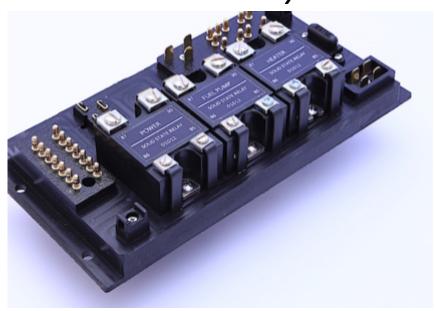
Porsche 914 Relay Board

Solid State Relays

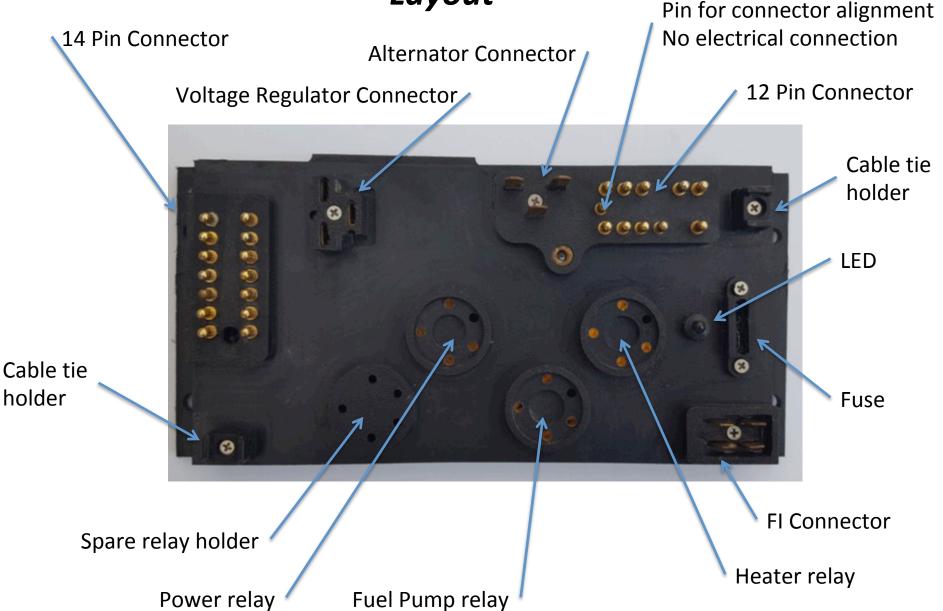


Electromagnetic Relays



- There are no provisions for a rear window heater.
- Uses ATC style fuse.
- LED illuminates when the relay board is supplying power to the fuel pump.

Electromagnetic Relay Board
Layout



Solid State Relay Board Layout

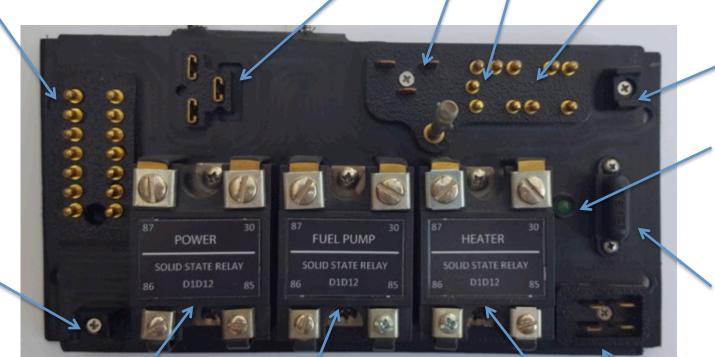
14 Pin Connector

Alternator Connector

Voltage Regulator Connector

Pin for connector alignment No electrical connection

12 Pin Connector



Fuse

LED

Cable tie

holder

Cable tie holder

FI Connector

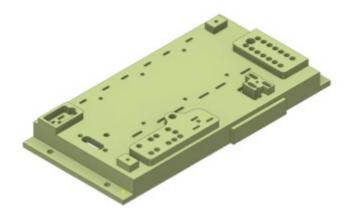
Heater relay

Power relay

Fuel Pump relay

Porsche 914 Relay Board 3D Models

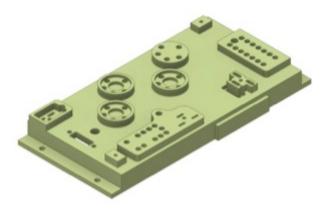
Solid State Relays



Alternator Plug Retainer



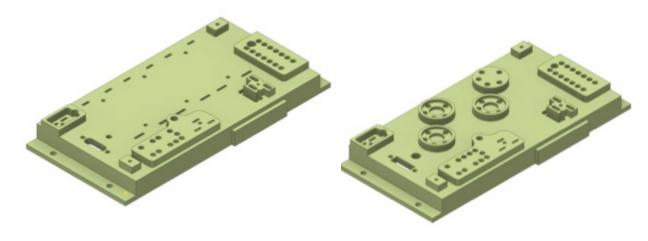
Electromagnetic Relays



Voltage Regulator Boss



- 3D models are in STEP format.
- Hole sizes in the 3D model are for location only.

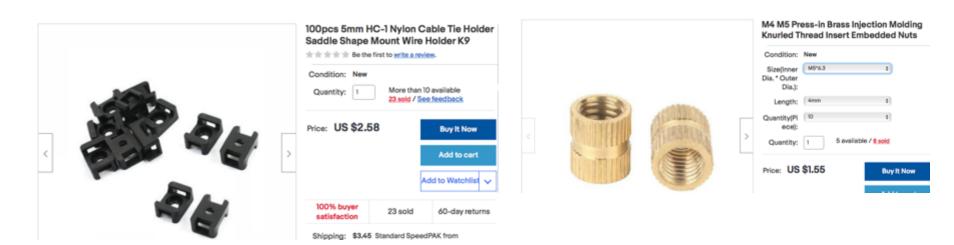


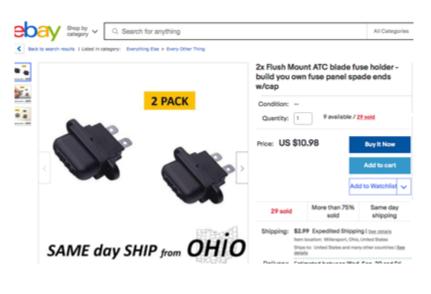
Solid State Relays Electromagnetic Relays

914 Relay Board Parts Source

Part	Description	Source
Board Plastic	King Starboard HDPE polymer 1" thick	Plastic store, ebay or Amazon
Fuse Holder	Flush mount ATC Fuse Ebay holder 1/4" thick	
Fuse	15A ATC Fuse	Auto parts store, Amazon, ebay
Wire	14 & 16 AWG wire	Auto parts store, Amazon, ebay
14 & 12 Pin connector pins	3.5mm bullet connector Banana plug (Male only)	Ebay, Amazon
Voltage Regulator Plugs	Supco T11121	Auto parts store, Amazon, ebay
Solid State Relay	Crydom D1D12	Digi-Key, Mouser, Amazon
LED	12V Panel mount LED	ebay
Threaded insert for cover support	M5 threaded insert	ebay
Electromagnetic Relay socket	3.0mm bullet connector Banana plug (Female only)	Ebay, Amazon
Epoxy Sealer	EpoxySeal 9000	Amazon

914 Relay Board Parts Source







F5mm 12V white Red Round Pre-wired water Clear led with Plastic Holder 10-100Pcs

Condition: New

Emitting Red : Color:
Holder a: YES : working DC12V : voltage:
Qty a: -Select- : Quantity: 1 9 available

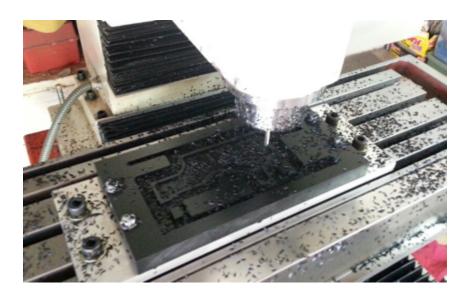
Price: US \$0.99

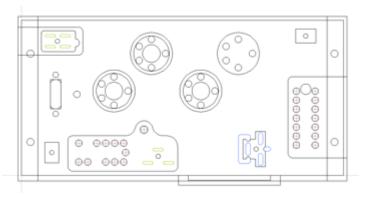
Buy It Now
Add to cart

Relay Board Fabrication

The board is CNC machined from 1" thick King starboard HDPE Polymer plastic. This plastic is available from most plastic suppliers or on Amazon and ebay. Two machining setups are required: one for the top and one for the bottom.







Milling Tools Required

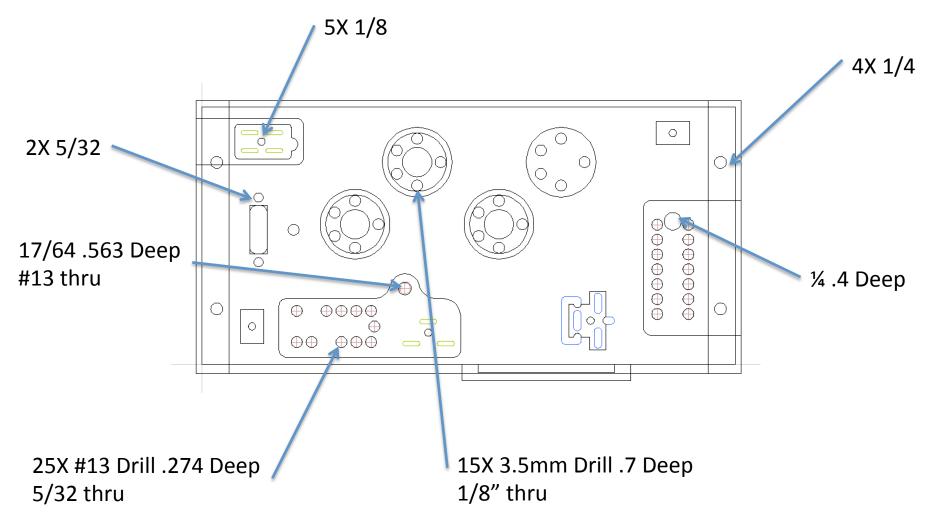
- .250 2 flute end mill
- .125 2 flute end mill
- .0625 2 flute end mill
- 82 deg countersink V bit
- #13 Drill
- 1/8" Drill
- 3.5mm Drill
- 5/32" Drill
- 17/64" Drill
- 1/4" Drill

Relay Board Fabrication Hole Size

The hole sizes in the 3D models do not reflect the actual final hole size.

The holes in the 3D model are for location only.

The hole size in the final part is determined by the drill bit used to make the hole.



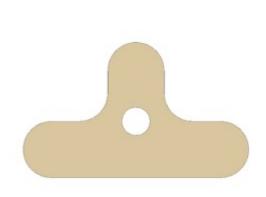
Alternator Plug





Make spade connectors from .031 X .25 brass sheet Cover with heat shrink tubing









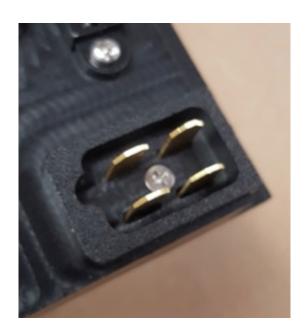
Machine from 1/16" G10 fiberglass per 3D model

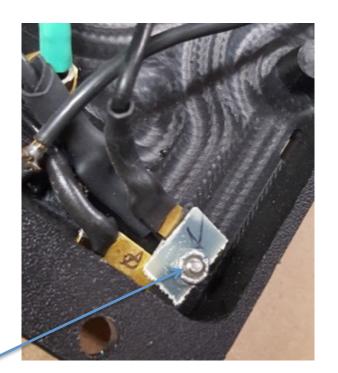
4-40 FHMS

Fuel Injector Plug



- Make spade connectors from .031 X .25 brass sheet
- Make spade connectors long and trim to length after installation
- Cover with heat shrink tubing





Voltage Regulator Connector Base Fabrication

The voltage regulator connector base is CNC machined per the 3D model from ¼" thick King starboard HDPE Polymer plastic and attached to the relay board with a 4-40 flat head machine screw/nut.





Milling Tools Required

- 1/8" Drill
- 1/8" End Mill
- 1/16" End Mill
- 82 deg countersink V bit



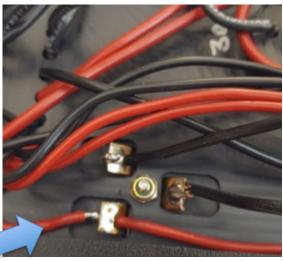


Voltage Regulator Plug

- Make spade connector from Supco T11121 terminal
- Install connector base onto relay board with 4-40 bolt/nut
- Insert spade connector and bend tab to retain the connector

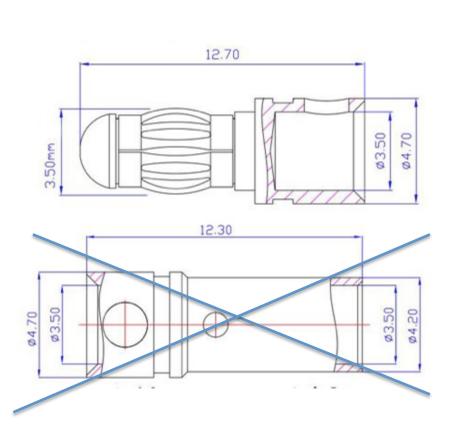


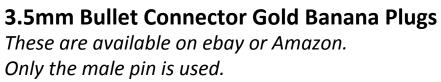




Spade connector

14 & 12 Pin Connector









Electromagnetic Relay Connector

3.0mm Bullet Connector Gold Banana Plugs *These are available on ebay or Amazon. Only the female pin is used.*



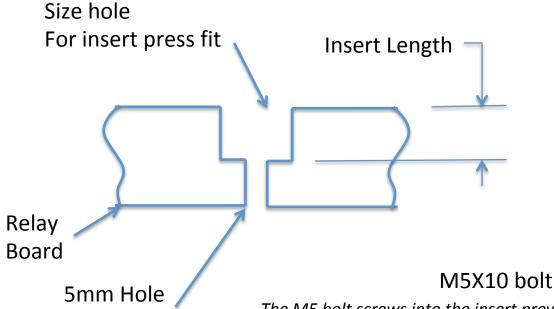


Relay Board Cover Support Rod Insert

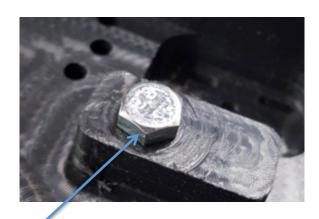


M5 threaded insert





For bolt



The M5 bolt screws into the insert preventing it from pulling out Apply red Loctite to thread

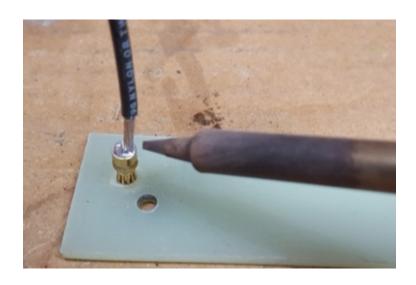
Wiring

Porsche 914 Relay Board Wire Lis	Porsche 914	Relay Board	Wire List
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Wire Size (AWG)	Connection No.	From	To	То	То
10	1	14P_1	12P_6	FI_Plug_II	FI_Plug_IV
14	2	14P_2	VR_D+	ALT_D+	
14	3	14P_3	12P_2	1.0.5	
14	4	14P_4	12P_4		
14	5	14P_5	12P_1		
14	6	14P_6	12P_3		
14	7	14P_7	12P_5		
18	8	14P_8	12P_7	PWR_Relay_85	Heater_Relay_85
18	9	14P_9	Heater_Relay_86	3252 3053	
18	10	14P_10	PWR_Relay_86	LED_Black	
14	11	14P_11	12P_10	12P_11	Heater_Relay_87
14	12	14P_12	PWR_Relay_30		
14	13	14P_13	Fuel_Relay_87	12P_12	LED_Red
14	14	14P_14	Fuse_1		
14	15	Fuse_2	Fuel_Relay_30	Heater_Relay_30	
18	16	12P_3	Not used		
	17	12P_8	Not used		
	18	12P_9	Not used		
	19	FI_Plug_I	Fuel_Relay_85	PWR_Relay_87	
18	20	FI_Plug_III	Fuel_Relay_86		
14	21	VR_DF	ALT_DF		
14	22	VR_D-	ALT_D-		

Stock Relay	SSR
30	2
85	3
86	4
87	1
87a	

Wiring



Solder wire to the 14 & 12 pin connector pins first



Solder on the relay connector



Insert the wire thru the hole and press in the pin



Press in the connector

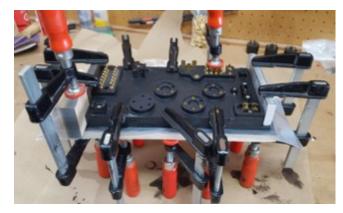
Epoxy Potting Compound



Seal all connectors with 5 min epoxy and microballons



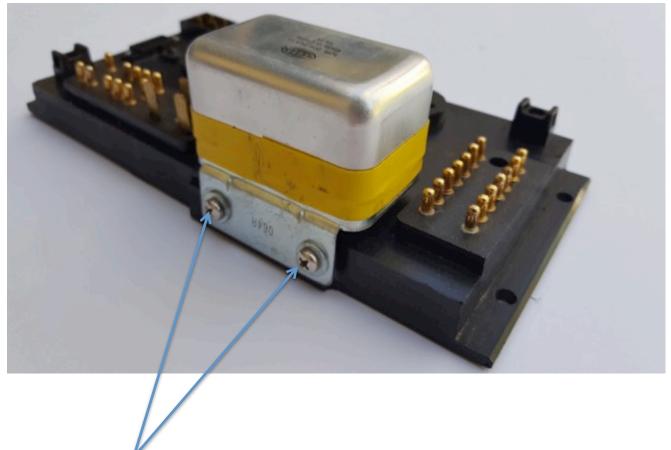
Fill with 5.25 oz Epoxyseal 9000 (3.5 oz part A and 1.75 oz part B)



Clamp to ½ plywood with ¼" Rubber and release film (large zip lock bag)



Voltage Regulator



#8 Sheet metal screws .5 long with washer

Drill pilot holes .4 deep after applying Epoxyseal 9000

Stock 914 Relay Board (for reference)



