F-Body Wiring	GTO Wiring	
PIN # on C1 connector	PIN # on C1 connector	
7 (not used)	7 (5-volt ref EOP sensor)	
24 (not used)	24 (ground)	
27 (not used)	27 (ground)	
30 (not used)	30 (engine coolant level signal)	
32 (clutch pedal position switch signal)	32 (transmission range switch signal A)	
33 (TCC brake switch)	33 (cruise control release signal)	
34 (PNP switch signal)	34 (trans range switch signal P)	
42 (cooling fan relay 1 control)	42 (not used)	
47 (egr pintle position 5V ref)	47 (not used)	REMOVE
55 (egr pintle position signal)	55 (not used)	
63 (not used)	63 (low ref EOP sensor)	
64 (not used)	64 (ground)	
67 (not used)	67 (ground)	
70 (low oil level switch)	70 (not used)	REMOVE
72 (not used)	72 (trans range switch signal B)	
Pin # on C2 connector	Pin # on C2 connector	
4 (air solenoid control)	4 (not used)	REMOVE
7 (egr control)	7 (not used)	
12 (not used)	12 (ign retard signal from EBCM)	
13 (cruise enable signal)	13 (not used)	
15 (alt terminal)	15 (not used)	
17 (a/c request signal)	17 (not used)	
21 (not sure)	21 (at iss signal)	
30 (VDT fuel enable signal)	30 (not used)	
36 (air pump relay control)	36 (not used)	REMOVE
37 (cruise control inhibit)	37 (not used)	
41 (egr position sensor ground)	41 (not used)	
52 (not used)	52 (HO2S Bank1 sensor 2 heater contro)
53 (spark retard signal)	53 (HO2S Bank2 sensor 2 heater contro)
58 (not used)	58 (engine oil pressure sensor signal)	
62 (not used)	62 (trans range switch signal C)	

72 (not used)	72 (H2OS Bank1 sensor1 heater control)	
74 (not used)	74 (H2OS Bank2 sensor1 heater control)	

Wiring it all up

Connector C1 (blue)

BMW 20 pin Fuse

Pin / Color Function

#1 Blk/Red	Ground	Ground	
#24 Blk/Red	Ground	Ground	
#27 Blk/Red	Ground	Ground	
#40 Blk/Red	Ground	Ground	
#64 Blk/Red	Ground	Ground	
#67 Blk/ Red	Ground	Ground	
#20 Orange	Batty 12v- constant	To Batty block	10A
#57 Orange	Batty 12v- constant	To Batty block	10A
#19 Orange	Ign 12V- switched	#21	15A
#58 Yellow	OBDII port	Inside car to DLC	#58 Yellow

Connector C2 (green)

Pin / Color Function

#1 Blk/Red	Ground	Ground
#40 Blk/Red	Ground	Ground
#10 Brwn	Tach signal to Tach	#20
#33 Blu/Wht	Cooling fan relay (terminal 86)	Custom
#46 Brwn/Wht	SES (ground side of circuit)	#12
#9 Grn/Wht	Fuel pump relay trigger (terminal 85)	#13

Custom- Gauges, A/C, etc

Coolant temp on LS1	#12
Oil pressure on LS1	#23
Starter (+12 when cranking)	#18

A/C compressor control	#4	
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Other

Lt grn wire to injectors- 12v+ switched/ 15A fuse	15A
Red wire to injectors- 12v+ switched/ 15A fuse	15A

Note: Ground wires are tied together inside the harness. There may be 1or 2 loose wires to hook up for the ground.

Note: Batty 12V constant wires are tied together in the harness, only 1 wire will actually be attached at the batty block.

BMW X20 Connector

PIN	Wire Color	Function
1	NOT USED	
2	NOT USED	
3	NOT USED	
4	black/ blue	A/C comp control from DME to turn on comp relay
5	black/ grey	Signal from DME to turn on normal speed relay (cooling fan)
6	violet/ grey	signal from car to DME to turn on A/C
7	green	starter immobilizaton relay- signal from car to DME to disable starting
8	grey	Ck eng light
9	NOT USED	
10	blue/ yellow	reverse light
11	brwn/ yellow	engine coolant temp 1- signal from cluster
12	brwn/ violet	engine coolant temp 2- return signal from sender
13	green/ violet	fuel pump relay trigger wire (+ 12v)
14	black/ white	road speed signal from cluster to DME
15	black/ green	wiper module
16	white/ yellow	data link
17	white/ violet	data link to DME
18	black/ yellow	starter (+12v when starter engaged)
19	white/ green	service reset (inst cluster)
20	black	tach signal to cluster from DME
21	green	ignition switched 12v- 12v when ign is on
22	green/ white	reverse light switch
23	brown/ white	oil pressure (inst cluster)
24	white/ black	fuel consumption signal from DME (inst cluster)
25	blue	From alt to back of cluster, charge indicator light

Wires to remove

Connector C1

Pin#	Function	
#23	Blk- low ref FTP sensor & fuel level sensor	
#25	Tan-H02S Low signal bank 2 sensor 2	
#28	Tan/Wht- H02S Low signal bank 1 sensor 2	
#33	Brwn- Cruise control release	
#46	Gry- 5-volt ref FTP sensor	
#65	Ppl/Blk- H02S High signal bank 2 sensor 2	
#68	Ppl/wht- H02S High signal bank 1 sensor 2	

Connector C2

Pin#	Function
#12	Cn/Plk Ign retard signal
#12	, ,
#45	Wht- EVAP canister vent solenoid control
#54	Ppl- Fuel level sensor signal
#64	Dk grn- Fuel tank pressure sensor signal
#54	Ppl- Fuel level sensor signal