Sensor 2)
65	0.5 BN	3122	HO2S Heater Low Control (Bank 1 Sensor 2)
66-67	—	—	Not Used
68	0.5 BN/WH	419	MIL Control
69	0.5 PU	1670	HO2S High Signal (Bank 2 Sensor 2)
70	0.5 L-BU	1937	Fuel Level Sensor Signal (Secondary)
71	0.5 YE	400	Vehicle Speed Sensor (VSS) High Signal
72	0.5 PU	401	Vehicle Speed Signal (VSS) Low Signal
73	2 BK	450	Ground