



Installation Instructions

Kodlin 3-1 Rear Fender Strut Indicators K68489 and K68490

Experience with soldering electric cables is necessary to install this product. We recommend working with a certified motorcycle shop.

1. Secure the motorcycle, turn the ignition off, disconnect the battery or remove the main fuse. Deactivate the alarm system or make sure that the key fob is close to the bike. Prior to disconnecting the electricity, the ignition needs to be turned on. Check your manual for details.
2. We recommend testing the functionality of the module prior to installation.
3. Remove the seat
4. Disconnect the connectors of both rear indicators and tail / LP lamp (see figure 1) making sure there are no zip ties holding wires to facilitate fender removal.

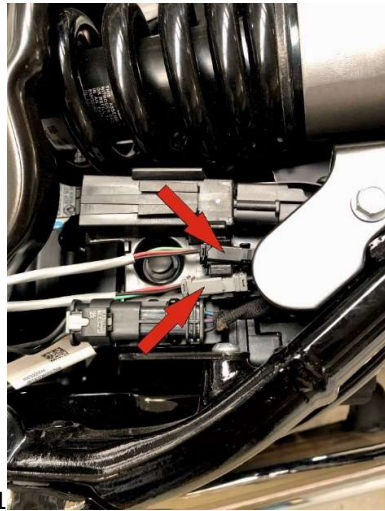


Fig. 1

5. Remove the four fender strut bolts and remove the rear fender (see figure 2)



Fig. 2

6. Remove the fender struts. (see figure 3 / 4)



Fig. 3



Fig. 4

7. Cut the stock indicator wires approx. 8-10cm / 3-4" next to the stock indicators.
8. Remove the stock indicators.
9. Install the Kodlin indicators with "Blue Loctite[®]" or similar medium strength thread locker.
Note: There are two lengths of screws. The short screw goes into the rear hole. (see figure 5)



Fig. 5

10. Trim the end of the bike and the Kodlin indicators wires to the right length. Solder and insulate the wires.

Cable Connection:

Black – Ground (-)

Red – Brake Light (+)

Yellow – Running Light (+)

Brown – Turn (+)

Tip: Make sure to read our Tech-Tips concerning 3-1 wiring with a taillight vs wiring without a taillight as well as how to wire with our load balancer. Go to <https://kodlinusa.com/tech-guide/#tech-tips>

11. Install the fender struts to the rear fender using medium strength thread locker.
12. Install the rear fender and fender struts to the frame using medium strength thread locker.
13. Reconnect the two indicator connectors (reverse item 4).
14. Reconnect battery or power by reversing the steps in item 1.
15. Test all lights for proper function.

Tip:

The flashing speed may change, or you may set DTC's when replacing the original indicators. For bikes with a BCM turning on your emergency flashers for 5-10 minutes should allow your BCM to adjust for the new load. If that is not the case the installation of a load equalizer will solve that problem. Kodlin p/n KUS11400 is a nice, small unit that works great. Review our wiring tips at <https://kodlinusa.com/tech-guide/#tech-tips>

16. Install seat.

Note:

It is the installer's responsibility to ensure that all the fasteners are tightened before operation of the motorcycle (we recommend following the Mfg.'s torque specs). Kodlin will not provide warranty coverage on products or components lost due to improper installation or lack of maintenance. Periodic inspection and maintenance are required.

For European models:

These 3-1 rear indicators are ECE approved for installation on the rear of the motorcycle when mounted on the fender struts as highlighted in these instructions. That means no registration or carriage of documentation is necessary.

For the latest install guides, video's, FAQ's, and Tech-Tip's scan QR code!



Wiring LED's with a Taillight

Bikes with fender mounted taillights already have the BCM set to "Dedicated Taillight". This setting provides correct signals from BCM to turn signal connectors for a dedicated voltage source for dim solid red running lights, bright flashing amber turn signal lights and bright solid red brake light when wired as shown in diagram #1. It will require the addition of two more wires (brake and running) to the turn signal light harness to complete the install for each side.

Kodlin Neowise 3-1 Rear LED Indicator with BCM set to "Dedicated Taillight"

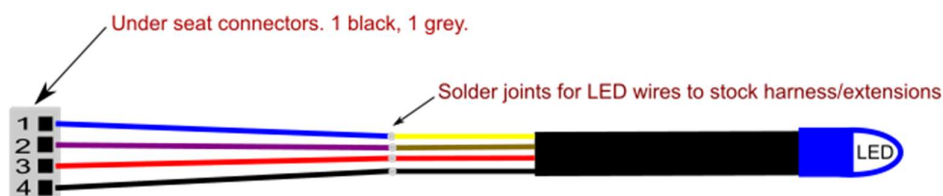


Diagram #1

Pin position 1, Blue=Running light to LED yellow wire, (stock not wired)
 Pin Position 2, Violet=Turn Signal to LED brown wire
 Pin Position 3, Blue/Red=Brake light to LED red wire, (stock not wired)
 Pin position 4, Black=Ground to LED black wire
 Additional wires or install kits will be needed to fill pin position 1 and 3.

LED Wire Colors
 Yellow=Running Lights
 Brown= Turn Signal
 Red=Brake
 Black= Ground

Wiring LED's without a Taillight

Bikes that have turn signals only have BCM set to "To Turn Signals Only". This setting has the voltage for brake light also going to pin #2 (violet wire) for the turn signal. If you wire as above in diagram #1 this makes the brighter more dominant amber LED to go on with brake activation.

To correct this you we suggest option 2 as the easiest sollution. Turn signals will be red instead of amber and requires no BCM config or additional wires.

Option 1: Set BCM to "Dedicated Taillight and wire as above in diagram #1. This option has red brake and amber turn lights but I have seen some BCM's throw DTC B2161 for an open circuit. If this happens I recemmend option two instead. I do not suggest using the resistor style of load balancer for brake circuit due to the amount of time brake lights may be activated and the amount of heat resistor will generate.

Option 2: As wired above remove violet wire from pin #2 and leave LED turn wire disconnected. Remove brake wire from pin #3 and install in pin #2 location. No other additional wires are required This setting provides signals from BCM that will have LED acting just like stock turn signal. Dim red running light, with bright solid red brake light that will begin to flash red when turn signal is activated. If you don't want to deal with changing the BCM and don't mind a red turn signal instead of an amber one this is a good option . It should be wired as in diagram # 2.

Kodlin Neowise 3-1 Rear LED Indicator with BCM set to "Turn Signal Only"



Diagram #2

Stock wire configuration works fine.
 Pin position 1, Blue=Running light to LED yellow wire
 Pin Position 2, Violet=Turn Signal to LED red wire
 Pin Position 3, Open
 Pin position 4, Black=Ground to LED black wire

LED Wire Colors
 Yellow=Running Lights
 Brown= Not Used
 Red=Brake/Turn
 Black= Ground

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