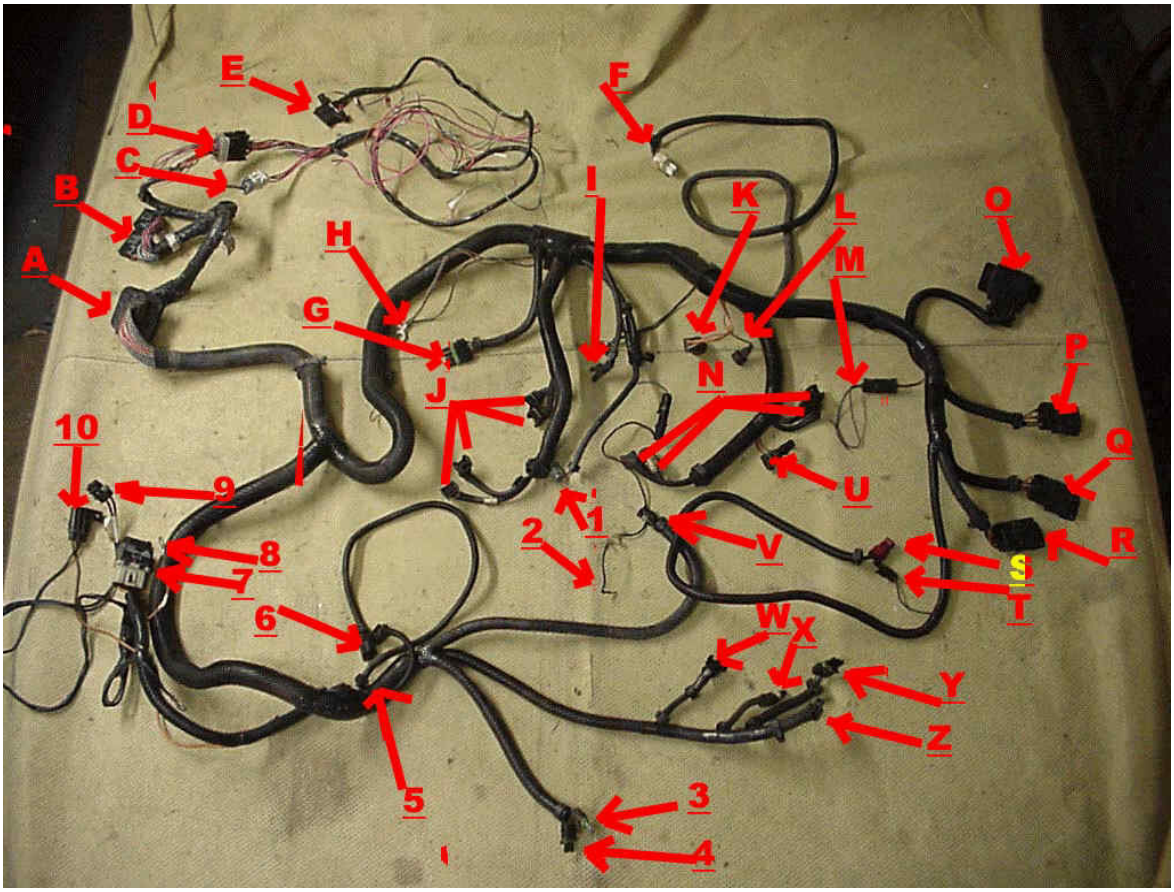
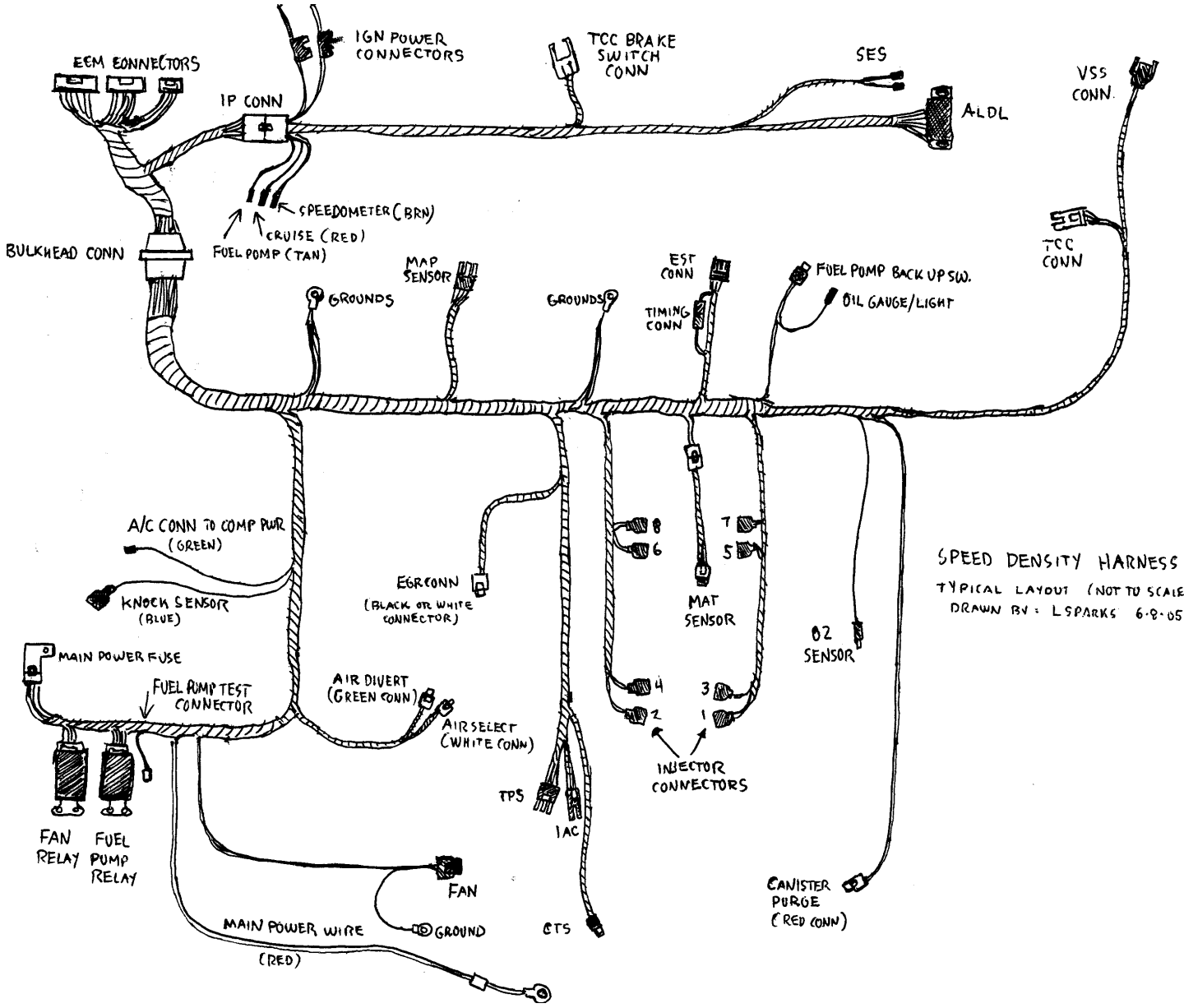
TPI wiring harness, typical 1986-89:



This is the layout of a typical harness form a 1986-88 TPI Camaro.

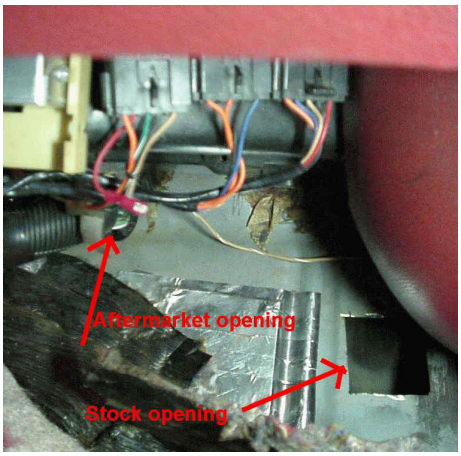
(A) bulkhead conn. through firewall. (B) ecm conn. (C) jct. conn for fuel injectors and cooling fan. (D) dash harness connector. (E) ALDL terminals. (F) TCC conn. (G) EST distributor conn. (H) ground wires to firewall. (I) egr valve solenoid conn. (J) fuel injectors conn r/s. (K) oil pressure switch, for fuel pump cutoff. (L) oil pressure gauge or light conn. (M) pwr. conn. for heater-a/c. (N) fuel injectors conn. l/s. (O) ESC module. (P) MAF burn off relay. (Q) MAF sensor relay. (R) fuel pump relay. (S) canister purge conn. (T) oxygen sensor conn. (U) cold start injector conn-except 1989. (V) maf sensor conn. (W) cold start switch conn-except 1989. (X) tps conn. (Y) IAC conn. (Z) cst conn. (1) mat or iat sensor conn. (2) egr temp. switch conn. (3) port solenoid conn. (4) diverter solenoid conn. (5) a/c compressor high pressure conn. (6) knock sensor conn. (7) cooling fan relay. (8) terminal to battery. (9) cooling fan conn. (10) cooling fan fuse.

Custom wiring harness layout



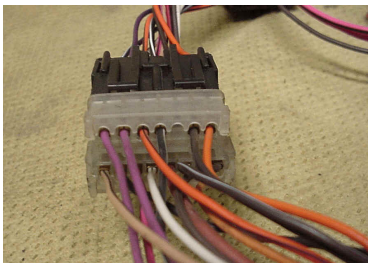
The diagram above is typical of my custom speed density harness layout.

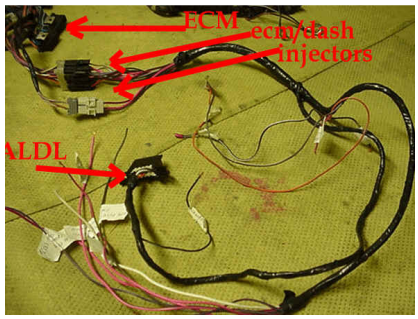
The layout is pretty close to what to expected. The esc module and relays mount on the firewall on the left near the power brake booster. The cooling fan relay and fuse mounts to the r/s fender well near the battery (on a Camaro). The part of the harness that leads to the bulkhead conn feeds between fender and inner fender wheel and goes through a opening in the passenger side foot well. In the picture below, shows two different possibilities when feeding the harness through the firewall. "A" shows where the stock length harness bulkhead connector will come through. Measure the size of the connector carefully to cut the proper size opening so the "U" shape collar that holds the bulkhead connector in place will be secure. Note the location of this square hole so you do the same in your Camaro. Other vehicles may or may not be the same so investigate carefully! "B" shows the location of a aftermarket harness feed through. Be sure to use a rubber wire grommet to protect the harness.



The main trunk of the harness that the distributor and injector harnesses come off lies against the backside of the firewall. The aftermarket harness is pretty close to this, except unless you order one with the extra long wiring to the bulkhead like a stock harness you will have to feed your wires close to the heater box. This means you will also have to make a heat shield to deflect the heat away from the r/s exhaust manifold.

If you decide to go with the stock harness, I have included here what you'll need to make the connections to your vehicle harness. First thing you need to do is to identify the under dash junction connectors.





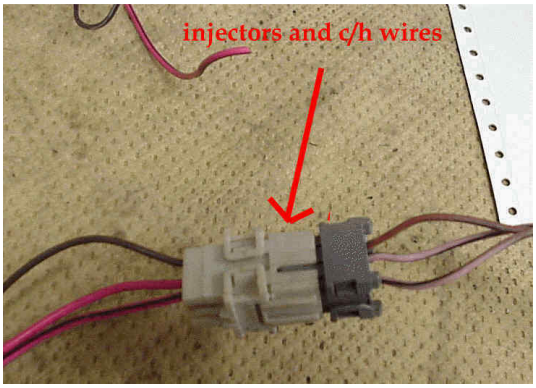
The under dash connectors (1985-89 only) shown in picture #1 are the ones that you'll need to identify for the wires that tie into the vehicle harness. If you look real close on the terminal ends where the wires enter you'll see letters from "a" to "h" on one side, and "j" to "r" on the other side. The breakdown on the identification is as follows:

IP under dash terminal ID Typical 1985-89 MAF system

TERMINAL	FUNCTION	ECM LOCATION	REQUIREMENTS
"A"	Terminal "c" on ALDL conn. egr port solenoid	Pin "A2" , air sw. sol.	None
"B"	Terminal "g" on ALDL. fuel pump function check.	None	None
"C"	Check engine lamp also known as "SES".	Pin "A5" , check engine lamp	This wire needs to tie into "ground" side of

	(service engine soon).		lamp socket. Identify wire with tape label .
"D"	Fuel pump main feed wire from add-on fuse block. (see below)	None	Need to add a fuse block, this wire ties into load side of fuse. Label wire. (see below)
"E"	Terminal "b" on ALDL	Pin "A9" aldl test terminal.	None
"F"	ECM power feed from add on fuse block (see below)	Pin "A6" ecm, +12V ign. on pwr.	Need to add a fuse block, this wire ties into load side of fuse. Label wire. see below)
"G"	egr sol. purge sol. power feed from +12V ign on power	None	Need to add a fuse block, this wire ties into load side of fuse. label wire. (see below)
"H"	Terminal "f" on ALDL, TCC check point.	Pin "A7" on ecm, TCC lock up cntrl	None
"J"	Terminal "e" on ALDL, serial data for diacom or similar program	Pin "A8" on ecm, serial data	None
"K"	feed to VSS	Pin "A10" VSS input	This wire needs to tie into the brn. wire on vehicle speed sensor. label wire
"L"	not used	not used	not used
"M"	ecm ground	Pins "D1" "D3" "D10" on ecm	This wire needs to connect to a good solid ground under dash on chassis or frame. Label wire
"N"	gear select switch	Pin "B10" on ecm, park/neutral switch	This wire needs to connect to a switch that is grounded when the gear select is in either park or neutral (see below) label wire
"P"	TCC control from brake switch	none.	this wire needs to go to a late model brake switch that uses the lock up. label wire (see below)
"R"	cold start injector feed from add on fuse block, hot in start only.	none.	This wire needs to be fused, coming of the hot in start only wire. label wire (see below)

On the injectors harness (picture below) is three more wires. Two are pink (one with black stripe) that need to be fused, with the hot in start and run wire from the vehicle harness. These wires are for the injector control. The brown wire is for the cooling fan relay.



Pink	Needs to be fused from aftermarket fuse block.	Injectors 1,3,5 and 7. Label wire
Pink with blk. stripe	Needs to be fused from aftermarket fuse block.	Injectors 2,4,6, and 8. Label wire
brown	needs to tied into load side of c/h (A/C-heater) fuse in existing fuse box. There are taps that are made for this.	This wire feeds the cooling fan relay.

You can do your ignition "on" fuse taps by using the in line ATO fuse fuse holders found at many major automotive parts stores. Just be sure to tie them into the heavy gauge pink/black wire from the ignition switch. Use 10 amp fuses for the injector and cooling fan relay.

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