

SERVICE BULLETIN

SB98.6

Machines/Models: SL20 - Toggle Controls

**Serial Numbers:
8000-8192**

THIS BULLETIN IS MANDATORY.

DATE: June 9, 1998

PURPOSE: Install Relay Kit (#030891-000) and Keyswitch Kit (#030891-002) to cut off power to Valberg Controller while machine is not in operation.

OPERATION REQUIRED: Install Relay Kit (#030891-000) and Keyswitch Kit (#030891-002) per instructions below.

**PARTS REQUIRED: SL20 Relay Kit (# 030891-000)
SL20 Keyswitch Kit (# 030891-002)**

REIMBURSEMENT: Installation of Relay Kit and Keyswitch Kit will take approximately 2 hours. UpRight will reimburse the owner of record for up to 2 hours of labor at \$30.00 per hour and for travel (up to 100 miles) at \$0.25 per mile. Reimbursement will be made upon receipt by UpRight of your completed warranty claim form. Please reference SB98.6 on your warranty claim form.

SL20 Relay Kit (# 030891-000)

1. 4 ea. 029615-002 Relay Connector
2. 3 ea. 029610-002 Fork Connector
3. 2 ea. 026920-003 Butt Connector
4. 1 ea. 029456-099 Wire, 16 AWG Yellow-7 inches
5. 4 ea. 029620-002 Butt Connector
6. 1 ea. 029477-099 Wire, 16 AWG Org/Blk - 7 inches
7. 4 ea. 011240-001 Washer, #6 STD
8. 2 ea. 011248-047 Nut Hex Esna #6-32 x 3/4
9. 2 ea. 011715-006 Screw, RD HD MS #6-32 x 3/4
10. 1 ea. 063951-001 Relay DPST 12VDC
11. 1 ea. 029825-002 Diode, 3 Amp
12. 1 ea. 029479-099 Wire, 16 AWG Wht/Blk - 7 inches
13. 1 ea. 029453-099 Wire, 16 AWG Orange - 7 inches
14. 50 ea. 15 1/2" Black Tie Straps

PROCEDURE: Read all instructions thoroughly and refer to figures 1 through 5 before starting.

1. Remove the negative wire from the battery terminal.
2. Remove the four screws from the top cover of the upper controls, and remove cover.
3. Cut off the existing butt connection that connects the white wire from the footswitch and the white wire from the blue cable.
4. Splice together the orange wire of the blue cable and the white wire of the footswitch to the 3-amp diode (#029825-002) using butt connector (#026920-003). (The grey striped end of the diode should be facing the connection of the white and orange wires). Figure 2.
5. Connect the other end of the diode to the white wire from the blue cable using butt connector (#026920-003).

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If you have any questions regarding this Service Bulletin, please contact the UpRight Product Support Department by telephone at (800) 926-5438 from within the USA or at (200) 891-5200 from outside the USA or by FAX at (200) 891-5211.

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PROCEDURE: (Continued) Read all instructions thoroughly and refer to figures 1 through 5 before starting.

6. Replace the top cover and fasten the four screws onto the control box.
7. Remove control module cover and open the swing door.
8. Fix the supplied relay (#063951-001) to the side of the tray using two 6-32 x 3/4" screws (#01175-006), two 6-32 x 3/4" hex nuts (#011248-047), and four washers (#011240-001). Drill one 9/64" diameter holes 5 1/2" from the side of the module and 1/2" down from the top of the module. Drill another 9/64" diameter hole 1 1/2" below the first hole. Figure 1.
9. Cut off the orange, wht/blk, and org/blk wires from the blue control cable connector attached to the lower control box. See figure 2. Leave approximately two inches from the end of the connector.
10. Connect the ends of the wht/blk and org/blk wires (lower control connector side) together using butt connector (#029620-002).
11. Attach the supplied org/blk wire (#029477-099) to the org/blk wire control cable end that was cut in step 9 using butt connector (#029620-002). Figure 2.
12. Attach the supplied wht/blk wire (#029479-099) to the wht/blk wire control cable end that was cut in step 9 using butt connector (#029620-002). Figure 2.
13. Attach the supplied orange wire (#029453-099) to the orange wire control cable end that was cut in step 9 using butt connector (#029620-002). Figure 2.
14. Attach the orange wire of the blue cable from platform controls to terminal B on the relay using relay connector (#029615-002). Figure 4.
15. Remove the red wire from the E-stop, which runs from the E-stop to the keyswitch.
16. Attach the wht/blk wire from the blue cable from platform controls to the open slot of the E-stop using fork connector (#029610-002).
17. With the red wire that was removed from the E-stop in Step 15, connect it to terminal A on the relay using relay connector (#029615-002).
18. Attach the org/blk wire from the blue cable from platform controls to the red wire connection on the keyswitch using fork connector (#029610-002).
19. Remove the wht/red wire on the keyswitch and attach it to terminal 5 on the relay using relay connector (#029615-002).
20. Attach one end of the supplied yellow wire (#029456-099) to the open slot on the keyswitch using fork connector (#029610-002) and fix the other end to terminal 3 on the relay using relay connector (#029615-002).
21. Fasten the lower control box wires with tie straps. Allow a bit of slack in the pigtail harness.
24. Replace the negative wire to the battery terminal.
25. Perform function test by turning keyswitch to platform position. The red light on the Valberg control box should not be illuminated.
26. Depress footswitch light should illuminate and all operations should function.

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Installation Instructions for Keyswitch

Parts Required: Keyswitch Kit (#030891-002)

1. 2 ea. 029610-002 Fork Connector
2. 2 ea. 029620-003 Butt Connector
3. 1 ea. 029452-099 16 AWG wire black x 4 inch
4. 1 ea. 029454-099 16 AWG wire red x 4 inch
5. 2 ea. 066805-010 N/O Contact Block, GE
6. 1 ea. 101221-000 Keyswitch

Procedure: Read all instructions thoroughly and refer to figures 1 through 5 before starting.

1. Remove all four wires that are connected to the existing keyswitch. (yellow, red, black, blk/red).
2. Unscrew the nut which fastens the body of the switch to the side flange. Remove switch.
3. Remove the new switch (# 101221-000) from package. Fasten the two contact blocks (# 066805-010) to port 1 and port 2 of the switch contact block.
4. Cut off the blue cable org/blk wire 4 inches from the end of the terminal. Figure 5.
5. Prepare the ends of the included black wire (#029452-099). Using the large butt connector (#029620-003), connect this wire and the 4 inch cut off wire to the end of blue cable org/blk wire. Figure 5.
6. Fix the org/blk wire to terminal 4 on left contact block and fasten the black wire to terminal 4 of the right contact block. Figure 5.
7. Take the red wire that was removed from the previous keyswitch and cut it 4 inches from the end of the fork terminal.
8. Prepare the ends of the included red wire (#029454-099). Butt connect one end of this wire and the 4 inch cut off wire to the end of the red wire that connects to terminal 4 on the relay using large butt connector (#029620-003). Figure 5.
9. Fix one end of the red wire to terminal 4 on left contact block and fasten the other red wire to terminal 4 of the right contact block.
There should now be a red wire connected to terminal 4 on both contact blocks and an org/blk wire connected to the left terminal 4 and a black wire to right terminal 4.
10. Fasten the end of the yellow wire that was removed from the previous keyswitch to terminal 3 on the left contact block. This contact block supplies power to the platform.
11. Fasten the blk/red wire to terminal 3 on the right contact block. This supplies power to the Chassis functions.
12. Insert the keyswitch body from outside the control tray. Thread the fastening screw hand tight plus 1/2 turn. Align the switch so the key is in the 6 o'clock position, which is the OFF position.

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13. Snap on the switch contact block to the end of the keyswitch.
14. Replace negative battery terminal.
15. Turn switch to the 8 o'clock position. Test the machine function from the chassis controls. The switch must be actuated while lifting and spring back to the off position when disengaged.
16. Switch the key to the 4 o'clock position. It will lock into place and platform functions are now available. The footswitch/joystick trigger will actuate the platform function.
17. If no functions are occurring, swap the contact block from port 1 to port 2 and vice versa. Retest for platform and chassis function.
18. If machine does not perform as described, please contact the UpRight Product Support Department by telephone at (800) 926-5438.

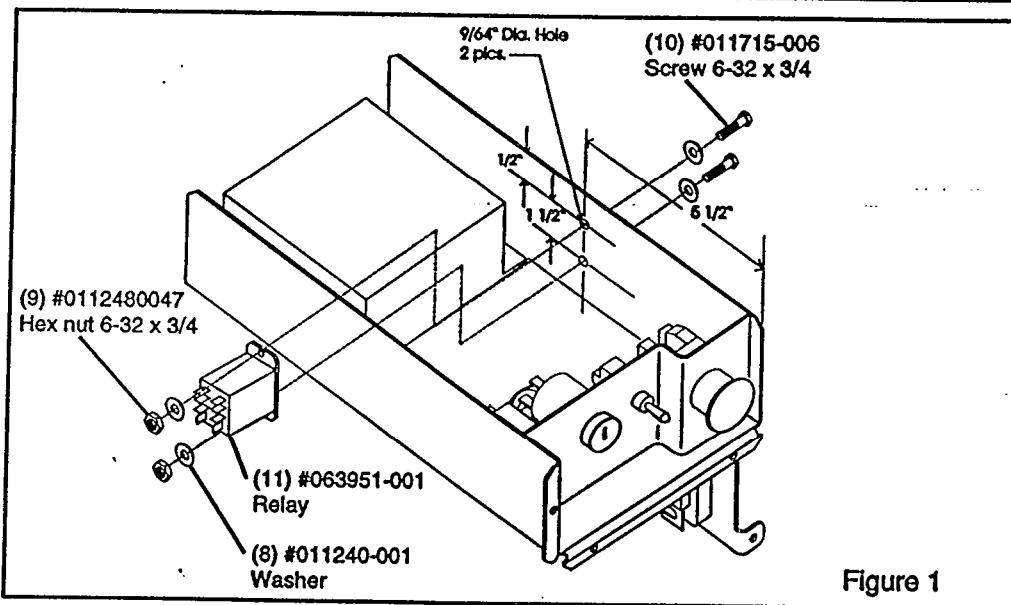


Figure 1

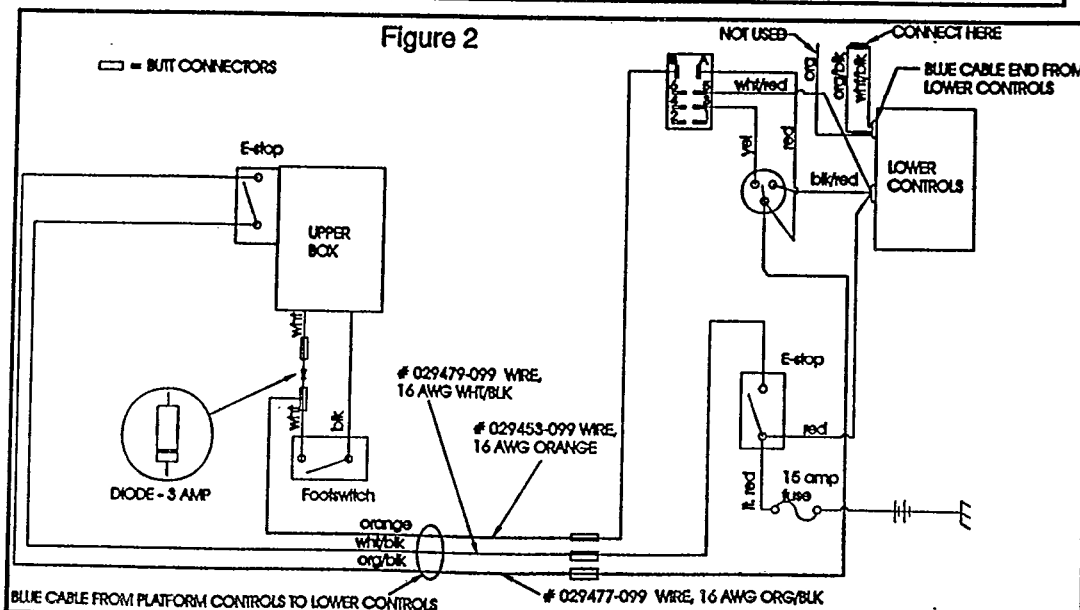


Figure 2

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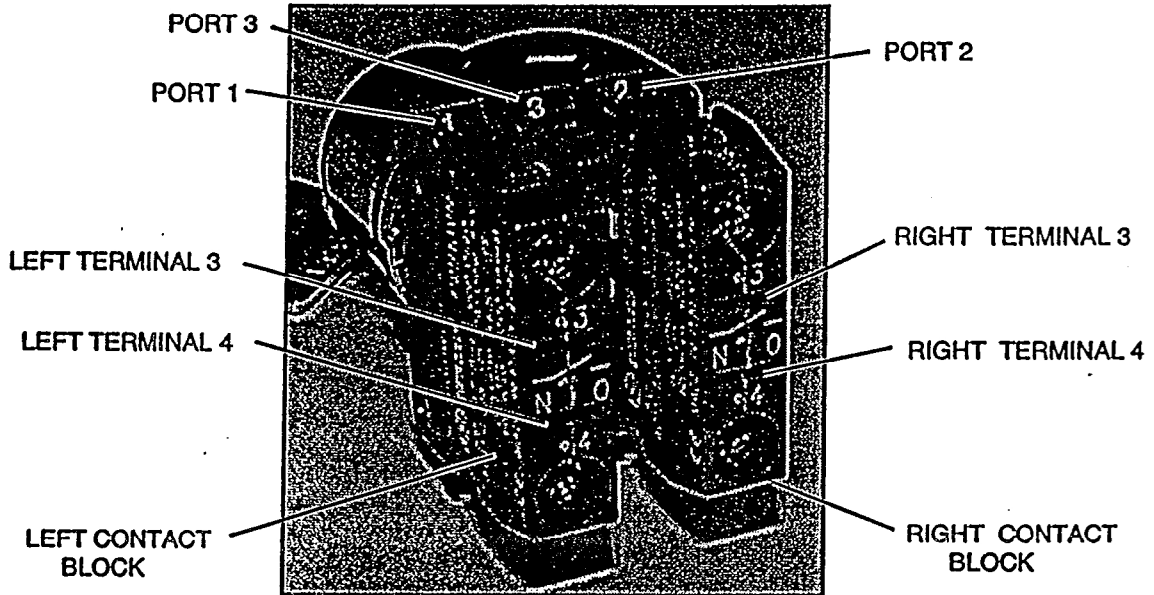


Figure 3 - Contact Block

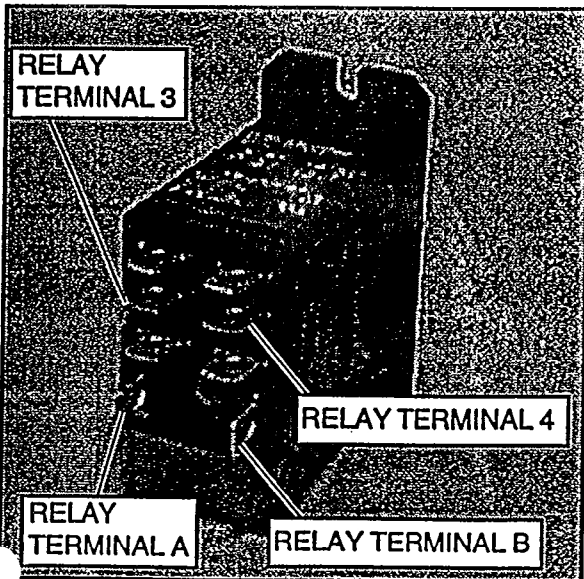


Figure 4 - Relay

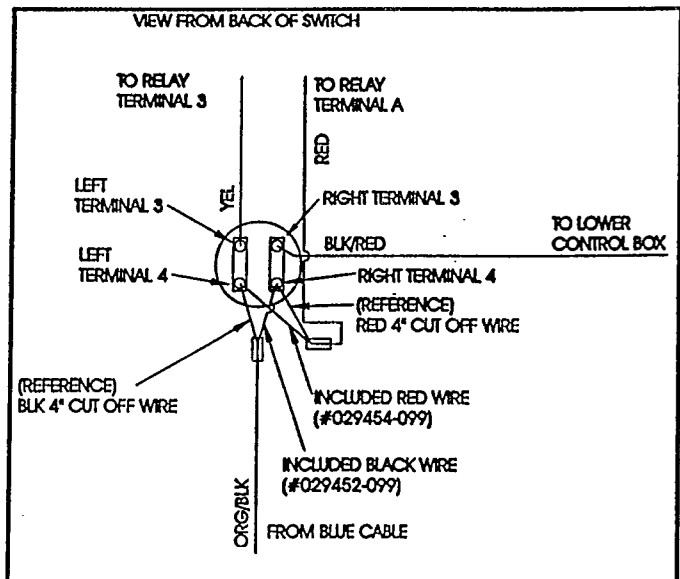


Figure 5

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