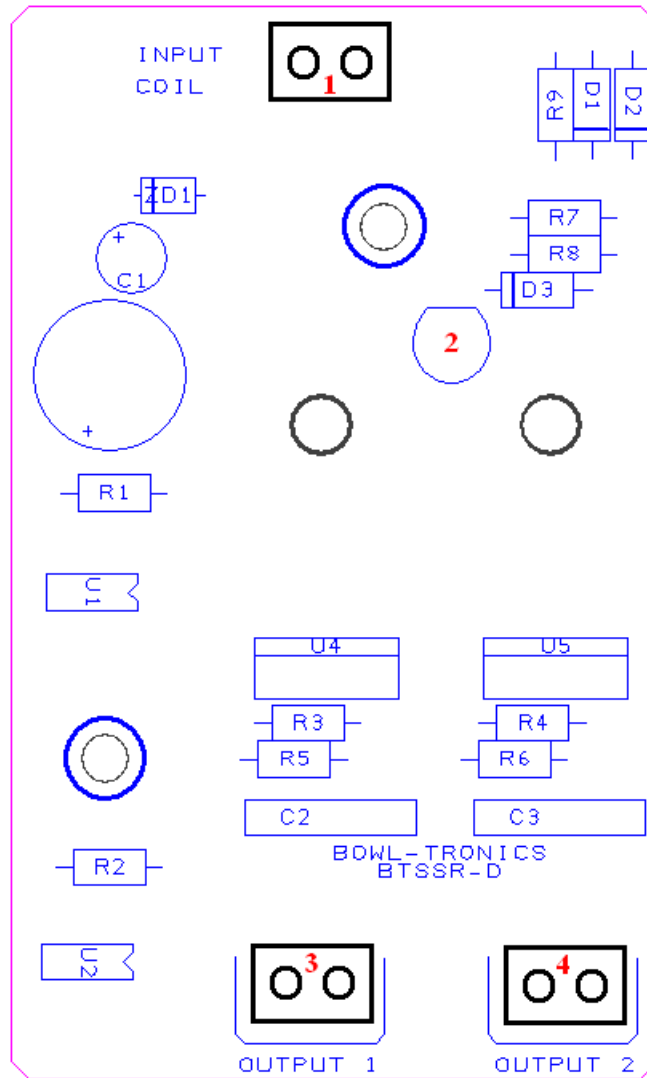


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## Solid-State Relay Manual (BTSSR-D)



### PC Board Layout Description Table BTSSR-D:

1. 24 VAC input coil terminal connector (Wires from old relay coil)
2. 24 VAC Diagnostic LED (When lit 24 VAC has been applied)
3. Output number 1 terminal connector (Relay points)
4. Output number 2 terminal connector (Relay points)

## **Solid-State Relay Theory**

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The solid-state relay works just like conventional contact closure relay but without the actual mechanical movement and arcing of relay points. A device called a TRIAC performs the contact closure for the solid-state relay and a device called an optocoupler resembles the coil of the relay.

## **Installation Instructions (BTSSR-D)**

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*Remember to remove power before performing any installation!!*

The (BTSSR-D) has many uses; it's a double pole relay that can handle up to a 1 AMP switching current @ 220 VAC per output. For example the (BTSSR-D) in a Brunswick "A" machine can be used as a reset relay and on an "A-2" machine a motor start relay.

## **Installation Instructions "A" Machine Reset Relay (BTSSR-D)**

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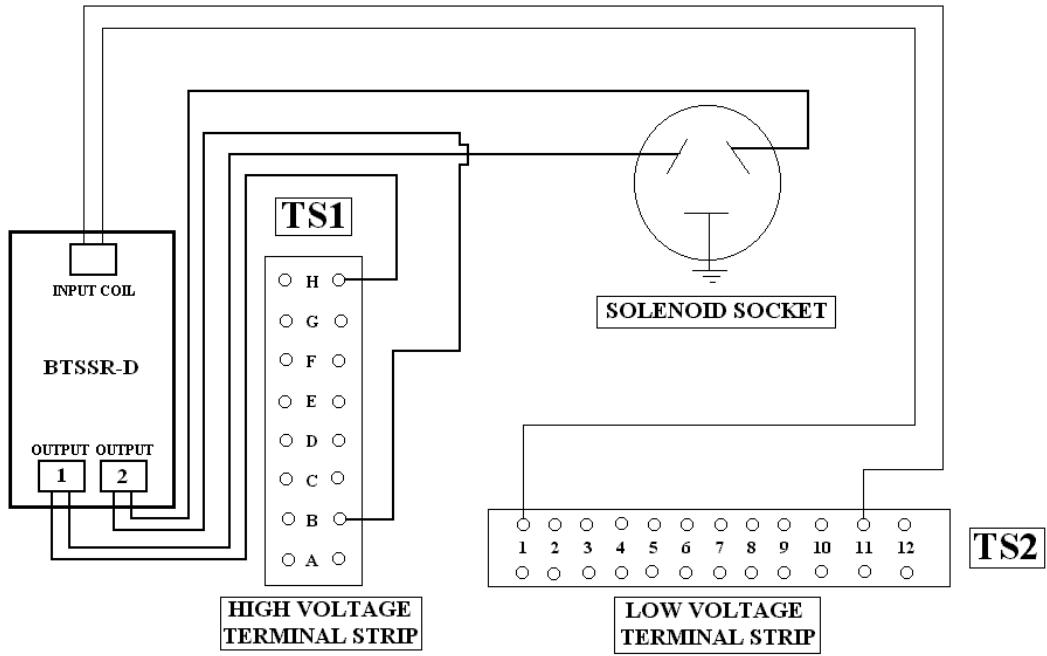
On an "A" machine as a reset relay, the wire coming from (TS2-9) will connect to one side of the input coil terminal connector. The wire coming from (TS2-11) will connect to the remaining side of the input coil terminal connector. The wire coming from terminal (H) will connect to one side of output terminal 1. The remaining side of output terminal 1 will connect to one side of the cycle solenoid socket. The wire coming from terminal (B) will connect to one side of output terminal 2. The remaining side of output terminal 2 will connect to the other side of the solenoid socket. *(See example on next page)*

## **Installation Instructions "A-2" Machine Motor Start Relay (BTSSR-D)**

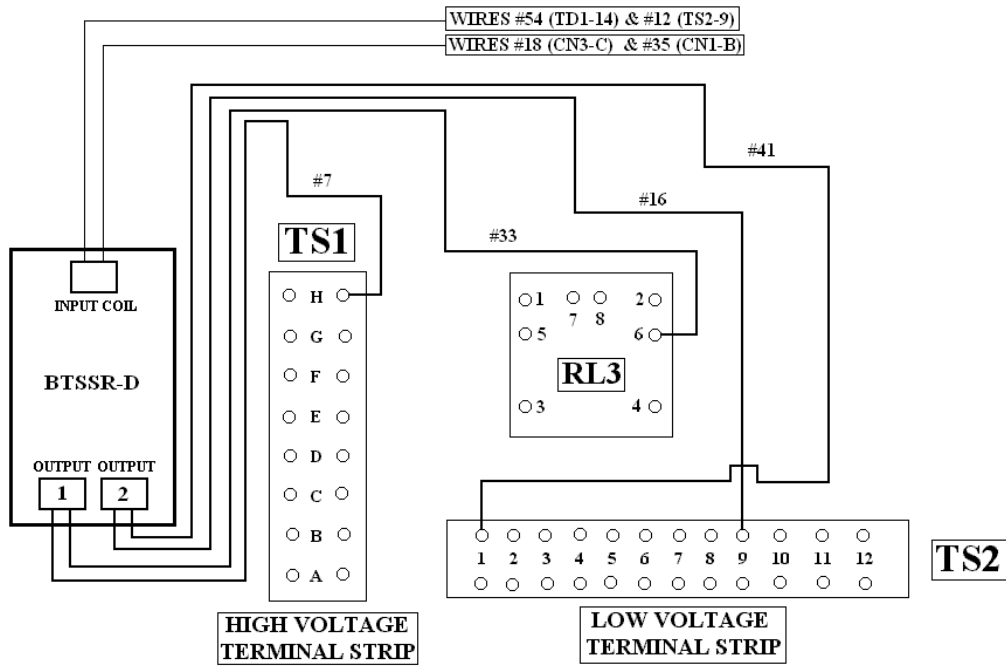
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On an "A-2" machine as a motor start relay, wire 54 (TD1-14) and wire 12 (TS2-9) connect to one side of the input coil terminal connector. Wire 18 (CN3-C) and wire 35 (CN1-B) connect to the remaining side of the input coil terminal connector. Wire #7 (TS1-H) will connect to one side of output terminal 1. Wire #33 (RL3-6) will connect to the remaining side of output terminal 1. Wire #16 (TS2-9) will connect to one side of output terminal 2. Wire #41 (TS2-1) will connect to the remaining side of output terminal 2. *(See example on next page)*



**"A" MACHINE**  
**EXAMPLE CIRCUIT**  
**RESET RELAY**



**"A-2" MACHINE**  
**EXAMPLE CIRCUIT**  
**MOTOR START RELAY**

**For repair visit: [www.bowl-tronics.com/service](http://www.bowl-tronics.com/service)**

**Fill out our service request form and ship to the address that is shown.**

**Notes:**

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