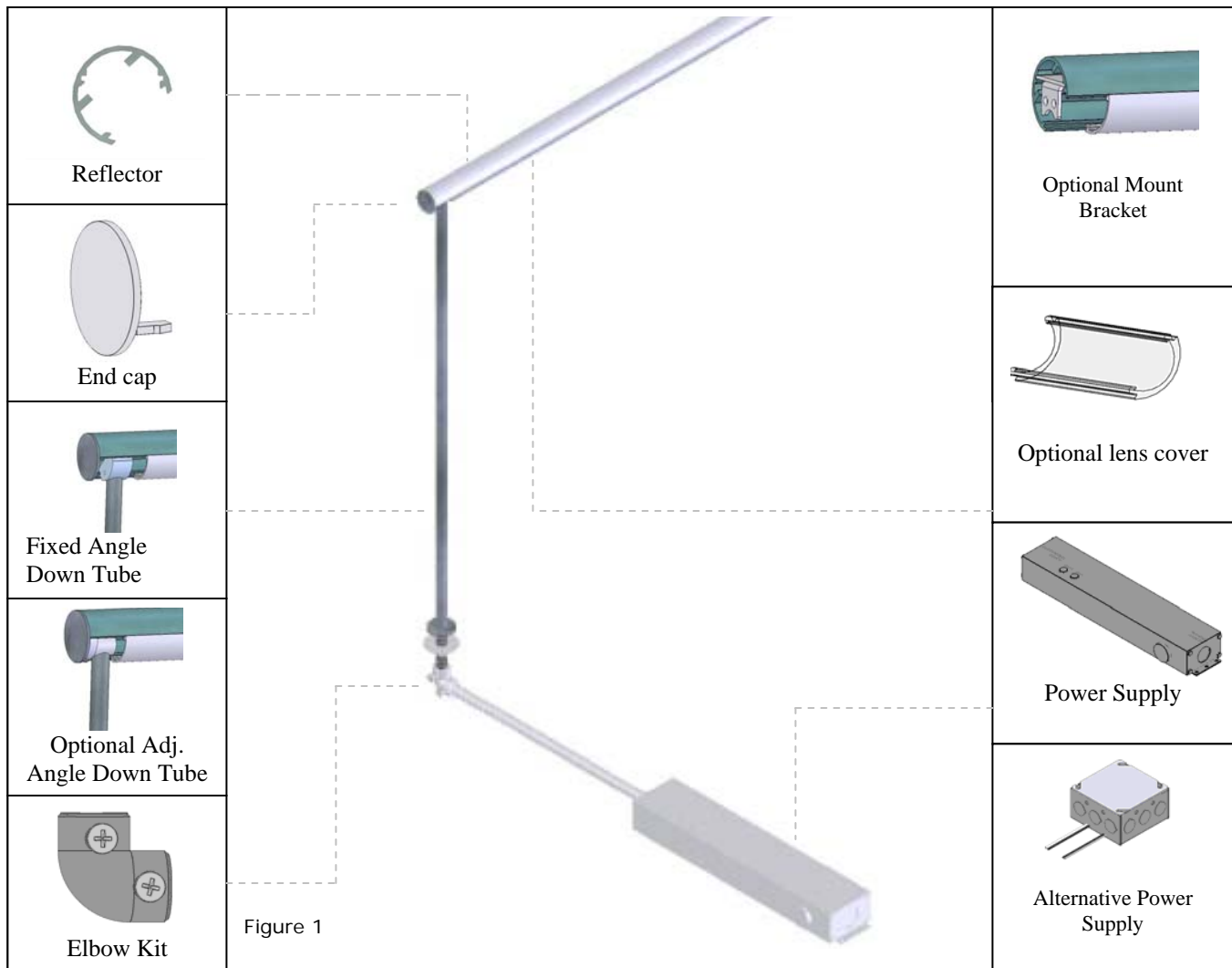




stylmark®

Installation Instructions

683700 LED Cabinet Lighting



INSTALLATION INSTRUCTIONS

Before you begin

These instructions illustrate the Stylmark® 683700 LED Lighting for showcases and cabinets. If you have questions during assembly, call Stylmark's technical help line. This package does not include specialty fasteners or adhesives which may be necessary for complete assembly.

Tools you'll need

- 3/16" hex key
- 5/64" hex key
- 11/16" open-ended wrench
- #2 Phillips screwdriver
- #1 Phillips screwdriver
- #2 flathead screwdriver
- Electric drill & standard bits

Please read these instructions carefully before beginning installation.

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Getting Started

The reflector can be mounted by one of four methods that were designated when the reflector was ordered. Follow the instructions for your mounting method.

Step-by-Step Instructions Rotating Down Tube Mounting

1. Connect the low voltage cable to the connectors on the LED wiring harness. Be sure to observe polarity.
2. Assemble the rotating down tube assembly by inserting the down tube connector into the retainer. **(See Figure 2, Step 1)** Adjust the angle of the reflector and tighten the set screw. **(See Figure 2, Step 2)** (Do not over-tighten, further adjustment may be necessary)
3. Insert the retainer into the reflector shell. **(See Figure 2, Step 3)** Ensure that the retainer is inserted such that the light will be aimed towards the center of the showcase.
4. Route the low voltage cable through the down tube connector, then through the down tube.
5. Insert the top end of the down tube into the down tube connector and tighten the set screw. **(See Figure 2, Step 4)**
6. Insert the end cap into the reflector. **(See Figure 2, Step 5)**
7. Tighten the threaded washer onto the bottom threaded end of the down tube such that no threads show above the washer.
8. Use the reflector assembly with down tubes installed to determine the location of the mounting holes in the cabinet deck. Mark and drill $\varnothing 1/2"$ (13mm) holes for the reflector down tubes. **(See Figure 3)** Ensure that there are no below deck interferences. **(See Figure 4)**
9. Insert the low voltage cable and the down tubes into the mounting holes in the cabinet deck.
10. Place the large fender washer onto the down tube below the cabinet deck and tighten the fastening nut in place. **(See Figure 4)**
11. Mount the power supply to the underside of the cabinet and attach the conduit connector.
12. Route the low voltage cable from the bottom of the down tube through the 90° elbow kit and the flexible conduit. Attach the elbow kit and conduit and fasten the retaining screws. **(See Figure 5)**
13. Make the wiring connections as shown in the wiring diagram. **(See Figure 14, 15)**

Notes:

The installer determines the power supply mounting location. Be sure to provide for adequate free air movement around the power supply. The low voltage cable is 156" (3.96 m) and should not be lengthened.

Figure 2

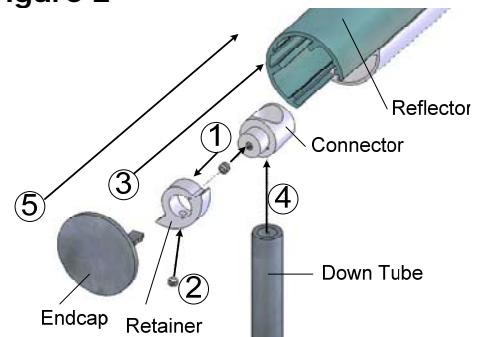


Figure 3

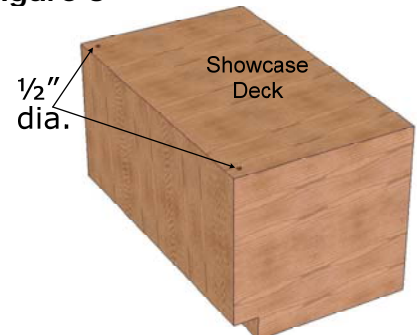


Figure 4

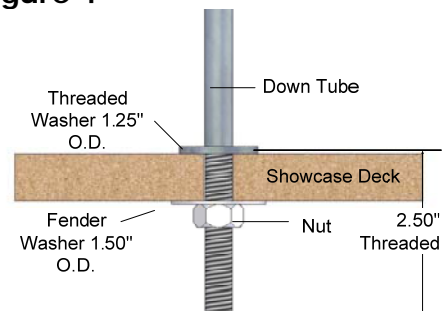
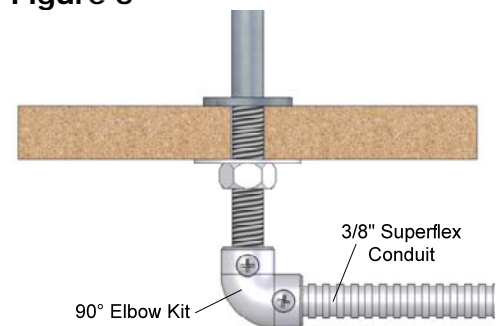


Figure 5



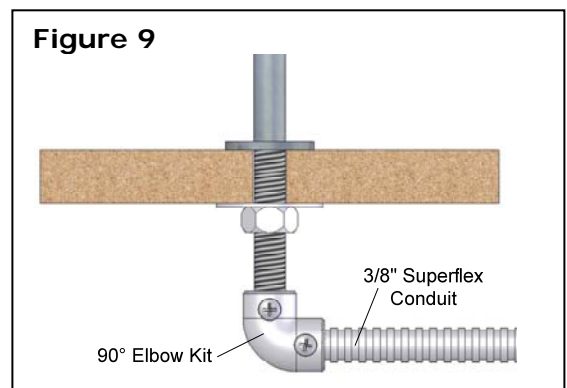
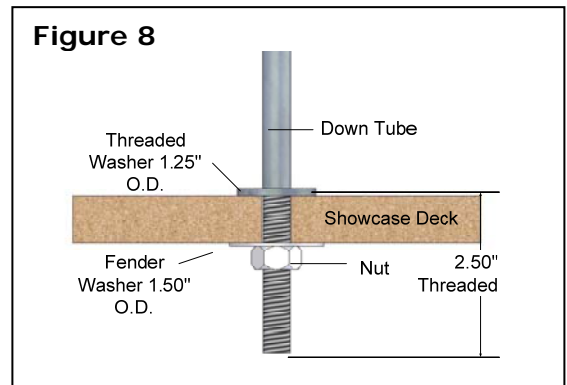
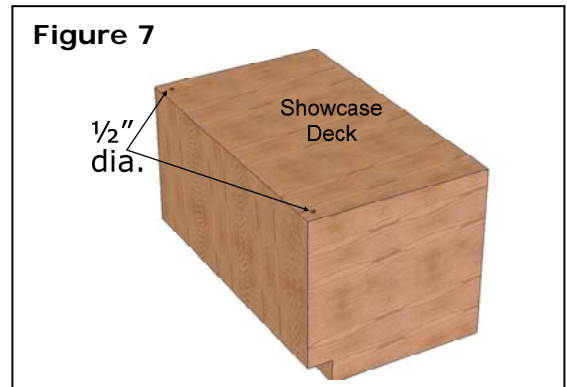
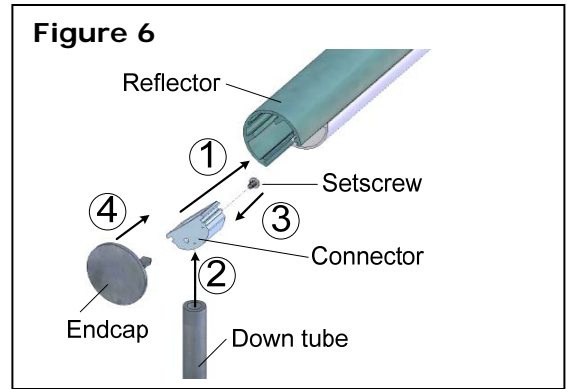
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Step-by-Step Instructions Fixed Down Tube Mounting

1. Connect the low voltage cable to the connectors on the LED wiring harness. Be sure to observe polarity.
2. Assemble the fixed down tube assembly by inserting the down tube connector into the reflector. **(See Figure 6, Step 1)** Ensure that the connector is inserted such that the light will be aimed towards the center of the showcase.
3. Cut the down tube to the desired length. Make sure to only cut from the top or the unthreaded end.
4. Route the low voltage cable through the down tube connector, then through the down tube.
5. Insert the down tube into the down tube connector and tighten the setscrew. **(See Figure 6, Step 2 & 3)**
6. Insert the end cap into the reflector. **(See Figure 6, Step 4)**
7. Tighten the threaded washer onto the bottom threaded end of the down tube such that no threads show above the washer.
8. Use the reflector assembly with down tubes installed to determine the location of the mounting holes in the cabinet deck. Mark and drill $\varnothing 1/2"$ (13mm) holes for the reflector down tubes. **(See Figure 7)** Ensure that there are no below deck interferences. **(See Figure 8)**
9. Insert the low voltage cable and the down tubes into the mounting holes in the cabinet deck.
10. Place the large fender washer onto the down tube below the cabinet deck and tighten the fastening nut in place. **(See Figure 8)**
11. Mount the power supply to the underside of the cabinet and attach the conduit connector.
12. Route the low voltage cable from the bottom of the down tube through the 90° elbow kit and the flexible conduit. Attach the elbow kit and conduit and fasten the retaining screws. **(See Figure 9)**
13. Make the wiring connections as shown in the wiring diagram. **(See Figure 14, 15)**

Notes:

The installer determines the power supply mounting location. Be sure to provide for adequate free air movement around the power supply. The low voltage cable is 156" (3.96 m) and should not be lengthened.



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Step-by-Step Instructions Fixed Mount Bracket

1. Use the reflector assembly to determine the location of the mount bracket on the cabinet end. Mark and drill pilot holes for the #6 screws (obtain locally). (See Figure 10)
2. Mark and drill a minimum $\varnothing 0.25"$ (6mm) hole in the cabinet end, just below the fixed mount bracket location. (See Figure 10)
3. Route a minimum $1/4" \times 1/4"$ (6mm x 6mm) grooved channel on the inside of the cabinet end. The channel should provide a wire way from the reflector to the power supply. (See Figure 12)
4. Fasten the fixed mount brackets using #6 screws. (obtain locally) (See Figure 10)
5. Connect the low voltage cable to the connectors on the LED wiring harness. Be sure to observe polarity. Route the low voltage cable through the hole and in the wire way.
6. Slide the mount bracket clip into the reflector with the snap clip facing the end of the reflector. (See Figure 11)
7. Position the reflector and mount bracket clips over the mount brackets. Snap into place. (See Figure 11)
8. Mount the power supply to the underside of the cabinet.
9. Make the wiring connections as shown in the wiring diagram. (See Figure 14,15)

Notes:

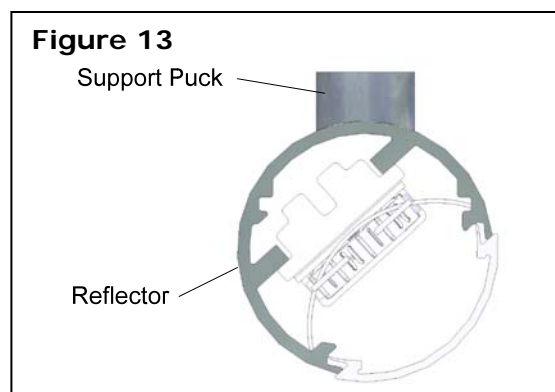
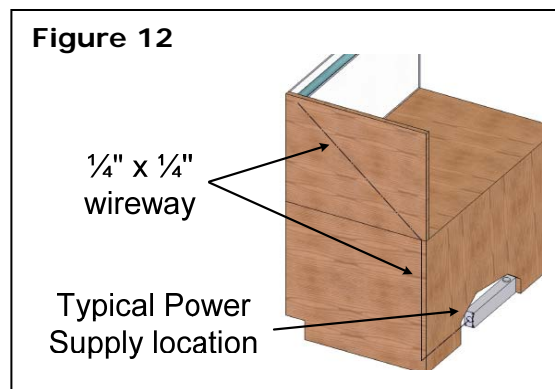
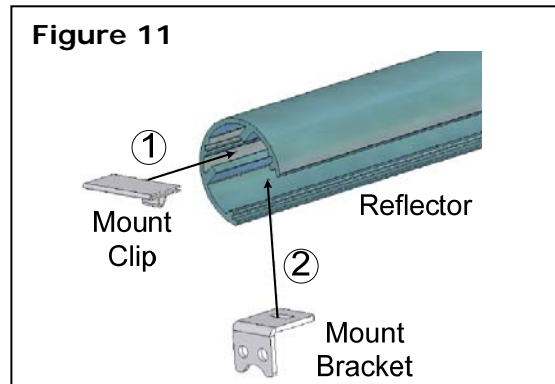
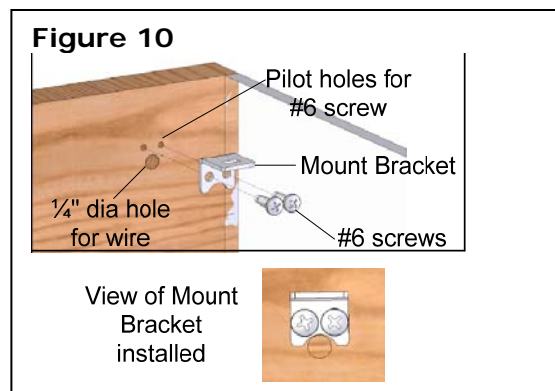
The installer determines the power supply mounting location. Be sure to provide for adequate free air movement around the power supply. The low voltage cable is 156" (3.96 m) and should not be lengthened.

Step-by-Step Instructions Support Puck

Reflectors over a certain length (typically 60") will be provided with a support puck.

(Stylmark recommends using 3M™ Scotch Weld™ Epoxy Adhesive DP-105 Clear, available from suppliers such as Grainger® or Fastenal®)

1. Identify and mark the desired position for the support puck on the light reflector.
2. Clean and prepare surface to adhesive manufacturer's instructions.
3. Apply adhesive to the concave surface of the support puck and position on to the top side of the light reflector, ensuring that all gaps are filled. Take care to position the support puck such that the top of the puck will be parallel to the glass mounting surface. (See Figure 13)
4. Allow adhesive to fully cure according to the adhesive manufacturer's instructions. Keep parts from moving during cure.
5. Install all mechanical mounting hardware and prepare for final positioning of light reflector.
6. Apply adhesive to the flat surface of the support puck and position to the underside of the showcase top glass. (See Figure 13)
7. Allow adhesive to fully cure according to the adhesive manufacturer's instructions. Keep parts from moving during cure.



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Power Supply Information Number of LED Light Modules per Power Supply

Light Engine Type	40W (p/n 580756-02)	60W (p/n 230493)	96W (p/n 230494)	
	Maximum Number of Modules ²	Maximum Number of Modules ²	Minimum Number of Modules ²	Maximum Number of Modules ²
MIG 15V Deluxe ¹	4 + 1	7 + 0	3 + 1	9 + 0
MIG 15V Premium ¹	3 + 1	5 + 0	2 + 1	6 + 1

Light Engine Type	40W (p/n 580756-04)	60W (p/n 230572)	96W (p/n 230573)	
	Maximum Number of Modules	Maximum Number of Modules	Minimum Number of Modules	Maximum Number of Modules
MIG 24V Deluxe ¹	4 + 0	7 + 0	4 + 0	11 + 0
MIG 24V Premium ¹	3 + 1	5 + 0	3 + 0	8 + 0

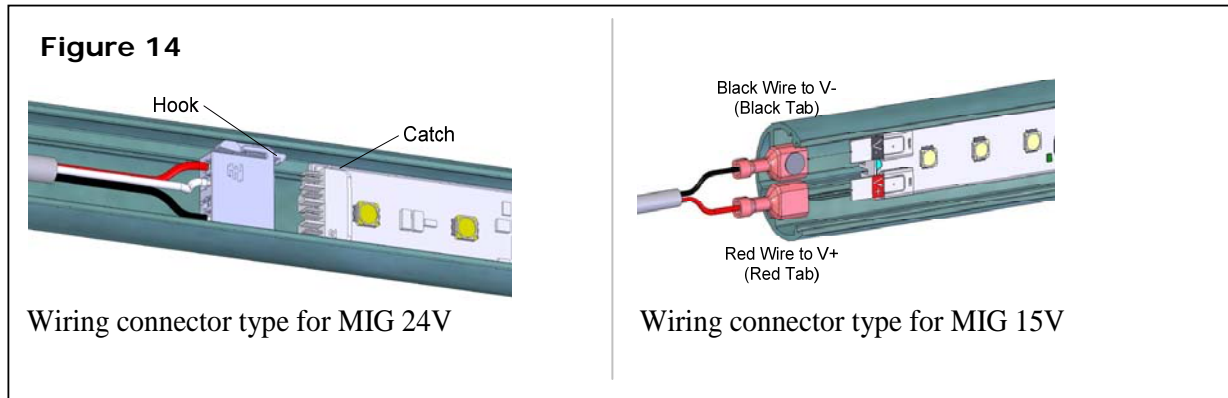
¹ – Modules are designed to be powered from Constant Voltage power supplies only.

² – Number of 12" modules + number of 6" modules which can be powered either from a single wire feed or in multiple parallel branches.

Wiring Instructions

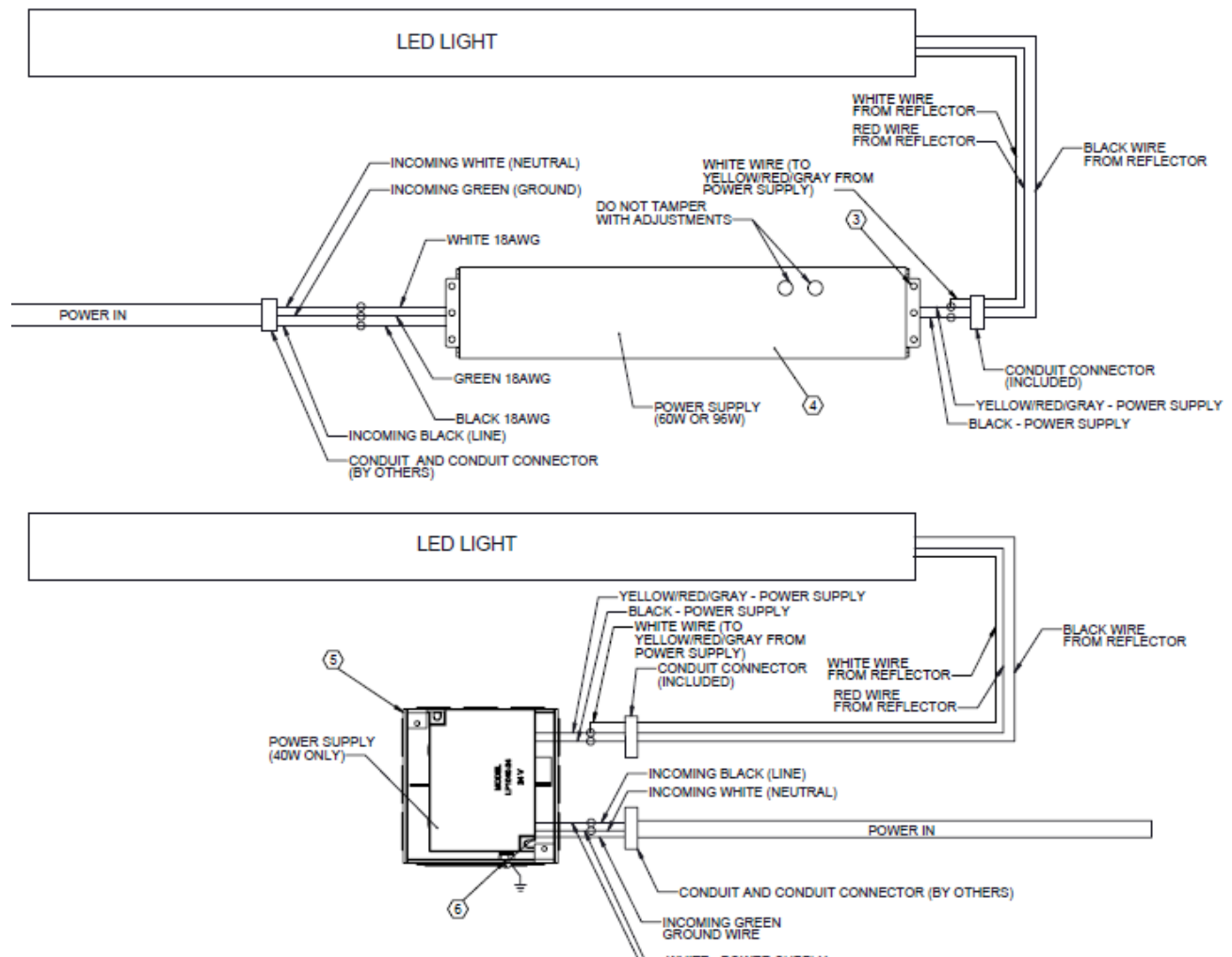
Notes:

- 1) The installer determines the power supply mounting location.
- 2) A minimum volume of 22" (56cm) x 17" (43cm) x 3-1/2" (9cm) is required for power supply mounting.
- 3) The low voltage cable is 156" (3.96 m).



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Figure 15



NOTES:

1. CONDUIT CONNECTORS TO BE SECURED TO END MOUNT PLATES INCLUDED WITH THE POWER SUPPLY OR TO KNOCK OUTS ON JUNCTION BOX.
2. SECURE CONDUIT AND HARNESS ASSEMBLY WITH CONDUIT CONNECTORS.
- ③ MOUNT POWER SUPPLY USING HOLES ON INCLUDED END PLATES (SCREWS NOT PROVIDED).
- ④ NO BALLAST BOX REQUIRED, POWER SUPPLY UNIT IS SELF CONTAINED.
- ⑤ 40W POWER SUPPLY IS CONTAINED WITHIN A STANDARD 4X4 JUNCTION BOX
- ⑥ INCOMING GROUND MUST BE GROUNDED TO THE JUNCTION BOX WITH INCLUDED GREEN SCREW (40W POWER SUPPLIES CONTAINED IN JUNCTION BOX ONLY).
7. EACH LED LIGHT UNIT WILL CONTAIN ONLY 1 OF THE 2 POWER SUPPLY OPTIONS NOTED ABOVE.
8. LOW VOLTAGE CABLE FROM LED LIGHT WILL BE NON-JACKETED WHEN SUPPLIED AS A DOWNTUBE MOUNT OR WILL BE JACKETED FOR ALL OTHER APPLICATIONS.