

CUSTOM LED 2005-2009 Boulevard M50 INTEGRATED TAIL KIT

INSTALLATION INSTRUCTIONS

NOTE: YOU MAY DOWNLOAD FULL SIZED INSTRUCTIONS AT [HTTP://WWW.CUSTOMLED.COM](http://www.customled.com) ON THE RESPECTIVE PRODUCT PAGE.



ITEMS YOU WILL NEED

- 1) DREMOL WITH SMALL CUTTING WHEEL OR EQUIVALENT
- 2) PLIERS
- 3) WIRE SNIPS
- 4) FLAT HEAD SCREWDRIVER
- 5) PHILLIPS HEAD SCREWDRIVER
- 6) EYE PROTECTION
- 7) STOCK LED TAIL LIGHT REMOVED FROM BIKE.
- 8) GLUE GUN
- 9) CRAZY GLUE (OR EQUIVALENT)
- 10) LATEX GLOVES



BEFORE PROCEEDING PLEASE READ THESE INSTRUCTIONS THOROUGHLY. IF YOU FEEL YOU ARE UNABLE OR UNWILLING TO PERFORM THIS INSTALLATION PLEASE CONTACT A QUALIFIED TECHNICIAN. IMPROPER INSTALLATION WILL VOID WARRANTY.

GETTING STARTED

IT IS HIGHLY RECOMMENDED THAT YOU USE LATEX GLOVES DURING THIS ENTIRE PROCESS. THIS WILL SAVE YOU LOTS OF CLEANING EFFORT LATER.

- 1) POSITION YOUR CUTTING WHEEL AT THE GLUE SEAM BETWEEN THE CLEAR LENS AND THE GREY PLASTIC HOUSING. **MAKE SURE YOU ARE WORKING ON A SOFT SURFACE SO YOU DO NOT SCRATCH THE LENS.**
- 2) PROCEED TO CUT INTO THE CLEAR LENS APPROXIMATELY HALF OF THE THICKNESS, ALL THE WAY AROUND THE PERIMETER OF THE LENS – BE SURE NOT TO CUT ALL THE WAY THROUGH BECAUSE IT WILL NOT GLUE BACK TOGETHER PROPERLY.

TIPS FOR CUTTING YOUR LENS

- A) KEEP THE CUTTING WHEEL MOVING AND APPLY LIGHT PRESSURE. SITTING IN ONE SPOT WILL JUST MELT THE PLASTIC.
- B) TRY TO STAY TIGHT AGAINST THE INSIDE EDGE WHERE THE CLEAR LENS AND THE GREY BACKING MEET (CUTTING THE CLEAR PART).

WHEN YOU MAKE YOUR WAY AROUND THE ENTIRE PERIMETER, CLEAN ALL THE BURRED PLASTIC FROM AROUND THE EDGES AND FROM INSIDE THE GROOVE YOU'VE MADE.

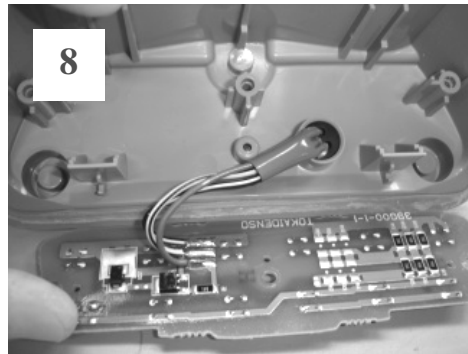
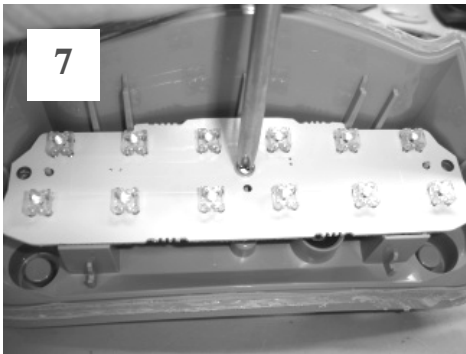
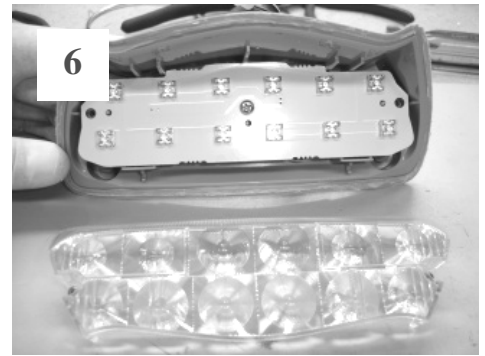
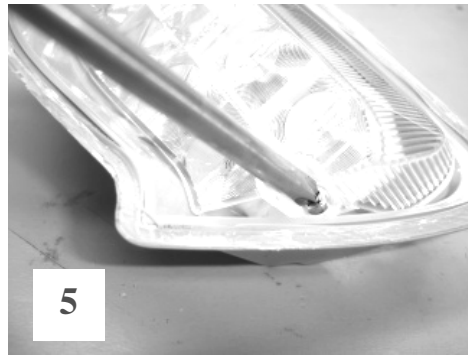


OPENING THE LENS

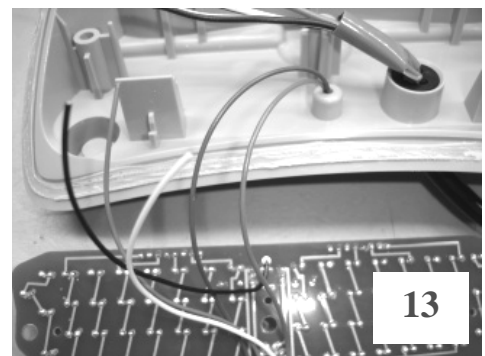
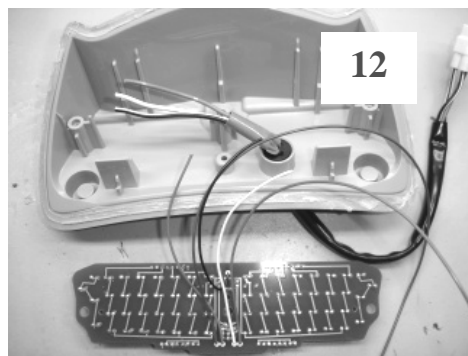
- 3) PLACE THE TIP OF A FLAT HEAD SCREWDRIVER IN THE GROOVE YOU HAVE CREATED.
- 4) GENTLY TWIST THE SCREWDRIVER TO CRACK THE GLUE ALONG THE GROOVE YOU HAVE CREATED.

NOTE: AS SOON AS YOU HEAR THE SOUND OF THE GLUE GIVING (A CRACK), MOVE THE SCREWDRIVER SLIGHTLY AND ADVANCE THE CRACK. SLOW AND STEADY IS THE NAME OF THE GAME HERE. IF YOU FIND A HARD SPOT, WEAKEN IT WITH THE CUTTING WHEEL AS NECESSARY.

THE HARD PART IS OVER! YOU CAN RELAX NOW!



- 5) REMOVE THE PHILLIPS SCREWS HOLDING THE INNER LENS TO THE HOUSING (YOU WILL BE REUSING THE SCREWS, SO PUT THEM TO THE SIDE)
- 6) REMOVE THE LENS AS SHOWN. **NOTE: YOU WILL NOT BE RE-USING THIS INNER LENS, DISCARD AS YOU WISH.**
- 7) REMOVE THE SCREW IN THE CENTER OF THE STOCK CIRCUIT BOARD AS SHOWN (YOU WILL BE REUSING THE SCREW, SO PUT IT TO THE SIDE).
- 8) TURN THE CIRCUIT BOARD FACE DOWN AS SHOWN TO REVEAL THE CONNECTIONS ON THE REAR.
- 9) SNIP OFF THE THREE WIRES CONNECTED TO THE STOCK CIRCUIT BOARD FROM THE HARNESS. **BE SURE TO SNIP THE WIRES CLOSE TO THE CIRCUIT BOARD!**
- 10) PLACE THE STOCK CIRCUIT BOARD ASIDE. YOU WILL NOT BE REUSING THIS COMPONENT.



- 11) POKe THE RUBBER PLUG THROUGH THE HOLE AS SHOWN TO CREATE AN OPENING FOR THE TURN SIGNAL WIRES.
- 12) POSITION YOUR CUSTOM LED BOULEVARD M50 TAIL LIGHT CIRCUIT BOARD FACE DOWN AS SHOWN.
- 13) RUN THE 16" BROWN AND GREEN WIRES THROUGH THE HOLE YOU OPENED IN STEP 11 (YOU MAY NEED TO ENLARGE THE OPENING).

WIRING UP YOUR CUSTOM LED BOARD



14) USE THE THREE (3 OF 5) SUPPLIED ORANGE SPLICE CONNECTORS. PUSH THE TWO WIRES TO BE SPLICED TOGETHER INTO THE OPEN END OF THE CONNECTOR. **BE SURE TO PUSH THE WIRES ALL THE WAY IN (UNTIL YOU CAN SEE THEY HAVE REACHED THE OTHER SIDE).**

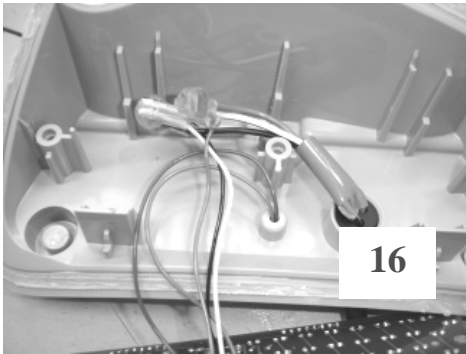
NOTE: THE SPLICE IS MORE RELIABLE IF THE WIRE IS NOT STRIPPED. BE SURE TO SNIP OFF THE BARE, OR PARTIALLY STRIPPED ENDS OF THE WIRES TO BE SPLICED TO ENSURE THAT THERE IS INSULATION WHERE THE SPLICE WILL OCCUR. THE SUPPLIED SPLICE CONNECTORS AUTOMATICALLY DISPLACE THE INSULATION AS NECESSARY.

MATCH THE WIRE COLORS AS FOLLOWS:

- BLACK / WHITE STRIPE ON HARNESS TO 4" BLACK ON CUSTOM LED BOARD
- WHITE / BLACK STRIPE ON HARNESS TO 4" YELLOW ON CUSTOM LED BOARD
- GREY ON HARNESS TO 4" BLUE ON CUSTOM LED BOARD

ONCE YOU DOUBLE CHECK YOUR COLOR MATCHING AND ARE ABSOLUTELY SURE THAT THE WIRES ARE FULLY INSERTED INTO THE SPLICE CONNECTORS DO THE FOLLOWING:

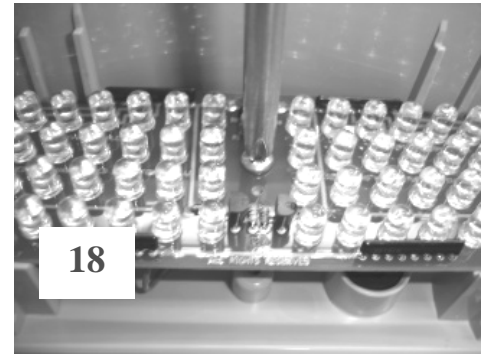
15) ONE BY ONE, SQUEEZE THE SPLICE CONNECTORS VERY FIRMLY WITH PLIERS. VISUALLY INSPECT YOUR CONNECTIONS TO SEE THAT THEY HAVE BEEN SPLICED PROPERLY INSIDE.



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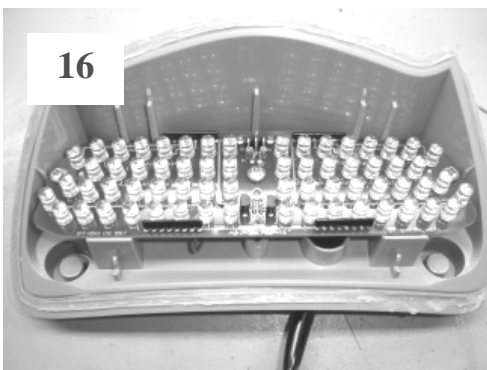


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16) ARRANGE THE WIRES NEATLY AROUND THE CIRCUIT BOARD ATTACHMENT POSTS.

17) CAREFULLY POSITION THE CUSTOM LED CIRCUIT BOARD INTO PLACE. YOU MAY WANT TO TAKE UP SOME SLACK IN THE BROWN AND GREEN WIRES (LEAVE ENOUGH LENGTH INSIDE THE HOUSING FOR FUTURE SERVICING).

NOTE: IT IS EXTREMELY IMPORTANT TO MAKE SURE THAT NONE OF THE WIRES UNDERNEATH THE CIRCUIT BOARD GET PINCHED UNDER A MOUNTING POINT, OR GET PRESSED UP AGAINST ANY OF THE SHARP SOLDER POINTS. FAILURE TO DO SO MAY DAMAGE THE ELECTRONICS IMMEDIATELY OR IN THE FUTURE.



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18) ONCE YOU ARE CERTAIN EVERYTHING IS POSITIONED NICELY, REINSTALL THE THREE SCREWS THAT FASTEN THE CUSTOM LED CIRCUIT BOARD TO THE HOUSING.

NOTE: YOU SHOULD NOT INSTALL THE LENS THAT WAS REMOVED IN STEP 5, DOING SO WILL HINDER THE PERFORMANCE OF YOUR TAIL LIGHT.

RESEALING YOUR LENS

CONGRATULATIONS! YOU'RE ONE STEP AWAY FROM FULFILLING YOUR WILDEST DREAMS – OK, MAYBE NOT, BUT YOU'RE ALMOST DONE WITH YOUR CUSTOM LED 2005-2009 BOULEVARD M50 TAIL!

IT IS STRONGLY SUGGESTED AT THIS POINT THAT YOU PLUG IN THE CUSTOM LED TAIL LIGHT TO VERIFY THAT THE WIRING IS DONE CORRECTLY BEFORE RESEALING THE LENS. THE RUNNING LIGHT AND BRAKE LIGHT SHOULD WORK PROPERLY.

NOTE: CLEAN THE INSIDE OF THE CLEAR LENS AND ALL THE LEDS AND CIRCUIT BOARD THOROUGHLY BEFORE GLUING IT SHUT. RUBBING ALCOHOL IS EXCELLENT FOR THIS PURPOSE. THOROUGHLY TOWEL DRY WITH A LINT FREE CLOTH, DO NOT ALLOW THE ALCOHOL TO AIR DRY SLOWLY. FINGER PRINTS AND GREASE WILL BECOME OPAQUE WITH CERTAIN GLUE VAPORS WHICH WILL HINDER THE PERFORMANCE OF YOUR TAIL LIGHT AND MAY VOID YOUR WARRANTY ENTIRELY!

19) RE-SEAL YOUR LENS GLUE OF YOUR CHOICE. WE HIGHLY RECOMMEND HOT GLUE AS IT DOES NOT CONTAIN VAPORS THAT PERMINANTLY DISCOLOR THE LEDS OR THE LENS. THE PROPER WAY TO USE HOT GLUE IS TO MOUNT THE LENS ON THE BUCKET AND RUN A BEAD OF HOT GLUE IN THE CUT RIDGE YOU MADE WITH THE DREMOL. MAKE SURE YOU WORK SLOWLY AND ALLOW THE GLUE TO PENETRATE INTO THE RIDGE.

20) ALLOW THE GLUE TO SET BEFORE DOING ANY MORE WORK.

WIRING THE BLINKERS

21) AFTER ALLOWING THE GLUE ON THE LENS TO SET, MOUNT THE TAIL LIGHT ASSEMBLY BACK ON THE MOTORCYCLE.



22) LOCATE THE BLINKER WIRES ON THE MOTORCYCLE. IF YOU HAVE NOT REMOVED THE STOCK BLINKERS YET, YOU CAN SIMPLY FOLLOW THE WIRES. OTHERWISE THEY ARE LOCATED ON A BLACK PLUG AND A GREY PLUG AS SHOWN.

YOU HAVE TWO (2) OPTIONS FOR WIRING YOUR CUSTOM LED BLINKER WIRES.

A) MAINTAIN THE STOCK PLUG IN TYPE CONNECTION BY CUTTING THE WIRES OFF OF THE STOCK BLINKERS AND USING THE SUPPLIED ORANGE SPLICE CONNECTORS TO SPLICE ON THE FACTORY PLUG TO THE CUSTOM LED WIRES (RECOMMENDED).

-OR-

B) USE THE NON-DESTRUCTIVE RED TAP CONNECTORS TO SPLICE INTO THE WIRING ON THE MOTORCYCLE.

23) WHICHEVER ROUTE YOU DECIDE TO GO, YOU WILL NEED TO CONNECT THE 16" BROWN AND GREEN WIRES FROM THE CUSTOM LED TAIL AS FOLLOWS:

- CUSTOM LED 16" GREEN WIRE TO GREEN WIRE IN BLACK PLUG FOR R TURN SIGNAL.
- CUSTOM LED 16" BROWN WIRE TO BLACK WIRE IN GRAY PLUG FOR L TURN SIGNAL.

NOTES:

- A) THE WIRE COLORS ON THE MOTORCYCLE MAY NOT BE SOLID (THERE MAY BE A STRIPE, BUT THE WIRE IS PREDOMINANTLY THE DESCRIBED COLOR)
- B) IF YOU DECIDE TO REUSE THE STOCK CONNECTOR BY CUTTING THE WIRES OFF OF THE STOCK BLINKERS, YOU WILL HAVE AN EXTRA WIRE ON EACH SIDE, WHICH IS NOT TO BE CONNECTED TO ANYTHING – THIS IS AN UNNECESSARY GROUND WIRE. WE SUGGEST YOU TAPE IT OFF NEATLY.

28) NEATLY ZIP TIE OR TAPE THE WIRES TOGETHER FOR A TROUBLE FREE INSTALL!

TROUBLESHOOTING

YOU MAY FIND THAT YOUR BLINKERS BLINK FASTER NOW THAT YOU HAVE REMOVED THE STOCK TURN SIGNALS IN THE REAR OF THE BIKE. THIS IS THE DESIGNED RESPONSE OF THE FLASHER RELAY – AND IT IS OK TO LEAVE IT THIS WAY. IF YOU WISH TO SLOW YOUR BLINK RATE, YOU MUST REPLACE YOUR FLASHER RELAY OR ADD LOAD TO THE SYSTEM. THE CUSTOM LED ELECTRONIC LED FLASHER RELAY P/N: ELFR-1, OR LOAD EQUALIZERS ARE THE PERFECT SOLUTION FOR THIS! SEE [HTTP://WWW.CUSTOMLED.COM](http://www.customled.com) FOR MORE INFORMATION.

IF YOU HAVE REPLACED THE FRONT TURNS SIGNALS WITH LEDS ALSO, YOU MAY FIND THAT YOUR BLINKERS DON'T BLINK AT ALL - YOU MUST REPLACE YOUR FLASHER RELAY OR ADD LOAD TO THE SYSTEM TO FIX THIS PROBLEM. AGAIN, THE CUSTOM LED ELECTRONIC LED FLASHER RELAY P/N: ELFR-1, OR LOAD EQUALIZERS ARE PERFECT FOR THIS. VISIT [HTTP://WWW.CUSTOMLED.COM](http://www.customled.com).

IF YOUR TAIL LIGHT IS NOT FUNCTIONING PROPERLY, CHECK YOUR CONNECTIONS CAREFULLY! THE CUSTOM LED INTEGRATED TAIL LIGHTS ARE TESTED "GOING INTO THE BOX." YOU CAN SAVE YOURSELF A LOT OF AGGRAVATION BY SIMPLY DOUBLE AND TRIPLE CHECKING YOUR WIRING. IN THE EVENT THAT YOU MAY HAVE A FAULTY UNIT, PLEASE CONTACT YOUR VENDOR FOR ASSISTANCE OR E-MAIL SUPPORT@CUSTOMLED.COM.

DISCLAIMER

BY SELLING YOU THIS PRODUCT, WE MAKE NO GUARANTEE THAT THE USE OF THIS PRODUCT CAN OR WILL HELP REDUCE THE CHANCE OF ACCIDENTS IN ANY WAY, NOR ARE WE LIABLE IN ANY WAY. IT IS YOUR RESPONSIBILITY TO VERIFY PROPER FUNCTIONALITY OF THIS PRODUCT EVERY TIME YOU START YOUR MOTORCYCLE.

FURTHERMORE, IT IS YOUR RESPONSIBILITY TO FOLLOW THE LAWS OF YOUR LOCAL JURISDICTIONS AS FAR AS D.O.T. REQUIREMENTS FOR MARKER LIGHT AND BLINKER LIGHT SHAPE, COLOR AND INTENSITY.

THIS PRODUCT IS SOLD "FOR OFF-ROAD USE ONLY."