Installation Instructions

Otto Small Sphere Pendant Track Version 161305T

CAUTION: FAILURE TO INSTALL THIS FIXTURE PROPERLY MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH AND PROPERTY DAMAGE. We recommend installation by a licensed electrician.

This product must be installed in accordance with applicable installation code(s), by a person familiar with the construction and operation of the product and the hazards involved.*

Caution: Do not exceed maximum wattage noted on fixture. Use only recommended bulbs with fixture.





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Component Parts

- A Track Adaptors (2)
- B Supply/Support Cable
- C Fixture
- D Bulbs (2) (Not Included)
- E Glass Tube
- F Mesh Tube
- G Glass Globe



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To Install Track Adapter (Figure 1)

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

- 1. Carefully unpack the fixture (C) from the carton.
- 2. Determine desired finished height of fixture (C).
- Using a sharp pair of cutters, cut the end of the supply/support cable (B) off square and clean at the desired length. This will change the profile of the end of the supply/support cable (B) and prepare it for insertion into the track adapter (A).

NOTE: Cutting the cables at different lengths will cause the fixture to hang with one side higher or lower. To hang fixture level, cut both cables at the same length.

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



(Figure 1)

(Continued)



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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.

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

(Continued)



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To Install Glass (Figure 2)

- 1. Install bulbs (D) (not included).
- 2. Screw glass tube (E) in the socket cup until it stops.

Note: you can screw the glass tube (E) into either socket cup to start.

- 3. While holding the glass tube (E) at an upward angle, slide the mesh tube (F) over the glass tube.
- 4. Keeping the upward angle, slide the glass globe (G) over the mesh tube (F) until the mesh tube (F) travels through the openings at both ends of the glass globe (G)
- 5. Screw the remaining socket cup into the exposed end of the glass tube (E) until it stops.

Note: Screw in the socket cup by holding onto the brass ball.

Note: To orient the seam in the mesh tube, lift the glass globe by holding the brass balls on each end. While tension is relieved in the cable rotate the entire globe until the mesh tube is oriented in the desired position.

6. Restore electricity at main breaker.



If you need further assistance, or find that you are missing any parts, please contact the dealer from which you purchased this product. We hope you enjoy your fixture!

* Hubbardton Forge will not be liable for injury or damage caused by improper installation, lamping or use of this fixture.



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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



Figure 1 - Coaxial Cable and Connector Assembled

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.







Figure 3 - Continuity Test #2



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. 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.

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



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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.

