Vintage LEDs
Installation Instructions for 65-72 F100 and 67-77 Bronco LED Taillights

Before Start
I highly recommend that you install a new lens gasket and thoroughly clean your existing lens.

Please install in this order and test the lighting system after each step!

1. Install turn signal flasher relay
2. Install hazards flasher relay
3. Test turn and hazards function. The LED flashers will work the stock 1157 bulbs
4. Plug LED tail assembly to bulb socket and test brake and turn functions
5. Install park/turn LED assemblies one at a time and test

Turn and Hazards Flasher Relay
Install the new flashers first and verify that they are hooked up correctly. This flasher will work with the existing 1157 bulbs. If the turn signals or hazards do not work correctly or the flasher module chatters, then try reversing the polarity on the wires. The **X** symbol on the flasher designates the hot side; the **L** symbol designates the Lamp or output side.
Note: The BF12L-CH that currently ships is not polarity sensitive and will work wired in any direction.

Locate and replace the turn and flasher modules. Since the LEDs draw less current than the 1157 bulb, (0.5A vs. 2.3A) the stock thermal turn flasher will not work. You will need to replace this with an electronic or LED flasher unit.

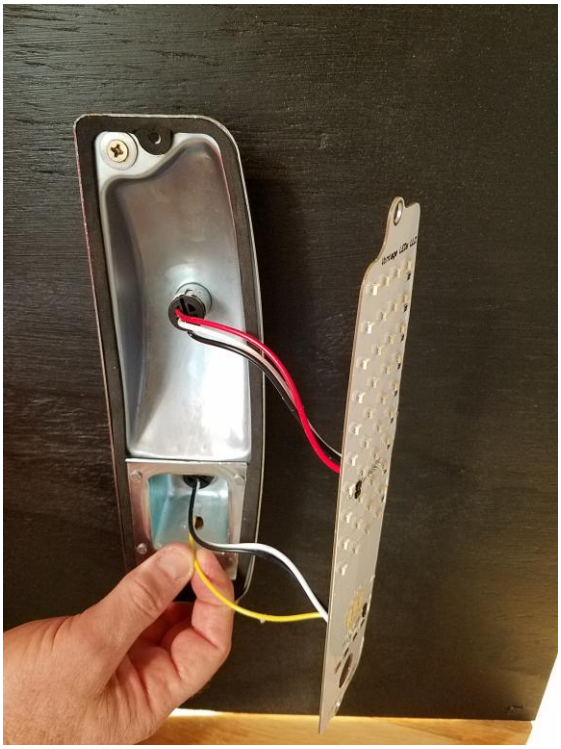
Note: The black wire on the LED flasher will need to be connected to chassis ground.
Adding a little dielectric grease to the connectors is a good idea.

Installation

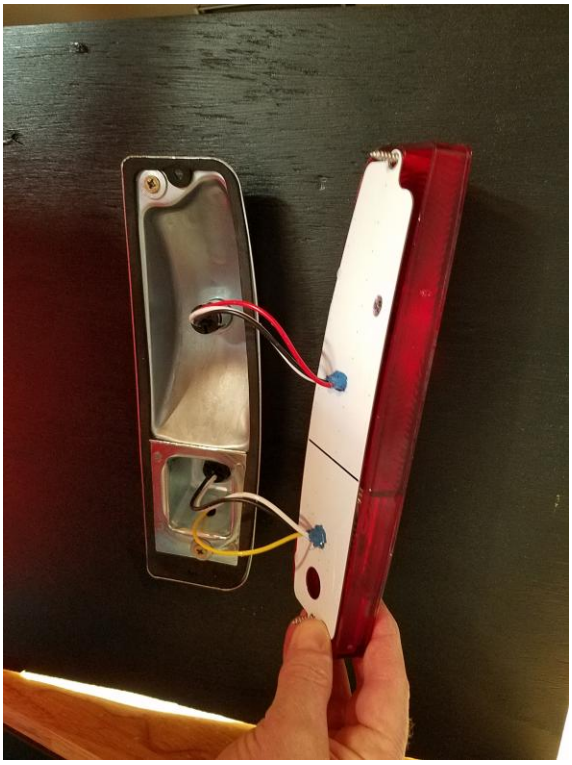
Plug 1157 cable to brake socket. Red, Black, and White wires.

Plug 1156 cable to brake socket. Black and White wires.

If you have the amber turn option, then you will need to drill a small hole in the light housing for the yellow wire. Make sure you add a gromet to keep the wire from chafing. The yellow wire will need to be connected to the turn signal circuit. Preferably to the front turn signal because it is separate from the rear brake circuit. No need for an extra ground wire. When the brake and reverse cables are connected, there is sufficient connection to ground.



You may find it easier to use the lens screws to hold the LED board in alignment.



Tighten lens screws and you are done.

Now enjoy your Vintage LEDs taillights.

Note:
Never disconnect the battery cable while the engine is running. This can cause a voltage spike in excess of 40V. This could damage the electronics in this light along with other electronics in your vehicle.

Sequential Taillights

The Sequential taillights are installed in the same manner as the standard lights.

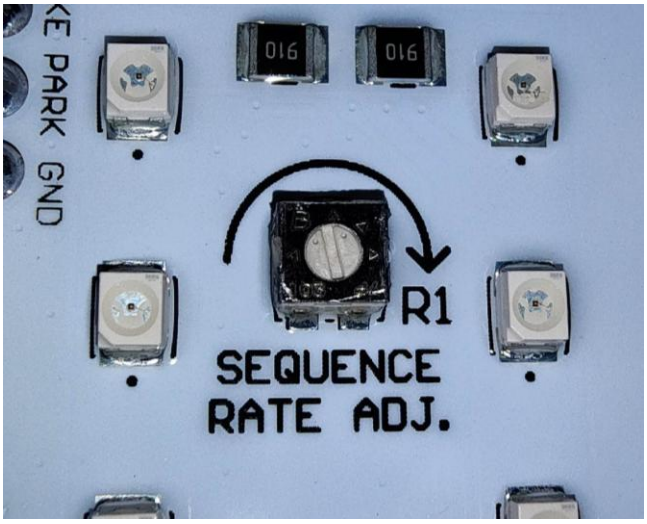
Operation of Sequential Taillights
The first turn signal, all three segments will light up. With each successive turn signal, the LED board will produce a sequential pattern.

The on-board micro controller (uP) keeps track of the off time between pulses. If the off time of the turn pulse is less than approx. 1 to 1.5sec, then the uP will interpret this as turn signal and produce the sequential pattern. If the time between pulses is greater than 1.5sec, then the uP interprets this as a Brake condition and all three lights will come on at once. The signal/flasher relays tested were between 0.3 and 0.6 sec. The slowest times were at 10v. However, at 12V, most are around 0.4 sec.

When the brakes are applied, all three light segments will come on. However, if you rapidly pump the brakes, the lights will sequence.

Hazard lights will be sequential.

Sequence Rate Adjustment
Turn on the turn signal and adjust the sequence rate on each board by turning the potentiometers R1.
Adjust R1 clockwise (CW) for faster, counterclockwise (CCW) for slower.

- Check the sequence rate with the turn signals.
- Confirm sequence rate with head lights on engine off. Low voltage condition.
- Confirm sequence rate with headlights off and engine running. High voltage condition.
- If you do not want sequencing lights at all, simply turn the pot fully clockwise and all three segments will come on together.

Please note that the on/off time for turn signals and hazards is controlled by the signal/flasher relay. The potentiometer only controls the sequence rate on the LED board.