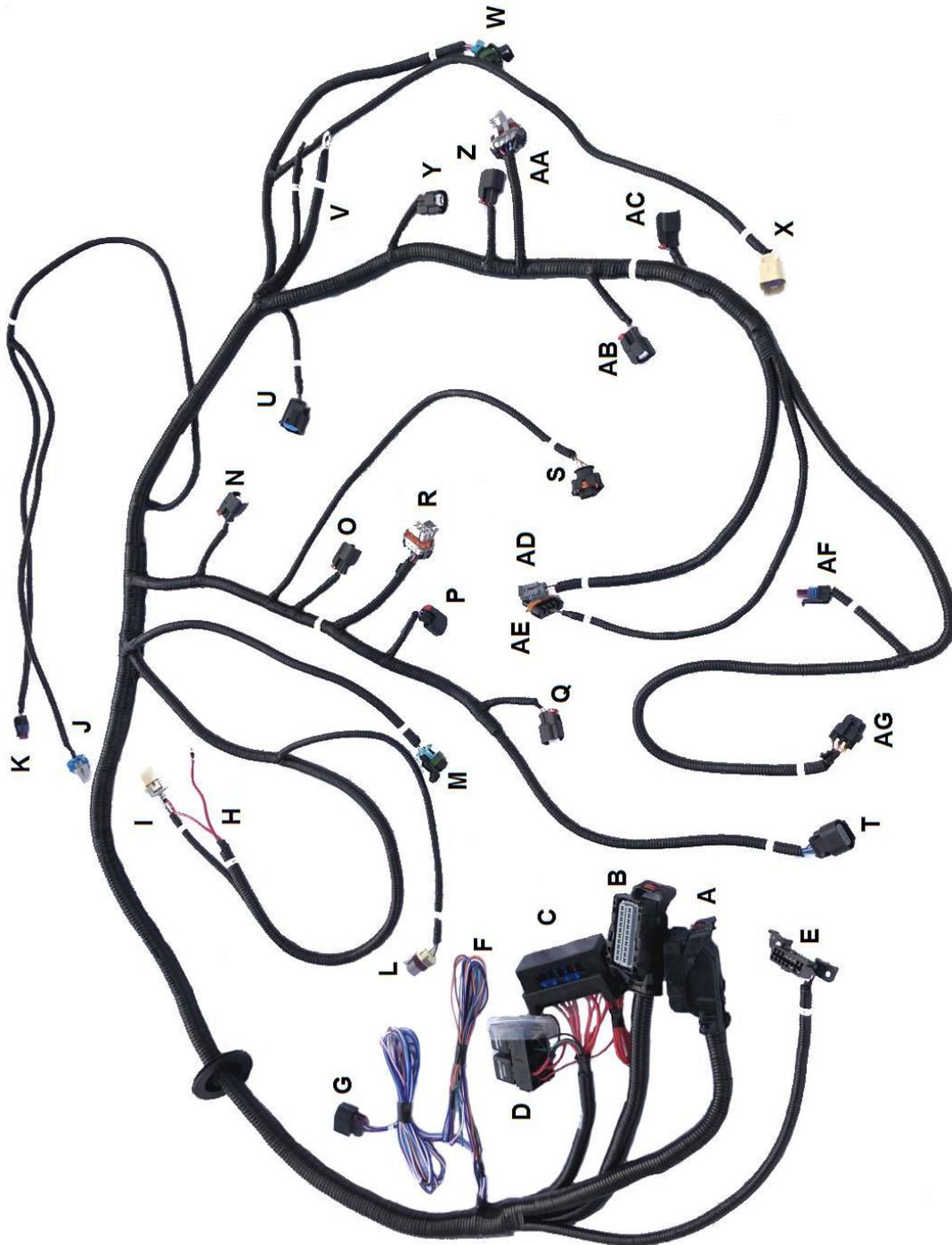


GM LS3 / LS7 wiring harness

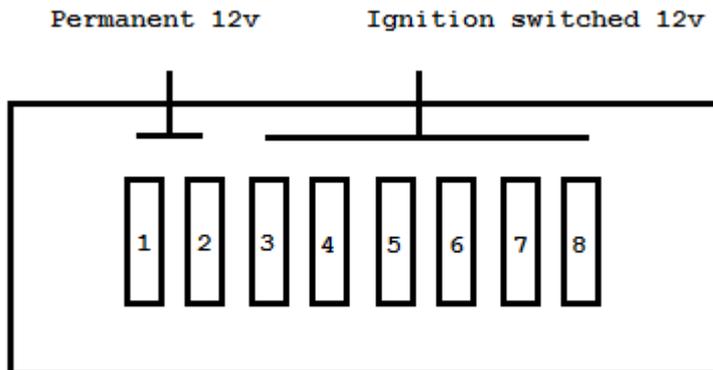


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A - ECU connector X1
B - ECU connector X2
C - Fuse box
D - Relay block
E - CAN data
F - Spare I/O
G - Accelerator pedal position sensor
H - 2 x ring terminal to permanent 12v supply
I - Knock sensor (even cylinder numbers)
J - T56 gearbox reverse lockout solenoid
K - T56 gearbox vehicle speed sensor
L - Crank position sensor
M - O2 sensor (even cylinder numbers)
N - Injector 8
O - Injector 6
P - Injector 4
Q - Injector 2
R - Coil packs (even cylinder numbers)
S - MAP sensor
T - Drive-by-wire throttle
U - Engine oil pressure sensor
V - 2 x ring terminal to earth
W - O2 sensor (odd cylinder numbers)
X - Knock sensor (odd cylinder numbers)
Y - Injector 7
Z - Injector 5
AA - Coil packs (odd cylinder numbers)
AB - Injector 3
AC - Injector 1
AD - Intake air temperature sensor
AE - Alternator
AF - Engine coolant temperature sensor
AG - Cam position sensor

Fuse box layout



1. 10A - permanent 12v supply to ECU (not req'd)
2. 15A - OBD/CAN data port
3. 10A - ignition switched 12v supply to ECU (not req'd)
4. 15A - ignition switched 12v supply to ECU
5. 15A - coils and injectors, odd cylinders
6. 15A - coils and injectors, even cylinders
7. 20A - O2 sensors
8. 15A - reverse lockout solenoid

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A - ECU connector X1

Pin no.	LS3/LS7 loom function
1	Optional map switch (orange)
2	
3	
4	
5	
6	
7	
8	
9	Optional gearbox flatshift signal (purple)
10	
11	
12	
13	
14	
15	
16	
17	Optional 2nd cooling fan relay output (blue)
18	
19	Ignition-switched 12v supply
20	Permanent 12v supply (not req'd)
21	
22	
23	Accelerator pedal pin A
24	
25	
26	
27	CAN Lo
28	CAN Hi
29	Accelerator pedal pin E
30	Accelerator pedal pin D
31	
32	Accelerator pedal pin B
33	
34	
35	
36	Accelerator pedal pin C
37	Intake air temperature
38	Earth for intake air temperature
39	
40	
41	
42	
43	
44	
45	
46	
47	Ignition-switched 12v supply (not req'd)
48	Rev counter output (white)
49	
50	Fuel pump relay output
51	
52	

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53	
54	
55	
56	Accelerator pedal pin F
57	Vehicle speed output / EPAS (black)
58	Cooling fan relay output (green)
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	Oil pressure warning lamp output (brown)
69	
70	
71	Vehicle speed sensor signal
72	Vehicle speed sensor earth
73	ECU main earth

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B - ECU connector X2

Pin no.	LS3/LS7 loom function
1	
2	5v supply to crank sensor
3	Throttle pin E (5v supply to TPS)
4	
5	Throttle pin A (DBW -ve)
6	Throttle pin B (DBW +ve)
7	
8	
9	
10	
11	Reverse lockout
12	O2 heater earth odd cylinders
13	O2 heater earth even cylinders
14	
15	
16	(Optional) power to VVT solenoid
17	Injector 8
18	Injector 5
19	Injector 6
20	Injector 1
21	Coolant temp. signal input
22	Coolant temp. signal earth
23	
24	
25	
26	Knock signal odd bank
27	Knock signal earth odd bank
28	
29	Knock signal even bank
30	Knock signal earth even bank
31	
32	
33	
34	Oil pressure sensor earth
35	Throttle pin C (earth to TPS)
36	
37	Injector 2
38	Injector 3
39	Injector 4
40	Injector 7

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41	Oil pressure sensor 5v supply
42	
43	MAP sensor 5v supply
44	Cam sensor 5v supply
45	
46	
47	
48	
49	
50	Oil pressure signal
51	
52	Optional VVT out
53	MAP sensor earth
54	
55	
56	O2 earth odd bank
57	O2 signal odd bank
58	MAP signal
59	O2 signal even bank
60	O2 earth even bank
61	Alternator control signal
62	
63	Throttle pin F (TPS signal)
64	Cam signal
65	Throttle pin D (TPS signal)
66	Cam sensor earth
67	
68	Crank signal
69	Crank sensor earth
70	Ignition coil 1
71	Ignition coil 8
72	Ignition coil 7
73	Ignition coil 2
74	Ignition coil 6
75	Ignition coil 5
76	Ignition coil 4
77	Ignition coil 3
78	Ignition coil earth, odd bank
79	Ignition coil earth, even bank
80	

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