ZonePro Glass Tube
Replacement Instructions

For # 12197 (2' Tube) and # 36053 (4' Tube)

Read these instructions thoroughly before proceeding. Save for future reference.

!WARNING - Use of unapproved luminaires in Classified hazardous locations can result in serious injury or death. Field replacement of glass tubes in Pauluhn/NRL ZonePro luminaires voids approval by UL and CSA, and voids any remaining factory warranty. Reinstallation or use of field-repaired luminaires in a Classified hazardous location violates federal law. Federal regulations require that this product be certified or approved by a nationally recognized testing laboratory, such as UL or CSA. Remove nameplate(s) identifying the luminaire as suitable for Classified hazardous locations, if the glass is field replaced.

For reinstallation of damaged luminaires into Classified hazardous locations, Pauluhn/NRL offers the ZonePro Factory Renewal program. Contact your Pauluhn/ NRL representative for details @ 800-826-5890 (USA) or 888-675-5483 (Canada).

Tools and Materials Required:
- Face shield & heavy gloves
- Hammer & cold chisel, approx 1/2" x 8"
- Small wire brush
- (4) Wire nuts or splices for 18 AWG
- 6" slotted & phillips screw divers
- Small amount of silicone based lubricant
- UL/CSA approved sealing compound for Class I, Division 1, Groups C & D

WARNING!!! Risk of electrical shock hazard, only qualified personnel should conduct this procedure!

Removing the Luminaire From Service: May require 2 persons. Completely turn off all power to the luminaire, including any that may be provided for emergency illumination. Unwire the power supply(s) and remove from service. Take the luminaire to a safe working area for servicing. Remove all nameplates identifying the luminaire as suitable for Classified hazardous locations.

Step 1: Initial Disassembly (Reference Figure 1)

CAUTION! Take proper care to protect the eyes, face & hands.
1.1 Remove 3 access caps (A) from wiring and lamp compartments.
1.2 Loosen screws (B) retaining the lamp holders (C), rotate, remove and swing them out of the way.
1.3 Remove screw (K) from the lampholder clip (L)
1.4 Cut the (2) leads (D) going to the narrow wire way (E), allowing enough room for splicing back together later in this procedure.
1.5 Remove the lamps (F) and the wire way channels (E) from both sides. Retain for reinstallation later in the procedure.

![Figure 1]

Step 2: Glass and Compound Removal (Reference Figure 2)

2.1 Using extreme caution, remove all glass (G), break other tube if unbroken. The blind end (I) will become free from the luminaire.
2.2 Using the chisel & hammer, remove all the sealing compound from both ends of (H & I).
2.3 Using the small wire brush, remove all remaining debris.

![Figure 2]

Step 3: Reassembly Preparation (Reference Figure 3)

CAUTION! These steps must be followed to allow a proper seal.
3.1 Stand & secure the fixture in a 90° vertical position from the floor, with the relamp end down.
3.2 Center a fiber gasket (J) in each hole of the relamp end (H).
3.3 Position glass tubes (G) in the center of the openings.
3.4 Center a fiber gasket (J) on top of each glass tube (G).
3.5 Position the blind end (I) on top, making sure the ends hook into the reflector (N) and center the glass.
3.6 CAUTION! Secure all in place with a jig, fixture, or clamp.

![Figure 3]
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SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

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**Step 4: Compound Pour, Relamp End (Reference Figure 4)**

CAUTION! Prior to pouring the sealing compound, be sure the glass is evenly centered in each opening.

4.1 Mix the sealing compound per the manufacturers instructions.
4.2 Pour the compound into each opening between casting (H) and glass (G), completely level and full to the top of the casting.
4.3 Allow the compound to set per the manufacturers instructions.

![Figure 4 (Relamp End)](image)

**Step 5: Compound Pour, Blind End (Reference Figure 5)**

5.1 Rotate the luminaire 180° placing the blind end (I) at the bottom, secure the luminaire in place 90° vertical to the floor.
5.2 Be sure the glass (G) is evenly centered in the openings.
5.3 Mix the sealing compound per the manufacturers instructions.
5.4 Pour compound into each opening between the casting (I) and the glass (G), completely level and full to the top of the casting.
5.5 Allow the compound to set per the manufacturers instructions.

![Figure 5 (Blind End)](image)

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**Step 6: Final Assembly (Reference Figure 6)**

6.1 Place the luminaire on a level work surface.
6.2 Slide the lamp/wire way channels (E) back into the glass (G) openings, wire way towards the reflector.
6.3 Secure in place with clip (L) and screw (K) previously removed during step 1.3.
6.4 Strip the four wire leads (D & M) on each side back approx 3/8".
6.5 Using approved wire nuts or splices, connect one lead from the luminaire (D) to one lead of the wire way (M)
Note: Either lead from the luminaire can be connected to either lead of the wire way.
6.6 Repeat step 6.5 for both wires in both openings.
6.7 Install lamps (F), and position lampholder (C) in place, secure with screws (B).
6.8 Place a small amount of lubricant on the threads of caps (A), thread all 3 into position until the o-ring seats securely.

![Figure 6](image)

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Note: We suggest testing the fixture, in a known safe area; with a power supply to be sure the lamps are working properly.

Glass tube replacement kits provided with (1) glass tube and (2) fiber gaskets.
P/N: 12197 (2' Tube)
P/N: 36053 (4' Tube)

**WARNING!!!** Now that the glass has been field replaced, the luminaire is no longer suitable for use in Classified hazardous locations. Insure that the nameplate(s) stating so have been removed!