









GENERAL INSTALLATION

WARNING

TO REDUCE RISK OF DEATH, INJURY OR PROPERTY DAMAGE FROM FIRE, ELECTRIC SHOCK AND OTHER HAZARDS:

The service of equipment must be performed by qualified personnel.

Installation and maintenance must be performed by qualified personnel familiar with the construction and operation of this product and any hazards involved. All applicable local, state and federal codes and ordinances must be followed.

Read this document before installing, servicing, or maintaining this equipment. These instructions do not cover all installation, service, and maintenance situations. If your situation is not covered, or, if you do not understand these instructions or need additional information, contact American Linear Lighting or your local American Linear Lighting distributor.

WARNING

BEFORE INSTALLING, SERVICING OR MAINTAINING THIS EQUIPMENT, FOLLOW THESE GENERAL PRECAUTIONS TO REDUCE THE RISK OF ELECTROCUTION:

Make sure the equipment is properly grounded.

Always de-energize the circuit and/or equipment before connecting to, disconnecting from or servicing the equipment.

TO PREVENT LUMINAIRE ROW FROM OVER-CURRENT:

By adding the input current of each luminaire section marked on the luminaire, the total current per power feed must not exceed the maximum line wire amperage rating in the luminaire and the power feed cord/wire amperage rating whichever is least.

WARNING

IT IS THE INSTALLERS RESPONSIBILITY TO ENSURE THAT WALL, CEILING OR JUNCTION BOX IS STRUCTURALLY CAPABLE OF SUPPORTING THE WEIGHT OF LUMINAIRE/LUMINAIRE ROW.

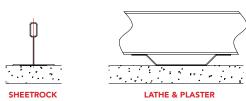
NOTE: The fixture markings can be found on labels positioned behind the direct lens. To access these labels, carefully pry off the direct lens from one end of the fixture using a flat, plastic tool.

FIXTURE: PAGES 2 - 8



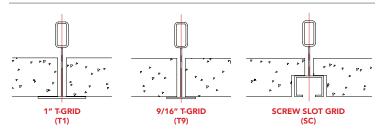


OFF-GRID: PAGES 8 - 10



VARIOUS
"HARD CEILINGS"

ON-GRID: PAGES 11 - 13





SELECTING LUMEN OUTPUT AND COLOR TEMPERATURE

Step One:

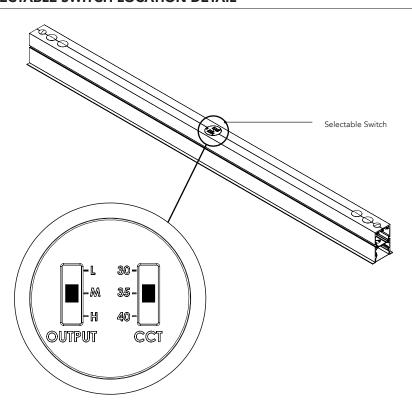
Locate and remove CCT and Lumen output reminder sticker. Discard.

Step Two:

On the back of the fixture, locate the white, circular switch that controls the color temperature and lumen output. Using the black toggle switches, select the desired color temperature and lumen output. Possible selections are outlined in the reference table below.

Step Three: Install fixture as in remaining pages of installtion guide.

SELECTABLE SWITCH LOCATION DETAIL



LUMEN OUTPUT AND COLOR TEMPERATURE REFERENCE TABLE

Lumen	Output	Color Temperature			
<u>L</u>	600 Lm/Ft	<u>30</u>	<u>3000K</u>		
M	900 Lm/Ft	<u>35</u>	<u>3500K</u>		
<u>H</u>	1200 Lm/Ft	40	4000K		



FIXTURE ROW LAYOUT: SINGLE UNIT 4'-8' 4' FIXTURE 8' FIXTURE 47 1/4" CABLE MOUNTING CENTERS 95 1/4" CABLE MOUNTING CENTERS 48 1/4" END-CAP to END-CAP 96 1/4" END-CAP to END-CAP FIXTURE ROW LAYOUT: TWO UNITS 12' - 16' 12' FIXTURE 95 1/4" CABLE MOUNTING CENTERS 48" CABLE MOUNTING CENTERS 8' UNIT 4' UNIT 96 1/4" 48 1/4" 144 1/4" END-CAP to END-CAP 16' FIXTURE 96" CABLE MOUNTING CENTERS 95 1/4" CABLE MOUNTING CENTERS 8' UNIT 8' UNIT 96-1/8" 96-1/8" 192 1/4" END-CAP to END-CAP FIXTURE ROW LAYOUT: THREE UNITS 20' - 24' 20' FIXTURE 96" CABLE MOUNTING CENTERS 96" CABLE MOUNTING CENTERS 47 1/4" CABLE MOUNTING CENTERS 8' UNIT 24' FIXTURE 96" CABLE MOUNTING CENTERS 96" CABLE MOUNTING CENTERS 95 1/4" CABLE MOUNTING CENTERS 96-1/8" 288 1/4" END-CAP to END-CAP EIXTLIDE DOW COMPONENTS

FIXTURE ROV	V COMF 4' - UNIT	8' - UNIT	S JOINER KITS	END CAPS KITS	FEED KITS	HANGER KITS	END-CAP TO END-CAP
4′	1	-	-	1	1	1	48-1/4"
8′	-	1	-	1	1	1	96-1/4"
12′	1	1	1	1	1	2	144-1/4"
16′	-	2	1	1	1	2	192-1/4"
20′	1	2	2	1	1	3	240-1/4"
24'	-	3	2	1	1	3	288-1/4"
28′	1	3	3	1	1	4	336-1/4"
32'	-	4	3	1	1	4	384-1/4"
36′	1	4	4	1	1	5	432-1/4"
40′	-	5	4	1	1	5	480-1/4"
44'	1	5	5	1	1	6	528-1/4"
48′	-	6	5	1	1	6	576-1/4"
52′	1	6	6	1	1	7	624-1/4"
56′	-	7	6	1	1	7	672-1/4"
60′	1	7	7	1	1	8	720-1/4"
64'	-	8	7	1	1	8	768-1/4"
68′	1	8	8	1	1	9	816-1/4"
72′	-	9	8	1	1	9	864-1/4"

Note 1: Suspended Mount Fixtures have Cable Mounting Holes 1/2" from End-Cap



INDIVIDUAL MOUNTING

CABLE MOUNTING "ON-GRID" (T1, T9 & SC):

Linear suspended luminaries intended for "On Grid" or "T-Bar Ceiling" cable mounting are to be installed with (T1 = 1" T-Grid), (T9 = 9/16" T-Grid) or (SC = Screw Slot Grid) Cable/Canopy Kits. Cable Kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

CABLE MOUNTING "OFF GRID" (HC):

Linear Suspended Luminaries intended for "Off Grid" OR "Hard Ceiling (HC)" cable mounting are to be installed with (HC) Cable/Canopy Kits. Cable kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

Step One:

Remove the Bottom lens and LED/Reflector tray(s) from fixtures and store in order of run placement storing safely aside (FIG. 2). It is best to perform the following tasks on a protective, elevated, stable surface to ease assembly and protect the fixtures.

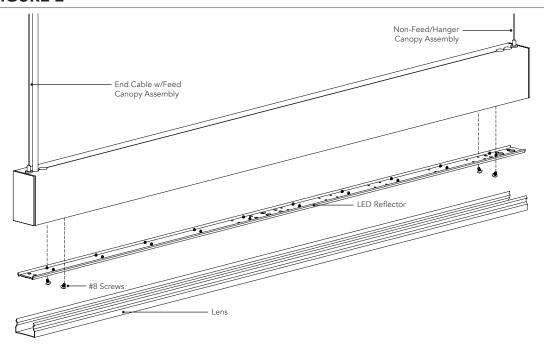
Step Two:

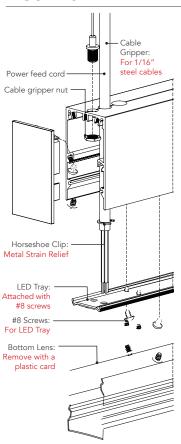
After locating the suspension cable locations as shown on page 3 of this document "Row Information" and following the cable mounting instructions provided, suspend the fixture (FIG. 2 and 3) Level the fixture according to the customer's requirements and tighten the cable gripper upper nut to fix the 1/16" steel cable.

Step Three:

Reassemble LED/Reflector tray in reverse fashion and ensure that there are no wires bound by the reflector as this will cause the lens to not fit correctly. For 2" wide product line only: When reinstalling the LED tray, hold it firm in the housing tracks, screw the first #8 screw with just a few revolutions, move to the middle, and to the last screw before screwing the first screw all the way in. Not following this step will cause the LED Tray to slide out of position and interfere with the end cap or the next fixture in a row. Reinstall the lens and energize the fixture.

FIGURE 2







ROW MOUNTING

CONTINUOUS LUMINAIRE INSTALLATION:

CABLE MOUNTING "ON-GRID" (T1, T9 & SC):

Linear suspended luminaries intended for "On Grid" or "T-Bar Ceiling" cable mounting are to be installed with (T1 = 1" T-Grid), (T9 = 9/16" T-Grid) or (SC = Screw Slot Grid) Cable/Canopy Kits. Cable Kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

CABLE MOUNTING "OFF GRID" (HC & JB):

Linear Suspended Luminaries intended for "Off Grid" OR "Hard Ceiling (HC)" cable mounting are to be installed with (HC) Cable/Canopy Kits. Cable kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

CAUTION

Attempting to assemble a Continuous Row Luminaire on the ground and lifting row into the position may create stress at connection points and may result in damage and/or mechanical failure. It is best to perform the following tasks on a protective, elevated, stable surface to ease assembly and protect the fixtures. (Please also note this is to be done before attempting to suspend the fixture run).

Step One:

Remove the Bottom lens and LED/Reflector tray(s) from fixtures and store in order of run placement storing safely aside (FIG.2). It is best to perform the following tasks on a protective, elevated, stable surface to ease assembly and protect the fixtures. (Please also note this is to be done before attempting to suspend the fixture run).

Step Two

Locate and install End Cap Kits (FIG. 4) and Joiner Kits (FIG. 5). See the packing list for quantities per run. It is best to install the End Caps on the Starter and the Ender fixtures while they are laying on the elevated and stable surface.

For End Cap, insert the End Cap into the housing, aligning it with the features in the extrusion (FIG. 4). Press the End Cap firm to eliminate the gap between the housing and the End Cap. Screw the #10 screws to secure the end cap. For the best results, keep the screwdriver perpendicular to the housing, and force the screw towards the end of the mounting tab (towards the middle of the fixture) before you start driving it down.

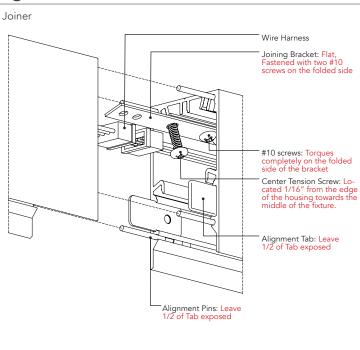
For Joiner, insert 4 alignment pins and 2 alignment tabs into the housing so that they are extending out towards the fixture to be joined by ½" (FIG. 5). Attached the Joiner Bracket with two #10 screws positioning it so that the Center Tension Screw is located 1/16" from the edge of the housing (towards the middle of the fixture). Joining fixtures should mate easily leaving no gaps between housings.

Repeat this process for the balance of the fixtures in the run as needed. Complete each fixture in the run to assure the run can be assembled from right to left as

Figure 4

When End Cap is flush with the housing, tighten both nuts (QTY 2) Side of the Housing Requiring the End Cap Push the End Cap as

Figure 5



SAVE THESE INSTALLATION INSTRUCTIONS

tight as possible



ROW MOUNTING

Step Three:

After locating the suspension cable locations as shown in the middle of this document "Row Information" and following the cable mounting instructions provided, suspend the First Fixture (FIG. 7) in the row. Level the first fixture according to the customer's requirements and tighten the cable gripper upper nut to fix the 1/16" steel cable.

Step Four:

Position second fixture in a row such that it aligns with the joint end of the first fixture and hang with joiner/intermediate cable assembly as illustrated in (FIG. 5). Plug wire harness together and push the excess wire into the luminaire wiring chamber. Push luminaires tightly together while making sure the alignment pins and tabs slide into the interior tracks of each luminaire. Adjust the height of the fixture/level with the first fixture (FIG. 6). When both fixtures are Leveled, screw in two #10 screws through the joining bracket plate (FIG. 7). When both sides of the joining bracket are attached to both housings in the run with four #10 screws, tighten the Center Tention Screw on the joining bracket enough to hold luminaires snug to the mounting surface (FIG. 7B). Joining brackets are designed for a single-use. Contact the factory for the additional joining kits.

Continue to install and assemble row referencing step 4.

Step Five:

Remove 1/2" hole plug and install feed cord in the "LH End of Row Fixture" at the LH End. Lock the Horseshoe Clip (metal strain releifs) at the end of the electrical wire after it's been inserted into the fixture as shown (FIG. 6). Leave 6" of feed cord inside of fixture for splicing to fixture. Connect feed cord to wire harness with wire nuts provided within the feed cord kits. Make a wire connection as required to meet the intended function. Install the End Cap on the last fixture (FIG. 4)

Reassemble LED/Reflector tray in reverse fashion and ensure that there are no wires bound by the reflector as this will cause the lens to not fit correctly. For 2" wide product line only: When reinstalling the LED tray, hold it firm in the housing tracks, screw the first screw with just a few revolutions, move to the middle, and to the last screw before screwing the first screw all the way in. Not following this step will cause the LED Tray to slide out of position and interfere with the end cap or the next fixture in a row. Power up the row and apply the Light Shield Tape below the joining tab (FIG. 7B). Do not let the bottom of the tape show below the edge of the housing. Reinstall lens(es) when all tape pieces are applied.

FIGURE 7

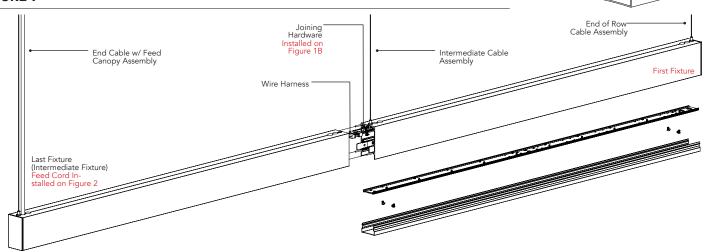
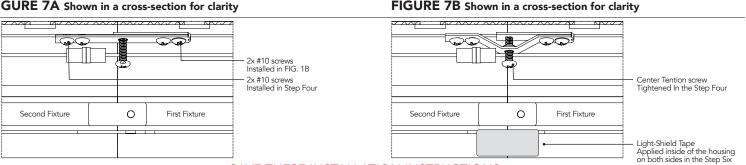


FIGURE 7A Shown in a cross-section for clarity



SAVE THESE INSTALLATION INSTRUCTIONS

FIGURE 6 Last Fixture (Intermediate Fixture)

Power feed Cord: Cable Gripper nut

No End Cap on

Horseshoe Clip:

LED Tray: Attached with #8 screws

#10 Screws:

Bottom Lens

Remove with a plastic card

Metal Strain Relief

Cable Gripper:



OFF-GRID MOUNTING

NON-FEED CABLE/CANOPY ASSEMBLY

Step One: Determine mounting cable spacing centers from the Fixture Row Layout Page 3.

Step Two: Install 1/4-20 studs projecting from the finished ceiling line 1/2".

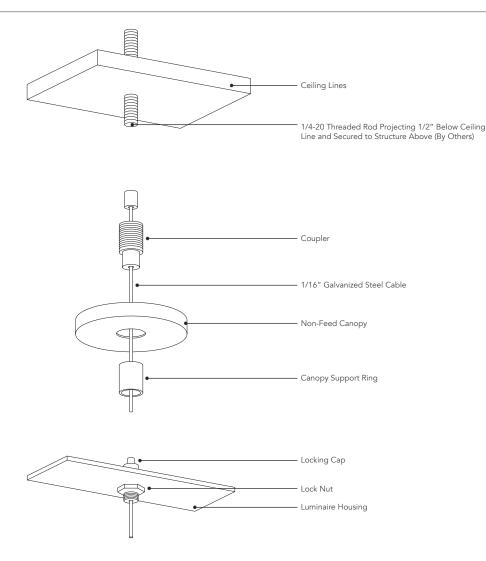
Step Three: Insert cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over 1/16" steel cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

Step Four: Raise luminaire to mounting/hanger assembly and route 1/16" steel cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the 1/16" steel cable to enter fitting. Feed the cable through the adjustable fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten locking cap onto retainer stem.

NOTE: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap, And Depress Retainer Stem While Adjusting To The Desired Position.

CALITION

BE CERTAIN TO SUPPORT LUMINAIRE INDEPENDENTLY OF 1/16" STEEL CABLES WHEN DEPRESSING RETAINER STEM.





OFF-GRID MOUNTING

FEED CABLE/CANOPY ASSEMBLY

Step One: Determine mounting cable spacing centers from the Fixture Row Layout Page 3 and locate a 4" octagonal junction box at the location indicated for incoming wire feed point.

Step Two: OPTION 1 Install junction box cross-strap support bracket to the junction box with screws by others. Be sure the junction box cross-strap can support luminaire row in accordance with local codes as illustrated (FIG, 6).

OPTION 2 Drill a 5/16" diameter hole in the roof of the junction box. Position and secure a 1/4-20 threaded rod (by others)to structural support above so that it passes through the hole drilled in the junction box and extends 1/2" below the finished ceiling line.

Step Three: Insert the 1/16" steel cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over the 1/16" steel cable and up to finished ceiling line. Loosely tighten the support ring to locate canopy in place.

Step Four: Raise luminaire to mounting/feed assembly and route the 1/16" steel cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the 1/16" steel cable to enter fitting. Feed the cable through the adjustable fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten locking cap onto retainer stem.

NOTE: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap, And Depress Retainer Stem While Adjusting To The Desired Position.

CAUTION

BE CERTAIN TO SUPPORT LUMINAIRE INDEPENDENTLY OF 1/16" STEEL CABLES WHEN DEPRESSING RETAINER STEM.

Step Five: Remove canopy support ring and route feed power cord(s) from luminaire through the grommeted hole(s) in the canopy and into the junction box. Connect feed cord(s) to incoming power feed wires within the J-box with appropriate connectors and install cord restraint as illustrated.

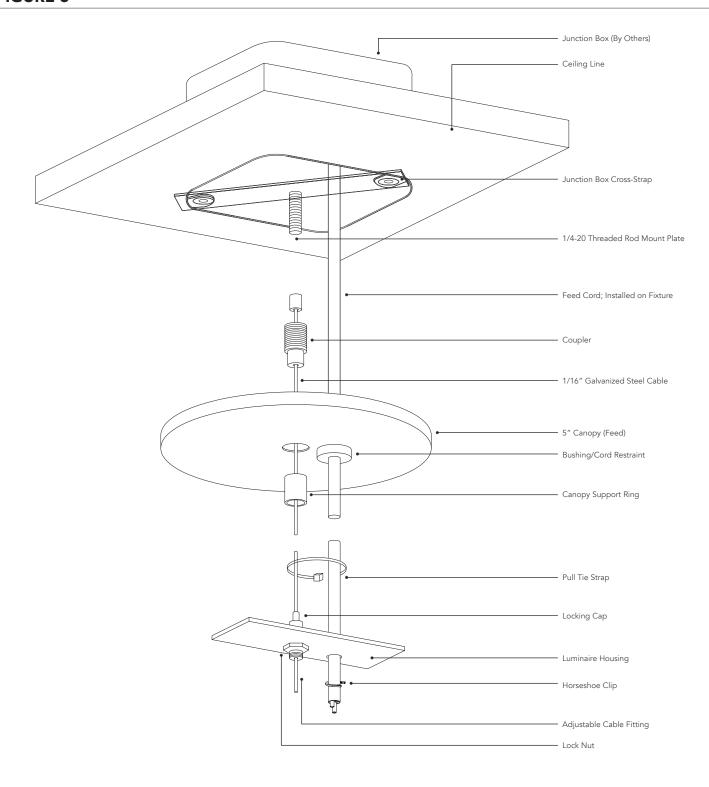
Step Six: Raise the canopy finished ceiling line and locate with canopy support ring. Attach supplied tie straps around feed cord and cable at minimum of 12" on center.

ENERGIZE AND CHECK FOR PROPER OPERATION.

FIGURE 6 ON NEXT PAGE



OFF-GRID MOUNTING





ON-GRID MOUNTING

NON-FEED CABLE/CANOPY ASSEMBLY

Step One: Determine mounting centers from the Fixture Row Layout Page 3.

Step Two: Installation of the grid clip onto T-BAR at appropriate locations (REF. STEP 1 AND FIG. 7)

- A. Assemble 1/4-20 stud and grid clip. Start stud into the recessed square hole, grasp the grid clip in hand and depress tab a with a thumb. Pull stud into place and release TAB A.
- B. Separate the grid clip into its two parts by bending at TAB B.
- C. Place PART X on T-BAR and insert the base tab on part into the slot. Close PARTS X and Y together locking with TAB C.

Step Three: Secure the grid clip to structural support above with minimum #12 gauge support wire in accordance with local, state, and federal codes. (REF FIG. 8)

Step Four: Insert the 1/16" steel cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud on the grip clip securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over the 1/16" steel cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

Step Five: Raise luminaire to mounting/hanger assembly and route the 1/16" steel cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the 1/16" steel cable to enter fitting. Feed the 1/16" steel cable through the adjustable fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten locking cap onto retainer stem.

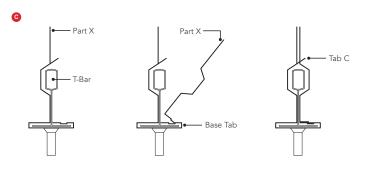
NOTE: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap, And Depress Retainer Stem While Adjusting To The Desired Position.

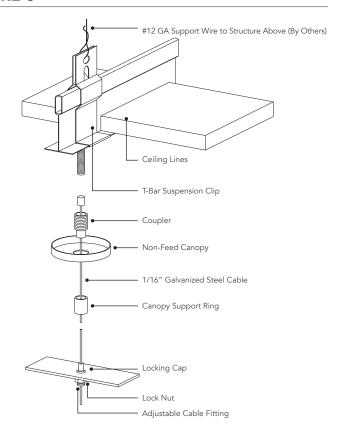
CAUTION

BE CERTAIN TO SUPPORT LUMINAIRE INDEPENDENTLY OF 1/16" STEEL CABLES WHEN DEPRESSING RETAINER STEM.

FIGURE 7









ON-GRID MOUNTING

FEED CABLE/CANOPY ASSEMBLY

Step One: Determine mounting cable spacing centers from the Fixture Row Layout Page 3.

Step Two: Install 4" Drop Ceiling Junction Box (by others) over T-BAR (by others). Align the bottom edge of the Junction Box with the ceiling. Connect the conduit from the building power to the Junction Box. Attach the Cross Bar to the Junction Box.

Step Three: Insert the 1/16" steel cable supplied in the kit through the Coupler in the kit. Remove threaded Canopy Support Ring from Coupler. Attach Coupler to ¼-20 stud on Cross Bar securely.

Step Four: Remove the threaded Canopy Support Ring from Coupler. Slide 5" Canopy then Support Ring over the Coupler up to finished ceiling line. Tighten support ring to locate canopy in place.

Step Five: Raise luminaire to mounting/feed assembly and route the 1/16" steel cable through the center of the Adjustable Cable Gripper fitting loosening the locking cap enough to allow the 1/16" steel cable to enter fitting. Feed the 1/16" steel cable through the Adjustable Cable Gripper fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten Locking Cap onto retainer stem.

NOTE: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap, And Depress Retainer Stem While Adjusting To The Desired Position.

CAUTION

BE CERTAIN TO SUPPORT LUMINAIRE INDEPENDENTLY OF 1/16" STEEL CABLES WHEN DEPRESSING RETAINER STEM.

Step Six: SJT Cord comes installed on Fixture from the factory. Route feed power cord(s) from luminaire through the hole(s) in the canopy. Make wire connections within Junction Box with appropriate connectors and install Strain Relief as illustrated. Attach supplied tie straps around feed cord and cable at a minimum of 12" on center.

ENERGIZE AND CHECK FOR PROPER OPERATION.

FIGURE 9 ON NEXT PAGE



ON-GRID MOUNTING

