

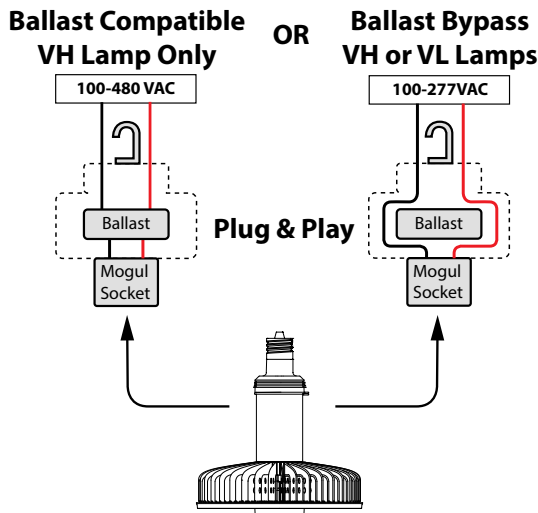
## Ballast Bypass or Ballast Compatible

### VH Series

Hybrid, works direct to line 100-277 VAC line. Also works with HID magnetic ballast compatible. When connected to a ballast, input voltage to ballast is shielded from lamp, therefore input to ballast can go up to 347VAC or 480VAC.

### VL Series

Ballast bypass only direct to 100-277 VAC.



## Ballast Bypass (VH or VL Series)

Bypassing the ballast enables the best energy saving by rerouting the main power around the ballast to power the lamp directly. In this configuration, the ballast no longer consumes power saving typically an additional 50W. This creates the optimum power factor of >0.95. See reverse side for ballast bypass installation instructions.

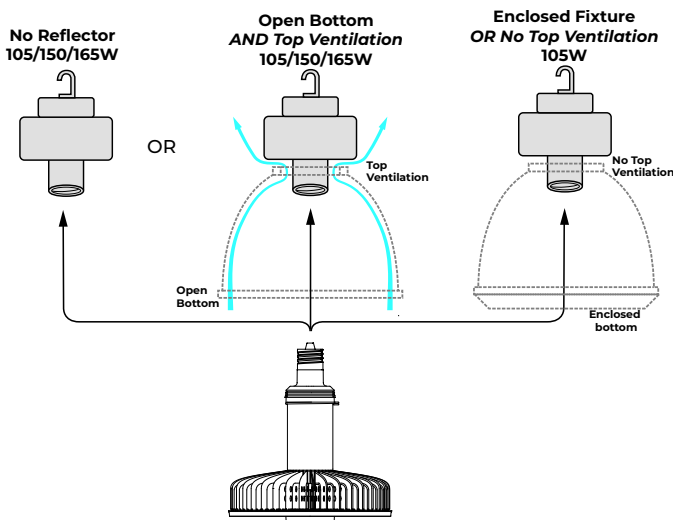
## Ballast Compatible (VH Series only)

The VH Series offers unparalleled flexibility. It is the first in the industry to be UL Listed for use with all ANSI magnetic ballasts (175-600W) as well as ballast bypass to mains line voltage (120-277V). This option is the simplest way to replace existing HID lamps, without the need for electricians: just change the lamp. In event of future ballast failure, you can still use the existing asset and bypass the failed ballast to power the lamp directly from the mains line voltage.

## Direct Replacement for HID target lamps only including:

Metal Halide:	M59/M155, M131, M154, M153/ M58, M136, M57/M152
Mercury Vapor:	H33, H37
High Pressure Sodium:	S106, S50, S66

## Fixture Compatibility



## Reflector Optional

Valto Lamp contains its own optics and does not require an external reflector. However, to preserve the traditional look the reflector may be left in place.

## Open with Top Ventilation (105W, 150W, 165W Lamps)

Open fixture must also have ventilation at top of fixture. This is configuration with lamps of all power levels.

## Enclosed or No Top Ventilation (105W Lamps)

The 105W version is compatible with fully enclosed fixtures. Fixture with no top ventilation should also use 105W. This kit is only suitable to retrofit ceiling-mounted surface and ceiling-mounted dependent HID luminaires, the minimum lamp compartment dimensions of the luminaire is 558.8 mm (W) x 558.8 mm (L) x 340mm (H)", or the equivalent should be described

## Certifications

- UL/ULC, DLC, CE/CB, PSE, KC, BSMI, NOM
- IP52 / UL damp listed standard
- IP65 / UL wet optional

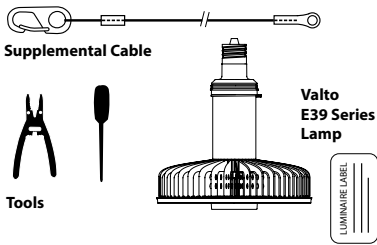


RoHS

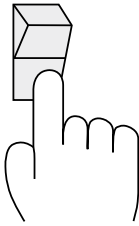
IP52

IP65

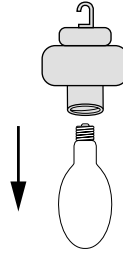
1. Make sure you have the required parts and tools.



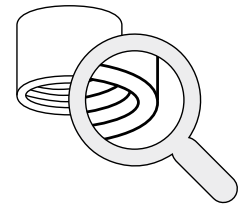
2. Turn power to fixture off.



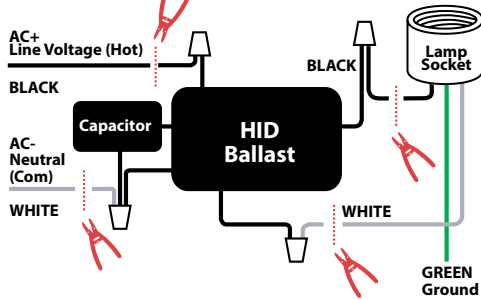
3. Remove HID lamp.



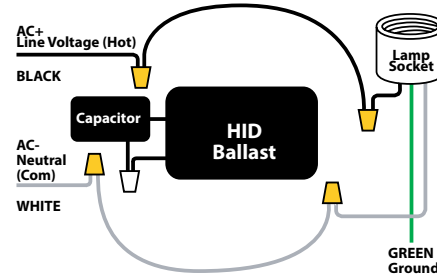
4. Make sure socket is not damaged.



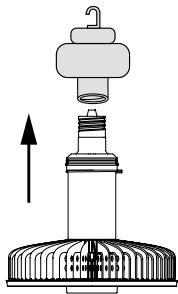
5. Disconnect wires from Ballast as shown.



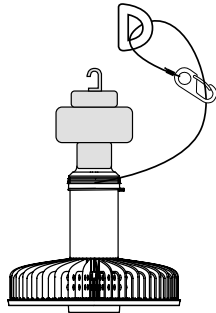
6. Connect Hot (100VAC-277VAC) to black wire and Neutral to white wire connected to socket.



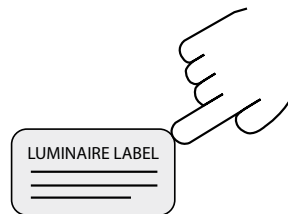
7. Install Valto Hybrid LED Lamp.



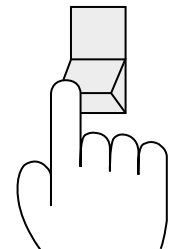
8. Attach safety harness.



9. Apply re-lamping label on a visible location outside the fixture.



10. Turn power on.



- WARNING -** RISK OF FIRE OR ELECTRIC SHOCK. LED RETROFIT KIT INSTALLATION REQUIRES KNOWLEDGE OF LUMINAIRE'S ELECTRICAL SYSTEM. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN.
- WARNING -** THIS KIT IS ONLY SUITABLE TO RETROFIT CEILING-MOUNTED SURFACE AND CEILING-MOUNTED DEPENDENT HID LUMINAIRES, THE MINIMUM LAMP COMPARTMENT DIMENSIONS OF THE LUMINAIRE IS 558.8 MM (W) X 558.8 MM (L) X 340MM (H). SUITABLE FOR ENCLOSED TYPE LUMINAIRE FOR 100-105W, SUITABLE FOR OPEN TYPE LUMINAIRE ONLY FOR 106-165W ", OR THE EQUIVALENT
- WARNING -** RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN LUMINAIRES THAT HAVE THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN PRODUCT SPECIFICATION SHEET AND/OR DRAWINGS AND WHERE THE INPUT RATING OF THE RETROFIT KIT DOES NOT EXCEED THE INPUT RATING OF THE LUMINAIRE.
- WARNING -** DO NOT MAKE OR ALTER ANY OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS DURING KIT INSTALLATION.
- WARNING -** TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.
- WARNING -** INSTALLERS SHOULD NOT DISCONNECT EXISTING WIRES FROM LAMPHOLDER TERMINALS TO MAKE NEW CONNECTIONS AT LAMPHOLDER TERMINALS. INSTEAD INSTALLERS SHOULD CUT EXISTING LAMPHOLDER LEADS AWAY FROM THE LAMPHOLDER AND MAKE NEW ELECTRICAL CONNECTIONS TO LAMPHOLDER LEAD WIRES BY EMPLOYING APPLICABLE CONNECTORS.
- WARNING -** INSTALLERS SHOULD EXAMINE ALL PARTS THAT ARE NOT INTENDED TO BE REPLACED BY THE RETROFIT KIT FOR DAMAGE AND REPLACE ANY DAMAGED PARTS PRIOR TO INSTALLATION OF THE RETROFIT KIT.
- WARNING -** THIS LAMP IS NOT INTENDED FOR USE WITH EXTERNAL LED DRIVER. LAMP INSTALLATION WITH EXTERNAL DRIVER VOIDS THE PRODUCT WARRANTY.
- CAUTION -** DO NOT INSTALL THIS LAMP TO LINE VOLTAGE ABOVE 277VAC. THIS LAMP SUPPORTS 120VAC - 277VAC VOLTAGE RANGE.
- CAUTION -** BALLAST OPERATION NOT COMPATIBLE WITH CONTROLS.
- WARNING CUL-** RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN THE LUMINAIRE THAT HAS 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 CUL-** THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.