SAFETY SUMMARY

FRC lighting products are engineered and manufactured with safety in mind. It is critical that FRC lights are installed, maintained, and operated correctly. Read and understand all instructions before installing, performing maintenance, or operating.

All components, equipment, and installation procedures shall conform to NFPA 1901, Standard for Automotive Fire Apparatus and NFPA 70 National Electrical Code.

The following safety precautions shall be observed.

General Safety Precautions

Ensure power is off prior to connecting or disconnecting wires and plugs or performing maintenance.

DO NOT stare directly into the light, or shine directly into eyes. Eye damage may result.

DO NOT use light in explosive atmospheres. It is NOT explosion-proof. Fire may result.

DO NOT touch the lens, as the bulb can become very hot during operation. Allow bulb to cool before replacing.

DO NOT place face down on any surface during operation. Fire may result.

DO NOT attempt to service light wiring or switches. Return to factory for service.

DO NOT leave the light turned on unattended.

DO NOT submerge under water.

OPERATION

1. After reading the above safety precautions, carefully remove the lamp from its packaging.

2. Plug the “cigarette lighter” style plug at the end of the coiled cord into any “cigarette lighter” style accessory outlet providing 12 Volts DC.

3. Push the “Momentary” switch to light the CD-MAGNUM spotlight. Push the “ON / OFF /ON” button to light the CD-CL-12 spotlight. (Select CD-CL-12-M for the Momentary Switch option.) For the CD-CL-HID-1 lamp, press up to move the switch to the "Momentary ON" position, and then press downward to move the switch to "ON".

4. Lamps are designed to be powered by being plugged into a 12V vehicle accessory outlet.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Watts</th>
<th>Volts</th>
<th>Amps</th>
<th>Lamp</th>
<th>Candlepower Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-MAGNUM</td>
<td>100</td>
<td>12</td>
<td>7.8</td>
<td>Spot H-1 Base</td>
<td>1,250,000 Spot</td>
</tr>
<tr>
<td>CD-CL-12</td>
<td>100 (Spot)</td>
<td>12</td>
<td>7.8</td>
<td>Spot H-2 Base</td>
<td>750,000 Spot 5,000 Flood</td>
</tr>
<tr>
<td></td>
<td>50 (Flood)</td>
<td>12</td>
<td>4.3</td>
<td>Flood</td>
<td></td>
</tr>
<tr>
<td>CD-CL-HID-1</td>
<td>35W Xenon</td>
<td>12</td>
<td>3.5</td>
<td>Xenon HID</td>
<td>750,000 Spot</td>
</tr>
</tbody>
</table>
TROUBLESHOOTING Q & A

Q. The search light is not operating. What might be the cause?

A. 1. Check to ensure the lamp is completely plugged into the accessory (cigarette lighter) outlet. Try rotating the plug to make a stronger connection.

2. Check the bulb color to confirm if the bulb has burned out.

3. Examine the vehicle fuse box to see if the fuse is weak and has blown.

4. Use a voltmeter to confirm the lamp is receiving adequate input power. *(If the voltage is too low, the lamp may fail to light or restrike. If the voltage is too high, the ballast and lamp can fail prematurely.)*

Q. Can the search lamp be used for extended time periods without causing damage?

A. All search lamps are constructed with a durable, black anodized aluminum body with a die-cast, textured-finish handle. Occasionally, the lamp may feel warm to the touch, but it is made to withstand continuous operation.

OPTIONS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Used with Lamp Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-DMB-CL</td>
<td>Mounting Bracket</td>
<td>CD-MAGNUM, CD-CL-12 or CD-CL-HID-1</td>
</tr>
<tr>
<td>CD-RR-1</td>
<td>Lens Gasket</td>
<td>CD-CL-12 or CD-CL-HID-1</td>
</tr>
<tr>
<td>CD-H2100W Spot</td>
<td>Spot Replacement Bulb</td>
<td>CD-CL-12</td>
</tr>
<tr>
<td>CD-H225W12 Flood</td>
<td>Flood Replacement Bulb</td>
<td>CD-CL-12</td>
</tr>
<tr>
<td>CD-H1100W</td>
<td>Spot Replacement Bulb</td>
<td>CD-MAGNUM</td>
</tr>
</tbody>
</table>

NOTES:

Mounting Bracket—Part Number CD-DMB-CL: *It is highly recommended to use Lens Gaskets (Rubber Rings) with the mounting bracket.*

Part Number CD-RR-MAG (Lens Gasket), comes standard with the CD-MAGNUM.

CD-CL-12-M: Handheld spotlight with Momentary Switch

BULB REPLACEMENT

**CD-MAGNUM**

1. Remove the rear cap by twisting counter-clockwise.

2. Withdraw the bulb mount assembly from the reflector housing.

3. Unscrew the rear bulb mount section, remove the old bulb.

4. Insert a new bulb into the bulb mount. Use cloth. Screw the sections back together.

5. Install the assembled bulb mount into the housing reflector alignment hole.

6. Replace the cap, mate spring with bulb mount and tighten clockwise.

**CD-CL-12**

1. Remove the rear cap by twisting counter-clockwise.

2. Grasp the bulb mount assembly and withdraw from the head. Separate the sections.

3. Remove the bulb to be replaced. Use cloth. Insert a new bulb and check for proper alignment.

4. Connect the bulb mount sections and slide into the head. Note alignment slots.

5. Check the alignment in the reflector. *Two dowel pins must protrude through reflector for proper alignment.*

6. Replace the cap onto the head, twist clockwise to lock.

⚠️ *Caution: Do not touch the glass bulb of the lamp.*

*If necessary, clean with isopropyl alcohol.*