To Install as part of a Track Lighting System (Figure 1)

**Component Parts**
- A Track Adapter
- B Supply/Support Cable
- C Fixture

**Caution:** Be sure power is off at the main breaker box prior to installation

1. Carefully unpack the fixture from the carton.
2. Determine desired finished height of fixture.
3. Using a sharp pair of cutters, cut the end of the coaxial cable off square and clean at the desired length. This will change the profile of the end of the coaxial cable and prepare it for insertion into the track adapter.

Follow the instructions on the included instruction sheet: **Installation Instructions for Edge Lighting Fast Jack Male Coaxial Fixture Connector, document # 904-FJ-MC-04.**

The product (luminaire) is intended to install on NRTL (UL, CSA, ETL, etc.) approved Edge Lighting Monorail System using Edge Lighting Fast Track connector model# FJ-MC-BZ. The product gets power from Edge Lighting Surface Magnetic Transformer model# MT-600-24, or Surface Magnetic Transformer model# MT-300-12, or Tech Lighting Monorail Surface Mount Transformer model# 700MOKTS300S, or 700MOSRT324DC, or WAC LM-K8111 250 Watt Max, or LBL FUSIONKITSC8ST, 300 watt Electronic Transformer or TRANSDIR-SFM600SC/24V, 600 Watt Magnetic Transformer, or similar UL 2108 & CSA C22.2# 9.0 approved transformer, or any NRTL approved (UL, CSA, ETL, etc.) CLASS 2 Transformers.

(continued)
**To Install Glass** *(Figure 2)*

**Component Parts**

- C  Fixture
- D  Screws
- E  Glass

1. Install bulb (not included). Be careful not to touch bulb with bare hands; oil from the hands will dramatically reduce bulb life. **CAUTION: To reduce the risk of fire do not use a lamp identified for use in enclosed luminaires.**
2. Loosen the four screws (D). It is not necessary to remove them from the fixture.
3. Raise glass (E) until groove is aligned with screws (D).
4. Tighten the four screws (D) equal amounts until snug with glass (E). **Be careful not to over tighten.**
5. Restore electricity at main breaker.

**INSTRUCTIONS PERTAINING TO A RISK OF FIRE, OR INJURY**

**IMPORTANT SAFETY INSTRUCTIONS**

Lighted lamp is HOT!

**WARNING – To reduce the risk of FIRE OR INJURY:**

- Turn off power and allow to cool before replacing lamp.
- Lamp gets HOT quickly! Contact only switch/plug when turning on.
- Do not touch hot lens, guard, or enclosure.
- Keep lamp away from materials that may burn.
- Do not touch the lamp at any time. Use a soft cloth. Oil from skin may damage lamp.
- Do not operate the luminaire with a missing or damaged shield.

SAVE THESE INSTRUCTIONS

* Hubbardton Forge will not be liable for injury or damage caused by improper installation, lamping or use of this fixture.
Troubleshooting Guide: 12 Volt Pendant Lighting

Part 1. For Hubbardton Forge Track Lighting products that use the “Fast Jack Male Coaxial Fixture Connector” from Edge Lighting, an Edge Lighting Installation Instruction “FJ-MC-” is provided to the customer. This Instruction shows one method for installing coaxial cable into the coaxial fixture connector. The method shown omits a trimming step to the Braided Outer Shield, to simplify the installation.

Components:

A. Coaxial Cable
B. Coaxial Fixture Connector
C. Conical Nipple
D. Strain Relief Tube
E. M4 Set Screw
F. M3 Set Screw
G. Inner Conductor
H. Wire Insulation
I. Braided Outer Shield

It has been determined that more consistent results can be obtained if:

1. The outer braided shield (I) of the coaxial cable (A) is stripped back 3/4” as shown in Figure 1.
2. The M3 Set Screw (F) is tightened until “Tight”, when the 1.5MM Allen Wrench starts to flex.
3. The M4 Set Screw (E) is tightened inward until it no longer causes an interference with the Conical Nipple (C). It will begin to crush the Strain Relief Tube (D).
4. 3 Electrical Continuity tests are performed after assembly with a Digital Multi-Meter or Continuity Tester.
   – Continuity Test #1 – Short Circuit test, tester should not light.
   – Continuity Test #2 – Open Circuit test, tester should light.
   – Continuity Test #3 – Functional Check. Same probe positions as Continuity Test #1, performed with Fixture wired and a working bulb in the socket, tester should light.

Note: The M3 Set Screw (F) must make electrical contact with the Coaxial Cable Inner Conductor (G), yet the instructions do not call for the inner conductor to be stripped back to expose the wire beneath. This is because the metal set screw pierces through the plastic insulation as the set screw is tightened to full torque. However, if the tester will not light during test #3 it is recommended to strip off 1/8” of insulation from the Coaxial Cable Inner Conductor (G). This will ensure that electrical connection is made.
Part 2. If all Open circuit or Short circuit conditions have been checked for and corrected as shown in Part 1, but still the system does not turn on, continue with the following:

Determine if the Transformer is working. The transformer output is high frequency and cannot be detected by most multi-meters. A simple Lamp test can verify the status of the Transformer.

**Caution:** Have a qualified person perform this operation. Do not hold lamp with bare hands as lamp heats quickly and may cause injury. Hold the lamp carefully using insulated pliers.

Turn off power and remove Bi-Pin Lamp from socket Assembly. Examine Lamp to verify that it does not appear defective. Lamp Glass should not be darkened and the filament should be intact. Expose Transformer by removing canopy and then turn power back on. These 12 Volt pendants are supplied with a Class 2 (power limited) Low Voltage Transformer, so there is no potential for shock. Carefully touch each one of the Transformer’s 12 Volt output wires to each pin of the Lamp as shown in Figure 4. If the Lamp lights, this indicates a good Transformer and the Pendant lead needs to be replaced. If the Lamp does not light, then the Transformer needs to be replaced. Turn off the power.

![Figure 4 – Transformer Check](image)

Part 3. List of Troubleshooting Issues and Solutions for 12 Volt Pendant Lighting

**Problem:** Lights burn out quickly or burn very brightly:

- **Diagnosis:** Bad Socket Connection.
- **Corrective action:** Inspect Lamp Pins and socket contacts for evidence of discoloration. Replace if discolored.

- **Diagnosis:** Finger Oils on Quartz Lamps
- **Corrective action:** Wipe Glass clean with clean soft cloth on all Lamps after installation.

**Problem:** System comes on but Lights flicker or are dim:

- **Diagnosis:** Wrong Lamps installed. 24 Volt Lamps operating on 12 Volt Power Supply.
- **Corrective action:** Replace 24 Volt Lamps with 12 Volt Lamps.

**Problem:** Lamps become dim or flicker after operating normally over a period of time

- **Diagnosis:** Deteriorating 12 Volt connections due to high current.
- **Corrective action:** Recheck all secondary connections, looking for discoloration, oxidation or hot spots. Tighten any loose connections. Replace Pendant leads if contacts are discolored.

**Problem:** Circuit Breaker on main panel trips on initial power up:

- **Diagnosis:** Electrical Short on 120 volt side of the Transformer.
- **Corrective action:** Check all connections and repair if needed, then confirm operation.