

SpaBrite® / AquaLight® Niche Fixture Housing Installation Procedures

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Table of Contents

Section I.	General Information.....	3
Section II.	Vinyl Liner/Fiberglass Pool Installation Instructions.	4
Section III.	Concrete/Gunite Pool Installation Instructions.	5
Section IV.	Technical Data	6
A.	Replacement Parts	6
	Hole Pattern Template	7

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.

Pentair Water Pool and Spa, Inc.

1620 Hawkins Ave., Sanford, NC 27330 • (800) 831-7133 • (919) 566-8000

10951 West Los Angeles Ave., Moorpark, CA 93021 • (800) 831-7133 • (805) 553-5000

Visit www.pentairpool.com or www.staritepool.com

 **Pentair**
Pool Products®
Because **reliability** matters most®

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 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.

© 2007 Pentair Water Pool and Spa, Inc. All rights reserved.

1620 Hawkins Ave., Sanford, NC 27330 • (800) 831-7133 • (919) 566-8000
10951 West Los Angeles Ave., Moorpark, CA 93021 • (800) 831-7133 • (805) 553-5000



This document is subject to change without notice.

Trademarks and Disclaimers: The *Pentair Pool Products* logo, *Because reliability matters most*, SpaBrite and AquaLight are registered trademarks of Pentair Water Pool and Spa, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Pentair Water Pool and Spa, Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

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 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 unless the light being used is UL listed for lesser depths. Refer to the Installation Manual of the light for exact depth requirements. (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

This niche may be installed at less than 18 inches below the normal water level if the light is UL listed for lesser depths or if the light is installed in an area that is not used for swimming and the lens is adequately guarded to keep any person from coming in contact with the lens. Consult your local codes and ordinances, the Installation Manual of the light, and the National Electric Code (NEC) for details.

- 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 Water Pool and Spa lighting fixtures to insure proper bonding and grounding connections.

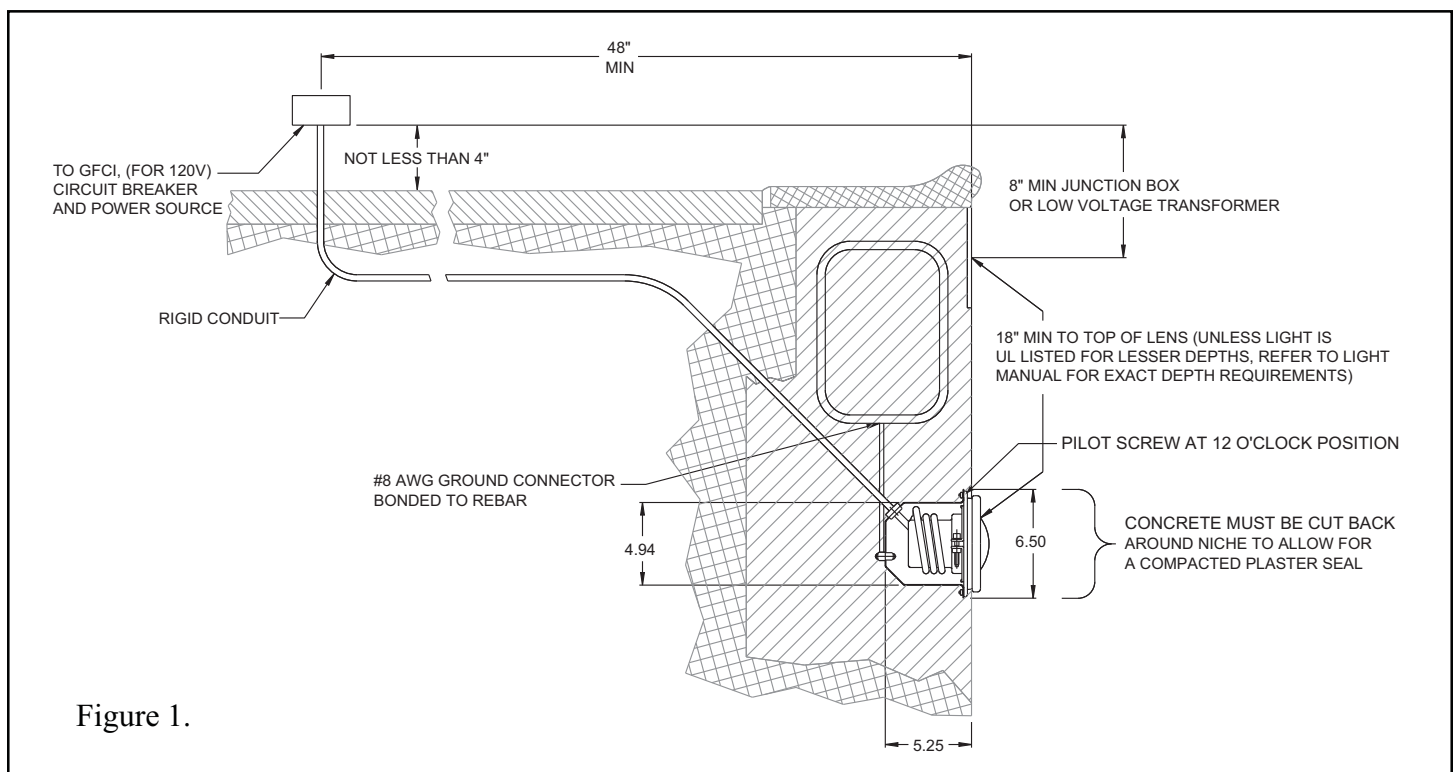


Figure 1.

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 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 Water Pool and Spa 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 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

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

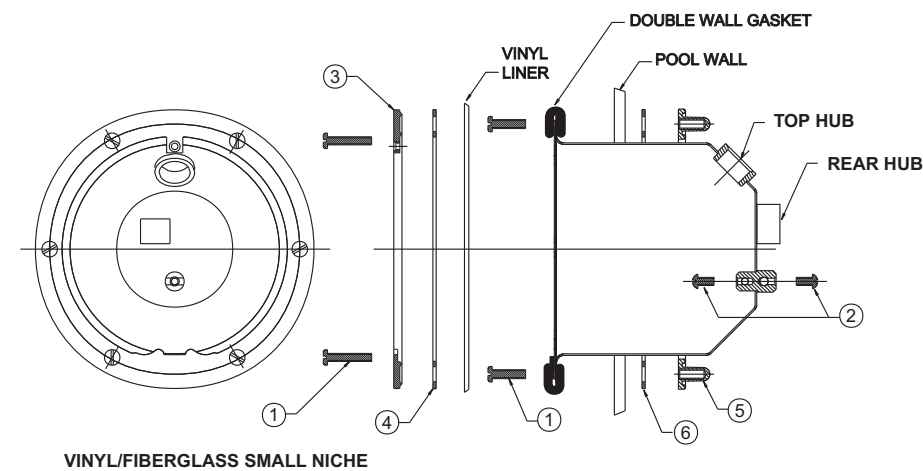
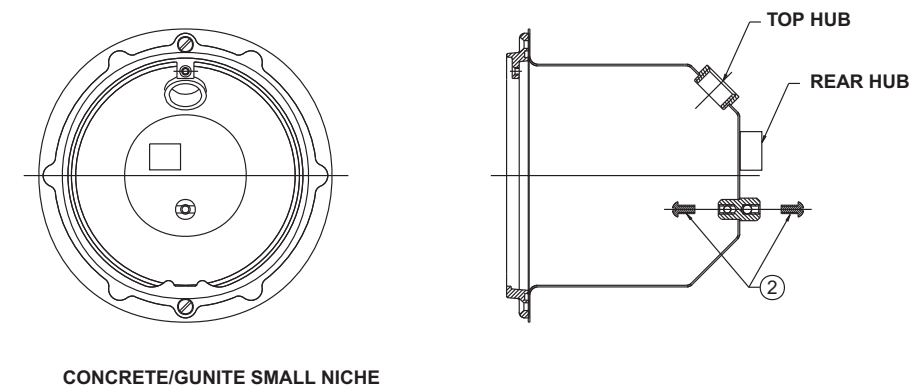


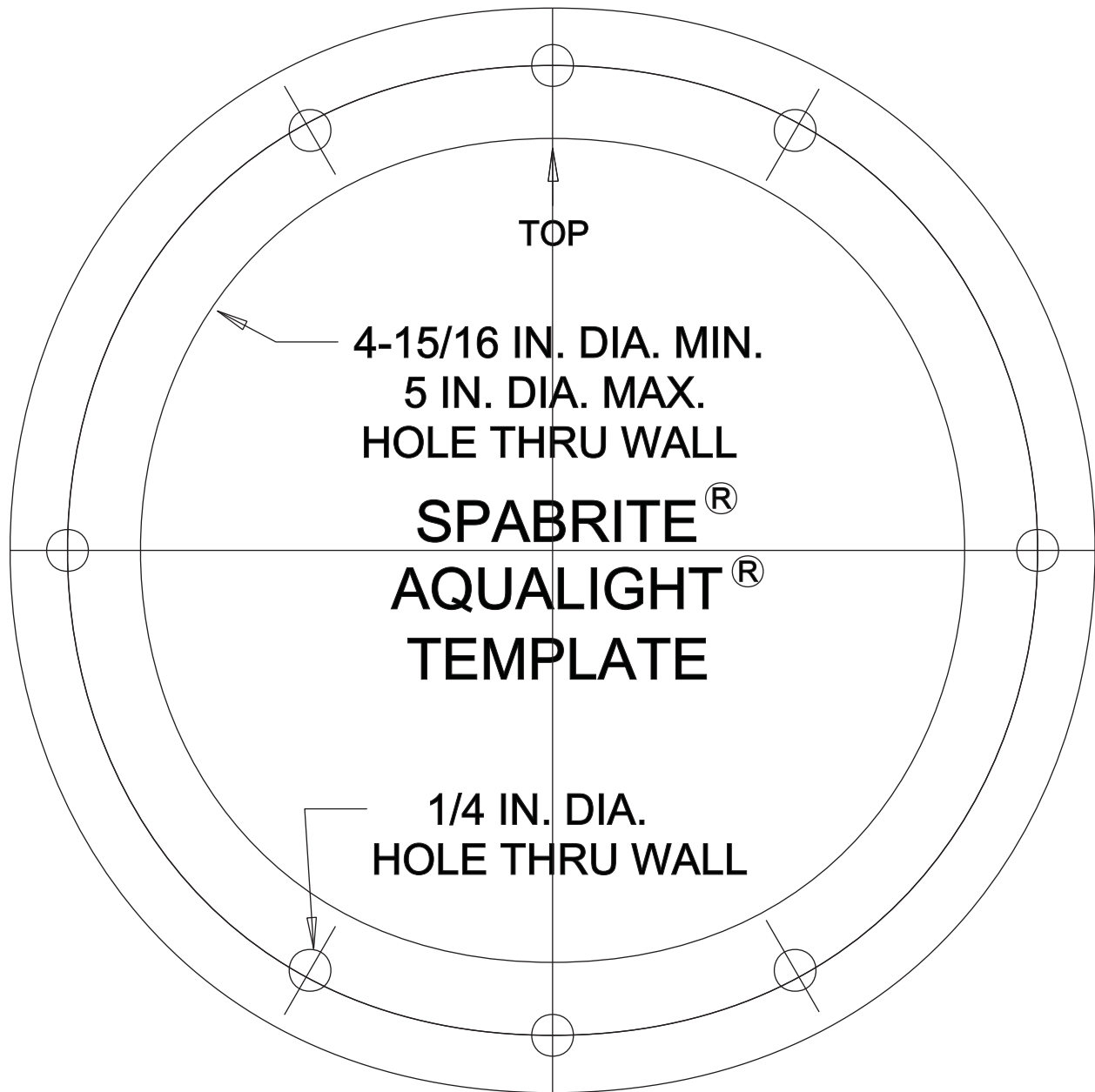
Figure 2.



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.

© 2007 Pentair Water Pool and Spa, Inc. All rights reserved.

1620 Hawkins Ave., Sanford, NC 27330 • (800) 831-7133 • (919) 566-8000
10951 West Los Angeles Ave., Moorpark, CA 93021 • (800) 831-7133 • (805) 553-5000

This document is subject to change without notice.

