

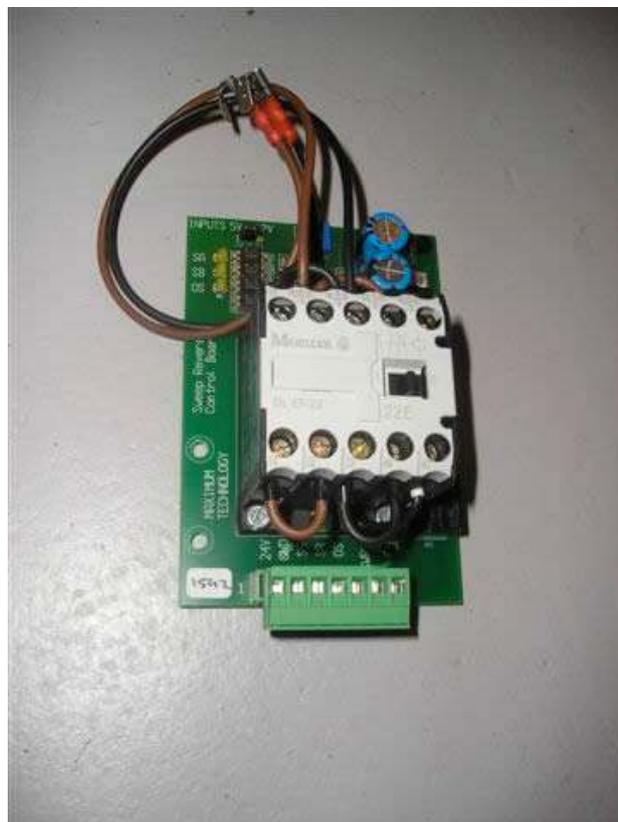


MAXIMUM TECHNOLOGY

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Professional Bowling Products

Installation manual Automatic Offspot Switch



Bowling produkten?.....Maximum Technology!

Besturingskasten voor AMF, Brunswick en alle merken touwmachines. Universele Foutlijn Units. Elektronische motorstarters voor AMF motoren. Elektronische Triggering. Tafel-, Sweep- en Back End Motoren voor AMF machines. Time Delay Modules met of zonder Elektronische Triggering. Reparatie van en onderdelen voor vrijwel alle bowling elektronica.



Remove the powerplug before you start working on the machine!

Step 1: Install the PC Board

Open the Back End Controlbox and remove the two screws that hold the righthand side of the wireway that goes to the front of the machine. Mount the PC Board in the Back End Controlbox with the two screws and spacers from the installation kit. See photo.



Step 2: Pull cable to camswitches

Remove the covers from the wireway that goes to the front of the machine. Remove the covers from the channel on the front of the machine. On a LH machine, you will have to remove the chassis before you can open the channel.

Connect the green plug of the cable assembly to the PC Board. Pull the other side of the long cable through the wireway to the front of the machine.

Step 3: Connect Sweep Reverse switch.

Remove the wire from the centre terminal on the lefthand side of the Sweep Reverse switch and connect this wire to terminal 22 on the bottom of the contactor on the PC Board (second from the left). Connect the wire from terminal 21 (second from the left) on the top of the contactor on the PC Board to the centre terminal on the lefthand side of the Sweep Reverse switch.

Remove the wire from the centre terminal on the righthand side of the Sweep Reverse switch. Connect this wire to terminal 32 on the bottom of the contactor on the PC Board (third from the left). Connect the wire from terminal 31 (third from the left) on the top of the contactor on the PC Board to the centre terminal on the righthand side of the Sweep Reverse switch.

Step 4: Connect Sweep Run Switch.

Connect the black wire from terminal 6 of the green plug to the centre terminal on the right hand side of the Sweep Run Switch. Connect the black wire from terminal 7 of the green plug to the lower terminal on the right hand side of the Sweep Run Switch. Leave the existing wires in place.

Step 5: Connect the power supply to the PC-Board.

Connect the yellow wire from terminal 1 of the green plug (24VAC) to the wire that connects the Sweep and Table switch in the Back End Controlbox. Leave the existing wires in place.

Connect the green wire from terminal 2 of the green plug (GND) to the terminal strip with all the green groundwires on the right hand side on the bottom of the Back End Controlbox.

Step 4: Connect the camswitches.

Connect the grey 'offspot wire' to terminal TS-29. Connect the brown 'SA wire' to TS-31. Connect the black 'SB wire' to TS-16. Leave all the existing wires in place.

Step 5: Test the connections.

Put all the covers back on the wireway and the channel. Remove the motorplugs from Sweep and Table motor. Connect the mainpower to the machine and switch it on.

Pull the SA switchlever away from the switch and check if the yellow LED for the SA input lights up. If not, check the SA wire on TS-31.

Pull the SB switchlever away from the switch and check if the yellow LED for the SB input lights up. If not, check the SB wire on TS-16.

Push the Offspot Switch lever away from the switch and check if the yellow LED for the OS input lights up. If not, check the OS wire on TS-29.

If all inputs are OK you can test the automatic Sweep Reverse function.

Step 6: Check the machine with out of range pin.

Place a pin on the deck where it will cause an out of range machine cycle. Make sure the machine is on 1st ball. Press the cycle button. The table will hit the out of range pin and goes up to zero. The sweep will go up in reverse and stop on its highest point. The machine is now ready for the second ball.

There is an adjusting screw on the PC-Board to adjust the stop position of the sweep. The stop position of the sweep is determined by the adjustment of the offspot switch and the speed of the table and sweep motor. If the sweep stops before it reaches its highest point, turn the adjusting screw a little bit to the right. If the sweep goes up and keeps running until it reaches guard position, turn the adjusting screw a little bit to the left. Repeat the testprocedure.

The Maximum Technology Automatic Offspot Switch has a jumper to select the input voltage. This is factory set to 12 Volt DC for most single board chassis (5-board, MP or similar). If the Automatic Offspot Switch does not bring up the sweep to zero, check if the yellow LED's on the PC-Board lights up properly. If not, move the jumper to the left and repeat the testprocedure.

If the sweepmotor runs in reverse after installing the automatic offspot switch, swop the two wires that you connected to the centre terminals of the sweep reverse switch. This will change the sweepmotor back to it's normal running direction.

