www.maximum technology.nl

**Professional Bowling Products** 

# Installation manual Solid State Motor Startswitch

For General Electric motors.



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.

# Step 1: Open the motor.

Unscrew the motorplug housing and lift up the motorcover.

#### **Step 2: Connect the new Startswitch.**

Remove the red wire from the top of the old switch by taking off the wirenut. Remove the rest of the red wire from the old switch by cutting it off the terminalboard. Connect one of the black wires of the new startswitch to the red wire that goes into the motor. Connect the other black wire to terminal 1 on the terminal board. Leave the existing wires in place.

Connect one of the brown wires of the new startswitch to terminal 2 on the terminalboard. Connect the other brown wire to terminal 3 on the terminal board. Leave all the existing wires in place.

## Step 3: Complete the installation.

Mount the wires of the startswitch to the motorcover with a cable ty, preventing the wires from being damaged by the moving parts of the motorshaft. Put the motorcover back on the motor. Put the wires of the startswith in the opening between motorplug housing and motorcover. Tighten the screws of the motorplug housing. Put the plug in the startswitch and mount it on the side of the motor with the velcro tape.

### **Step 4: Test the motor on the machine.**

Before you put the motor on the machine, it is recommended that you remove the centrifugal mechanism from the motorshaft. When the mechanism gets older, some parts might fall into the motor and cause damage to the motor windings!

Mount the motor on the machine and check if it runs O.K. If the startswitch is installed properly, the motor should start up in both directions, without any changes in the machine wiring.

Bad electrical components can be the cause of many motor problems. If the motor will not start up properly please check the following:

Motorcables, pins in the C1 plug on chassis and C1 cable assembly, start capacitors in the channel and sweep and table contactors in the chassis.

#### P.S

The Maximum Technology motor startswitch is the only solid state motor startswitch that does not require any changes in the machinewiring to keep the sweep reverse function. Motors with Maximum Technology startswitch are interchangable with every other motor of that type. It can be used on every machine in your centre, even if the machinewiring has been converted for other types of startswitches.

Every time the motor starts up you will see a green light in the plug of the startswitch. This is the light of a green LED that indicates that the motor is getting power to start up.

