



Installation and Operating Procedures

Retrofit

CONCRETE, LINER, ABOVE GROUND & FIBERGLASS POOLS



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



WARNING

Never operate the **Amoray Underwater LED Light** for more than 3 minutes unless it is totally submerged in water. Operating light out of water has potential risk of serious injury or damage to light and property.



FOR USE WITH APPROVED 12V TRANSFORMERS

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 |



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 |

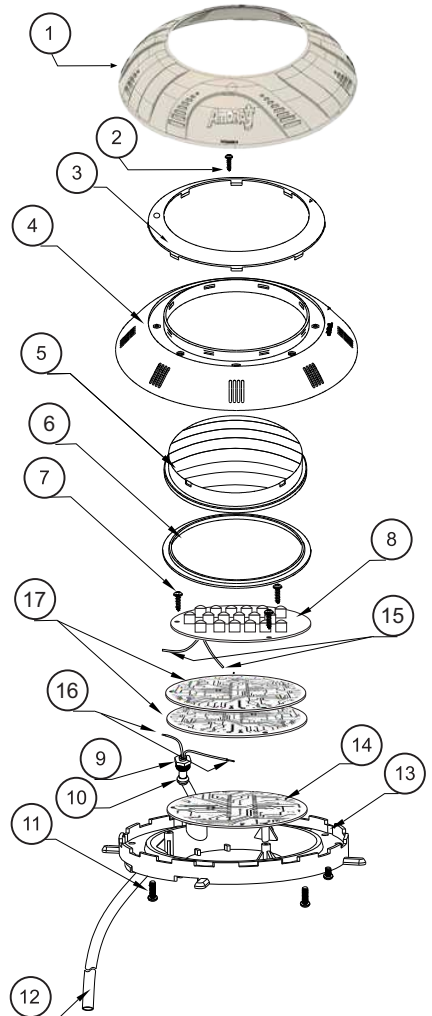


AMORAY SPECIFICATIONS

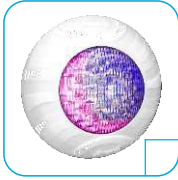
Amoray Light	Power	Size	LED Type	Brightness Lumens	Input	Cord Length Options
12" Original	54W	11 3/4 x 2	18pcs 3W, RGB	4200-5400	12V AC	30', 50', 100'
Commercial	54W	11 3/4 x 2	18pcs 3W, White	4700-5400	12V AC	55'
8"	36W	8 3/4 x 2	12 pcs 3W, RGB	3200-4200	12V AC	30, 50'

REPLACEMENT PARTS

No.	QTY	DESCRIPTION
1	Opt.	Colored Body Clip
2	1	Screw
3	1	Sealing Ring
4	1	Bezel Cover
5	1	Lens
6	1	Lens Seal
7	3	Screws
8	1	Bulb Plate
9	1	Dent Head
10	1	Sealing O'ring
11	8	Screw & Nut
12	1	Cord
13	1	Body
14	1	Communications Board
15	2	Terminals Insulation Joints
16	2	Terminals Insulation Joints
17	2	Circuit Board



AMORAY RETROFIT KIT PARTS LIST



8" & 12"
Color Change
Commercial Units
Available



TRANS60



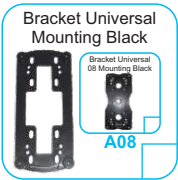
R15



BATT



CASE



A12



E



F



G



H



K1



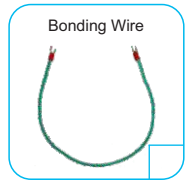
K7



K8



M



W

Wedge Bracket 98-12



98-08



D



D2



K3



L5



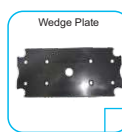
K6



A12



D1



P1



L3

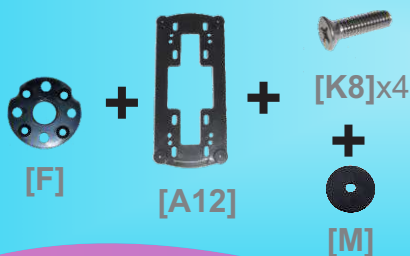


L4

RETROFIT BRACKET COMBINATIONS

Works with All Pool Types
Concrete, Gunit, Vinyl Liner,
Above Ground & Fibreglass Pools

Patented Bracket retrofits Small Niche Lights

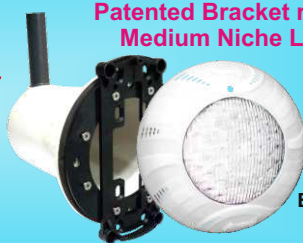
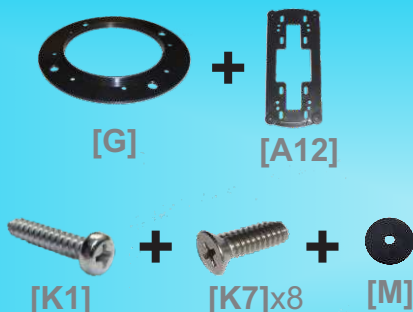


EASY RETROFIT:
- Aqualumin
- Pentair

[A12] or [A12]+[F]+[M]

See Page 11 for
detailed Installation

Patented Bracket retrofits Medium Niche Lights

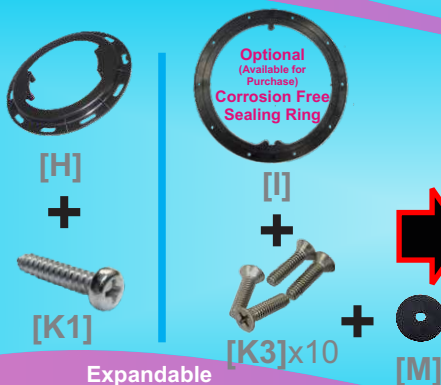


EASY RETROFIT:
- Swimquip
- Aqualamp
- Jacuzzi Q500
- Jandy
- Hayward
- Pentair
- plus many more...

[A12]+[G]+[M]

See Page 10 for
detailed Installation

Patented Bracket retrofits Large Niche Lights



EASY RETROFIT:
- American Products
- Amerlite
- PacFab
- Purex
- Hayward
- Pentair
- plus many more...

[A12]+[H]+[M]

See Page 9 for
detailed Installation

Expandable Wedge Bracket



(fits 3" to 15" Niches)



See Page 12 for
detailed Installation

Visit our website AmorayLighting.com
for updated brackets and latest
innovations





**IDEAL FOR - POOLS - WATER FEATURES - FOUNTAINS - PONDS
STREAMS - LAKES - DOCKS - BOATS - UNDERWATER ACCENT LIGHTING**

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 runs 13 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

Retrofit Instructions



**Retrofit any existing
niche light**



CALL

ASK for Tech Support to
make your install fast and easy

1-800-970-2827



AmORAY lighting

Making Installations Simple

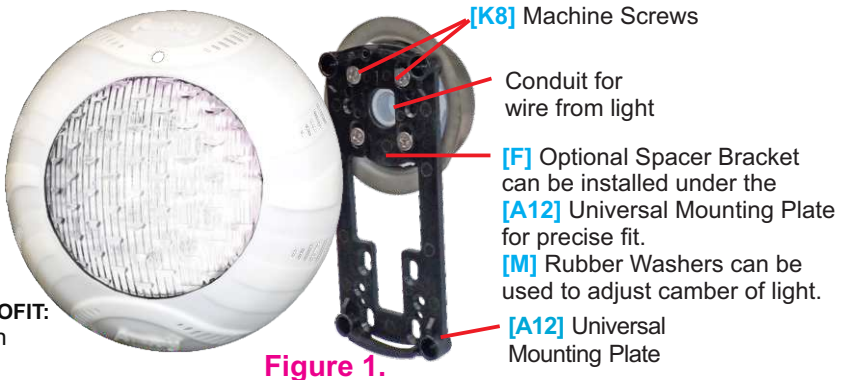
RETROFIT SMALL NICHE

SMALL AQUALUMIN NICHE INSTALLATION FOR ALL POOLS

1. For small niche installations, remove existing light then attach the **[A12]** Universal Mounting Plate to the niche.
2. Optionally, the **[F]** Spacer Bracket can be used in conjunction with **[A12]** Universal Mounting Plate to provide a more precise fit. **[F]** Spacer Bracket can be installed between niche and **[A12]** Universal Mounting Plate (**Figure 1.**) **[M]** Rubber Washers can be used to adjust camber of light.
3. Wrap a length of the cord to a maximum of 2.4m (8ft) long on the back of the light assembly. This extra cord allows for the light to be brought up out of the pool for servicing.
4. Pull wire through the center of the niche inside the existing conduit. Connect blue and red wires to the low voltage transformer at the junction box. Leave communication wire (yellow-green stripe) exposed.
5. To mount the light on the **[A12]** bracket, use your fingers to pull out bottom of **[A12]** bracket 1" forward, then slide the tab near the inside bottom of light into slot in bottom of the **[A12]** Universal Mounting Plate. (**Figure 4. Page11**)
(Light must be in vertical position (set screw hole at top) to slip tab into slot.)
6. 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.
(Cycle ON OFF Buttons to Sync Multiple Lights)

Use **[A08]** bracket for 8" Light applications

SMALL NICHE INSTALLATION WITH **[F]**&**[A12]** BRACKET



EASY RETROFIT:

- Aqualumin
- Pentair

Use **[A08]** bracket for 8" Light applications

RETROFIT MEDIUM NICHE

MEDIUM NICHE INSTALLATION FOR ALL POOLS

1. For medium niche (6") installation, remove existing light and ring. Fasten **[G]** Medium Retrofit Bracket to the existing niche using 4 x **[K7]** screws on either side of **[G]** bracket only.
2. Fasten the **[A12]** Universal Mounting Plate to the **[G]** Medium Retrofit Bracket with the remaining 4 x **[K7]** screws. **(Figure 2)** for example of final configuration. **[M]** Rubber Washers can be used to adjust camber of light.
3. Wrap a length of the cord to a maximum of 2.4m (8ft) long on the back of the light assembly. This extra cord allows for the light to be brought up out of the pool for servicing.
4. Pull wire to the outside-right of **[A12]** Mounting Plate and through the existing conduit. Connect blue and red wires to the low voltage transformer at the junction box. Leave communication wire (yellow-green stripe) exposed.
5. Slide the tab near the inside bottom of light into slot in bottom of the **[A12]** Universal Mounting Plate. **(Figure 4. Page 11)**
(Light must be in vertical position (set screw hole at top) to slip tab into slot.)
6. 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.
(Cycle the ON OFF buttons to Sync multiple lights.)

Use **[A08]** bracket for 8" Light applications

MEDIUM NICHE INSTALLATION WITH **[G]**&**[A12]** BRACKET



Figure 2.

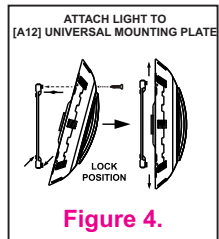
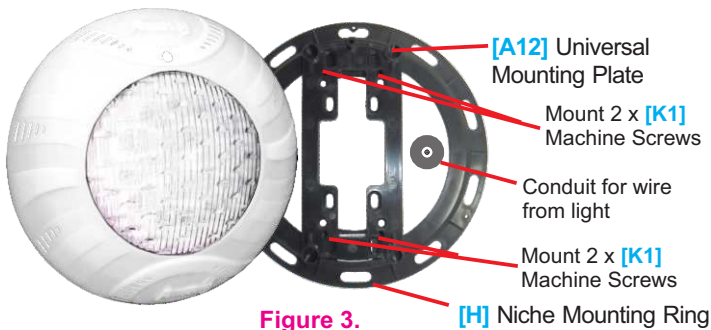
Use **[A08]** bracket for 8" Light applications

RETROFIT LARGE NICHE

LARGE NICHE INSTALLATION FOR ALL POOLS

1. For large niche (12") installation, remove all but the 12 o'clock (top) screw from beauty ring. *(Loosen the 12 o'clock (top) screw slightly so the beauty ring can swivel.)* Remove existing light leaving niche in place.
2. Install **[H]** Black Mounting Ring into the recessed groove in existing niche. *(The **[H]** Black Mounting Ring can be installed either concave or convex depending on desired offset from pool wall.)* Swivel beauty ring back into place, align holes and resecure. *(If installing **[H]** Ring in concave position, holes must be predrilled into **[H]** Ring.)*
3. Fasten the **[A12]** Universal Mounting Plate to the **[H]** Black Mounting Ring using **[K1]** screws. **(Figure 3.)**
4. Pull wire to the outside-right of **[A12]** Mounting Plate and through the existing conduit. **(Figure 3.)** Connect blue and red wires to the low voltage transformer at the junction box. Leave communication wire (yellow-green stripe) exposed.
5. Slide the tab near the inside bottom of light into slot in bottom of the **[A12]** Universal Mounting Plate. **(Figure 4.)**
(Light must be in vertical position (set screw hole at top) to slip tab into slot.)
6. 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.
(Cycle the ON OFF buttons to sync multiple lights.)

LARGE NICHE INSTALLATION WITH **[H]**&**[A12]**BRACKET

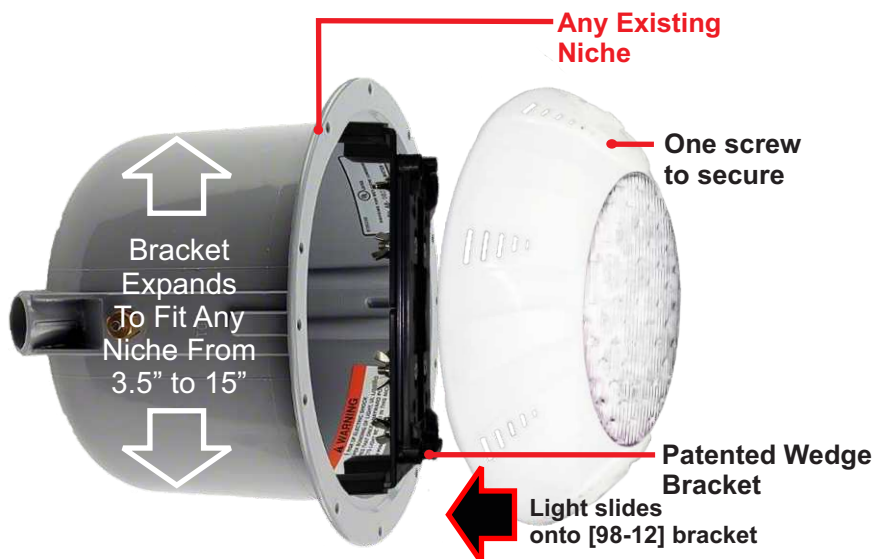
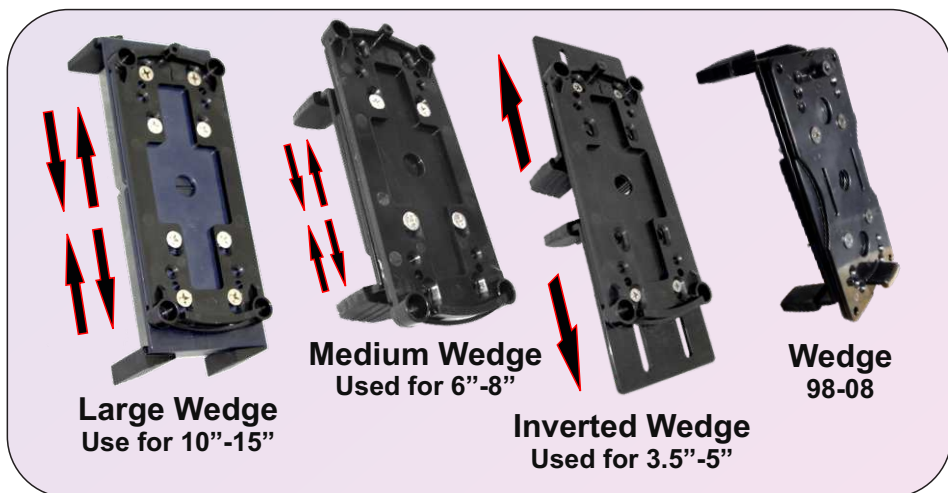


EASY RETROFIT:

- American Products
- Amerlite
- PacFab
- Purex
- Hayward
- Pentair
- plus many more...

PATENTED WEDGE BRACKET

UNIVERSAL WEDGE BRACKET INSTALL FOR ALL OTHER NICHE RETROFITS

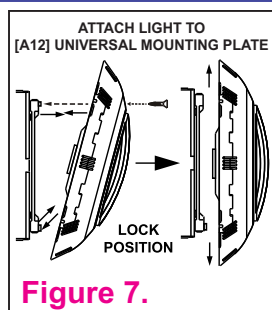
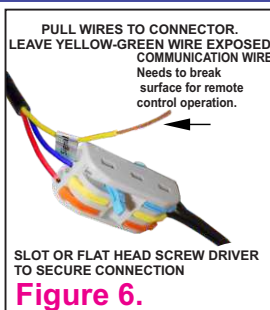
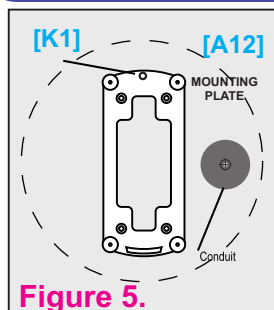


The Amoray Light fits easily on the **EXPANDABLE WEDGE BRACKET**
FAST AND HASSLE FREE RETROFIT

UNIVERSAL RETROFIT NICHE

UNIVERSAL NICHE INSTALLATION FOR ALL POOLS

1. To set [98-12] Expandable Wedge in place - first loosen the wing nuts to allow easy adjustment. Expand [98-12] Wedge Bracket to width of niche and finger tighten wing nuts at the appropriate size.
3. Use Philips head screw driver to tighten the 4 bottom wing nuts.
4. Install [98-12] Wedge Bracket in niche. For fine adjustment, place flat (slot) screw driver in center hole of wedge bracket, between [D] sliders and rotate screwdriver up and to cause a tighter fit.
5. To adjust [98-12] Wedge Bracket orientation, slide finger under bracket and secure the top set of wing nuts. Tighten remaining screws with Philips head screw driver, while holding wing nuts from behind.
6. Wrap a length of the cord to a maximum of 2.4m (8ft) long on the back of the light assembly. This extra cord allows for the light to be brought up out of the pool for servicing.
7. Pull wire to the outside-right of [A12] Mounting Plate and through the existing conduit. **(Figure 5.)** Connect blue and red wires to the low voltage transformer at the junction box. Leave communication wire (yellow-green stripe) exposed. **(Figure 6.)**
8. Slide the tab near the inside bottom of light into slot in bottom of the [A12] Universal Mounting Plate. **(Figure 7.)** *(Light must be in vertical position (set screw hole at top) to slip tab into slot.)*
9. 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.



Amoray lighting

PATENTED BRACKETS

Wedge



Large Wedge
Use for 10"-15"

[98-12]

This universal bracket makes **retrofitting** any **existing light** with a niche simple. Three configurations of this bracket will allow it to retrofit any niche between 3.5"-15"

Big C



[99-12]

BIG C bracket allows **Amoray Underwater LED Light** to be installed on any jet or return fitting. No additional drilling or cutting is required.

Pond

Fountain Ocean



[100]

The **POND** Bracket was designed to mount the Amoray LED Light at any angle. Suitable for Fountains and Ocean applications

Available for 8" and 12" Light



Medium Wedge
Used for 6"-8"

Inverted Wedge
Used for 3"-5"



Customized Click Fit
Colored Bezels



Large Sealing Ring



BIG C BRACKET

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



PATENTED
ACCESSORIES



[99-12]



[99-08]



One screw
to secure

Patented
BIG C Bracket
works with all
jet and return fittings

AVAILABLE IN OUR
NEW INSTALL KIT

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

FAST AND HASSLE FREE

INCLUDED IN OUR
RETROFIT KIT

EXPANDABLE WEDGE BRACKET

FIT ANY NICHE FROM 3.5" TO 15"



[98-12]

Bracket
Expands
To Fit Any
Niche From
3.5" to 15"

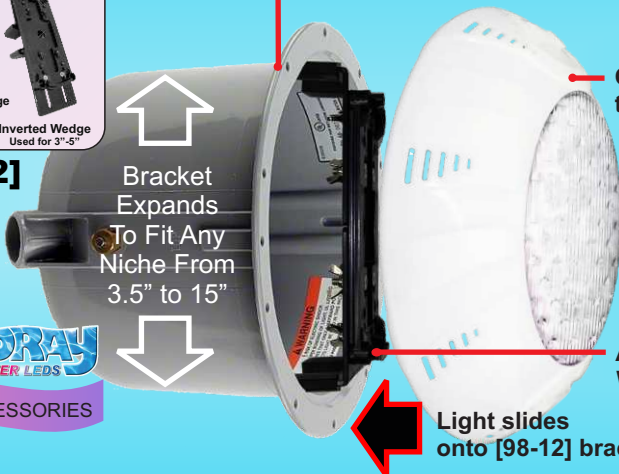


Any Niche

One screw
to secure

Amoray Patented
Wedge Bracket

Light slides
onto [98-12] bracket



PATENTED
ACCESSORIES



[98-08]



The Amoray Light fits easily on the
EXPANDABLE WEDGE BRACKET
FAST AND HASSLE FREE RETROFIT



AMORAY MASTER PARTS LIST

<p>Bracket Universal Mounting Black</p>  <p>A12</p>	<p>Bracket Universal 08 Mounting Black</p>  <p>A08</p>	<p>Multi Purpose Thru & Thru Wall Fitting</p>  <p>B</p>	<p>Big C-12 Return Bracket</p>  <p>C1-12-THICK</p>	<p>Big C-08 Return Bracket</p>  <p>C2-08-THIN</p>
<p>Heat Shrink Tube</p>  <p>E1</p>	<p>Silicone Tube</p>  <p>E2</p>	<p>Bracket Small Niche Retrofit</p>  <p>F</p>	<p>Bracket Medium Niche Retrofit</p>  <p>G</p>	<p>Bracket Large Niche Retrofit</p>  <p>H</p>
<p>Concrete Jet Sleeve</p>  <p>J2</p>	<p>Gasket Thin Small Hole Washer (use with J & J1)</p>  <p>J3</p>	<p>Big C Jet Return Ring</p>  <p>J4</p>	<p>Threaded 08 Jet Fitting 1 1/4" OD & 1" ID</p>  <p>J5</p>	<p>Gasket White Thin 08</p>  <p>J6</p>
<p>10x1 Type B Flat Phillips Tapping Screw 18.8</p>  <p>K5</p>	<p>8x1/2 Tapping Screw 316</p>  <p>K6</p>	<p>10X24-5/8 Flat Phillips Machine Screw 18.8</p>  <p>K7</p>	<p>1/4X3/4 Flat Phillips Machine Screw 316</p>  <p>K8</p>	<p>10-32 Machine Screw Nut 316</p>  <p>L1</p>
<p>1/4-20x3/4 Nylon Flat HD Slot Machine Screw</p>  <p>L7</p>	<p>Rubber Grommets</p>  <p>M</p>	<p>Rubber Grommets</p>  <p>M1</p>	<p>Wedge Plate</p>  <p>P1</p>	<p>Wedge Plate</p>  <p>P2</p>
<p>Fitting TEE 1 1/2</p>  <p>TEE</p>	<p>Bonding Wire</p>  <p>W</p>	<p>Antenna</p>  <p>W1</p>	<p>Wire Connector</p>  <p>W2</p>	<p>Transformer 60W</p>  <p>TRANS60</p>
<p>Remote</p>  <p>R15</p>	<p>Battery Replacement</p>  <p>BATT</p>	<p>Remote Case</p>  <p>CASE</p>	<p>Custom Click Fit Bezels</p>  <p>Change Color at anytime, clips over existing installed Light</p>	



C3



D



D1



D2



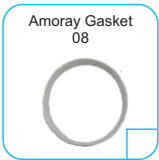
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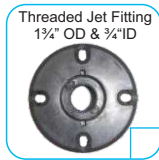
I1



I2



J



J1



J8



K1



K2



K3



K4



L2



L3



L4



L5



L6



P3



RED



R12



R08



S



TRANS100
TRANS200, TRANS300



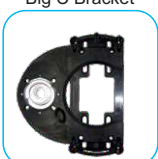
98-12

or



98-08

Pond Fountain Ocean



99-12

or



98-08



Colored Spacer
Ring Gaskets
available



100