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# INSTALLATION INSTRUCTIONS

<b><u>Product</u></b> ECOUPLED FLASHLIGHT CHARGING MOUNT 7160-0232	<b><u>Revision</u></b> Rev. A	<b><u>Form</u></b> INST-456
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The eCoupled Flashlight Charging Mount will provide a tough water resistant location to charge the Energizer eCoupled Hard Case Professional LED Swivel Light.

### Tools Needed

- 7/16 Socket
- Wire Crimper
- Wire Stripper

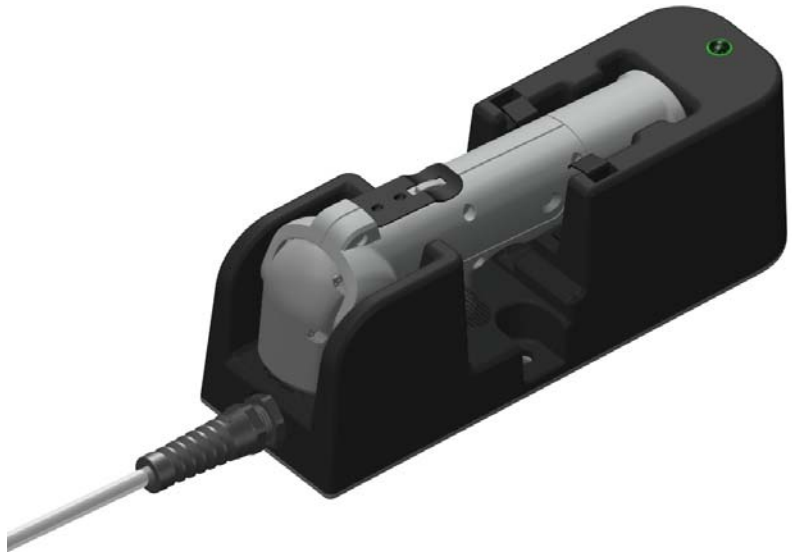


Figure 1

*These instructions are for the Flashlight Charging Mount only. For instructions on features, operation, and maintenance of the Energizer eCoupled Hard Case Professional LED Swivel Light, please refer to the Energizer instructions after page five.*

## IMPORTANT SAFETY INFORMATION for INSTALLERS

Safety is dependent on the proper installation and servicing of this charging mount. It is important to read and follow all instructions before installing this product.

To properly install a Gamber-Johnson charging mount you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and service of aftermarket vehicle equipment.

There are no adjustments required at any time of the electrical components within the charging mount. ***Opening the power housing will void the product warranty.***

#### Product Mounting Disclaimer

Gamber-Johnson is not liable under any theory of contract or tort law for any loss, damage, personal injury, special, incidental or consequential damages for personal injury or other damage of any nature arising directly or indirectly as a result of the improper installation or use of its products in vehicle or any other application. In order to safely install and use Gamber-Johnson products full consideration of vehicle occupants, vehicle systems (i.e., the location of fuel lines, brakes lines, electrical, drive train or other systems), air-bags and other safety equipment is required. Gamber-Johnson specifically disclaims any responsibility for the improper use or installation of its products not consistent with the original vehicle manufactures specifications and recommendations, Gamber-Johnson product instruction sheets, or workmanship standards as endorsed through the Gamber-Johnson Certified Installer Program.

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If you need assistance or have questions, call Gamber-Johnson at 1-800-456-6868

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## During Installation

- DO NOT connect this charging mount to the vehicle battery until:
  1. ALL other electrical connections are made
  2. Mounting of ALL components is complete
  3. VERIFICATION that no shorts exist in the entire system
- DO NOT install equipment or route wiring or cords in the deployment path of any air bag.
- When drilling into the vehicle, DO make sure that both sides of the surface are clear of anything that could be damaged.

*CAUTION: If wiring is shorted to the frame, high current conductors can cause hazardous sparks resulting in electrical fires or flying molten metal.*

## After Installation

- Test the charging mount to ensure that it is working properly.

File these instructions in a safe place and refer to them when performing maintenance or re-installing.

*WARNING: Failure to follow all safety precautions and instructions may result in property damage, serious injury or death.*

# PRE-INSTALLATION RECOMMENDATIONS

## Conduct a "Bench Test"

Gamber-Johnson strongly advises a "bench test" be conducted to verify that all electronic issues are resolved prior to installation:

- Make sure the flashlight is operational by itself.

*Gamber-Johnson also recommends positioning of all mounts and equipment in the vehicle prior to the actual install to verify that mounting locations are safe and practical.*

# POWER SUPPLY INFORMATION

This charging mount has a built-in power supply and is designed to be used as follows:

Start charging at: 13.1 V DC

Continuous charging between :12.1 - 18 V DC.

Power is provided using the wires located on the end of the Flashlight Charging Mount.

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# WIRING INSTRUCTIONS

*IMPORTANT: Make sure that you have read this entire section before you begin wiring!*



Figure 2

1. Install charging mount into vehicle, making sure that all bolts are tight.
2. Connect Power Cable (Part Number 7100-0256) to Flashlight Charging Mount (Figure 2).
3. Power Connections:
  - Use Power Cable (Part Number 7100-0256) to attach the Flashlight Charging Mount to the vehicle's electrical system.
  - Use only SAE J1128 Type GPT number 14 AWG stranded wire (minimum) to attach the charging mount to the vehicle's electrical system.
  - Attach black ground wire to the location where vehicle battery grounds to the vehicle chassis.
  - Route the lead wires to the battery.
  - Protect the lead wires from abrasion and chafing by using wire loom or conduit, and route away from moving parts or areas where high temperatures may occur.
  - Connection of the supply voltage (V+) must be kept as close to the battery as possible.
  - Attach red power wire to the battery positive terminal using the 2 amp in-line fuse and fuse holder provided with the charging mount. Connect the fuse holder to the red wire using the butt splice connectors provided with the fuse holder. *When assembling the butt splice connectors use only Panduit crimp tools CT-100, CT-600, CT-1525 or CT-1551.*
  - The fuse holder location must be kept within 10 inches of the connection to the battery positive, away from moving parts, and temperatures that exceed 180 degrees F. *Caution: If the fuse holder requires replacement it should be replaced by qualified service personnel.*
  - Fuse must be inserted in supplied fuse holder. *Caution: For continued protection against risk of fire replace only with the same type and rating of supplied fuse. The provided fuse is UL Listed, rated as 2 amp, 32 volt AC/DC fast acting.*
  - If a timing device is used, follow the instructions of the manufacturer of that device. It must be wired in-line with the supply voltage (V+) to the charging mount.
  - If you have any installation questions, please call Gamber-Johnson Inside Sales at **1-800-456-6868**.

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## REMOVING THE FLASHLIGHT FROM THE CHARGING MOUNT

The eCoupled Flashlight Charging Mount is designed to secure the flashlight and ensure accurate alignment of the charging coils between the flashlight and the mount. In addition, the system is designed to prevent the flashlight from becoming dislodged during normal operational vibration or from a 40g shock.

To remove the flashlight from the charging mount perform the following steps (figure 3).

1. Grab the flashlight near the center
2. Slightly rotate the flashlight towards its head.
3. Pull the flashlight away from the charging mount.

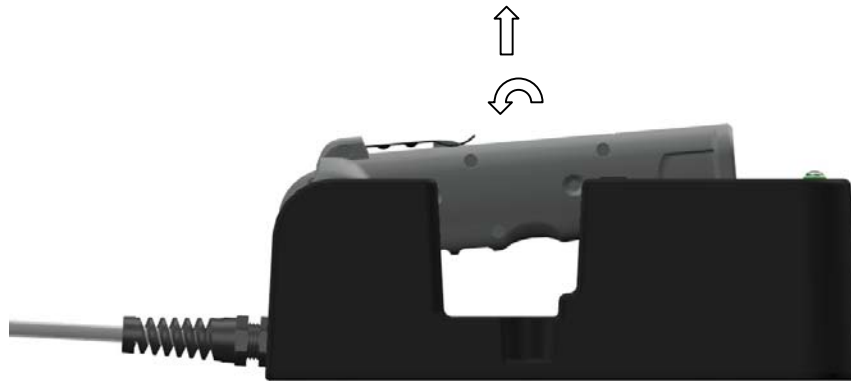


Figure 3

## LED INDICATOR LIGHT

The eCoupled Flashlight Charging Mount is equipped with a tri-color LED indicator light. The LED has four states: Green, Amber / Yellow, Red, and Off. Each state communicates the following:

LED is Off = Charging mount is not charging

- Flashlight coils are not aligned
- Power is not supplied to the charging mount

LED is Green = Charging mount is not charging and the flashlight is fully charged

- Flashlight battery is fully charged
- Flashlight coils are aligned
- Power is supplied to charging mount

LED is Amber / Yellow = Charging mount is charging

- Flashlight battery is receiving a charge
- Flashlight coils are aligned
- Power is supplied to charging mount.

LED is Red = Error in charging

- Flashlight battery is not receiving a charge
- Flashlight coils are aligned
- Power is supplied to charging mount
- Flashlight or charging mount is over temperature.
- Flashlight or charging mount is under temperature.
- Faulty printed circuit board in flashlight or charging mount.

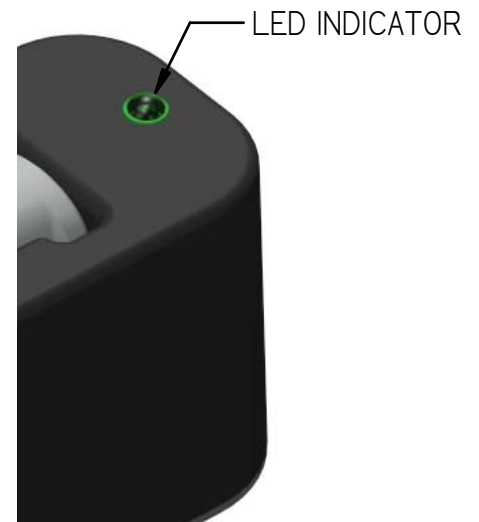


Figure 4

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## POSITIONING THE FLASHLIGHT CHARGING MOUNT

The Flashlight Charging Mount can be positioned vertically or horizontally without affecting charge. It can also be positioned with the flashlight up or the flashlight upside down without affecting charge.

The Flashlight Charging Mount is supplied with a u-bolt to clamp the system on a Gamber Johnson center pole, Figure 5. The charging mount can be secured to a top plate using two 1/4-20 fasteners with washers and nuts (not supplied), Figure 6.



Figure 5



Figure 6



# Energizer® Hard Case® Professional® LED Swivel Light powered by eCoupled™ technology

## LIGHT OPERATING INSTRUCTIONS



### Rechargeable

- Features eCoupled inductive wireless power technology
- NiMH battery pack can be charged up to 500 times
- Designed to be charged with Gamber-Johnson® eCoupled charging mount (See charging mount instruction sheet)
- Additional NiMH battery packs can be ordered through Gamber-Johnson®



15 feet

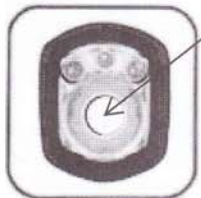
### Construction and Durability

- Withstands 15 foot drop
- Water resistant and weatherproof. Meets IEC 60529 IPX4 standards



### Rotating Head

- Head rotates 125°



### White LED

- For intense illumination
- Depress lower button once for high white spot
- Depress lower button again for low white spot
- Depress lower button a third time for off



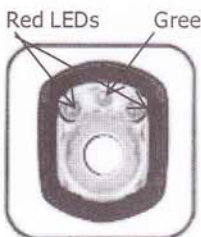
### Integrated Belt Clip

- Sturdy clip attaches to belt or strap



Lower Button

## USER MAINTENANCE INSTRUCTIONS



Red LEDs Green LED

### Red & Green LEDs

- Depress upper button once for red spot
  - To use for night vision
  - Minimal effect on your eyes' ability to adjust to darkness
- Depress upper button again for green spot
  - To use for pipe inspection
- Depress upper button a third time for off



Upper Button



### Battery Removal and Insertion

- Rotate end cap counter-clockwise to remove from light body



- Place light in upright position and battery pack will slide out
- Insert new battery pack with protruding tip end first



- Replace end cap and rotate clockwise until it stops

## DO NOT USE NON-RECHARGEABLE BATTERIES

**ONE YEAR LIMITED WARRANTY:** Warranty covers any defect in material or workmanship for up to one year. It excludes damage caused by normal wear and tear, misuse, modification. Warranty applies only to the original U.S. or Canadian purchaser of the light. Warranty terminates if you sell or transfer product. Energizer will repair or replace light at its option. Call 1-800-383-7323 for warranty service. Warranty is limited to consumer use. EXCLUDES ALL INCIDENTAL AND CONSEQUENTIAL DAMAGES, SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY BY JURISDICTION. Energizer Holdings, Inc., St. Louis, MO 63141. Energizer Canada, Inc., Walkerton, Ontario N0G 2V0.





**IMPORTANT:  
WARNING & SAFETY  
INSTRUCTIONS**



**IMPORTANT SAFETY INSTRUCTIONS**

**WARNING** - when using the flashlight, basic precautions should always be followed, including the following:

1. Read all the instructions before using the flashlight.
2. To reduce the risk of injury, close supervision is necessary when the flashlight is used near children.
3. For a rechargeable flashlight - use only the charger supplied by the manufacturer to recharge.
4. **DO NOT USE NON-RECHARGEABLE BATTERIES.**

**SAVE THESE INSTRUCTIONS**

Energizer  
Mfd for: Energizer Holdings, Inc.  
St. Louis, MO 63141  
Light made in China  
U.S. Patent No.: 536,464;  
Additional Patents Pending  
Energizer® and other marks are  
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The eCoupled trademark is  
licensed by Fulton Innovation  
LLC or its affiliates.  
U.S. Patent Nos.: 7,385,358;  
6,825,620; 7,180,248;6,436,299

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