# **Bowl-Tronics Enterprises Incorporated**

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## **Solid-State Contactor BRC (SSRBRC A-2)**

### **Solid-State Contactor BRC Theory**

This solid-state contactor is designed to replace the main contactor relay and motor start relay in a Brunswick A-2 Chassis. Instead of using relay points the SSRBRC utilizes solid-state triac switching instead. This contactor will outlast any normal mechanical type contactor.

### **Installation Instructions**

Remember to remove power before performing any installation!!

### Removing the motor start relay.

Remove wire # 54 & 12 off the coil of the motor start relay and strip and twist them together. Cap the two wires with a closed end crimp connector. Remove wire # 18 & 35 off the coil of the motor start relay and strip and twist them together with an o-ring terminal connector. These two wires hook up to terminal # 1 on the low voltage terminal strip. See the wire diagram for details. Remove the old relay and wire # 33, 7, 41 and 16 from the machine chassis.

### Transformer wire hook up modification for eliminating the motor start relay.

Switch the black low voltage fuse wire on terminal # 9 with the orange or blue transformer wire that's going to terminal # 6. See wire diagram for details. The  $1^{st}$  and  $2^{nd}$  ball light reference is terminal # 1 and 7 for first ball and #1 and 8 for second ball.

#### **Installing the new SSRBRC contactor.**

Remove the old contactor and replace it with the new SSRBRC contactor. Follow the wire diagram for all your wire connections. The new circuit breaker is only used if you have a motor without a thermal overload or klixon breaker. To mount the new breaker punch a ½" hole in the bottom of you electrical chassis. The black wire from the breaker should already be plugged into the SSRBRC 3-OUT terminal. Crimp a new ½" female connector to the black wire coming from the motor socket and connect that wire to the other side of the breaker. If you don't need the breaker hook the black wire from the motor socket directly in to the 3-OUT terminal of the SSRBRC contactor. It is very important that all high voltage connectors be crimp on solidly. On a 208 VAC system H-5 from the transformer is hooked to 5-IN on the SSRBRC contactor. The wire from the pin deck light socket hooks to 6-OUT. Note!!!! On a 230 VAC system wire # 29 from the pin deck light socket hooks to 4-OUT. The H-5 wire from the transformer is not used. Wire # 40 from the rectifier and wire # 58 from the time delay module plugs into 3-OUT on the new SSRBRC contactor. The red and black wire coming from C-1 & C-2 on the new SSRBRC contactor hooks to terminal # 1 & 6 on the low voltage terminal strip.

### Checking installation to be sure all wire connections are correct.

Check all you're wiring to be sure it is correct before turning power back on!!!! Plug in the power cord and turn on the breaker there are two small relays on the contactor that remove the current from the triacs when the machine is running. The triacs do all the high current switching so there will never be any burning of these contact points of the small relays. You will be able to see them open and close when the machine is turned on or off.

For repair visit: www.bowl-tronics.com/service
Fill out our service request form and ship to the address that is shown.
Notes:

