

Off Road Only

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Installation Document Wrangler TJ Stock Location

This document designed to aid in installation of LitePLATE™ on Jeep TJ models in the OEM license plate location along with LiteDOT's™ installed, other models are similar.

NOTE: Installing LitePLATE™ on any other vehicle will follow the wiring and possible license plate modification as specified in this document.

Parts in kit:

- LitePLATE™ License plate light
- 3 solder seal connectors

Tools Needed to install in OEM TJ location:

- 10mm socket, extension and Ratchet
- Wire cutter
- Wire Stripper
- Heat gun (High heat hair dryer may work)
- Utility knife or other sharp knife
- 3/16" Allen wrench
- Diagonal Pliers

Additional supplies possibly required:

4-8 foot of small gauge (20-24) insulted wire, determined by where the license plate is mounted.

ASSEMBLY

- 1. Remove license plate, this should leave you as shown in Image 2.
- 2. Wire routing, we recommend omitting the upper right license plate to the Jeep tub mounting bolt and run the wires through that hole in the body, this eliminates drilling any extra holes in the body.



3. The wires may run inside the bracket by entering the opening that was trimmed for the LiteDOTS. You may need to open a path to run the wires from the inside of the mounting bracket to the hole that you desire to pass the wires thru the body. You can see Image 3 where an additional hole was drilled to allow the wires to pass from the inside directly to the bolt opening.







- Extend the wire harness as necessary for your install. In the photos shown, the 3rd brake light option was not employed, so there is nothing connected to the red wire on the light plate.
- 5. Plan a route for the wire to reside inside the bracket, prevent any sharp bend or kinks if possible. You can see that it was planned for the bulk of the LitePLATE™ wiring to go in below the mounting screw boss, and then the loose wire will snake around the boss and out the hole and thru the tub.



- 6. Route the wire thru the mounting hole as shown in Image 5
- 7. Feed the wire thru the hole in the body, position license plate mounting bracket and attach to Jeep tub with 3 remaining screws.
- 8. Position license plate and LitePLATE™ bracket against the OEM mounting bracket.
- 9. Mount license plate and LitePLATE™ using the original mounting screws.



Wiring color code:

On the LitePLATE™, the wiring is color coded as follows:

Tail / License plate light G	reen
Brake F	
Ground F	Rlack

Black with Yellow trace on taillight Not used typically in this position Black on taillight.

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

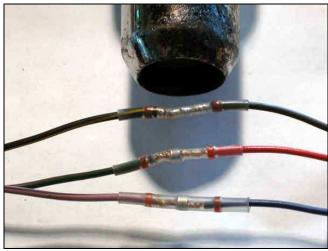
10. Connect the wires to the left taillight wires. Remove LiteDOT™ from the vehicle, and using the solder seal connectors, splice into the black LiteDOT™ ground wire the wire that you have attached to the black wire on the LitePLATE™. Cut the ground wire, make the appropriate twist splice and insert the additional wire at the same time. Repeat with the wire that ties into the taillight wire.





11. 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 7.



Showing three stages of heat applied to Solder Seal connectors
(Note top connection the center ring has completely melted, this means the connection is 100% soldered)

- 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 7 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.)
- 12. 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.



13. Reassemble LiteDOT™ to the body to complete the install. Check the wires inside the tub and ensure they are in a safe place.





Thank you for your purchase of the ORO LitePLATE™.

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

Thank you for your purchase of LitePLATE <u>Please Detach Below for Warranty</u>

ORO LiteDOT's Warranty Certificate			
Please mail the following information to:			
Off Road Only Warranty	or	email to: Oro-info@offroadonly.com	
1971 Seneca Road, Unit E.		· ·	
Eagan, MN 55122	Date of Purchase		
Dealer Business Name			
Customer Name		Off Road Only warranties this product	
Address		for one year from date	
City		of purchase provided	
Phone		this information has been sent to Off Road	
Email Address		Only	
Reference #	D 100712		