

Pentair 78210500

Pentair Amerlite 78210500 Pool and Spa Light Niche Instruction Manual

Model: 78210500

1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, and maintenance of your Pentair Amerlite 78210500 1-Inch Large Top Hub Stainless Steel Niche. This niche is designed for concrete pool and spa light installations, ensuring a secure and watertight housing for your underwater lighting fixture. Please read this manual thoroughly before beginning installation or use to ensure safety and optimal performance.

2. SAFETY INFORMATION

Always observe basic safety precautions when installing and operating this product. Failure to follow these instructions could result in serious injury or property damage.

- **Electrical Safety:** Installation must be performed by a qualified electrician in accordance with all national and local electrical codes. Ensure power to the circuit is disconnected at the breaker before any installation or service.
- **Water Safety:** Ensure the pool or spa is drained to a safe level before working on the niche or light fixture.
- **Proper Sealing:** Incorrect sealing of the niche or light fixture can lead to water leaks, electrical hazards, and damage to the pool structure.
- **Use Approved Components:** Only use Pentair approved parts and accessories with this niche.
- **Bonding:** Ensure proper bonding of the niche to the pool's equipotential bonding grid as required by local electrical codes. This niche includes internal and external bonding lugs for this purpose.

3. PRODUCT OVERVIEW

The Pentair Amerlite 78210500 niche is a robust housing designed to securely hold a pool or spa light in concrete installations. Its stainless steel construction ensures durability and resistance to corrosion in aquatic environments.



Figure 1: Pentair Amerlite 78210500 Stainless Steel Niche. This image shows the stainless steel niche designed for concrete pool and spa light installations, featuring its robust construction and top hub.

Key Features:

- **1-Inch Top Brass Hub:** Provides a secure connection point for conduit.
- **Stainless Steel Construction:** Offers excellent durability and corrosion resistance.
- **Internal and External Bonding Lugs:** Facilitates proper electrical bonding for safety.
- **Dimensions:** Measures approximately 11.5 inches in length, 8.5 inches in height, and 11.5 inches in width.
- **Compatibility:** Designed for concrete pool and spa light applications.

4. SETUP AND INSTALLATION

Installation of the Pentair Amerlite 78210500 niche requires careful planning and adherence to local building and electrical codes. It is recommended that installation be performed by a qualified pool professional or electrician.

Installation Steps (General Guidance):

1. **Positioning:** Determine the optimal location for the niche in the pool or spa wall, ensuring it is at the correct depth and orientation for the light fixture.
2. **Formwork Integration:** Securely integrate the niche into the pool's formwork before concrete pouring.

Ensure it is level and plumb.

3. **Conduit Connection:** Connect the electrical conduit to the 1-inch top brass hub. Ensure a watertight seal using appropriate fittings and sealant.
4. **Bonding:** Connect the niche's bonding lugs to the pool's equipotential bonding grid using approved bonding wire and clamps.
5. **Concrete Pour:** Carefully pour concrete around the niche, ensuring no voids and that the niche remains securely in place. Allow concrete to cure fully.
6. **Finishing:** After concrete curing and pool finishing (e.g., plastering), ensure the niche opening is clear and ready for the light fixture installation.
7. **Light Fixture Installation:** Refer to the specific instructions for your pool light fixture for its installation into the niche. Ensure the light fixture's cord is properly routed and sealed.

Note: For vinyl liner pools, specific vinyl niches with chrome and brass sealing rings and sandwich gaskets are used. This 78210500 model is specifically for concrete applications.

5. OPERATING INSTRUCTIONS

The Pentair Amerlite 78210500 niche is a passive component designed to house a pool or spa light. It does not have operational controls itself. Its function is to provide a secure, watertight, and electrically bonded enclosure for the light fixture.

Operation of the pool light will depend on the specific light fixture installed within the niche. Always refer to the light fixture's instruction manual for details on turning the light on/off, changing colors (if applicable), and other operational aspects.

6. MAINTENANCE

Regular maintenance of the niche area is crucial to ensure the longevity and safety of your pool lighting system.

- **Visual Inspection:** Periodically inspect the niche and the surrounding pool wall for any signs of cracking, leaks, or damage.
- **Gasket/Seal Integrity:** If the light fixture is removed for service, inspect the gasket and sealing surfaces for wear or damage. Replace as necessary to maintain a watertight seal.
- **Bonding Connections:** Ensure that all bonding connections to the niche remain secure and free from corrosion.
- **Cleaning:** Keep the niche area free from debris, algae, and mineral buildup. Use appropriate pool cleaning tools and chemicals that are safe for stainless steel.
- **Winterization:** Follow standard pool winterization procedures, ensuring the niche and light fixture are protected from freezing temperatures if applicable to your climate.

7. TROUBLESHOOTING

This section addresses common issues related to the niche itself. For issues related to the light fixture, refer to the light's specific manual.

Problem	Possible Cause	Solution
Water leaking around the niche.	Improper sealing during installation, damaged niche, or issues with the light fixture's seal.	Inspect the niche and light fixture for cracks or damage. Ensure all seals and gaskets are correctly installed and watertight. Consult a pool professional for repair.

Problem	Possible Cause	Solution
Light fixture does not fit securely in the niche.	Incorrect light fixture model or improper installation of the niche.	Verify that the light fixture is compatible with the Pentair Amerlite niche. Ensure the niche was installed correctly and is free of obstructions.
Corrosion on the niche.	Improper water chemistry, stray electrical currents, or damage to the stainless steel.	Maintain proper pool water chemistry. Check bonding connections. If corrosion is severe, consult a professional.

8. SPECIFICATIONS

Attribute	Value
Model Number	78210500
Product Type	Pool and Spa Light Niche
Material	Stainless Steel
Hub Size	1-Inch (Top Brass Hub)
Application	Concrete Pool and Spa
Product Dimensions (L x H x W)	11.5 x 8.5 x 11.5 inches
Item Weight	4.5 pounds
Manufacturer	Pentair

9. WARRANTY AND SUPPORT

Pentair products are manufactured to high-quality standards. For specific warranty information regarding your Pentair Amerlite 78210500 niche, please refer to the warranty card included with your purchase or visit the official Pentair website. Keep your proof of purchase for warranty claims.

For technical support, replacement parts, or further assistance, please contact Pentair Customer Service. Contact details can typically be found on the Pentair website or in the packaging materials.

Pentair Official Website: www.pentair.com