

NEVCO SCOREBOARD COMPANY

End-of-Life
Disassembly Instructions

INTRODUCTION

This information is intended for use by end-of-life recycler or treatment facilities. It provides basic instructions for the disassembly and recycling of products manufactured by NEVCO SCOREBOARD COMPANY.

Recyclable Materials

Nevco Scoreboard Company has determined that all recyclable disassembled materials may be separated into the following material types.

Metals	Cabinets, enclosures, plated, brackets, transformers, screw/nut/washer hardware.
Wiring	Input cables, internal wiring harness, internal data and power interconnects.
Plastics	Enclosures, plates, connectors, cover plates.

Contains Hazardous Materials (non-recyclable)

Nevco Scoreboard Company has determined that all components that contain hazardous materials (non-recyclable) may be separated into the following material types.

Printed circuit assemblies	Primary/secondary logic, intelligent power modules, power supplies, display boards.
Batteries	

Tools Required for Disassembly

Flat blade screwdriver.....	Medium
Phillips screwdriver.....	Medium
Torx screwdriver.....	T-20
Nut driver.....	1/4"
Wire cutters.....	
Long nose pliers.....	
Adjustable wrench.....	Medium
Power drill.....	
Drill bit.....	1/8"

INDOOR SCOREBOARDS:

Standard Indoor LED scoreboard Models:

1. Disconnect power.
2. Remove the power cord. (If applicable)
3. Unplug all cables and remove the electronic module. Use a screwdriver to remove the cover and reveal the printed circuit assembly inside.
4. Each LED bank consists of several printed circuit cards. Use your finger and thumb to release and remove each LED bank cover. Unplug all cable harnesses and remove the circuit cards.
5. Remove all LED banks by drilling out the pop rivets that hold the LED bank pans in place.
6. Remove the buzzer type horn(s) and the resistor(s) located on one of the “bonus” shadowboxes.
7. Remove all caption plates, incandescent lamps and sockets.
8. Remove all remaining cables and harnesses.
9. Remove the transformer located in the lower right section of the scoreboard, as you face the front of it.

Standard Indoor incandescent scoreboard Models:

1. Disconnect power.
2. Remove the power cord. (If applicable)
3. Open the module access door located on the front of the scoreboard. It will have the word PERIOD on it. On some models this door is on a hinge and is held shut with two _ turn fasteners. On others the word PERIOD is on a plate that slides horizontally.
4. Each lamp bank consists of several lamps, sockets, and 1 or more large resistor. Drill out the pop rivets that secure the lamp bank in the scoreboard cabinet. Pull the lamp bank out thru the face of the scoreboard.
5. Remove the buzzer type horn(s) and the resistor(s) located on the top of one or both of the “bonus” shadowboxes.
6. Remove all caption plates, incandescent lamps and sockets.
7. Remove all remaining cables and harnesses.
8. Remove the transformer located in the lower right section of the scoreboard, as you face the front of it. (If applicable)

Shot Clock Model SCD-5:

1. Disconnect power.
2. Remove the power cord. (If applicable)
3. Remove the 24 screws that hold the plastic perimeter edge molding in place. Pry the molding off and separate the front, back, and edge components.
4. Remove the screws that hold the cover over the LED segments and remove it. Remove the printed circuit display assemblies.
5. Remove the electronic module and horn assembly from its compartment. Remove the screws and cover from the module to reveal the printed circuit assembly.
6. Remove all remaining cables and harnesses.
7. Remove the transformer located in the bottom of the shot clock cabinet.

Shot Clock Model S60-LED:

1. Disconnect power.
1. Remove the power cord. (If applicable)
2. Remove the screws from around the edge of the shot clock that hold the front and back together. Separate the two halves to reveal the printed circuit assembly, horn, and transformers.
3. Remove all remaining cables and harnesses.

Shot Clock Model S60:

2. Disconnect power.
3. Remove the power cord. (If applicable)
4. Remove the screws from around the edge of the shot clock that hold the front and back together. Separate the two halves to reveal the wiring, resistors, horn, and transformers.
5. Remove all remaining cables and harnesses.

Indoor Portable Models 200, 230:

1. Disconnect power.
2. Remove the power cord. (If applicable)
3. An electronic module is located behind a panel on the back of the scoreboard. Two screws at one end of the panel hold it in place. Remove the cover, unplug all the cables, and remove the module. Remove the screws and module lid to reveal the printed circuit assembly.
4. Drill out the pop rivets that hold the plastic perimeter edge molding in place. Pry the molding off and separate the front, back, and edge components.
5. Remove the screws that hold the cover over the LED segments and remove it. Remove the printed circuit display assemblies.
6. Remove all remaining cables and harnesses.
7. Remove the transformer(s) located in the lower section of the scoreboard.

OUTDOOR SCOREBOARDS

Standard outdoor LED scoreboard Models:

1. Disconnect power.
2. Open the large Module (Electronics) access door(s) usually located on the back of the scoreboard.
3. Unplug all cables from, and remove the electronic module. Use a screwdriver to remove the cover and reveal the printed circuit assembly inside.
4. Unplug all cables from, and remove the power supply(s).
5. Each LED bank has a printed circuit card on the back side of it. Use a screw driver to remove each LED bank. Unplug all cable harnesses and remove the circuit card.
6. Drill out the pop rivets that hold the solid state horn and its shadow box in the scoreboard, and pull the assembly out thru the face of the scoreboard. Remove 2 screws and the gray cover from the horn to reveal the printed circuit assembly inside.
7. Remove all remaining cables and harnesses.
8. Remove all caption plates.

Standard outdoor incandescent scoreboard Models:

1. Disconnect power.
2. Open the large Module access door(s) usually located on the back of the scoreboard.
3. Unplug all cables and remove the module(s) and the Line Driver (If applicable). Use a nut driver to remove the cover(s) and reveal the printed circuit assembly(s) inside.
4. Each lamp bank consists of several lamps, sockets, and 2 or more large resistors. Drill out the pop rivets that secure the lamp bank in the scoreboard cabinet. Pull the lamp bank out thru the face of the scoreboard. Drill out the pop rivets and remove the shield from the back of the lamp bank.
5. Drill out the pop rivets that hold the solid state horn and its shadow box in the scoreboard, and pull the assembly out thru the face of the scoreboard. Remove 2 screws and the gray cover from the horn to reveal the printed circuit assembly inside.
6. Remove all caption plates, incandescent lamps and sockets.
7. Remove all remaining cables and harnesses.

ULTRA SCORE Portable:

The ULTRA SCORE Portable is a sealed unit and is not designed to be taken apart. To disassemble follow these steps:

1. Remove the battery from its compartment on the back of the scoreboard, in the center, near the bottom.
2. Remove the battery charger from its compartment on the back of the scoreboard, in the top right corner as you face the back of the scoreboard.
3. Remove the buzzer type horn.
4. Cut and/or pry the scoreboard cabinet apart as needed to recover the 9 printed circuit assemblies inside.

CONTROLS

2-MC (metal)

1. Be sure NO power is applied to the control.
2. Remove the 4 screws (2 on each side) that hold the top and bottom of the control together.
3. Separate the top of the control from the bottom.

MPCN, MPC-2, MPC-3, or MPC-4 (plastic)

1. Be sure NO power is applied to the control.
2. Remove the 4 screws (2 on each side) that hold the top and bottom of the control together.
3. Separate the top of the control from the bottom.
4. If the control has a display, remove it from the top by separating the Velcro fasteners at each end of the display.

MPC-5, MPCW-5, MPC6, or MPCW-6 (plastic)

1. Be sure NO power is applied to the control.
2. Remove the 6 screws (2 on the top under the overlay and 4 on the bottom) that hold the top and bottom of the control together.
3. Separate the top of the control from the bottom.
4. Remove 4 screws that hold each key pad to the under side of the control top.
5. Remove the nuts from the output connectors on the back of the bottom to free the PC card at the back of the control.

MPCH, MPCHA

1. Open the battery compartment and remove the 4 AA batteries.
2. Remove the 4 screws from the back of the control and separate the housing to reveal the printed circuit assembly.
3. Remove the overlay and 4 small screws to release the printed circuit assembly.

ULTRA SCORE

1. Open the battery compartment and remove the 2 AA batteries.
2. Remove the screws from the back of the control and separate the housing to reveal the printed circuit assembly.

OTHER COMPONENTS OR ACCESSORIES:

Receivers

1. Remove power
2. Remove the screws and cover to access the printed circuit assembly.

Hand Held Switches (Older -1 type)(TCS-1)

1. Pry the grommet out of the housing and slide it down the cable.
2. Pry the mechanical switch/switches from the housing. NOTE: some switches may include electronic components)

Hand Held Switches (-5 type)(TCS-5)

1. Disconnect all cables.
2. Remove 3 screws and the bottom of the hand held switch.
3. The mechanical switch has been soldered to the printed circuit assembly after it was installed into the housing. You will need to break the housing, the switch, or unsolder the switch in order to remove the printed circuit assembly.