

# **LED UPGRADE** (RETROFIT) INSTALLATION INSTRUCTIONS

## KIRLIN LIGHTING LED RETROFIT INSTALLATION GUIDE



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.

WARNING - Risk of fire or electric shock. Install this kit only in luminaires that have the construction features and dimensions shown in the photographs and/or drawings and where the input rating of the retrofit kit does not exceed the input rating of the luminaire.

WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

#### Qualifications:

- 1. Restricked to use in Kirlin enclosures as noted below:
  - Minimum housing size 11-3/4" sq. x 6-1/4" deep.
  - Housing aperatures from 4-3/4" dia./sg. through 8-7/8" dia./sg.
  - Ceiling tile, drywall or masonary thickness of 1-1/4" maximum.
- 2. For installations in all ceilings as noted below:
  - Maximum 27-watt LED kit approved for Insulated ceilings.
  - Maximum 74-watt LED kit approved for Non-insulated ceilings.
  - All kits > 27-watt equiped with thermal cut off protection.

- a.) Driver/Bracket Assembly #1
- b.) Driver/Bracket Assembly #2
- c.) LED Lighthead with Driver
- d.) LED Lighthead
- e.) Standard Fastener Pack (2) 501030-00-00 (#10-24 keps nut)
  - (2) 502099-00-00 (#10 x 1/4" S.M.S.)
  - (2) 502108-00-00 (#10 x 1" S.M.S.)

Page 1 - Fixture disaasembly (before)
Page 2 - LED driver installation, 10-1/8" deep housing. (gutted)

Page 3 - LED driver installation, 6-1/4" deep housing. (gutted)

Page 4 - LED lighthead installation, all housings. (after)

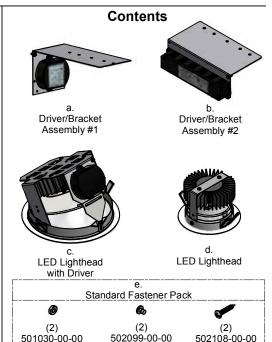
#### Contents / Retrofit kit

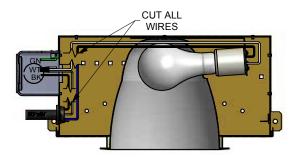
a + d + e = LKR-04020 & LKS-04020

a or b + d + e = LKR-06020 & LKS-06020 LKR-06023 & LKS-06020 LKR-06027 & LKS-06027 LKR-06034 & LKS-06034 LKR-06042 & LKS-06042 LKR-06055 & LKS-06055 LKR-06074 & LKS-06074

b + d + e =LKR-07055 & LKS-07055 LKR-07074 & LKS-07074 LKR-08055 & LKS-08055 LKR-08074 & LKS-08074

LKR-07020 & LKS-07020 LKR-07023 & LKS-07023 LKR-07027 & LKS-07027 LKR-07034 & LKS-07034 LKR-07042 & LKS-07042 LKR-08020 & LKS-08020 LKR-08023 & LKS-08023 LKR-08027 & LKS-08027 LKR-08034 & LKS-08034 LKR-08042 & LKS-08042





Example #1

**FIXTURE** DISASSEMBLY



**CUT ALL** 

WIRES

#### For All Fixtures

- 1. Turn the power off to the fixture.
- 2. Example #1 (Incandescent):

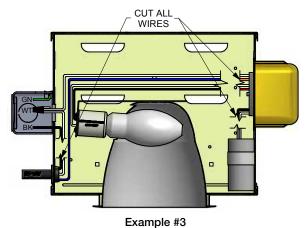
Cut all wires exiting the j-box. Remove socket, brackets, reflectors and trim from the fixture.

#### Example #2 (Fluorescent):

Cut all wires exiting the j-box. Remove socket, brackets, reflectors and trim from the fixture. It is not necessary to remove the ballast.

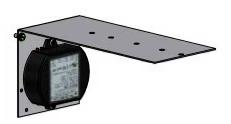
#### Example #3 (H.I.D.):

Cut all wires exiting the j-box. Remove socket, brackets, reflectors and trim from the fixture. Do not remove the ballast. Potted HID ballasts should remain in place with all power wires disconnected. It is not necessary to remove the capacitor or ignitor.





# **GUTTED FIXTURE, LED DRIVER INSTALLATION**



Driver/Bracket
Assembly #1
(4-3/4" fixture aperature)

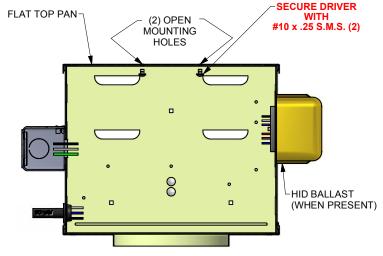


Driver/Bracket
Assembly #2
(All other ceiling aperatures)

STANDARD FASTENER PACK			
QTY	PART NUMBER	DESCRIPTION	
2	501030-00-00	10-24 KEPS NUT	
2	502099-00-00	#10 X .250 SMS	
2	502108-00-00	#10 x 1" PH/SL PN HD S.M.S.	

# #10-24 x .50 M.S. #ID BALLAST (WHEN PRESENT)

Example #1



Example #2

# 12" sq. x 10-1/8" deep housing

- 1. Be sure the power to the fixture is off.
- Confirm all necessary components are removed from inside of housing.

#### 3. Example #1:

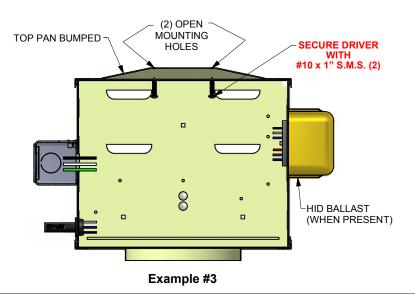
Locate (2)  $\#10-24 \times 1/2$ " M.S. on the top of the housing. Install the Driver/Bracket Assembly on the (2) screws with (2) #10-24 keps nuts to the top of housing.

#### Example #2

Locate (2) open holes on the top of the housing. Install the Driver/Bracket Assembly with (2) #10-24 x 1/4" S.M.S. to the top of housing.

#### Example #3:

Locate (2) open holes on the top of the housing. Install the Driver/Bracket Assembly with (2) #10 x 1" S.M.S. to the top of housing.



INSTALL IN ACCORDANCE WITH ALL APPLICABLE NATIONAL AND LOCAL ELECTRIC CODES INSTALL IN ACCORDANCE WITH ALL MARKINGS APPEARING ON OR INSIDE LUMINAIRES



# **GUTTED FIXTURE, LED DRIVER INSTALLATION**

STANDARD FASTENER PACK			
QTY	PART NUMBER	DESCRIPTION	
2	501030-00-00	10-24 KEPS NUT	
2	502099-00-00	#10 X .250 SMS	
2	502108-00-00	#10 x 1" PH/SL PN HD S.M.S.	

#### 12" sq. x 6-1/4" deep housing

- 1. Be sure the power to the fixture is off.
- Confirm all necessary components are removed from inside of housing.

#### 3. EXAMPLE #1:

Remove the support bracket. Locate (2) open holes on the top of the housing. Install the driver/bracket assembly with (2) #10 x 1/4" S.M.S. to the top of housing.

#### **EXAMPLE #2:**

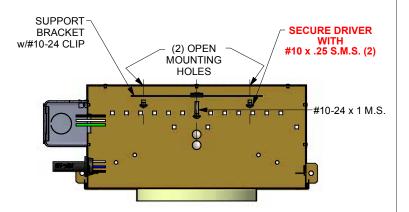
Locate the center stud & open holes on the top of the housing. Install the driver/bracket assembly with (2) #10 x 1/4" S.M.S. to the top of housing.

#### **EXAMPLE #3**:

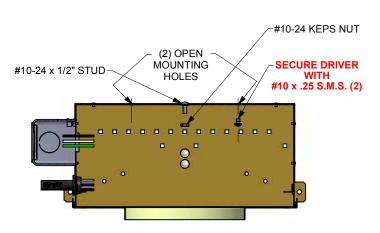
Locate (2) #10-24 x 1/2" M.S. on the top of the housing. Install the driver/bracket assembly on the (2) screws with (2) #10-24 keps nuts to the top of housing.

#### EXAMPLE #4:

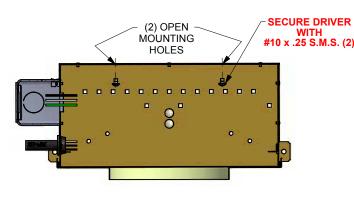
Locate open holes on the top of the housing. Install the driver/bracket assembly with (2) #10 x 1" S.M.S. to the top of the housing.



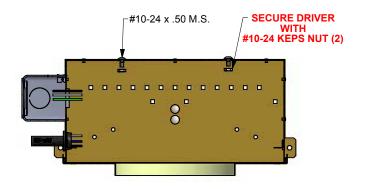
Example #1



Example #2



Example #4



Example #3

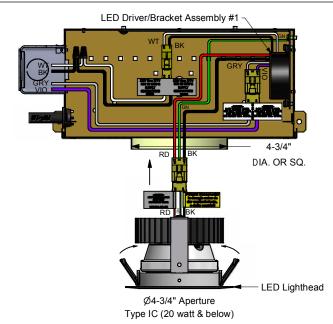
INSTALL IN ACCORDANCE WITH ALL APPLICABLE NATIONAL AND LOCAL ELECTRIC CODES INSTALL IN ACCORDANCE WITH ALL MARKINGS APPEARING ON OR INSIDE LUMINAIRES

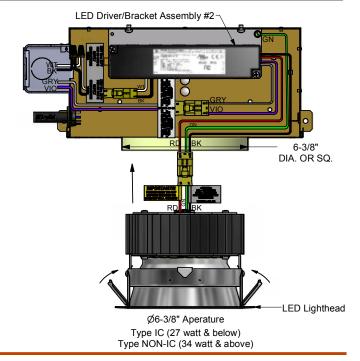


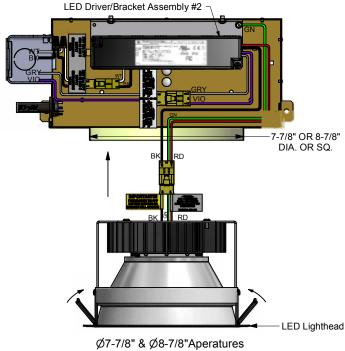
### **FIXTURE ASSEMBLY**

#### For All Fixtures

- Route the voltage wires (BK, WT & GN if necessary) to the j-box and connect to the incoming power (120-277V). If thermal protection is present, it is not necessary to use.
- 2. Route the dimming wires to the j-box if planning to dim the lighthead. If not planning to dim, disconnect the connector with violet & gray wires and discard (If not connected, the driver will run at full output.)
- Connect the lighthead connector to the driver connector (BK, WT & GN).
   Be sure to match wire colors on connectors. Install the lighthead into the fixture
- 4. Turn the power on to the fixture.







Type IC (27 watt & below)

Type NON-IC (34 watt & above)

7-7/8" OR 8-7/8" DIA. OR SQ.

DIA. OR SQ.

### Aperatures with Driver

Type IC (27 watt & below)

Type NON-IC (34 watt & above)

INSTALL IN ACCORDANCE WITH ALL APPLICABLE NATIONAL AND LOCAL ELECTRIC CODES INSTALL IN ACCORDANCE WITH ALL MARKINGS APPEARING ON OR INSIDE LUMINAIRES