Congratulations on your purchase of the LED42-VSP-T-TS (CG) light kit!

The LED42-VSP-T-TS (CG) light kit will work on any scooter fitted with the Vespa 42L topcase.  The kit is easy to install and significantly enhances your visibility on the road and the good looks of your Vespa case.  Each kit contains four high intensity red/amber LED light arrays that fit perfectly behind the original red lenses of the Vespa case.  The embedded mini controller fits neatly under your seat or behind the tail light assembly.  The mini controller allows you to connect the light kit to your scooter's tail light, brake light **and** turn signals.  Your case lights will always be on when riding, the lights will brighten when you apply your brakes, and the right or left case lights will flash (amber) with your turn signals.   The sophisticated circuitry included with this light kit includes a brake light modulation feature for added safety.

*Please note:  We make no guarantee that the LED42-VSP-T-TS light kit is legal for street use in your area.  You should never rely on your LED42-VSP-T-TS light kit alone – always ensure that your stock brake light and turn signals are functioning properly.  The LED42-VSP-T-TS light kit is intended to <u>complement</u> your scooter's original safety lights for added safety.*



\*  Standard kit shown.  Premium (CG) kit has 2 LED arrays per side
   for a total of 24 LEDs per side.

# LED42-VSP-T-TS (CG) Light Kit

## Installation Instructions

## Please read all instructions fully BEFORE beginning installation!

1. Remove the screw on each side of the case lid holding the red lens in place.  Remove the two red lenses from the case lid.
2. Determine best location for LED strips and apply to each side of case.  LED strips should be applied side-by-side.
3. Drill a 3/16" (5mm) hole on each side under the red lens as shown.
4. Run each of the LED array wires through each of the drilled holes from outside the case to inside the case.
5. Take each of the small, black, empty connector housings and mate them to the corresponding connectors on the Top Case Harness.
6. Match wire colors (yellow to yellow, red to red, and black to black) from the LED array & insert all 3 wires <u>at the same time</u> half way into the empty connector housing
7. Press each wire firmly into the housing ensuring that each of the three (3) terminals is secure in each connector housing.
8. Replace red lenses and screws (2) removed earlier.
9. Determine preferred location to mount male connector.  Location should be relatively flat (outside and inside case), and should not interfere with an existing or future backrest.  Also, be mindful of the length of cable provided for installation inside the case.  Drill a pilot hole then use the supplied 7/16" (11.5mm) drill bit to enlarge hole to the required size*.
10. From inside of case, insert male end of connector through hole and secure on outside of case using supplied plastic nut.  Ensure connector is tight (hand tighten only).  **<u>Do not over tighten!</u>**
11. Connect case harness cables with both LED cables.
12. Proceed to LED42-VSP-T-TS (CG) Light Kit Wiring Instructions
13. Tidy up installation securing all cables.  Use the included cable clamps to secure the cable to the inside of your case.  Be sure to clean surface with an alcohol wipe prior to affixing the cable clamps to ensure maximum adhesion.

Tools/items required:

- Drill with standard drill bits
- Small Phillips screwdriver
- Electrical tape
- Circuit tester (if available)

Items supplied:

- 4 – LED42-VSP-T-TS (Red/Amber) light arrays
- 2 wiring harnesses (internal & external)
- Connector kit with cable clamps
- 7/16" drill bit
- These instructions
- Warranty card

**CAUTION:**  The micro-controller embedded in the main power harness **MUST NOT** be submersed in water.  Ensure that the micro-controller is placed in a location that does not fill with water!

**\*** The connector can be placed in any number of places on the case.  We recommend, mounting the case on your rack to determine exactly where you most prefer to install the connector.  Should you make a mistake or change your mind in the future, we can supply complementary plugs to fill a 7/16" drilled hole.  Contact us at www.admorelighting.com.

# LED42-VSP-T-TS (CG) LIGHT KIT

## Wiring Instructions

Your LED42-VSP-T-TS light kit has been designed to operate with the tail, brake **and turn signal** light functions of your scooter.  Using the supplied wire tap connectors, look as close to the rear taillight as possible to locate the indicated wires:

| 5-Wire (CG) Power Harness | Function | Most Vespa Scooters* |
|---|---|---|
| RED | Tail Light wire | Yellow with Black Trace |
| BLUE | Brake Light wire | White with Black Trace |
| GREEN | Right Turn Signal wire | White with Blue Trace |
| YELLOW | Left Turn Signal wire | Pink |
| BLACK | Ground | Ground |

The LED42-VSP-T-TS (CG) Light Kit incorporates a brake light modulation feature into the controller circuitry.  This feature will quickly modulate the topcase brake lights 3 times before the brake lights go on solid.

* Note:  The Vespa wire colors are provided for reference only.  We cannot guarantee that these are the correct wire colors for your specific Vespa scooter.

Mount top case on scooter and attach harness from scooter to male connector on bottom of case.  Note: Connector locks by inserting and turning.

Finally, test the functioning of the light kit with your scooter's tail and brake lights and turn signals.

Troubleshooting:

1. Ensure the Red wire is connected to +12v
2. Ensure Black wire is connected to a solid ground
3. If lights still do not illuminate, test the power harness by connecting the Red wire directly to +12v of a battery and the Black wire to solid ground.

Visit www.admorelighting.com for information on
other AdMore products, replacement parts and special offers!