Amoray
UNDERWATER LEDS

Installation and Operating Procedures
New Install

CONCRETE, LINER, ABOVE GROUND & FIBERGLASS POOLS

NEW INSTALLS

USE WITH 12 VOLT TRANSFORMER ONLY

The electrical for this underwater light fixture is to be installed by a licensed electrician or a qualified pool service person in accordance with all local codes and regulations. The 12V transformer must always be installed between the power source and the light fixture.

Prior to any service of pool equipment or lighting, always disconnect power at the circuit breaker, (located above ground or at the panel). Failure to do so could result in death or serious injury.

ATTENTION

Amoray fixtures accept only 12V power and uses multiple LEDs.

* Read Carefully and Save These Instructions for Future Reference

REMOTE CONTROL INSTRUCTION

SELECTING COLOR SHOWS & SYNCING MULTIPLE LIGHTS

Note: Extend antenna for greater range (up to 150 ft). Lower antenna for shorter range or to control one light without changing nearby lights. Using the ON button on the remote will automatically start at the last used color show.

To SYNC multiple lights - turn ON - OFF & then recycle the ON button.

Activation

| 1 | ON |
| 2 | OFF |

7 Individual Colors

3	Blue
4	Red (sea turtle friendly)
5	Green
6	Purple
7	Aqua
8	Yellow
9	White

100% SEA TURTLE FRIENDLY

6 Different Color Cycles

10	Cycle red-yellow-green
11	Cycle green-aqua-blue
12	Cycle red-purple-blue
13	Cycle red-green-blue
14	Cycle green-purple-blue-red-white-aqua-yellow
15	Gradual change of all colors

AMORAY
UNDERWATER LEDS

8" 13 COLOR SHOWS

12" ORIGINAL 13 COLOR SHOWS

COMMERCIAL WHITE LIGHT

EASY INSTALLATION

Flat back design and flush wall mounting bracket make installation **faster and easier**. Ideal for **new installations and retrofits**.

Flush mount light with no large niche cavity required. Custom brackets for any existing niche available. **Concrete, Gunite, Vinyl, & Fibreglass** Installs.

MOUNTING OPTIONS

1. FLUSH MOUNT ON POOL WALL ✓
2. USE EXISTING NICHE ✓

NICHE

APPLICATIONS

- **Chlorinated** and **Saltwater** Swimming Pools
- Freshwater and Saltwater **Water Features**
- Under **Dock Lighting** in Freshwater and Saltwater
- Underwater **Safety Lighting for Marinas**
- **Shore Lighting** in Freshwater and Saltwater
- Large Freshwater and Marine **Aquariums**
- Underwater **Caves** and **Grottos**
- Large **Ponds, Lagoons, Streams** or **Lakes**
- Underwater **Accent Lighting**
- Boats

ENERGY SAVINGS

Long lasting LED lights, **ultra low power** and durable construction means **low maintenance** and **big savings**. The **Amoray Light** pays for itself with energy cost savings within a season.

MULTI-COLORED WITH REMOTE

With **13 color combinations** and color transitions, setting the mood with your underwater lighting has never been easier. **Ultra bright** lumens with large dispersion area and easy to use **remote control** convenience.

SAFE LOW VOLTAGE (12V) POWER

Bright pool lighting makes your pool safer after dark. Parents can see clearly making the pool experience more enjoyable for everyone.
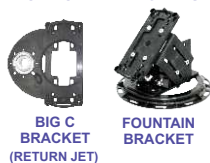
SALT WATER APPROVED

Durable and **Corrosion Free**, **Amoray Underwater 12V LED Lights** make the best choice for both **chlorine** and **salt water pools**. The ideal choice for **ponds** and **water features**.

Custom Bezels: Ask About Matching Your Pool Liner, Tile or Fiberglass

OPTIONAL BRACKETS

BIG C BRACKET (RETURN JET)

FOUNTAIN BRACKET

SPECIFICATIONS

Input: Safe Low Power 12V AC
Output: 54 watts,18x3 w LED
Power Cord: 30', 50', 100'
(custom lengths available)

3 YEAR WARRANTY
SALT WATER SAFE
CORROSION FREE

RETROFIT ANY NICHE
Expandable Wedge Bracket

Bracket Expands To Fit Any Niche From 4" to 18"

LARGE NICHE

SMALL NICHE

MEDIUM NICHE

UNIVERSAL MOUNTING PLATE (32 INSTALL OPTIONS)

12 VOLT NICHELESS ULTRA BRIGHT UNDERWATER LED LIGHT

NEW RETROFIT

PATENTED BRACKETS
RETROFIT EXISTING NICHES

AMORAY
UNDERWATER LEDS

AMORY NEW INSTALLATION KIT PARTS LIST

Amoray Underwater Light

8" & 12" Color Change
Commercial Units Available

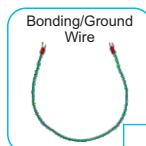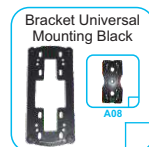|					
Amoray Underwater Light	Remote **R15**	Battery Replacement **BATT**	Remote Case **CASE**	Transformer 60W **TRANS60**	Bonding/Ground Wire **W**
Bracket Universal Mounting Black / A08 **A12**	Electrical Extension Fitting **E**	10X1 Round Phillips Tapping Screw 316 **K1**	Rubber Grommets **M1**	Multi Purpose Thru & Thru Wall Fitting **B**	Wall Flange Fitting 08 **S**

BIG C BRACKET-12

99-12	Big C Return Bracket **C1-12-THICK** 1	10-32x1/2 Flat Phillips Machine Screw 316 **K4** 4	10-32 Machine Screw Nut 316 **L1** 4	1" Threaded Jet Fitting **J** 1	**OR**	3" Retaining Ring **C3** 1
	Bracket Universal Mounting Black **A12** 1	10-3/16 Internal Tooth Lock Washer 316 **L2** 4	10x1 Type B Flat Phillips Tapping Screw 18.8 **K5** 4	Gasket Thin Small Hole Washer (use with J & J1) **J3** 1		Big C Jet Return Ring **J4** 1

OR

T

Fitting TEE 1'1/2 Available in 2" **TEE**	Fitting RED 1' 1/2 Available in 2" **RED**	Waterproof Fitting **J8**

BIG C BRACKET-08

99-08	Big C Return Bracket **C2-08-THIN** 1	10-32x1/2 Flat Phillips Machine Screw 316 **K4** 4	10-32 Machine Screw Nut 316 **L1** 4	1" Threaded Jet Fitting **J** 1	**OR**	3" Retaining Ring **C3** 1
	Bracket Universal Mounting Black **A08** 1	10-3/16 Internal Tooth Lock Washer 316 **L2** 4	10x1 Type B Flat Phillips Tapping Screw 18.8 **K5** 4	Gasket Thin Small Hole Washer (use with J & J1) **J3** 1		Big C Jet Return Ring **J4** 1

BIG C BRACKET
MOUNTS TO ANY JET, RETURN FITTING OR 1" ABS JET OR SUCTION

AMORAY UNDERWATER LEDS
PATENTED ACCESSORIES

One screw to secure

Patented BIG C Bracket works with all jet and return fittings

[99-12]

[99-08]

Amoray Underwater Light slides onto bracket

The **BIG C BRACKET** allows the Amoray Light to easily fit on any existing jet or return fitting
FAST AND HASSLE FREE

BIG C BRACKET-12
For Pool Light install (Exploded View)
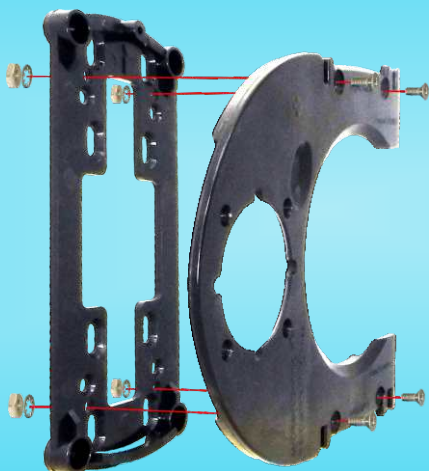
BIG C BRACKET-08
For 8" light install

AMORAY UNDERWATER LEDS

1.800.970.2827
info@amoraylighting.com

BENEFITS

1) Easy installation for both new and existing pools.
Save Up To 80% on labor costs and electricity

2) **Child Safe 12v power** means **no risk** of electric shock

3) **Turtle Safe** Red LED's (for applications near ocean sand)

4) Installer Invented, Designed and Assembled in Canada - USA

5) Remote control syncs multiples lights and runs13 light shows

6) Multiple Light Styles Available - **Original 12" 13 Color Shows,
Commercial or 8" Color Shows**

7) Best choice for both Chlorine and Salt water applications.
Durable and **Corrosion Free**.

8) Backed by industry leading experts. **3 YEAR WARRANTY**
direct from manufacturer. (*with option to extend to 5 years*)

9) Brightest light on the market, uses large LED lights for energy
efficiency with 50,000 hours of use and 60° flood dispersion

10) **Nicheless, Flatback** design

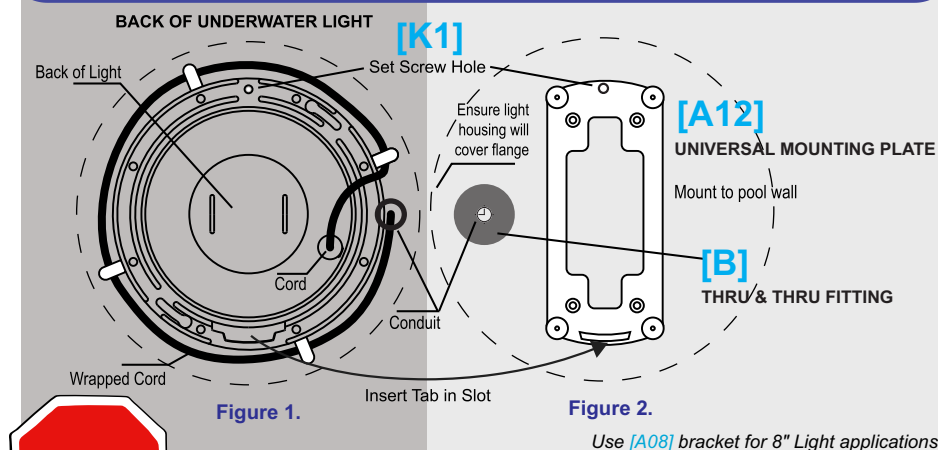11) Retrofits all existing niches

New Installation Instructions

Installing on a Pool without a light

INSTALLATION SUMMARY

1. After pool surface is finished, install **[B]** Thru & Thru Fitting. Install the conduit and pull electrical cord to junction box or power source for connection to 12V transformer. (**Figure 2.**)

2. Connect all wires to the corresponding circuit wires of the low voltage transformer at the junction box. Leave communication wire exposed. Secure the junction box cover in place.

3. Wrap a length of the cord up to a maximum of 2.4m (8 ft.) long on the back of the light assembly. This extra cord allows for light to be brought up out of the pool for servicing.

4. Mount **[A12]** Universal Mounting Plate (**Figure 2.**). Place light tab into slot on **[A12]** bracket. Tip light towards wall. Insert **[K1]** set screw through hole to secure light. (**Figure 6. Page 10**) NOTE: Light must be in vertical position (set screw hole at top) to slip tab into slot.

5. Before operating the light for more than 3 minutes, ensure the Light is completely submerged. To check for proper light operation, turn on the main switch at the circuit breaker and use the ON/OFF buttons (1&2) on the remote to turn light ON or OFF.

Use [A08] bracket for 8" Light applications

BACK OF UNDERWATER LIGHT

[K1]

Back of Light

Set Screw Hole

Ensure light housing will cover flange

[A12]
UNIVERSAL MOUNTING PLATE

Mount to pool wall

Cord

[B]
THRU & THRU FITTING

Conduit

Wrapped Cord

Insert Tab in Slot

Figure 1.

Figure 2.

Use [A08] bracket for 8" Light applications

STOP

Have Questions?
ASK for Tech Support to
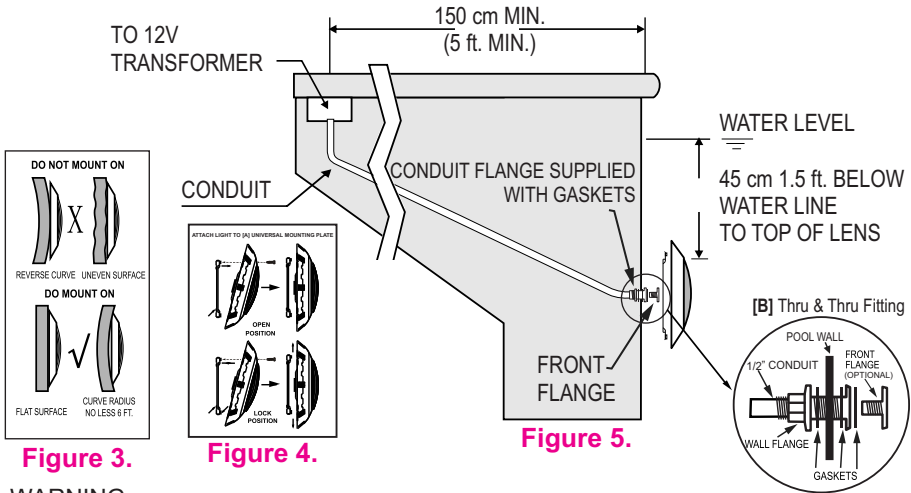make your install fast and easy

1-800-970-2827

CONCRETE POOLS

TO 12V TRANSFORMER

150 cm MIN.
(5 ft. MIN.)

WATER LEVEL

CONDUIT FLANGE SUPPLIED WITH GASKETS

45 cm 1.5 ft. BELOW WATER LINE TO TOP OF LENS

CONDUIT

DO NOT MOUNT ON

X

REVERSE CURVE   UNEVEN SURFACE

DO MOUNT ON

√

FLAT SURFACE   CURVE RADIUS NO LESS 6 FT.

Figure 3.

ATTACH LIGHT TO [A] UNIVERSAL MOUNTING PLATE

OPEN POSITION

LOCK POSITION

Figure 4.

FRONT FLANGE

Figure 5.

[B] Thru & Thru Fitting

POOL WALL

1/2" CONDUIT

FRONT FLANGE (OPTIONAL)
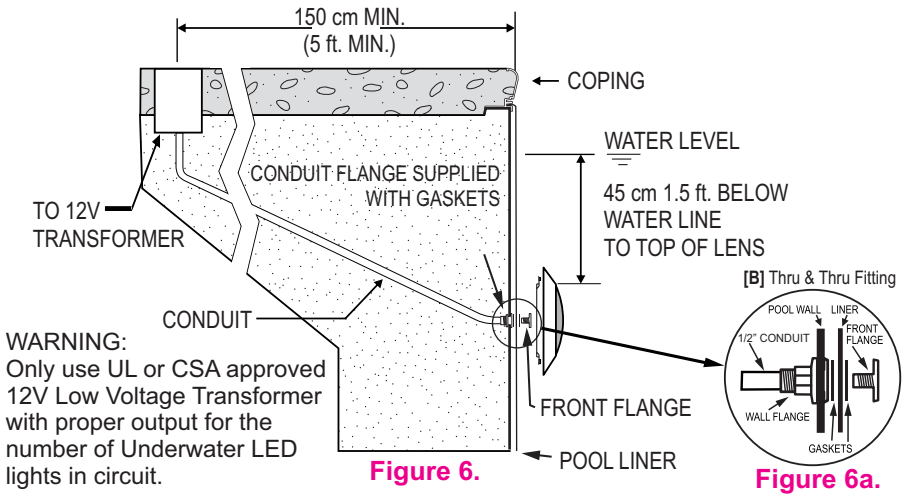
WALL FLANGE

GASKETS

Figure 5a.

WARNING:
Only use UL or CSA approved 12V Low Voltage Transformer with proper output for the number of Underwater LED lights in circuit.
Electrical preparation must be performed by a certified electrician PRIOR TO BACKFILLING BEHIND POOL PANELS. Ensure that the pool's electrical system and wiring conforms to local electrical codes. Pretest electrical system before installation.

1. To fasten directly to pool wall, locate the position on the wall where the Amoray Light is to be installed. Top of lens must be minimum of 45cm (1.5ft) below the surface. ONLY mount on a flat surface or inside curve with radius not less than 1.8m (6ft) (**Figure 3.**) NOTE the location of the cord on the back of the unit.
   (**Figure 1. on Page 8**)

2. Fasten the **[A12]** Universal Mounting Plate to the pool wall using **[K1]** Stainless Screws or **[K2]** Self Tapping Screws.

3. Install **[B]** Thru & Thru Fitting. Install the conduit and pull electrical cord to junction box or power source for connection to 12V transformer. Ensure light housing covers conduit coming out of **[B]**.
   (**Figure 2. on Page 8** for suggested placement)

4. Place light tab into slot on **[A12]** bracket. Tip light towards wall. Insert **[K1]** Stainless Screw to set screw hole to secure light.
   (**Figure 4.**)

Use [A08] bracket for 8" Light applications

1.800.970.2827
info@amoraylighting.com

LINER POOLS

150 cm MIN.
(5 ft. MIN.)

← COPING

WATER LEVEL

CONDUIT FLANGE SUPPLIED
WITH GASKETS

45 cm 1.5 ft. BELOW
WATER LINE
TO TOP OF LENS

TO 12V
TRANSFORMER

CONDUIT

WARNING:
Only use UL or CSA approved
12V Low Voltage Transformer
with proper output for the
number of Underwater LED
lights in circuit.

FRONT FLANGE

POOL LINER

Figure 6.

[B] Thru & Thru Fitting

POOL WALL   LINER

1/2" CONDUIT

FRONT FLANGE

WALL FLANGE
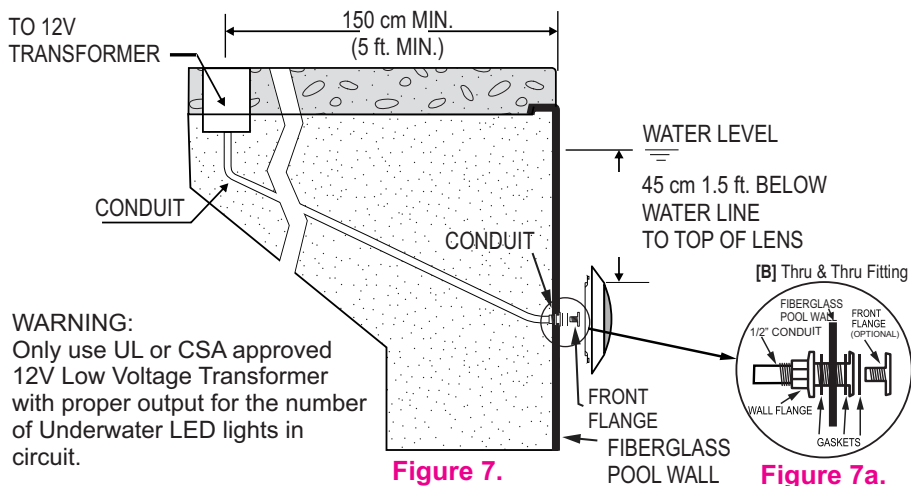
GASKETS

Figure 6a.

Electrical preparation must be performed by a certified electrician PRIOR TO BACKFILLING BEHIND POOL PANELS. Ensure that the pool's electrical system and wiring conforms to local electrical codes. Pretest electrical system before installation.

1. After pool liner is in place, locate the position on the wall where the Amoray Underwater LED Light is to be installed. (Top of lens must be minium of 45cm (1.5ft) below the surface. ONLY mount on a flat surface or inside curve with radius not less than 1.8m (6ft) (**Figure 4. on Page 7**) NOTE the location of the cord on the back of the unit. (**Figure 1. on Page 8**)

2. Fasten the **[A12]** Universal Mounting Plate to the pool wall using **[K1]** Stainless Screws.

3. Install **[B]** Thru & Thru gasket and threaded front flange by cutting a small "X" in the liner. Push front flange with gasket through liner and thread into wall flange. (**Figure 6a.**) Ensure light housing covers conduit coming out of **[B]**. (**Figure 2. on Page 8** for placement)

4. Install the conduit and pull electrical cord to junction box or power source for connection to 12V transformer.

5. Place light tab into slot on **[A12]** bracket. Tip light towards wall. Insert **[K1]** Stainless Screw to set screw hole to secure light.

Use [A08] bracket for 8″ Light applications

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FIBERGLASS POOLS

TO 12V TRANSFORMER

150 cm MIN.
(5 ft. MIN.)

WATER LEVEL

45 cm 1.5 ft. BELOW
WATER LINE
TO TOP OF LENS

CONDUIT

CONDUIT

[B] Thru & Thru Fitting

FIBERGLASS
POOL WALL
1/2" CONDUIT

FRONT
FLANGE
(OPTIONAL)

WALL FLANGE

GASKETS

WARNING:
Only use UL or CSA approved
12V Low Voltage Transformer
with proper output for the number
of Underwater LED lights in
circuit.

FRONT
FLANGE
FIBERGLASS
POOL WALL

Figure 7.

Figure 7a.

Electrical preparation must be performed by a certified electrician PRIOR TO BACKFILLING BEHIND POOL PANELS. Ensure that the pool's electrical system and wiring conforms to local electrical codes. Pretest electrical system before installation.

1. Locate the position on the fiberglass wall where the Amoray Light is to be installed. (Top of lens must be minium of 45cm (1.5ft) below the surface. ONLY mount on a flat surface or inside curve with radius not less than 1.8m (6ft) (**Figure 4. on Page 7**) NOTE the location of the cord on the back of the unit. (**Figure 1. on Page 8**)

2. Attach conduit to **[B]** Thru & Thru Fitting or **[S]** Flange Fitting depending on the size of conduit. (**Figure 6a. on Page 10**)

3. Trim the conduit and pull electrical cord to junction box or power source for connection to 12V transformer.

4. Fasten the **[A12]** Universal Mounting Plate to the pool wall using **[K1]** Stainless Screws. Ensure light housing covers **[B]** Thru & Thru Fitting. (**Figure 2. on Page 8** for suggested placement)

5. Place light tab into slot on **[A12]** bracket. Tip light towards wall. Insert **[K1]** Stainless Screw to set screw hole to secure light. (**Figure 4. on Page 9**)

Use [A08] bracket for 8" Light applications

Amoray
UNDERWATER LEDS

NEW

New Nicheless Installation

S | B
C | R12

Retrofit Any Existing Niche

H | F
A12 | G
E | D

Accessories

99-12
Big C
98-12
Wedge

100
Pond
Fountain Ocean

BIG C

RETURN JET BRACKET

BIG C RETURN JET BRACKET

Amoraylighting

Introducing

BIG C Bracket

No drilling or cutting required. Our innovative mounting ring makes installation **FAST** and **EASY**! The **BIG C** bracket allows you to mount the **Amoray Underwater 12V LED** light to any return jet and still allow water flow.

Call our techline **1-800-970-2827** for more information.

Patent 4285443

Amoraylighting.com
1-800-970-2827

Big C
Installation
Instructions

Installing on
Jet Return Fitting

BIG C BRACKET

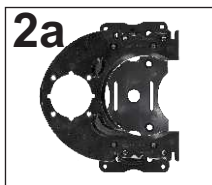Installation Instructions for **[99-12]** & **[99-08]** below

Locate Return Jet Fitting
1a) Remove eyeball fitting and face plate
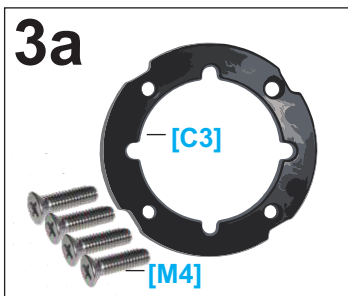**1b)** Jet fitting housing for Big C

Place Big C Bracket on Return Jet Fitting

[99-08] C2-08-THIN (2a) for 8" light show
OR
[99-12] C1-12-THICK (2b) for original 12" light show

OPTION 1: Use Spacer-Ring **[C3]** and provided stainless mounting bolts **[M4]**. Secure Big C bracket to return jet.
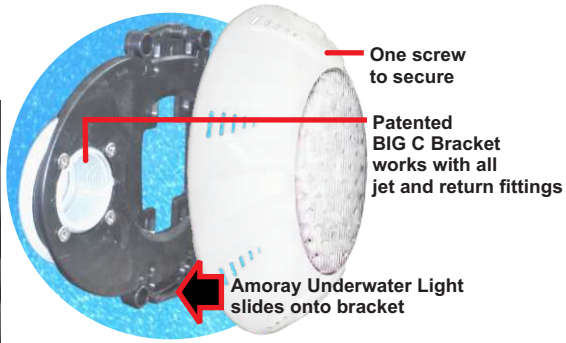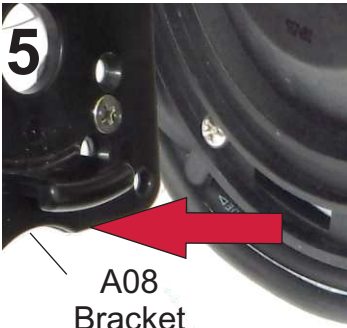
[C3]

[M4]

OPTION 2: Use threaded ring **[J]** and gasket **[J3]** to secure Big C bracket to return jet.
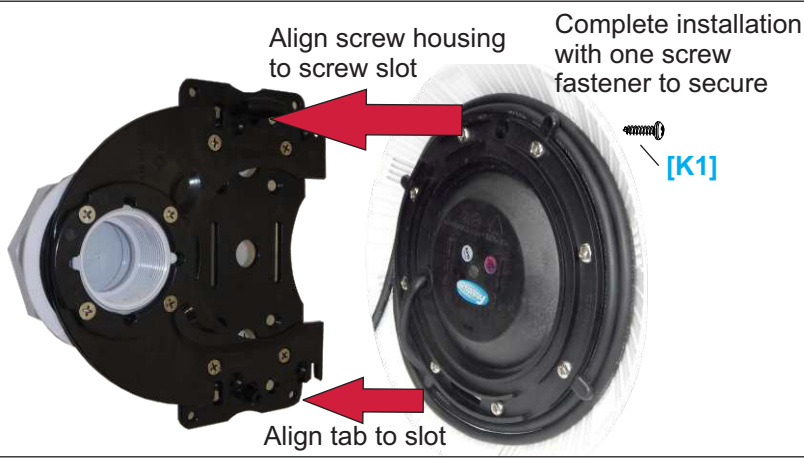
[J]

[J3]

[J]

Steps 4a and 4b are identical for **[99-12]** C1-12-THICK versions

Mount 8" light by inserting tab on A08 bracket into the slot on bottom ring of the light housing

5

A08 Bracket

One screw to secure

Patented BIG C Bracket works with all jet and return fittings

Amoray Underwater Light slides onto bracket

(Above) Example of original light mounting onto C1-12-Thick

6

Align screw housing to screw slot

Complete installation with one screw fastener to secure

[K1]

Align tab to slot

7 Power cable comes out of 1½" Slip Connector and Waterproof Fitting

Connect power to 12 v transformer

Fish power cord through jet return

OR use Waterproof Mini-T-Fitting