

Figure 1

1. INTRODUCTION

High-Power LED Light Sockets 2008639-[] for AMP LIGHT GUIDES light pipes are designed to house and provide electrical interconnection and thermal solution for a high-power LED star printed circuit (pc) board light source. The light socket accepts Ultra-Fast Series 110 FASTON* Cable Assemblies 2058102-1 (black) and 2058102-2 (red). These light sockets only work with AMP LIGHT GUIDES 10-mm Light Pipes 2058295-[] (refer to instruction sheet 408-10297 for detailed information).

NOTE



Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

These light sockets are designed to be used with an Underwriters Laboratories Inc. (UL) Class 2 power supply.

2. DESCRIPTION

The light socket consists of a locking ring, contact carrier subassembly, and heat sink. A thermally-conductive pad is available separately. See Figure 1.

The locking ring has an orientation notch, the contact carrier assembly has a square detent, and the heat sink has orientation latches and a square pin — these features ensure proper orientation for assembly.

The light socket is compatible with hexagonal “star board” high-power LEDs measuring 19.9 [.783] across the hexagonal flats and having a thickness range of 1.0 to 2.5 [.040 to .01]. Refer to the light socket customer drawing for the star board pattern.

Soldering or thermally-conductive adhesive is not required for assembly.

3. ASSEMBLY PROCEDURE

Refer to Figure 2, and assemble the light socket as follows:

1. Place a thermally-conductive pad or thermal grease into the hexagonal inset of the heat sink.
2. Install the LED over the thermally-conductive pad or thermal grease.

Assembly Procedure

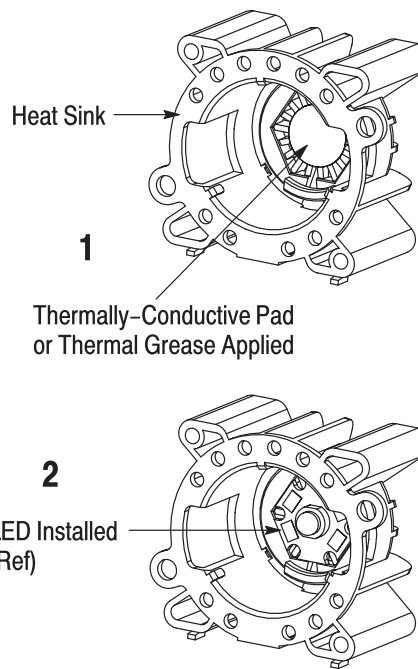


Figure 2 (Cont'd)

3. Insert the contact carrier assembly into the heat sink. Make sure that the square detent of the contact carrier assembly engages the square pin of the heat sink (shown in Figure 1).

4. Insert the locking ring into the heat sink so that the orientation notches of the locking ring engage the orientation latches of the heat sink (shown in Figure 1); then, using a long-nosed pliers or large snap ring tool with right-angle tips, rotate the locking ring until it secures the contact carrier assembly.

5. Insert the end of the light pipe into the socket of the contact carrier assembly. Make sure to orient the light pipe so that the output light beam emits in the desired direction (the light is emitted from the side opposite the reflector strip).

6. Connect the cable assemblies to the electrical connector tabs. Ensure that the receptacles are fully connected to the tabs.



The thermal performance of the overall system is paramount to the life of the LED. The light socket supports 1 to 4 watts of input to the LED without using forced air cooling or additional heat sink. IT IS IMPORTANT that the thermal management is adequate for the specific LED and lighting fixture used. LEDs with higher wattage rating can be used if forced air cooling or additional heat sink is employed.



For detailed application and inspection requirements, refer to Application Specification 114-13232.

4. REPLACEMENT AND REPAIR

LED light sockets are not repairable. DO NOT use any damaged or defective components.

Order product through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105-3608

5. REVISION SUMMARY

- Initial release of instruction sheet

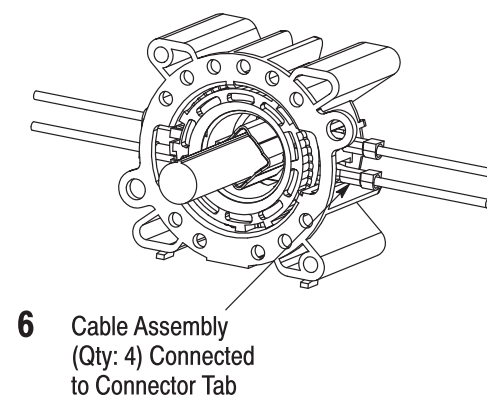
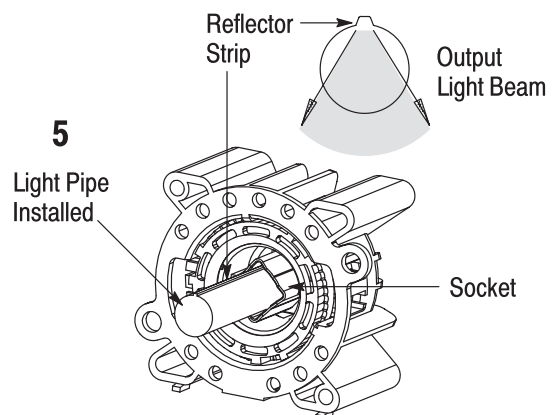
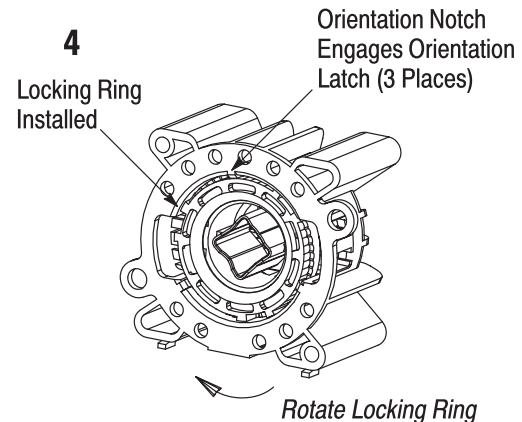
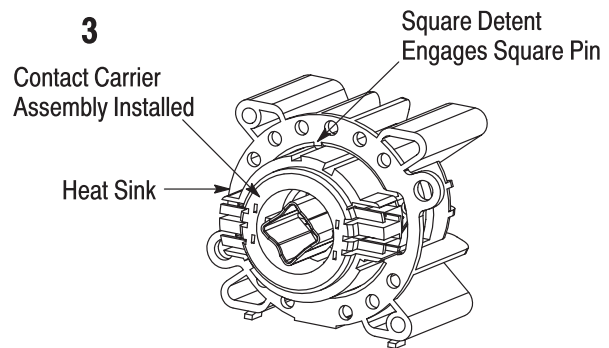


Figure 2 (End)