

# Installation Instructions

100527-000

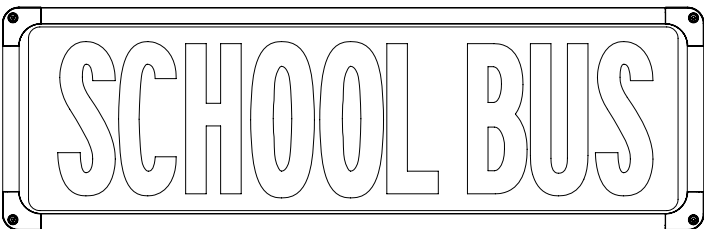


**FIRST LIGHT**  
SAFETY PRODUCTS

## ILLUMINATED SCHOOL BUS SIGN BLUE BIRD OPEN CAVITY



### BLUE BIRD OPEN CAVITY - FRONT



Fully Assembled Sign Unit - Front  
A1 x 1

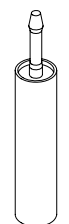
Backsheet Template - Front  
B1 x 1



2Ft Sign Main Power Wire Harness  
D x 1

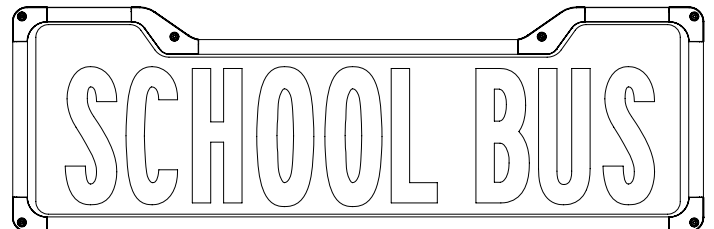


#10-32 Rivet Nut  
C x 5



FDOW 700 Clear  
Silicone Sealant  
E x 1

### BLUE BIRD OPEN CAVITY - REAR



Fully Assembled Sign Unit - Rear  
A2 x 1

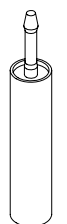
Backsheet Template - Rear  
B2 x 1



2Ft Sign Main Power Wire Harness  
D x 1



#10-32 Rivet Nut  
C x 7



FDOW 700 Clear  
Silicone Sealant  
E x 1

# Blue Bird Open Cavity

## BILL OF MATERIALS

| BLUE BIRD OPEN CAVITY - FRONT     | QTY | REF |
|-----------------------------------|-----|-----|
| Fully Assembled Sign Unit - Front | 1   | A1  |
| Backsheet Template - Front        | 1   | B1  |
| #10-32 Rivet Nut*                 | 5   | C   |
| 2Ft Sign Main Power Wire Harness  | 1   | D   |
| DOW 700 Clear Silicone Sealant    | 1   | E   |

| BLUE BIRD OPEN CAVITY - REAR     | QTY | REF |
|----------------------------------|-----|-----|
| Fully Assembled Sign Unit - Rear | 1   | A2  |
| Backsheet Template - Rear        | 1   | B2  |
| #10-32 Rivet Nut*                | 7   | C   |
| 2Ft Sign Main Power Wire Harness | 1   | D   |
| DOW 700 Clear Silicone Sealant   | 1   | E   |

| BLUE BIRD OPEN CAVITY - SET - FRONT AND REAR | QTY | REF |
|--|-----|-----|
| Fully Assembled Sign Unit - Front            | 1   | A1  |
| Fully Assembled Sign Unit - Rear             | 1   | A2  |
| Backsheet Template - Front                   | 1   | B1  |
| Backsheet Template - Rear                    | 1   | B2  |
| #10-32 Rivet Nut                             | 11  | C   |
| 2Ft Sign Main Power Wire Harness             | 2   | D   |
| DOW 700 Clear Silicone Sealant               | 1   | E   |

\* One extra Rivet Nut provided as spare.

## REQUIRED TOOLS

- Marker
- 5/32" and 1/8" Allen keys
- 25/64" and 3/4" Drill
- Rivet nut installation tool\*
- 7/8" Wrench
- 11/16" Wrench or socket
- Screwdriver set

\* Available for Purchase.  
Part Number: 100521

## DISCLAIMER

**IMPORTANT: PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING, FAILURE TO DO SO MAY CAUSE PERSONAL INJURY OR DAMAGE TO PRODUCT AND/OR PROPERTY.**

This manual has been created for basic informational purposes only. The activities described herein can be dangerous unless proper safety precautions are taken. If you are not comfortable or are inexperienced with the processes and tools described in this manual, you should not attempt to install the product. These instructions do not purport to cover all details or variations in the equipment and do not claim to provide for every possible contingency met in connection with the installation. Installation of this product should always be performed by a qualified technician and in accordance with safe work procedures. First Light Safety Products (a division of Smartrend Supply Ltd., hereinafter "First Light Safety Products") shall not be held responsible for any errors or omissions respecting installation as they are the responsibility of the installing technician and/or the customer. First Light Safety Products does not make any representation, warranty, guarantee or condition respecting third-party installation or any other service provided by a third-party, and any such representations perceived by the reader/customer are hereby fully disclaimed.

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[www.firstlightsafety.com/resources](http://www.firstlightsafety.com/resources)



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NORTH AMERICA

If further help is needed, please contact us:

### Technical Support

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# Blue Bird Open Cavity

## STEP 1 - PRE-INSTALLATION VEHICLE PREPARATION

- Disconnect electrical power to the vehicle.
- Remove existing sign and rubber seal.
- Clean any remaining adhesive and residue left from the rubber seal.

**NOTE:** A clean, flat surface is necessary to ensure proper sealing of the sign, preventing water intrusion.



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## STEP 2 - USE BACKSHEET TEMPLATE (B1/B2) TO MARK HOLES

- Locate the Backsheet Template (B1/B2) to the cap where the Sign Unit (A1/A2) will go.
- Ensure the Backsheet Template (B1/B2) is level and secure in place using masking tape.
- Mark the location of the harness and mounting holes.
- Remove Backsheet Template (B1/B2) once holes are marked.



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## STEP 3 - DRILL HOLES AND INSTALL RIVET NUTS (C)

- Rear only* - Drill the harness hole to 3/4".
- Drill the mounting holes for the Rivet Nuts (C) to 25/64".
- Using the Rivet nut installation tool, install the supplied Rivet Nuts (C).

**NOTE:** For Rivet nut installation instructions refer to our resources page:  
[www.firstlightsafety.com/resources](http://www.firstlightsafety.com/resources)



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## STEP 4 - PREPARE ELECTRICAL CONNECTION

**NOTE:** Keep harnesses away from sharp edges, secure harnesses with ty-wraps as needed, and maintain white (power) and black (ground) wire color code.

- Inside the front/rear cavity, find the harness that supplies power to the existing lights and cut it as close to the existing lights as possible.
- Remove 11mm of insulation from the wires inside the existing light power supply harness.
- Connect the 2Ft Sign Main Power Wire Harness (D) to the existing light power supply harness.



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# Blue Bird Open Cavity

## STEP 5 - SILICONE (E) PERIMETER OF OPENING

- i. Apply a continuous bead of Silicone (E) around the opening.

**NOTE:** Ensure the bead is continuous for a weather resistant seal.



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## STEP 6 - PRESS BACKSHEET TEMPLATE (B1/B2) INTO SILICONE (E)

- i. Locate the Backsheet Template (B1/B2) to the cap and press it into the Silicone (E).

**NOTE:** Ensure the Backsheet Template (B1/B2) is level and the holes in the Backsheet Template (B1/B2) line up with the harness hole and the Rivet Nuts (C).



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## STEP 7 - CONNECT HARNESS TO SIGN UNIT (A1/A2)

- i. Run the 2Ft Sign Main Power Wire Harness (D) through the harness hole and connect it to the Sign Unit (A1/A2).



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## STEP 8 - SEAT GROMMET

- i. Ensure the grommet seats properly with the installed Backsheet Template (B1/B2) to form a weather resistant seal.



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## STEP 9 - MOUNT SIGN UNIT (A1/A2)

- i. Mount the Sign Unit (A1/A2) using the frame's integrated screws.

**NOTE:** Recommended torque is 25-40 in-Lbs.



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## STEP 10 - TURN ON SIGN UNIT (A1/A2)

- i. Ensure no wiring has been damaged and once safe, restore electrical power to the vehicle.
  1. If wired directly to a 12V circuit powered by the ignition switch: turn the vehicle on and ensure the Sign Unit (A1/A2) illuminates.
  2. If wired through a manual switch to a 12V circuit powered by the ignition switch: turn the vehicle on, turn the switch on, and ensure the Sign Unit (A1/A2) illuminates.



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