





INSTALL GUIDE

2023 Ford Expedition



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HG2 Side Runner[®] - Installation Guide



UNDERSTANDING THE GUIDELINES

The HG2 Runner[®] Package is an extremely versatile emergency lighting system designed for maximum visibility with a minimal footprint. HG2 Runners were developed to enhance the outline of a vehicle's profile (side of vehicle), offering greater visibility through installation location, variable flash patterns and lighting intensity.

Our patent-pending designs feature super-bright, wide-angle LEDs, a high-impact polycarbonate housing and a powder-coated extruded aluminum mounting sleeve for stealth installation.

SAFETY FIRST!

This guide provides information for a safe and proper installation of your HG2 Emergency Lighting product. Please read this guide in its entirety before attempting to install or operate this product.

This guide offers information that could prevent damage or serious injury.

The installation of this kit may require that the vehicle is safely supported off of the ground, using jack stands or a vehicle lift. Never work on a vehicle supported only by a jack. Observe all warnings and procedures as outlined in the manual or instructions provided by the manufacturer of your jack stands, vehicle lift and other necessary tools required to install this kit.

Installer or technician should have a good understanding of automotive electronics, and a general working knowledge of related automotive systems and procedures. When mounting this product, care must be taken to avoid damage/interference to vehicle components and systems—such as brake and fuel lines, electrical devices (computers and airbag sensors) and wiring:

- Inspect both sides of mounting surface before drilling or inserting fasteners
- Use fasteners of proper length

• Install control components in accessible location that provides for safe operation of the vehicle and product controls under any driving condition

- Do not install this product in a manner that interferes with moving parts, or where lifts or jacks are used to raise the vehicle
- Do not install this product in a manner that interferes with the deployment of an airbag

When wiring this product:

- Deburr and install grommets into any holes drilled for wiring
- Route wires to avoid sources of excessive heat and any moving parts, such as exhaust, suspension systems, brake pedal
- Secure all wires using wire/cable ties or equivalent
- Use NEGATIVE (-) battery post for all chassis ground connections for optimum per formance and efficiency
- Do not route wires in a manner that interferes with the deployment of an airbag

The installer or technician assumes any and all responsibility to determine proper mounting location and wire routing, with consideration of the safety of the vehicle operator and passengers.

DO NOT:

- Stare directly into the lights. High-intensity LEDs can cause momentary blindness and/or damage to your eyes
- Mount product/product controls that interfere with/ impede safe operation of vehicle
- Attempt to initiate or control this lighting system during hazardous driving conditions
- Clean product with a pressure washer, solvents or other chemicals

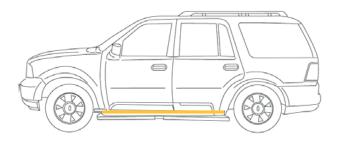


FAILURE TO FOLLOW THESE GUIDELINES COULD CAUSE DAMAGE TO THE PRODUCT, VEHICLE AND/OR SERIOUS PERSONAL INJURY OR DEATH.



Side Mount:

2019 Ford Expedition



PARTS LIST

- 2 72" HG2 Runners Side of Vehicle
- 1 RPM12 Runner Platform Module
- 1 Pattern Selector Button
- 1 10A Fuse
- 1 Installation Guide and Warranty Info Packet

REQUIRED TOOLS

- Drill
- 9/32 Drill Bit
- #8 X 1/2" Screws
- Phillips-head Screwdriver/bit
- Wire Strippers
- Soldering Iron / Solder
- Heat Shrink Tubing
- Wire/Cable Ties

Additional tools may be required to complete installation.

INSTALLATION

Preparation

1. Read the installation guide for this product in its entirety.

2. Unpack product components and review parts list.

3. Bench test Runner Platform Module and HG2 Runner(s) using 12v power supply to ensure components are in working order.

- 4. Disconnect negative terminal from vehicle battery.
- 5. Remove door sill panels at all door locations.

MOUNTING

Driver's Side Shown Repeat steps 1 – 5 for passenger side.



It is highly recommended that the installer has assistance in positioning and holding the runner assembly during the inspection and mounting process.

1. Remove the vehicles step bar by removing mounting bolts from underside vehicle frame.



Remove step bar from vehicle before installing Arrows indicate bolts not visibile in photo.

2. Position Runner light to align on top of step bar as evenly as possible.



Arrows illustrates placement of Runner light on step bar.

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3. Use factory mounting holes to fix the Runner light to vehicles step bar.



Arrows illustrates factory mounting holes. New holes can be made by marking and pre-drilling.

4. Using $\#8 \times 1/2"$ self-tapping sheet metal screws, fasten using front-most mounting hole, then fasten at rear using rear-most mounting hole. Continue fastening with selftapping sheet metal screws until all factory mounting holes are utilized.



Photo details placement of #8 1/2" screws. Note: Make sure Runner light is tightly secured to step bar.

5. Once Runner is secure, re-mount step bar to vehicle.



Use another person to assist with remounting step bar to vehicle. Ensure Runner doesn't obstruct door before securing.



Inspect exterior of vehicle to ensure mounting fasteners will not be obstructed by, or damage, vehicle systems such as fuel or brake lines. Examine the vehicle's interior floor, under carpet and door sills to make certain drilling of holes or insertion of fasteners will not damage or interfere with wiring, sensors or computers.



Arrows illustrates locations to secure step bar to underside of vehicle.

Wiring

7. With door sill and kick panel removed, lift carpet to access factory grommet for wire routing.



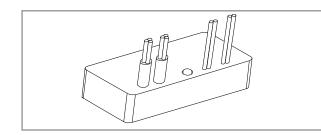


[Left] Factory grommet for wire routing. [Right] Using an awl, create access Passenger side factory grommet. Route wiring to Runner Platform Module [RPM12].



Fasten wire stress-relief clamp to underside of vehicle in a suitable location using self-tapping sheet metal screw.

Runner Platform Module [RPM12]



Parts list

- 1 RPM12 Runner Platform Module
- 1 Pattern Selector Button
- 1 10A Fuse
- 1 Installation Guide and Warranty Info Packet

Required Tools

- Drill
- 9/32" Drill Bit
- Wire Strippers
- Soldering Iron / Solder
- Heat Shrink Tubing
- Wire/Cable Ties

Additional tools may be required to complete installation.

Installation

Preparation

- 1. Read the installation guide for this product in its entirety.
- 2. Unpack product components and review parts list.

3. Bench test Runner Platform Module and HG2 Runner(s) using 12v power supply to ensure components are in working order.

4. Disconnect negative terminal from vehicle battery.

5. Prepare mounting location by removing interior panels as necessary.

Mounting

6. Mount the Runner Platform Module in a secure, dry location (interior of the vehicle). Keep away from moving parts, heat sources or locations that interfere with safe operation of the vehicle.

7. Mount the Pattern Selector Button in an easily accessible location. Drill a 9/32" hole for mounting.

Wiring

8. All wiring connections should be soldered and protected using appropriate heat shrink tubing.

BASIC OPERATION

Demo mode

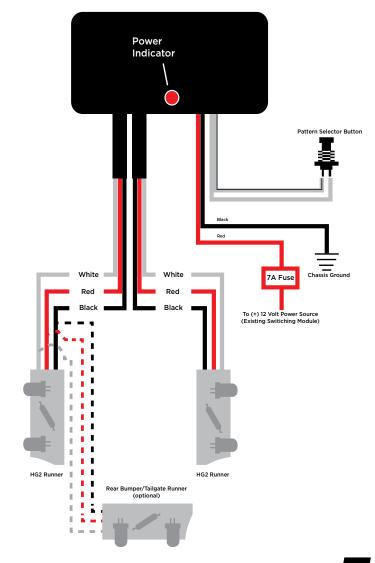
Demo mode rotates through each of up to 20 patterns every 10 seconds. To enter demo mode, press the pattern selector button and power up module (key on or power from existing switching unit). Exit demo mode by cycling power off and on again without pattern selector button depressed.

Selecting Patterns

Press pattern selector button to select a new pattern. The selected pattern is retained even after cycling power.



Inspect exterior of vehicle to ensure mounting fasteners will not be obstructed by, or damage, vehicle systems such as fuel or brake lines. Examine the vehicle's interior floor, under carpet and door sills to make certain drilling of holes or insertion of fasteners will not damage or interfere with wiring, sensors or computers.



TROUBLESHOOTING

Problem		Solution
HG2 Product does not illuminate	 No power to RPM12 module Power wires reversed Fuse blown Improper ground to chasis 	 Check wiring for loose connection; check fuse Checking wiring diagram;reverse power wires Replace fuse Ensure ground wire terminates to metal chassis ground
External fuse blows	1. Power wires shorted 2. Incorrect fuse size	 Check power connections for damaged or shorted wiring Replace with correct fuse size
HG2 Product illuminates regardless of ignition switch postion	1. RPM12 Module wired to constant +12v power source	1. Check wiring connection to RPM12 Module for switched power
Incorrect flash pattern	1. Wrong flash pattern is selected	1. Select another pattern; see Basic Operations: Selecting Patterns
Flash patterns continually change	1. RPM12 Module in "Demo Mode"	1. Exit "Demo Mode"; see Basic Operations: Demo Mode

WARRANTY

This warranty gives you certain rights and you may also have other rights that may vary from state to state. This warranty is given only to the end-use purchaser of the accompanying product (referred to in this warranty as "this Product").

Product Registration

HG2 Emergency Lighting warrants Products within the "Warranty Period" and that have been properly registered. To register this Product, go to www.hg2lighting.com. Each HG2 product must be registered within 90 days of purchase.

What Is Covered

HG2 Emergency Lighting warrants to you for the Warranty Period that there are no defects in the materials and workmanship of this Product. The "Warranty Period" is a maximum of 5 years (Limited) from the date of purchase with proof of purchase.

What Is NOT Covered

This warranty is **VOID—that is, this Product has no warranty**—if (1) you did not purchase this Product from an authorized HG2 reseller within the United States, (2) this Product has been serviced, modified or tampered with by anyone other than an Authorized Service Representative of HG2 Emergency Lighting (3) the serial number has been modified, defaced or removed from this Product, (4) this Product has been abused or purposely damaged, (5) non-HG2 controllers have been used, (6) this Product has been transported without the proper preparation and packaging, (7) a non-certified HG2 Installer performed work on the unit or installed the unit.

If Your Product Defective

Call 866-468-4569, or if you suspect a defect in materials or workmanship in this Product, you can report it to a HG2 Emergency Lighting Authorized Service Center. During the Warranty Period, supply HG2's representative with a copy of your dated bill of sale showing that this Product was purchased within the United States. For the name of HG2 Authorized Dealer or Distributor call 866-468-4569. After contacting the HG2 Authorized Dealer or Distributor, you may be required to deliver or send the Product properly packaged, freight prepaid,to the Authorized Service Center together with a photocopy of your bill of sale.

What HG2 Will Do

HG2 will evaluate your report of a possible defect to determine whether a defect exists, and if it does exist, HG2 (or its Authorized Service Center) will repair this product or (at HG2's option) replace

this Product with a product that performs the same functions and performs as well as the original Product. HG2 reserves the right to supply refurbished or remanufactured replacement products provided that the replacement products meet the manufacturer's specifications for new products. The repaired or replacement product will be returned to you at no cost.

Exchange Service

HG2 Emergency Lighting Systems are covered by an 5 Year Limited Warranty. You must contact HG2 Support to first troubleshoot the issue, and if this Product is deemed inoperable, then a RMA (Return Merchandise Authorization) will be opened and sent to you. All RMA shipments must have the RMA number listed on the box or on a form in the box. Return shipments without RMA information attached will not be guaranteed.

HG2 Support

Toll-free customer service and technical support is available for assistance at 866-468-4569. You may access more HG2 support by going to the HG2 website at: www.hg2lighting.com.

Please keep a record of this Product by completing the online registry. In response we will send a confirmation of the approved registered products. Retain this information with your proof of purchase (bill of sale) in case your Product is lost, stolen, or requires service.

You may ship this product back to

Attn: Returns HG2 Emergency Lighting 477 N. Semoran Blvd, Orlando FL, 32807

Important

We recommend that you keep all original packing materials, in the event that you ship this product.

HG2 Emergency lighthing reserves the right to discontinue, modify, or upgrade any products it manufactures with design improvements without prior notice.

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, WHETHER EXPRESSED BY AFFIRMATION, PROMISE, DESCRIPTION, DRAWING, MODEL, OR SAMPLE. ANY AND ALL WARRANTIES OTHER THAN THIS ONE, WHETHER EXPRESSED OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED.

PATENT PENDING • U.S. Patents #6,612,726; #6,962,427, #8,480,253 B1