



SPABRITE® & AQUALIGHT® LIGHT NICHE

INSTALLATION INSTRUCTIONS

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.

⚠ DANGER! Risk of Electrical Shock or Electrocution!



This product must be installed by a licensed or certified electrician or a qualified pool serviceman 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. Always disconnect the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electrical shock. **READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.**

⚠ WARNING — Important Safety Information for Pentair Aquatic Systems Niche and Light Installation

- All Niche and Light installations must conform with all codes. If local codes mandate a cord seal, use Pentair plastic niches (P/N 79206600 and P/N 79206700).
- Under no circumstances replace lights by splicing wire under water or behind niche.

**⚠ WARNING — RISK OF ELECTRIC SHOCK AND INJURY.
USE ONLY THE INSTALLATION METHOD SPECIFIED BELOW.**

Important Safety Information for Fountain Fixture Installations

Location of Luminaire (Light) Use	Pentair Fountain Fixture* (P/N 560000 – P/N 560001) (P/N 560002 – P/N 560003)	Required Installation Method
Swimming Pool or Spa	Wet-Niche Swimming Pool (or Spa) Luminaire (Light)	Fixture Housing (Forming Shell) ONLY. DO NOT USE Fountain Fixture Stand.
Fountain	Wet-Niche Submersible Swimming Pool (or Spa) Luminaire (Light)	Fixture Housing (Forming Shell) or Fountain Fixture Stand.

(*) Note: Wet-niche luminaires complying with requirements for both uses may bear both the Listed Wet-Niche Swimming Pool (or Spa) Luminaire UL Mark and the Listed Wet-Niche Submersible Luminaire UL Mark. A luminaire not bearing the corresponding UL Listing Mark is not considered by UL to have been produced under UL's Listing and Follow-Up Service for the associated usage location.

Section I. General Information – USA ONLY

- A. Ensure that the electrical system of your pool conforms with the following requirements of the current National Electrical Code (NEC), and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the light and (fixture-housing) is installed.
- B. Some of the NEC requirements are listed below.
1. The lighting circuit must have a Ground Fault Circuit Interrupter (GFCI), and have an appropriately rated circuit breaker.
 2. The junction box or the low voltage transformer shall be located at least eight (8) inches above the maximum water line and at least four (4) inches above the ground level or pool deck whichever provides the greater elevation. The junction box shall be no less than 48 inches from the inside wall of the pool, unless separated from the pool by a solid fence, wall or other permanent barrier. See NEC 680.24 code requirement. See Figure 1.
 3. The light fixture and all metal items within five (5) feet of the pool must be properly electrically bonded. See NEC 680.26 code requirement. See Figure 1.
 4. The niche must be properly installed so the pilot screw hole is at the 12 o'clock position and 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.

NOTE

The required orientation of all Pentair lights is with the pilot screw at the 12 o'clock position. This is guaranteed by proper niche installation.

NOTE

Different rules apply to Fountain Light installations, consult the National Electric Code.

5. Bond the niche-fixture housing to all other metallic items within five (5) feet of the pool, using a No. 8 AWG bond wire. The Bond connection is located at the rear of the niche, see Figure 1.

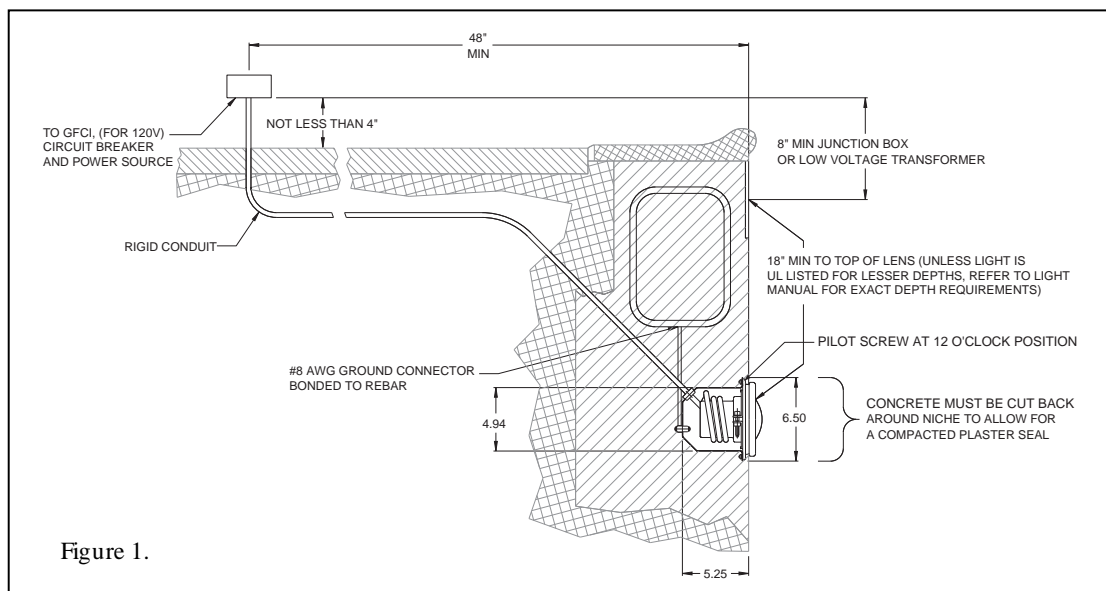
- C. Use only Pentair lighting fixtures in this niche to ensure proper bonding and grounding connections.

⚠ DANGER



RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

For proper bonding and grounding connections, use only Pentair 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 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 two gaskets has larger holes to go over the retainer screw head.

2. Make sure double wall gasket is around the niche flange. 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 rear gasket, (the gasket without larger holes), 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 skip to step 4.
4. Align front 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), front gasket, vinyl liner if there is one, flange of the light niche, double wall gasket, wall panel, rear gasket 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 four (4) inches above ground level and eight (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 five (5) feet of the pool, using a No. 8 AWG wire. Bond connection is located at the rear of the niche. See NEC 680.26 code requirement.
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. Seal the wire/lug connection with a listed sealant such as 3M™ Scotchcast™ Potting Kit 2136 or equivalent, to protect the connection from possible pool water corrosion. See figure 2. See NEC 680.23 code requirement.

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.

For proper bonding and grounding connections, use only Pentair 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 unless the light being used is UL listed for lesser depths. Refer to the Installation Manual of the light for exact depth requirements.
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.
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 five (5) feet of the pool, using a No. 8 AWG wire. Bond connection is located at the rear of the niche. See NEC 680.26 code requirement.
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. Seal the wire/lug connection with a listed sealant such as 3M™ Scotchcast™ Potting Kit 2136 or equivalent, to protect the connection from possible pool water corrosion. See figure 2. See NEC 680.23
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

Item	P/N	Description
1	79205500	Screw Kit, Vinyl
2	98204400	Screw, 10-24 x 1/2 in. R.H.
3	79206000	Sealing Ring
4	79204600	Front Gasket
5	79205600	Back-up Ring
6	79207600	Rear Gasket, Vinyl

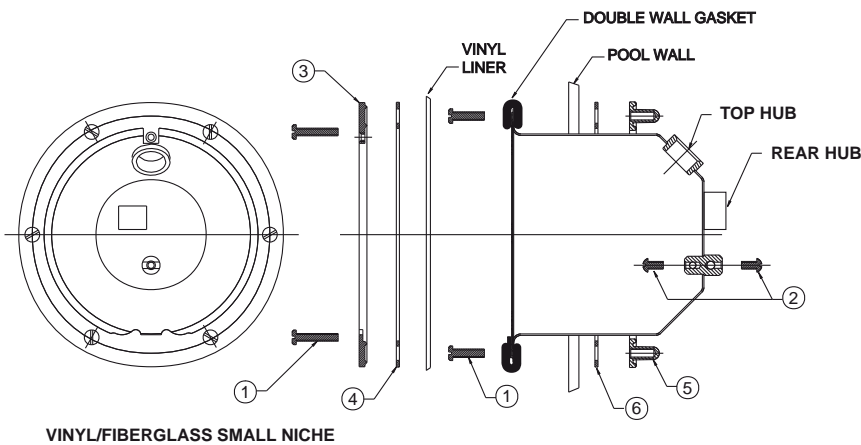
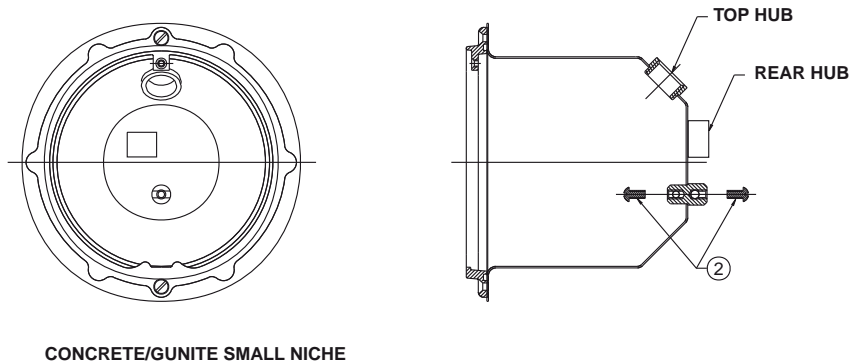


Figure 2.



SMALL NICHE FOR MANUFACTURED VINYL LINER/FIBERGLASS POOLS OR SPAS & TUBS

(AVAILABLE NICHE HUB SIZES)

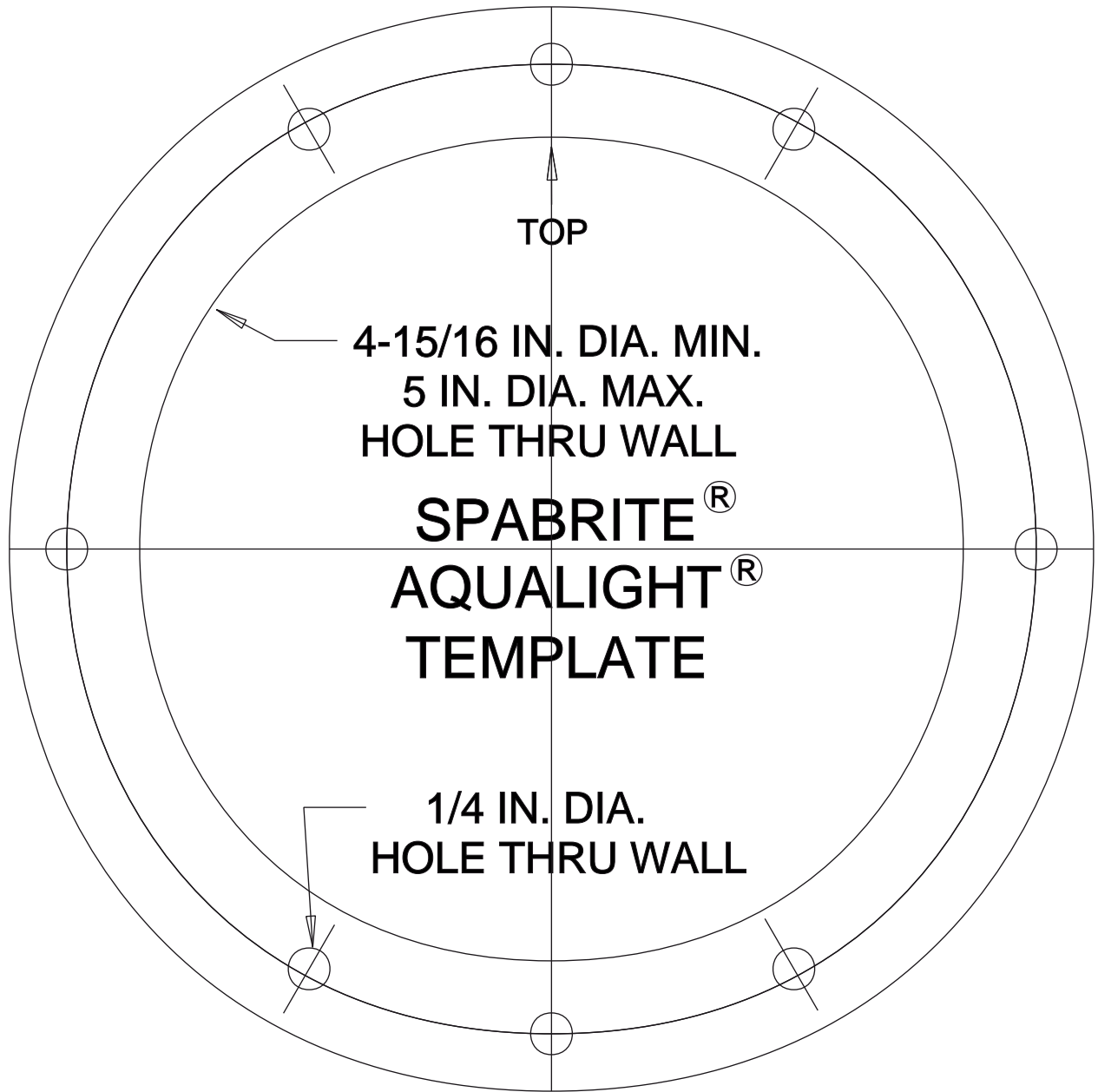
78241100	Niche Top 1/2 in. Hub
78241200	Niche Top 3/4 in. Hub
78241300	Niche Top 1 in. Hub
78242100	Niche Rear 1/2 in. Hub
78242200	Niche Rear 3/4 in. Hub
78242300	Niche Rear 1 in. Hub

SMALL NICHE FOR CONCRETE/GUNITE POOLS OR SPAS

(AVAILABLE NICHE HUB SIZES)

78243100	Niche Top 1/2 in. Hub
78243200	Niche Top 3/4 in. Hub
78243300	Niche Top 1 in. Hub
78244100	Niche Rear 1/2 in. Hub
78244200	Niche Rear 3/4 in. Hub
78244300	Niche Rear 1 in. Hub

HOLE PATTERN TEMPLATE



SAVE THESE INSTRUCTIONS.



WATER SOLUTIONS

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10951 WEST LOS ANGELES AVE., MOORPARK, CA 93021 • (805) 553-5000

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