# LitePLATETM Installation Document

# **Off Road Only**

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This document is intended to aid in installation of LitePLATE™ in combination with a quick removable mounting bracket such as the Rock Hard 4x4 Parts spare tire mounting bracket.

If you are mounting this on a Wrangler JK, we have a specific manual for the wiring on that model on our website at <a href="https://www.offroadonly.com">www.offroadonly.com</a> Simply search for PL-6 and there will be a link in the product description to the manual.

#### Parts in kit:

- LitePLATE™ License plate light with weather pack connector installed
- 6 ft harness with weather pack connector installed
- 3 solder seal connectors

Tools needed to install will vary by application, minimum tools needed:

- Wire cutter
- Wire Stripper
- Heat gun (High heat hair dryer may work)
- Utility knife or other sharp knife



## **Assembly**

- Position license plate and LitePLATE™ bracket together.
- 2. Mount license plate and LitePLATE™ using ¼" fasteners. (Not included with the LitePLATE™ kit).
- 3. Route the wire as needed along the tire carrier or to what ever you mounted the bracket on, make sure to leave loops where the carrier opens or other areas that may require more wire during operation. Restrain wire to carrier as necessary. Fish the wire from the bottom of the tub up through the hole in the tub where the lights are mounted. Splice in wire as appropriate.
- 4. When wiring the LitePLATE™ in the center of the vehicle, you may use the red LED's as a 3<sup>rd</sup> brake light, but to do this you must tie the brake circuit ONLY to the red LED's, not the turn signal/brake light combination signal you will get at the taillight. If the Jeep has a factory 3<sup>rd</sup> brake light assembly, use the wires on the Passenger side of the vehicle for splicing in the LitePLATE™ wires.

# Wiring color code:

coded as follows:

Tail / License plate light ------ Green
Brake ------ Red
Ground ------ Black

04-06 TJ/LJ wiring harness can be found in the passenger side corner
A. Green ------- White/Yellow

C. Black -----Black or Body Ground

On the LitePLATE™, the wiring is color

A. Green -------White/Yellow is a B. Red ------Brown/Red

On the connector the wire code should match the following:

Terminal A Tail Green
Terminal B Ground Black
Terminal C Brake Red

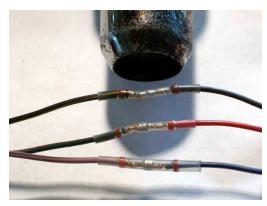
On the harness end to splice in, the harness is as follows:

Tail Green Ground Black Brake Red There are two connectors attaching the third brake light to the tub on the inside. Pull these wires off and cut off the rubber mounts. The white wire attaches to the red from the harness and the black wire attaches to the black from the harness. This will enable the 3<sup>rd</sup> brake light function.

If you opt to not use the 3<sup>rd</sup> brake light red LED's in the LitePLATE™, then just omit hooking anything to the red wire.

# Image 2 - Showing three stages of heat applied to Solder Seal connectors

(Note top connection the center ring has completely melted, as this means the connection is 100% soldered)



### Solder Seal connectors:

- a. With one solder seal shrink connector on each of the wires to be spliced, you're ready to connect to the harness
- b. Make each connection by placing the two connecting wires intersecting at approximately 90\* in the middle of the bare section.
- c. Proceed by twisting the wires to complete an "audio twist" connection, keep the ends of the wires wrapped as small and tight as possible, this will make the next step easier.
- d. Slide the solder seal shrink connector over the connection, centering the silver ring at the center of the shrink tube in the middle of the bare wire splice connection as shown in Image 4.
- e. Using a heat gun or other high temp heat source (a lighter or other heat source may not be enough to complete the solder and seal shrink process) heat the shrink connector evenly. The clear shrink tube will shrink first and if that's all the heat available, will keep the wires sealed and connected.
- f. If enough heat is available, continued heating will result in the silver solder ring in the center to bubble and melt, resulting in the completion of the connection. Continue this for the remaining wire connections. (See Image 2 to see the three stages of shrinking, starting at the bottom with gentle heat and moving upward with more heat, the top one showing the solder ring melted.)
- 5. Once splicing is done, connect the ground tab and perform electrical test, the white LEDS on the LitePLATE™ should light when the taillights are on, red LEDS should light ONLY when the brakes are applied. If the reds light up with the turn signals, then you need to find the brake light feed directly off of the stop light switch rather than the turn signal circuit.



### Image 3 License plate and LitePLATE™ mounted

Off Road Only recommends "Lights On for Safety" while the vehicles are in motion.

## Please Detach Below for Warranty

ORO LiteDOT's Warranty Certificate

Please mail the following information to:		
Off Road Only Warranty	or	email to: litedots@offroadonly.com
1971 Seneca Road Unit E		
Eagan, MN 55122	Date of Purchase	
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Phone	_	
Email Address		
Reference #	D 131217	