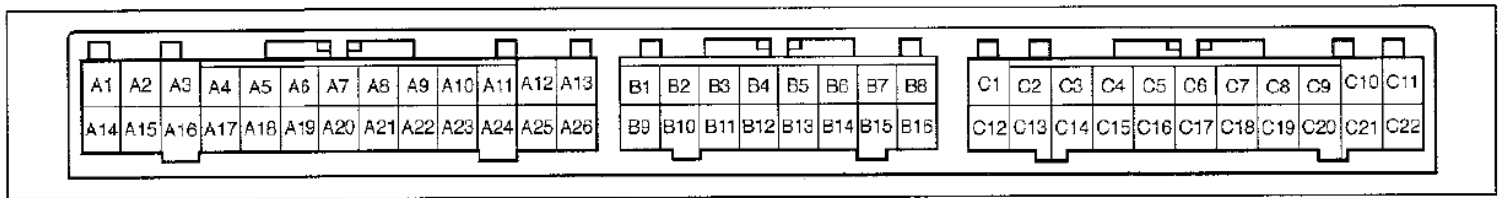G16B Baleno into 1.3 Sierra ECU wiring
Created by PJ.zook
admin@ptjau.com

Version 1.0

1. Connect to positive on battery
2. High amp fuse box (is part of Baleno relay/fuse box)
3. Relay/fuse box (graft into sierra under the bonnet. Has added benefit of many spare fuse and relay sockets for spotlights, etc...)
4. "FI" fuse
5. "DOME" fuse
6. Main relay
7. Fuel pump relay
8. Fuel pump (connect to whatever fuel pump you are using, ie Vitara swimmer pump, Bosch 044 external pump, etc...)
9. Thermo fan control relay (don't need if you are using mechanical fan bolted to water pump)
10. Thermo fan motor (can use any thermo fan that fits)
11. Splice into Sierra's ignition switch 'IG' wire (on 1.3's the wire should be B/Bl)
12. Splice into Sierra's ignition switch 'ST' wire (on 1.3's the wire should be B/Y)
13. Tachometer output (you can graft Baleno tacho into Sierra cluster, note this output will NOT work with standard Sierra tacho)
14. Check Engine light (I found there are a few spare globe holders in Sierra dash you could use)
15. VSS signal (ECU will still run engine without signal, but engine light will come on without it)
16. DLC (don't really need this plug, but its very easy to fit and good to have sitting there in case its needed)
17. Diagnosis connector (this is built into Baleno relay/fuse box, another good reason to graft box into Sierra)
18. Diodes for electric loads (not necessary, but idles up engine slightly for large electrical loads)
19. Headlight idle up (Connect positive wire from park light switch here)
20. Demister idle up (Connect positive wire from demister switch here)
21. ECU
22. No.1 injector
23. No.2 injector
24. No.3 injector
25. No.4 injector
26. Idle Air Control valve
27. EVAP canister purge valve
28. Ignition coil assemblies
29. Cyl.1 spark plug
30. Cyl.4 spark plug
31. Cyl.2 spark plug
32. Cyl.3 spark plug
33. Crankshaft Position Sensor
34. Camshaft position sensor
35. Oxygen sensor (make sure you have the single wire sensor, if not you need an addition to this diagram)
36. Manifold Air Pressure sensor
37. Throttle Position sensor
38. Engine Coolant Temperature sensor
39. Temperature output to instrument cluster (can connect to Sierra's gauge, but is very inaccurate)
40. Inlet Air Temperature sensor

TERMINAL ARRANGEMENT OF ECM (PCM) COUPLER (VIEWED FROM HARNESS SIDE)

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13
A14	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25	A26

B1	B2	B3	B4	B5	B6	B7	B8
B9	B10	B11	B12	B13	B14	B15	B16

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
C12	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22

TERMINAL		CIRCUIT
A1	DN	Diagnosis switch terminal
A2	TS	Test switch terminal
A3	SPL	DLC
A4	MON	Duty output terminal
A5	TM	Tachometer
A6	MR	Main relay
A7	DNL	Malfunction indicator lamp ("CHECK ENGINE" light)
A11	VCC	Power source (for sensors)
A12	E1	ECM(PCM) ground
A13	B1	Power source
A16	EL+	Electric load signal for position lamp and rear window defogger switch
A20	IGS	Ignition switch
A21	RFC	Radiator fan control relay
A22	ISC	IAC valve
A25	BB	Power source for back-up
A26	B2	Power source

TERMINAL		CIRCUIT
B1	IGT1	Ignition coil assembly for No.1 and No.4 cylinder
B2	FP	Fuel pump relay
B7	INJ1	No.1 injector
B8	INJ3	No.3 injector
B9	IGT2	Ignition coil assembly for No.2 and No.3 cylinder
B12	PRG	EVAP canister purge valve (if equipped)
B15	INJ2	No.2 injector
B16	INJ4	No.4 injector

TERMINAL		CIRCUIT
C1	E01	Ground
C5	STA	Engine start switch
C6	THW	ECT sensor
C7	VTA	TP sensor
C8	PM	MAP sensor
C9	SPD	VSS (M/T and 4AT only)
C10	CR+	CKP sensor (+) (without immobilizer)
C11	CAS	CMP sensor (without immobilizer)
C12	E02	Ground
C17	E2	Sensor ground
C18	THA	IAT sensor
C19	OX	Heated oxygen sensor (HO2S) (if equipped)
C21	CR-	CKP sensor (−) (without immobilizer)

NOTE: This wiring diagram assumes you have a G16B from a Suzuki Baleno with manual transmission, has no immobiliser, has no EGR, has a single wire oxygen sensor and has a carbon canister with purge valve.

DISCLAIMER: While I have done my best to provide you with correct information, I am in no way responsible if anything happens if you choose to use the information.