

# SpaBrite™ / AquaLight™ Niche Fixture Housing Installation Procedures

**IMPORTANT SAFETY INSTRUCTIONS**  
*READ AND FOLLOW ALL INSTRUCTIONS*  
**SAVE THESE INSTRUCTIONS**

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### **DANGER**



#### **RISK OF ELECTRICAL SHOCK OR ELECTROCUTION!**

This niche - fixture housing must be installed by a licensed or certified electrician in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property. Read and follow the specific instructions below.

### **WARNING**

Before installing this product, read and follow all warning notices and instructions accompanying this niche. Failure to follow safety warnings and instructions can result in severe injury, death, and property damage. Call (800) 831-7133 for additional free copies of these instructions.

### **Important Notice**



Attention Installer.

This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

## **Section I. General Information.**

1. Verify the pool meets the requirements of the current National Electrical Code and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed these requirements before the niche (fixture housing) is installed.
2. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:
  - a. The light fixture and all metal items within 5 feet of the pool are properly electrically grounded.
  - b. The niche is properly installed so that the top edge of the Underwater Light's lens is at least 18 inches below the surface of the water in the pool. (See Figure 1.)
  - c. The niche is properly electrically bonded and grounded via the No. 8 AWG ground connector located at the rear of the niche.
  - d. The junction box (or, the 12 volt models, the low voltage transformer) is located at least 12 inches above ground level and at least 48 inches from the edge of the pool. (See Figure 1.)
3. Use only Pentair Pool Products lighting fixtures to insure proper bonding and grounding connections.

## Section II. Vinyl Liner/Fiberglass Pool Installation Instructions.

1. Punch or drill 6 sealing holes, 2 retainer holes and large panel hole, as per circular panel cut-out information.

### NOTE

One of the three gaskets has larger holes to go over the insert the stainless steel light niche through wall panel from inside the pool.

2. Place one gasket against the back of the niche flange and insert the stainless steel light niche through wall panel from inside the pool.
  - a. Align the two retainer screws holes (diametrically opposite one another at top and bottom) of the light niche with those that were drilled or punched in the wall panel.
  - b. Insert the two fillister head retainer screws through light niche and wall panel.
  - c. Align the holes of the back-up ring and second gasket with the holes on the back side of the wall panel.
  - d. Fasten the back-up ring and second gasket to the back of the wall panel by tightening the two fillister head retainer screws. At this point the wall panel is sandwiched by two gaskets.
3. If this is a vinyl pool, install the vinyl liner. For fiberglass pools to step 4.
4. Align third gasket (gasket with the two larger holes to go over the retainer screw heads) with brass-chrome sealing ring and fasten tightly to the light niche with the six 10-24 x 1 1/8 inch flat stainless screws provided for that purpose.
  - a. Be sure the two countersinks on the back of the sealing ring (top and bottom) line up with the heads of the retainer screws, and the two large holes in the third gasket are placed over the heads of the retainer screws.
  - b. Be sure the pilot screw hole of the sealing ring is at the center top. For vinyl liner pools, pierce the liner through the sealing ring holes, one at a time, and insert and tighten each screw at it's hole pierced.
  - c. Each screw should be inserted and tightened through the sealing ring (in proper order), gasket #3, vinyl liner if there is one, flange of the light niche, gasket #1, wall panel, gasket #2 and into the back-up ring.
5. For a vinyl liner pool, cut out vinyl liner along inside diameter edge of the sealing ring.
6. Connect rigid conduit from niche-fixture housing to junction box. The junction box (or for 12 volt models, the low voltage transformer) must be located at least 4 inches above ground level and 8 inches above water level and at least 48 inches from the edge of the pool.
7. Bond the niche-fixture housing to all other metallic items within 5 feet of the pool, using a No. 8 AWG bond wire. Bond connection is located at the rear of the niche.
8. If non metallic conduit is used a No. 8 AWG bonding/grounding wire must be installed through the conduit from the junction box to the bonding/grounding lug inside the niche. The connection inside the niche must be sealed with a listed sealant such as 3M Scotchcast.

## **⚡ DANGER**



### RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

For proper bonding and grounding connections, use only Pentair Pool Products Underwater Light Fixtures with this niche-fixture housing. Failure to do so could create an electrical hazard which would result in death or serious injury to pool users, installers and others.

## Section III. Concrete/Gunite Pool Installation Instructions.

1. Locate position on vertical wall where light is to be installed. The top of the light lens must be a minimum of 18 inches below normal water level.
2. Connect conduit to the niche using a recommended thread sealant.
3. Secure niche to rebar with tie wires. Orient the niche so that the pilot screw receptacle is located at the top of the niche.

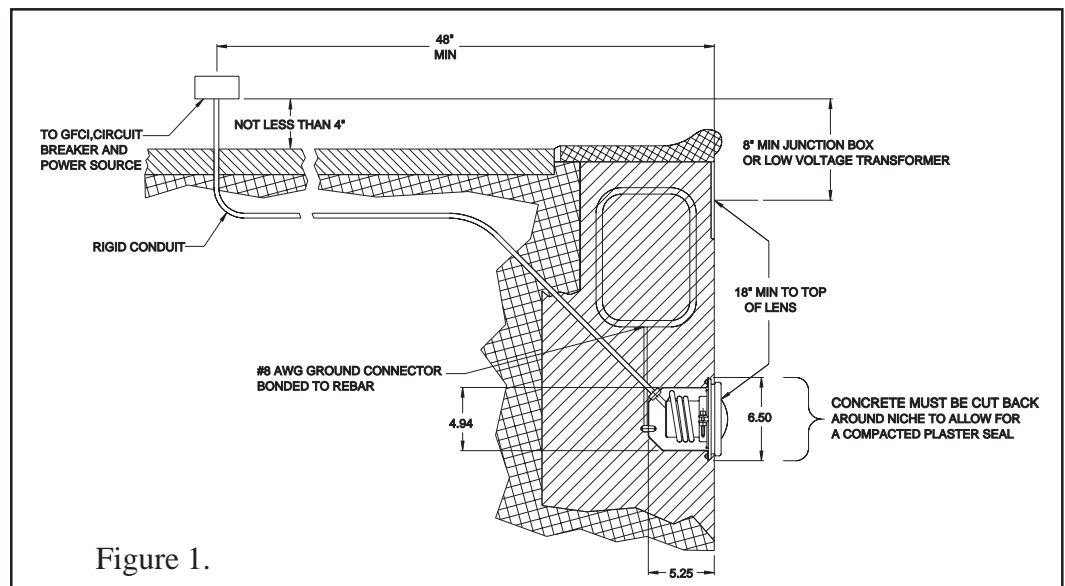
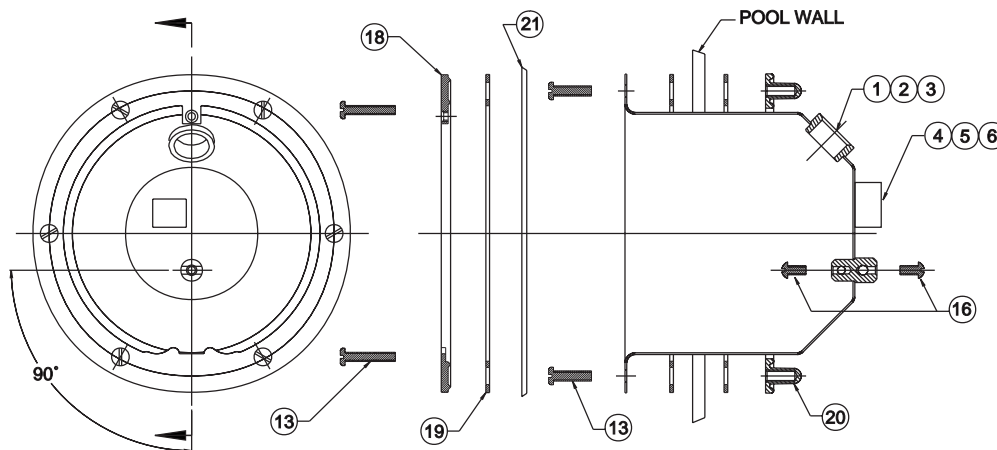


Figure 1.

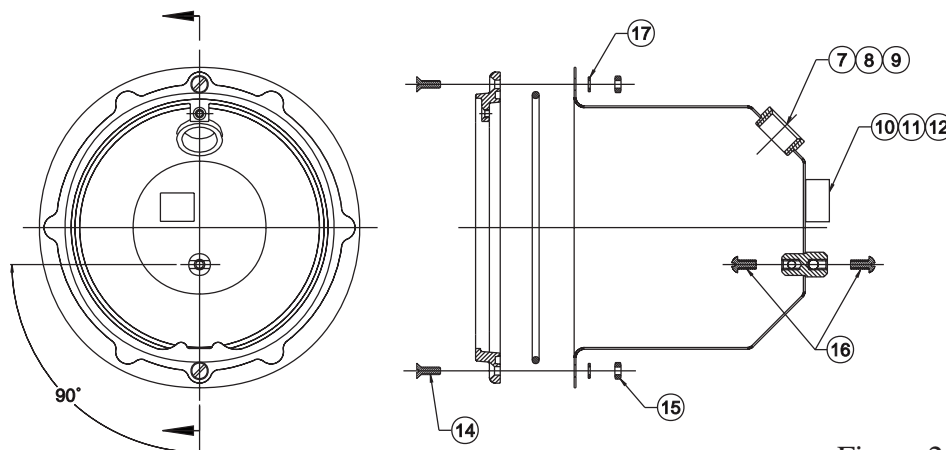
4. Connect bonding wire from rebar and bonding grid to the bonding lug at the rear of the niche.
5. Bond the niche-fixture housing to all other metallic items within 5 feet of the pool, using a No. 8 AWG bond wire. Bond connection is located at the rear of the niche.
6. If non metallic conduit is used a No. 8 AWG bonding/grounding wire must be installed through the conduit from the junction box to the bonding/grounding lug inside the niche. The connection inside the niche must be sealed with a listed sealant such as 3M Scotchcast.
7. Support conduit to hold niche the proper distance in front of rebar so that the front of mounting ring is flush with the desired finish surface.
8. If pool surface is to be plastered, you must allow proper concrete cut-back for plaster thickness. Finished concrete surface must be cut-back behind the niche flange. Finished area surrounding niche must be flat and flush with the brass mounting ring on the front of the niche. This ensures a snug fit between light and wall.

**Section IV. Technical Data.**

**A. Replacement Parts**



**NICHE FOR MANUFACTURED POOLS OR SPAS & TUBS**



**NICHE FOR CONCRETE POOLS OR SPAS**

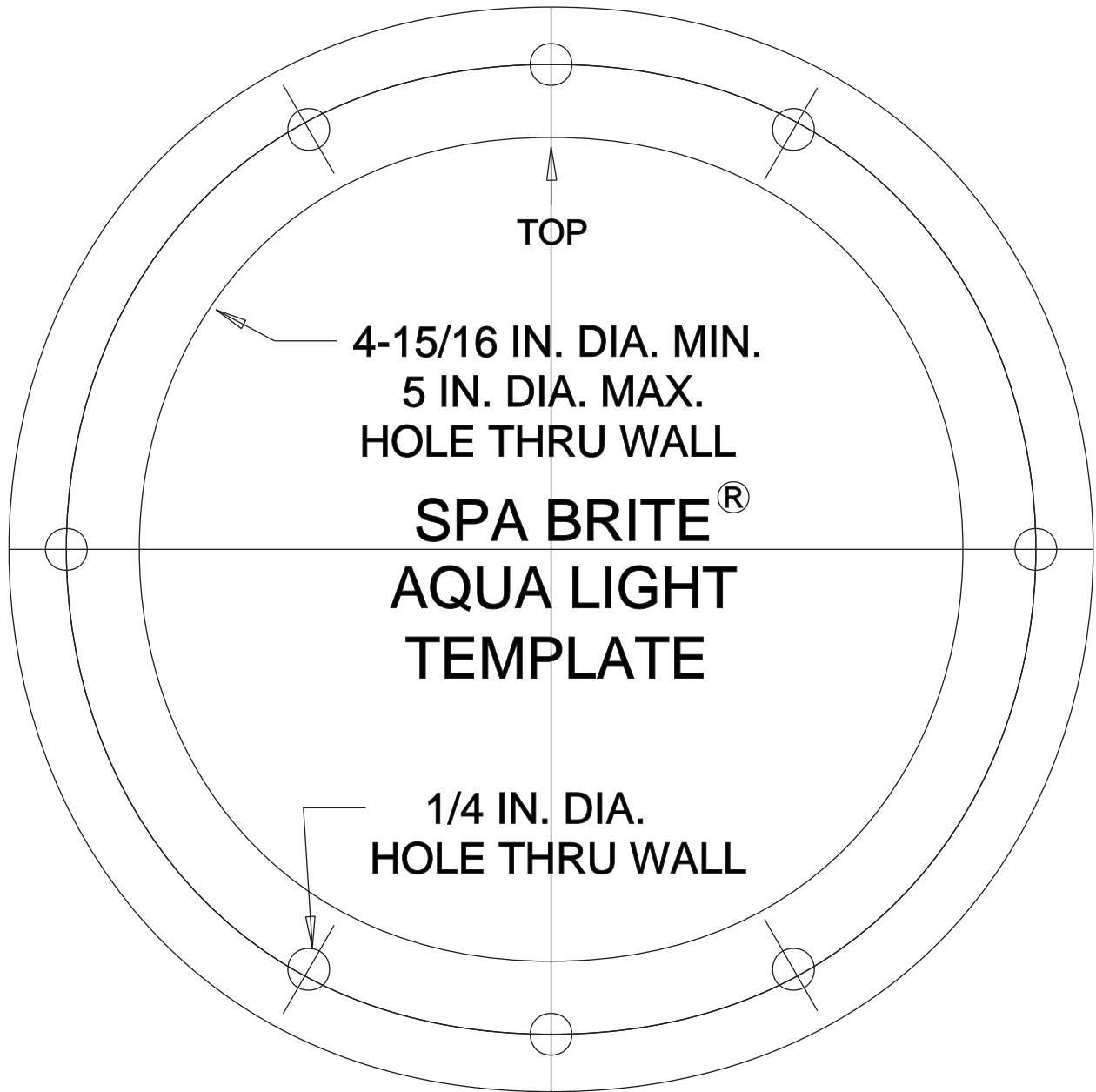
Figure 2.

Item	P/N	Description
1	78241100	Niche Top 1/2 in. Hub □
2	78241200	Niche Top 3/4 in. Hub □
3	78241300	Niche Top 1 in. Hub □
4	78242100	Niche Rear 1/2 in. Hub □
5	78242200	Niche Rear 3/4 in. Hub □
6	78242300	Niche Rear 1 in. Hub □
7	78243100	Niche Top 1/2 in. Hub □
8	78243200	Niche Top 3/4 in. Hub □
9	78243300	Niche Top 1 in. Hub □
10	78244100	Niche Rear 1/2 in. Hub □
11	78244200	Niche Rear 3/4 in. Hub □

Item	P/N	Description
12	78244300	Niche Rear 1 in. Hub □
13	79205500	Screw Kit, Vinyl
14	98213700	Screw, 8-32 x 1/2 in. F.H.
15	98202500	Hex Nut, 8-32 Stainless Steel
16	98204400	Screw, 10-24 x 1/2 in. R.H.
17	98213800	Lock Washer #8 Stainless Steel
18	79206000	Sealing Ring
19	79204600	Gasket
20	79205600	Back-up Ring
21	79207600	Gasket, Vinyl Liner

▨ ITEM NOT SOLD SEPARATELY

**HOLE PATTERN TEMPLATE**



**SAVE THESE INSTRUCTIONS.**

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