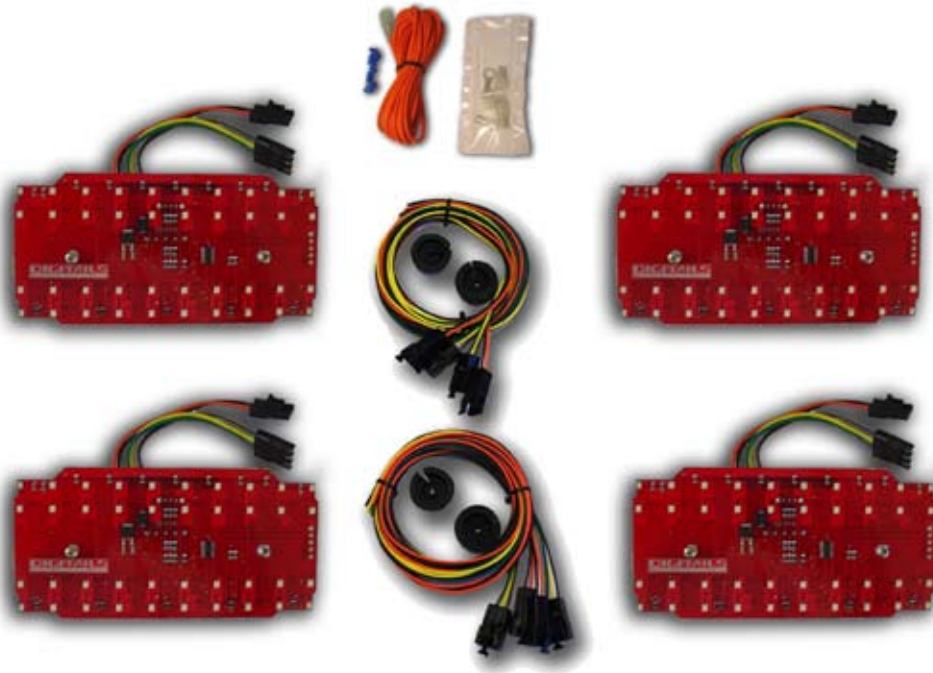


DIGITAILS

D I G I T A L T A I L L I G H T S

BUICK GRAND NATIONAL SEQUENTIAL LED TAIL LIGHT KIT PN 1100886



INSTALLATION GUIDE

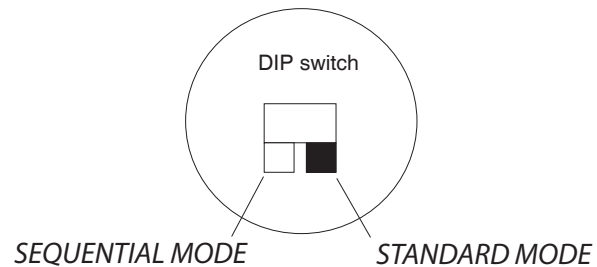
Please refer to Invoice for full warranty information.
Digi-Tails is not a licensed GM product.

Note

The LED boards are shipped with the DIP switch set to Standard mode. It is recommended that DIP switches on all the LED boards be set to the same setting. (either standard or sequential). The switch position should be set prior to installing the LED boards into the housings. Please follow all local laws concerning exterior lighting.



*Mode Selection DIP switch
(for location reference only)*



LED CIRCUIT BOARD INSTALLATION

1

Remove the negative terminal from the battery to cut off all power in your car. Press on the brake pedal to double check that your brake lights are not lighting up.

2

Remove the taillight housing assembly from the car. The Taillight housing is held on by 4 plastic nuts. Take all safety precautions to make sure you don't scuff or scratch the paint in any way. Remove the bulbs out of the sockets and put them away. They are no longer needed. Now remove the Tail light trim from each lens. Take all safety precautions to make sure you don't scuff or scratch the paint in any way.

3

Lay out a soft towel or rag and gently lay down the housing so the front side is facing you. On the red part of the lens remove the 2 screws at the top and the one clip. Turn the housing over and remove the last clip. Now turn the housing back over and gently remove the red lens from the tail light basket. A flat screwdriver or putty knife may have to be used to gently pry the lens from the tail light basket. Take your time and be very careful not to crack or break the lens.



4

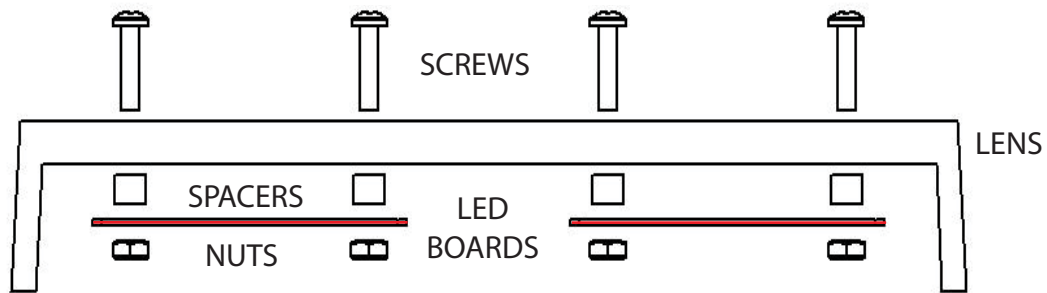
There are 4 holes that must be drilled through the lens. Cut out the included templates and place them on the frontside of the lens. Mark the location of the 4 holes on each lens. Double check to make sure you have marked the holes in the correct position. Carefully drill each mark with a 5/32 inch drill bit. Be very careful not to press too hard with the drill bit. It takes very little effort for the drill bit to drill through the plastic. Let the drill bit do all of the work. A drill press may work best. No matter what drill you are using, make sure it is on a very low speed setting.

5

Each LED board is marked to indicate its position. **LOOKING AT YOUR GN FROM THE BACK.** There are Driver's Outer (DL) and Driver's Inner (DR) LED boards as well as Passenger's Outer (PR) and Passenger's Inner (PL), marked DL, DR, PL, and PR respectively. Place the LED boards into the lens. Mount each LED board with the plastic spacers between the board and the lens. Use the provided screws and nuts to mount everything together. Feed the wires through the light socket hole and re-attach the lens to the housing.



Passenger Side Lens looking at it from the Back.



6

Place the included grommets around the LED board wires and plug the grommets into the light socket hole. This will keep the LED board wires from rubbing against the housing and help to seal it off.



Wire splicing installation

The light socket ends on the car harness are no longer needed. (Leave the bulbs out) You can remove the socket ends or you can leave them there (to someday return the car back to stock) just tuck them carefully behind the taillight housings. Note: If you decide to leave the sockets in place they should be sealed off. Use dielectric grease to put inside the holes of the sockets to seal out any moisture and you could use a cotton ball in the end to seal out dust and dirt. At this point everything should be done but the wiring. Now looking at the convoluted plastic tubing that protects the taillight wires that goes over the gas filler neck. The taillight wires go from the left side over to the right side taillights. You now want to hold your taillights up to the car and see where the 4 sections of LED wires will be. Mark those areas with something. Now locate a good spot in that taillight harness to make your connections.

Take the LED harness **DARK GREEN** wires and splice them in with the original **DARK GREEN** wire. Take the LED harness **YELLOW** wires and splice them in with the original **YELLOW** wire. Take the LED harness **BROWN** wires and splice them in with the original **BROWN** wires. The ends going to the side marker lights must be included in the splice for the side markers to remain functional.

Take the **BLACK** ground wires and connect them all together. Bolt them to the trunk latch support along with the original rear body harness ground. (Drilling a hole in latch support may be required).

An **ORANGE** power wire is supplied along with a T-Tap. The orange power wire must be supplied with a constant 12 volt battery supply for the LED circuitry to operate properly. The T-Tap connector is used to splice to the constant power source.

Located behind the drivers side trunk hinge, find the orange wire that powers your trunk light. It's hard to find but it's there! That is the closest constant 12v source.

Splice the T-Tap connector into the constant power wire, then plug the orange wire into the T-Tap. The other end of the orange wire is spliced into the LED harness Orange wires.

The last page is a wire diagram of how the LED harness splices into the car's original harness.



Insert wire onto T-Tap



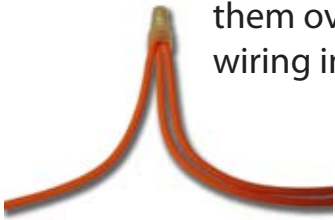
Crimp with pliers



Plug connector into T-Tap

Once you make your connections on both sides you can now plug the LED connectors back together and check for proper lighting operation. Once they work proceed to mount the taillights back into place.

To keep the wires neatly tucked and inline, take the spliced sections and fold them over to one side and tape them in place. This will allow you to place the wiring into loom or have the ability to wrap the LED harness wiring tightly away.



Wires spliced together.



Fold wires over to a side.



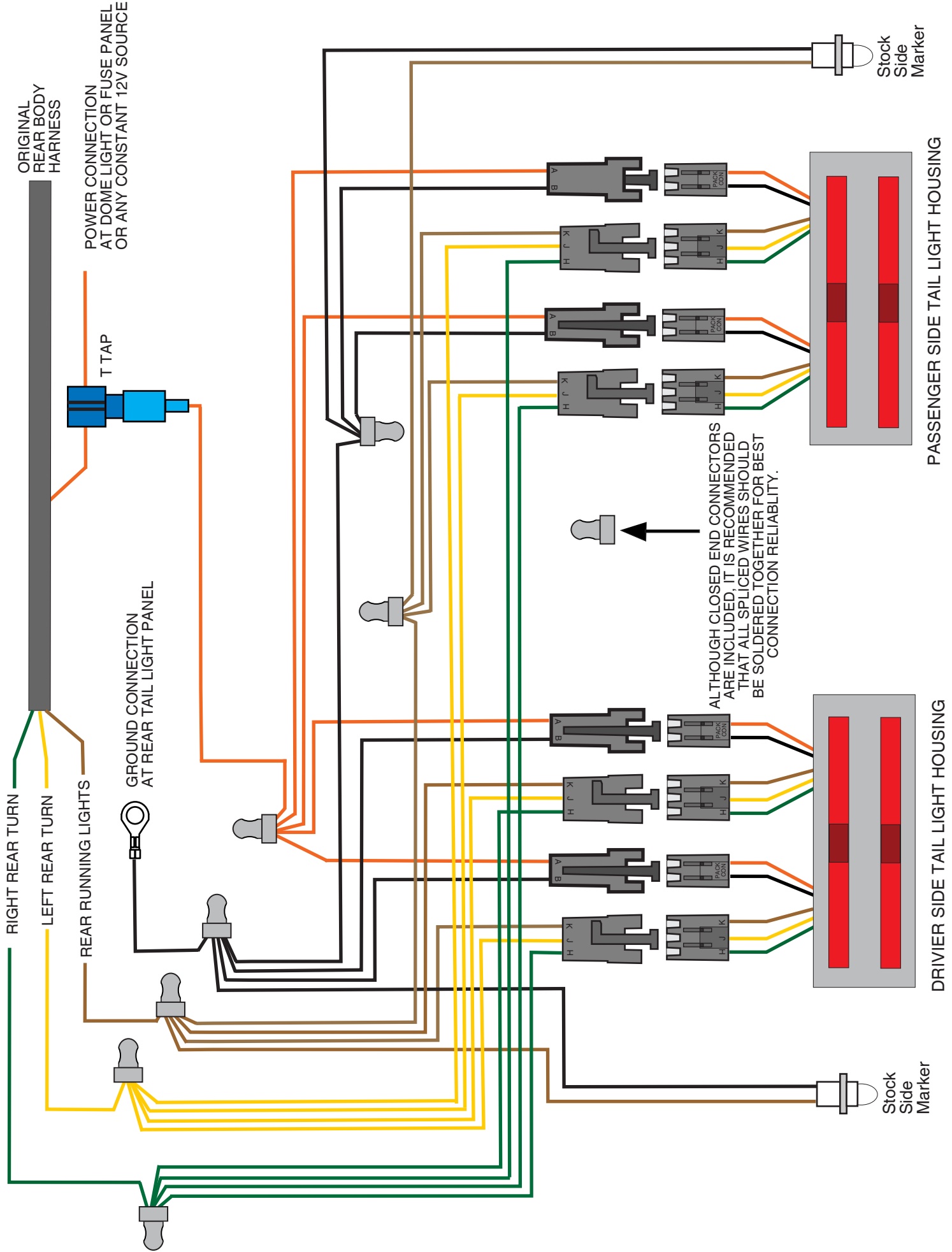
Wrap with tape to hold in place.

The LED light kits are designed for best performance when using an electronic no-load flasher. Shown here is an optional electronic no-load flasher (PN 200002) available from Spaghetti Engineering.

When using a stock bi-metal flasher, it is recommended that a standard duty flasher be used instead of a heavy duty flasher. If your turn signal circuit includes LED turn signals in the front as well as the rear, the turn signal circuit will not have enough resistance load to operate an original bi-metal flasher and this no-load flasher will be required for both the turn signal and hazard flashers.



Black wire must be grounded



ORIGINAL REAR BODY HARNESS

POWER CONNECTION AT DOME LIGHT OR FUSE PANEL OR ANY CONSTANT 12V SOURCE

T TAP

GROUND CONNECTION AT REAR TAIL LIGHT PANEL

RIGHT REAR TURN
LEFT REAR TURN
REAR RUNNING LIGHTS

PASSENGER SIDE TAIL LIGHT HOUSING

DRIVER SIDE TAIL LIGHT HOUSING

Stock Side Marker

Stock Side Marker

ALTHOUGH CLOSED END CONNECTORS ARE INCLUDED, IT IS RECOMMENDED THAT ALL SPLICED WIRES SHOULD BE SOLDERED TOGETHER FOR BEST CONNECTION RELIABILITY.

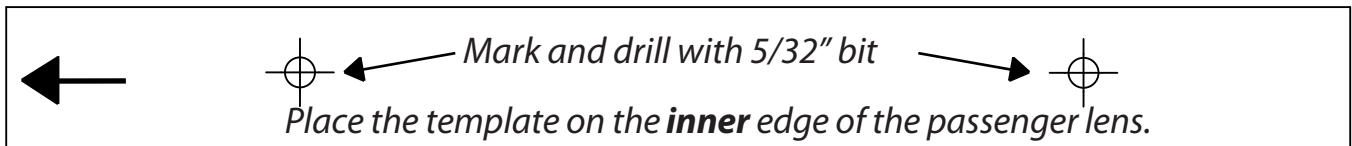
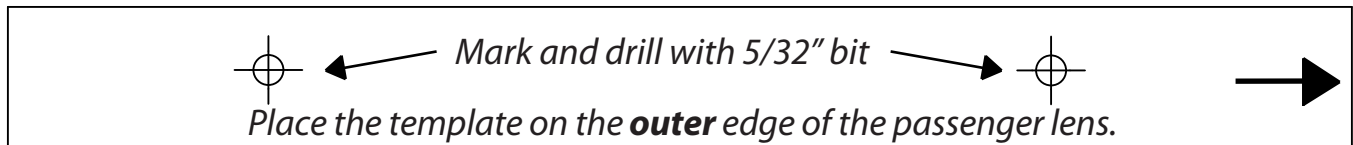
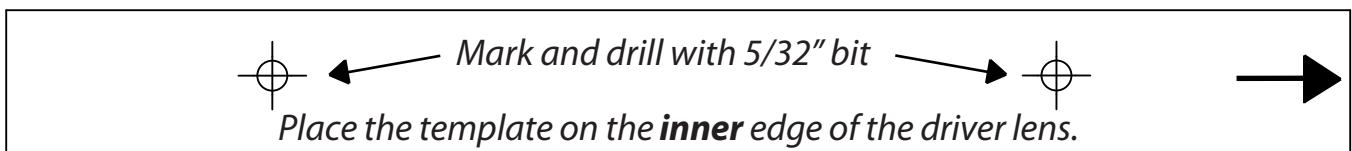
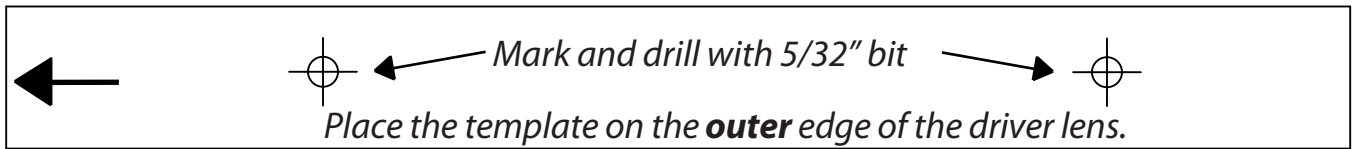
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PN 1100886

BUICK GRAND NATIONAL SEQUENTIAL LED TAIL LIGHT KIT CIRCUIT BOARD INSTALLATION TEMPLATE



Note: Templates above are not identical.



Shown above is the passenger outer template placed onto the lens.



Templates placed on the passenger lens.

- 1. Lay down the lens with the frontside facing up.**
- 2. Cut template along the outline and lay the template onto the lens.**
- 3. Align the template by facing the arrow to the edge of the lens.**
- 4. Mark the hole centers and carefully drill a hole using a 5/32" size drill bit.**