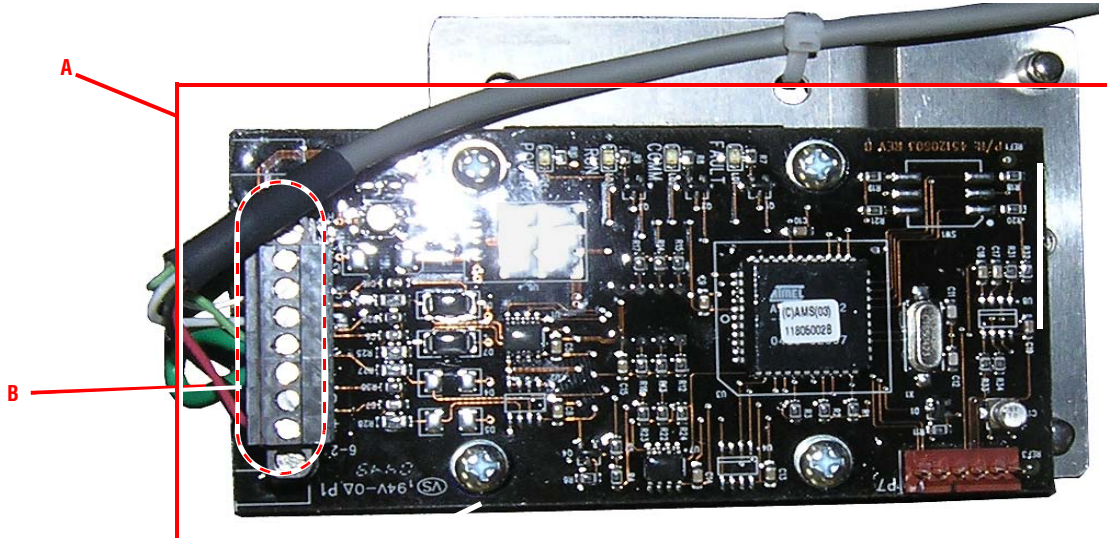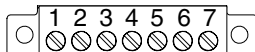# Light Sensor Board (pn 1175-9008SP)

1.1   Description

The light sensor board (pn 1175-9008SP) is used to control the dimming of the sign's LEDs. This light sensor is used in the AlphaEclipse RoadStar signs and the AlphaEclipse StreetSmart signs.

Item	PCB Label	Description
A		Light sensor board.
B	P1	Light sensor board terminal connector: **P1** 1 2 3 4 5 6 7 • Pin 1 = nc • Pin 5 = TERMINATION • Pin 2 = SHIELD • Pin 6 = GND • Pin 3 = RS485 (+) • Pin 7 = +5VDC • Pin 4 = RS485 (-) NOTE: If the light sensor board must be terminated, connect pins 4 and 5.

1.2   Sign Identification

This light sensor is used in both the AlphaEclipse RoadStar signs and the AlphaEclipse StreetSmart signs.

- The AlphaEclipse RoadStar signs have large louvers (see below). If you have an AlphaEclipse RoadStar sign see "AlphaEclipse RoadStar sign installation instructions" on page 3.

Alpha Eclipse Road Star Sign

(side view)

- The AlphaEclipse StreetSmart signs have small louvers (see above). If you have an AlphaEclipse StreetSmart sign see "AlphaEclipse StreetSmart sign installation instructions" on page 5.

Alpha Eclipse StreetSmart Sign

(side view)

1.3   AlphaEclipse RoadStar sign installation instructions

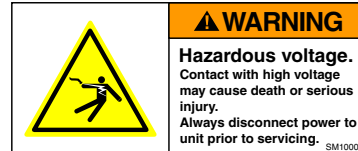| **1**	**Prevent electrostatic discharge (ESD) or "static" damage to the replacement part.**	

- For safe handling of ESD-sensitive parts, see TechMemo #00-0005.

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE DEVICE

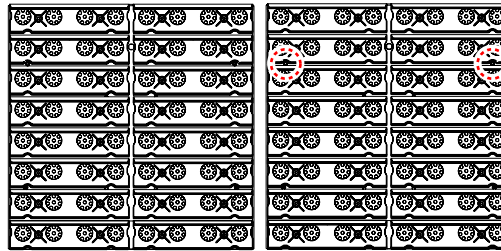| **2**	**Remove power from the sign AT THE SOURCE.**

NOTE: All power switches must be in the off position to remove power from the sign. On a two or more-line sign, lines one, three and five have power switches that must be turned off prior to servicing.

⚠ WARNING
Hazardous voltage.
Contact with high voltage
may cause death or serious
injury.
Always disconnect power to
unit prior to servicing. SM1000A

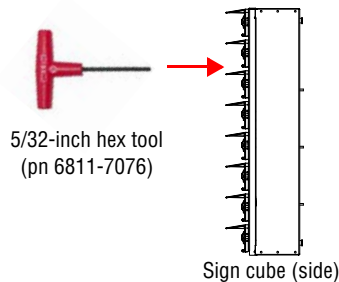| **3**	**To access the light sensor board, open the 8x8 (or 8x7) *right* side sign door of the control cube:**

- Locate the two door locks (circled) on the *right* side sign door of the control cube:
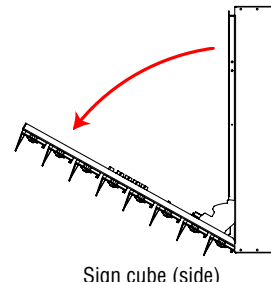
Left sign door (front)   Right sign door (front)

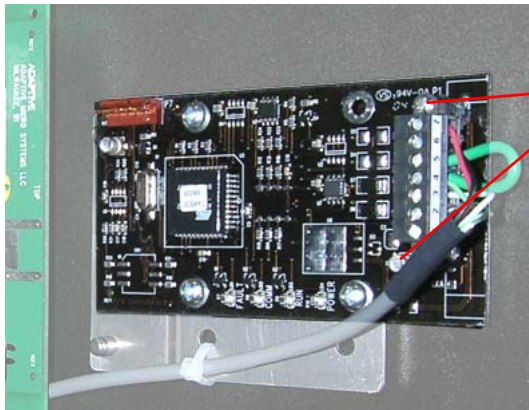- Use a 5/32-inch hex tool to open each door lock.

5/32-inch hex tool
(pn 6811-7076)
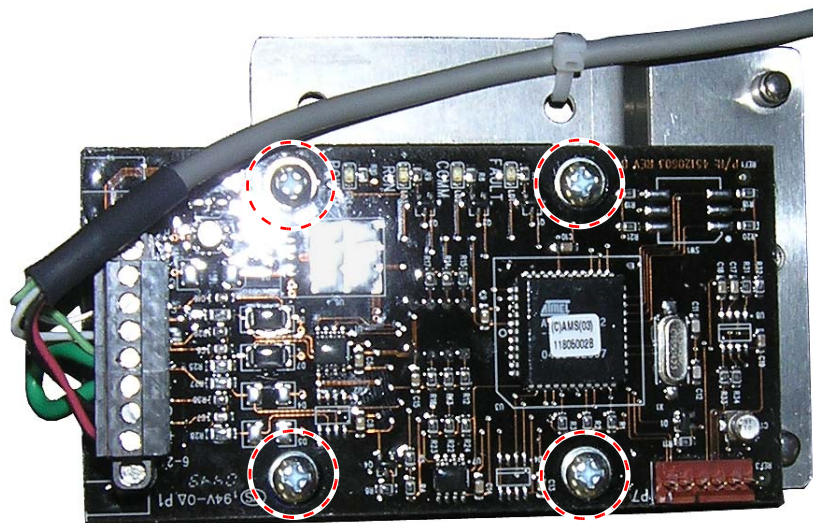
Sign cube (side)

- Carefully pull the door back.

Sign cube (side)

4	**Remove the light sensor board terminal connector.**

Remove the two screws on either end of the terminal connector.

Then detach the terminal connector from the light sensor board.

5	**Remove the screws (circled) that hold the light sensor board to the sign door. Then remove the board from the sign.**

Light sensor board (top view)

6	**Install the new light sensor board.**

- Using the screws that were just removed, attach the replacement light sensor board to the sign door.

- Reattach the terminal connector to the light sensor board.

7	**Close the sign door and tighten hex screws.**

8	**Apply power to the sign.**

1.4   AlphaEclipse StreetSmart sign installation instructions

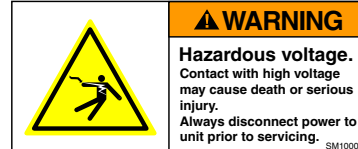**1** | **Prevent electrostatic discharge (ESD) or "static" damage to the replacement part.**

- For safe handling of ESD-sensitive parts, see TechMemo #00-0005.

ATTENTION
OBSERVE PRECAUTIONS
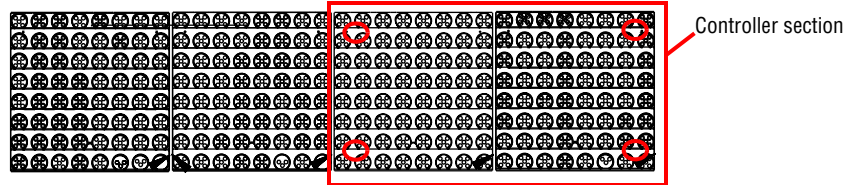**ELECTROSTATIC**
SENSITIVE DEVICE

2 | **Remove power from the sign AT THE SOURCE.**

NOTE: All power switches must be in the off position to remove power from the sign. On a two or more-line sign, lines one, three and five have power switches that must be turned off prior to servicing.
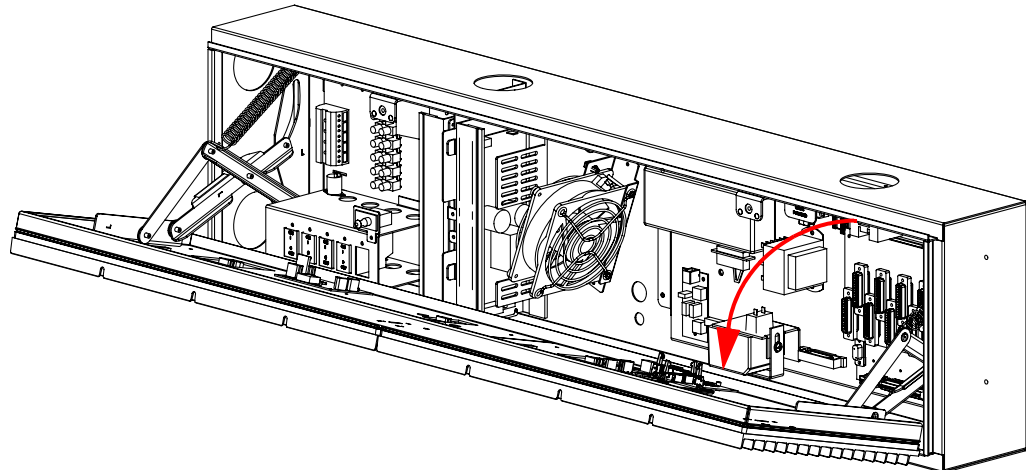
⚠ WARNING
Hazardous voltage.
Contact with high voltage may cause death or serious injury.
Always disconnect power to unit prior to servicing. SM1000A

3 | **The light sensor is located in the controller section of the sign, on the sign door. When viewed from the front, the controller is located in the lower rightmost section of the sign. Locate and remove the hex screws (circled below).**
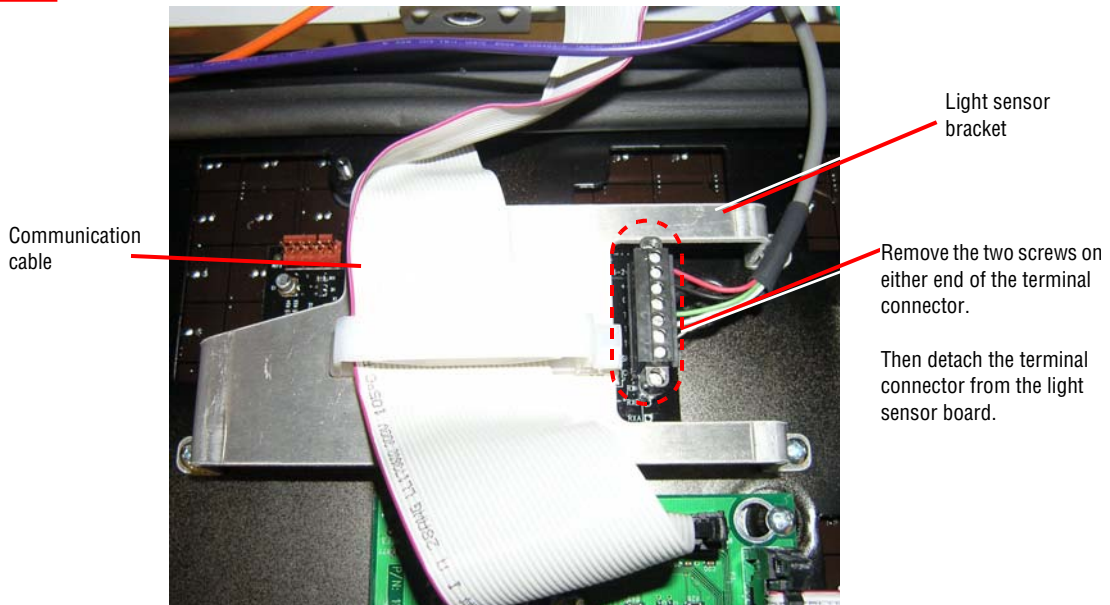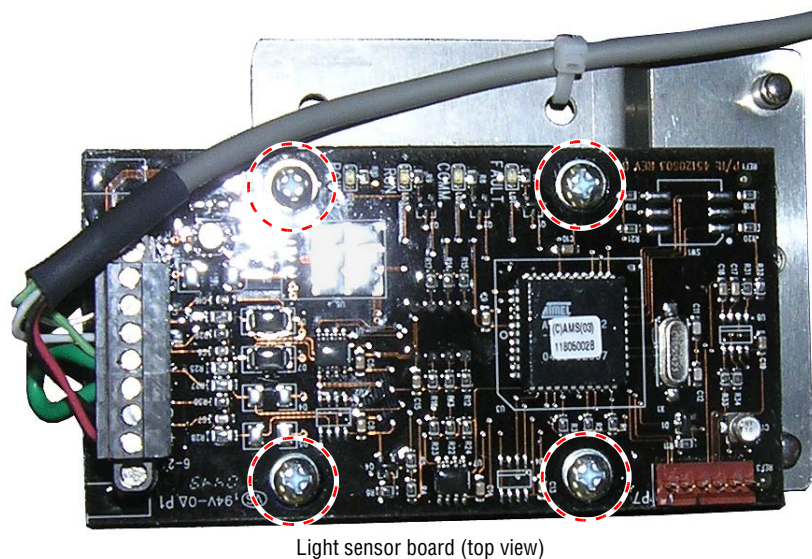

Controller section

4 | **Open the door.**

5 **Remove the light sensor board terminal connector. Remove the communication cable. Remove the light sensor bracket screws.**

Light sensor bracket

Communication cable

Remove the two screws on either end of the terminal connector.

Then detach the terminal connector from the light sensor board.

6 **Remove the screws (circled) that hold the light sensor board to the sign door. Then remove the board from the sign.**

Light sensor board (top view)

7 **Install the new light sensor board.**

- Using the screws that were just removed, attach the replacement light sensor board to the sign door.
- Reattach the terminal connector to the light sensor board.
- Reattach the light sensor bracket.

8 **Close the sign door and tighten the hex screws.**

9 **Apply power to the sign.**

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Light Sensor Board (pn 1175-9008SP) — AlphaEclipse StreetSmart sign installation instructions