

1979-81 FIREBIRD

SEQUENTIAL SYSTEM

Model: **CLE0068FBS Sequential** LED Tail Lamp conversion board
Thank you for your purchase of ClassicLEDs LLC's Sequential LED system.
This system was manufactured in Eugene, Oregon.

Check local/State laws regarding use of sequential lights

During installation, *do not allow the board* to contact metal. This may/will cause a short.

Check for proper operation before installing lens/bezel

The LED lamp substitutes for the OEM bulb in the tail lamp. The LED board operates as, tail, signal and brake lights. No other circuits are represented. The LED lights will be a vast improvement to OEM lights. Each LED board is installed within a new housing. This housing replaces the OEM housing. Ensure the lens gasket is in good condition. This is a good time to replace this gasket.

You may find it helpful to read the entire installation outline before starting. Lay the entire system on a flat surface. The trunk area is preferred. While going through the instructions, having the system laid out will provide a better understanding and make installation much easier.

This system is designed for a 12Volt Negative Ground operation. Any other power application will destroy the LED board and void the warranty.

THIS SYSTEM MUST BE CONNECTED TO A CONSTANT 12 VOLT POWER SUPPLY.

POWER MUST BE SUPPLIED WITH AND WITHOUT THE IGNITION KEY IN THE ON POSITION. DUE TO THE SIZE OF THE BOARD AND NUMBER OF LEDS, THIS IS REQUIRED TO COMPLETE EACH ELECTRONIC CYCLE OF THE TURN SIGNAL.

LEDs are coated with a plastic/silicon covering. Coating helps protect against moisture, but they are not waterproof. Ensure your gaskets are in good condition.

Operation Overview:

This system replaces the OEM bulbs. You will tap into the OEM harness located near your OEM drivers side light housing. The power supply may be attached to the fuse box (preferred) under the dash, or any constant power supply.

Finally, the installation part. Hope your still awake enough to get this done.....

Installation:

1. WIRE HARNESS OUTLINE

- a. The system contains four wire harnesses leading out of the control unit which is covered in a green shrink wrap
- b. Each harness is marked with a colored tie
 - i. Power supply
(1) **RED** Tie
 - ii. OEM Wire harness connection
(1) **Yellow** Tie
 - iii. Left side LED board connection
(1) Not marked with a colored tie
 - iv. Right side LED board connection.
(1) **Black** Tie

2. CONTROL UNIT

- a. the control unit is cover with a lite green shrink warp for protection
 - i. although very little heat is generated, do not seal the ends
 - ii. the unit has been coated with a plastic spray for protection
 - iii. **It is advised that the control unit be placed where it will not be covered when items are placed in the trunk**

3. POWER SUPPLY HARNESS

This system must be connected to a *CONSTANT 12 VOLT POWER SUPPLY*. Due to the size of the board and number of LEDs, this is required to complete each electronic cycle of the turn signal

CHECK FOR POWER WITH THE KEY IN THE ON AND OFF POSITION

- a. This is the **RED** Tie
- b. Connect to a ***constant*** 12 volt supply
 - i. this provides power to the LEDs
 - ii. **Red** wire to positive
 - iii. **Black** to ground
- c. Ensure you connect to a fused power supply.
 - i. Your headlight fuse may be used if you wish
 - ii. A fuse tap is included
 - (1) if you attach directly to a trunk mounted battery/power supply, a small inline fuse is recommended.
- d. Any **CONSTANT** power supply in the rear area may be used.

**YOU MUST ENSURE THIS IS A *CONSTANT* POWER SUPPLY
CHECK FOR POWER WITH THE KEY IN THE OFF POSITION
THIS SYSTEM WILL NOT OPERATE WITHOUT POWER**

- e. If your LEDs do not operate when testing, ensure the power wires are connected properly.
 - i. If installed backward, the control unit will not allow power to pass to the computer chip

LED BOARD INSTALLATION

4. No colored tie

**ENSURE YOU HAVE TURNED THE POWER OFF BEFORE ATTACHING COMPONENTS.
YOU MAY DO THIS BY TURNING THE IGNITION KEY TO OFF AND ENSURE THE TURN SIGNAL
HANDLE IS IN THE OFF OR CENTER POSITION.**

- a. **LED BOARD INSTALLATION** into the housing

- i. Place the left side LED boards within the housing
 - (1) center the boards within the housing
 - (2) left board has the short wire harness
 - (a) Push the wire harness thru the OEM socket hole
 - (b) use a clear silicon adhesive to attach the board to the housing
 - (i) after setting board into the housing note where the boards are touching the housings
 - (ii) place a good amount of silicon at these points and press the boards into the silicon
 - 1) **ensure silicon is placed anywhere the boards may touch the housing**
 - 2) **the housing will carry power and contacting the boards may short out the LEDs**
 - (iii) place a bead of silicon around the board's edge ensuring the board is attached
 - (iv) hold boards with masking tape (blue painters tape is the best) until silicon sets
- ii. Ensure the left side turn signals are in operation
- iii. Ensure you cover the connections with tape or any other suitable covering

5. **RIGHT SIDE BLACK TIE**

- a. Place board as you did with the left side
 - i. Attach the harness to the control unit's harness
 - ii. Run the harness along the same path the OEM wire harness is located
 - iii. Ensure harness is not allowed to lay unprotected
 - (1) ensure you cover the connections with tape or any other suitable covering

6. **Connecting to the OEM wire harness**

- a. The harness with the **yellow** tie attaches to the OEM wire harness
- b. Beginning with the left turn/brake operation
- c. Place the turn signal handle in the down or left turn signal position with power on
- d. **WHILE WORKING IN THE TRUNK**
 - i. Find the **LEFT TURN** wire in the OEM harness nearest the new LED boards
 - (1) after locating the wire **TURN THE POWER OFF**
 - ii. tap the **black** wire into this wire
 - (1) this operates the brake and turn signal
- e. Place the turn signal handle in the up or right turn signal position with power on
 - i. Find the **RIGHT TURN** wire in the OEM harness nearest the new LED boards
 - (1) after locating the wire **TURN THE POWER OFF**
 - ii. tap the **RED** wire into this wire
 - (1) this operates the brake and turn signal
 - (2) test for operation
- f. Turn signal off
- g. **After attaching each side**
- h. **Test each side and ensure the front and rear turn signals are working on the same side**
- i. **If backwards**
- j. **Change the red and black wire connections and repeat test**
- k. Turn running lights on
 - i. Find the wire carrying the running light power
 - ii. **TURN THE POWER OFF**
 - iii. attach the white wire
 - iv. There is only one running light attachment
- l. There is no grounding wire at this point
 - (1) control unit is the grounding
- m. Check each board for the running lights proper operation
- n. Should the running lights not operate
 - i. Ensure the white wire is attached to a running light powered wire within the OEM harness

7. After testing and ensuring the system works
 - a. Use a silicon adhesive and secure the PC boards to the housings
 - b. Ensure you test for alignment of the LEDs and the lens for proper lighting and effect before securing the boards with the silicon
 - c. Allow silicon to dry as noted on container
 - d. When placing the board in the silicon, move them around a bit to maximize contact area
 - e. If the boards do not light when power is applied, ensure the proper controller wire is connect to the side you are working on
8. Enjoy your new LED system!

Should you have any questions, please contact [ClassicLEDs LLC](#) at

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Limited Warranty

All ClassicLEDs LLC products are warranted against defective materials and/or workmanship to all original consumer owners from the date of original consumer purchase as long as original purchaser owns the vehicle. In the event of defective materials and /or workmanship, ClassicLEDs LLC. will, without charge, repair or replace, at its option, the defective product within 60 days from the receipt of the defective product at the following address: ClassicLEDs LLC, 3128 Marvin Dr. Eugene, OR 97404 atn Warranty Dept. Postage to ClassicLEDs paid by owner. Return postage paid by ClassicLEDs LLC.

The Warranty does not apply to damage not resulting from defective materials and/or workmanship while in the possession of the original consumer or to unreasonable use by the original consumer, which includes but is not limited to improper installation, failure to provide reasonable and necessary maintenance, or commercial applications. ClassicLEDs LLC. is not liable for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.