

Installing and setting up Haltech Sprint 500 on my daily driven Protege5.

By Alberto Perez

01/09/13 AP123 on Mazdas247.com

These are pin outs I made to get you started. Top and bottom row of each table indicate the slot the wires go into on the receptacle/pin. They correspond with the slot number on the actual receptacle/plug. Use this freely as a template, make any changes you want that will fit your need. Remember the less plugs you use the cleaner and cheaper the install. You will end up with wiring that looks similar to the picture on the right.



ECU side of original wiring harness

A 12Pin Receptacle

1	2	3	4	5	6
Pin 74	Pin 101	Pin 52	Pin 21	Pin 85	Pin 80
Pin 75	Pin 100	Pin 26	Pin 22	Pin 86	Pin 89
12	11	10	9	8	7

B 12Pin Receptacle

1	2	3	4	5	6
Pin 2	Pin 47	Pin 48	PLUG	PLUG	PLUG
Pin 83	Pin 45	PLUG	PLUG	PLUG	PLUG
12	11	10	9	8	7

Installing and setting up Haltech Sprint 500 on my daily driven Protege5.

By Alberto Perez

01/09/13 AP123 on Mazdas247.com

Engine harness side of original wiring harness

A 12Pin Plug

1	2	3	4	5	6
Pin 74	Pin 101	Pin 52	Pin 21	Pin 85	Pin 80
Pin 75	Pin 100	Pin 26	Pin 22	Pin 86	Pin 89
12	11	10	9	8	7

B 12Pin Plug

1	2	3	4	5	6
Pin 2	Pin 47	Pin 48	Coolant temp signal	Air temp signal	Boost solenoid 1 st wire
Pin 83	Pin 45	PLX Signal Output	Coolant temp ground	Air temp ground	Boost solenoid 2 nd wire
12	11	10	9	8	7

C 12pin Plug

1	2	3	4	5	6
PLUG or External MAP Signal	PLUG or External MAP +12V	PLUG	Button switch	Painless Blue Wire +Bat volt	1 st Ground wire
PLUG or External MAP Ground	PLUG	PLUG	Button switch	Painless Pur. Wire +Bat volt	2 nd Ground wire
12	11	10	9	8	7

Installing and setting up Haltech Sprint 500 on my daily driven Protege5.

By Alberto Perez

01/09/13 AP123 on Mazdas247.com

Haltech wiring harness

A 12Pin Receptacle

1	2	3	4	5	6
INJ 2	INJ 4	Coil 2	+ Trigger*	+ Home*	Fuel pump Re.
INJ 1	INJ 3	Coil 1	- Trigger*	- Home*	TPS Signal
12	11	10	9	8	7

B 12Pin Receptacle

1	2	3	4	5	6
PLUG	Thermo Fan	Tacho	Coolant temp signal	Air temp signal	DPO 3
DPO4	Thermo Fan	O2 Input	Coolant temp ground	Air temp ground	+12 Switched
12	11	10	9	8	7

C 12Pin Receptacle

1	2	3	4	5	6
MAP Signal	MAP Supply +12	Coil 3	AUX Rev	Switch Ecu +12v Supply	ECU Ground
MAP Ground	Road Speed Input	Coil 4	AUX Ground	Switch Ecu +12v Sensor Supply	ECU Sensor Ground
12	11	10	9	8	7

Installing and setting up Haltech Sprint 500 on my daily driven Protege5.

By Alberto Perez

01/09/13 AP123 on Mazdas247.com

If using Hall effect sensors Cherry GS100502:

Remove wires from Haltech wiring receptacle for slots 4,5,8,9 and plug them.

You can either use 6 pin connection for both sensors or a pair of 3 pin connections and separate each sensor. This is how they are wired. Make sure not to mixup cam and crank sensor wires.

Sensor wires, 3Pin Plug.

1	2
Brown wire, VCC	Black wire, Output
Blue wire, Ground	
3	

Haltech Harness, 3Pin Receptacle

1	2
Red wire, Switched +bat	Yellow Wire, +
Blue, Ground	
3	

Suggested Fuel injector harness wiring:

Do the same thing for the plug and each receptacle.

1	2	3	4
INJ 1 Power	INJ 2 Power	INJ 3 Power	INJ 4 Power
INJ 1 Ground	INJ 2 Ground	INJ 3 Ground	INJ 4 Ground
8	7	6	5

Installing and setting up Haltech Sprint 500 on my daily driven Protege5.

By Alberto Perez

01/09/13 AP123 on Mazdas247.com

PLX wideband wiring

This can be placed on a separate plug/ receptacle or you can add it to the main 3 12 pin plugs if there is space.

Plug, car wiring side:

1
Painless Yellow wire
1st or 2nd Ground wire
2

Receptacle, PLX side

1
PLX +12v power
PLX Ground
2