SHARK™ INSTALLATION INSTRUCTIONS



Thank you for buying RAB lighting fixtures. Our goal is to design the best quality products to get the job done right. We'd like to hear your comments. Call the Marketing Department at 888-RAB-1000 or email: marketing@rabweb.com







IMPORTANT

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.

Fixtures must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

WARNING: Make certain power is OFF before installing or maintaining fixture. No user serviceable parts inside.

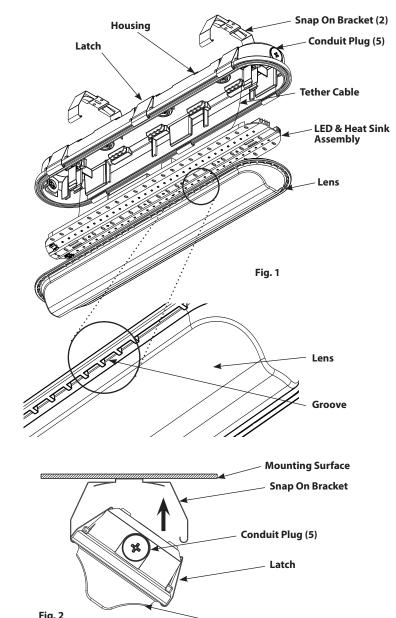
CAUTION:

- For proper weatherproof function all gaskets must be seated properly and all screws and plugs inserted and tightened firmly. Apply weatherproof silicone sealant around the edge of the Housing. This is especially important with an uneven ceiling surface. Silicone all plugs and unused conduit entries.
- USE SHARK WITH CONDUIT ONLY.

SURFACE MOUNTING

The fixture is suitable for outdoor applications in wet locations either ceiling or wall mounted.

- Use appropriate mounting hardware (not supplied) to secure the Snap On Brackets (2) to Mounting Surface. Recommended Snap On Bracket distance center to center is 15-3/16" (for 2 feet) and 37-19/32" (for 4 feet). WARNING: Mount Snap On Brackets (2) farther away from each other and symmetrical about the center. To secure Housing, Snap On Brackets (2) must be aligned with each other.
- 2. Unlatch the **Lens** from **Housing**.
- Snap out the LED & Heat Sink Assembly. Tether Cables (2) are provided, if required.
- Feed supply wires through one of the Conduit Plugs
 (5) to make electrical splices. Cord-grips (2) are provided and can be used based on application.
- Snap in LED and Heat Sink Assembly and secure Lens to Housing by Latch. Be careful not to pinch wires. Check that gasket is fully sealed.
- 6. Use appropriate UL approved wire connectors as required by code to complete wiring with supply wires. Be careful not to pinch wires.
 - WARNING: To prevent wiring damage or abrasion, do not expose wiring to edges of sharp objects.
- Snap Housing on Snap On Brackets (2) as shown in Fig. 2. Ensure that Housing is secure to Snap On Brackets (2) and inserted into the Grooves on Lens as shown in Fig. 1.
- 8. Use silicone or teflon tape on all **Conduit Plugs** and on the threads of all conduit entry points. If outdoor surface is irregular, use caulk to seal any gaps around **Housing**.



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NSF COMPLIANCE

To comply with NSF, apply silicone the "X" drive on all plugs and any unused bracket mounting holes as shown in the fig. 2A. Use food grade silicone such as Dow Corning 732.

ACCESSORIES - CMSHARK

(ordered separately) - Fig. 3 and 4

- Secure Bracket A (2) to Housing with screws provided. WARNING: Brackets must be mounted at exact location as shown in Fig. 3.
- Use appropriate mounting hardware (not supplied) to secure the Bracket B (2) to mounting surface. Bracket B distance center to center is 12-19/32" (for 2 feet) and 32" (for 4 feet).
 - **WARNING:** To secure **Housing**, **Bracket B (2)** must be aligned with each other.
- 3. Hang one side of **Bracket A** onto **Bracket B** and tighten **Screw (2)** on other side as shown in **Fig. 4**

ACCESSORIES - VHOOKSHARK

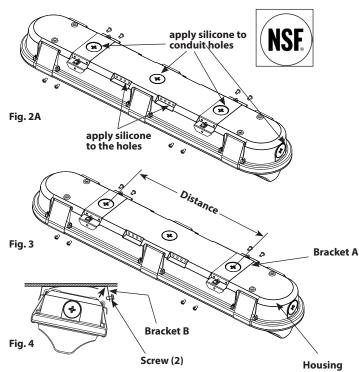
(ordered separately) - Fig. 3 and 5

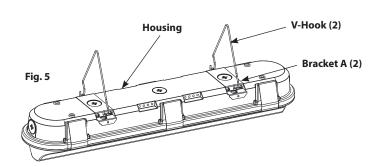
- Secure Bracket A (2) to Housing with screws provided. WARNING: Brackets must be mounted at exact location as shown in Fig. 3.
- 2. Loop V-Hooks (2) on Bracket A (2) as shown in Fig. 5.

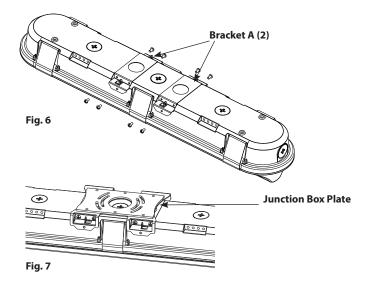
ACCESSORIES - JBSHARK

(ordered separately) - Fig.4, 6 and 7

- Secure Bracket A (2) to Housing with screws provided. WARNING: Brackets must be mounted at exact location as shown in Fig. 6.
- Use appropriate mounting hardware (not supplied) to secure the **Junction Box Plate** to mounting surface or junction box. Check that gasket is fully sealed. Use Cord Grip provided with fixture to feed supply wires in fixture.
- Hang one side of each Bracket A onto Junction Box Plate and tighten Screws (2) on other side as shown in Fig.4







SHARK™ INSTALLATION INSTRUCTIONS

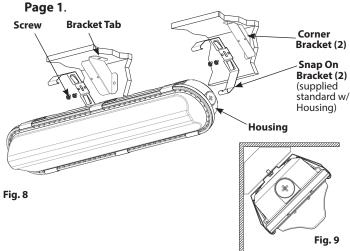


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ACCESSORIES - ANGSHARK

(ordered separately) - Fig. 8 and 9

- Use appropriate mounting hardware (not supplied) to secure the Corner Bracket (2) to mounting surface as shown in Fig. 8. Bracket Tabs must face towards each other. Recommended Corner Bracket distance center to center is 13-5/16"/ 338.14mm (for 2 feet) and 35-23/32"/ 907.26mm (for 4 feet).
- 2. Secure **Snap On Bracket (2)** (supplied standard with Housing) to **Corner Bracket (2)** with **Screws** provided as shown in **Fig. 8.**
- Snap Housing on Snap On Brackets (2) as shown in Fig.
 Page 1. Ensure that Housing is secure to Snap On Brackets (2) onto the Grooves on Lens as shown in Fig. 1,



CLEANING & MAINTENANCE

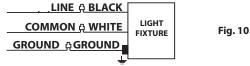
CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

- 1. Lens should be washed in a solution of warm water and any mild, non abrasive household detergent, rinsed with clean water and wiped dry.
 - WARNING: Polycarbonate is affected by cleaning agents or other liquids containing partial solvents such as low molecular weight aldehydes and ethers, ketones, esters, aromatic hydrocarbons and perchlorinated hydrocarbons. In addition, chemical attack ranging from partial to complete destruction of polycarbonate occurs in contact with alkalines, alkali salts, amines and high zone concentrations. Please go to rclighting.ca for a detailed list of damaging chemicals.
- 2. Do not open fixture to clean the LED. Do not touch the LED.

ON-OFF WIRING

Universal voltage driver permits operation at 120V thru 277V, 50 or 60 Hz. Units ordered with (/347V) suffix are 347V, 50Hz or 60Hz. For Non-Dimming, follow the wiring directions in **Fig. 10**.

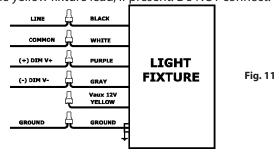
- 1. Connect the black fixture lead to the LINE supply lead.
- 2. Connect the white fixture lead to the COMMON supply lead.
- Connect the GROUND wire from fixture to supply ground.



0-10V DIMMABLE WIRING

Universal voltage driver permits operation at 120V thru 277V, 50 or 60 Hz. Units ordered with (/347V) suffix are 347V, 50Hz or 60Hz. For 0-10V Dimming, follow the wiring directions in **Fig. 11**.

- 1. Connect the black fixture lead to the (+) LINE supply lead.
- 2. Connect the white fixture lead to the (-) COMMON supply lead.
- 3. Connect the GROUND wire from fixture to supply ground. Do NOT connect the GROUND of the dimming fixture to the output.
- 4. Connect the purple fixture lead to the (V+) DIM lead.
- 5. Connect the gray fixture lead to the (V-) DIM lead.
- 6. Cap the vellow fixture lead, if present, Do NOT connect.



TROUBLESHOOTING

- 1. Check that the line voltage at the fixture is correct. Refer to wiring directions.
- 2. Be sure the fixture is grounded properly.

PATENT - **US**: pat. D725, 307

Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation operation or maintenance.



Easy Installation & Product Help

SHARK[™]EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS



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WARNING: Make certain power is OFF before installing or maintaining fixture. No user serviceable parts inside.

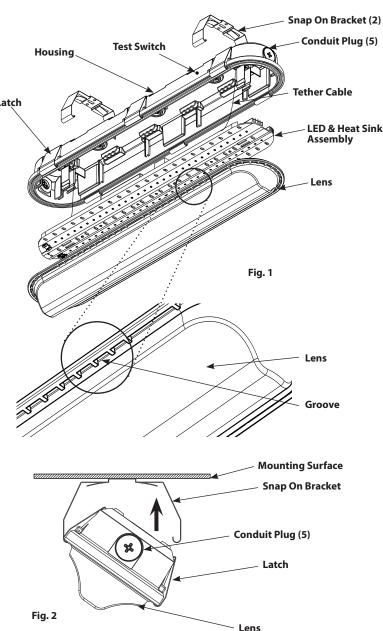
CAUTION:

- For proper weatherproof function all gaskets must be seated properly and all screws and plugs inserted and tightened firmly. Apply weatherproof silicone sealant around the edge of the Housing. This is especially important with an uneven ceiling surface. Silicone all plugs and unused conduit entries.
- ONLY FOR USE WITH CONDUIT

SURFACE MOUNTING

The fixture is suitable for outdoor applications in wet locations either ceiling or wall mounted.

- Use appropriate mounting hardware (not supplied) to secure the Snap On Brackets (2) to Mounting Surface. Recommended Snap On Bracket distance center to center is 37-19/32."
 - **WARNING:** Mount **Snap On Brackets (2)** farther away from each other and symmetrical about the center. To secure **Housing**, **Snap On Brackets (2)** must be aligned with each other.
- 2. Unlatch the **Lens** from **Housing**.
- 3. Snap out the LED & Heat Sink Assembly. Tether Cables (2) are provided, if required.
- Feed supply wires through one of the Conduit Plugs
 (5) to make electrical splices. Cord-grips (2) are provided and can be used based on application.
- Snap in LED and Heat Sink Assembly and secure Lens to Housing by Latch. Be careful not to pinch wires. Check that gasket is fully sealed.
- 6. Use appropriate UL approved wire connectors as required by code to complete wiring with supply wires. Be careful not to pinch wires.
 - WARNING: To prevent wiring damage or abrasion, do not expose wiring to edges of sharp objects.
- Snap Housing on Snap On Brackets (2) as shown in Fig. 2. Ensure that Housing is secure to Snap On Brackets (2) and inserted into the Grooves on Lens as shown in Fig. 1.
- Use silicone or teflon tape on all Conduit Plugs and on the threads of all conduit entry points. If outdoor surface is irregular, use caulk to seal any gaps around Housing.



SHARK[™]EMERGENCY BATTERY BACKUP INSTALLATION INSTRUCTIONS



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WIRING

CAUTION: THIS IS AN EMERGENCY BATTERY BACKUP FIXTURE. Voltage could be present in Battery. To prevent high voltage from being present on output leads, inverter connector must be open. Do not join inverter connector until installation is complete and AC power is supplied to the emergency ballast.

NOTE: Make sure that the necessary branch circuit wiring is available. An unswitched AC source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

Do not use any supply voltage other than those specified below.

SHARK4/F2

120V-277V, 50/60Hz

- Connect the UNSWITCHED black fixture lead to the HOT supply lead.
- 2. Connect red and black lead together, if not using a switching method.
- 3. If switching, connect SWITCHED red lead to a switch.
- 4. Connect the COMMON fixture lead to the COMMON supply lead.
- For 0-10V Dimming, connect DIM (+) purple lead and DIM
 gray lead to 0-10V dimmer. Do not connect the yellow lead.
- Connect the GROUND wire from fixture to supply ground. Do NOT connect the GROUND of the dimming fixture to the output.
- 6. All unused leads must be capped and insulated.
- 7. After installation is complete, supply AC power to the emergency ballast and join the inverter connector.
- At this point, power should be connected to both the AC ballast and the emergency ballast, and the Charging Indicator Light on the **Test Switch** should illuminate indicating the battery is charging.
- 10. A short-term discharge test may be conducted after the emergency ballast has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.

To reduce the risk of electric shock, disconnect both normal and emergency power supplies and converter connector of the emergency ballast before servicing. Do not attempt to service the emergency ballast. The use of accessory equipment may cause an unsafe condition. Do not use this product for other than intended use. Refer any servicing indicated by these checks to a Qualified Service Personnel.

Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation operation or maintenance.

OPERATION

- 1. When AC power is applied, the charging indicator light is illuminated, indicating that the battery is being charged.
- When power fails, the emergency ballast automatically switches to emergency power (internal battery), operating at reduced illumination. The emergency ballast supplies 12W of power (measured at nominal battery voltage) at a maximum rated current of 200mA with a maximum voltage of 60VDC in emergency mode for a minimum of 90 minutes.
- 3. When AC power is restored, the emergency ballast automatically returns to charging mode.

CLEANING

CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

- Lens should be washed in a solution of warm water and any mild, non abrasive household detergent, rinsed with clean water and wiped dry.
 WARNING: Polycarbonate is affected by cleaning
 - warning: Polycarbonate is affected by cleaning agents or other liquids containing partial solvents such as low molecular weight aldehydes and ethers, ketones, esters, aromatic hydrocarbons and perchlorinated hydrocarbons. In addition, chemical attack ranging from partial to complete destruction of polycarbonate occurs in contact with alkalines, alkali salts, amines and high zone concentrations. Please go to rclighting.ca for a detailed list of damaging chemicals.
- Do not open fixture to clean the LED. Do not touch the LED.

MAINTENANCE

Although no routine maintenance is required to keep the emergency ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

- 1. Visually inspect the charging indicator light monthly. It should be illuminated.
- 2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds.
- 3. Conduct a 90-minute discharge test once a year. Fixture would operate at reduced illumination for a minimum of 90 minutes.

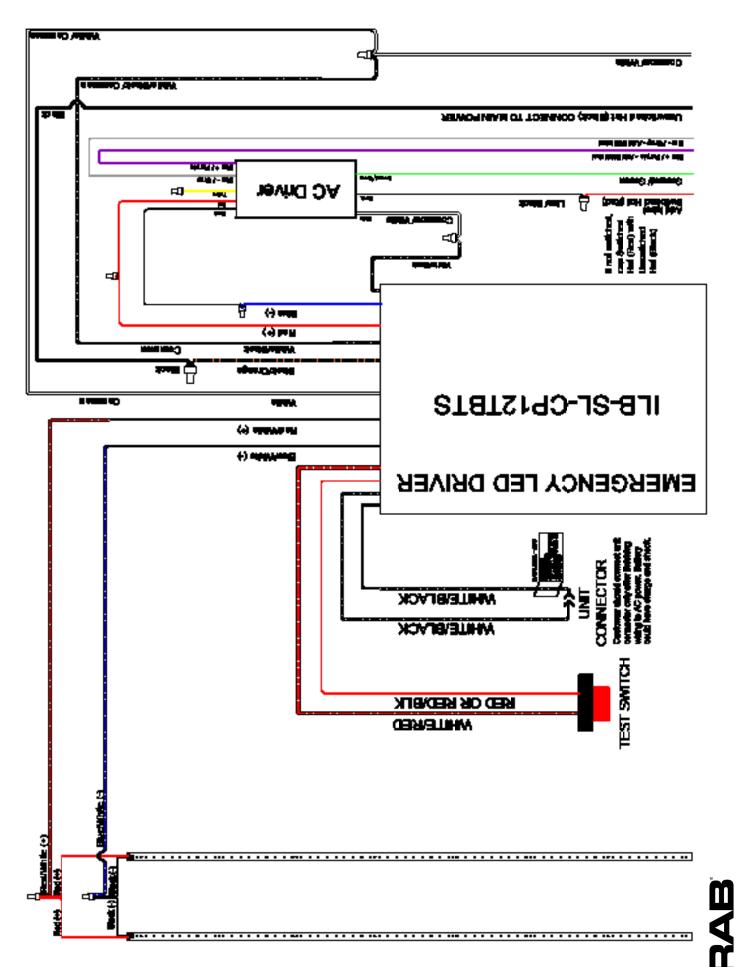
TROUBLESHOOTING

- 1. Check that the line voltage at fixture is correct. Refer to wiring directions.
- 2. Is the fixture grounded properly?

email

PATENT - **US**: pat. D725, 307





SHARK[™] 2FT 4FT LENS REPLACEMENT INSTRUCTIONS



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WARNING: Make certain power is OFF before installing or maintaining fixture.

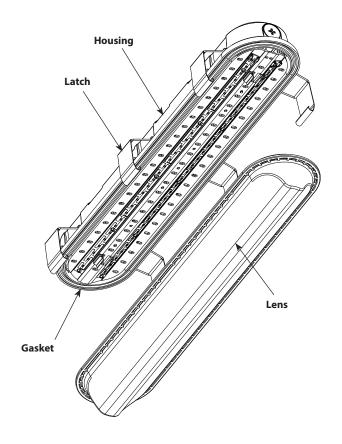
LENS REPLACEMENT- SURFACE MOUNT

- To remove the installed **Lens**, unlatch the **Lens** from **Housing** as shown in figure.
- Secure replacement Lens to Housing by Latch (6
 Latches for 2FT, 10 Latches for 4FT). Check that Gasket is
 fully sealed.



CAUTION: Be sure fixture temperature is cool enough to touch. Do not clean or maintain while fixture is energized.

- 1. Lens should be washed in a solution of warm water and any mild, non abrasive household detergent, rinsed with clean water and wiped dry.
 - WARNING: Polycarbonate is affected by cleaning agents or other liquids containing partial solvents such as low molecular weight aldehydes and ethers, ketones, esters, aromatic hydrocarbons and perchlorinated hydrocarbons. In addition, chemical attack ranging from partial to complete destruction of polycarbonate occurs in contact with alkalines, alkali salts, amines and high zone concentrations. Please go to rclighting.ca for a detailed list of damaging chemicals.
- 2. Do not open fixture to clean the LED. Do not touch the LED.



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