

Testing HyZor version C Board

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You can fill in this form electronically, save it and email it back OR you can print it out, fill it in and FAX it to 250-492-7480.

HyZor Serial # ERHZ-_____

Date_____ Installer Name_____ email_____

Describe the symptoms as completely as possible:

To diagnose your board you need voltages on all the indicated pins:

1. with the key on and float switch, J7, connected (with the float tested for correct continuity (ohm-meter), float properly grounded and enough water to raise the float to continuity)
2. the key on and the float switch, J7, disconnected.

Component	Key on, J7 connected				Key on, J7 disconnected			
	pin 1	pin 2 D	pin 3 G	pin 4 S	pin 1	pin 2 D	pin 3 G	pin 4 S
P1	NA				NA			
N1	NA				NA			
Blue LED	On		Off		On		Off	
Yellow LED	On		Off		On		Off	
J6					J6			
J11					J11			
J7					J7			
J13					J13			
J15					J15			
J17					J17			
J10					J10			

Measure DC VOLTAGE. Use a VOLT-METER.
Do not use an amp-meter or an ohm-meter.
Measure voltage from the pin to vehicle ground.
(Voltage between pins means nothing for this evaluation).
Put the black lead of your voltmeter to vehicle ground.

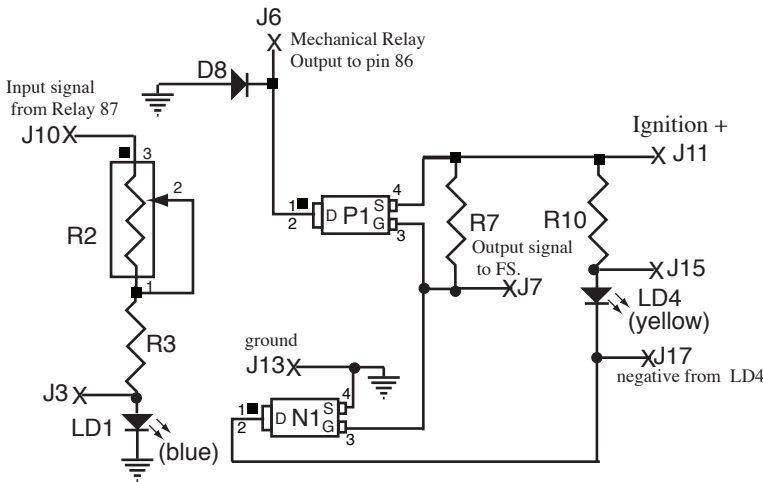
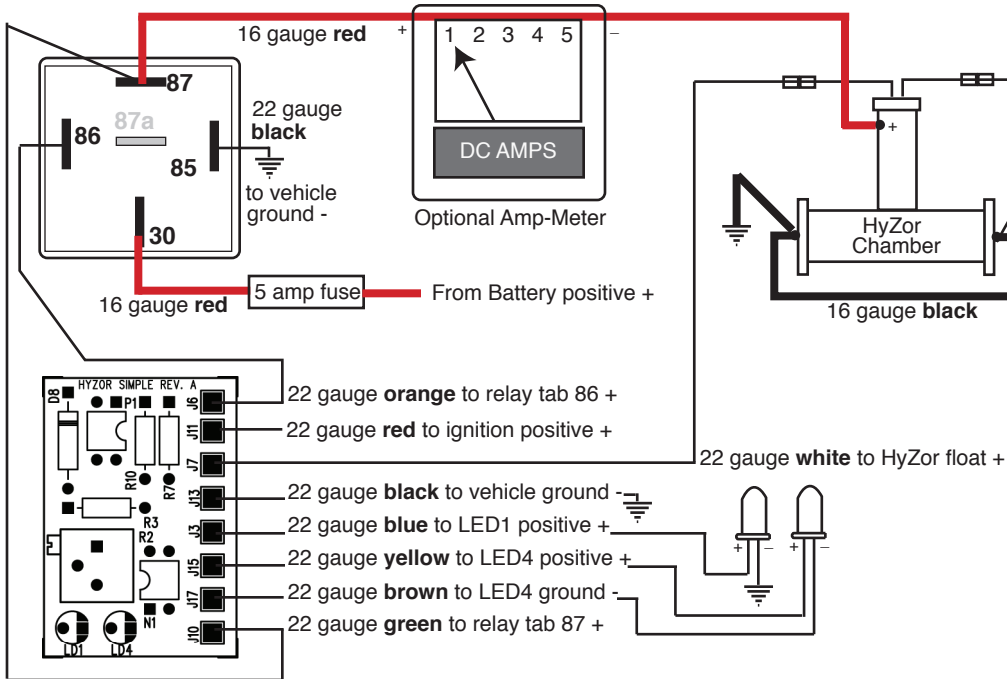
NA = Not Applicable for that component.

Testing Notes:

HyZor version C circuit board schematic

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Note: There are changes in the relay wiring on this schematic. Tabs 85 and 86 are switched from the HyZor Basic Kit assembly instructions because this is the standard wiring for this type of relay.

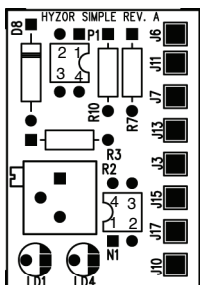


- N1 is a board mounted n-channel mosfet, IRFD014 (grounds (turns on) LD4 when J7 is high voltage)
- P1, is a board mounted p-channel mosfet, IRFD9014 (turns on ignition power to relay when J7 is low voltage)
- LD1 is a blue LED (indicates when HyZor is working.)
- LD4 is a yellow LED (indicates low HyZor liquid level)
- D8 is 1 amp, 1000 volt diode (wheeled diode, prevents relay CEMF voltage spike)
- R3 is 402 ohm (limits ultimate brightness of LD1)
- R10 is 402 ohm (controls brightness of LD4)
- R2 is a 50K multiterm pot, mounted flat, in the style of the EFIE. DigiKey #490-2870-ND, Murata #PV36P503C01B00 (allows dimming of LD1 for night driving)
- R7 is 1 meg ohm. (brings P1 gate positive to turn it off) (brings N1 gate positive to turn it on)

X indicates board input/output

J6 and J11 are 14 gauge, all other input/output are 18 gauge.

The T 1 3/4 case style LED's (1 & 4) are optionally board mountable or external.



■ 1 2 3 4
D P1 S G
P mosfet is a board mounted p-channel IRFD9014

■ 1 2 3 4
D N1 S G
N mosfet is a board mounted n-channel IRFD014

This simple board uses similar 'wire out' letters-numbers and component numbers as the original HyZor board. This allows simplification of our instructions and reduces confusion.