



# INSTALLATION

## L.E.D. FRONT TURN SIGNAL INSERTS

5440

THANK YOU FOR CHOOSING KÜRYAKYN!

**PROTECT YOURSELF AND OTHERS FROM POSSIBLE INJURY AND PROPERTY DAMAGE OR LOSS. PAY CLOSE ATTENTION TO ALL INSTRUCTIONS, WARNINGS, CAUTIONS, AND NOTICES REGARDING THE INSTALLATION, USE, AND CARE OF THIS PRODUCT.**

### WARNING

THIS INDICATION ALERTS YOU TO THE FACT THAT IGNORING THE CONTENTS DESCRIBED HEREIN CAN RESULT IN POTENTIAL DEATH OR SERIOUS INJURY.

### CAUTION

This indication alerts you to the fact that ignoring the contents described herein can result in minor or moderate potential injury.

### NOTICE

This indication alerts you to the fact that ignoring the contents described herein may negatively affect product performance and functionality or damage the product itself or the product to which it is being attached.

**MAKE SURE THE FOLLOWING PARTS HAVE BEEN INCLUDED IN THE KIT:**

- 2 3-1/4" LED Front Two Circuit Inserts—Amber Lens
- 1 Load Equalizer
- 1 Dielectric Grease
- 3 Wire Connectors—(Scotch Locks)
- 1 Installation Instructions

**Pictures may depict different parts. Installation is the same.**

### TOOLS SUGGESTED:

Phillips and Flat Blade Screwdrivers, Test Light

### NOTICE

**These installation instructions contain important information. Ensure that the end user receives this copy and is aware of its importance for future reference.**

### STEP 1

Read and understand all steps in the instructions before starting the installation. Park the motorcycle on a hard, level surface and turn off the ignition.

### NOTICE

**LED circuit boards are polarity sensitive! Use a test light to determine the polarity of the bike's wiring before connecting the LED circuit board. Kuryakyn is not responsible for damage to the LED circuit board caused by reversed polarity.**

**Use a test light to verify wire functions before connecting the LED circuit board to non-stock wiring. Kuryakyn is not responsible for damage to the LED circuit board caused by non-stock wiring.**

### CUSTOMER SERVICE

877.370.3604 (toll free)

### INSTALLATION QUESTIONS

techsupport@kuryakyn.com  
or call 715.247.2983

### LIMITED WARRANTY

Kuryakyn warrants that any Kuryakyn products sold hereunder, shall be free of defects in materials and workmanship for a period of one (1) year from the date of purchase by the consumer excepting the following provisions:

- Kuryakyn shall have no obligation in the event the customer is unable to provide a receipt showing the date the customer purchased the product(s).
- The product must be properly installed, maintained and operated under normal conditions.
- Kuryakyn makes no warranty, expressed or implied, with respect to any gold plated products.
- Kuryakyn shall not be liable for any consequential and incidental damages, including labor and paint, resulting from failure of a Kuryakyn product, failure to deliver, delay in delivery, delivery in nonconforming condition, or for any breach of contract or duty between Kuryakyn and a customer.
- Kuryakyn products are often intended for use in specific applications. Kuryakyn makes no warranty if a Kuryakyn product is used in applications other than intended.
- Kuryakyn electrical products are warranted for one (1) year from the date of purchase by the consumer. L.E.D.'S contained in components of Kuryakyn products will be warranted for defects in materials and workmanship for 3 years from the date of purchase where as all other components shall be warranted for one(1) year. This includes, but is not limited to; control modules, wiring, chrome & other components.

- Kuryakyn makes no warranty of any kind in regard to other manufacturer's products distributed by Kuryakyn. Kuryakyn will pass on all warranties made by the manufacturer and where possible, will expedite the claim on behalf of the customer, but ultimately, responsibility for disposition of the warranty claim lies with the manufacturer.

### ABOUT OUR CATALOG

For purchasing Kuryakyn® products, you can receive a complete catalog free of charge. Send the Proof-of-Purchase below with your address to: Kuryakyn  
454 County Road V V  
Somerset, WI 54025-9031  
Please indicate either Accessories Catalog for Harley-Davidson® or GL & Metric Cruisers.

Be sure to ask your local dealer about other Kuryakyn® products, the motorcycle parts and accessories designed for riders by riders.

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PROOF OF PURCHASE

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## BIKE PREP:

**STEP 2** Remove the lenses from the stock turn signal fixtures. The screws will be re-used.

**STEP 3** Push the stock turn signal bulb in, gently rotate it counter-clockwise and pull it out of the turn signal socket.

## INSTALL THE INSERTS:

**STEP 4** Apply some of the included dielectric grease to the end of the new LED Insert connector. Refer to **PIC 1**. Align the pins and slots; use a flat blade screwdriver to carefully push the Insert connector into the socket, then rotate it clockwise. Repeat for the other side.

**STEP 5** Refer to **PIC 2**. Secure the Insert to the fixture with the stock screws. **DO NOT OVERTIGHTEN THE SCREWS; over-tightening may cause lens breakage.** Repeat for the other side.

## VERIFYING CORRECT OPERATION OF THE INSERTS:

CAN bus electrical systems are found on all '11-later Softails, '12-later Dynas, '14-later Sportsters, and '14-later Touring and Tri-Glide models. CAN bus motorcycles can also be identified by the hazard (4-ways) button located on the brake-side (right) hand controls as shown in **PICs 3 and 4**. Refer to the procedure below for CAN bus system bikes, for **ALL OTHER MODELS** refer to the procedures on **PAGES 3 and 4**.

## CAN BUS SYSTEM MODELS:

**IMPORTANT:** Load equalizers are **NOT** necessary on CAN bus systems when LED Turn Signal Inserts are installed.

**STEP 6** Start the bike and check for proper turn signal operation. If the turn signals flash rapidly on CAN bus system bikes, you will need to synchronize the turn signal system. Follow the procedure below to synchronize:

Turn the ignition **ON**,

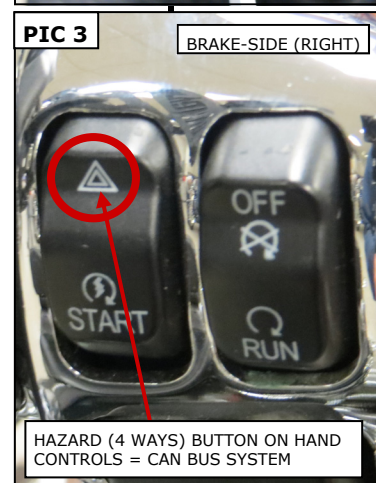
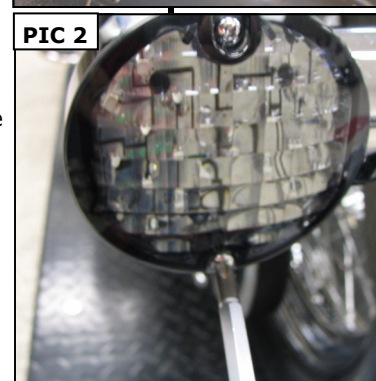
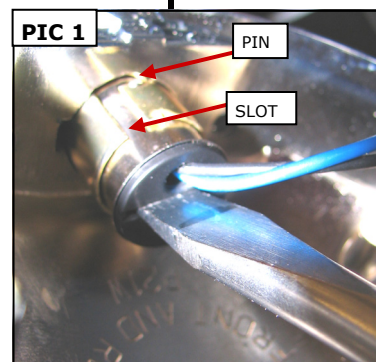
Turn on the 4-way flashers for at least 20 seconds; shut the 4-way flashers off,

Turn the ignition **OFF**,

Turn the ignition back **ON**; check for proper turn signal operation,

You may need to repeat the procedure if the signals still flash rapidly.

**NOTE:** Diagnostic Trouble Codes (DTC) may be triggered during initial start-up when using LED Turn Signal Inserts. Follow the procedure on **PAGE 3** to check and clear DTCs.



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## CLEARING DIAGNOSTIC TROUBLE CODES (DTCs)—CAN BUS MODELS:

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**NOTE:** Before clearing any codes, confirm that the LED Turn Signal Inserts illuminate and flash correctly.

Refer to **PICs 5, 6 and 7**. To enter diagnostic mode, press and hold the trip odometer reset switch located on the left handlebar control, while turning the **IGN ON**.

Release the trip odometer reset switch when **"DIAG"** appears on the **ODOMETER DISPLAY**.

Press and release the trip odometer reset switch until **"BCM"** is displayed on the odometer display. **"BCM Y"** = Yes DTC set. **"BCM N"** = No DTC set.

If **"BCM Y"** is displayed, press and hold the trip odometer reset switch.

If any DTC's (diagnostic trouble codes) are stored in the module, the odometer will display the DTC. Quickly pressing and releasing the trip odometer reset switch will cycle through the stored DTCs.

When all the DTCs have been cycled the odometer will display **"END"**. Continue to quickly press and release the trip odometer reset switch to cycle through the DTCs again.

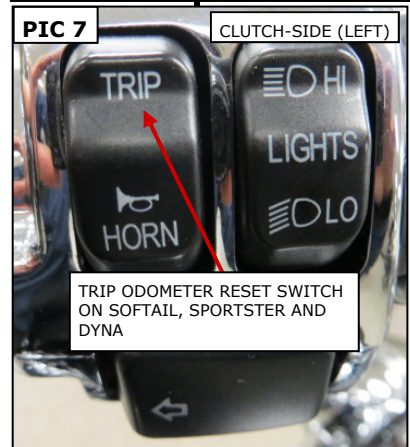
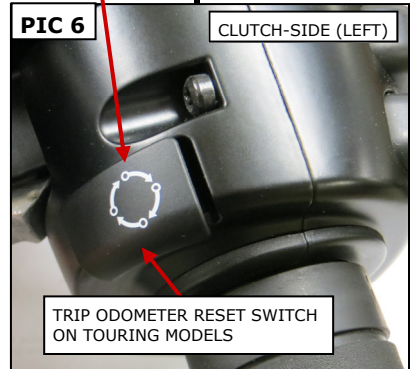
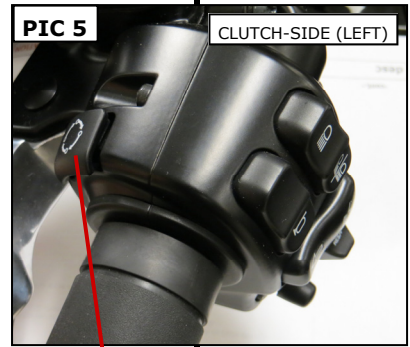
**NOTE:** The **ONLY DTCs** you will be clearing are as follows:

<b>b2141</b>	<b>Left front turn signal output open</b>
<b>b2146</b>	<b>Right front turn signal output open</b>
<b>b2151</b>	<b>Left rear turn signal output open</b>
<b>b2156</b>	<b>Right rear turn signal output open</b>

To clear the DTCs listed above, press and hold the trip odometer reset switch **while the DTC is displayed** until **"CLEAR"** appears on odometer display.

Press and release the trip odometer reset switch again to continue to the next module. Repeat for **any other code listed above**.

Turn the **IGN OFF** to exit the diagnostic mode. Wait for any security lights to flash and repeat the procedure to ensure that the DTCs have been cleared.



## VERIFYING CORRECT OPERATION OF THE INSERTS (ALL OTHER MODELS):

### **STEP 7**

Start the bike and check for proper turn signal operation. If the turn signals illuminate, but do not flash; flash normally several times then flash rapidly; or, if the security system warning light remains lit; then the included Load Equalizer will need to be installed. Follow the procedures below:

If the bike is equipped with a Küryakyn Run-Turn-Brake Controller, plug the Load Equalizer into an unused 3-pin connector on the module.

If there is an existing load equalizer connected and no additional 3-pin connectors available:

Cut the 3-pin connector off of the included Load Equalizer,

Use the included Scotch Locks to splice the wires to the like-colored wires on the Load Equalizer already in place. Refer to **PIC 8 on PAGE 4**.

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**L.E.D. FRONT TURN SIGNAL INSERTS**

**INSTALLATION**

If the bike is not equipped with a Küryakyn controller of any sort:

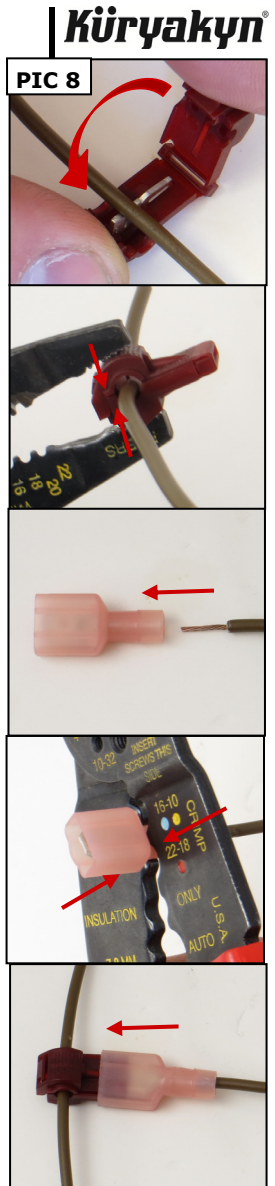
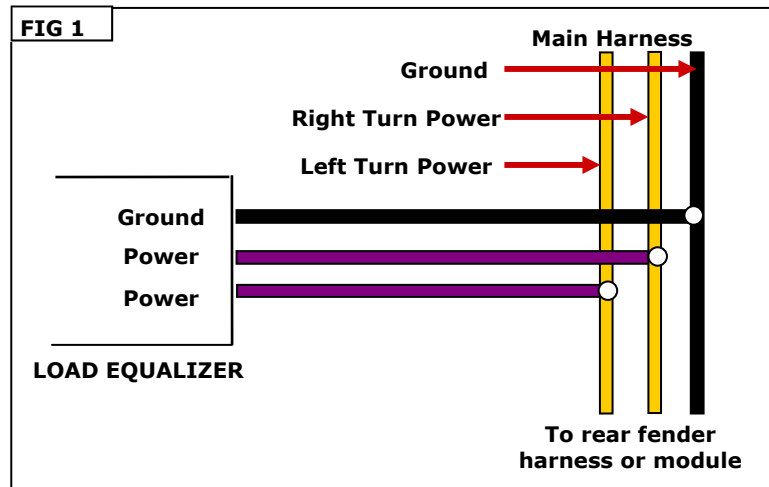
Use a test light or wiring schematic to locate the left and right turn signal power wires and a ground wire. Typically the easiest access is beneath the seat or behind a side cover. Refer to **FIG 1** and **PIC 8**. Cut the 3-pin connector off of the included Load Equalizer and use the included Scotch Locks to connect one violet wire from the Load Equalizer to the bike's right turn power wire. Connect the other violet wire from the Load Equalizer to the bike's left turn power wire. Connect the black wire from the Load Equalizer to the ground wire. Test for the proper function of the turn signals.

#### NOTE:

If you do not wish to splice into the bike's wiring, Küryakyn offers plug-in Load Equalizer Adapters (P/N 4837, or P/N 5499, sold separately) that fit most '96-later H-D models. These adapters connect to the stock wiring harness under the seat or behind the side cover (ensure that these are being connected upstream from any other multi-function controller) and provide connectors that will accept the Load Equalizer.

Upgrade reliability and convenience with the Self-Regulating Load Equalizer (P/N 5498, sold separately). It is compatible with all H-D Factory Security Systems and won't overheat, even when subjected to 4-way flashers, non-stop security system flashing while trailering, or when stuck at never ending red traffic lights.

For use with Küryakyn Run-Turn-Brake Controllers and Load Equalizer Adapters on H-D models equipped with factory security. Not required for '11-'13 H-D Softail & '12-'13 H-D Dyna models.



**WARNING**

AFTER INSTALLING THE SEAT, PULL UP ON IT TO ENSURE IT IS LOCKED INTO PLACE. A LOOSE SEAT CAN SHIFT AND CAUSE LOSS OF CONTROL RESULTING IN SERIOUS INJURY OR DEATH.



**WARNING**

ENSURE PROPER LIGHT OPERATION BEFORE RIDING THE MOTORCYCLE. VISIBILITY IS A MAJOR CONCERN FOR MOTORCYCLISTS. A LIGHT MALFUNCTION COULD RESULT IN DEATH OR SERIOUS INJURY.

**NOTICE**

Do not secure the Load Equalizer to the control module! Excess heat from the Load Equalizer could damage the control module.

Secure all wiring away from any moving parts, pinch points or extreme heat. Küryakyn WILL NOT issue a warranty on any electrical component that fails due to pinched, crimped, broken, abraded, melted or frayed wires.

It is the end user's responsibility to ensure that all of the fasteners (including pre-assembled) are tightened before operation of the motorcycle. Küryakyn will not provide warranty coverage on products or components lost due to improper installation or lack of maintenance. Periodic inspection and maintenance are required on all fasteners.

*Ride On!*

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**L.E.D. FRONT TURN SIGNAL INSERTS**

**INSTALLATION**