



INSTALLATION INSTRUCTIONS

LED Light Engine Kit Model: 4" x 7" Engine

120V: TRIAC DIMMING
TKT120013RTXX-06

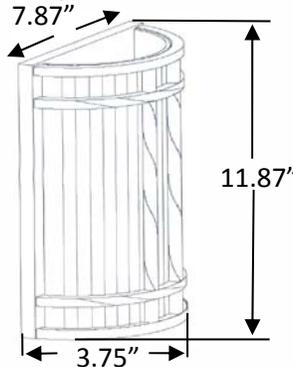
120V-277V: 0-10V DIMMING
TKMUNV013RTXX-06
TKMUNV011RTXX-06

Disclaimer: The driver pictured above is the 0-10V Dimming version. The Triac Dimming driver does not have the gray and purple wires.

1.0 INSTALLATION INSTRUCTION WARNINGS

1. "THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED."
2. "WARNING - Risk of fire or electric shock. LED Retrofit kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician."
3. "WARNING - Risk of fire or electric shock. Install this kit only in the luminaires that has the construction features and dimensions shown in the photographs and/or drawings."
4. "WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects."
5. "WARNING –Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED retrofit kit. Check for enclosed wiring and components."
6. "Please make sure the grounding conductor of the luminaire is properly secured to the Branch Circuit Grounding conductor. "
7. "CAUTION – RISK OF FIRE. CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT CONDUCTOR."
8. "The assembly of this LED retrofit should be performed by a licensed electrician or equivalent as State or Provincial Codes and Laws dictate."
9. "WARNING – RISK OF FIRE OR ELECTRIC SHOCK. DO NOT ALTER, RELOCATE, OR REMOVE WIRING, LAMP HOLDERS, POWER SUPPLY, OR ANY OTHER ELECTRICAL COMPONENT."
10. "THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY CSA OR AUTHORITIES HAVING JURISDICTION."

2.0 Minimum Original Luminaire Dimensions



- Keep the Original Diffuser.
- Remove all the remaining original fixture parts, hardware, and lamp in order to begin the retrofit.

Illustration 1: Minimum Original Luminaire

Mfr: Portfolio – Model: FNG8411A-3
Approved for open or close fixtures

3.0 Intended Use

- This LED Engine Kit can retrofit any luminaire with a diameter/height greater or equal to the minimum dimensions shown above.
- This LED Engine Kit can be used with luminaires similar to the one illustrated above.

4.0 Required Tools (Not Included)

Tool #	Description	QTY
1	Power Drill	1
2	Phillips Drill Bit (P2)	1
3	7/16" Drill Bit	1



Tool #1



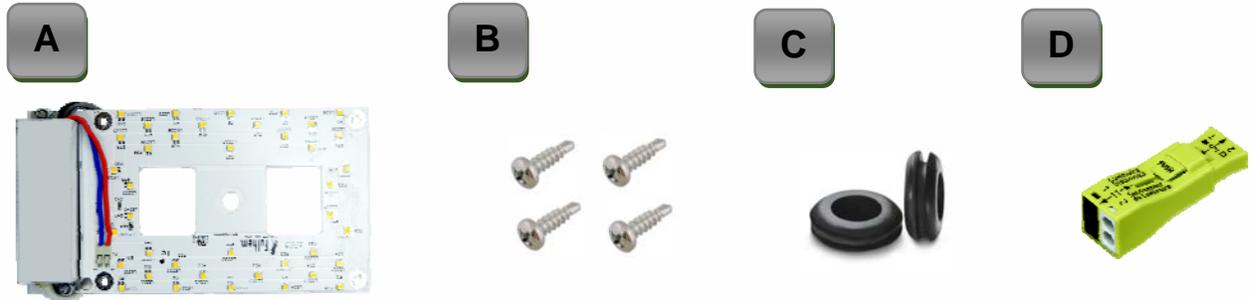
Tool #2



Tool #3

5.0 Included Components

Warning: Disconnect power when servicing fixture.



Picture A: 4" X 7" LED Light Engine Kit

ITEM	DESCRIPTION	QTY
A.	LED Engine (Includes LED Module and LED Driver)	1
B.	Pan Head Drilling Screw for Metal, 410 Stainless Steel, 6-20 Thread, 3/8" Length, Drill Point #1	4
C.	Rubber Grommet	1
D.	PUSH WIRE Input Power Connector (Wago 873-902 LUMI-NUTS)	1

NOTE: If the Triac Dimming Driver (dedicated voltage) is used, the Rubber Grommet (Part: E) is not required, nor drilling the 7/16" hole.

LED Engine Retrofit Kit Consist of:				
LED Engine Retrofit Kit	LED Engine:	QTY	Hardware:	QTY
TKT120013RTXX-06	TET120013RTXX-06	1	TLC-HW05	1
TKMUNV013RTXX-06	TEMUNV013RTXX-06	1	TLC-HW05	1
TKMUNV011RTXX-06	TEMUNV011RTXX-06	1	TLC-HW05	1

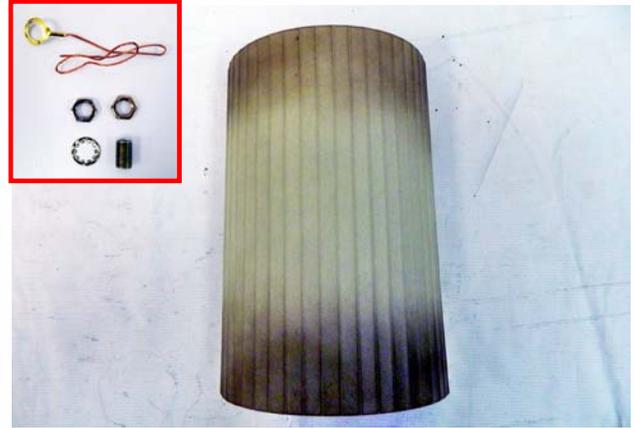
NOTE: "XX" represents desired Kelvin Temperature. (ex: 40: 4000K 50:5000K)

6.0 Original Luminaire

Warning: Disconnect power when servicing fixture.



Picture B: Original Luminaire Housing



Picture C: Original Diffuser



Picture D: Connector Provided per Energy Star CSD

Original Luminaire Disassembly:

1. Remove all hardware, Insulation (if available) and original electronic components from the luminaire. (See Picture B).
2. Parts to be kept include:
 - Original Luminaire Housing
 - Original Diffuser/Lens (See Picture C)
 - Grounding Cable (Copper wire) (See Picture C) (Grounding wire must be relocated)
 - Original nipple, tooth lock washer and two hex nuts (See picture C)

7.0 Retrofit Kit Assembly (4" x 7" Rectangle)

Warning: Disconnect power when servicing fixture.

1. Place the LED Engine into the fixture and center it. The circles show the location where the Pan Head Drilling Screw (Part: B) will be used. See Picture #1.

NOTE: The Engine LED Driver must be placed as shown. See picture #1.

2. Secure the LED Engine by using the Pan Head Drilling Screw (Part: B). See Picture #1.

NOTE: You will need to use the Power Drill and the Phillips Drill Bit (P2) in order to complete step #2.

3. Drill two 7/16" holes in the bottom part of the luminaire (circles). See picture #2.

NOTE: Only one 7/16" hole must be drilled in the rear of the luminaire when using the Triac Dimming Driver. The hole must be

4. Insert the original nipple through the tooth lock washer and the original loop of the original ground wire and pass it through one of the 7/16" pre-drilled holes on the rear of the luminaire. See picture #2.

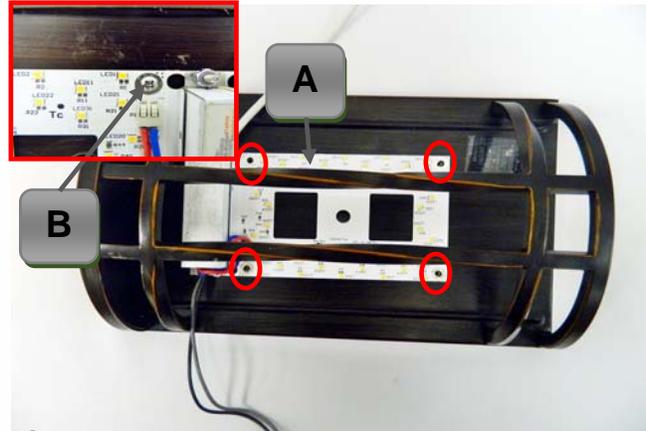
5. On the front side of the luminaire secure both sides of the original nipple by using the original hex nuts. See picture #2.

6. Pass the LED Engine (Part: A) input power wires through the wire hole. See Picture #3.

7. Place the Rubber Grommet (Part: C) on the pre-drilled 7/16" hole. Pass the dimming wires (If available) through the Rubber Grommet (Part: C). See picture #3.

NOTE: Step 7 is not needed when using a Triac Dimming Driver.

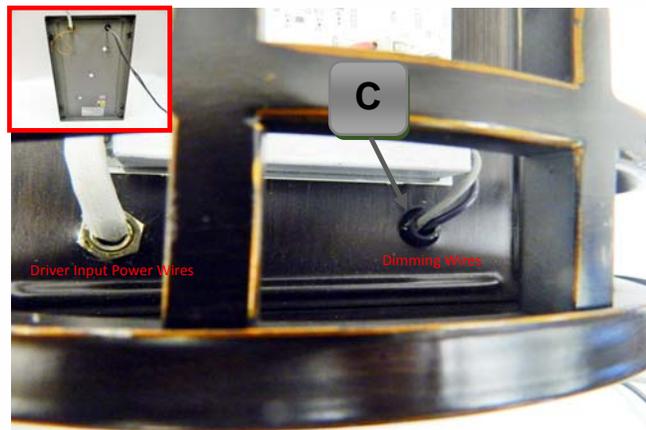
8. See page #6 "Connecting Power to the LED System" section for proper connection steps.



Picture #1



Picture #2



Picture #3

7.1 Retrofit Kit Assembly (4" x 7" Rectangle)

Warning: Disconnect power when servicing fixture.

- Place the provided labels in the outer space of the luminaire after the LED engine installation has been completed. Labels must be visible. See picture #4 and Illustration 2.

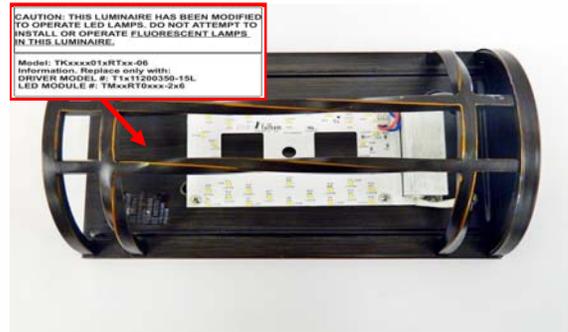
CAUTION: THIS LUMINAIRE HAS BEEN MODIFIED TO OPERATE LED LAMPS. DO NOT ATTEMPT TO INSTALL OR OPERATE FLUORESCENT LAMPS IN THIS LUMINAIRE.



Model: TKxxxx01xRTxx-06
Information. Replace only with:
DRIVER MODEL #: T1x11200350-15L
LED MODULE #: TMxxRT0xxx-2x6

Illustration 2

- Secure the Luminaire to the wall by using the original hardware. See picture #5.
- Re-attach and secure the lens to the luminaire. See Picture #5.
- Completed retrofit should look like Picture #5.



Picture #4



Picture #5

Connecting power to the LED System:

- Connect the copper wire (Ground) from the luminaire housing to the ground wire (Ground) that is being fed by the power source. Connect these two wires by using a 16-18 AWG Gauge Wire Nut.
- Connect the white wire (Neutral) from the LED Engine (Part: A) to the white wire (Neutral) that is being fed by the power source. Connect these two wires by using the provided connector or a 16-18 AWG Gauge Wire Nut.
- Connect the black wire (Line) from the LED Engine (Part: A) to the black wire (Line) being fed by the power source. Connect these two wires by using the provided connector or a 16-18 AWG Gauge Wire Nut.

8.0 Warranty and Contact Information

Warranty

Please see our warranty policy on LED system.